ETERNITY

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THE concept of eternity makes a significant difference in the consideration of a variety of issues in the philosophy of religion, including, for instance, the apparent incompatibility of divine omniscience with human freedom, of divine immutability with the efficacy of petitionary prayer, and of divine omniscience with divine immutability; but, because it has been misunderstood or cursorily dismissed as incoherent, it has not received the attention it deserves from contemporary philosophers of religion. In this paper we expound the concept as it is presented by Boethius (whose definition of eternity was the *locus classicus* for medieval discussions of the concept), analyse implications of the concept, examine reasons for considering it incoherent, and sample the results of bringing it to bear on issues in the philosophy of religion.

Eternality—the condition of having eternity as one's mode of existence—is misunderstood most often in either of two ways. Sometimes it is confused with limitless duration in time—sempiternality—and sometimes it is construed simply as atemporality, eternity being understood in that case as roughly analogous to an isolated, static instance. The second misunderstanding of eternality is not so far off the mark as the first; but a consideration of the views of the philosophers who contributed most to the development of the concept shows that atemporality alone does not exhaust eternality as they conceived of it, and that the picture of eternity as a frozen instant is a radical distortion of the classic concept.

I. BOETHIUS'S DEFINITION

Boethius discusses eternity in two places: *The Consolation of Philosophy*, book 5, prose 6, and *De Trinitate*, chapter 4.ⁱⁱ The immediately relevant passages are these:

CP:

That God is eternal, then, is the common judgment of all who live by reason. Let us therefore consider what eternity is, for this makes plain to us both the divine nature and knowledge. Eternity, then, is the complete possession all at once of illimitable life. This becomes clearer by comparison with temporal things. For whatever lives in time proceeds as something present from the past into the future, and there is nothing placed in time that can embrace the whole extent of its life equally. Indeed, on the contrary, it does not yet grasp tomorrow but yesterday it has already lost; and even in the life of today you live no more fully than in a mobile, transitory moment. . . . Therefore, whatever includes and possesses the whole fullness of illimitable life at once and is such that nothing future is absent from it and nothing past has flowed away, this is rightly judged to be eternal, and of this it is necessary both that being in full possession of itself it be always present to itself and that it have the infinity of mobile time present [to it]. (CP, 422.5—424.31)

DT:

What is said of God, [namely, that] he is always, indeed signifies a unity, as if he had been in all the past, is in all the present—however that might be—[and] will be in all the future. That can be said, according to the philosophers, of the heaven and of the imperishable bodies; but it cannot be said of God in the same way. For he is always in that for him *always* has to do with present time. And there is this great difference between the present of our affairs, which is *now*, and that of the divine: our now makes time and sempiternity, as if it were, running along; but the divine now, remaining, and not moving, and standing still, makes eternity. If you add

'semper' to 'eternity', you get sempiternity, the perpetual running resulting from the flowing, tireless now. (DT. 20.64—22.77)ⁱⁱⁱ

The definition Boethius presents and explains in CP and elucidates in the earlier DT is not original with him, in nor does he argue for it in those passages. Similarly, we mean to do no more in this section of our paper than to present and explain a concept that has been important in Christian and pre-Christian theology and metaphysics. We will not argue here, for instance, that there is an eternal entity, or even that God must be eternal if he exists. It is a matter of fact that many ancient and medieval philosophers and theologians were committed to the doctrine of God's eternality in the form in which Boethius presents it, and our purpose in this section of the paper is simply to elucidate the doctrine they held.

Boethius's definition is this: Eternity is the complete possession all at once of illimitable life. vi

We want to call attention to four ingredients in this definition. It is clear, first of all, that anything that is eternal has life. In this sense of 'eternal', then, it will not do to say that a number, a truth, or the world is eternal, although one might want to say of the first two that they are atemporal and of the third that 'it is sempiternal — that it has beginningless, endless temporal existence.

The second and equally explicit element in the definition is illimitability: the life of an eternal being cannot be limited; it is impossible that there be a beginning or an end to it. The natural understanding of such a claim is that the existence in question is infinite duration, unlimited in either 'direction'. But there is another interpretation that must be considered in this context despite its apparent unnaturalness. Conceivably, the existence of an eternal entity is said to be illimitable in the way in which a point or an instant may be said to be illimitable: what cannot be extended cannot be limited in its extent. There are passages that can be read as

suggesting that this second interpretation is what Boethius intends. In CP eternal existence is expressly contrasted with temporal existence described as extending from the past through the present into the future, and what is eternal is described contrastingly as possessing its entire life at once. Boethius's insistence in DT that the eternal now is unlike the temporal now in being fixed and unchanging strengthens that hint with the suggestion that the eternal present is to be understood in terms of the present instant 'standing still'. Nevertheless, there are good reasons, in these passages themselves and in the history of the concept of eternity before and after Boethius, for rejecting this less natural interpretation. In the first place, some of the terminology Boethius uses would be inappropriate to eternity if eternity were to be conceived as illimitable in virtue of being unextended. He speaks in CP more than once of the fullness of eternal life. In DT, and in The Consolation of Philosophy immediately following our passage CP, he speaks of the eternal present or an eternal entity as remaining and enduring. viii And he claims in DT that it is correct to say of God that he is always, explaining the use of 'always' in reference to God in such a way that he can scarcely have had in mind a life illimitable in virtue of being essentially durationless. The more natural reading of 'illimitable', then, also provides the more natural reading of these texts. In the second place, the weight of tradition both before and after Boethius strongly favours interpreting illimitable life as involving infinite duration, beginningless as well as endless. Boethius throughout the Consolation, and especially in passage CP, is plainly working in the Platonic tradition, and both Plato and Plotinus understand eternal existence in that sense. ix Medieval philosophers after Boethius, who depend on him for their conception of eternity, also clearly understand 'illimitable' in this way. So, for both these sets of reasons, we understand this part of Boethius's definition to mean that the life of an eternal entity is characterized by beginningless, endless, infinite duration.

The concept of duration that emerges in the interpretation of 'illimitable life' is the third ingredient we mean to call attention to. Illimitable life entails duration of a special sort, as we

have just seen, but it would be reasonable to think that any mode of existence that could be called a life must involve duration, and so there may seem to be no point in explicitly listing duration as an ingredient in Boethius's concept of eternality. We call attention to it here, however, because of its importance as part of the background against which the fourth ingredient must be viewed. The fourth ingredient is presented in the only phrase of the definition still to be considered: 'The complete possession all at once'. As Boethius's explanation of the definition in CP makes clear, he conceives of an eternal entity as atemporal, and he thinks of its atemporality as conveyed by just that phrase in the definition. What he says shows that something like the following line of thought leads to his use of those words. A living temporal entity may be said to possess a life, but, since the events constituting the life of any temporal entity occur sequentially, some later than others, it cannot be said to possess all its life at once. And since everything in the life of a temporal entity that is not present is either past and so no longer in its possession or future and so not yet in its possession, it cannot be said to have the *complete* possession of its life. xi So whatever has the complete possession of all its life at once cannot be temporal. The life that is the mode of an eternal entity's existence is thus characterized not only by duration but also by atemporality.

