AN ESSAY ON RELIGION IN AN AGE OF SCIENCE

REFLECTIONS UPON THE WORDS "SALVATION," "FULFILMENT," AND "SUCCESS"

by Richard A. Underwood

Choosing to view them as entrees into more basic issues rather than as objects for specific investigation, I see two fundamental questions emerging from reflection upon the words "salvation," "fulfilment," and "success."

The first question to be considered is that of language and world. This will be dealt with in Part I. As will become clear, my own approach to this question will be neither that of scientific linguistics nor that of linguistic analysis. Rather, it will be roughly phenomenological and existentialist.

The nature of the second question follows from the observation that the three words of the subtitle can be interpreted as representing a perspective on life and a discipline of thinking which either have had or do have considerable, if not overwhelming, cultural significance. Salvation represents the perspective of religion and theology; fulfilment represents the perspective of psychology; success represents the perspective of pragmatic philosophy and, by implication, the whole range of science. Here, it seems to me, will be found the most crucial issues with the most direct bearing on the over-all theme of religion in an age of science. Taken together, the rise, transformation, and interrelationship of these perspectives issue in what I am calling, in Part II, "Western man's new experience." Part II of this essay, therefore, will attempt to delineate more specifically the aspects of this new experience.

Finally, in a concluding and anticipatory section, the essay will attempt to spell out some of the implications of both Part I and Part II for an appropriate contemporary understanding of the religiotheological enterprise in an age of science.

Nothing remains to be said, in an introductory way, except the

Richard A. Underwood is associate professor of philosophy of religion at the Hartford Seminary Foundation. A highly abridged version of this paper was given at the 1967 summer conference of the Institute on Religion in an Age of Science. following explicit comments regarding some presuppositions of my own. Speaking from the context of philosophy and the philosophy of religion, I am, sometimes exuberantly, sometimes painfully, aware of the perspectival nature of all claims to knowledge. My interpretation of the contemporary situation begins with the assumption that what we are witnessing and participating in at present is a clash of perspectives, a battle of world views. Only gradually and with much pain has modern Western man come to the point of seeing the relativity of his place in the universe, of his epistemologies, ideologies, mythologies, sciences. Note how the adjective "Western," when applied to man, bespeaks this growing awareness of the relative (as distinct from absolute) nature of the human condition; no longer do we speak of man, but of Western or Eastern, primitive or modern, religious or scientific, Stone Age or industrial, man. Philosophically, the quest for the absolute has given way to the quest for the phenomenon, that which "shows itself," that which appears. But the "showing," the appearing, the manifestation can be only in relation to an observing, intending subject. And we now know that a variety of factors contribute to the way in which that subject perceives, relates, and interprets. These factors include biological, psychological, sociological, and linguistic dimensions.

There is, however, more at stake here than sheer perspectival analysis. At the level of philosophical analysis and religious understanding, the goal of the inquiry is existential, not speculative; its movement is dialectical, not abstract. That is to say, the function of perspectival analysis is to facilitate deliverance out of the perspectival, relative dimension of reality into the "truly real." As ambiguous as the phrase may be and as susceptible as it is to diverse and even contradictory interpretations, it is the questing for the "truly real" that I see informing the activity of both religion and science.

I. THE QUESTION OF LANGUAGE AND WORLD

The question of language and world raises a prior question. Let us formulate it this way: How is it possible for the religious and the scientific imagination to coexist? To state the question this way requires, first of all, the admission that I am not sure there is such a thing as "the imagination." Thus, any distinction between the scientific and the religious "imagination" is tenuous and ambiguous at best. I am sure, however, in the sense of being intuitively certain and in the sense that there is evidence in support of this, that different constructions are put upon the same data and that these constructions are constitutive of different "lived-in worlds"—that is, worlds of feeling,

attitude, and behavior. What we are to look at, then, is the phenomenon of different constructings. This is not the same as looking at the conflict between worlds constructed—for instance, the obvious conflict between the biblical account of creation and those offered by contemporary science. The differences and conflicts are obvious. In considering the question of the coexistence of the religious and the scientific imagination, I am looking for an underlying unity of activity, an activity of "world construction" common to both.

One could name man as the underlying unity of activity. Though this does not advance our analysis very far, at least it shows that to raise the question of the imagination is to raise a question of philosophical anthropology. One way to proceed, then, would be to develop a metaphysics of the imagination. This, however, is not the tack to be followed here. It is more pertinent, given the over-all theme of the essay, to move in the direction of a socio-biologic of the imagination. To do so brings immediately into view at least four fundamental activities which, while not identical with the imagination, can at least be seen as manifestations of its spontaneous and creative activity. I am referring to dreaming, fantasy, reverie, and play. On sheerly quantitative grounds, these constitute a fundamental and major aspect of human activity, characteristic of the long period of infancy and childhood development and that third of postnatal life spent in sleeping and dreaming.

Of all the placental species, the human being has the longest period of postnatal dependency. As culture develops in the complexity of its organization-as in what Herbert Marcuse calls "advanced industrial civilization"-this period of dependency is lengthened proportionately. In primitive cultures, a boy may be initiated into manhood at the age of twelve upon his mastery of the rudiments of that culture's technology (say, hunting). Thus, he may become self-sustaining, even though he produces as yet no surplus to the economy. When, on the other hand, can one say that the rudiments of the technology of contemporary Western culture have been mastered? Certainly not at the age of twelve. Perhaps sixteen-the age at which, in most of our states, one can legally leave school, now the universal agency of training in cultural tradition and technology. We may have had parents or grandparents who did just this. But now the age of seventeen or eighteen-at which time the high school diploma is presented as the credential signifying the minimum level of mastery-is looked upon as the basic requirement for becoming self-sustaining. More and more, however, education beyond this minimum level is required, so that the period of dependency

(gestation in what Joseph Campbell has called the "second womb" of culture) can extend into the twenties and even the thirties. This has presented us with an anomaly: biologically, manhood is coming earlier, due to improvement of both pre- and postnatal health services; culturally, however, manhood comes later and later. (This is undoubtedly one of the factors behind the appearance of the Playboy phenomenon!) This long period of dependency is one essentially of mime and play: mime in the sense of imitating activities essential to full initiation into the culture; play in the sense of being a period of activity which is not immediately productive. It has been argued that this element of play, which presumes a period of dependency during which adult cultural demands are altered, if not suspended, is itself the crucial factor in the appearance of human culture.¹

Beyond this, there is that third of our life we spend in sleep and dreaming. In the twentieth century-after having long forgotten what the ancients knew, what the poets and the philosophers knew, concerning dreams-we have rediscovered the reality and meaning of dreams and dreaming. Freud called the dream the "royal road to the unconscious." Jung saw the dream and indeed all symbolism as manifesting the archetypal power of the unconscious, not just of the individual and his personal history, but of the race, thus constituting a point of contact with primordial energies which permeate and sustain the universe itself. The question of whether these energies manifest themselves creatively or destructively was a question which preoccupied Jung throughout his lifetime. In any event, when this newly rediscovered aspect of man's life is seen in conjunction not only with the dependency period previously remarked on but also in relation to the growth of new disciplines and sciences (such as history of religions, anthropology, and comparative mythology), then the interconnections between myth, dream, and religion become unmistakably apparent, if not unambiguously understood. These interconnections, too, did not need to await the arrival of the twentieth century to be seen and understood. Writing after Darwin but before Frazer, Freud, and Jung, Nietzsche wrote in the opening pages of The Birth of Tragedy, quoting Lucretius: "It was in dreams . . . that the glorious divine figures first appeared to the souls of men; in dreams the great shaper beheld the splendid corporeal structure of super-human beings." Then Nietzsche quotes from The Mastersingers a passage Lucretius would perfectly well have understood: "My friend, that is exactly the poet's task, to mark his dreams and to attach meanings to them . . . man's most profound

illusions are revealed to him in dreams; and all versifying is nothing but an interpretation of them."2

This may be the poet's task. It is certainly part of the psychotherapist's task. We may see even that it is part of the religionist's task, perhaps even that of the philosopher and metaphysician. But is it a part of the scientist's task? The answer to this question must be both "yes" and "no." One has only to recall a comment of Einstein's when he described science as "a creation of the human mind by means of freely invented ideas and concepts." So let us remind ourselves that what we are attempting to look at is the phenomenon of "world construction." What has been both assumed and implied thus far is that this phenomenon is rooted in the imagination, broadly conceived, and that the activities of dreaming, fantasy, reverie, and play are essential to world construction.

Let us state it more baldly: "World" is a creation of the imagination. Put another way, world is the incarnation of the imagination. Stated less baldly, world functions here as metaphor—the third term which, while arising from the imagination, bodies itself out, physically and sensually, into a total context of life.

