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THE RELATION OF ETERNITY AND TIME TO REALITY

A Dissertation Prepared
for
The University of Richmond

by

Thomas English Hill

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INTRODUCTION: The Relation of Eternity and Time to Reality

Definitions:
- Time, a uniform continuum of before and after succession
- Eternity, a state of indifference to all succession
- Reality, that which exists
- Absolutism, the theory that only Eternity belongs to reality
- Materialism, the theory that only Time belongs to reality
- Idealism, the theory that both Time and Eternity belong to reality
- Spiritualism, the theory that both Time and Eternity are products of mind and that reality is neither temporal nor eternal.

Procedure:
Sketch of the history of philosophy showing the development of each, and an attempt to show merits and defects of each

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Historical Sketch

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II. Greek Philosophy and the formulation of three basic theories
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   B. The theory that Eternity belongs to reality, absolutism, and the Eleatic school
   C. The theory that both Eternity and Time belong to reality, idealism
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A. Contributions
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Conclusion
INTRODUCTION

Problem, Definitions, and Procedure
Such is the importance which modern philosophy has recognized in the Time problem that a host of questions emerges upon the very mention of the words Time and Eternity. Does time really move? In what sense, if any, is the future determined? Does the past exist? What can be the meaning of present? In what sense can a thing be and yet change? Can a future life be eternal? If God is eternal, can He be personal?

However, in the present discourse we forego detailed discussions of these interesting problems except as they bear on what we consider a more basic problem, namely, the problem of the relation of Eternity and Time to reality. Are Time and Eternity actually parts of the existing universe? Is Eternity real and Time illusory? Is Time real and Eternity a myth? Are both real? Or do both belong to the subjective realm? Such is our problem.

In order that our undertaking may proceed with clarity we endeavor to get at working definitions of the principal terms, to present our problem more concisely, and to outline the general characteristics of each of the major types of theory which we have found in the history of philosophy.

By Time we mean that regular one directional successive order of before and after which is ordinarily meant by the word. It should be carefully noted that we are not talking about mere succession as such. The duree of Bergson has, as we shall see, some place in reality; but it is not, strictly speaking, Time. By Eternity we mean that order of existence which is conceived
to be altogether without successiveness. Eternity is not infin­
ity of time, nor is it a strange indefinable state that eludes ap­
prehension. It is timelessness, the state of being altogether in­
dependent of succession. By Reality we mean that which is, or
exists, whether in idea only or in fact, whether as changing or
as changeless. At the same time we recognize that there are de­
grees of reality, so that that which is both in idea and in fact
is more real than that which is in idea only.

We are fully aware that the above are not the only possible
definitions for the terms indicated. However, for the sake of
definiteness some reasonably precise meaning has to be given to
important terms. From this point onward the terms Time and Eterni­
ty and Reality will be used according to the definitions
which we have given. In the light of our definition of terms
we may state our problem somewhat more precisely as follows:

What is the relation of that regular one directional succession
of before and after which is called Time and that state of being
apart from succession which is called Eternity to the existing
order of things? Does one of these two belong to the existing
order of things and the other not? Do both belong to the exist­
ing universe? If so, to what extent do they have a part in that
universe? Do they tell the whole story about the universe?

In general, the history of philosophy has presented four
main types of theory relative to our problem. The first is the
theory that Eternity is a real state of all reality and that
Time belongs only to the realm of the illusory. The second is
the theory that Time is a state of practically all reality and that Eternity either does not apply to reality at all or is of little importance. The third is the theory that Time and Eternity form a harmonious pattern which embraces all reality. The fourth is the theory that Time and Eternity are concepts which mind has fastened somewhat arbitrarily upon a reality which intrinsically is characterized by quite other states than those of Time and Eternity. Using the terms not simply in their ordinary senses but technically in the senses of the theories above, we designate the first Absolutism; the second, Materialism; the third, Idealism; and the fourth, Spiritualism. We recognize that, in some particulars, violence is done to the historical meanings of the above terms. (1) This is almost inevitable, since the terms were not developed primarily to describe theories of Time and Eternity. However, some terms must be used, and we believe that the above will be found to be appropriate in the main.

In the following pages we shall undertake, first, to trace the history of our problem, sketching in order the presentation of each of the above theories and, second, to summarize what seem to be the major contributions and defects of each.

1. Probably the greatest difficulty concerns the use of the term Idealism. However, we believe that even here our use of the term is in fundamental accord with the use of the term as applied to the thought of Plato, the founder of Idealism.
PART I

Historical Sketch
I. Primitive Thought and the Emergence of Philosophy

A. Primitive man as he looked out upon reality saw, not an ordered universe nor, as far as he knew, a universe at all. The world came to him as a weltering mass of impressions not unlike that which makes its way into the dawning consciousness of an infant. There was neither world nor sun nor moon - only shapes and shadows, lights and colors, changes and familiar objects, to which he never thought of giving names, but to which he responded as he had been taught of nature. Reality and unreality meant nothing to him. It was with the greatest difficulty that he distinguished even imperfectly between his dreams and his waking experiences. His world was indeed spread out and his experiences of it successive; but it did not occur to him to think of it so. Thus, for many centuries the idea of Time did not distinctly arise in the mind of man.

B. As the centuries rolled past, man gradually came to improve upon his primitive condition, both within and without. He learned not only to meet danger when he confronted it, but to prepare for it. He learned to form images of things that were not present with him for the moment. He began to learn to control the babbling sounds that came from his throat and to give names to things. At first each object had a different name in each set of distinct circumstances. But gradually it was found to be more convenient to give a standard name to each object, its relation being designated only by varying inflections. In time cooperation between men was marvelously improved by grouping kinds of objects under class names. In the course of the centuries discrimination became more acute and more daring. The days came
when there was an idea of a total universe as distinct from its parts, a dim notion of causality had arisen, thought began to apply itself to other enterprises than crops and conquests. Men began to speculate with regard to the origin and the course of the order of things in which they found themselves. The stage was set for the dawning of philosophy and then for the discovery in thought of the distinction between Eternity and Time.

C. The emergence of philosophy as distinct from mythology and religion is generally made to coincide with the Greek physicist Thales. One cannot but feel that this procedure is somewhat arbitrary, since unquestionably men had long been seriously inquiring into the meaning and origin of the universe many centuries earlier, both in Egypt and in Babylon. That their contemplation led them to trace the course of things to causes which were not thought of as primarily of a rational character certainly need not place their thought altogether outside the realm of philosophy. As we shall presently see, their influence upon certain Greek philosophers was considerable. However, as regards our formal effort to trace the history of thought, we may well follow the usual procedure and begin with Thales, referring back to Oriental thought in so far as the requirements of historical clarity may demand.

The Greek thinkers of the earliest group, the school of Miletus, like their distant primitive forebears, had not yet come to distinguish Time from the weltering movements that surrounded and pressed in upon them. What impressed them was that here was a world that was too complex and changing to be as it appeared. It
must have a simpler origin, some more clearly apprehensible principle from which it derived its being. Thus Thales, Anaximander, and Anaximines traced the complex universe to single elements. Thales found the source of things in water, Anaximander in what we might call ether, and Anaximines in air or breath. (1) Here then was an effort to distinguish the ultimate sources and process of the universe from its appearances, but as yet no distinction between Eternity and Time as aspects of Being.

II. Greek Philosophy and the Formulation of Three Basic Theories

A. The Emergence of the Intellectual Distinction between Eternity and Time

The philosophers known as the Eleatic school began where the Miletians left off. Impressed by the effort of the Miletians to trace all reality to a single element, they were dissatisfied with the attempt to find the ultimate source of things in something that was a sensibly discernible part of the universe. This seemed an illegitimate attempt to find the cause in one of the effects. This discontent, doubtless coupled with the influence of an Oriental philosophy which tended to minimize appearances and emphasize the idea of supersensuous Unity, led to the discovery of the general concept of Being which they substituted for the physical substances to which the Miletians had traced the universe. Moreover, the Eleatics found that the attempt to derive the complex changing order of things from a single uniform substance was not by any means so simple as the Miletians had supposed. The procedure of the latter had overlooked a major problem, the apparent coexistence of permanence and change. To the Eleatics themselves permanence and change seemed so utterly un reconcileable that they undertook to deny change and make Being all in all.

Since this procedure was quite out of accord with commonly accepted opinions, the Eleatics were obliged to draw out the inferences of their point of view and to defend it with shrewd arguments. It was perhaps in the controversy which was thus aroused that Time and Eternity were first brought into distinct intellectual contrast in Western thought. Parmenides's idea
that only Being is real needed only to be stated to call forth the objection that our impression of events as before and after one another was not accounted for in the theory. Thus was Parmenides obliged fairly to confront the problem of Time in its relation to Eternity.

B. The Eleatic School: The Absolutist Theory

The initial impulse out of which the theory which denies Time and affirms the reality of Eternity arose was Oriental rather than Occidental. The general tendency of Oriental thought for centuries had been to sum all up under One, to attempt to annihilate personality, absorbing it in Unity. All individual appearances were seen as a part of the Whole. Thus naturally Time was minimized and Eternity exalted. Whether or not Parmenides derived anything else from oriental sources, it seems quite probable that his inclination to minimize appearances in favor of a more stable kind of basic reality was in part due to Oriental influence.

In what has already been said as to how the distinctions between Time and Eternity came to intellectual expression the general character of the theory of Parmenides is already clear. Approaching reality by beginning with an attempt "to analyse what we mean when we say that a thing is" Parmenides reasons that "we mean that it cannot move, change, or be divided into or composed of many parts." (1) This, of course, involves the assumption that Time is illusory for, if Being is immutable, Time can have no meaning. The fact is, Parmenides made no attempt to escape this consequence but boldly affirmed it. Thus Fuller

1. B.G. Fuller: History of Greek Philosophy, p. 162
writes of Parmenides's idea of Time: "Again, Time, the real twin-brother of change, cannot logically be regarded as real. We have no business to speak of what was, since that implies something which no longer is, or in other words, has gone out of existence. It is equally impossible to speak of what will be, since that implies that something is not as yet, but will come into existence. What exists is simply now, here, all at once."

Essentially the same theory, i.e. the contention that Eternity alone is real, that Time is illusory, comes to expression in Zeno, the pupil of Parmenides.

Zeno's method, Fuller informs us (1), is that of "conceding the reality of the Many, of Space, and of Motion, and then --- showing (2) that the self-contradictions and absurdities which follow on the concession are far greater than those involved in the denial of their existence." Among the contradictions which Zeno presents are the following (3).

(1) Regarding magnitude: "A (limited) magnitude must be infinitely great and infinitely small: infinitely great, because, being infinitely divisible, it is composed of an infinite number of parts; infinitely small, because unextended parts, even though multiplied by infinity, cannot produce extension or magnitude."

(2) Regarding motion: "The line which separates the starting-point of movement from its point of rest is composed of points, and, since the point has no extension, of an infinite number of points. Hence --- even the smallest distance is infinite and the stopping point can never be reached."

(3) Regarding space: "Space exists somewhere, that is, in a

1. Ibid., p. 162.
2. Italics mine.
space, which in turn exists in another space, and so on."

The second of the above arguments Zeno illustrates by the well known paradoxes of Achilles and the tortoise, and the arrow in flight. Achilles can never overtake the tortoise because however much he might gain he still must traverse half of the remaining distance before he can enter upon the next half and so on ad infinitum. By the same logic he can traverse no distance at all for any distance is infinitely divisible. The arrow seems to fly but being at a given point at every given moment it must in reality be always at rest. The penetrating power of Zeno's mind was bent, like the more poetic talents of Parmenides, toward the establishment of the idea of the reality of Being as eternal and only so.

Thus, the earliest Western thought in which Time and Eternity are intellectually distinguished formulates itself in a theory in which Time is denied and Eternity is all, that is to say, in what we have called an absolutist theory. Parmenides gives to Time no standing at all within reality. Time is neither an emanation, nor a creation, nor even a secondary manifestation within reality. It is illusion pure and simple. To be sure, even illusions have, as a more recent philosophy has recognized, some status within the whole of things, but this is not within the comprehension of Parmenides and Zeno. In their thought, Time simply is not.

It is comparatively easy to point out flaws both in the methods and in the conclusions of Parmenides and Zeno. However, whatever deficiencies their thought may have, it is not altogether without significance that when the Time problem first distinctly emerges in Western thought, it comes forth in a theory in which the whole
emphasis is upon the reality of Eternity. As thought begins to sharpen its distinctions it is mastered by a powerful impression of unchanging reality.

C. Idealism (1)

(I) Its Development

Parmenides's doctrine that Time was illusory was so thoroughly out of keeping with ordinary human experience that it was scarcely to be expected that it should have the field of Greek thought to itself. Thus we find two other theories of Time, namely, an idealism which recognizes that both Eternity and Time are real and a materialism which holds that Time is real but that Eternity is not. The root ideas of both theories were already present in the days of Parmenides. Without attempting to give any specific accounts of the ideas of Time of the earlier writers we shall indicate in a broad way the development of the thought tendencies that issued in the idealistic theory.

(A) During the lifetime of Parmenides (2) the Pythagoreans, who traced their intellectual ancestry farther back than the days of Parmenides, were attempting to trace reality back to numerical principles and ultimately to Idea. Their conclusions were in agreement with Parmenides in that they thought that all things reduced themselves to Unity; but their recognition of the reality of number was in opposition to the Eleatic attempt to deny all save pure Being. Their own theory allows no place for

1. It must be noted that the term idealism is used, in a general way, not in the sense of modern epistemological idealism but in the sense of Platonic ontological idealism, and that specifically the term is used in this paper to indicate a theory of Time which we have elsewhere defined.
2. Ibid., ch. 24.
a real Time. Its emphasis upon numbers is an important step in the direction of the breaking of the Eleatic thought of the sole reality of Being and the establishment of the reality of Ideas in which diversity as well as unity must be recognized.

(B) Heraclitus, an older contemporary of Parmenides, taught a theory almost opposite to that of Parmenides. Change, he said, instead of being illusory, was almost literally the sole reality. Indeed, Being was itself an illusion. (1) All was in perpetual flow. The only things that remained constant were the principles upon which change takes place; all else was in ceaseless motion. Thus from a second source the principle of diversity received emphasis.

(C) The conflict that grew out of the clash between Parmenides's philosophy of Being and Heraclitus's philosophy of becoming led to the development of a type of theory which tried to reconcile the hostile theories by a view which, instead of explaining reality in terms of a single principle which must be either Being or Becoming, presented the idea of a duality of principles which in their interaction produced change.

Empedocles (450 B.C.) (2) held that there were four elements: fire, air, earth, and water. These elements were immutable in themselves. However, they were mixed and separated in the various proportions that make up the universe of substances and events according to the immaterial principles of Love and Hate.

Anaxagoras proceeds in a similar manner. Instead of four substances there are an infinite number and instead of principles of Love and Hate there is a NOUS which brings about the

1. Ibid., p. 19.
2. Ibid., p. 27.
changes in the relationships of things. However, material substances are still wrought upon by an immaterial principle.

Thus the speculations of Empedocles and Anaxagoras, influenced on the one side by the Eleatics and on the other by Heraclitus, represent a dualistic reconciliation of the conflicting ideas of Being and Becoming. In this they pave the way for the idealistic recognition of the reality both of Eternity and of Time.

(D) Altogether apart from the development of the metaphysical systems of which we have been speaking, there was between the days of Parmenides and those of Plato a shift in the whole point of view of Greek philosophy that was of far reaching importance. Up to the time of Parmenides the effort had been made to explain reality in terms of perceivable substances such as water, earth, air, and fire. Even Parmenides tended to think of Being in terms of a perfect sphere. However, through various influences, including the writings of Empedocles, Anaxagoras, and a number of skeptics, and culminating in the teaching of Socrates, philosophy came much more to take its cue from the moral and spiritual nature of man. Philosophy was still not subjective: the concern was yet with that which could be objectified. However, ideas and ideals, as well as perceivable objects, were more fully introduced as explanatory and controlling principles. Being was no longer defined either in physical or negative terms but in terms of the spiritual and positive concepts.

Thus out of various tendencies there emerged the theory that Eternity is a changelessness that belongs to certain ideal principles and that Time, though only an imperfect product of Eternity, shares some of the regularity of Eternity. This theory finds its
classic expression in Plato and, as we shall presently see, a not very different expression in Aristotle.

(II) Its Expression in Plato.

In Plato's thought, as found both in the general direction of his thinking and in that passage in the *Timaeus* which he devotes especially to the Time problem, all of the essential features of what we have called the idealist theory of the relation of Time and Eternity to reality came to expression. Plato is indeed the typical representative of this type of theory.

(A) A recognition of the Reality of Both Eternity and Time

Emerson has remarked that Plato was a "balanced soul", holding that in Plato the concepts of identity and difference, the one and the many, were combined successfully. It is this aspect of Plato's thought which marks the advance of his theory of Time over that of the Eleatics, on the one hand, and of Heraclitus, on the other. Plato adopted both the concept of the reality of unchanging Being and the concept of constant change among things. Thus Plato's Ideas, though independent in themselves, are in things. Plato insisted on the abiding character of Goodness, Truth, and Beauty, and yet at the same time held that these Ideas penetrate a realm of temporality. When Plato came specifically to deal with the Time problem he placed his discussion within the frame of a concept of a temporal order which is made after an eternal pattern. (1) He never doubted that there is both an order of reality which exists in a state of changelessness as Eternity,

and an order of reality which exists in a state of constant change as Time. He saw clearly that both must be seriously reckoned with.