With the possible exception of Parmenides, none of the ancients or medievals who accepted eternity as a real, atemporal mode of existence meant thereby to deny the reality of time or to suggest that all temporal experiences are illusory. In introducing the concept of eternity, such philosophers, and Boethius in particular, were proposing two separate modes of real existence. Eternity is a mode of existence that is, on Boethius's view, neither reducible to time nor incompatible with the reality of time.

In the next two sections of this paper, we will investigate the apparent incoherence of this concept of eternity. We will begin with a consideration of the meaning of atemporality in this connection, including an examination of the relationship between eternity and time; and we will go on to consider the apparent incoherence generated by combining atemporality with duration and with life.

II. THE ATEMPORALITY OF AN ETERNAL ENTITY:

PRESENTNESS AND SIMULTANEITY

Because an eternal entity is atemporal, there is no past or future, no earlier or later, within its life; that is, the events constituting its life cannot be ordered sequentially from the standpoint of eternity. But, in addition, no temporal entity or event can be earlier or later than or past or future with respect to the whole life of an eternal entity, because otherwise such an eternal life or entity would itself be part of a temporal series. Here it should be evident that, although the stipulation that an eternal entity completely possesses its life all at once entails that it is not part of any sequence, it does not rule out the attribution of presentness or simultaneity to the life and relationships of such an entity, nor should it. In so far as an entity is, or has, life, completely or otherwise, it is appropriate to say that it has present existence in some sense of 'present'; and unless its life consists in only one event or it is impossible to relate an event in its life to any temporal entity or event, we need to be able to consider an eternal entity or event as one of the relata in a simultaneity relationship. We will consider briefly the applicability of presentness to something eternal and then consider in some detail the applicability of simultaneity.

If anything exists eternally, it exists. But the existing of an eternal entity is a duration without succession, and, because eternity excludes succession, no eternal entity has existed or will exist; it *only* exists. It is in this sense that an eternal entity is said to have present existence. But since that present is not flanked by past and future, it is obviously not the temporal present.

And, furthermore, the eternal, pastless, futureless present is not instantaneous but extended, because eternity entails duration. The temporal present is a durationless instant, a present that cannot b; extended conceptually without falling apart entirely into past and future intervals. The eternal present, on the other hand, is by definition an infinitely extended, pastless, futureless duration.

Simultaneity is of course generally and unreflectively taken to mean existence or occurrence at one and the same time. But to attribute to an eternal entity or event simultaneity with anything we need a coherent characterization of simultaneity that does not make it altogether temporal. It is easy to provide a coherent characterization of a simultaneity relationship that is not temporal in case both the *relata* are eternal entities or events. Suppose we designate the ordinary understanding of temporal simultaneity *T simultaneity*:

(T) T-simultaneity = existence or occurrence at one and the same time.

Then we can easily enough construct a second species of simultaneity, a relationship obtaining between two eternal entities or events:

(E) E-simultaneity = existence or occurrence at one and the same eternal present.

What really interests us among species of simultaneity, however, and what we need for our present purposes, is not E-simultaneity so much as a simultaneity relationship between two *relata* of which one is eternal and the other temporal. We have to be able to characterize such a relationship coherently if we are to be able to claim that there is any connection between an eternal and a temporal entity or event. An eternal entity or event cannot be earlier or later than,

or past or future with respect to, any temporal entity or event. If there is to be any relationship between what is eternal and what is temporal, then, it must be some species of simultaneity.

Now in forming the species T-simultaneity and E-simultaneity, we have in effect been taking the genus of those species to be something like this:

(G) Simultaneity = existence or occurrence at once (i.e., together).

And we have formed those two species by giving specific content to the broad expression 'at once'. In each case, we have spelled out 'at once' as meaning at one and the same something time, in the case of T-simultaneity; eternal present, in the case of E simultaneity. In other words, the relata for T-simultaneity occur together at the same time, and the relata for Esimultaneity occur together at the same eternal present. What we want now is a species of simultaneity — call it ET-simultaneity (for eternal—temporal simultaneity)—that can obtain between what is eternal' and what is temporal. It is only natural to try to construct a definition for ET-simultaneity as we did for the two preceding species of simultaneity, by making the broad 'at once' in (G) more precise. Doing so requires starting with the phrase 'at one and the same _____ 'and filling in the blank appropriately. To fill in that blank appropriately, however, would be to specify a single mode of existence in which the two relata exist or occur together, as the relata for T-simultaneity coexist (or co-occur) in time and the relata for E-simultaneity coexist (or co-occur) in eternity.xii But, on the view we are explaining and defending, it is theoretically impossible to specify a single mode of existence for two relata of which one is eternal and the other temporal. To do so would be to reduce what is temporal to what is eternal (thus making time illusory), or what is eternal to what is temporal (thus making eternity illusory), or both what is temporal and what is eternal to some third mode of existence; and all

three of these alternatives are ruled out. The medieval adherents of the concept of eternity held that both time and eternity are real and that there is no mode of existence besides those two. xiii

Against this background, then, it is not conceptually possible to construct a definition for ET-simultaneity analogous to the definitions for the other two species of simultaneity, by spelling out 'at once' as 'at one and the same _____ 'and filling in the blank appropriately. What is temporal and what is eternal can coexist, on the view we are adopting and defending, but not within the same mode of existence; and there is no single mode of existence that can be referred to in filling in the blank in such a definition of ET-simultaneity.

The significance of this difficulty and its implications for a working definition of ET-simultaneity can be better appreciated by returning to the definition of T-simultaneity for a closer look. Philosophers of physics, explaining the special theory of relativity, have taught us to be cautious even about the notion of temporal simultaneity; in fact, the claim that temporal simultaneity is relative rather than absolute is fundamental to the special theory of relativity.