Philip Wheelwright has described metaphor as follows: "The essence of metaphor consists in the nature of the tension which is maintained among the heterogeneous elements brought together in one commanding image or expression."3 A dictionary offers as the first three (of seventeen) definitions of "world": "1. An age of man; a generation; 2. Any state or sphere of existence; any wide scene of life or action; 3. The system of created things; all created existences; the whole creation; the created universe."4 The first definition suggests an understanding of "world" primarily in terms of the human phenomenon. The second and third definitions suggest an understanding of "world" in terms of images of all-inclusiveness and totality.⁵ Taken together, the three definitions suggest a reality which presupposes human reflective-linguistic activity issuing in a wider and wider scope of inclusiveness which then reflexively reinforces particular, concrete, and personal understanding. To say, then, that "world" is a metaphor is to say that it is first and foremost an image which unifies, which constitutes a unity of heterogeneous elements. Earlier in his book, in a section entitled "Metaphoric Imagining," Wheelwright quotes from the Aesthetics of José Vasconcelas: "Knowledge consists essentially in a unifying act which integrates instantaneously any given multiplicity into an organic whole that has meaning."6 Is this not the way "world" functions—as a metaphor of integration?

If "world" is seen as a metaphor, then we have moved in a direction whereby it becomes necessary to raise more directly the question of language. We shall do this by referring to a philosopher, a linguist, and a historian of science.

At the outset, however, we should note the special way we are looking at language: it is the way related to "world constructing" where, as we have said, "world" is seen as a metaphor of integration arising out of the activity of the imagination. This is not looking at language as a something there for empirical analysis, as in the case of descriptive linguistics. The science of linguistics-as is the case with all of the special sciences-cannot, indeed need not, as science qua science, raise the question of the being of the reality attended to. As special sciences (whether biology, physics, astronomy, or zoölogy), the reality of the thing attended to must be assumed. What is called into question in the special sciences is the reality—as the claim to truth from a specialized perspective—of the statements about the field demarcated by the specialized discipline itself. This is what makes science and religion so subjective-subjective in the sense that the nature of the reality observed can only "be there" for the observing consciousness. To this extent, quasars, radio signals, viruses, and geological ages are only "there" insofar as a theoretical structure (perspective), which of course includes the appropriate technical apparatus, has been constructed. None of these "existed" for the prescientific imagination. The same thing might be said in the field of religion, with regard to the pantheon of Greek divinities: While the Greek gods "existed" for the Homeric imagination, they do not exist for the scientific imagination because its perspective places different constructions on the nature and dynamics of existence. This is probably most strikingly seen in the fact that the vehicles of our space arsenal-Gemini, Apollo, Mercury-carry over the ancient names but are now applied to specific entities which remain under human control and manipulation. The names have reality only because we assign them such from our own perspective.

It is, however, difficult to do this with our words "salvation," "fulfilment," and "success." Not being proper names, they do not and have not stood for particular entities. Still, their meanings reverberate with ancient connotations. Because they do, they raise the question of language at a different level—not the question of the things for which words stand but the question of the being of language itself, not as an entity but as the possibility of there being any-thing-with-name. That is, our three words raise the philosophical question about language, the question of the ontological status of language. By "ontological

status" is meant the claim language has, as a human activity, to be that something which is itself there as the possibility of some thing. That is, the philosophical approach to the being of language, as distinct from the approach of scientific linguistics, does not assume the reality of language (except de facto) but, rather, questions it. Only by questioning the reality of language can its ontological character appear, that is, its character as world possibility.

This character of language as world possibility is summed up in an essay of Martin Heidegger. At the beginning of the essay, Heidegger lists "The Five Pointers"—poetic statements by Hölderlin on language and poetry. The second of these pointers reads as follows: "Therefore has language, most dangerous of possessions, been given to man... so that he may affirm what he is..." In commenting on these lines, Heidegger makes the following observations, which are pertinent to our own reflections:

The essence of language does not consist entirely in being a means of giving information. This definition does not touch its essential essence, but merely indicates an effect of its essence. Language is not a mere tool, one of the many which man possesses; on the contrary, it is only language that affords the very possibility of standing in the openness of the existent. Only where there is language, is there world, i.e., perpetually altering circuit of decision and production, of action and responsibility. . . . [Language] is good for the fact that (i.e., it affords a guarantee that) man can exist historically. Language is not a tool at his disposal, rather it is that event which disposes of the supreme possibility of human existence.⁷

In Heidegger's interpretation, then, the being of language is seen as the being of possibility, the possibility of man's living in a world which is itself the possibility of man's historical existence. ("Only where world predominates is there history.") For Heidegger, language is that which calls "world" into being-not the world of things, not the world of stuff, but the world of meaning. It is only in the world of meaning that human being is possible. Thus it is that there is an intimate connection between meaning and being; in a very special sense, in fact, meaning and being are indistinguishable. "To mean" is "to be"; on the other hand, "to be" is "to mean." One of the implications of this is to call into question the radical distinction between mind and body which has prevailed throughout the greater part of the modern era since the distinction was most forcefully introduced into Western consciousness by Descartes, who was, after all, functioning as the prime theoretician in metaphysical support of the newly emerging scientific approach to reality. The impact of the new scientificastronomical discoveries as an impetus for Cartesian philosophy is dramatically summed up in a letter quoted by Hannah Arendt which Descartes wrote to Mersenne in November, 1633, concerning Galileo's trial and recantations: "... if the movement of the earth is false, all the foundations of my philosophy are also false."

We have come to a point now which requires us to go beyond Heidegger's observations to see how they might apply more directly to questions of intellectual perspective and cultural organization (as elements which are themselves constitutive of "world-as-lived-in") in Heidegger's sense. This extension is necessary, it seems to me, in order to do justice to the issues involved in the theme of religion in an age of science. Let us, then, refer to two other authors who, while proceeding from different grounds and operating with different methodologies from those in evidence here, have nevertheless developed arguments not incompatible with the kinds of questions about language which we have been raising. The authors are Benjamin Lee Whorf and Thomas S. Kuhn.

Benjamin Lee Whorf has developed what he calls "the principle of linguistic relativity." Without attempting systematically to trace the development of this principle in Whorf's own thinking, it is for our purposes sufficient to indicate at first what it is that the principle is directed against. Whorf asks the question: "Do you not conceive it possible that scientists... unknowingly project the linguistic patterns of a particular type of language upon the universe and SEE them, rendered visible on the very face of nature?" He describes this as the activity of the "personal mind" and then makes the following observations concerning the way in which Western language and thinking have carried this activity to its greatest extreme:

All this is typical of the way in which the lower personal mind, caught in a vaster world inscrutable to its method, uses its strange gift of language to weave the web of Maya or illusion, to make a provisional analysis of reality and then regard it as final. Western culture has gone farthest here, farthest in determined thoroughness of provisional analysis and farthest in its determination to regard it as final. The commitment to illusion has been sealed in Western Indo-European language, and the road out of illusion for the West lies through a wider understanding of language than Western Indo-European alone can give.9

The principle of linguistic relativity, first formally stated (in conjunction with and following from Whorf's work with Edward Sapir) in 1939, two years prior to the article this quotation is taken from, is designed, therefore, to break out of what we might call the "principle of linguistic absolutism" which Whorf apparently judged to have in-

formed the development of Western philosophy, theology, and science. Whorf offers two explicit statements of the principle of linguistic relativity:

- [1]. We are thus introduced to a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated.¹⁰
- [2]. Automatic, involuntary patterns of language are not the same for all men, but are specific for each language and constitute the formalized side of the language, or its "grammar"—a term that includes much more than the grammar we learned in the textbooks of our school days.

From this fact proceeds what I have called the "linguistic relativity principle", which means, in informal terms, that users of markedly different grammars are pointed by their grammars toward different types of observations and different evaluations of externally similar acts of observation, and hence are not equivalent as observers, but must arrive at somewhat different views of the world.¹¹

Stuart Chase, in the Foreword to Language, Thought and Reality, in summing up the theoretical and philosophical importance of Whorf, says the following: "Whorf as I read him makes two cardinal hypotheses: First, that all higher levels of thinking are dependent on language. Second, that the structure of the language one habitually uses influences the manner in which one understands his environment. The picture of the universe shifts from tongue to tongue." 12

Whorf's interpretation of the relationship between language and understanding, while developed on different grounds, is basically similar to the ontological analysis of language developed by Heidegger. In both instances, "world" is phenomenological; that is, "world" is the lived-in reality, the construction of language which shapes understanding and response. In both cases, though again proceeding from different assumptions, intentions, and methods, there is a common desire to "see through" specific structures (Whorf's particular grammars and corresponding pictures of the universe; Heidegger's entities, or what he calls "being-things") to that which makes possible the appearance of the specific "thing" in the first place. Whereas Whorf proceeds on the basis of scientific linguistics, Heidegger proceeds on the basis of fundamental ontological analysis. Whorf's analysis leads him to questions-he lets (in fact, encourages) it to do so-of being (and, since this takes him beyond possibilities of empirical demonstration, this makes him suspect in certain linguistic circles); Heidegger's analysis leads him to questions of language-it requires him to do so. Taken together, Whorf and Heidegger offer an illuminating interpretation of Alfred Korzybski's pun: "Ontology recapitulates philology."