(B) Eternity Consisting in Intelligible Being

Whereas the Eleatics had found Eternity to consist primarily in Being in which no distinction was made between spirit and matter or between idea and thing, Plato found Eternity to consist primarily in "intelligible being". (1) Plato regarded the Creator as eternal and not infrequently spoke of the spiritual God rather than of the intelligible ideas as ultimate. However, the more distinctive side of Plato's thought was his insistence upon the eternity of the "intelligible ideas". Thus, while there is in Plato's thought the idea of an eternal God, the distinctive thought of Platonism is the idea of eternal intelligible idea.

(C) Eternity as a State of "Timelessness"

Since in Plato's thought intelligible ideas were eternal, it was not surprising that Eternity was for Plato not simply a state of endless duration or even of freedom from a definite time order, but rather a state of complete timelessness. Thus Plato writes: "We say indeed that he was, he is, and he will be, but the truth is that 'he is' alone truly expresses him, and that 'was' and 'will be' are only to be spoken of generation in Time ..... that which is immovably the same cannot become older or younger by time, nor ever did or has become, or hereafter will be older, nor is subject at all to any of those states of generation which attach to the movements of sensible things." (2)

(D) Time a Product of Eternity

Throughout Plato's writings it is evident that both the force and the pattern which produces temporal reality is resident

1. Ibid., p. 37.
2. Ibid., p. 38.
in Eternity, that in some sense Eternity produces Time. This is particularly evident in Plato's account in the *Timaeus* of the creation. Thus Plato writes: "There were no days and nights and months and years before the heaven was created, but when He created the heaven He created them also." (1) Again Plato declares: "When the Father and Creator saw the image that He had made of the eternal gods moving and living, He was delighted, and in His joy determined to make His work still more like the pattern... He resolved to make a moving image of Eternity, and as He set in order the heaven He made this eternal image having a motion according to number, while Eternity rested in unity; and this is what we call Time.(2)

It is clear enough that in Plato's thought the forces which produced Time are eternal and that the patterns after which it was created are eternal. However, the question as to how Time was created remains obscure in Plato's thought. To begin with, it is uncertain whether Plato intends that we should think of an actual Creator or whether Plato is in the term Creator simply personifying the creative forces that he believes to be resident in the Ideas themselves. We are unable to resolve the question, although we may remark that the latter view is more in keeping with the more distinctive idealistic side of Plato with which we are primarily concerning ourselves here. Beyond this, it is not immediately evident whether Plato intends that we should think of a real beginning of Time or whether he is speaking in a figure of a process of continuous generation. This question requires special consideration.

1. Ibid., p. 37.
2. Ibid..
It is scarcely conceivable that so shrewd a writer as Plato should have committed the logical blunder of affirming that there was a time before before and after existed. Such an affirmation implies, as Aristotle shows, a contradiction in terms, for the phrase before time depends upon the very concept which it seeks to deny; Plato's idea judged in the light of its true purpose does not involve such a contradiction.

The intent of Plato's idea of the beginning of Time is to indicate the logical priority of Eternity to Time. There is indeed in Plato's thought a confused state which can neither be said to be Time nor Eternity but only uncertain possibility. Plato's whole concept of matter indicates this. It refers to that in which no distinctions, not even before and after, have any meaning. Moreover, Plato's language in discussing the creation seems to indicate the possibility of a motion prior to ordered Time. (1) Plato considers it quite unnecessary to show the logical priority of Eternity to this, since confusion is to him negation. However, over against confused possibility is an ordered Time which impresses Plato with its regularity. Plato considers it appropriate to illustrate the logical priority of Eternity to this Time and accordingly presents the idea of the beginning of Time. Thus in Platonism there may be said to be a time when distinguished before and after began to have a definite expression in ordered motion, though their indefinite possibility may have had no origin.

(E) Time Regular and Real

Although Time is a product of Eternity, it possesses, for Plato, a reality of its own. Time is, in his thought, by no means a thing that has no existence. The reality of Time is not merely a matter of concept, but it is a fact that can be perceived. Plato: Ibid., p. 525.
means the illusion that it is in Eleatic thought. Instead, it has a regularity such as no illusion possesses and by virtue of this regularity and order is more nearly akin to eternal reality than aught else that has been created.

Plato writes: "When the Father and Creator saw the image that He had made of the eternal gods moving and living, He was delighted, and, in His joy, determined to make His work still more like the pattern; and as the pattern was an eternal creature, so He sought to make the universe the same as far as might be. Now the nature of intelligible being is eternal, and to bestow eternity on the creature was wholly impossible. But He resolved to make a moving image of Eternity, and as He set in order the heaven He made this eternal image having a motion according to number, while eternity rested in unity; and this is what we call time". (1) It is Time which imparts to the heavens their highest perfection. Thus, the temporal movement of the stars rounds out the universe: "The perfect number of Time completes the perfect year when all eight revolutions, having their relative degrees of swiftness, are accomplished together and again meet at the original point of departure, measured by the circle of the same moving equally." (2) Time is for Plato no mere illusion but an order and a regularity which cannot be relegated to the realm of the subjective. We have remarked that it is somewhat uncertain whether Plato meant by the creation of Time a continuing process or a definite act by which Time became a self sufficient reality. However, in either case this much is quite clear, that Time as produced by eternal realities which are, in Plato, logically...

1. Ibid., p. 37.
2. Ibid., p. 39.
prior to all finite minds must always be taken by finite minds as objective reality which they meet, not as a subjective entity which they produce. The Idealism of Plato is an objective idealism and the Time which comes out of the Ideas and most nearly expresses them is an objective Time.

(F) Time a Means of Knowledge of Eternity

As a regular and objective product of Eternity, Time, in the thought of Plato, not only does not obscure Eternity but reveals Eternity and leads toward the contemplation of eternal realities. Consider, for example, the following passage from the *Timaeus:*

"The sight in my opinion is the source of the greatest benefit to us, for had the eyes never seen the stars and the sun, and the heaven, none of the words which we have spoken about the universe would have been uttered. But now the sight of day and night, and the revolution of the months have given us the invention of number, and a conception of time, and the power of inquiring about the nature of the whole; and from this source we have derived philosophy, than which no greater good was or will be given by the gods to mortal man ........ This much let us say, that God invented and gave us sight to this end, that we might behold the courses of intelligence in the heaven, and apply them to the courses of our own intelligence which are kin to them, the unperturbed to the perturbed; and that we, learning them and being partakers of the true computations of nature, might imitate the absolutely unerring courses of God and regulate our own vagaries." (l)

(III) Its Expression in Aristotle

The philosophy of Aristotle is not generally called idealistic and cannot as a whole be characterized by that term. Indeed, l. Ibid., p.47.
as we shall see, it contains features which fall outside even our special use of the term idealism. However, the theory of the relation of Time and Eternity to reality which Aristotle presented, despite some real differences from the theory of Plato, falls in the main within the bounds of the theory which we have called idealistic.

(A) Aristotle does not begin as does Plato with eternal self sufficient Ideas. Nor does Aristotle have the same absorbing interest in Eternity. Aristotle's first concern is for actually existing sensible reality. Eternal principles are introduced not for their own sakes but because they are needed for the explanation of existing reality. However, the fact is clear that Aristotle, like Plato, is firmly convinced of the reality of changelessness. (1)

(B) Aristotle's conception of the nature of that which is eternal is somewhat different from Plato's. Plato, as we have indicated, had thought of Eternity as consisting primarily of eternal changeless Ideas, and though he often spoke of a Creator, the idealistic side of his thought continued to present Eternity in terms of Ideas which are essentially static. Objects only "partake" (2) of them. Aristotle introduced considerably more of a dynamic element into the essential character of his first principle. He combined, in thought of a first principle, something of what Plato meant by Idea and something of what he meant by God. Thus Aristotle traces all reality back to a First Mover, or a First Cause. The terms in themselves indicate something of a dynamic principle. A cause cannot as a cause be purely static. As the beginning of the series of movements a First Mover cannot be an altogether static principle whatever protests Aristotle may make.

However, in the intent of Aristotle the content of Eternity is not so different than in the thought of Plato. Thus Aristotle points out that Eternity includes necessary truths which for him are essentially static. What is more important, Aristotle insists that the First Mover is unmoved, that He brings about creation without being affected, much as an object of desire or admiration may affect an observer without itself being affected. However much Aristotle's principles may suggest a more dynamic idea of eternal realities, Aristotle evidently intended, like Plato, to present Eternity as somewhat of a static nature.

(A) Aristotle was far more preoccupied with the temporal than was Plato. It is, accordingly, not surprising that Aristotle differed with Plato regarding the problem of the beginning of Time. Instead of speaking of a beginning of Time, Aristotle argued that Time had no beginning. (1) He held that the very notion of a beginning of Time was a contradiction in terms, since it was the nature of Time to be continuous, and since it was of the nature of every movement to be bounded by a past and a future, the idea of Time as other than infinite in extent was to Aristotle not thinkable.

However, once again the contrast, while real, is not as deep as it appears. It must be remembered that Plato did not assign a beginning to temporality itself but only to ordered regular Time, and that even so his intention was primarily rather to point out the logical priority of Eternity - a point which Aristotle would not have disputed - and may not refer to a literal beginning at all. Further - and this is the principal fact here - there can be no doubt that Aristotle, like Plato, considered Time (2)

1. Ibid., p. 84.
2. Ibid., p. 93 ff.
to be a product of Eternity.

Whatever may be the differences between Aristotle and Plato as to center of interest or problem of beginning, it is quite clear that for both writers Eternity is real and Time is in some sense generated by Eternity. In both writers the manner in which Time is generated is somewhat obscure, but in both the manner of the production of Time is such as to be in no way inconsistent with the independence of eternal principles.

(D) When we come to look at the view of Aristotle alongside that of Plato with respect to the idea that Time shares in the reality of Eternity, the situation is not quite as we should expect, from what we have seen so far of Aristotle's theory. As Aristotle considered the relation between Eternity and temporal existence he was impressed with the reality of the temporal more than was Plato. But when Aristotle considered the relation between Time itself and temporal existences he was impressed with the reality of Time less than was Plato. Indeed the fact is that whereas Plato never doubted that Time was real, Aristotle only with considerable hesitancy ascribed reality to Time. Thus, for example, Chapter X of book IV of the Physics is introduced by a presentation of certain considerations which "might make one suspect either that there is really no such thing as Time, or at least that it has only an equivocal and obscure existence." (1)

The forms in which Aristotle's suspicions of the reality are presented are three: a. His analysis of the internal structure, b. His concept of the relation of Time to motion, and c. His idea of the speculative possibility that Time may depend upon mind.

a. Whereas Plato looking at Time as a whole had found 1. Aristotle: Physics, Book IV, Chapter 10, in Loeb's Classical Library, p. 373.
it regular and real, Aristotle looking at the structure of Time and finding it not subject to sensible apprehension suspected its reality. Thus Aristotle suggested in opposition to the idea of the reality of Time that Time is made up of the "no-longer and the not-yet" (1), that its parts having no extent cannot together make up a whole reality, and that its essential element, the now, is paradoxical in that it seems to be both the same and changing. (2)

b. Again, whereas Plato had been content to suggest that Time and motion arose together, Aristotle made Time quite dependent upon motion, insisting that Time is the "number of movement in respect of before and after" (3) because "we discriminate .... the more and the less of movement by Time". (4) Thus in Aristotle Time seems to be reduced to the status of a sort of an appendix to movement.

c. Whereas, for Plato, Time derived its existence directly from Eternity, Aristotle toyed with the speculative possibility that Time was dependent on mind or that there would be no Time if there were no soul. (5)

When this account of the possible unreality of Time is considered in the general background of Aristotle's teachings, two impressions emerge. On the one hand, it is clear that Aristotle was far less willing to ascribe a large and unequivocal place in reality to Time than was Plato. The latter had thought that Time was a mighty frame of all created reality in which all events

1. Ibid., p. 373.
2. Ibid., p. 375.
4. Ibid.
5. Ibid.
and all finite minds must have their place. Time was a sort of a ground of created existence. Aristotle, however, made Time not a frame or ground of existence, but only a number of motion. Time was not the prerequisite of events, but only a sort of a rule which might be placed alongside events. At best it was a highly intangible rule and one which might pass out of existence altogether if mind were no longer there.

On the other hand, a second impression which is inherent even in Aristotle's objections to the reality of Time must not be lost sight of, namely, that Aristotle, in spite of suggestions opposing the idea of the reality of Time, continued to ascribe to Time a genuine place in reality. He considered that Time is a fact to be dealt with. He gave it the status not of a mere phase of motion, but as distinct from motion, declaring that whereas there were many motions there was only one Time. (1) Again, even his suggestion that Time might cease if mind ceased is far short of the idea that mind creates Time, and at very most is advanced exceedingly cautiously, as Ross says, as a question which is never answered. (2) As a measure Time might disappear with mind, but as a measurable aspect it still belongs to reality. Aristotle refrains from the specific suggestion that Time is a product of our minds, and his positive treatment of the subject rules out the thought that he intended to exclude Time altogether from the sphere of reality.

We may now sum up the position of Aristotle. Aristotle softened the severity of Plato's insistence that eternal Ideas

1. Ibid., p. 89.
2. Ibid., pp. 90, 91.
were the essence of reality. By implication he introduced somewhat more of a dynamic element into his idea of that which is the source of all things. At the same time, he continued to believe that Eternity stood for something real. The Pure Form and First Cause of Aristotle's thought was not so essential a part of Aristotle's system as the Ideas of Plato's thought were of his system; but the eternal Pure Form and First Cause of Aristotle's thought was considered to be real.

In like manner, Aristotle was far less disposed than was Plato to ascribe objective reality to Time. Time was a number of motion. Further, several special facts suggested to him the possibility that Time was either unreal or only partly real. However, he continued to think of Time as something distinct from motion and distinct from mind. He considered it a subordinate aspect of reality, but still an aspect of reality.

D. Democritus and Materialism

(I) Development of the Theory

We have now seen how the discovery of the distinction between Time and Eternity arose with a theory which undertook a denial of the reality of Time, and how in the course of the years there developed a theory which embodied the chief affirmation of this theory without adopting its extreme denial. We are now to see that some of the same influences which issued in the theory which attempted to affirm the reality of both Eternity and Time were worked out along another line in a theory which affirmed the reality of Time but denied the reality of Eternity.
Heraclitus's emphasis upon the fact of change was not a systematic attempt to deny all permanence, but an affirmation of the reality of change and a protest against too easy attempts to discover the essence of reality. As this trend was combined with the Eleatic thought in Empedocles and Anaxagoras, it was worked out in theories which tried to preserve both permanence and change through the recognition of the coexistence of material particles and vital principles. Change was supposed to be the result of the action of the latter upon the former. However, the vital principles were never clearly defined (1), while the material particles seemed to be quite tangible. Thus it occurred to certain writers that perhaps the material particles were the only realities, thus excluding the eternal Ideas of Plato.

(II) The Theory

The leading features of Greek materialism, of which Democritus was the chief representative, may be briefly put somewhat as follows: The universe consists essentially of particles that cannot be divided although they have size and weight. These particles are alike in quality but differ in quantity and in shape. They are endowed with a force of their own by virtue of which they move everlastingly downward with a whirling motion. Atoms of like texture come together to form bodies. Souls consist of groups of smooth atoms which have come together in such a way as to make sensation possible. All souls, even those of the gods, are ultimately dissolved so that while the atoms persist, individuality comes to an end. (2)

1. Weber and Perry, Ibid., p. 34.
2. Cf. Ibid., pp. 35-39, also Robin: Greek Thought, pp. 112-121.
From this sketch it is quite apparent, in the first place, that the atomists reduced the idea of Eternity to a minimum. It cannot strictly be said that they got rid of the notion of Eternity altogether, for the atoms were supposed to remain unaltered. However, the atoms themselves were in a constant flux of changing relations which came about almost by chance. Moreover, whatever eternal qualities they may have had were of little significance. All that they possessed was body and a whirling downward motion in relation to which all thought, beauty, or goodness, all ideas, were only accidents that came and went with the shifting movements of atoms. Although the idea of Eternity was not eliminated, it was reduced to such a bare minimum that it had little remaining significance.

In the second place, it is reasonably clear that the atomists thought of Time as quite real. To be sure they did not seem to have a definite conception of a perfectly ordered Time. However, it is reasonably clear that what was implied in the concept of a continuous endless downward motion was Time. Such a motion as the atomists presented can scarcely be described apart from an idea of Time implied or expressed. Without developing the idea of Time the atomists described a motion in Time.

Essentially the atomists' theory was one in which Time was the pattern of events. For them it meant little to say that a thing was in Eternity. A thing could only be in Time. Time was real; Eternity was unimportant and scarcely real.

**E. Later Greek Thought**

Greek thought after Plato and Aristotle produced little that was new regarding the relation of Time and Eternity to reality.
Thought was taken up either with carrying on the metaphysical ideas of the systematists or with developing systems that were essentially moral rather than metaphysical. We may follow briefly the course of the major types of theory which grew out of the systems of Parmenides, Plato, Aristotle, and Democritus, respectively, in later Greek thought.

(I) Absolutism

As we shall presently show, the thought of Plotinus relative to our problem retains a Platonic flavor. Although Eternity is magnified and Time reduced, Time continues to have some place in reality. However, there is enough of the tendency to find Eternity everywhere while brushing Time aside to warrant some discussion of the views of Plotinus in connection with the absolutist theory. Especially is this true when the tremendous influence of Plotinus upon subsequent absolutism is remembered.

Plotinus was disposed to make all ultimate reality, or the One, eternal. To be sure, strictly speaking, the One was beyond all distinctions, even beyond the distinction between Time and Eternity, but actually Plotinus's system suggests the idea of the Eternity of the One. Indeed, if among other distinctions the distinction between before and after disappears in the One, it is scarcely possible to avoid the conclusion that the One is essentially eternal. At the same time, it must not be forgotten that the state of the One is never thought of as completely described by the word Eternity. There is something more of the vital, the experimental and the religious in the Eternity of Plotinus than in the Eternity of Parmenides. Eternity is not the
exact state of that which logic alone demands, but a partial and inadequate account of that which experience attains at the end of a painful and laborious process involving not only logic but mysticism.