For all ordinary practical purposes, and also for our theoretical purposes in this paper, time can be thought of as absolute, along Newtonian lines. But, simply in order to set the stage for our characterization of ET-simultaneity, it will be helpful to look at a standard philosophical presentation' of temporal simultaneity along Einsteinian lines. Imagine a train traveling *very* fast, at six-tenths the speed of light. One observer (the 'ground observer') is stationed on the embankment beside the track; another observer (the 'train observer') is stationed on the train. Suppose that two lightning bolts strike the train, one at each end, and suppose that the ground observer sees those two lightning bolts simultaneously. The train observer also sees the two lightning bolts, but, since he is traveling toward the light ray emanating from the bolt that strikes the front of the train and away from the bolt that strikes the rear of the train, he will see the lightning bolt strike the front of the train before he sees the other strike the rear of the train. 'This, then, is the fundamental result: events occurring at different places which are

simultaneous in one frame of reference will not be simultaneous in another frame of reference which is moving with respect to the first. This is known as *the relativity of simultaneity*.' xv

We want to leave to one side the philosophical issues raised by this example and simply accept it for our present purposes as a standard example illustrating Einstein's notion of the relativity of temporal simultaneity. According to this example, the very same two lightning flashes are simultaneous (with respect to the reference frame of the ground observer) and not simultaneous (with respect to the reference frame of the train observer). If we interpret 'simultaneous' here in accordance with our definition of T-simultaneity, we will have to say that the same two lightning flashes occur at the same time and do not occur at the same time; that is, it will be both true and false that these two lightning flashes occur at the same time. The incoherence of this result is generated by filling in the blank for the definition of T-simultaneity with a reference to one and the same time, where time is understood as one single uniform mode of existence. The special theory of relativity takes time itself to be relative and so calls for a more complicated definition of temporal simultaneity than the common, unreflective definition given in (T), such as this relativized version of temporal simultaneity:

(RT) RT-simultaneity = existence or occurrence at the same time within the reference frame of a given observer.

This relativizing of time to the reference frame of a given observer resolves the apparent incoherence in saying that the same two lightning flashes occur and do not occur at one and the same time. They occur at the same time in the reference frame of one observer and do not occur at the same time in the reference frame of a different observer. **vi*

Once this is understood, we can see that, if we persist in asking whether or not the two lightning bolts are *really* simultaneous, we are asking an incoherent question, one that cannot

be answered. The question is asked about what is assumed to be a feature of reality, although in fact there is no such feature of reality; such a question is on a par with 'Is Uris Library really to the left of Morrill Hall?' There is no absolute state of being temporally simultaneous with, any more than there is an absolute state of being to the left of. We determine the obtaining of the one relationship as we determine the obtaining of the other, by reference to an observer and the observer's point of view. The two lightning flashes, then, are RT-simultaneous in virtue of occurring at the same time within the reference frame of the ground observer and not RT-simultaneous in virtue of occurring at different times within the reference frame of the train observer. And, Einstein's theory argues, there is no privileged observer (or reference frame) such that with respect to it we can determine whether the two events are really simultaneous; simultaneity is irreducibly relative to observers and their reference frames, and so is time itself. Consequently, it would be a mistake to think that there is one single uniform mode of existence that can be referred to in specifying 'at once' in (G) in order to derive a definition of temporal simultaneity.

These difficulties in spelling out even a very crude acceptable definition for temporal simultaneity in the light of relativity theory foreshadow and are analogous to the difficulties in spelling out an acceptable definition of ET-simultaneity. More significantly, they demonstrate that the difficulties defenders of the concept of eternity encounter in formulating such a definition are by no means unique to their undertaking, and cannot be assumed to be difficulties in the concepts of ET-simultaneity or of eternity themselves. Finally, and most importantly, the way in which we cope with such difficulties in working out a definition for RT-simultaneity suggests the sort of definition needed for ET-simultaneity. Because one of the *relata* for ET-simultaneity is eternal, the definition for this relationship, like that for ET-simultaneity, must refer to one and the same present rather than to one and the same time. And because in ET-simultaneity we are dealing with two equally real modes of existence, neither of which is

reducible to any other mode of existence, the definition must be constructed in terms of *two* reference frames and *two* observers. So we can characterize ET-simultaneity in this way. Let 'x' and 'y' range over entities and events. Then:

- (ET) for every x and for every y, x and y are ET-simultaneous iff
 - (i) either x is eternal and y is temporal, or vice versa; and
 - (ii) for some observer, A, in the unique eternal reference frame, x and y are both present—i.e., either x is eternally present and y is observed as temporally present, or vice versa; and
- (iii) for some observer, B, in one of the infinitely many temporal reference frames, x and y are both present

—i.e., either x is observed as eternally present and y is temporally present, or vice versa.

Given the concept of eternity, condition (ii) provides that a temporal entity or event observed as temporally present by some eternal observer A is ET-simultaneous with every eternal entity or event; and condition (iii) provides that an eternal entity or event observed as eternally present (or simply as eternal) by some temporal observer B is ET-simultaneous with every temporal entity or event.

On our definition, if x and y are ET-simultaneous, then x is neither earlier nor later than, neither past nor future with respect to, y—a feature essential to any relationship that can be considered a species of simultaneity. Further, if x and y are ET simultaneous, x and y are not temporally simultaneous; since either x or y must be eternal, it cannot be the case that x and y both exist at one and the same time within a given observer's reference frame. ET-simultaneity is symmetric, of course; but, since no temporal or eternal entity or event is ET-simultaneous

with itself, the relationship is not reflexive; and the fact that there are different domains for its *relata* means that it is not transitive. The propositions

(1) x is ET-simultaneous with y.

and

(2) y is ET-simultaneous with z.

do not entail

(3) $x ext{ is ET-simultaneous with } z$.

And even if we conjoin with (I) and (2)

- (4) x and z are temporal.
- (1), (2), and (4) together do not entail
 - (5) x and z are temporally simultaneous.

(RT) and the Einsteinian conception of time as relative have served the only purpose we have for them in this paper, now that they have provided an introductory analogue for our characterization of ET-simultaneity, and we can now revert to a Newtonian conception of time, which will simplify the discussion without involving any relevant loss of precision. In the first place, at least one of the theological issues we are going to be discussing—the problem of omniscience and immutability—depends on the concept of an absolute present, a concept that is often thought to be dependent on a Newtonian conception of absolute time. But the concept of an absolute present which is essential to our discussion is not discredited by relativity theory. Every conscious temporal observer has an undeniable, indispensable sense of the absolute present, *now*, and that thoroughly pervasive feature of temporal consciousness is all we need. We do not need and we will not try to provide a philosophical justification for the concept of an absolute present; we will simply assume it for our present purposes. And if it must be said that the absolute present is absolute only within a given observer's reference

frame, that will not affect our use of the concept here. In the second place, in ordinary human circumstances, all human observers may be *said—should* be said—to share one and the same reference frame, and distinguishing individual reference frames for our discussion of time in the rest of this paper would be as inappropriate as taking an Einsteinian view of time in a discussion of historical chronology.