The thrust of our reflections thus far on the question of language, meaning, and being is illustrated in a more specific way by Thomas S. Kuhn, professor of the history of science at Princeton University, in his book The Structure of Scientific Revolutions. Presented as an analysis of the nature and causes of revolutions in basic scientific concepts, Kuhn establishes and develops the nature of the relationship between paradigm and normal science, paradigm change and scientific revolution. The author's appropriaton of the word "paradigm" carries him beyond its usual meaning of "an accepted model or pattern" and beyond its meaning in grammar, where "the paradigm functions by permitting the replication of examples, any one of which could in principle serve to replace it." Pointing out that in science "a paradigm is rarely an object for replication," the author specifies the meaning of his own use of the word: in science, "like an accepted judicial decision in the common law, [the paradigm] is an object for further articulation and specification under new or more stringent conditions."18

For our purposes here, Kuhn's argument can be summed up as follows: What the author calls normal scientific research is carried out under the "direction" of a paradigm: "extending the knowledge of those facts which the paradigm displays as particularly revealing, by increasing the extent of the match between those facts and the paradigm's predictions, and by further articulation of the paradigm itself."14 Kuhn then specifies "three normal foci for factual scientific investigation. First is that class of facts that the paradigm has shown to be particularly revealing of the nature of things." A second but "smaller class of factual determinations is directed to those facts that . . . can be compared directly with predictions from the paradigm theory." The author then specifies a "third class of experiments and observations" which he suggests "exhausts . . . the fact-gathering activities of normal science. ... It consists of empirical work undertaken to articulate the paradigm theory, resolving some of its residual ambiguities and permitting the solution of problems to which it had previously only drawn attention."15

Part of Kuhn's point here is that these three foci obtain no matter what paradigm is "directing" scientific investigation, and the history of Western science can be seen as a history of successive paradigms; for instance, "Aristotle's analysis of motion, Ptolemy's computation of planetary position, Lavoisier's application of the balance, Maxwell's mathematization of the electromagnetic field." Each of these—and many others, of course—constitute paradigms under which normal scientific research is carried out.

But there have been changes in paradigms, and these changes are constitutive of a crisis in normal science leading to what we call scientific revolutions. Thus, Aristotle's *Physics* is replaced by Newton's *Principia*, Newtonian mechanics is superseded by quantum mechanics; and in the movement from Copernicus to Galileo to Einstein we see a corresponding shift in paradigms. In each case of paradigm shift, there is a corollary scientific revolution and newly emerging world view.

In these periods of paradigm shift, Kuhn observes that the search for rules (explicit rationalizations) becomes a characteristic of scientific procedures which is absent during a time of paradigm consensus. He speaks, for instance, of the "deep debates over legitimate methods, problems and standards of solution" which mark "pre-paradigm periods." A "pre-paradigm period" is also what I would call a "postparadigm consensus period" before the articulation of a new paradigm, where new discoveries and anomalies call radically into question confidence in the existing paradigm (for instance, circumnavigation in the face of the image of a flat earth). Summing up the relationship between rules, paradigm, and revolution, Kuhn notes the following: "When scientists disagree about whether the fundamental problems of their field have been solved the search for rules gains a function that it does not ordinarily possess. While paradigms remain secure, however, they can function without agreement over rationalization or without any attempted rationalization at all."16

One final observation remains to be made in order to do summary justice to Kuhn's complex and commanding argument. Throughout the first nine chapters of his book, the author has developed his analysis showing that the nature of science, as a human activity, is informed, if not determined, by the paradigm which opens up regions of phenomena for scientific investigation. Thus, his argument is compatible with our interpretation of both Heidegger and Whorf insofar as the meaning of the realm of activity-be it philosophical, linguistic, or scientific-is constructed by the theoretical and practical imagination of the subject. At the end of chapter ix ("The Nature and Necessity of Scientific Revolutions"), Kuhn makes a statement which serves as a transition to chapter x ("Revolutions as Changes of World View"). The statement also serves to fit his thesis with the present essay in an even more pertinent way than may presently be apparent. At the end of chapter ix the author says, "I have so far argued only that paradigms are constitutive of science. Now I wish to display a sense in which they are constitutive of nature as well."17 At the beginning of chapter x

the author says, "Led by a new paradigm, scientists adopt new instruments and look in new places. Even more important, during the revolutions scientists see new and different things when looking with familiar instruments in places they have looked before." Lest this be construed merely as a matter of interpretation, as against sheer seeing, the following comments later on in chapter x are unmistakably clear: "Rather than being an interpreter, the scientist who embraces a new paradigm is like the man wearing inverting lenses. Confronting the same constellation of objects as before and knowing that he does so, he nevertheless finds them transformed through and through in many of their details." And further, on the same page:

Given a paradigm, interpretation of data is central to the enterprise that explores it.... [The] interpretative enterprise... can only articulate a paradigm, not correct it. Paradigms are not corrigible by normal science at all.... Normal science leads only to the recognition of anomalies and to crises.... These are terminated, not by deliberation and interpretation, but by a relatively sudden and unstructured event like the gestalt switch. 19

Thus, we ought to be able to see a definite and meaningful congruence—each from his own perspective, intention, and method—between Heidegger, Whorf, and Kuhn. Heidegger, following Hölderlin the poet, sees language as the possibility of world and historical existence. Whorf, studying the structure of various languages and grammars, develops the principle of linguistic relativity and sees that "a change in language can transform our appreciation of the Cosmos" and that "as goes our segmentation of the face of nature, so goes our physics of the Cosmos." Kuhn, analyzing paradigm and scientific revolution, sees that "paradigms are constitutive of nature" as well as of science.

The question of language, then, has brought us to a point of seeing the constitutive function of language in relation to the development of world view. Analysis of the nature and function of world view is fundamental to the interpretation being offered here. In each of the authors cited, there has been either an implicit or explicit recognition that world view is not only that which constitutes the lived-in world. There has been also the recognition that the tendency to look upon world view as final and true leads to consequences of distortion, alienation, and even destruction. This is the case implicitly in the section quoted from Heidegger's essay on Hölderlin. (Heidegger has treated the subject of world view and world picture explicitly in an essay in Holzwege, "Die Zeit des Weltbild.") In Whorf's case, it was precisely the Western tendency to regard as final its provisional picture of the universe that led him to develop his linguistic relativity principle. In Kuhn's thesis

on paradigm, the shift in world view as a result of paradigm shift is essential to the full growth of science.

The analysis of world view was first most systematically developed by the late nineteenth-century (1833–1911) philosopher, Wilhelm Dilthey. Dilthey's influence on Heidegger has been immense.²⁰ Dilthey developed a typology of the stages of development of world view,²¹ a statement of which follows because it is highly relevant to the concerns of this section: "In the beginning a new outlook grew primarily out of a new life-relationship which no longer fitted within the old categories. The new life-relationship then expressed itself in new concepts and in fragmentary systems in poetry and unsystematized thought. Out of the early studies there grew up comprehensive, systematic metaphysical constructions. Finally, the new world-view reached maturity when critical investigation laid the epistemological bases for these systems."²²

What is at stake in the analysis of world view, and what has been at issue in our reflections on language and world, is of fundamental importance to religion and science. It is, in fact, the overriding question, namely, the question of man's deep relationship to the "truly real" and the way in which he can be delivered from the constructions he takes as real, unaware of their artifactual nature, into the "truly real." Traditionally, it has been the function of religion to be the means of this deliverance. This is related to what Eliade calls the "nostalgia for paradise" and to what Albert Camus has called the "nostalgia for lost unity." It proceeds according to a fundamental experience and intuition that—to use the words of our title—true salvation, fulfilment, and success arise only out of association with and in the truly real which lies beyond all the constructions of mind and civilization-and yet so close as to be always within reach. It is like the discovery that health is the other side of disease and that its possibility lies at the closest possible point to the organism-its very within-ness. The religious counterpart of analysis of world view is conversion—"turning around" -which Plato called metanoia to describe the action of the man in the cave who "turned around" from the shadows on the wall of the cave to the light and thus to the "true reality." It is also, as the religious counterpart of analysis of world view, called rebirth and transformation, deliverance out of the womb of one's own construction (or that constructed by one's culture) into a transformed existence.

The point is that world views are not, in and of themselves, healing. They are not salvatory, they are not themselves the instruments of transformation, no more so than a recipe for angel food cake is satisfy-

ing to the child clamoring for dessert. For there to be a cake there must be a technology of cooking and a patterned procedure for combining ingredients. But the child would never mistake the stove and the recipe for the real thing he seeks.

In our time, bound up as it is in appeals to and clashes of world view, analysis of world view is a necessary propaedeutic—prepedagogy, preteaching—to the transformation we are seeking, and which is involved in the achievement of salvation, fulfilment, and success. It is the cultural-philosophical equivalent to the therapeutic dynamics of analyst and analysand, where projection and counterprojection, transference and countertransference must be seen for what they are (and thus "seen through") for the process of true healing to begin.