Naturally such a system as that of Plotinus would tend to remove Time from the sphere of that which is ultimately real. Just how far Plotinus went in this direction it is difficult to say. But, since he regarded even intelligible ideas as nothing more than emanations of reality, it is fairly clear that he thought of Time as less real than did Plato. Time was a part of reality, yet not more than an emanation from the ultimate reality, an emanation that was at least twice removed from that reality. It was more than an illusion, yet far short of final reality.

(II) Idealism

(A) The Platonic Type

1. The Platonic tradition was carried on with some modifications for several centuries in the Academy in Athens. Thus we find Speusippus, while maintaining the essentials of the Platonic system, introducing the principle of emanation and so throwing some light upon our problem. (1)

2. The really significant development of the Platonic principles is in the writer of whom we have just been speaking in connection with another school, Plotinus of Lycopolis.

It has already been made sufficiently clear that, like Plato, Plotinus considered that ultimate reality was eternal, but continued to find a subordinate place in reality for Time. It has further been shown that Plotinus went beyond Plato in an absolutist

direction by making the place given to Time less important than did the latter. However, apart from this, Plotinus departed from Plato's thought upon our problem, along idealist lines, in several important ways.

a. Plato had spoken of Time as being created by Eternity. Its reality was in some sense a product of eternal Will. Even if the idea of creation represents only a sort of a figurative terminology in Plato; the connection between Eternity and Time is not apparently entirely necessary. However, Plotinus explains the production of all that is temporal in terms of emānation from the One. To be sure, he insists that emānation is never to be explained. It is neither creation, nor derivation, nor identity, nor gleaming as of light. (1) It is like the One, a miracle. (2) But even so, despite Plotinus's insistence on the indefiniteness of emānation, it is clear that emānation is to be distinguished from creation and that it implies a necessity of relation such as is not suggested in Plato's thought. Thus, the reality of Plotinus's Time, though it be farther removed from ultimate reality than is that of Plato's Time, is connected by greater necessity to ultimate reality than is that of Plato's Time. Time in Plato's thought stands higher in the hierarchy of the reality of created existence, but the whole existing world, in Plotinus's thought, stands related to ultimate reality by a stronger principle of necessity.

b. By connecting the idea of Time rather more closely to the idea of the world soul than did Plato, Plotinus introduced somewhat more of a subjectivist element into his conception of the reality of Time than did Plato. For Plato, Time was a primary ground of created existence. Plotinus held that Time existed by

1. Ibid., p. 132.
2. Ibid.
nature (1) as "the form which the Soul (i.e., the World Soul) creates for itself when it desires to reproduce the eternal ideas as living creatures." It will be at once seen that the unquestioned objectivity which Plato assigned to Time is softened down and Time becomes in some degree dependent upon soul. It should be noted, however, that since the soul which apprehends in terms of Time is the World Soul, Time still does not lose all of its objectivity.

c. Plotinus included considerably more in his concept of Eternity than did Plato. Plato held that God and general ideas belong to Eternity. Plotinus added the idea that intelligible concepts of individuals, in so far as they are parts of the unified whole, were likewise eternal, so that in this sense all that comes to be in Time is in idea included in Eternity. This thought which originated shortly after the time of Plato himself, and was emphasized by Plotinus, contributed toward the significantly Medieval inclination to view reality as essentially static. It doubtless played a large part in the development of the idea of predestination which grew up in the church, the idea that events are fixed beforehand, not simply by an unbroken chain of causation, but by "divine decree".

d. Finally, Plotinus clarified somewhat the idea of the beginning of Time which Plato had left somewhat indefinite. Plotinus taught that the beginning of Time did not mean, as Aristotle had interpreted Plato to mean, that there was a time when there was no Time. Indeed, the "time-series" may be said to be eternal "in the vulgar sense". (2) Time's beginning consists rather in

2. Ibid.
the logical priority of spiritual movement to "the movement which takes place in time". (1)

(B) The Aristotelian Type

The tradition of Aristotle was carried forward in the Lyceum or school of the Peripatetics at Athens. Under the leadership of Theophrastus and Straton the school leaned toward an emphasis on the sensualistic side of Aristotle's thought. (2) Later, possibly as a result of this emphasis, a decided skepticism appeared in the Aristotelian school under the influence of Carneades and others. (3)

We shall have more to say in another place of the influence of later Greek skepticism upon thought regarding Time.

(C) Stoicism

The philosophy of the Stoics as primarily a moral emphasis has some affinity for each of the theories of Time which had been presented up to the time of its emergence. Stoicism's disparagement of the joys and sorrows of daily life is akin to the Platonic emphasis upon Idea. At the same time, Stoicism's attempt to link soul and body in a single concept and its failure to present a clear idea of Eternity mark a certain kinship between Stoicism and materialism. In its theory of the reality of Time and Eternity Stoicism belongs formally to the materialist type of theory. Its concern seems to have been primarily with that which goes on and on endlessly. (4) (5) However, really its thought should probably be classed with the other idealists, for despite the fact that it seems to have had no clear idea of that which was independent of Time, as contrasted with that which goes on and on, it "did empha-

1. Ibid.
5. Ibid., Paragraph 55.
size laws of nature and life which should be thought of as eternal. Practically, its thought comes to mean that eternal principles pervade endless Time.

Probably the chief contribution of the Stoics to thought upon the Time problem was its adding to the idealism of Plato and Aristotle a further moral earnestness. The fleeting moment had no significance with respect to its passing feelings but in its moral demands and possibilities it was somehow linked with Eternity.

(III) Materialism

(A) The materialist theory of Time, as the denial of Eternity, was carried forward especially in the Epicurean school. While Epicureanism is essentially a moral philosophy, its adoption of the atomist metaphysic is sufficiently well known to require no particular comment. Disregarding the idea of Eternity, Epicureanism adds to the atomist theory the thought that one ought to live so as to gain as much of pleasure as possible in the moments that he has. Thus, where the Stoic has found the chief significance of the moment in its moral import and so linked it with Eternity, the Epicurean has found the primary importance of the moment in its possibility for pleasure and so cut it off from all save itself.

(B) The materialist position is presented in its classical form in the Roman world in Lucretius's classical poem De Natura Rerum, in which the universe was pictured as the result of the fortuitous falling of atoms through infinite time. Lucretius advocated the characteristic materialist denial of the reality of Eternity and affirmation of the importance of Time as a constituent of the universe.

"Not of design did primal elements
Find each their place as 'twere with forethought keen,
Nor bargained what their movements were to be;
But since the atom host in many ways
Smitten by blows for infinite ages back,
And by their weight impelled, have coursed along,
Have joined all ways and made full test of all
The types which mutual unions could create,
Therefore it is through great Time dispersed,
With every kind of blend and motion tried,
They meet at length in momentary groups
Which oft prove rudiments of mighty things -
Of earth and sea and sky and living breeds." (1)

(IV) The Function of Greek Skepticism

We must not pass from our account of the major types of Greek thought without some mention of skepticism. We have already indicated the place of skepticism in the development of the thought of Plato. However, the influence of skepticism is more far reaching. Despite Greek skepticism's destructiveness it has at each stage served a useful purpose in bringing out the defects of the current theories of Time. Thus such writers as Gorgias reduced the one sided theory of Parmenides to absurdity, while Phyrro, Carneades, and others showed difficulties involved in every attempt to construct a purely rational theory of Time. Beyond this we may affirm that it was the outcropping of an attitude closely akin to Greek skepticism and doubtless more or less directly influenced by it that cleared the way in the thought of the early philosophers of the modern era for the discovery of those ideas that issued in what we have called the spiritualist

theory of Time.

III. The Middle Ages

The thought of the Middle Ages contributed little that was new toward the solution of the problem of the relation of Time and Eternity to reality. However, attention may be called to three significant facts regarding Medieval thought with reference to the subject: first, that the idealist and realist traditions dominated the field while absolutism continued to find some advocates and materialism dropped out of sight; second, that there was a gradual movement away from the type of idealistic theory represented in Christian Platonism toward a non-idealistic nominalism and skepticism; third, that certain interpretations and modifications were introduced into the idealistic and absolutist theories. We now present a sketch illustrating briefly the above facts and calling attention to a few outstanding representatives of the theories which find expression in Medieval thought.

A. The Idealist Approach

(I) The Platonic Type

When the Christian religion came to occupy a position of prominence in the Roman world it found expedient the development of a philosophical background. Not unnaturally it turned first to Neo-Platonism as a congenial system which shared its high belief in transcendence and at the same time its idea of the possibility of union with the Divine. Thus, in Saint Augustine, who came into Christianity from a Neo-Platonic background, we find the first representative Christian theory of Time, a modified Platonism.

Although Augustine's ideas of faith, church, and dogma have
no precise counterpart in the theory of Plato, his theory of
Time is in the main a reaffirmation of the Platonic theory. Like
Plato Augustine believed that God was beyond Time, the unchangeable
Author of change. (1) Like Plato he assigned to Time a beginning
simultaneous with that of motion. However, Augustine offered the
explanation that the beginning of Time must not be taken to mean
a beginning in Time, for Eternity does not mean duration and what
existed before Time was not an extent but an eternal simultaneity.(2)
Augustine's real advance over Plato, however, was his emphasis
upon the place of will both in Eternity and in Time. The origin
of the world and of Time, he held, was not, as Platonius had said,
an emanation. Rather it was a creation, a free act of God. Where­
as Plato found the essential character of the Eternity, which stands
over against Time as its antithesis and source, in ideas, Augustine
found it in the freedom of God. In modern times, as we shall
presently see, the shift to the volitional basis has had a revolu­
tionary effect upon the whole concept of Time. However, during
the Middle Ages it never became sufficiently dominant to set aside
the idealistic conception.

(II) The Aristotelian Type

For eight hundred years after the death of Augustine, Euro­
pean thought continued to be largely under the influence of the
Platonic tradition. However, in the thirteenth century the Aris­
totelian tradition began to make itself felt more pointedly (3)
so that by the middle of the fifteenth century it had become the
official philosophy of the church(4). Thus a view of Time which,
while still of what we have called the idealist type, was quite

2. Ibid., p. 147.
3. Ibid.
4. Ibid.
different from that of Augustine, came into Medieval thought as a development of the Aristotelian tradition.

The classical expression of Medieval Aristotelianism was of course the writings of Thomas of Acquin. As a disciple of Aristotle Thomas adopted the doctrines of the reality of Eternity and of Time. However, as a Christian theologian he was obliged to introduce modifications. For one thing, the special Aristotelian doctrine of the infinity of Time had to be modified. The doctrine of creation was too vital a part of the Christian faith to be thrust aside. Thus, Thomas acknowledged that world and Time were indeed created at a definite moment. (1) At the same time, in an attempt to soften the difference between this doctrine and the teachings of Aristotle, Thomas contended that the doctrine of creation was a tenet of faith that could not be ascertained or established by reason. Further, the idea of a world infinite in Time was, St. Thomas held, rationally conceivable, even in a Christian system; for, on the one hand, the idea of creation from nothing did not necessarily mean that creation was temporally preceded by nothing, and, on the other hand, the idea of an infinite Time stretch did not make the world like God, for however durable the world might be it was still subject to change.

More important is the fact that as a Christian teacher Thomas could no longer hold on to a purely formal concept of the First Mover. The very fact of the acceptance of a Christian idea of God meant that by implication at least the ground of the universe was no longer purely eternal or unmoved. God, if He 1. Ueberweg: A History of Philosophy, Volume I, p. 448.
is at all, is Spirit and Life and not mere motionlessness. Thus, whether avowedly or not, the place given to Eternity becomes somewhat smaller. As in Augustine, though less noticeably, will finds some place in reality. Spiritualism begins to gain a firm hold upon thought.

The course of the Aristotelian domination of European thought was not uniform. The first part of the period was devoted to what was called a **realistic** interpretation of Aristotle (i.e., universals were thought to be real). However, as time moved on, what was called a nominalistic interpretation began to prevail (i.e., universals were thought to be only names for universals which had no real existence). St. Thomas had stood about midway between these two, holding that universals exist in things. However, after the days of Thomas the nominalistic interpretation came more and more to prevail. Churchmen no longer believed that general concepts had a real existence of their own. This meant that there was less and less confidence in the power of reason. The emphasis upon reason was replaced in Duns Scotus by an emphasis upon will, and an emphasis upon will means a distrust of all intellectual concepts including the concepts of Time and of Eternity. Finally, in Occam nominalism became fully expressive. Faith was held to be the way to knowledge. Skepticism reigned in philosophy. Thus, along with all other metaphysical ideas, all theories of Time tended to be placed under the shadow of doubt. The way was paved for a new metaphysics and a new theory of Time.

**B. Absolutism**

Despite general Medieval acceptance of the Aristotelian and Platonic types of idealist theory of Time, the absolutist theory
was never entirely thrust aside. As a matter of fact, as we have already seen, the Platonic form of idealism in the hands of many of its advocates has always leaned strongly toward absolutism. In the Medieval mystics the absolutist theory finds considerable, though not unambiguous, representation. Thus, for example, Eckhart, though unwilling to go all the way in the denial of Time, almost implies as much. Ueberweg presents one phase of his teaching as follows: "Out of God the creature is pure nothing; Time and space and plurality, which depends on them, are nothing in themselves." (1) Again, putting it more definitely, Ueberweg presents Eckhart's thought thus: "When the creature had as yet no existence for itself, it was yet eternally in God and in His reason. Creation is not a temporal act. God did not literally create heaven and earth, as we inadequately express it; for all creatures are spoken of in the eternal Word. In God there is no work: there is one now, a becoming without a becoming." (2)

It should be pointed out that the Absolutism of the Middle Ages was an entirely different order from that of the ancient Eleatics. Parmenides and his followers, while perhaps having been under the influence of Oriental mysticism, sought to found their doctrine of the sole reality of unchanging Being upon a logical reasoning which was in the main negative. Parmenides drew out the implications of the concept of Being in such a way as to exclude Time. Zeno tried to show the absurd consequences of attempting to assert the reality of Time and change.

The Medieval mystics derived their inspiration, not from the Eleatic logicians, but from the Neo-Platonists, in whose thought there was a considerable religious element, and from

1. Ibid., p. 469.
2. Ibid., p. 475.
their Christian tradition, which from the start involved some mystical aspects. Thus the absolutism of the Medieval mystics was based not simply on a logical and negative foundation but on a religious and positive foundation. Their theory was not an interpretation of a concept, but an attempt to interpret an experience. It was not an analysis of an order of existence, but a manner of expressing a fact of experience.

This meant, of course, that the Eternity of which it spoke excluded the element of temporality less rigidly than does that of which the Eleatics spoke. If a thing simply is, so that neither becoming nor passing away can have any application, it is as rigidly as possible eternal and non temporal. But, if there is a state which is believed upon experimental grounds to be beyond all distinctions, even beyond the distinctions between Eternity and Time, and Being and non Being, while that state certainly cannot be said to be temporal, temporality is not so definitely ruled out as in the former case. The mystics are absolutists but they are somewhat softened absolutists who move in the direction of a spiritualist theory.

IV. The Modern Era

As scholastic philosophy gradually reduced itself to a nominalism which surrendered the hope of finding rational solutions of the major problems of philosophy and new impulses that came with the Renaissance and the Reformation began to take hold, it became almost inevitable that a fresh start should be made in metaphysical inquiry. Modern philosophy has, in fact, made a fresh start in metaphysical inquiry, and its effect upon the interpretation of Time and Eternity has been considerable. It
has set forth certain suggestions which would probably seem rather novel to the ancients. Quite naturally, however, the new thoughts have not arrived suddenly and fully formed. We have already seen how Medieval philosophy had already introduced some spiritualist tendencies. In the modern history of our problem there are three distinct and gradual processes which go simultaneously. The first is the process by which a new approach to the problem has emerged. This process naturally belongs especially to the earlier part of the modern era. The second is the process by which upon the foundation of the new approach there has gradually developed a spiritualist theory of the relation of Time and Eternity to reality. In its earlier phases this process takes the form of more or less indefinite and uncoordinated suggestions in the minds of writers who were developing the new approach and who held alongside their spiritualist suggestions major tenets of the older theories. Later, this process expresses itself in a distinct spiritualist theory which finds a number of distinguished modern advocates. The third process is that by which the older theories have readjusted themselves to the modern world. In its earlier phases this process goes forward in the same great minds as the other two, but later it emerges in distinct form in the thought of the more recent representatives of the older theories. We must now trace these three processes.

A. The New Approach

(I) Descartes

The real significance of Descartes with regard to the Time
problem is not his own theory, which, as we are later to see, never really got beyond the older idealist theories, but in a general approach to philosophy which was revolutionary in its consequences.

Descartes began with a determination to doubt all things. Thus he laid it down as a rule "never to receive anything as a truth which I did not clearly know to be such." (1) Again, regarding an important period of his experience, he declared: "I gave particular attention to that in it which afforded occasion for doubt." (2) Thus far, Descartes is like the Greek skeptics who doubtless influenced him considerably.

However, the skepticism of Descartes was only tentative, a doubting in order to believe. "My whole design", he wrote, "tended only to assurance and to the rejection of the shifting soil or sand, to find solid foundation on rock or the hard clay." (3) Out of the doubting of Descartes emerged two principles which were destined to be of tremendous influence. We may consider them in order.

The first of the two principles which concern us in Descartes's way of approaching reality is his insistence upon beginning with the self. Up to the time of Descartes nearly all non-skeptical systems of philosophy had endeavored to deal with objects of knowledge, taking the knower for granted. Descartes, however, subjecting all things to doubt and seeking for a sure point at which to begin constructive thought, settled upon the self as that which was most surely known. Even doubt led to knowledge of the self, for doubt was thought, and to think was to be a self.