III. IMPLICATIONS OF ET-SIMULTANEITY

If x and z are temporal entities, they coexist if and only if there is some time during which both x and z exist. But if anything exists eternally, its existence, although infinitely extended, is fully realized, all present at once. Thus the entire life of any eternal entity is coexistent with any temporal entity at any time at which that temporal entity exists. From a temporal standpoint, the present is ET-simultaneous with the whole infinite extent of an eternal entity's life. From the standpoint of eternity, every time is present, co-occurrent with the whole of infinite atemporal duration. xix

We can show the implications of this account of ET-simultaneity by considering the relationship between an eternal entity and a future contingent event. Suppose that Richard Nixon will die at noon on 9 August 1990, precisely sixteen years after he resigned the Presidency. Nixon's death some years from now will be present to those who will be at his death-bed, but it is present to an eternal entity. It cannot be that an eternal entity has a vision of Nixon's death before it occurs; in that case an eternal event would be earlier than a temporal event. Instead, the actual occasion of Nixon's dying is present to an eternal entity. It is not that the future pre-exists somehow, so that it can be inspected by an entity that is outside time, but rather that an eternal entity that is wholly ET-simultaneous with 9 August 1974, and with

today, is wholly ET-simultaneous with 9 August 1990, as well. It is *now* true to say 'The whole of eternity is ET-simultaneous with the present'; and of course it was true to say just the same at noon of 9 August 1974, and it will be true to say it at noon of 9 August 1990. But since it is one and the same eternal present that is ET-simultaneous with each of those times, there is a sense in which it is now true to say that Nixon at the hour of his death is present to an eternal entity; and in that same sense it is now true to say that Nixon's resigning of the Presidency is present to an eternal entity. If we are considering an eternal entity that is omniscient, it is true to say that that entity is *at once* aware of Nixon resigning the Presidency and of Nixon on his death-bed (although of course an omniscient entity understands that those events occur sequentially and knows the sequence and the dating of them); and it is true to say also that for such an entity both those events are present at once.^{xx}

Such an account of ET-simultaneity suggests at least a radical epistemological or even metaphysical relativism, and perhaps plain incoherence. We *know* that Nixon is now alive. An omniscient eternal entity *knows* that Nixon is now dead. Still worse, an omniscient eternal entity also *knows* that Nixon is now alive, and so Nixon is apparently both alive and dead at once in the eternal present.

These absurdities appear to be entailed partly because the full implications of the concept of eternity have not been taken into account. We have said enough to induce caution regarding eternal, it is being related to. An eternal entity's mode of existence is such that its whole life is ET-simultaneous with each and every temporal entity or event, and so Nixon's death, like every other event involving Nixon, is really ET-simultaneous with the life of an eternal entity. But when Nixon's death is being related to *us*, today, then, given our location in the temporal continuum, Nixon's death is not simultaneous (temporally or in any other way) with respect to us, but really future. *xxi*

IV. ATEMPORAL DURATION AND ATEMPORAL LIFE

With this understanding of the atemporality of an eternal entity's existence, we want to consider now the apparent incoherence generated by combining atemporality with duration and with life in the definition of eternity.

The notion of atemporal duration is the heart of the concept of eternity and, in our view, the original motivation for its development. The most efficient way in which to dispel the apparent incoherence of the notion of atemporal duration is to consider, even if only very briefly, the development of the concept of eternity. The concept can be found in Parmenides, we think, xxii but it finds its first detailed formulation in Plato, who makes use of it in working out the distinction between the realms of being and becoming; and it receives its fullest exposition in pagan antiquity in the work of Plotinus. xxiii The thought that originally stimulated this Greek development of the concept of eternity was apparently something like this. Our experience of temporal duration gives us an impression of permanence and persistence which an analysis of time convinces us is an illusion or at least a distortion. Reflection shows us that, contrary to our familiar but superficial impression, temporal duration is only apparent duration, just what one would expect to find in the realm of becoming. The existence of a typical existent temporal entity, such as a human being, is spread over years of the past, through the present, and into years of the future; but the past is not, the future is not, and the present must be understood as no time at all, a durationless instant, a mere point at which the past is continuous with the future. xxiv Such radically evanescent existence cannot be the foundation of existence. Being, the persistent, permanent, utterly immutable actuality that seems required as the bedrock underlying the evanescence of becoming, must be characterized by genuine duration, of which temporal duration is only the flickering image. Genuine duration is fully realized duration—not only extended existence (even that is theoretically impossible in time) but also existence none

of which is already gone and *none* of which is yet to come—and such fully realized duration must be atemporal duration. Whatever has atemporal duration as its mode of existence is 'such that nothing future is absent from it and nothing past has flowed away', whereas of everything that has temporal duration it may be said that from it *everything* future is absent and *everything* past has flowed away. What has temporal duration 'does not yet grasp tomorrow but yesterday it has already lost'; even today it exists only 'in a mobile, transitory moment', the present instant. To say of something that it is future is to say that it is not (yet), and to say of something that it is past is to say that it is not (any longer). Atemporal duration is duration none of which is not—none of which is absent (and hence future) or flowed away (and hence past). Eternity, not time, is the mode of existence that admits of fully realized duration.

The ancient Greek philosophers who developed the concept of eternity were using the word 'aiôn', which corresponds in its original sense to our word 'duration', in a way that departed from ordinary usage in order to introduce a notion which, however counter-intuitive it may be, can reasonably be said to preserve and even to enhance the original sense of the word. It would not be out of keeping with the tradition that runs through Pannenides, Plato, and Plotinus into Augustine, Boethius, and Aquinas to claim that it is only the discovery of eternity that enables us to make genuinely literal use of words for duration, words such as 'permanence' and 'persistence', which in their ordinary, temporal application turn out to have been unintended metaphors. 'Atemporal duration', like the ancient technical use of 'aiôn' itself, violates established usage; but an attempt to convey a new philosophical or scientific concept by adapting familiar expressions is not to be rejected on the basis of its violation of ordinary usage. The apparent incoherence in the concept is primarily a consequence of continuing to think of duration only as 'persistence through time'.

Since a life is a kind of duration, some of the apparent incoherence in the notion of an atemporal life may be dispelled in rendering the notion of atemporal duration less readily

dismissible. But life is in addition ordinarily associated with processes of various sorts, and processes are essentially temporal, and so the notion of an atemporal entity that has life seems incoherent. xxv Now what Aguinas, for example, is thinking of when he attributes life to eternal God is the doctrine that God is a mind. (Obviously what is atemporal cannot consist of physical matter; we assume for the sake of the argument that there is nothing incoherent in the notion of a wholly immaterial, independently existent mind.) Since God is atemporal, the mind that is God must be different in important ways from a temporal, human mind. Considered as an atemporal mind, God cannot deliberate, anticipate, remember, or plan ahead, for instance; all these mental activities essentially involve time, either in taking time to be performed (like deliberation) or in requiring a temporal viewpoint as a prerequisite to performance (like remembering). But it is clear that there are other mental activities that do not require a temporal interval or viewpoint. Knowing seems to be the paradigm case; learning, reasoning, inferring take time, as knowing does not. In reply to the question 'What have you been doing for the past two hours?' it makes sense to say 'Studying logic' or 'Proving theorems', but not 'Knowing logic'. Similarly, it makes sense to say 'I'm learning logic', but not 'I'm knowing logic'. And knowing is not the only mental activity requiring neither a temporal interval nor a temporal viewpoint. Willing, for example, unlike wishing or desiring, seems to be another. Perceiving is impossible in any literal sense for a mind that is disembodied, but nothing in the nature of incorporeality or atemporality seems to rule out the possibility of awareness. And though feeling angry is impossible for an atemporal entity—if feelings of anger are essentially associated, as they seem to be, with bodily states—we do not see that anything prevents such an entity from being angry, a state the components of which might be, for instance, being aware of an injustice, disapproving of it, and willing its punishment. It seems, then, that the notion of an atemporal mind is not incoherent, but that, on the contrary, it is possible that such a mind might have a variety of faculties or activities. Our informal, incomplete consideration of that

possibility is not even the beginning of an argument for such a conclusion, but it is enough for our purposes here to suggest the line along which such an argument might develop. The notion of an atemporal mind is not *prima facie* absurd, and so neither is the notion of an atemporal life absurd; for any entity that has or is a mind must be considered to be *ipso facto* alive, whatever characteristics of other living beings it may lack.