These questions, important as they are, cannot be pursued at the moment. They take us beyond the scope of the present paper. What remains within our scope is a question which moves us through the question of language and world and takes us directly to the question of shifts of world view or shifts in paradigm that have taken place in Western culture during the past three hundred and fifty years—shifts constitutive of what I am calling "Western man's new experience." It is only as we confront this question that we can progress in our analysis and arrive at a point of at least tentative understanding so as to clarify the nature of the contemporary situation vis-à-vis religion and science.

II. WESTERN MAN'S NEW EXPERIENCE

By "Western man's new experience" I mean this: the radically altered construction of world view or paradigm which marked and marks the transition from the Middle Ages to the modern and contemporary world. These radical reconstructions have, it will be argued, issued in new interpretations, new feelings, new knowledge, and new experience of world which in turn constitute new meanings. These considerations are implicit in the interpretation of the title of this essay offered in the introduction, where salvation was seen as representative of theology; fulfilment, of psychology; and success, of science. Thus, the intent of the present section of this essay will be that of seeing the interrelationship of these perspectives in terms of Western man's new experience.

There are, as I see it, four aspects of this new experience which bear directly upon the questions at issue: (1) the scientific revolution; (2) the encounter of East and West; (3) the end of metaphysics; and (4) the discovery of the innermost.

Let us begin our interpretation here by citing one of the papers of Sigmund Freud. In his paper entitled "One of the Difficulties of Psychoanalysis," Freud says, in a prefatory note to one section, "I shall describe how the general narcissism of man, the self-love of humanity, has up to the present been three times severely wounded by the researches of science." Freud then specifies three wounds to the general narcissism of man: the cosmological wound inflicted by Copernicus, the biological wound inflicted by Darwin, and the psychological wound inflicted by Freud himself.

It is important to note here that Freud sees these "narcissistic wounds" as the effect of what he calls "the researches of science." Thus, we may specify formally what is obvious anyway, namely, that the first and overarching element of Western man's new experience is the scientific revolution. Of course, one does not have to agree with Freud's interpretation of this event in order to agree with its specification as the fundamental element in Western man's new experience-not just as an event primus inter pares but as the sine qua non of modernity. In this context, Herbert Butterfield, writing of the extent to which the scientific revolution issued in "the eclipse of scholastic philosophy . . . [and] the destruction of Aristotelian physics," says, "It outshines everything since the rise of Christianity and reduces the Renaissance and Reformation to the rank of . . . mere internal displacements. . . . It changed the character of men's habitual mental operation . . . while transforming the whole diagram of the physical universe and the very texture of human life itself."24

Butterfield's concern, as distinct from that of Freud, must be understood in the context of the genre of the history of ideas. But there is an aspect of the scientific revolution specified by neither Freud nor Butterfield in the passages quoted—except where the latter speaks of the transforming of "the very texture of human life itself."

In the final analysis, the consummate force of the scientific revolution is to be seen in its effect precisely at the point of its effect upon the texture of human life. If Christianity was indeed the greatest revolution in the West prior to the scientific revolution, there is at least this difference: the Christian revolution, radical as it was, did not have the effect that the scientific revolution has had upon "the very texture of human life itself," to use Butterfield's phrase. In fact, it has been argued that no revolution since the one inaugurated by the development of neolithic village life has had so drastic an effect upon styles of human organization and communication as the scientific revolution has had.

Marshall McLuhan, perhaps, has described more clearly than any other contemporary interpreter this drastic effect. His attention, unlike Butterfield's, is focused upon the nineteenth- and twentieth-century stages of the scientific revolution, specifically, those stages which marked the end of the dominance of the model of the machine and the rise of a different kind of model, based upon electromagnetic energy. McLuhan writes:

All values apart, we must learn today that our electric technology has consequences for our most ordinary perceptions and habits of action which are quickly recreating in us the mental processes of the most primitive men. These consequences occur, not in our thoughts or opinions, where we are trained to be critical, but in our most ordinary sense life, which creates the vortices and matrices of thought and action. . . . We can now live, not just amphibiously in divided and distinguished worlds, but pluralistically in many worlds and cultures simultaneously. We are no more committed to one culture—to a single ratio among the human senses—any more than to one book or to one language or to one technology. Our need today is, culturally, the same as the scientist's who seeks to become aware of the bias of the instruments of research in order to correct that bias. Compartmentalizing of human potential by single cultures will soon be as absurd as specialism in subject or discipline has become.²⁵

In placing side by side the interpretations of the meaning of the scientific revolution given by such diverse critics as Freud, Butterfield, and McLuhan, we can see the transforming nature of this revolution moving in different directions.

One direction can be described as the movement from the closedness of the Ptolemaic world to the openness of the Copernican world. This direction is summed up in the title of Alexander Koyré's book, From the Closed World to the Infinite Universe. The title, of course, is taking account not only of the mathematical-logical basis of the Copernican revolution but also of the existential impact of the announcement that the earth is not the stable center but is flying away at the edge of a universe (to quote Pascal, who is echoing Nicolas of Cusa) "whose center is everywhere and whose circumference is nowhere." In another of his Pensées, Pascal also speaks of the fright with which he is filled by "the eternal silence of these infinite spaces." John Donne, too, records this existential impact in a poem quoted in Koyré's book: "The earth is lost, and the sun, and no man's wit knows where to look for it." Thus, one direction, the obvious direction, of the transforming nature of the scientific revolution-especially in its earliest effect on cosmological theory—is to be seen as the explosion out of a relatively closed system into the open-endedness of the new system.

But there is another direction that can be seen in the light of McLuhan's judgment—a direction not immediately apparent in the light of Butterfield's assessment. This direction is apparent in the first

sentence of the McLuhan statement quoted above: "We must learn today that our electric technology has consequences . . . which are quickly recreating in us the mental processes of the most primitive men." Whether or not one accepts the judgment of the recreating of the primitive mentality, it must certainly be obvious that McLuhan is pointing to a fundamental fact of the style of technological life, namely, the transforming of the human world (understood as a system of communication) from a series of distinct entities and agencies into an energy field in which the characteristic closeness of the primitive tribe is restored. Thus, McLuhan begins the section immediately following the statement quoted above with this observation: "The new electronic interdependence recreates the world in the image of a global village."

The implications of McLuhan's judgment here are several. They point, for instance, to the way in which Western man has in the short span of less than four centuries reconstituted not only his cosmic symbolism but also the technical organization of his sociocultural life so as to experience himself once again in a relatively close, familiar setting. (One might ask if the new system has become not just close but closed, so that it is experienced not as a liberating agency but rather as a trap.) One is tempted to cite this accomplishment as evidence for the way in which the traumatic character of new experience is transformed so as to restore an earlier condition-in accord with Freud's theory of instinct. At least we could point out that the very meansnamely, the researches of science-whereby man was pushed out of the closed world are precisely the means whereby the reshaping and reorganizing of cosmos are accomplished so as to experience it, once again, as familiar and comfortable. The McLuhan statement, then, points toward a second and different direction of the transforming effect of the scientific revolution—when its effect upon "the very texture of human life" is considered. In this respect, then, a sequel to Koyré's book, to indicate the two-directional nature of the effect of the scientific revolution, should bear the title: From the Closed World to the Infinite Universe to the Closed World Once Again.

There is, however, another and more radical dimension to the movements being pointed to here—a dimension which both is and is not a part of the transforming effect of the scientific revolution. Also, it is a dimension which is only superficially concealed by the description of the movement from the closed to the open to the closed once again. This other dimension—hinted at certainly but not intrinsic to the scientific revolution as such—is pointed to by McLuhan, again in the statement previously quoted, when he says, "We can now live . . . in

many worlds and cultures simultaneously. We are no more committed to one culture . . . any more than to one book or to one language or to one technology." What McLuhan is suggesting here seems to me to be the cultural-psychological counterpart of the Copernican revolution -though now it is a revolution which is not reorganized and reshaped so as to become closed once again. Rather, this new dimension is to be seen as a movement from cultural singularity and closedness to cultural plurality and openness; or, stated more dynamically, this new dimension points to a movement from the closedness of familiarity to strangeness, confusion, and diffusion. The consummation of the scientific revolution in "electronic culture," to use McLuhan's phrase, has succeeded in re-placing man in a familiar cosmos in which everything is near at hand, so to speak, for the immediate purposes of ordinary living and communication as reconstrued under the impact of the scientific revolution. But this consummation has left completely untouched, or nearly so, this other dimension-the movement of which we have described here as the unresolved movement into strangeness, confusion, and diffusion.