2. Ibid., p. 56.
3. Ibid.
In Descartes's own thought this principle was allowed to work out in a dualistic philosophy that was too like the traditional systems to involve any radically different concept of Time. Further, the *Cogito ergo sum* was itself not widely accepted as a beginning point by other philosophers. However, the spotlight of thought had now been turned upon the self, and as the years passed it was increasingly seen that any analysis of metaphysical realities must take seriously into consideration the part played by the subjective consciousness.

The second of the factors which concern us in Descartes's approach to reality is his insistence upon the value of the mathematical type of reasoning. Descartes was a mathematician of considerable eminence. Impressed as he was with the precision of mathematical sciences, it was not unnatural that he should discard many of the ambiguous terms of scholastic philosophy and attempt to present his thought in a form analogous to that of mathematics.

This approach has issued in a greater exactness in philosophical language and has led philosophical thought into a vastly greater appreciation of the value of mathematical sciences, so that, since Descartes, philosophy has taken not only much of its form but many of its most important ideas from these sciences.

Thus, without developing a significant theory of the relation of Time and Eternity to reality, Descartes has set forward new tendencies of far reaching importance for the problem. We must now see how these new tendencies worked out in a number of writers who, like Descartes, failed to develop theories of Time that were significantly new, and yet contributed to the development of a
new approach to Time that ultimately issued in a theory that was quite different from any of the three traditional theories of which we have spoken.

(II) Seventeenth Century Rationalism

(A) Descartes's attempt to bring mathematics into the service of philosophy was carried on in the work of Spinoza and Leibnitz. The use of mathematics made by these writers was not essentially different from that of Descartes. Spinoza attempted with even greater vigor than did Descartes to work out a system of metaphysics on the model of geometry. Although Leibnitz's use of the mathematical principle was freer than that of Spinoza, and although he made some independent contributions to mathematical science itself, his system remained, like that of Spinoza, essentially a rationalistic attempt to deduce reality by mathematical methods from certain first principles.

Applying mathematics in this way to the study of philosophy Spinoza and Leibnitz did not immediately revolutionaryize philosophical method. Their method was somewhat mechanical and artificial. Certainly it did not persist in the form which they gave it. However, the mathematical approach of Leibnitz and Spinoza did accomplish two significant results. First, it influenced philosophy to adopt a greater precision in language and in reasoning after the pattern of mathematics. Second, it was a step in the direction of that close cooperation and mutual influence that has come to characterize the relation of mathematics and philosophy in recent years. Of this we shall presently have more
to say.

(B) Descartes's subjectivist tendency, like his mathematical method, was carried forward by Spinoza and Leibnitz. Although these did not begin precisely as did Descartes with knowing and then proceed to divide reality into thought and extension, the lesson of the metaphysical importance of the act of thinking was so firmly impressed upon their minds that they felt obliged to recognize it as an attribute of all reality. Spinoza, unwilling to posit more than one real substance, undertook to show that thought and extension were only attributes of a single substance, and Leibnitz, while by no means disposed to reduce all to a single substance, contended that the force which animated all individuals was thought and extension brought into essential unity. Without being subjective idealists or even Cartesions, Spinoza and Leibnitz carried forward the idea that mind was essential to all reality.

Eighteenth century rationalism issued, on the one hand, in a mathematical approach to philosophy and, on the other hand, in a recognition of the importance of mind or spirit in any concept of the universe.

(III) British Empiricism: Locke, Berkeley, Hume

Across the English channel the mathematical method did not have a great deal of influence. However, the implications of the necessity of bringing the fact of the knower into consideration in metaphysical inquiries were worked out.

John Locke (1632-1704) did not literally begin, as did Descartes, with the certainty of self. However, by making the fundamental problem that of knowledge, he was in effect beginning, as did Descartes, with the self. The knowing self is real, taught
Descartes; certain knowledge which the self attains is valid, taught Locke. Despite important differences the two affirmations are basically similar. In either case further progress is seen to be dependent upon a recognition of the self. In either case the knowing process is the point of departure.

Locke's approach to all reality from the standpoint of mind became, in the writings of George Berkeley (1665-1753), a bold declaration that all reality consisted in minds and the ideas of minds. Berkeley held that the primary qualities, extension, figure, and motion, as well as the secondary ones, seeing, hearing, taste, and smell, belong to the knowing mind. Hence every object is really dependent upon the knowing mind. The Cartesian tendency to regard mind as the starting point of philosophy was now a thoroughgoing theory of subjective idealism.

David Hume (1711-1776) went a step beyond Berkeley and in so doing reduced the thought of English empiricism to skepticism. Agreeing with Berkeley that none of the qualities of objects inhered in the objects, Hume was unable to find sufficient evidence for the existence either of object or of mind. Knowledge was reduced to ideas and impressions which relate themselves by principles of resemblance and contiguity and causality. (1) But even these principles further reduced themselves to mere habit.(2)

The egocentric approach had now apparently destroyed not only the foundations of belief in the reality of the objective world, but also the foundations of belief in the ego itself. However, this by no means ended the emphasis upon the importance of recognizing the self or even affirmation of the fact of the self, for as we are presently to see, the recognition of the importance of knower con-

2. Ibid., pp. 333, 334.
tinued to be a vital feature of modern philosophy, and new theories affirming the reality and centrality of the ego were shortly to appear.

(IV) Modern Classical Physics

Having now traced the major philosophical factors in what we have termed the new approach to the problem of Time, we must now record some observations regarding the scientific side of the matter. We have seen how Descartes and the succeeding rationalists cast their thought in mathematical molds. The more important aspect of Descartes's interest in mathematics was, however, the stimulus that it gave to mathematics itself as a kindred study of philosophy.

For all the subjectivism of Descartes's philosophy, mathematical physicists, who had learned a good deal from Descartes, continued without hesitation to proceed upon the assumption of the reality of an observable objective measurable continuum to which its formula could be applied. In this order of things Time was still distinct and a real part of a framework in which events might be oriented.

However, even in the mathematical physics of the early part of the modern era a tendency of quite a different order was at work. Time had come to be regarded as a factor in physical equations, but if Time were one of the factors in physical equations, it was at least conceivable that there was more than one Time as there was more than one motion. Accordingly, the thought was at hand that the uniform Time in which we attempt to orient all things was not an objective reality but a convenient arrangement of our minds. That none of the early physicists took this thought seriously must not obscure the fact that it was already present
in germ in their speculations and that it would inevitably come sooner or later to play a significant role in physics. The truth is that even Newton himself, although without attaching importance to the fact, was not unaware of the impossibility of actually discovering a system of fixed references. (1) Moreover, the older physicists recognized certain imperfections in their own theories which would one day issue in a more subjective view of Time. How the subdued relativist tendencies in the older physics were translated into a theory of relativity which has had a significant relation to the spiritualist theory of Time we are to see when we come to discuss the spiritualist theory itself. For the present it is enough: to note that already in classical physics were tendencies which were to lead away from the idea of the real and distinct existence of Time as an objective order of being.

We may now proceed to summarize what has been said concerning the new approach to metaphysical problems. With the writings of Descartes and his successors down to David Hume, the manner in which metaphysical problems (such as the Time question) had been dealt with in the past underwent two profound changes.

The first change in the approach to metaphysical problems was a shift from an objective to a subjective point of view. The Medieval philosophers had followed the Greeks in beginning with the thing known rather than with the knower. However, Descartes found the foundation of all speculation in the act of thinking, and Spinoza and Leibnitz felt obliged to make thought an essential attribute of all reality. Locke regarded all metaphysical speculations as dependent upon an understanding of the knowing process and 1. Cf. Sir James Jeans: The New Background of Science, p. 79.
Berkeley, pursuing the same line of thought, found it necessary to reduce existences to two, minds and ideas. Hume carried the process to the ultimate extreme, declaring that ideas, or the atoms of the knowing process itself, were all that could be certainly said to exist. Thus did philosophy shift its emphasis until, instead of being concerned with relations between objects of knowledge, its attention was absorbed in analysing the knowing process, and its entities were reduced to the elements of the knowing process. It was a shift of emphasis from known to knower, from object to spirit. The second change in the approach to metaphysical problems was the shift from a conceptual and logical way of dealing with physical relations to a mathematical way. The ancient Greeks and their Medieval successors had undertaken to work out the problems of physics in terms of the kind of concepts that were employed in everyday speech and in metaphysics. However, in such writers as Descartes there came to be an increasing recognition that the more precise statements of mathematical formulas were required to express physical relations. Although Descartes, Spinoza, and Leibnitz endeavored to give too wide an application to the mathematical type of reasoning, mathematics became more and more recognized as a way of expressing physical relations, and philosophy more and more ready to accept the results of a mathematical physics.

We must now see how these two new instruments of philosophy, the subjective approach and the mathematical emphasis, have affected consideration of the problem of the relation of Time and Eternity to reality. We may at this stage in our discussion note
in a very general way that the major effects of the new approach were two: first, the development of a new theory of the relation of Time and Eternity to reality, and second, the bringing about of certain important changes in the older theories as they are presented by modern writers.

B. A New Theory: Spiritualism

In a preliminary statement we defined spiritualism as the theory that Time and Eternity are concepts which mind has impressed somewhat arbitrarily upon reality which is intrinsically of quite a different sort. This implies fundamentally three things: 1. that Time is in some sense an arbitrary product of mind, 2. that essentially the same is true of Eternity, 3. that reality is basically different from the Eternity-Time form. We are now to see how during a long period first one, then another of these ideas cropped out in the thought of various writers, until at last all appear together and there is a distinctly spiritualist theory of Time and Eternity.

(I) Early Expressions of Various Aspects of the Spiritualist Theory

(A) Although retaining in connection with his idea of extension the notion of regular and external Time and never attempting to exclude the idea of Eternity, Descartes insisted upon the idea of the complete freedom of God. This insistence is in itself an expression of the characteristic spiritualist idea that ultimate reality is of a different order from that which can be described in terms of Time and Eternity, the idea of the spirituality of ultimate reality.

When Descartes came to consider the condition of the external world he felt that a proper recognition of the majesty of
God required the concept that the world was created anew in each moment. Such a theory certainly does not suggest the idea of an objective time frame and seems to imply the spirituality of reality.

However, Descartes continued to regard the constantly renewed world as describable in regular and mechanical terms, and, of course, when the idea of an invariable order of renewal was introduced, the idea of an objective temporal order was not far away.

(B) Spinoza's contribution to spiritualism was twofold. First, his effort to overcome the dualism of mind and matter, by declaring that thought and extension were attributes of the same reality directed attention toward the idea that consciousness was to be associated with all reality. Second, Spinoza distinguished between reality as seen under the aspect of Eternity and as seen under the aspect of Time. (1)

The first suggestion would tend to further the spiritualist idea of the spirituality of ultimate reality. The second would tend to suggest the possibility that Time and Eternity were impressed upon reality by mind; for, when the idea is present that reality can be seen under this aspect or that, the thought is not far away that this aspect or that is impressed upon this thing by the one who sees. Neither suggestion, however, was developed either by Spinoza or by his immediate successors.

(C) Leibnitz was so devoted to the determinist hypothesis that his contribution to the spiritualist theory was largely indirect. However, in two points Leibnitz has made contributions toward the theory. In the first place, the concept of force as

being beyond the dualism of thought and extension involved a faint suggestion that Time, like space, might be but an aspect of a deeper spirit or like reality. In the second place, his theory of monads puts individuality at the center of things and in so doing tends to make such patterns as Eternity and Time secondary to spirit, despite his determinist principles.

(D) In the philosophy of John Locke there are a number of interesting and rather surprising suggestions in the direction of the first of the three important ideas of spiritualism, namely, that Time is a subjective product of mind. In the first place, the sensationalism of Locke is in itself a tendency that has significance in leading toward the relativist conclusions of modern physics, which, as we shall see, are of considerable importance for the spiritualist theory. But beyond this, Locke distinguishes between duration and Time and regards the latter as merely a mode of the former (1) (a suggestion that would seem to have influenced Bergson's elaboration of such a distinction in Time and the Freedom of the Will). When Time has become only a mode of an idea it is on the border of becoming only a subjective product of mind. A third suggestion of Locke's was his idea of the relativity of Time spans. (2) To be sure, Locke does not here suppose as does Bergson that the reality behind Time is not really subject to regular measurement, but it is easy to see how his suggestion leads in that direction. Dates, he says, are relative to other dates and ages to other ages.

1. Ibid., p. 312.
(E) Berkeley's thought carries Locke's tendency to reduce Time to subjectivity still farther, for Berkeley eliminated all realities except minds and ideas, and specifically indicated that Time was nothing apart from ideas.

(F) David Hume went even beyond Berkeley in denying objectivity to Time. Hume first reduced the world of which Time would be the pattern to ideas and impressions and then attempted to reduce all rules applying to the succession of ideas and impressions to mere habit. Such a system completely excludes the idea of an objective Time. Time is now not even an order of ideas, for order is taken away. Time becomes little more than habit.

(II) The First Representatives of Spiritualism

The first real representative of what we have called spiritualism is Immanuel Kant, who, despite his unwillingness to renounce altogether the tenets of the older theories, nevertheless embodied all three of the essential spiritualist emphases, namely, a subjectivist idea of Time, a subjectivist idea of Eternity, and a non determinate view of reality.

Kant's thought of the subjectivity of space and Time seem to have been a conviction that went back to a comparatively early point in his thought. However, it was in his search after such a priori elements in experience as would give universal validity to knowledge that he set this idea forth clearly. In this connection emphatically and repeatedly he affirmed that Time is a form of experience rather than an object of knowledge. We shall let him speak for himself.

In the Transcendental Aesthetic of his Critique of Pure
Reason, after examining the concept of space which he takes to be the pure form of primary intuitions, Kant comes to an analysis of the intuition of Time. Time, he declares, is "not an empirical conception." (1) It is rather, he says, the "foundation" of our ideas of succession as well as of simultaneity. (2) Indeed, he says that it is at the foundation of all our intuitions, that if all else were thought away the intuition of Time would remain. (3) Time is not empirical, neither is it a "general conception" for this reason: "its representation can only be given by a single object." (4) Thus, Time unmistakably loses its quality as an objective reality and becomes a way of looking at reality imposed by the mind.

When we consider Kant's attitude toward Eternity the situation is somewhat different. Kant does not definitely make Eternity a form of experiencing. However, his thought on the whole, we believe, comes essentially to this. It is from the outset clear enough that Kant is unwilling to allow the possibility that Eternity is an object of our knowledge. The insistence that Time is a form of all knowledge precludes that. But if Eternity is not known, how can it be even a form or pattern of knowledge? The answer is not far to seek. The categories of Kant stand for pretty much the same thing as the Eternity of Plato, and since Kant's categories are clearly forms of knowledge, Kant is in effect taking the Eternity to which Plato ascribed objective reality and making of it a form of knowledge.

Having made Time and Eternity essentially forms of experience fastened upon reality by mind, Kant is by no means dogmatic when

1. Kant: The Critique of Pure Reason, Translated by Meiklejohn, p.28.
2. Ibid.
3. Ibid.
4. Ibid., p.29.
he undertakes to tell what the nature of the reality beyond the forms is. Pure intellect, he thinks, throws no light upon the subject. All that intellect can do is to speak of the unknown "thing in itself". However, conscience gives us some clues. It demands belief in a spiritual God, in freedom, and in a life that does not perish. This, of course, leaves the matter quite indefinite, but it represents an unmistakable affirmation that Freedom is at the center of things. Ultimate reality is not of such nature that its pattern can be fully marked out by the determinist pattern of Eternity and Time.

Thus, Kant's theory presents unmistakably all of the essential tenets of a spiritualist view of Time and Eternity. Time and Eternity are not aspects of objective reality, but something which mind has impressed upon a reality which is essentially of a different type.

We must not, however, leave Kant without pointing out another side of his thought. There are two important respects in which Kant does not entirely eliminate the prevailing idealist tendencies of his day. In the first place, Time is described as an inevitable, unvarying form which is the same for all individuals. This is considerably short of the view of later spiritualists who regard Time as only a result of an unfortunate habit of most minds. Whether rightly or wrongly, Kant persists in ascribing at least this much of objectivity to Time and Eternity, that both are more than arbitrary habits, being inevitable and unvarying forms of experience. This much of a place in reality Kant continues to ascribe to Time and Eternity. Time and Eternity do
not, for him, belong to the thing "in itself"; but they continue to belong to reality at least as invariable forms stamped upon the thing as seen.

(III) Fichte

We have seen how, despite Kant's refusal to allow an assured place in objective reality either to Time or to Eternity, he continued to ascribe some place in reality to both. Both were for him at least the same inescapable forms in all intellects.

J. G. Fichte did not eliminate these remnants of an objective view of Time and Eternity. He did modify them. To Fichte the ego was not as it tended to be to Kant, a mechanically divisible structure of intellectual, moral, and aesthetic and theological parts. It was rather an indivisible whole of which the practical or moral element was the vital one. Moreover, this ego was not bound by Time but was conscious of a supertemporal destiny. Clearly such a being is less rigidly limited by the forms of Time and Eternity than the being whom Kant describes. Time, for Fichte, flowed from intellect and indeed became a ground of possibility of moral life; but it was essentially the product of a free supertemporal spirit rather than of a rigid intellect. Accordingly, it lost some of its remaining objectivity and became a little more arbitrary. In like manner, while eternal forms of thought continued as aspects of intellect, they became the tools of practical aspirations and so were one step farther removed from objective reality.