V. THE NOTION OF AN ETERNAL ENTITY'S ACTING IN TIME

The difficulties we have considered so far are difficulties in the concept of eternity itself. We have by no means dealt explicitly with all the objections to the concept which have been raised in contemporary discussions; but many of those objections involve difficulties over simultaneity, and such objections can, we think, be dealt with adequately in the light of our previous discussion of ET-simultaneity. We hope, for instance, to have revealed the misunderstanding underlying such attempted reductions of the concept to absurdity as this one:

But, on St Thomas' view, my typing of this paper is simultaneous with the whole of eternity. Again, on his view, the great fire of Rome is simultaneous with the whole of eternity. Therefore, while I type these very words, Nero fiddles heartlessly on. *xxvi*

We want now to turn to fundamental difficulties in theological applications of the concept, particularly those which arise in considering the possibility of interaction between eternal and temporal entities.

There are several reasons for thinking that an eternal entity, as we have characterized it, could not affect or respond to temporal entities, events, or state of affairs. Just as an eternal entity cannot exist in time, so, we might suppose, (I) an eternal entity cannot act in time. It might seem, furthermore, that (II) the nature of a temporal action is such that the agent itself must be temporal. Nelson Pike provides the following case in point:

Let us suppose that yesterday a mountain, 17,000 feet high, came into existence on the flatlands of Illinois. One of the local theists explains this occurrence by reference to divine creative action. He claims that God produced (created, brought about) the mountain. Of course, if God is timeless, He could not have produced the mountain *yesterday*. This would require that God's creative-activity and thus the individual whose activity it is have position in time. The theist's claim is that God *timelessly* brought it about that yesterday, a 17,000 feet high mountain came into existence on the flatlands of Illinois. . . . [But] The claim that God *timelessly* produced a temporal object (such as the mountain) is absurd. **xxxii**

On this basis Pike denies that God, considered as atemporal, could produce or create anything; whatever is produced or created begins to exist and so has a position in time. And it might be argued along similar lines that (III) an atemporal entity could not preserve anything temporal in existence because to do so would require temporal duration on the part of the preserver.

If God is taken to be eternal, considerations I, II, and III are incompatible with some doctrines central to most versions of theism, such as the divine creation and preservation of the world, and divine response to petitionary prayer. More specifically, they militate against the central doctrine of Christianity, since the Incarnation of Christ entails that the second person of the Trinity has a temporal nature and performs temporal actions during a certain period of time.

We think all three of these considerations are confused. In connection with consideration I, a distinction must be drawn between (a) acting in such a way that the action itself can be located in time and (b) acting in such a way that the effect of the action can be located in time. For temporal agents the distinction between (a) and (b) is generally nugatory; for an atemporal entity, however, (a) is impossible. An agent's action is an event in the agent's life, and there can be no temporal event in the atemporal life of God. But such an observation does not tell against (b). If an eternal God is also omnipotent, he can do anything it is not logically impossible for him to do. Even though his actions cannot be located in time, he can bring about effects in time unless doing so is logically impossible for him.

Considerations II and III may be construed as providing reasons for thinking that it is indeed logically impossible for an atemporal entity to produce temporal effects. Pike's version of consideration II, however, involves a confusion like the confusion just sorted out for consideration I. He says:

- (9) '[I]f God is timeless, He could not have produced the mountain *yesterday*.'
- (10) 'The claim that God *timelessly* produced a temporal object (such as the mountain) is absurd.'

Both these propositions are ambiguous because of the possibility of assigning different scopes to 'yesterday' and to 'timelessly' (or 'atemporally'), and the ambiguities can be sorted out in this way:

- (9)(a) If God is atemporal, he cannot yesterday have brought it about that a temporal object came into existence.
- (9)(b) If God is atemporal, he cannot (atemporally) bring it about that a temporal object came into, existence yesterday.
- (10)(a) It is absurd to claim that God atemporally brings it about that a temporal object came into existence.
 - (10)(b) It is absurd to claim that God brings it about that a temporal object came into existence atemporally. *xxviii*

Apparently without taking account of the ambiguity of propositions (9) and (10), Pike understands them as (9)(a) and (10)(b) respectively. Propositions (9)(a) and (10)(b) are indeed

true, but they do not support Pike's inference that an atemporal God cannot produce a temporal object. In drawing that inference, Pike seems to be relying on an assumption about a temporal relationship that must hold between an action and its effect. The assumption is not entirely clear; in some passages of his God and Timelessness it looks as if Pike thinks that an action and its effect must be simultaneous, an assumption that is plainly false in general regarding actions and their effects as ordinarily conceived of. But if we do adopt co-occurrence as a theoretically justifiable condition on causal connection between an action and its effect, we can point out that any and every action of an eternal entity is ET simultaneous with any temporal effect ascribed to it. And, since it would simply beg the question to insist that only temporal simultaneity between an action and its effect can satisfy this necessary condition of causal connection, we see no reason for denying of an eternal, omnipotent entity that its atemporal act of willing could bring it about that a mountain came into existence on [yesterday's date]. Consequently, we can see no reason for thinking it absurd to claim that a divine action resulting in the existence of a temporal entity is an atemporal action. In other words, we think that propositions (9)(b) and (10)(a) are false, although they are legitimate senses of the ambiguous propositions (9) and (10). And so we reject consideration II as well as I.

Our reasons for rejecting these first two considerations apply as well, *mutatis mutandis*, to consideration III. If it is not impossible for an omnipotent, eternal entity to act in eternity (by atemporally willing) in such a way as to bring it about that a temporal entity begins to exist at a particular time, it is not impossible for an omnipotent, eternal entity to act in eternity (by atemporally willing) in such a way that that temporal entity continues to exist during a particular temporal interval.

A different sort of difficulty arises in connection with answering prayers or punishing injustice, for instance, since in such cases it seems necessary that the eternal action occur later than the temporal action; and so our reasons for rejecting considerations I, II, and III, based on

the ET-simultaneity of eternal actions with temporal events, seem inapplicable. The problem of answering prayers is typical of difficulties of this sort. An answer to a prayer must be later than the prayer, it seems, just because

(11) Something constitutes an answer to a prayer only if it is done because of the prayer.

and

(12) Something is done because of a prayer only if it is done later than the praying of the prayer.