The meaning of this movement, it seems to me, is quite clear: It means that contemporary Western man is left with no recourse to an ultimate authority upon which to base his technological style of life or in terms of which to interpret his own spiritual tradition. The attempt to do this by recourse to a so-called theology of secularization, or by appeal to the biblical understanding of creation and grace whereby the world is looked upon as man's inheritance from God, is mainly a tour de force. The technologization of life is, after all, a fact of historical development, and attempts to justify it historically do not necessarily help us to understand its meaning. Also, the attempt to justify it by means of appeal to some suprahistorical reality begs the entire question raised by the phenomenon of technological organization and understanding of life. Furthermore, these attempts to justify technology and secularization as extensions not contradictory to the meaning of the Gospel may represent the final vestige of the historicist mentality which sees the current historical period as the goal of history, its fulfilment. It is entirely possible that the technologization of life is simply a stage in the development of human consciousness which is itself the prelude to different forms. This movement into strangeness, confusion, and diffusion means, then, that there is the problem of construing internal developments in the Western tradition-that is, the scientific revolution as we have been reflecting upon it here—in terms of our own spiritual tradition, and seeing, furthermore, that the two are, if not

mutually incompatible or unnecessary for each other's vitality, at least uncomfortable and sometimes embarrassed partners in the same household. In the end, perhaps, the world is not big enough for science and religion as they are presently understood. The one that remains will be the one that most successfully transforms itself into the agency of profoundest satisfaction.

But the movement into strangeness, confusion, and diffusion also means that Western man is confronted by religiophilosophical systems and traditions which are external to his tradition and which compete with its claims. This meaning, it seems to me, is the more threatening of the two because there are traditions better equipped to survive the encounter than our own, precisely because some of these other traditions—Hinduism, for example—are not exclusivistic. Neither are they historical, in the sense of the Judeo-Christian tradition—and, thus, they need not justify any particular form of social organization. Furthermore, their concepts and languages are more at home with contempoary scientific understandings than the incipient substantialistic presuppositions of most Christian theologizing.²⁶

Now, this second meaning of the movement into strangeness, confusion, and diffusion, where it is now part of normal experience to be confronted with competing claims by other religious traditions, constitutes the second fundamental aspect of Western man's new experience and, by implication, a third and fourth aspect. We have come to this second aspect in a rather roundabout way, by virtue of our reflections upon the scientific revolution and its consummation in what McLuhan calls "electronic culture." But though this second aspect follows from and is bound up with the first (as is the case also, as we shall see shortly, with the third and fourth aspects), it is sufficiently distinct to see it as separate. It is pointed to unmistakably by Joseph Campbell when he includes a long statement from Nietzsche's Human, All Too Human and says:

When the bold square-riggers of the West, about 1500 A.D., bearing in their hulls the seeds of a new, titanic age, were coming to port, sails furled to yard-arms, along the coasts not only of America but also of India and Cathay, there were flowering in the Old World the four developed civilizations of Europe and the Levant, India and the Far East, each in its mythology regarding itself as the one authorized center, under heaven, of spirituality and worth. We know today that those mythologies are undone—or, at least are threatening to come undone: each complacent within its own horizon, dissolving, together with its gods, in a single emergent new order of society, wherein, as Nietzsche prophesied in a volume dedicated to the Free Spirit, "the various world views, manners, and cultures are to be compared and experienced side by side, in a way

that formerly was impossible when the always localized sway of each culture accorded with the roots in place and time of its own artistic style. An intensified aesthetic sensibility, now at last, will decide among the many forms presenting themselves for comparison: and the majority will be let die. In the same way, a selection among the forms and usages of the higher moralities is occurring, the end of which can be only the downfall of the inferior systems. It is an age of comparison! That is its pride—but more justly also its grief. Let us not be afraid of this grief!"27

Let us, then, following Campbell and Nietzsche, name the second fundamental aspect of Western man's new experience "the inauguration of the age of comparison"—understanding this now as the name for what we have been calling the movement into strangeness, confusion, and diffusion, and understanding it also as originating in the historical event of the age of exploration, as distinct from the scientific revolution. Now, a third and a fourth aspect of Western man's new experience are bound up with and follow from this second.

Let us name the third aspect-borrowing the phrase from Martin Heidegger and informed by, but not necessarily limited to, the strict meaning he assigned to it—"the end of metaphysics." Let us understand metaphysics in the classical sense as the location and defining of the realm of essence which exists independent of both the world of thought and the world of things-an understanding deriving from the tradition of Platonic-Aristotelian substantialism. Note, then, how the metaphysical tradition in Western philosophy has led to a metaphysical tradition in theology which makes it possible to conceive of God as the absolute substance, who exists independent of his creation. (Two observations may be made here. First, this is precisely the principle which informs the development of the ontological argument for the existence of God. Second, the transition from the impersonal pronoun "it" to the personal pronouns "who" and "his" carries problems unique to Christian experience which are summed up in the trinitarian and christological controversies of the earliest centuries of the Christian era.)

In this context, then, the "end of metaphysics" (not only its end as terminus a quo but also its end as telos, its end as consummation, its end as surpassing) would signify a turning from metaphysics as a science of essence to a radically different approach to the location of the place and the way in which being manifests itself. Given, however the traditional alignment of theology and metaphysics where the one becomes a species of the other, the "end of metaphysics" would require that theology find some other means of establishing its right to speak authoritatively concerning the Being of God. Or, conversely, it would mean that metaphysics find some other way of elucidating its own claim to speak

definitively of Being than by way of reference to some ultimate substance-traditionally, in our culture, called God. As a matter of fact, this is the problem posed by the inauguration of the age of comparison and of science. That is to say, no longer could Western philosophy, understood in the substantialistic-metaphysical sense, be counted upon to validate philosophically the Judeo-Christian mythology, to use Campbell's phrase from the passage quoted, "as the one authorized center, under heaven, of spirituality and worth." It took approximately four centuries for this to become generally apparent. But what are ordinarily understood as the beginnings of modern philosophy-under the impact of both the scientific revolution and the age of comparison-show in unmistakably clear terms that philosophy in the metaphysical sense disavowed any explicit alliance with or dependence upon theological claims. The line that moves from the rationalistic metaphysics of Descartes, Spinoza, and Leibnitz to the critical philosophy of Kant to the anti-metaphysical philosophy of Nietzsche registers precisely the reverberations from the dual shock of the scientific revolution and the age of comparison. Descartes needed God only as a logical principle, a third term in order to get from the substance of mind to the substance of matter; or, in Pascal's more telling phrase, "I cannot forgive Descartes. In all his philosophy he would have been quite willing to dispense with God. But he had to make Him give a fillip to set the world in motion; beyond this, he has no further need of God." Three hundred and fifty years later God was no longer needed even for this; the fillip necessary to get the world in motion could be conceived quite apart from metaphysical grounds, on purely naturalistic grounds—on the grounds of the internal organization of the world. So the last bastion of metaphysics, the principle of the formal cause, was rendered not only incompetent but senile, and Nietzsche's Dr. Jekyll and Mr. Hyde, Zarathustra and the Madman, could proclaim the death of God. Beyond their significance as Nietzsche's personae for a profoundly anguished age, they were announcing the demise of all metaphysical supports for God. With this demise, the metaphysical projections collapsed, and all ways of establishing God's substantial presence were demolished. What was left was either the sheer will to believe or, as suggested by Nietzsche in the passage quoted by Campbell, an "intensified aesthetic sensibility."

In sum, the inauguration of the age of comparison involves not only, as Campbell said, the undoing of mythologies; it involves also the end of metaphysics as our culture's way, traditionally, of attempting to interpret its mythology to itself to give substance to that mythology. Theology, then, has been in a bind: no longer has it been able simply

to rehearse the myths and symbols of its own tradition; they have been called radically into question by both internal developments (the scientific revolution) and external encounter (the age of comparison). Neither has it been able to appeal, as a result of the "end of metaphysics," to the tradition of thinking which gave theology its characteristic concepts and vocabulary. This latter aspect of the new experience, in terms of its effect on theology, was directly anticipated by Pascal in an insight gained during his famous conversion and written in a memorial (which he kept hidden in his jacket) to that experience: "God of Abraham, God of Isaac, God of Jacob, not the god of philosophers and scholars." One could argue that Pascal had foreseen the end of metaphysics as we have been discussing it. Pascal's insight here, of course, was anticipated by others before him. Thus, Nicolas of Cusa wrote in his essay "On Learned Ignorance": "All we know of truth is that absolute truth, such as it is, is beyond our reach. . . . The quiddity of things, which is metaphysical truth, is unattainable in its entirety; and though it has been the object of all philosophers, by none has it been found as it really is. The more profoundly we learn this lesson of ignorance, the closer we draw to truth itself."

Both Pascal and Nicolas of Cusa, then, seem to have foreseen the end of metaphysics—not only as a discipline in itself but also as an appropriate discipline for reflecting upon the structure and dynamics of religious truth. The insights of both have arisen from the profundity of their own vital experience, their mystical experience, if you will.