(IV) Bergson

After the days of Fichte, the philosophy of spiritualism was

in some degree submerged under the intellectualist emphasis that followed in the wake of Hegel. However, the spiritualist influence was kept alive and nurtured in France by Main de Biran, Cousin, Ravaisson, and Boutroux. It was revived in Germany through the philosophy of Schopenhauer, whose pessimism grew out of his conviction of the primacy of will. The same tendency was fostered by the writings of Herbart and Nietzsche. The teachings of Lotze and Fechner contributed materially especially to the interpretation of the concept of the spirituality of nature. To this list we may add with special emphasis William James whose pragmatistic outlook added a somewhat new and distinctive angle to the pluralist spiritualism which he advocated. Naturally such presentations of the spiritualist philosophy as the above, would tend to foster a spiritualist solution of the problem of the relation of Time and Eternity to reality, for example, Fechner came to think of the past as having a psychical nature in God, (l) and William James developed the fruitful thought of the extended psychological moment. However, without an effort to present in detail the contributions of the impressive list of modern spiritualists we turn at once to a consideration of the thought of that one of their number in whom, despite the naturalistic influences that color his thought, the most distinctive features of the spiritualist view of Time and Eternity receive perhaps their fullest expression.

1. Kant had held that Time was a product of mind rather than an attribute of objective reality. He had, however, refrained from making Time an arbitrary product of individual minds, regarding it as a form which mind has already stamped upon reality when

1. Ibid., p. 519.
we become aware of it. Bergson, however, boldly presents Time not only as lacking objective reality, but as wanting any necessary connection with objective reality. Time becomes a mere practical habit of mind.

It must be made clear from the start that Bergson does not eliminate or explain away the element of successiveness. Indeed, this is quite fundamental with him. It is for its want of a genuine recognition of this element that he criticises modern science. (1) How then does he come to regard Time as a mere practical habit of mind, having little connection with reality? Bergson accomplishes this by distinguishing sharply between Time or "clock time" as the ordered invariable succession which we measure by clocks, the stars and the like, and which offers the same possibilities to all, and durée as the indeterminate succession of consciousness and life. Upon the basis of this distinction, while unhesitatingly affirming that succession belongs to reality, Bergson denies that Time belongs to reality. Although vigorous in his affirmation of the fact of successiveness, he is unrelenting in his disparagement of ordered Time, which he considers as nothing but a spreading out of successiveness in space, a nullifying of real successiveness.

Of course the question may arise as to whether it is really Time that Bergson means when he refers to "clock time" (as he calls it in Creative Evolution (2), abstract Time). The question becomes particularly pointed when it is noted that Bergson continues to use the word Time for what he elsewhere calls durée, referring in Creative Evolution to concrete Time. However, as we

2. Ibid., p. 21.
have all along contended, Time has always meant a regular uniformly divisible continuum of succession which offers the same possibilities to all. This is precisely what Bergson means by "clock time" and if something else for which even Bergson continues to use the word Time has regularly been associated with Time, it is only because it has qualities similar to Time, not because it is essentially what men have meant by **Time**. Accordingly, we feel reasonably safe in assuming that what Bergson is concerned to deny to reality is nothing more nor less than **Time**.

But if Bergson denies a place in reality to Time, what does he do with this Time which he tries to exclude from reality? In what does he go beyond Kant's idea that Time is an invariable form? Bergson contends that Time is nothing more than a practical habit of mind. Of course Bergson recognizes that the Time habit is deeply ingrained in thought, but he holds that it is quite possible to see reality in other than a temporal way. For practical purposes, men have needed to know something of the future, and so they have formed the habit of arranging things in a determinate Time order. However, by shutting out practical intellect they can, in intuition, live reality in the indeterminate way in which it really exists. Thus does Bergson destroy most of the connection with objective reality that Kant allowed to Time. Time is now not even a form invariably associated with reality. It is only a sort of an unfortunate habit that individuals have fallen into and from which a return to intuition will progressively free them.

2. Bergson is perhaps even more emphatic in denying that Eternity belongs to reality than in denying that Time belongs to reality. He contends, especially in his Creative Evolution that any philo-
sophies which insist upon the concept of Eternity, whether in terms of intellectual concepts (1), mechanistic laws (2), or final causes (3), are at best only partially true. This he contends upon the following, among other grounds: 1. that such philosophies depend on the selection of certain incidents out of the totality of events, neglecting others which are equally important (4), 2. that they regard the units of successive reality as mere forms, neglecting the units themselves which are the really important factors, 3. that they fall short of an adequate notion of continuity, 4. that the need for the self sufficiency (5) in reality, which such philosophies think demands the idea of Eternity, may be met in durée, 5. that such philosophies give no real significance to the processes which are at work in life, so all phases are on a dead level (6).

Objecting thus to the idea of an objectively real Eternity, Bergson goes on in the same way in which he has dealt with Time to try to show that the idea of Eternity arises out of a practical habit of intellect which has little value as an attempt to present the actual state of things.

3. It is now clear enough that Bergson attempts to reduce Time and Eternity to the status of more or less arbitrary products of mind which do not have any essential place in reality. What does Bergson consider the nature of the pattern of the reality that lies beyond the forms of Time and Eternity to be?

Bergson things of essential reality in very much the same

1. Ibid., p. 342.
2. Ibid.
3. Ibid., p. 59.
5. Ibid., p. 398.
6. Ibid., p. 16.
terms as all of his spiritualist predecessors. Reality is fundamentally free spirit, undetermined will, voluntary purpose, life. If its pattern, relative to succession, is to be drawn it must be drawn not in terms of a rigid Eternity-Time form, but in terms of spontaneity.

The chief difference between Bergson and his predecessors is that Bergson having before him the discoveries and ways of thinking of modern biological studies is able to take the idea of spontaneous vital force more deeply and more definitely into the lower levels of existence than were his predecessors. Thus, the entire living world becomes one vast expression of a restless vital force or elan vital which works itself out now in this direction, now in that, being never completely determined or predictable.

This does not, of course, mean that the reality of which Bergson speaks has no direction or purpose. Its freedom is not that of chaos. Direction and purpose are there; they are free direction and purpose rather than rigid force and determined direction such as can be completely reduced to an Eternity-Time pattern.

Again, we must call attention to the fact that while Bergson's ultimate reality is neither temporal nor eternal, it retains some qualities in common with these states. The durée in terms of which Bergson repeatedly describes reality does not have, like Time, the property of regularity. It does share with the traditional notion of Time something of the quality of successiveness, and it embodies the experience, which has often been associated with the word Time, of uncertainty. (1) Similarly, Bergson's

1. Ibid., pp. 339-340.
duree is, while certainly different from Eternity, not devoid of the qualities of Eternity. It gathers up the past into itself. It is not incompatible with the idea of self-sufficiency; it involves no denial of the so-called laws of science but denies that they determine events. We may, then, summarize Bergson's account of reality by saying that, for Bergson, reality is vital force or free spirit which is constantly working itself out in a pattern of purposive spontaneity which being neither temporal nor eternal nor both, yet has some aspects of each.

(V) The Contributions of Modern Science

Our account of the spiritualist theory of Time and Eternity would be by no means complete without some reference to the contributions of modern science. Every theory of the relation of Time and Eternity and reality is influenced by the findings of its contemporary science. In the case of the spiritualist theory the influence of recent science has been quite considerable.

We have already indicated that even classical physics, by its insistence upon bringing Time within its formulæ and by its recognition of certain gaps in its theory, was already contributing something to that new approach to metaphysical problems which issued in the spiritualist theory. During the last half of the nineteenth century and the first quarter of the twentieth rapid and remarkable developments took place in the scientific world which at least in a negative way gave very considerable support to the spiritualist theory.

We may first indicate the general character of the developments in science to which we refer, and then show briefly their

1. Ibid., p. 298.
bearing upon the theory in question.

(A) 1. The first of the remarkable changes in scientific thought which bears upon our problem is the new approach of physics to the whole problem of space and time that has emerged out of the application of experimental and mathematical methods to the difficulties which classical physics had left unresolved. (1)

For many years it was assumed that the gaps in the mechanical theory were only minor difficulties that in due time would be resolved along the general lines laid down by classical physics. However, a series of discoveries, falling mainly in the last half century have proved the reverse to be true. Recognition of the want of intuitive certainty attaching to Euclid's postulate that when two lines are intersected by a third line and the interior angles on the same side of the intersecting line are equal to two right angles, the intersected lines will not meet (2) has led to the unfolding of whole new systems of geometry in which space may be conceived to be slightly curved. Thus it could no longer be assumed that there was only one way in which space could be regarded. Again, the impossibility of finding an actual point of rest has led to the question as to whether such a point existed at all and the assumption that it did not. Once more, certain apparent irregularities in the behavior of light led to a new way of regarding the framework within which light moved. In short, investigation of the supposed minor gaps in the older physics has led to the conviction that they were not in reality minor at all but of such importance that a reinterpretation of the whole concept of space and time was demanded. This could not but have a significant bearing

1. For a general consideration of this subject see Jeans: The New Background of Science, pp. 70-110.
on the problem of the relation of Eternity and Time to reality.

2. The second important change in modern science was the emergence of the concept of organic evolution as a relatively well established scientific theory. The general concept of organic evolution may be traced back as far as the early Greek philosophers. It found some support in Aristotle and was not entirely lost sight of in the Middle Ages. Early nineteenth century scientists toyed with the idea but without making material progress. So far the idea remained a rather hazy suggestion which was not taken very seriously. However, when Charles Darwin presented the theory of organic evolution in a clear cut scientific manner, accompanying his thoughts with an imposing mass of evidence, the course of scientific thought began to change. Idealistic intellectualism received a severe blow and naturalistic philosophies a considerable impetus.

(B) The above tendencies of modern science have contributed significantly to the support of the spiritualist interpretation of the relation between Eternity and Time.

1. They have in four important ways created at least a negative suggestion in favor of the idea that Time as a single uniform continuum is a product of mind in its effort to deal with the universe.

a. The reinterpretation of the background of the universe demanded by modern physics involves a failure to find evidence for a Time that is the same for all persons in all places and at all rates of motion. Thus, for example, Sir James Jeans writes as follows concerning intuitive "concepts of space and
"Nothing in our experiences or experiments justifies us in extending either this or any other parochial scheme to the whole of nature on the supposition that it represents any sort of objective reality." (2) J. Arthur Thomson writes in a similar vein in his Outline of Science: "Time is merely a local affair. As the measuring rod creates space, so it is clocks which create time. We cannot form any idea of absolute time or of absolute space. As we shall see, we make a wrong supposition if we suppose that an interval of time and an interval of space between two given phenomena are the same for every observer whatsoever and whatever the conditions of observation may be." (3)

Of course the mere denial of the fact of a single physical time continuum does not establish the idea of the dependence of Time upon spirit. However, whereas most of the older philosophers approached the Time problem under the assumption that the thing that they studied somehow existed in nature, modern philosophers must approach the problem under the definite protest of the physicist that there is no evidence in nature for the existence of that single continuum which has generally been meant by Time. This means that the modern scientific idea of Time obliges the modern philosopher to seek some explanation for the origin of the Time experience and concept that does not rest upon the idea of an absolute Time continuum that is physically demonstrable. Of course, various ways of meeting the situation have been presented, but certainly one of the most obvious is in the spiritualist idea that Time is an imperfect product of mind.

2. Ibid., p. 96.
b. A second important phase of the reinterpretation by modern physics of the framework of the universe is the insistence that Time must be welded with space in a single space-time continuum. Jeans writes: "We discover that the primary ingredients of nature are not objects existing in space and time, but events in the continuum." (1) J. Arthur Thomson in his Outline of Science puts it as simply and definitely as possible. Speaking of the Einstein theory, which he presents as accepted teaching of science, he writes: "The theory asserts that the actual reality which underlies all the manifestations we experience is neither spacial nor temporal nor material, but a blend of all three." (2) "There is no essential distinction between time and the three dimensions (Length, Breadth, Thickness) of Space ....... Time enters into physical phenomena in the same way as the directions in space ...." (3) Physics has revealed that measurements which deal only with space and Time as separate have, when taken from bodies moving at various speeds, a way of presenting all kinds of contradictory reports, but that, as Thomson puts it, "there is a certain combination of space and time measurements on which everyone agrees, whatever their state of motion." (4)

As in the case of the scientific doubt concerning the existence of absolute time, so in the case of the scientific idea of the welding of space and time, more than one philosophical account of the situation is possible. However, if the Time which the most careful analysis discovers appears to be not a distinct order but only one aspect of a continuum which must be regarded as a whole if consistent results are to be obtained in physical

3. Ibid., p. 1034.
4. Ibid., p. 1037.
measurements, the spiritualist suggestion that the concept of Time is merely a product of mind is likely to arise.

c. The principal feature of the doctrine of organic evolution is, of course, the idea that various types of complex life forms have developed out of simple life forms in the course of the centuries.

As long as it was taken for granted that certain unchangeable life forms were brought into existence at the beginning of the world the matter of Time was scarcely a problem relative to organic forms. These forms simply could exist in Time or without Time and their existing or not existing had little to do with the pattern of succession. When the theory of organic evolution was first introduced it was assumed in keeping with the mechanical science of the day that mechanical forces working in a vast time stretch were adequate to explain the changes in organic forms. However, a better understanding of organic life forms and a more careful scrutiny of the difficulties involved has led to the conviction, at least on the part of many scientists, that mechanical forces and Time were not adequate to explain the evolution of the species. This has rendered scientifically plausible such a suggestion as that of Bergson that the underlying determinant of the species is something that is ultimately neither a set of eternal types nor a body of mechanical principles by which the whole process may be fitted into a symmetrical time pattern, but a more fundamental type of reality of which mechanical forces and Time are only external aspects.

2. The remarkable shift in the point of view of modern physical science and the emergence of the theory of organic evolution have not only contributed to the idea that Time is a product
of mind, they have strengthened the suggestion that Eternity is a pattern which mind fastens upon reality. This comes about in three ways.

a. One of the strongholds of those who believe in the reality of Eternity has always been the idea of a self sufficient space and matter. These entities were not thought of as the essence of Eternity or necessarily as eternal at all. Geometrical arrangements and atoms could at the same time be pointed to as illustrations of that which is essentially unaffected by Time. However, modern science contends that no location in space can remain stationary and that there is no unchanging matter. The absolutist and the idealist are thus deprived of their illustrations and obliged to admit that unchanging geometrical patterns and unchanging atoms are at least not discoverable in physical reality. The suspicion, accordingly, emerges that the order of Eternity itself as well as the illustrations in question are basically products of mind.

b. A second stronghold of those who hold that Eternity belongs to reality is the idea of law of nature. However, certain modern philosophers, supported by the relativist discovery that by measuring objects from different points of view discordant results are obtained, have come to the conclusion that the answers to all questions regarding the universe are dependent upon the point of view from which the questions are asked. The universe would appear as a vast weltering sea of elusive reality concerning which facts might be discovered only as the scientist, by the very form of his questions, projected himself in some degree
upon the universe. In such a type of thought the idea of an eternal law belonging to the universe itself would retain little meaning.

c. As long as the species of life forms were thought of as being made once for all, biological science had no quarrel with the idea of a real Eternity. Indeed, the very forms of the various species might be taken as illustrations of eternal ideas. However, the introduction of the theory of organic evolution has presented the species as transient phases in a constantly changing process. But if there is no changeless species in the physical world, the suggestion is that perhaps the whole of reality is in constant flux, that, as the pragmatist suggests, our ideas are not representatives of eternal realities, but practical ways, that may be constantly improved upon, of dealing with changing situations.

3. Having now illustrated at some length how modern science with its reinterpretation of the framework of the universe and its theory of organic evolution has tended to throw doubt upon the idea that Time and Eternity belong to reality and to suggest that both may be only convenient arrangements introduced into a complex order by mind, we may now note briefly how modern science tends to support spiritualism in what it has to say about the question as to what reality actually is.

Certainly modern science continues to think of reality as involving succession. However, equally clearly modern science softens the dogmatism of older science regarding the determinate nature of that succession. Modern physics tends to see space, Time, and matter as drawn into a single entity; it sees its in-
individual electrons moving according to no known law; it finds it impossible to fix velocity and place at the same time. Its quanta seem to ignore mechanical principles. Similarly, modern biology no longer casually assumes eternal principles and regular movements which can be harmoniously fitted into a homogenous time pattern but speaks of impulse, mutations, and vital urges. It moves away from the older mechanism of Darwinism and allows some room for freedom and spontaneity. In such ways does modern science contain at least in germ the suggestion that ultimate reality is of the order of free spirit.

C. Modern Expressions of the Older Theories

Since the four types of theory which we have considered represent not four views as to what empirical facts are, but reasonable ways of interpreting empirical facts, it is not surprising to find each of the three earlier types of theory persisting alongside spiritualism in our modern era. At the same time, since the spiritualist theory is based upon a new type of approach to metaphysical problems, it is not strange that the older theories are considerably modified in their more recent expressions.

(I) Modern Expressions of Absolutism

(A) Spinoza

By the time that the absolutist theory began to find expression among thinkers who could be called modern, interest in the world of sense perception and belief in its reality had become
too firmly established in modern thought to permit absolutism to recur in the thoroughgoing form which it took in Parmenides. Its great modern representative, Spinoza, was a man of the modern world. Moreover, he was a disciple of Descartes. Accordingly, despite the fact that his theory minimizes the element of succession, he retains a far more lively impression of its importance than does Parmenides.

Attempting to deduce everything from a unified self-sufficient and all inclusive substance, Spinoza finds thought and extension to be attributes or indispensable qualities of substance. He further finds intellect and will, and rest and motion to be modes or dependent modifications of the above attributes. In this scheme Time, which finds a sort of place under each of the attributes, is decidedly subordinated to Eternity, which is of the essence of ultimate reality.