We think that (11) is true; (12), on the other hand, seems doubtful even as applied to temporal entities. If at 3 o'clock a mother prepares a snack for her little boy because she believes that when he gets home at 3.30 he will ask for one, it does not seem unreasonable to describe her as preparing the food because of the child's request, even though in this case the response is earlier than the request. Whatever may be true regarding temporal entities, however, if (12) is true, it obviously rules out the possibility of an eternal entity's responding to prayers. But consider the case of Hannah's praying on a certain day to have a child and her conceiving several days afterward. ** Both the day of her prayer and the day of her conceiving are ET-simultaneous with the life of an eternal entity. If such an entity atemporally wills that Hannah conceive on a certain day after the day of her prayer, then such an entity's bringing it about that Hannah conceives on that day is clearly a response to her prayer, even though the willing is ET-simultaneous with the prayer rather than later than it. If ET simultaneity is a sufficient condition for the possibility of a causal connection in the case of God's bringing about the

existence of temporal entity, it is likewise sufficient for the possibility of his acting because of a prayer prayed at a particular time. xxx

The principal difficulty in the doctrine of the Incarnation seems intractable to considerations of the sort with which we have been trying to alleviate difficulties associated with an eternal entity's willing to bring about a temporal event, because according to the doctrine of the Incarnation an eternal entity itself entered time. If we take the essence of the doctrine to be expressed in

(13) 'When the fulness of the time was come, God sent forth his Son, born of a woman' (Galatians 4: 4).

it is not difficult to see, in the light of our discussion so far, how to provide an interpretation that shows that, as regards God's sending his Son, the doctrine is compatible with God's eternality:

(13') God atemporally wills that his Son be born of a woman at the appointed time.

But the possibility of making sense of an eternal action with a temporal effect does not settle this issue, because the principal difficulty here does not lie in the nature of the relationship between an eternal agent and a temporal effect. The difficulty here is rather that an eternal entity is also a *component* of the temporal effect—an effect which is, to put it simplistically, an eternal entity's having become temporal without having ceased *(per impossibile)* to exist eternally. Formulating the difficulty in the doctrine of the Incarnation simplistically, however, simply exacerbates it. And whereas this formulation of it may present an insuperable difficulty for one or more of the heresies of the Patristic period that took the person of Christ to be only

divine or only human, it is ineffective against the orthodox doctrines of the Trinity and the dual nature of Christ. A full treatment of those philosophically intricate doctrines lies outside the scope of this paper, but we will consider them very briefly on the basis of our limited understanding of them in order to suggest some reasons for supposing that the doctrine of the Incarnation is not incompatible with the doctrine of God's eternality.

The doctrine of the Trinity maintains that God, although one substance, consists in three persons, the second of which is God the Son. The doctrine of the dual nature maintains that the second person of the Trinity has not merely one essence or nature, like every other person divine or human, but two: one the divine nature common to all the persons of the Trinity, the other the human nature of the Incarnation. One of the explicitly intended consequences of the doctrine of the dual nature is that any statement predicating something of Christ is ambiguous unless it contains a phrase specifying one or the other or both of his two natures. That is, the proposition

(14) Christ died.

is ambiguous among these three readings:

(14)(a) Christ with respect to his divine nature (or qua God) died.

(14)(b) Christ with respect to his human nature (or qua man) died.

(14)(c) Christ with respect to his divine and human natures (or qua both God and man) died.

From the standpoint of orthodox Christianity (14)(a) and (14)(c) are false, and (14)(b) is true. (14)(b) is not to be interpreted as denying that God died, however—such a denial forms the basis of at least one Christian heresy—but to deny that God, the second person of the Trinity,

and it is not part of our purpose here even to sketch an analysis of it; but, whatever its internal difficulties may be, the doctrine of the dual nature provides *prima facie* grounds for denying the incompatibility of God's eternality and God's becoming man.

died with respect to his divine nature. Such an account is loaded with at least apparent paradox,

A Boethian account of the compatibility of divine eternality and the Incarnation might be developed along these lines, we think. xxxi The divine nature of the second person of the Trinity, like the divine nature of either of the other persons of the Trinity, cannot become temporal; nor could the second person at some time acquire a human nature he does not eternally have. Instead, the second person eternally has two natures; and at some temporal instants, all of which are ET-simultaneous with both these natures in their entirety, the human nature of the second person has been temporally actual. At those times and only in that nature the second person directly participates in temporal events. We need no theologian to tell us how rudimentary this outline is, and no other philosopher to tell us how paradoxical it looks; but we are not now willing or able or required by our main purpose in this paper to undertake an analysis or defense of the role of the doctrine of the dual nature in establishing the compatibility of divine eternality and the Incarnation. We hope simply to have pointed out that the doctrine of the Incarnation cannot be reduced to the belief that God became temporal and that, if it is understood as including the doctrine of the dual nature, it can be seen to have been constructed in just such a way as to avoid being reduced to that simple belief. And those observations are all we need for now in order to allay the suspicion that eternality must be incompatible with the central doctrine of orthodox Christianity.

It seems to us, then, that the concept of eternity is coherent and that there is no logical impossibility in the notion of an eternal being's acting in time, provided that acting in time is understood as we have explained it here.

VI. OMNISCIENCE AND IMMUTABILITY

The doctrine that God is eternal is obviously of critical importance in the consideration of any issue involving the relationship of God to temporal entities or events. We will conclude our exploration of the concept of eternity by sampling its effect on three such issues concerning either God's knowledge or God's power in connection with the future, the past, and the present, respectively.

First, the short answer to the question whether God can foreknow contingent events is no. It is impossible that any event occur later than an eternal entity's present state of awareness, since every temporal event is ET-simultaneous with that state, and so an eternal entity cannot foreknow anything. Instead, such an entity considered as omniscient knows—is aware of—all temporal events, including those which are future with respect to our current temporal viewpoint; but, because the times at which those future events will be present events are ET-simultaneous with the whole of eternity, an omniscient eternal entity is aware of them as they are present. **EXXXIII*

Second, the short answer to the question whether God can change the past is no. But it is misleading to say, with Agathon, that not even God can change the past. **XXXXIIII** God in particular cannot change the past. The impossibility of *God's** changing the past is a consequence, not of the fact that what is past is over and done with, but rather of the fact that the past is solely a feature of the experience of temporal entities. It is just because no event can be past with respect to an eternal entity that an eternal entity cannot alter a past event. **XXXIV** An omnipotent, omniscient, eternal entity can affect temporal events, but it can affect events only as they are actually occurring. As for a past event, the time at which it was actually occurring is the time at which it is present to such an entity; and so the battle of Waterloo is present to God, and God can affect the battle. Suppose that he does so. God can bring it about that Napoleon

wins, though we know that he does not do so, because whatever God does at Waterloo is over and done with as we see it. So God cannot alter the past, but he can alter the course of the battle of Waterloo. XXXV

Third, the short answer to the question whether God can know what time it is is yes. There is a published attempt to prove that, although for orthodox Christianity God is necessarily both omniscient and immutable, omniscience and immutability are in fact incompatible characteristics. **xxxvi* The proof reads as follows:

- (1) A perfect being is not subject to change.
- (2) A perfect being knows everything.
- (3) A being that knows everything always knows what time it is.
- (4) A being that always knows what time it is is subject to change.
- (5) A perfect being is subject to change.
- (6) A perfect being is not a perfect being.
- (7) There is no perfect being.