It is at this point that we may begin to specify the fourth aspect of Western man's new experience. It so closely follows from and is involved in the other three aspects specified that one is tempted to say that it alone is the basis of, the possibility of, the appearance of, the other three aspects thus far named. But it is so subtle and at the same time so obvious, so much a part of the contemporary mentality, yet so distant from it, that the attempt to name it, to see it, is much like the attempt to taste one's own tongue. I am calling this fourth aspect of Western man's new experience "the discovery of the innermost." The phrase is taken from José Ortega y Gasset's remarkable and much too neglected book What Is Philosophy? He also speaks of "the discovery of subjectivity," but for our purpose the phrase "discovery of the innermost," because it is more general and less technical, is better. The meaning of the phrase is simply this: modern man "has collided with himself," much as he does when, expecting another step at the bottom of the stairs and there is none, he stumbles—the point being that in this collision man has discovered himself as an absolutely new kind of reality in the universe. Let us hear Ortega himself speak the decisive passage:

Without sound or bloodshed, lacking cymbals to announce it, fifes to exalt it, or poets to adorn it with verses, this shift is undoubtedly one of the greatest events for which the planet has provided a stage. Ancient man still lived close to his brother the animal, and like him, was focused toward the external. Modern man has put himself inside himself, has awakened from his cosmic unconsciousness, shaken off the sleep which was left to him from the garden, the algae, the mammal, and has taken possession of himself: he has discovered himself.²⁸

Ortega is not saying here that there have not been individuals in the past who have themselves on their own account made this discovery. In our tradition, one could go as far back as Heraclitus and Socrates and Isaiah and Jeremiah to find individuals who discovered the reality of the innermost. Nor is he saying that previous cultural epochs in the West have not provided symbolisms which represent an early stage in this discovery. Eric Voegelin, for instance, in his three-volume Order and History, has described as "leaps in being" both the Hebrew and the Greek experiences, one of the results of which was to issue in symbolisms which differentiated Greek and Hebrew experiences from the compact symbolisms of the ancient Near Eastern cosmologies. What Ortega is saying is that modern Western man is, for the first time, as a whole, identified in terms of this discovery; that his whole experience is shaped by it; and that it is, fundamentally, a new experience.

This discovery of the innermost has been implicit in each of the three aspects of Western man's new experience specified thus far in this essay. It is implicit in the scientific revolution and its consummation in electronic culture to the extent that the presupposition of technological life is that it is man's responsibility to organize and control his own world. It is implicit in the inauguration of the age of comparison to the extent that the encounter of Western and non-Western symbolisms has induced an awareness of the symbolic and mythic modes of consciousness and at the same time raises questions concerning the dynamics of such modes. It is implicit in the end of metaphysics insofar as it signifies the impossibility of validating any cultural or individual style of life by appeal to some ultimate knowledge. And, now, that which was implicit in each of these becomes explicit in the "discovery of the innermost" as a fourth aspect of Western man's new experience.

In terms of the purpose of the present essay, the question is: What does this discovery have to do with religion? A partial answer is provided by Ortega. Shortly after the passage quoted above, he suggests, as

a possibility, that the Christian God must have taken the trouble to "intervene very specially in order to bring about the specifically modern discovery from which the whole anti-Christian age springs"—that is, the discovery of the innermost. Then, a few pages later in the same chapter, he compares Augustine and Descartes, saying: "It is curious that the founder of Christian ideology and the founder of modern philosophy should so coincide in their whole first line. For St. Augustine, too, the self exists insofar as it knows itself to be—its being is its knowing—and that reality of thought is first in the order of theoretic truths. One must take one's stand on that reality, not on the problematical reality of the cosmos and that which is external." Ortega goes on to quote St. Augustine directly. Then he makes an observation and poses a question which shows directly the relevance of "the discovery of the innermost" to questions of religion.

First he quotes Augustine: "Do not go afar, seek within thyself. Truth resides inside of man." Then he goes on to say:

Here, too, is man an absolute interior, as the innermost. And . . . in the depth of this innermost being he finds God. It is curious that all religious men should coincide in talking to us of what St. Theresa too calls "the depths of the soul"; and that it should be just in that depth of the soul where, without going forth from it, they find God. The Christian God is apparently transcendent to the world, but immanent in the "depths of the soul." Is there any reality behind this somewhat dusty metaphor? Let us not ask questions now which we cannot answer.30

I will not now attempt to answer the question which Ortega posed, though I cannot refrain from pointing out that the metaphor is still operative in the contemporary discipline called "depth psychology." But I do want to elaborate briefly on the direction in which Ortega has led us in order to show more directly the bearing of the discovery of the innermost on the problem of theology and religious truth in general.

On the final page of The Hero with a Thousand Faces, Joseph Campbell makes the following observation: "The descent of the Occidental sciences from the heavens to the earth (from seventeenth century astronomy to nineteenth century biology) and their concentration today, at last, on man himself (in twentieth century anthropology and psychology) mark the path of a prodigious transfer of the focal point of human wonder. Not the animal world, not the plant world, not the miracle of the spheres, but man himself is now the crucial mystery."31

When Campbell's statement is seen in relation to Ortega's understanding of "the discovery of the innermost," it becomes clear that a fundamental dimension of this fourth aspect of Western man's new ex-

perience is to be understood as a shift in the locus of the holy. Throughout most of man's history, the "holy" has been "out there": in the sun and the moon, in thunder and lightning, in the cycles of nature, in the Ark of the Covenant, in the mystery at the altar, in the Book on the pulpit. But now at the coordinate of the descent of the occidental sciences and the discovery of the innermost, the holy, the crucial mystery, that which both attracts and repels in an overpowering way, is "in here"—it is man himself as innermost, as pure subjectivity creating and organizing his world out of his vital center. Mircea Eliade has commented upon precisely this dimension in such a way as to show how the "inauguration of the age of comparison," as we call it here, is also involved in what we are calling the "shift in the locus of the holy":

It is remarkable that the cultural flowering of psychoanalysis, as well as the growing interest in the study of symbols and myths, should have coincided to a large extent with the emergence of Asia into History and, furthermore, with the spiritual and political awakening of the "primitive" peoples. . . . It has not yet been clearly realized that the "openings" effected by the discoveries of the psychologists and the explorers of archaic thought are homologous to the large-scale appearance of the non-European peoples in history; that it is not merely a question of the considerable enlargement of the scientific horizon . . . but also, and primarily, of experiencing an encounter with the "unknown." Now an encounter with the "totally other," whether conscious or unconscious, gives rise to an experience of a religious nature. 32

Ortega, then, speaks of the "discovery of the innermost"; Campbell speaks of the "descent of the Occidental sciences" and man's discovery of himself as the crucial mystery in the cosmos; Eliade speaks of the encounter between conscious and unconscious, modern and archaic modes of thought, Western and non-Western myths and symbols as an encounter with the "totally other" which "gives rise to an experience of a religious nature." Together, they speak in behalf of what I am calling "a shift in the locus of the holy." I would like to pose the significance of this, the fourth aspect of Western man's new experience, in the form of a sort of riddle:

If the universe is conceived of as the totality of everything that is, as everything that is the case, then can there be anything outside the universe? But, if there can be nothing outside the universe, then that means there is no ear to hear it, no eye to see it, no tongue to speak it, no finger to point to it, no mind to think it. But, if this is the case, then is the universe not inaudible, invisible, unutterable, ineffable, and inconceivable? And are what we project as sounds, sights, voices, movements not simply the interior workings of the universe as absolute interiority? And would not the discovery of the innermost then be the discovery of our fundamental interconnections with the universe as absolute inwardness?

The question of inwardness may be the ultimate mystery of the cosmos. We have specified four fundamental and interconnected aspects of Western man's new experience: (1) the scientific revolution; (2) the inauguration of the age of comparison; (3) the end of metaphysics; (4) the discovery of inwardness. In terms of the questions raised in Part I concerning language and world, what we see emerging as a result of our interpretation of Western man's new experience, in Part II, is a specific illustration, within the general theme of religion in an age of science, of the clash of perspectives, paradigms, world views, and interpretations of human existence.

The mood of the essay thus far has been analytic and diagnostic. We have reached a point now where, in conclusion, we must venture constructively, synthetically, and prognostically.

III. CONCLUDING AND ANTICIPATORY REMARKS

The argument of the essay can be summed up as follows: Reflection upon the three words of the subtitle, within the range of issues included in the theme "religion in an age of science," raises immediately two questions. The first is that of language and world, on the assumption that particular views of the function of language and the nature of world not only inform any approach to such words as "salvation," "success," and "fulfilment" but also inform, if not determine, the approach to the broader questions of religion and science. Part I, therefore, was intended to show, beginning with the question of the imagination, that the question of language and world is just as relevant to science as to religion. Furthermore, the appeal to the arguments of Whorf and Kuhn were designed to show that what we call "development of scientific language" or "revolutions in scientific views and procedures" is to be seen as the successive creations of "lived-in worlds." It is the creation of the human world, the world of meaning, wherein it was argued that the theses of both Whorf and Kuhn are compatible with Heidegger's view of the relation between language, world, and history. The stark implication of this, which has become more and more explicit in recent Western consciousness, is that there is no extra-linguistic or extraworldly standpoint, no Archimedean point, by which to judge between the final truth of the various worlds created by human imagination and activity. The most that can be accomplished is simply the interpretation of the meanings of the various worlds. Human life in its fulness, then, is to be seen, finally, as poetic, with, however, the understanding that the root meaning of "poetry" is "to make" or "to do." In this sense, the argument ensuing from the first question, the question of language

and world, is summed up in these excerpts from Delmore Schwartz's poem "The Kingdom of Poetry":

For poetry magnifies and heightens reality.