When he considers the attribute of thought, Spinoza contrasts the manner of seeing things under the aspect of Time and that of seeing reality under the aspect of Eternity.(1) The former seems to be considered a sadly inferior way of seeing things, a way above which we ought to rise. The latter is the true way of seeing things.

When Spinoza considers the attribute of extension, Time, of course, enters the picture as a phase of motion and rest. But motion and rest are themselves in no sense self sufficient. They are merely forms which the eternal substance takes. They belong to the eternal substance as the properties of the triangle follow from the nature of the triangle, not as effect follows from cause.(2)

2. Ibid.
Moreover, however much individual things may change, the "face of the whole universe" does not change.

All this together seems fairly definitely to place Spinoza's thought among the absolutist theories. However, we must not fail to note that in accord with the age in which he lived, Spinoza could not bring himself, despite the implications of his first principles, to deny altogether the reality of change and Time. Indeed, he felt obliged to admit the contingency of particular facts and to acknowledge that they could not be logically deduct ed from substance. (1) However, unimportant this fact seemed to him, Spinoza was quite frank in allowing its truth. Thus his must remain an absolutism which has been significantly modified by its era, an absolutism in principle and intent but not always in detail.

(B) Bradley

The only other modern representative of absolutism and whom we need consider is F.H. Bradley. Bradley contended that the very fact that we are obliged to think about a thing indicated that the thing was not as it appeared (2), that every thought pointed beyond itself and was never complete, that thought could never complete its task since every relation pointed to another. (3) By a method similar to this Bradley reduced Time (4) to the status of appearance, while continuing to affirm the reality of Eternity.

However, in at least three important respects Bradley's theory tones down the absolutism of Parmenides. First, Bradley sets out not from the formal concept of "being", but from the vital concept of knowing, so that his concepts are never so isolated from

1. Ibid., p. 292.
2. Weber and Perry; Ibid., p. 545.
3. Ibid.
4. Ibid.
life and movement as those of Parmenides. Second, Bradley is unwilling to deny the fact of appearances to which he ascribes some place in the eternal Absolute. Finally, the Absolute of which Bradley speaks is not merely a static concept, but as the foregoing statement would indicate, a sort of a comprehensive existence which does not altogether exclude vitality, "an individual experience, in which all appearances are harmoniously resolved". (1)

Thus, for Bradley Time is appearance and only the Absolute real, but at the same time appearance is not altogether lost nor the Absolute unequivocally eternal.

(II) Modern Expressions of Idealism

Of the three older traditions regarding the Time problem which have come down from antiquity into modern times idealism has probably found the largest number of adherents. Not only have those writers whose suggestions have paved the way for the spiritualist theory continued to hold in the main to the idealist theory but even successors of Kant reverted to idealist theories and were in time followed by numbers of recent idealists. At the same time, it is equally clear that modern expressions of idealism, like modern expressions of absolutism, are by no means the same as their ancient counterparts. Modern idealism differs from both in point of departure and in quality of conclusion.

(A) Apart from spiritualistic suggestions which we have already mentioned, Descartes's theory was essentially idealist. He believed that God existed as eternal. (2) He was equally convinced that the universe had been set in a continuous motion (which would imply a real Time) by the Creator. (3) However, it is abundantly

1. Ibid., p. 546.
2. Thilly, Ibid., p. 278.
3. Ibid., p. 281.
clear that these conclusions were, unlike Plato's, founded not upon an attempt to grasp reality in terms of objective ideas, but rather upon a subjective fact. It is equally clear, in the light of Descartes's insistence upon the freedom of God, that however large a place Descartes gave to the order of Eternity and Time, he continued to hold alongside these ideas an idea that freedom was in some sense at the center of things.

(B) Leibnitz, like Descartes, was essentially an idealist in theory of Time, Eternity, and reality. His belief in the reality of Eternity is showed in several ways. He is quite convinced that there are certain truths, such as those of logic and geometry, which are eternal. These truths presume the existence of an eternal intellect. (1) Once again he held that this is the best possible world and that God is obliged to act in accord with His own laws. Finally, even the principles involved in the monads implied the reality of something eternal. (2)

Nevertheless, however much Leibnitz shares with Plato, his is not the somewhat static idealism of Plato. The ultimate principle is force. Existences are not Ideas but spiritual monads. Even the supreme Being is a spiritual Being, not an Idea. Thus, without sharing the subjectivist starting point of Descartes, Leibnitz's idealism is one which goes beyond Descartes in recognizing the reality of spirit. Eternity and Time have, to say the very least, lost some of their distinctiveness.

(C) John Locke's theory of Time and Eternity is an idealism that is far more strikingly modified by the subjectivist and mathematical approach to philosophy than that of Descartes and Leib-

1.Ibid., p. 373.
2.Ibid., p. 370.
nitz. On the whole, Locke continued to regard Eternity and Time as actual states in terms of which things exist. Thus Locke affirms that we have certain knowledge of God and that God is eternal. (1) There is underlying all of his thought the assumption that material and spiritual substances exist within a determined order which can in this case scarcely mean anything but a temporal order. (2) Attention has, however, already been called to the fact that Time was formally spoken of by him as no more than a mode of the idea of duration and that he called attention to the relativity of temporal spans. His theory may indeed be spoken of as an idealism that was ever on the verge of becoming a spiritualism.

(D) The idealism of Berkeley is still less pronounced than that of Locke. Berkeley seemed to hold that ideas, although dependent upon mind, were objects of knowledge to mind rather than mere processes of mind. This would mean that Time which was an aspect of the series of ideas still belonged in some degree to the objective realm. With the idealist, Berkeley could still say that Time was a condition of reality. However, in that the reality of which Time was a condition was dependent upon mind, it is easy to see how near to spiritualism Berkeley's idealism was at this point.

In its concept of Eternity Berkeley's idealism is likewise, although less strikingly, a modified idealism. Berkeley held that the Creator and Sustainer of all souls and ideas was God. In that the ideas were unchanging in the thought of God and presented themselves to us as entities, the ultimate existence of

1. Ibid., p. 322.
2. Ibid., pp. 318, 325.
which was not dependent upon us, the idealist concept of the reality of Eternity remains. But in that even so, the ideas were dependent upon a spiritual God, there was present a tendency to make Eternity a state of secondary rather than of primary existence. Thus, even Berkeley's idea of the reality of Eternity is colored by spiritualism.

(E) Before passing on to the idealistic successors of Kant, we may pause to note that in David Hume the remaining idealistic tendencies of Berkeley have dissipated themselves in a skepticism which denies with equal emphasis the reality of both Time and Eternity without putting in their place a non temporal pattern. Time was regarded as a hybrid idea composed of a succession of distinct ideas but without reality or even corresponding impression, and Eternity was thought to be quite unknowable by intellect.

(F) The successors of Kant took as their point of departure the structure of the knowing process, quite as much as did the English empiricists. Moreover, although their theories were speculative systems rather than modest inquiries, their conclusions regarding Time and Eternity, like those of the English empiricists, represent modified idealism. We need deal, in this connection, only with the philosophy of Hegel.

Beginning as did Kant with the analysis of mind, Hegel refused to believe that the categories of thought were simply forms of thought, but boldly affirmed that, as forms of thought, they were also forms of reality. (1) This affirmation in itself excluded the possibility of Hegel's pursuing Kant's course of regarding Eternity and Time as mere subjective products of thought, but did not prevent the expression of affinities of another sort. 1. Weber and Perry, Ibid., p. 407.
with the spiritualistic trend.

1. Hegel believed in a real Time. The categories were developed through a process that involves succession. (1) Indeed, even the ethical concepts emerged in consciousness and life out of an evolutionary process. (2) The Absolute was consciously recognized only at the end of a process which seems to be temporal as well as eternal. Thus, there seems to be no mistaking the fact that Hegel was convinced of the reality of Time and that he was quite as confident as Plato.

2. Hegel believed in the reality of Eternity. In discussing Hegel's idea of the process of evolution Thilly writes: "The Absolute is eternally that into which it develops......The categories are eternally potential in it ....... They have never evolved". (3) All of reality is potentially there from the start. Mind and the universe are ever attempting to actualize what is potentially eternally there. Thus Eternity is more than simply a way of thinking of things. Just as in Plato, it is a state in which something exists.

3. Despite the fact that there is rather definitely in Hegel a belief in the reality of Time and Eternity, Hegel's thought represents a very considerable modification of Platonism in the direction of spiritualism. To begin with, the Time which made its appearance in Hegel was apparently not the completely regular Time of which Plato spoke. It was rather the Time of accumulating and suddenly advancing thought, of spontaneous biological processes, of historical upheavals. It was neither the Time of mechanism,

1. Ibid., p. 470.
2. Thilly, Ibid., pp. 470, 475.
3. Ibid., p. 470.
nor of the perfectly harmonious ordering of tranquil ideas. Its lack of regularity was expressed in Hegel's well known idea of thesis, antithesis, and synthesis. It was, accordingly, whether expressly or not, at least by implication, a time not unlike the durée of Bergson. One wonders whether it can properly be called time at all.

In like manner, the Eternity of which Hegel spoke was by no means the serene unperturbed order of Ideas of which Plato spoke. Eternity is rather the condition of that which is at the outset only vague and potential, becoming definite and real only at the end of a process.

Finally, both the Eternity and the Time of Hegel's thought have subjective as well as objective aspects. In Hegel the insistence upon the basic identity of thought and being, of subject and object, is such that whatever may be the nature of Time and Eternity, they are tinged with subjectivity. This, of course, does not mean that Time and Eternity do not belong to reality, for, in Hegel, the only kind of reality that exists is in part, but only in part, subjective. It does mean that Hegel is by no means ready to think of Time and Eternity as states of such an unequivocally objective reality as Plato had in mind.

Thus, while continuing to think of distinct states of Time and Eternity as belonging to a real world, Hegel so modifies his ideas of those states as to move strongly in the direction of an idea of a single state which is the underlying pattern of existence; and so introduces subjectivity into his whole system as to tone down any unequivocal affirmation of the objectivity of
Time and Eternity.

(G) Leaving aside any attempt to deal with the expressions of the idealist tradition which followed Hegel, we pass immediately to a consideration of an expression of the theory which we take to be fairly representative of recent idealism.

1. Like Plato, Royce contended that both Eternity and Time were real. Thus Royce held that God's life "consciously surveys... the whole temporal process ... as one life." (1), and with equal emphasis that "Time is known to us both perceptually and, as the psychologists would say, conceptually." (2)

2. In Royce, as in Plato, Eternity was thought to consist primarily in Idea. A large part of the first volume of Royce's The World and the Individual was devoted to an endeavor to show that knowledge was possible only if Being was of an ideal character. Royce was unwilling to say with the spiritualists that essential Being was fundamentally undefinable spirit. Eternity was for him definable Idea.

3. Like all his modern idealist predecessors Royce's theory modifies considerably the Platonic type of idealism relative to our problem. To begin with, he regards Time as involving the possibility of psychological spans of various lengths, speaking, for example, of the span of a man and of the span of Niagara Falls. This in itself represents a softening down of the objective uniformity which Plato ascribed to Time. Further, the Ideas to which Royce ascribed Eternity had far more of a dynamic character than the Ideas of Plato. Thus Royce insisted upon the purpose involved in ideas, declaring: "Whatever else our ideas are.... it is certain that they are ideas not because they are masses or

2. Ibid., p. 113.
series of images, but because they embody conscious purpose. Every idea is as much a volitional process as it is an intellectual process."

4. The chief contribution of Royce to the understanding of the problem of Time and Eternity was, however, not his reaffirmation of the idealistic principle nor his modification of the idealist theory is in the direction of spiritualism. The chief contribution of Royce's thought relative to our problem was his conscious effort to show how the ideas of Time and Eternity, without losing their distinctness, can be harmonious aspects of the same reality.

Royce argued not only that Eternity and infinite Time can exist together without contradiction, but that the two are essential to one another. His argument rests essentially upon two principles: a. the dependence of the parts of Time upon the Whole; b. the necessity of Time to the perfection of Eternity.

a. Royce contended that the parts of Time are so dependent one upon another that Time is inconceivable apart from an Eternity in which all the parts are viewed at one time. Thus, for example, he declared: "You cannot conceive a cubic foot of space destroyed without abstracting from all space; nor can you suppose this hour to vanish wholly from the time stream without abolishing all time." (1) Royce undertook to show how every present was dependent on a rich past and assumed a future which was already potentially present in such a way that the whole had a sort of present being. His favorite analogy was that of a symphony. "The melody does not come into existence contemporaneously."

eously with its own last note ..... the melody is the whole, whereof the notes are but abstracted fragments...."(1) Royce held that the brief moments of our consciousness draw into simultaneity events which by a more rapidly functioning type of consciousness might be regarded as successive, that even the successive present moments of our consciousness might be viewed as a simultaneity by a more slowly working type of consciousness, and that it is accordingly possible that all events in Time might be drawn into a single simultaneity by the Infinite Consciousness.(2)

b. Royce was equally persuaded that the nature of the whole or eternal order was such that it attained its perfection only in the successive order. A spoken sentence, he contended, attained its perfection only as its single words were sounded, although its wholeness did not have to wait for the last sound. Royce believed that the infinite Being, as well as finite beings, apprehended the temporal order and was made perfect by it. Thus he wrote: "God is thus a Person, because, for our view, He is self-conscious, and because the Self of which He is conscious is a Self Whose eternal perfection is attained through the totality of these ethically significant temporal strivings, those processes of evolution, those linked activities of finite Selves." (3)

Thus, for Royce Time and Eternity are harmonious aspects which together form the pattern of existing reality. Each is real in its own way. Eternity is the totality which is basically ideal, Time is the working out in the discrete and material, but neither is complete without the other. The two together are of the very essence of reality.

1. Ibid., Vol. 2, p. 419.
2. Ibid., pp. 111-151.
3. Ibid., p. 419.
(III) Recent Expressions of Materialism

Like each of the other ancient theories of the relation between Eternity and Time, materialism has found its representatives in the modern world. Moreover, like each of the other theories it has under the influence of the new approach of modern philosophy undergone significant changes. These changes are of different types, as we shall see.

(A) There is a sense in which all naturalistic philosophy is materialistic in its treatment of the problem of Time and Eternity. Nature is the entity with which it is concerned and certainly the most conspicuous aspect of nature is the constant process of change which it seems to present to the apparent exclusion of eternal principles of any great significance. This materialist leaning is illustrated in the philosophy of Herbert Spencer. It is indeed true that Spencer believed in and attempted to defend the idea of the Unknowable (1) which presumably would imply at least the possibility of an eternal existence. However, Spencer's chief concern was with a nature which conformed to a law of ceaseless change.

(B) Adopting as explanatory principles the ideas of "the constancy of matter and force (2) and the universal law of evolution", Haeckel, in effect, not only reduced the types of eternal principles to one but made even this one type quite dependent for its significance upon a process. That is to say, in Haeckel the material march of things is what counts. Neither vital patterns nor eternal principles are of any importance in the order of reality.

2. Ibid., p. 488.
(c) We have shown how the modern scientific ideas concerning Time have aided the spiritualists in their contention that Time is a product of Spirit. Modern science has declared that it sees no evidence for objective Time and that space and Time must be welded into a single continuum. The modern spiritualist has taken these ideas to be evidence that Time is only a sort of a fiction which spirit creates for its own purposes. However, as we have indicated, the findings of modern science are capable of other interpretations.

Bertrand Russell wholeheartedly adopted the ideas of modern science regarding the want of evidence for objective Time and the value of the concept of space-time. He writes: "We can no longer speak of a body at a given time, but must speak simply of an event," or again, "We have to make up our minds to the fact that, within certain limits, there is no definite time-order between events which happen in different places." (1) However, instead of interpreting this to mean that measurable Time is a fiction of minds which are in themselves the underlying realities, Russell interprets it to mean simply that the path of events is not the same from all points of view, never that it is non-temporal. Willing to concede with the spiritualists that reality cannot be pressed into a completely uniform time mold, Russell is quite unwilling to concede that this introduces any element of freedom. Indeed, he is of the opinion that events, despite their lack of uniformity, follow a rather definitely fixed pattern which he designates as the "principle of least action" (2) Time enters a single continuum with space and in so doing, instead of


2. Ibid., p. 299.
disappearing becomes more than ever an integral part of reality. The concept of Time is modified, not destroyed. Thus does Russell refuse to yield to the spiritualist.

However, Russell is equally persistent in his opposition to absolutism and idealism. Recent discoveries, he feels, must not be made to say that the universe involves freedom, but still less must they be interpreted to mean that the universe involves significant eternal principles. Russell concedes to the idealist and the absolutist that by painstaking investigation it is possible to discover some things about the way in which nature works, but he declines to admit that principles so discovered are of more than merely descriptive values.

D. Samuel Alexander does not adopt the usual modern four dimensional concept of space and Time but holds that Time has true dimensions analogous to those of space. Making space and Time the building stones of his universe, he tries to trace their development throughout all the levels of existence, showing how life, personality, and even divinity emerge out of them. Probably more significance is attached to life and mind than in the system of Russell, but the system seems to go even beyond Russell in a positive affirmation that space and Time are the stuff out of which the universe is built.

Summary

We are now in a position to summarize the history of discussion of the problem of the relation of Time and Eternity to reality.

It was only after civilization had progressed to a considerable degree that the concept of Time and Eternity came to be separated from the surging complexity of the impressions with which reality confronted man. When at last these concepts were distinguished from reality and
from one another, it was naturally assumed that they stood for actual patterns of reality. Thus for many centuries the question was not so much a question as to whether and to what extent reality corresponded with either concept but a question as to which of the concepts reality corresponded with. Three views, namely, that Eternity belongs to reality and Time is an illusion (absolutism), that both Eternity and Time belong to reality (idealism), and that Time is real and Eternity is unimportant (materialism) came early to expression and contended for the field for many centuries. However, from an early date many writers were inclined to present reality in less rigid patterns than those of completely uniform succession and sheer timelessness.