Steps (1) and (2) are the immutability and omniscience claims. Step (3) is intended as the claim that an omniscient being knows what time it is *now* in the absolute present, what part of history is neither past nor future but presently occurring. In explaining (4) the author takes 'It is now t_n ' as the form of propositions that say what time it is. Thus a being that always knows what time it is knows first that it is now t_1 (and not t_2), then that it is now t_2 (and not t_1), and so on; and in that way such a being's knowledge is constantly changing. And, if a being's knowledge is changing in such a way that it no longer knows what it once knew, then that being itself is also changing.

But God's eternality is as much a part of orthodox Christian doctrine as are God's omniscience and immutability; xxxviii and, when not only time is taken into account but also eternity, as the mode of God's existence, then, as we have seen, such expressions as 'now' and 'present' are equivocal. Given the way in which the concept of eternity affects the interpretation of such expressions, it is clear that the weak point in the proof is premiss (s), which contains two implicit references to the present. The first of these is in the tense of 'is', since the point of the premiss is that an omniscient being always knows what time it is *now*; the second is in the tense of the second occurrence of 'knows', since part of the idea underlying the proof is that knowledge of what time it is must be present knowledge or knowledge one has at the present time.

If we analyse (3) to bring out the equivocations at those two points, we produce the following four possible interpretations:

- (3)(a) A being that knows everything always knows in the temporal present what time it is in the temporal present.
- (3)(b) A being that knows everything always knows in the eternal present what time it is in the temporal present.
- (3)(c) A being that knows everything always knows in the temporal present what time it is in the eternal present.
- (3)(d) A being that knows everything always knows in the eternal present what time it is in the eternal present.

Interpretations (3)(c) and (3)(d) can be dismissed at once as incoherent in virtue of the expression 'what time it is in the eternal present'. (3)(a) is obviously the intended sense of premiss (3); but (3)(a) is true just in case only a temporal entity can be omniscient, since an

omniscient atemporal entity cannot be said to know in the temporal present, and it begs the question at issue to assume that no atemporal entity can be omniscient. The evaluation of the proof, then, depends on the evaluation of (3)(b).

(3)(b) is hard to evaluate because it is hard to interpret. What exactly is being picked out as the temporal present? If it is the time at which you are reading these words, then (3)(b) may be taken to be true, for it is true that

(3)(b') For any time experienced as present by a temporal entity, an omniscient eternal entity knows all the events actually occurring at that time (as well as the dating of that time and its being experienced as present by a temporal entity).

But if premiss (3) is interpreted as (3)(b'), it will not contribute as it is designed to do to the support of sub-conclusion (5) in the proof; a being that always knows what time it is in the way laid out in (3)(b') is not a being subject to change in virtue of its always knowing what time it is. If premiss (3) is read as (3)(b'), then (3) is true but (4) is false.

The defender of the proof we are criticizing may feel that (3)(b') rests on a notion of the temporal present as merely relative. He may well want to insist that some things have actually happened, some things are actually going to happen, and some things are actually happening; and what he wants to know is whether God knows what is actually happening as it is happening. The answer to that question, too, is yes. The whole of eternity is ET-simultaneous with each temporal event as it is actually happening; the only way in which an eternal entity can be aware of any temporal event is to be aware of it as it is actually happening. And from the eternal viewpoint every temporal event is actually happening. There is no single temporal viewpoint; even when the temporal present is taken to be absolute, the temporal viewpoint that is correctly designated as now is incessantly changing. (3)(b') has already expressed what we

have to say about an eternal being's epistemic relationship to temporal nows, but perhaps our analysis of premiss (3) will be clearer if we provide a simpler version of that interpretation alongside an interpretation involving the single eternal now.

(3)(b") For every temporal now, God knows which temporal events are actually happening now.

 $(3)(b^{""})$ For the unique eternal now, God knows which temporal events are actually happening now.

The temporal events picked out in (3)(b) are, for instance, those which are temporally simultaneous with your reading these words; the temporal events picked out in (3)(b) are all of them. Taken together, (3)(b) and (3)(b) ascribe to God all there is to be known regarding the actual occurrence of temporal events, and there is no further sense in which to press the question whether God knows what time it is.

The proof we have been criticizing may be said to succeed in showing the incoherence of the concept of an omniscient, immutable, temporal entity; but that is not the concept of the perfect being that has been identified as God in orthodox Christian theology, which takes God to be eternal. XXXVIII

At least one contemporary philosopher of religion has recently turned his attention to the concept of divine eternality in order to reject it as incompatible with biblical theology and, in particular, with the doctrine of divine redemption. 'God the Redeemer cannot be a God eternal. This is so because God the Redeemer is a God who changes' (Nicholas Wolterstorff, 'God Everlasting', in Clifton J. Orlebeke and Lewis B. Smedes (eds.), *God and the Good* (Grand Rapids, Mich., 1975), pp. 181—203, p. 182). (We are grateful to Kenneth Konyndyk for having supplied us with copies of this article, which is obviously highly relevant to our purposes in this paper. The work we are presenting here was substantially complete by the time we had access to Professor Wolterstorff's work.) Although it is no part of our purposes here to discuss Wolterstorff's arguments, it will become clear that we think he is mistaken in his assessment of the logical relationship between the doctrine of divine eternality and other doctrines of orthodox Christianity, including the doctrine of redemption, even in their Biblical formulations. Passages that have been or might be offered in evidence of a Biblical conception of divine eternality include Malachi 3: 6; John 8: 58 James I: 17.

ii Ed. E. K. Rand, in H. F. Stewart, E. K. Rand, and S. J. Tester, *Boethius: The Theological Tractates and The Consolation of Philosophy* (London and Cambridge, Mass., 1973).

There are at least two misleading features of this passage. In the first place, Boethius says that God's eternality *always* has to do with present *time*. In the second place, Boethius's etymology of 'sempiternity' is mistaken. 'Sempiternitas' is an abstract noun constructed directly on 'semper', somewhat as we might construct 'alwaysness'. His etymology is not only false but misleading, associating 'sempiternity' with 'eternity' in a

context in which he has been distinguishing between sempiternity and eternity.

iv Its elements stem from Parmenides via Plato, and Plotinus had already framed a definition of eternity on which Boethius's seems to have been based. See note 6 below. Cf. Romano Ameno, 'Probabile fonte della nozione boeziana di eternità', *Filosofia* I (1950), pp. 365—73.