Poetry says of reality that if it is magnificent, it is also stupid.

For poetry is, in a way, omnipotent;

For reality is various and rich, powerful and vivid, but it is not enough

Because it is disorderly and stupid or only at times, and erratically, intelligent:

For without poetry, reality is speechless or incoherent:

It is inchoate, like the pomp and bombast of thunder....

Hence it is true that poetry is an everlasting Ark, An omnibus containing, bearing and begetting all the mind's animals.

The effect of the argument issuing from the first question thus begins to chafe the sensibilities of all religious pietisms and theological absolutisms, as well as those of a parochial scientism. For generation upon generation, we in the West have been taught, within the Judeo-Christian tradition, that the mythos of that tradition carries an absolute, final, and unique truth summed up in the historical events considered both revelatory of the essence of God and of the nature of the universe and constitutive of the tradition itself. Thus, any attempt to develop a theory of religious life or a philosophy of religious meaning which derives from different categories (for instance, the function of myth, the metaphoric nature of language, psychological or anthropological perspectives) is bound to meet with a deep resistance born of centuries of cultural and psychological conditioning.

It is, however, precisely this conditioning which we have observed being called radically into question during the past three centuries. Thus, the second question to emerge from our reflections on the title was the question of what was called "Western man's new experience"—the question, that is, of the ways in which Western man has experienced over the past three centuries those events which have tended to push him out of the security of his habitual and familiar world. Thus, the analysis in Part II can be seen as an attempt to specify in more concrete terms the issues which emerged in Part I. This specification, perhaps, can be summed up by reference to another poet, Goethe, who wrote: "Every man sees the finished, complete, and organized world only as a starting point out of which he creates a special world which is suitable to his nature. He who is permeated with this basic truth will strive with one truth but will regard the ideas of another, as well as his own, as phenomena." 33

If there ever was a "finished, complete, and organized world" in the

West, Western man's new experience has delivered him out of it. The deep memory of its patterns, structures, promises, and meanings, however, still lingers. On this basis we are engaged, as every generation must be, in creating "a special world suitable to [our] nature." That world is here; we are in it already. But its outlines are only dimly seen because we are in it and have not yet, perhaps, learned Goethe's trick, the poet's trick, of seeing not only the ideas of another but our own ideas as well, as phenomena.

That is, we cannot divest ourselves of overattachment to the patterns either of the past or of the present and thus cannot see clearly how to get the two together. It is this task of seeing clearly the shape of the world we are in that I see as the prime function of religion in an age of science. It is a task of illumination and of transformation. It is a task pointed to by the first statement of Whorf quoted in Part I: "The commitment to illusion has been sealed in Western Indo-European language, and the road out of illusion for the West lies through a wider understanding of language than Western Indo-European alone can give."

In light of the subsequent interpretation, we perhaps have a clearer understanding of what Whorf was saying, namely, that it seems to be in the nature of man-the-speaker to regard as final, and commit himself to, the worlds constructed by the activity of language and imagination. In his innocence he does not see these as illusory. But Western man, by virtue of his new experience, has lost his innocence; it has been replaced by the awareness of the relative nature of all constructive human activity. It may be that in this there is hope of salvation, fulfilment, and success. Apparently, Whorf thought so, because immediately following the statement above he said: "This [wider understanding of language] is the . . . next great step, which [Western consciousness] is now ready to take. It is probably the most suitable way for Western man to begin that 'culture of consciousness' which will lead him to a great illumination."

It may seem questionable whether religion, whose task, as I have suggested, is that of helping to see clearly the pattern of the world we are already in, must limit itself to the means of providing a "wider understanding of language" as preparatory to the "great illumination." This is in spite of the fact that one of the traditional scriptures of the West begins by saying, "In the beginning was the Word," and sees the possibility of light in the Word: "The light shines in the darkness. . . ." Wallace Stevens writes in his poem "A Primitive Like an Orb":

It is
As if the central poem became the world,
And the world the central poem, each one the mate
Of the other.

As questionable as it may seem, however, is this "wider understanding of language" not precisely what has happened in both the scientific revolution and the encounter of East and West? That is, as a result of both of these aspects of Western man's new experience, has not Western religion become more self-conscious, has it not become more aware of the peculiar nature and function of its own peculiar language? The difficulty is that the self-consciousness may inhibit rather than facilitate deliverance into "the great illumination." But, at the same time, the other aspects specified—the end of metaphysics and the discovery of the innermost—may be the initial steps prerequisite to that illumination—the one representing freedom from the illusion of authoritarian sanctions which pretend to be ultimate and the other representing the reexperience of those creative, life-giving sources which lie beyond all particular symbolisms.

In any event, it seems clear that whatever method, whatever way ("method," from the Greek "meta to hodos," meaning according to the way followed) religion follows, its interpreters must develop a new science, if you will, of religious interpretation. Edmund Husserl wrote in the margin of his Cartesian Meditations, presenting his new science of phenomenology: "Where there is a new experience, there a new science must arise." If, in fact (and it is, of course, arguable from certain perspectives), Western man has undergone a new experience, then a new science of religion must arise in this age of science. Such a new science is arising; one can see it emerging all the way from theology to history of religions, from phenomenology to the phenomenon of the psychedelics. And these new interpretations are drawing upon all of the new sciences: the new physics, psychology, anthropology, biology, ecology, psychopharmacology. As yet, however, the pattern of the new science of religion is not clear; it is in what we have seen Kuhn describe as the crisis of the "pre-paradigm period."

Perhaps—to initiate now a series of final observations intended to be anticipatory—the paradigm of the new science of religious interpretation will be that, once again, of myth. What is being suggested here can be seen more clearly in a statement by Joseph Campbell. (In fact, his work is probably the *only* contemporary work in progress [three volumes of a projected four have been published] which is accomplishing

the development of a new science of religious interpretation, what he calls a "natural history" of religion and myth.) Concerning the nature and function of mythology, Campbell writes:

In the long view of the history of mankind, four essential functions of mythology can be discerned. The first and most distinctive—vitalizing all—is that of eliciting and supporting a sense of awe before the mystery of being....

The second . . . is to render a cosmology. . . . The cosmology has to correspond, however, to the actual experience, knowledge and mentality of the culture folk involved. . . .

A third function is to support the current social order, to integrate the individual organically with his group; and here again, in the long view, we see that a gradual amplification of the scope and content of the group has been the characteristic sign of man's advance from the early tribal cluster to the modern post-Alexandrian concept of a single world-society....

The fourth function is to initiate the individual into the orders of his own psyche, guiding him toward his own spiritual enrichment and realization.³⁴

In terms of our delineation of the scientific revolution as the first and basic aspect of Western man's new experience, it is striking to note the extent to which science as a system of symbols orienting and organizing Western man meets the conditions laid down by Campbell regarding the four essential functions. It is quite reasonable to propose that science (1) elicit a sense of awe; (2) render a cosmology; and (3) support the social order. It is also quite reasonable to propose that the point where science fails to meet an essential function of mythology as specified by Campbell is the point at which science fails "to initiate the individual into the orders of his own psyche, guiding him toward his own spiritual enrichment and realization" (the latter being synonymous with the words of our subtitle?). It is precisely here that traditional metaphysical theology, called into question by the new experience of Western man, has so obviously failed. It is also precisely here wherein lies the great opportunity for the rise of a new science of religious interpretation.

Such a new science which treats of the way or ways in which an individual is "initiated into the realities of his own psyche" would be one informed not only by the data of its own tradition, not only by every dimension of Western man's new experience, but also by the new sciences in other realms which have arisen in response to the new experience.