There began with Descartes a new approach to metaphysical problems which involved a new emphasis upon mathematics and a new subjectivist outlook. This new approach led at first to varied expressions of suspicion that the concepts of Time and Eternity might belong to mind more than to reality which seemed to be akin to both but different from both. Then these suspicions were embodied in a distinct theory which made Time and Eternity mere forms of thought and regarded reality as having a pattern of spontaneity that, although not altogether unlike the concepts in question, could never be described in terms of them. From then on, the question as to whether there is anything in reality corresponding to Time and Eternity came to the fore. The spiritualists adopted the extreme position indicated above, while other writers undertook to blend the new approach with the older theories, continuing to hold that either Time or Eternity or both could still have some place in reality even when the importance of mind and of mathematics was fully recognized.
It may appear that there is little hope of getting beyond a group of irreducibly contradictory theories as to the relation of Time and Eternity to reality. However, although such an outline as we have presented tends to emphasize differences rather than likeness, a certain progress is noticeable even here. New problems have displaced the old, and some things are in later times quite taken for granted that in earlier times presented serious difficulties. A new extreme theory has emerged and older theories have been modified in the direction of the new theory. All this cannot but give some hope that the riddle will be in some measure untangled.

The subject is still too inadequately explored and perhaps at best too inherently fraught with difficulties to make possible a universally acceptable statement as to the nature of the facts. However, we believe that we can gather out of the diversity of theories some conclusions that may be held with assurance. We shall now briefly examine each of the four leading theories, attempting to point out both the obvious weaknesses and the evident contributions of each and such other faults and virtues in each as seem to us to be worthy of note. We acknowledge that to some our judgments will seem arbitrary, but we trust that we shall have at least some progress in the attempt to find order in the seeming chaos of the theories concerning the important problem of the relation of Time and Eternity to reality.

I. Absolutism

A. Value

The abiding contribution of the absolutists is their affirmation of the reality of Eternity. For centuries men had thought of all reality in common terms which involved mortality and perishing. In some religions even the gods grew old.
Vague surmises of an existence of another order than the temporal had presented themselves. But as yet there was no clear idea.

Then came Parmenides, perceiving that with existence as such Time had nothing to do. It matters little that he pushed his conclusions too far and supposed that this was all that there was to the matter. Here was one of the most significant discoveries of thought, that there is reality to which Time does not apply, that in the midst of a changing order is - if one will only look for it - changelessness.

We affirm that definable ideas, and principles of reason or relationships of ideas, are in no way affected by the Time process. To be sure, the objection immediately arises that ideas do not arise until there are minds and that neither ideas, nor relations, have any meaning apart from minds in the Time process. However, we answer with the Platonists that, regardless of what may be said of ideas as mental acts, ideas as ideal possibilities are in no sense dependent upon their emergence in mind or, indeed, upon the existence of minds - it is only as a state of ideal possibility or relation that we are at present affirming the fact of Eternity. That two and two would make four is a fact that is not affected by Time, Regardless of whether or not there are minds to apprehend, ideally two and two imply four. That Eternity is a state that describes at least this type of reality is a fact that remains unaffected by any discovery of irregularity in physical processes or spontaneity in life processes. Ideas, in so far as they are ideas, are eternal.

The objection may be raised at this point that an Eternity that
applies only to that which is mere ideal possibility cannot be

genuinely said to apply to reality. However, as modern thought

seems to be coming increasingly to recognize, even ideal possibil-

ity is reality of a sort. To be sure, it is not the same as in-

dividual concrete existence. Indeed the Eternity which applies

only to ideal existence can be said only in a qualified sense to

belong to reality, but to reality it still belongs. Moreover, the

kind of reality represented by ideal possibility is not without

significance. Such reality is highly important both from episi-

temological and from practical standpoints. From the epistemo-

logical standpoint the fact of eternally existing ideal possi-

bility of ideas, is indispensable to the escape from subjecti-

vism. If my ideas and thought relations are not in some measure
timeless ideal possibilities, then my picture of reality is

nothing but a transient vision of a moving scene from a passing

perspective, so that it is of value only to me and can neither

be corrected by nor presented to other persons. Whether or not

we are ready to go with modern realism all the way in ascribing

full objective reality to relations, we certainly must acknow-

ledge that the modern realists have done philosophy a valuable

service in showing the necessity of according some kind of object-

ivity to relations if subjectivity is to be escaped.

From the practical point of view the whole endeavor of

thought is based on the assumption, recognized or unrecognized,

that concepts and thought relations remain unaffected by the time

process. Mankind never would have had the courage to develop a

system of mathematics or of logic, save for the faith that con-
cepts are timeless. The acceptance of the fact of concepts as eternal is a basic element in what Lotze (1) called "faith in reason," without which thought would come to a standstill.

Thus, however unimportant eternal ideas (ideal possibilities) may seem from an ontological point of view, they seem to be quite indispensable from the epistemological and pragmatic points of view.

Our contention thus far is that the absolutists are right in holding that Eternity or timelessness is a state that characterizes at least ideas and thought relations as ideal possibilities and that these ideal possibilities are not without importance. We are now ready to advance a further affirmation, namely, that the reality of the eternal ideas is something more than mere ideal possibility, that it stands for some kind of actuality in the mind of God. Of course it is beyond the scope of this paper to discuss at length the problem of the existence. However, some considerations may now be noted that are sufficient for our present purposes.

We have indicated that epistemology and the practical demand of thought for a logical foundation required the existence of thought relations as ideal possibilities. The fact is that these considerations are not satisfied with mere ideal possibility; they require some kind of actual existence for ideas and relations. Thought is never satisfied to act as if there were objectively real ideas and relations. It proceeds upon the basis that its judgments and ideas stand for something real which can be verified by comparison with the experiences of other thinkers. It is not 1. Weber and Perry: Ibid., p. 520.
enough to say that ideas have only the reality of ideal possibility; they must stand for something the reality of which is at least comparable with observable fact. That is why some philosophers beginning with Plato have insisted upon the actual independent reality of ideas.

However, the majority has never been quite able to accept the thought of ideas existing quite apart from minds. This situation seems to be best met by the Berkelian thought that the ideas exist in God or that God is the ground of the ideas. Altogether apart from other reasons for affirming the belief in a Supreme Being, the thought of a God before Whom all possible ideas and relations remain as eternal existences seems to be the best solution of the epistemological problem before us. If the eternal ideas are constantly thought by God, then they take on an actuality that makes them no less real than observed phenomena, yet without requiring the difficult assumption that they are actualities which depend upon nothing. Human thought stands for something which is eternally actual, yet is not bound to the hypothesis of independent objective ideas.

Beyond this the thought of the eternal ideas as belonging to the mind of God satisfies at least in part the religious insistence upon associating the thought of Eternity with the thought of God, an insistence which despite the difficulty (to be noted later) of ascribing Eternity to a personal God, is not to be ignored in any adequate view of reality.

If the foregoing be a true account of things, Eternity is a state applying to ideas and relations as existing in the mind of
God and absolutism has done a valuable service to thought in bringing to light a concept representing a fact which is vital to all thought processes. In saying this we must note that we do not by any means regard the ascription of eternal ideas to God as being as complete an account of the life of God as Berkeley did. We shall presently see that the thought in question represents only one aspect of the life of God and that perhaps that aspect is not the most important. However, this does not nullify the value of the recognition of such reality as that of which we have spoken.

B. Errors

(I) From the negative side the mistake of absolutism is that of the denial that temporal processes belong to reality. The motive for this denial seems to have been a feeling that that which changes and moves is less perfect than that which is changeless, an idea that has not been confined to absolutists or even to Greek thinkers. (1) There seems, however, to be no justifiable ground for the claim that change is necessarily a mark of inferiority. For the modern man the motive of the Eleatics and the Medieval mystics seems to lose some of its point. Apart from this we need only to note that the human mind grows up in a world of change, that many of its most obvious impressions are those of change, so that if its impression of change be denied, there would seem to be little ground for affirming that its other impressions have any validity.

Beyond the obvious mistake of denying change, we call attention to certain correlated mistakes on the positive side. Corresponding to the absolutist's denial of the world as we see it, there is in his philosophy the contention that all reality is eternal. But this contention does not simply mean that he denies the reality of all that others affirm to be temporal; it means that he attributes Eternity to much that others think of as temporal. This attributing of Eternity to large areas of existence has among the absolutists at least two roots which we must now consider.

First, on the part of the Eleatics, the application of the idea of Eternity to existence as such, i.e., to the essence of much that would ordinarily be thought of as temporal, seems to have been based on a peculiarity of the verb to be. Now the verb to be or its participle being, onta, implies existence altogether irrespective of state, stage of development, or any other factor or condition. The Eleatics seem to have taken the indifference to conditions of the word being to mean that that for which the word stood was independent of Time and change. They were fond of contrasting the word being with the word becoming as though the two were opposites; and naturally if the two were opposites, the quality of change (becoming) would be excluded from all that is (being). But as a matter of fact, the two are not opposites at all. The verb to be implies indifference to becoming, not opposition to it. Altogether regardless of whether the idea of becoming from nothing is possible, there is certainly nothing in the nature of being to pre-
clude the possibility of a becoming within being. A sprouting apple seed certainly is, irrespective of what it is - whether it be called a seed or a tree. Indeed about the most obvious fact about most of the things that are is that they change. Neither in observation nor in logic does the fact of their being one thing preclude the possibility of their being in process of becoming some other thing. Aristotle is quite right in insisting that what is the matter of one thing can be the form of another.

Accordingly, the assumption that being necessarily involves timelessness is quite without foundation. There is no warrant in the obvious fact that things are for saying that beneath the shadow of their illusions they are really changeless.

The second foundation of the attempt to give a very wide scope to the word Eternity is the mystical experience in which Time seems to cease, as the believer feels that he becomes one with God. Many of the mystics, feeling that their mystical experiences represented a contact with ultimate reality, in the light of which all of their other experiences were pale and shadowy, have felt that the changeless reality with which they have come in contact is the underlying essence of all reality. However, several considerations must be kept in mind in this connection. In the first place, it scarcely seems reasonable to set aside the overwhelming preponderance of human experience on the basis of the testimony of a comparatively small company of unusual individuals. In the second place, in the more cultured type of religious circles today it will probably be fairly generally agreed that conscious meditation and noble life
represent a more important type of contact with ultimate Reality than mystical experience, and unquestionably such experiences involve temporality. In the third place, the mystical experience, representing an escape from consciousness, is at best not so much a source of information about the Deity as an intensifying of inner life. The testimony of mystics themselves, while indicating a genuine deepening of sensitiveness to truth, contains little evidence that new truth has been imparted through the experience itself. If the experience is exceptional and inadequate, and if it, moreover, fails to offer positive conscious ideas as to the nature of reality, it would scarcely seem legitimate solely upon the basis of the form and feeling of the experience, to extend the concept of Eternity to include the underlying essence of all existence. Accordingly, without denying the reality and significance of mystical experience we must assert that it offers no adequate basis for the attempt to see in Eternity the ultimate form of all reality.

Beyond the fact that there is no convincing evidence either from the analysis of the concept of being or from mysticism to the effect that the underlying essence of all reality is eternal, we call attention to a positive ground for holding that conscious existence, whether divine or human, cannot be completely or even mainly eternal. Edwyn Bevan in his Symbolism and Belief (1) has set forth the thought that since Eternity means complete timelessness or the elimination of succession, and since consciousness implies succession, it is not possible to say that a God Who is personal or conscious is eternal and nothing more. This type of argument seems to us to be conclusive. We would accordingly insist

that while divine consciousness and human consciousness may not be, and probably are not, merely temporal in the ordinary sense (i.e., bounded by and lived in fixed and regular order) and that while there are some aspects of each which are indeed timeless, neither may appropriately be described as only eternal in essence.

Of course the absolutist will reply that he is by no means concerned to maintain the reality of consciousness. Yet, a theory which denies the fact of consciousness cuts the ground from under itself. All human systems depend upon consciousness. Nor has that concept ever been shown to stand for an inferior type of reality. The fact still remains that it stands not only for that with which we meet all else but for the highest of all that which has been met by us. Consciousness is too meaningful to be reduced to a secondary level. To say that eternal reality is the underlying essence of consciousness is to nullify thought and to destroy more of the richness of life than there is any warrant for.

II. Materialism

While the theory which stands as the opposite of absolutism involves a onesidedness that must certainly be pointed out, it likewise involves a historical bequest to thought upon our problem which should not be overlooked.

A. Contribution:

As the outstanding contribution of absolutism is its affirmation that Eternity belongs to reality, that of materialism is its contention that Time belongs to reality. At first thought this contention of materialism seems to be so obvious as to require no vindication. Was it not already, one may ask, included
in the crude speculations of the Ionian physicists long before materialism was a distinct philosophy? But that the reality of Time is not so readily to be taken for granted is quite evident in the very fact that the absolutists have so long and earnestly opposed it. Moreover, however, much the reality of Time may have been implied in the indefinite theories of the Ionians, it undoubtedly needed a definite affirmation after the Eleatics had undertaken, after distinguishing Eternity and Time, to deny the latter. The truth is that, since today not only the old absolutism but the newer spiritualism is tending to cast doubts upon the concept of Time, the connection between Time and reality must certainly be carefully considered.

In the first place, one of the most obvious facts about the observed world which is constantly thrusting itself in upon us is the fact of change. The clouds constantly change their forms. The water of the river is continually replaced. The stars seem to move across the face of the heavens. The seasons follow one another. Our man made structures decay. Men themselves are young and then become old and die. Even the mountains change their forms and the streams their courses. Such an array of changing events can never suffer us to forget the reality of successiveness.

In the second place, there is order and regularity in the changes of the universe by virtue of which they may be at least partially formulated. When the fact of the spontaneity of life, the freedom of will, and even the irregularity of movements of electrons are fully admitted, there remains a certain statisti-
cal regularity in the course of events. Time, in this sense, has been a foundation of science from the beginning. Not only so, but the conception of one regular Time is such that the human mind cannot shake it off. It belongs to mind. There is no inherent reason why it should not be said to be at least one aspect of reality.

Some types of events can be fitted with great precision into a regular time order, others only with an approximation. The time order remains and all events have some relation to it. The impossibility of discovering an absolute Time in the physical world illustrates the fact that the time picture does not tell the whole story, but it does not disprove the fact of Time. It is one thing to say that no absolute Time is discoverable; it is quite another to say that no absolute Time exists. The discoveries of modern relativists seem to establish the first point; but they do not, as far as we can see, even touch upon the second.

Even the attempt to relegate the whole of observed nature to the realm of the subjective has been unable to obliterate the fact of Time. To begin with, it may be quite fully admitted that Time belongs to the subjective without denying that Time has a place in reality. Kant regarded Time as a form of experience, but he did not in so doing make Time unreal or even unimportant. As a writer to whom we have recently referred points out (1), even if we denied "that there was any temporal process outside conscious minds ...... it would be an absolute truth that the experiencing individual did have that series of sensations and feelings in temporal order." Even the subjective is a part of reality. In this

1. Edwyn Bevan: Symbolism and Belief, p. 103.
sense even a subjective Time belongs to reality.

However, as what has been said above will indicate, our contention is that the reality to which Time belongs is more than that of subjective mind. That in which the human mind sees Time is not simply itself but an external world. If mind is to be trusted at all, it would seem reasonable to admit that the Time in terms of which it sees reality is at least one aspect of external reality itself. That, however impossible it may be to fit all reality completely into the pattern, the pattern certainly definitely belongs to some types of reality and is at least loosely connected with the rest of it.

Time is too definitely referred to something other than mind and too essential to man's adjustments to nature to be hastily relegated to the realm of the subjective. Certainly it would be a mistake to try to deny it altogether. The materialists have made a real contribution in insisting upon the reality of Time.

B. Defects

(I) The most obvious weakness of the materialist theory of the relation of Time and Eternity to reality is its failure to ascribe any significant place in reality to Eternity. To be sure, the materialist does not exclude implications of the idea of Eternity. The form of the downward motion, in the thought of Democritus, is presumably unaffected by Time. Russell's "principle of least action" is presumably quite unaltered by the passage of the centuries. However, the materialist fails to give any appreciable significance to the eternal principles which he
tacitly allows. The form of downward motion of Democritus's atoms is merely incidental and Russell's "principle of least action" is a way of reducing the significance of the permanent to a minimum.

We take it that enough has already been said concerning the place of Eternity in reality to indicate the chief grounds of our conviction that a failure to ascribe any significant place in reality to Eternity is a grave error. We believe that the error is the more dangerous because it is obscured by the materialists' casual bow in the direction of the recognition of Eternity. It is just in this sort of thing that many errors in philosophy consist, namely, in presenting statements which imply essential facts other than those stressed and yet give the latter no standing within the statements themselves. In this way the omission in the formal statements passes unnoticed because the facts in question are implied. But when the effort is made to build upon the formal statements the fact is left out of account. Thus, if Eternity be such an important fact as we have indicated, the materialist position is evidently gravely in error in attempting to present a picture of reality in which Time plays a significant role and Eternity is essentially ignored.

(II) However, the difficulty in materialism is not solely the negative matter of minimizing the fact of Eternity; there is, in like manner, a positive error in materialism's attempt to make regular time succession the sole feature of existence with respect to temporality. To put the matter slightly differently, it has extended the concept of regular ("clock") Time to cover not only that which is temporal and that which is eternal but also
that which being in Time has other aspects than uniform regularity. Thus, for example, materialism regards life as working itself out solely under the pattern of Time. However, investigation has at least suggested the possibility, as Mr. Bergson has so well pointed out, that life forms have not developed with that regularity that we should expect if life forms could be completely brought under the law of Time. It may well be that life forms have developed with an irregularity that requires a different sort of pattern. Again, as Mr. Bergson holds, mental life is not purely an unfolding in an unbroken order of Time. Volition seems within limits to have its own order. It refuses to be altogether fitted into a time pattern. Accordingly, however much Time may be an order by which all processes can be measured in certain aspects, it seems to be an unwarranted procedure to attempt to extend the scope of regular Time to such length that it becomes the sole standard of reality with respect to succession. We shall have more to say of this later.

III. Idealism

A. Contributions

(1). To the idealists belongs the credit for the discovery that both the concept of Eternity and the concept of Time describe conditions of reality. Such a discovery will doubtless to some appear too obvious to be of any importance. However, it is sometimes the obvious that needs to be asserted. Particularly was this true in a philosophical world in which materialism, on the one hand, had tended to ignore the fact of Eternity and absolutism, on the other hand, had tended to deny the fact of Time.
It takes on a still greater importance in a modern world in which spiritualism, taking advantage of the discoveries of recent science, attempts to get rid of both Time and Eternity. Plato and his successors have not spoken for naught in reminding us that however much either Time or Eternity is emphasized or however much some factor not describable in terms of either may be put forward, reality has and will continue to have aspects that can best be described through the concepts of Time and Eternity. The grounds for holding that they have been quite right in giving both a standing in reality we take to be for our purposes adequately indicated in what we have said above in connection with our discussion of absolutism and materialism concerning the place in reality of Eternity and the place in reality of Time, respectively.

(II) Closely associated with the idealist insistence upon the reality of both Time and Eternity is another idealist thought which represents a distinct contribution to thought regarding the relation of Time and Eternity to reality. Common sense is likely to keep before us the fact that both Time and Eternity belong to reality; but absolutism, on the one hand, and materialism, on the other, insist upon another difficulty than want of evidence for the reality of either concept. They contend that the concepts are contradictory, that if you accept the one you must reject the other, and vice versa. In face of this, idealism has rightly endeavored to show that basically Time and Eternity are quite harmonious concepts that enter into a unified pattern of reality, that neither concept is to be excluded from reality because it does not accord with the other.
We have noted how Plato undertook to show in the *Timaeus* that Time, of all that was created, most like Eternity. Time was never to be thought of as the antithesis of Eternity but as its best expression. In like manner, we have seen that Royce undertook to show how the part of the symphony, while being itself, belonged to the whole.

The truth of the idealist thought of the harmony of the concepts of Time and Eternity is recognized even by such an opponent of idealism as Bergson who, while denying the value of the concepts, feels that they belong together and even tends to obliterate the distinction between them. Bergson holds that "clock time", which is what is ordinarily meant by the word Time, is static and therefore not essentially different from space and mechanical principles. Bergson seems to feel that Time is nothing more than unchanging principles spread out. We need only add that while we believe Bergson to be mistaken in this extreme position, it certainly lends aid to the idealist thought that Time and Eternity are not mutually exclusive concepts.

The grounds upon which we support the idea of the essential harmony of Time and Eternity are quite simple. In the first place, we hold that each concept of the two really implies the other. Time implies Eternity and Time is an ordered continuum which either exists or measures existences (It makes no difference for our present purposes). But in the very fact of the order is implied something that is not affected by change, i.e., something eternal. But if an eternal order of Time is implied in the concept of Time, there is no inherent reason why other eternal possibilities
or ideas should be excluded by the fact of Time. Likewise, Eternity implies Time. Eternity means nothing else than timelessness. But being apart from Time certainly implies an idea of Time.

The objection may be raised at this point that this applies only to concepts, that whereas the concepts may be compatible, the realities are not. Indeed, but contradiction applies to concepts rather than to existences, so that when it is shown that two concepts are logically compatible the only way of showing that they are actually antithetical is to show that one or the other does not in fact exist. However, with reference to the problem before us, grounds have already been furnished to show that the actuality neither of Time nor of Eternity can be denied.

This leads us to a second ground, namely, that in the effort to describe the existing universe it is necessary to acknowledge the existence side by side of eternal principles and uniform succession. The explanation of no event approaches completeness until some account has been given, on the one hand, of the comparative extent of its duration and, on the other hand, of the enduring principles which were involved in it. Indeed, the effort of science through the centuries has been to discover how to reduce to formulae, which involve Time as one of the factors and eternal principles as another, the various facts of the universe. The two together make up a single pattern of reality neither side of which can be ignored by any attempted scientific explanation.

In the third place, the acknowledgement of an actual time order implies the existence of actual eternal principles. Immediately you allow that events follow a certain uniform pattern, you
must admit the existence of eternal principles through which the facts fit into the pattern. Without some such principles all order disappears from the time scheme, and Time without order is no longer Time.

Accordingly, we take it that the idealists have been quite right in contending that Time and Eternity are harmonious, supplementary aspects of a single pattern, so that neither could be denied a place in reality on account of the other.

B. Defect

The chief defect of idealism is its supposition that the Time-Eternity form is the pattern of all reality or that all reality can be pressed into the forms of Time and Eternity. That the Time-Eternity pattern may be applied to all forms of concrete existence in some way is plain enough; but this is very different from the supposition that that form adequately represents everything in all types of concrete existence that has to do with succession. Thus, for example, consciousness may be to some extent measured in terms of Time and Eternity. You may list its ideas. You may check its progress at various points, measure its objective results in any given period. But to suppose that this is to give an adequate account of the leaping, darting, circling variety of its life even during a brief interval is to suppose an absurdity. Even if from the outside consciousness could be reduced to a pattern, every attempt to state the essence of its inner existence in terms of any kind of a pattern, however complex, is doomed to failure.

What may be said of consciousness is, in general, true of life. Certainly, the Time-Eternity pattern may be applied to it, but that pattern does not by any means tell the story of its successive
leaps, reversions, and advancements. As a matter of fact science has, as we have already indicated, thrown doubt - to say the very least - upon the idea that even the physical movements of inorganic bodies can be adequately described in terms of a regular time. Modern science's quantum theory, principle of uncertainty, space-time, and the like, are expressions of the limitations of the accepted Time-Eternity pattern. Thus, we insist that that pattern, however real and convenient as a measure of some types of reality, is not in the same way the pattern of all reality.

IV. Spiritualism

A. Contributions

(I) Probably the most significant contribution of spiritualism is its testimony that reality has aspects which cannot be described either in terms of space or in terms of Time and Eternity. Thus we find Kant presenting the idea of an indefinite "thing in itself" as the nearest that intellect can come to description of ultimate reality. Again we find Fichte talking about an ego which, while it is sometimes called eternal, is evidently not intended to be eternal in the strict sense. When we come to Bergson we have a distinct word durée, as an attempt to express that which, he feels, falls outside the usual forms.

In discussing the defects of idealism we have already indicated how some types of reality, namely, consciousness and life, do not fall within the Time-Eternity pattern. We now pursue the problem of the scope of the Time-Eternity pattern somewhat further.

It is quite a commonplace that almost no events proceed with the unerring regularity of Time. Probably a hypothetical star
moving forever in one direction would be the only type of movement that would represent such regularity, for even circular movement is marked by recurring intervals for which Time allows, but to which it is indifferent. Actually we are reasonably sure that there is no such movement, and even if there were, irregularity would be introduced by the thought of the relation of the moving star to other stars. "But", the idealist replies, "this is precisely where Eternity comes in; we admit there is no motion altogether regular like Time, but there are certain eternal principles which when altogether known can enable us to show the exact relation of events to the time pattern and so to bring all under the Eternity-Time order". Very well, if such comprehensive principles be discoverable! The fact is that they have not yet been discovered and there seems to be far less prospect of their ever being discovered than there seemed to be a few years ago. Admittedly rigid principles can be fairly readily applied to certain types of events, but not only have psychology and biology refused to reduce themselves to mechanical terms but physics has rather generally abandoned rigidity and admitted some uncertainty in minute events. It is reasonable to hold that reality never will be entirely reduced to a mechanical time order. Certainly not even the fondest dreamer would claim that science has accomplished that end.

But if there seems little prospect of showing how all of the facts by eternal principles fit into the time order, the question may be asked: What point is there in continuing to assert that all reality falls under the order of Time and Eternity?
It would seem that until evidence is forthcoming of likelihood of our being able to reduce all to formulae of Time and Eternity, it is demanded of us that we continue to hold open the possibility that there is more to reality than can be encompassed in these forms. Indeed, in face of such aspects of reality as consciousness and life which remain so remote from any likelihood of being reduced to the forms of Time and Eternity, it would seem that the overwhelming probability is on the side of the presumption that reality is broader than these forms.

At this point, of course the question arises: "What is this that has to do with succession but is neither Time nor Eternity?" (Is it some other kind of order? If so, why can it not be completely coordinated with the Time-Eternity order?) The answer of the spiritualists is that it is freedom or spontaneity. That is to say, it is an inner principle of free self determination which, while not without guiding principles or general directions, can never be forced into any completely determined pattern. We deem this answer to be quite satisfactory, for not only does it seem to correspond to the experience that every conscious individual knows, but it seems to be the only type of definition possible. Any attempt to formulate a precise pattern of those aspects of reality which do not fall within the Time-Eternity pattern is only to fasten upon them forms which could ultimately be reduced to a Time and Eternity pattern and so to move in a circle. We can therefore scarcely go beyond saying that by that which cannot be placed under Time by eternal formulae we simply mean that which never can be completely formulated at all. The only pattern
of spontaneous reality that can be formulated is that of its past which modifies but does not determine its future.

(II) In what has been said up to now one important question has been left out of account. It has been admitted that a Time and Eternity pattern which involves ideas and unchanging principles and a uniform order of succession belongs to reality and at the same time that a pattern of spontaneity which is never fixed until its events are passed belongs to reality. The question emerges as to the relative standing in reality of these two. Are both upon an equal footing? Is one basic? If so, which?

Obviously this is a question that cannot be satisfactorily settled apart from a general ontological inquiry which is beyond the scope of this paper. All we can do for the present is to indicate the general nature of our position, and add some brief notes in defense and application of it. We venture, then, to assert that while the Time-Eternity pattern is, as we have repeatedly asserted, never to be excluded from the realm of objective reality, reality is basically of the nature of free spirit, and, accordingly, that the spiritualists are right not only in asserting that a spontaneity outside the Time and Eternity pattern exists but also in claiming that that spontaneous reality is of basic importance.

We believe upon grounds which are too complex to be detailed here that beyond all finite realities is an Infinite Spirit, that basically every event involves an element akin to will, that even events which appear quite mechanical have a sort of a volitional aspect. In defense of this position we shall be content with four
general remarks. First, belief in an infinite God finds support alike in the impress which nature is constantly making upon our minds and in special religious experience which cannot be disregarded in any philosophical inquiry. Second, if belief in God is to be taken seriously it would seem to imply that in some sense the divine life penetrates all reality. Third, in daily experience as it is actually lived, apart from thoughts about it, events are encountered as resisting forces not unlike wills. Fourth, the picture of atomic structure given us by recent science certainly does not contradict and seems in a measure to support the view presented here.

Without attempting further to enter into the involved subject of the ultimate structure of reality, we contend that if the above is a true picture of reality, unchanging principles and uniform succession, while they may still belong to reality, are incidental to a basic spontaneous life. We hold that ideas are aspects of reality and that the regular succession of events is likewise a part of reality but that the scope of the reality that exactly corresponds to them is limited, and that even that reality has underlying elements of which they are no adequate measure. The ideas and ideals of a man are real parts of his mental life, but if we want to see his mental life as it is we have to see it as a moving arena of stresses and strains, of emotional and intellectual patterns in which the ideas are only static sections, "snap-shots" or series of them. Even the "clock time" which he is perhaps noting is only a rough approximation, a pattern into which his ideas may be fitted. Essentially they come and go, to be sure, with some orderliness but never in any completely predictable way.
Neither ideas nor Time can stand alone. The objectivity which both present to us is dependent upon the Divine Mind. Intellectual concepts are, as we have suggested, thoughts of God. Moral ideals are His moral nature and commands, and the Time process is His orderly way. No one of these is self-subsistent. Each is dependent upon the Divine Mind. Yet none of them is the essence of the Divine Mind. There are aspects of God's nature that can best be defined conceptually as ideas, others as moral ideals, others as a Time order, but essentially God is beyond them all just as a man is beyond his ideas. God is essentially living Spirit and, although looking at His nature in various ways we find grounds for assertion of the reality of ideas, ideals, and Time, these are only static representations of a Reality. A yard stick applied to a tapestry will give us the measurements of the tapestry, but no one supposes that that is the essential fact about the tapestry. A formula regarding the speed of falling water, the volume of the water, etc., will measure Niagara, but no one supposes that that is an adequate presentation of Niagara.

(III) Of course the affirmation that there are important aspects of reality which are neither temporal nor eternal nor both demands—and spiritualism has felt called upon to give some kind of an explanation of the fact of Time. In general, it has tended to adopt the idea that Time is only a subjective product of intellect. Now, while this judgment seems to be mistaken, it has led to a recognition of this truth, which may be regarded as a contribution of spiritualism, that Eternity and Time, instead of being the sole patterns of reality relative to succession, are as-
pects of the patterns of reality selected by mind for practical purposes.

There are good reasons, already suggested in part, for refusing to relegate Time and Eternity to the realm of the subjective. Time and Eternity are too universally accepted, too widely applicable, too closely associated with the very foundations of knowledge for that. But these objections do not apply to the idea that mind selects out of a reality consisting of many possibilities certain aspects which make up a pattern of Time and Eternity. Indeed, if we have been right in saying that Time and Eternity are real and that spontaneity is also real, there seems to be no other way of accounting for Time and Eternity than by acknowledging that mind has for practical purposes chosen out of a broader reality those aspects that make up the Time-Eternity pattern.

While not many outside the spiritualist group will care to adopt the extreme subjectivist idea of Time and Eternity, the modified form of the idea which we find implied in the coexistence of spontaneity and a Time-Eternity pattern will doubtless have a wider appeal. Such a view will represent the thought of all those who believe that not all reality can be crowded into a Time-Eternity mold and who yet find it impossible to deny the existence of both. Indeed, not only is the idea that the Time-Eternity pattern is a selection of certain kindred aspects of reality the only possible reconciliation of the facts, it is one which is reasonably easily understood along lines suggested by Bergson and the pragmatists. It is not difficult to see why mind should
have been more inclined to select the Time-Eternity pattern as the plan of reality relative to succession than to select the element of spontaneity. Spontaneity means unpredictability. Mind, in seeking practical ends, would naturally concentrate on that which may be foreseen with a reasonable degree of accuracy, and so tend to disregard the spontaneous.

B. Defects

(I) The most obvious defect in spiritualism is its tendency to minimize the place of the ideas of Time and Eternity in reality. Thus in Creative Evolution Bergson suggests that the ideas of Time and Eternity have been developed by men of practical minds for practical purposes and that if you want to get at reality you have to get as far away from them as possible. Such concepts as spirit, life, and person probably get closer to the heart of reality than the concepts of Time, Eternity, logic, and the like. However, this is no adequate ground for thrusting the latter ideas out of the realm of reality altogether. If the human mind is to be trusted at all it must be admitted that our concepts of Time and Eternity stand for something real. We trust that what has already been said in connection with absolutism materialism, and idealism has set forth reasonably well positive grounds for this contention.

(II) A second and equally obvious error of spiritualism is its attempt to make Time and Eternity merely products of mind. As we have suggested, there is in spiritualism's idea a truth, which we have tried to indicate, of the selective activity of mind in the formation of the concept of Time and Eternity. But
selection and creation are two different things. Mind does not place something new in reality, rather it discovers and selects something that is already there. Again, we take it that the grounds for the position in question have been sufficiently touched upon in the foregoing pages.

Conclusion

Having now briefly sketched the history of the leading types of theory of the relation of Eternity and Time to reality, and what we consider to be the major contributions and defects of each, the broad outline of a theory which emerges from the study ought to be apparent. We conclude with a very brief sketch of such a theory which will be seen to be similar to, though noticeably different from, the theory of Bergson.

Reality, we take it, is vast, infinitely complex, and unfathomable as far as our minds are concerned. Our best ideas are only approximations of the truth about it. By means of them we apprehend now this phase, now that, of its many-sidedness, but always to discover that we have only a part of the truth. Out of this weltering sea of intellectually perplexing reality, mind intuitively selects certain aspects that make up a uniform succession in reality and chooses out certain principles which are actually unaffected by change. The elements in question are, by virtue of the fact that they are selections, not the whole of reality, but they belong to reality just the same.

Gradually definite concepts of Time and Eternity emerge, and as eternal principles are used to fit events into Time, a Time-
Eternity pattern emerges. This pattern, like its separate constituents actually belongs to certain selected aspects of reality. It has been applied by human thought to different levels of reality with varying degrees of success. With respect to some types of reality, e.g., ordinary physical events, it corresponds almost precisely with the essential facts. However, with respect to other types of reality, e.g., consciousness, it measures only the external form or boundaries of the things and tells us little of the thing itself.

Beyond that selected reality which constitutes Time and Eternity is a spontaneous volitional reality much of which can be measured only in a hopelessly inadequate way by the Time-Eternity pattern and which underlies even that in reality which conforms to that pattern. This underlying spontaneity is not without orderliness. Indeed it has aspects which can best be described as eternal principles and uniform Time succession - in this sense Eternity and Time remain real, - but it must be remembered that these aspects are but aspects, that they may be said to be only onesided glimpses of what is essentially far more comprehensive. An arrow that points the general direction belonging to the flow of a river and a law of gravitation that belongs to its fall tell something of the river, but the arrow and the law are only selected descriptive aspects. The river is much more. Time points a direction of the flow of reality and Eternity states some of its formulae but these are only selected determined elements; reality is vastly more.
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