Such a new science, for instance, would be informed by the data of the history of religions which, while it has its roots in the nineteenth century, has come into its own only during this century. This, of course, is probably the most threatening prospect: How can religion and theology, which have their own data, their own claims regarding those data, be open to the insights of other religions, to the procedures developed for the study of and appreciation of these other religions? The proper question, in light of what we have here called the "inauguration of the age of comparison," is: "How can a new science of religion and theology not do this?" Resistance to letting either Christianity or theology be informed by this aspect of Western man's new experience goes all the way back to the "new science" of Giambattista Vico. Vico, in his attempt to write of the world of nations, or history, which man could know since man had made it, specifically excluded "the Hebrew-Christian tradition and its institutions from the range in which the new science claimed full competence." Concerning this difference between the natural law of the Hebrews and that of the gentiles, Vico wrote: "Besides the ordinary help from providence which was all that the gentiles had, the Hebrews had extraordinary help from the true God. . . . "35

Vico's strategy here, it seems to me, has marked either explicitly or implicitly every avowedly Christian theology which has appeared since, even though the evidence for including the Hebrew-Christian tradition under the "full range of competence" of the human sciences has steadily increased. Paul Tillich spoke of the problem being posed here in the last of his Chicago lectures, when he said: "A theologian who accepts the subject, 'The Significance of the History of Religions for the Systematic Theologian,' and takes this subject seriously, has already made, explicitly or implicitly, two basic decisions. On the one hand he has separated himself from a theology which rejects all religions other than that of which he is a theologian. On the other hand if one accepts the subject affirmatively and seriously, he has rejected the paradox of a religion of non-religion, or a theology without theos, also called a theology of the secular."³⁶

Besides being informed by the history of religions, a new science of religion and theology would also be informed by the researches of depth psychologists, anthropologists, and all who study critically the whole range of symbolic and mythic meanings according to which men have established their worlds. That is to say, there is now once again the possibility of a total knowledge of man—though now as a discipline of reflection which is granted no special status because of an alleged supranatural subject matter. Eliade has spoken directly to this point also: "What principally concerns us now is to integrate the researches of the orientalists, ethnologists, depth psychologists, and historians of religion in order to arrive at a total knowledge of man. These scholars

have untiringly revealed the human interest, the psychological 'truth' and the spiritual value of all those symbols, myths, divine figures and practices to be found among the Asiatics and the primitives."²⁷

Can a science of religion and theology transformed into a new science be concerned with anything less than integrating all relevant researches in order to "arrive at a total knowledge of man"? Certainly nothing less; perhaps a great deal more-more, that is, in the sense of not getting in the way of, but helping, the individual to "be initiated into the realities of his own psyche" and to "be guided toward spiritual enrichment and realization." Seeing theology as the Western specialized study of religion, it all depends on how theos functions in the new theology. It may be that the kind of new science we are seeking will need to be profoundly informed not only by all the available relevant researches but by the vision of theos as standing for the totality of experience, the Mystery of the All. Theology traditionally has claimed this vision for itself. But, in the light of Western man's new experience, the claim has become empty, sounding like "thoughts of a dry brain in a dry season." To understand theos as the Mystery of the All may mean that theology can become a new science of the Whole.

Though it is undoubtedly premature, I will venture, in conclusion, a delineation of four aspects of a new science of religious interpretation and theology which, if appropriately developed, could bring together the diverse requirements we have been considering. Speaking quite tentatively, I would suggest that our new science would become a science of eros, a science of mythos, a science of psyche, and a science of therapeia. In other words, a new science of religious interpretation and theology, seeking to speak truthfully on behalf of Western man's new experience and at the same time authentically on behalf of the Mystery of the All, will address itself to the life of the body as the fundamental reality of life, to the life of expressive language, to the life of soul as vital innermost, and to the life of healing as the means of reconciling all the dichotomies and oppositions upon which man is caught. In this way, perhaps, a new science of religion in an age of science could function in such a way as to initiate the individual into the realities of his own psyche and assist fundamentally in guiding him toward spiritual enrichment and realization.

Can, or will, this transformation be accomplished? One thing is clear: the Western sciences of religion are in a state of crisis, they are undergoing a transformation. Speaking of the individual moving into the second half of life, C. G. Jung wrote: "In the second half of life the necessity is imposed of recognizing no longer the validity of our former

ideals, but of their contraries; of perceiving the error in what was previously our conviction; of sensing the untruth in what was our truth; and of weighing the degree of opposition and even of hostility in what we took to be love."

It may be that Western religion, in an age of science, has moved into the second half of its life.

NOTES

- 1. See especially Géza Róheim, The Origin and Function of Culture (New York: Nervous and Mental Disease Monographs [No. 69], 1943); Roger Caillois, Man, Play and Games (Glencoe, Ill.: Free Press, 1961); and Johannes Huizinga, Homo Ludens (Boston: Beacon Press, 1955).
- 2. Friedrich Nietzsche, The Birth of Tragedy from the Spirit of Music, trans. Clifton P. Fadiman, in The Philosophy of Nietzsche (New York: Modern Library, 1927), p. 952.
- 3. Philip Wheelwright, The Burning Fountain: A Study in the Language of Symbolism (Bloomington: Indiana University Press, 1954), p. 101.
 - 4. The Century Dictionary (New York: Century Co., 1891).
- 5. With reference to the word "scene" in the second definition, it is pertinent to note that Kenneth Burke, in his Grammar of Motives (New York: Braziller, 1955), lists the words "society," "environment," "ground," "terrain" as synonyms for "scene." Specifically, for Burke, "scene" means when or where an act was (is) done. In this sense, then, our use of "world" can be looked upon as a synonym for "scene." Northrup Frye has said, not of world but of "nature": "When we pass into anagogy, nature becomes, not the container, but the thing contained.... Nature is now inside the mind of an infinite man who builds his cities out of the Milky Way. This is not reality, but it is the conceivable or imaginative limit of desire, which is infinite, eternal, and hence apocalyptic. By an apocalypse I mean primarily the imaginative conception of the whole of nature as the content of an infinite and eternal living body which, if not human, is closer to being human than to being inanimate" (Northrup Frye, Anatomy of Criticism [New York: Atheneum Publishers, 1966], p. 119). Following Frye, it could be argued that science has taken over the apocalyptic function both in the literal sense (unveiling the secrets) and in the anagogic sense (seeing nature as the thing contained in man's imagination).
 - 6. Wheelwright, op. cit., p. 95.
- 7. Martin Heidegger, "Hölderlin and the Essence of Poetry," in Existence and Being (Chicago: Henry Regnery Co., 1949), pp. 299-300.
- 8. Hannah Arendt, The Human Condition (Chicago: University of Chicago Press, 1958), p. 273.
- 9. Benjamin Lee Whorf, Language, Thought and Reality, ed. John B. Carroll (Cambridge, Mass.: M.I.T. Press, 1956), p. 263.
 - 10. Ibid., p. 214.
 - 11. Ibid., p. 221.
 - 12. Ibid., p. vi.
- 13. Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1964), p. 23.
 - 14. Ibid., p. 24.
 - 15. Ibid., pp. 25-27.
 - 16. Ibid., pp. 48-49.
 - 17. Ibid., p. 109.
 - 18. Ibid., p. 110.
 - 19. Ibid., p. 121.
 - 20. See the English translation of Heidegger's Being and Time, pp. 72-73. Also,

William J. Richardson, Heidegger: Through Phenomenology to Thought (New York: Humanities Press, 1963); and Herbert Spiegelberg, The Phenomenological Movement (New York: Heinman Imported Books), I, 323.

21. Most of Dilthey's writings remain untranslated. For an introduction to his thought, see H. A. Hodges, *The Philosophy of Wilhelm Dilthey* (London: Routledge & Kegan Paul, 1952), especially pp. 93–95, for Dilthey's conception of *Weltanschauungen*.

22. William Kluback, Wilhelm Dilthey's Philosophy of History (New York: Colum-

bia University Press, 1956), pp. 38-39.

23. Philip Rieff (ed.), The Collected Papers of Sigmund Freud: Character and Culture (New York: Collier Books, 1963), p. 185.

24. Herbert Butterfield, The Origins of Modern Science (New York: Macmillan Co., 1958), pp. vii-viii.

25. Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man

(Toronto: University of Toronto Press, 1962), pp. 30-31.

- 26. See, for instance, the section in McLuhan's Gutenberg Galaxy entitled "The Modern Physicist Is at Home with Oriental Field Theory"; the chapter entitled "The Chinese Box" in Alan Watt's Beyond Theology (New York: Pantheon Books, 1964); "Polarity, Unity, Totality, Evolution" in F. C. Happold's Religious Faith and the Twentieth Century Man (Baltimore: Penguin Books); "No-knowledge" in The Tao of Science by R. G. H. Siu (Cambridge, Mass.: M.I.T. Press, 1958).
- 27. Joseph Campbell, The Masks of God: Oriental Mythology (New York: Viking Books, 1962), p. 33.
- 28. José Ortega y Gasset, What Is Philosophy? (New York: W. W. Norton & Co., 1960), pp. 168-69.
 - 29. Îbid., pp. 174 ff.
 - 30. Ibid., p. 175.
- 31. Joseph Campbell, The Hero with a Thousand Faces (New York: Meridian Books, 1956), p. 391.
- 32. Mircea Eliade, Mephistopheles and the Androgyne: Studies in Religious Myth and Symbol (New York: Sheed & Ward, 1965), pp. 10-11.
 - 33. Quoted in Kluback, op. cit. (see n. 22 above), pp. 66-67.
- 34. Joseph Campbell, The Masks of God: Occidental Mythology (New York: Viking Press, 1964), pp. 519-21.
- 35. The New Science of Giambattista Vico. Trans. from the 3d ed. and with a new Introduction by Thomas Goddard Bergin and Max Harold Fisch (New York: Doubleday & Co., 1961), III, xxxvi.
- 36. Paul Tillich, The Future of Religions, ed. Jerald C. Brauer (New York: Harper & Row, 1966), p. 80.
 - 37. Eliade, op. cit., p. 12.