^v The argument that is concluded in the last sentence of passage *CP* is based on premisses about God's eternality and omniscience, and is not an argument in support of the definition.

'Aeternitas igitur est interminabilis vitae tota simul et perfecta possessio', De Trinitate, p. 422.9-1 1. This definition closely parallels the definition developed by Plotinus in Enneads iii 7: 'The life, then, which belongs to that which exists and is in being, all together and full, completely without-extension-or-interval, is what we are looking for, eternity' (A. H. Armstrong (ed.), Plotinus (London and Cambridge, Mass., 1967), vol. 3, p. 304.37—39). The way in which Boethius introduces eternity suggests that he considers himself to be presenting a familiar philosophical concept associated with a recognized definition. The parallel between the Plotinjan and Boethian definitions is closest in their middle elements: 'z ōē homou pasa kai plerës' / 'vitae tota simul et perfecta'. Plotinus describes the possessor of this life, and Boethius does not; but, in view of the fact that Boethius is talking about God, he, too, would surely describe the possessor of eternality as 'that which exists and is in being'. The most interesting difference between the two definitions is that the Plotinian has 'completely without-extension-or-interval' and the Boethian has 'illimitable', which suggests that Boethius takes eternity to include duration but Plotinus does not. In the rest of Enneads iii 7, however, Plotinus goes on to derive duration from his definition and to stress its importance in the concept. For an excellent presentation and discussion of Plotinus on eternity and time, see Werner Beierwaltes, Plorin über Ewigkeit und Zeit (Enneade iii 7) (Frankfurt am Main, 1967).

vii The many medieval discussions of the possibility that the world is 'eternal' really concern the possibility that it is sempiternal, and most often their concern is only with the possibility that the world had no beginning in time. Thomas Aquinas provides an important summary and critique of such discussions in *Summa Contra Gentiles*, bk. ii, chs. 32—8.

viii See, e.g., p. 424.51—56.

ix See Plato, *Timaeus* 37D—38c; Plotinus, *Enneads* iii 7 (and cf. note 6 above).

^x See, e.g., Thomas Aquinas, *Summa Theologiae*, pt i, q. 10. Augustine, who is an earlier and in general an even more important source for medieval philosophy and theology than Boethius and who is even more clearly in the Platonist tradition, understands and uses this classic concept of eternity (see, e.g., *Confessions*, bk. xi, ch. 11; *The City of God*, bk. xi, ch. 21); but his influence on the medieval discussion of eternity seems not to have been so direct or important as Boethius's.

xi Notice that these characteristics of a temporal entity's possession of its life apply not just to finite temporal lives but even to a temporal life of beginningless, endless duration—a sempiternal life.

xii In the interest of simplicity and brevity, we will for the most part speak only of coexistence in what follows, taking it as covering co-occurrence too.

xiii The medieval concept of the *aevum* or of *aeviternitas* seems to us to be not the concept of a third mode of existence, on a par with time and eternity. See, e.g., Thomas Aquinas, *Summa Theologiae*, pt. i, q. 10, arts. 5 and 6. xiv Our adaptation of this example is a simplified version of Wesley C. Salmon's presentation of it in his *Space*, *Time*, *and Motion* (Encino, Cal., 1975), pp. 73—81. We mean to do little more here than cite the example. An understanding of its significance for relativity theory requires a consideration of a presentation as full (and clear) as Salmon's.

xv Salmon, Space, Time, and Motion, p. 76.

xvi It is important to understand that by 'observer' we mean only that thing, animate or inanimate, with respect to which the reference frame is picked out and with respect to which the simultaneity of events within the reference frame is determined. In the train example we have two human observers, but the example could have been set up just as well if the observers had been nothing more than devices, primitive or sophisticated, for recording flashes of light.

xvii On this issue see William Godfrey Smith, 'Special Relativity and the Present', *Philosophical Studies*, 36(3) (Oct. 1979), pp. 233—44.

xviii Since no eternal entity or event can itself be an element in a temporal series, no temporal entity or event can be earlier or later than the whole life or than any part of the life of an eternal entity. It is not clear that it makes sense to think in terms of parts of atemporal duration (cf. Aquinas, *Summa Theologiae*, pt. i, q. 10, art. I, ad. 3); but even if it does, it cannot make sense to think of any such part as earlier or later than anything temporal. If the Battle of

Waterloo were earlier than some part of atemporal duration, it would be uniquely simultaneous with one other part of atemporal duration, in which case one part of atemporal duration would be earlier than another, which is impossible.

xix In the development of the classic concept of eternity, geometric models were sometimes introduced in an attempt to clarify the relationship we are calling ET simultaneity. There is a passage in Boethius, for instance (Consolation, bk. iv, prose 6; De trinitate, pp. 364.78—366.82), which suggests that he took the relationship between time and eternity to be analogous to that between the circumference and the centre of a circle. Aquinas developed this sort of analogy in connection with an account of an eternal entity's apprehension of temporal events:

'Furthermore, God's understanding, just like his being, does not have succession; it is, therefore, always enduring all at once, which belongs to the nature of eternity. The duration of time, on the other hand, is extended in the succession of before and after. Thus the relationship of eternity to the whole duration of time is like the relationship of an indivisible to a continuum—not indeed of an indivisible that is a limit of the continuum, which is not present to each part of the continuum (an instant of time bears a likeness to that), but of the indivisible that is outside the continuum and nevertheless coexists with each part of the continuum or with a designated point in the continuum. For, since time does not extend beyond change, eternity, which is entirely beyond change, is nothing belonging to time; on the other hand, since the being of what is eternal is never lacking, eternity in its presentness is present to each time or instant of time. A sort of example of this can be seen in a circle. For a designated point on the circumference, although it is an indivisible, does not coexist together with another point as regards position since it is the order of position that produces the continuity of the circumference. But the centre, which is outside the circumference, is directly opposite any designated point on the circumference. In this way, whatever is in any part of time coexists with what is eternal as being present to it even though past or future with respect to another part of time. But nothing can coexist with what is eternal in its presentness except as a whole, for it does not have the duration of succession. And so in its eternity the divine understanding perceives as present whatever takes place during the whole course of time. It is not the case, however, that what takes place in a certain part of time has been existent always. It remains, therefore, that God has knowledge of those things that, as regards the course of time, are not yet' (Summa Contra Gentiles, bk. i, ch. 66).

argue that divine omniscience is compatible with human freedom, and he does so by demonstrating that omniscience on the part of an eternal entity need not, cannot, involve foreknowledge. See also section VI below.

**Xi* The claim that Nixon's death is really future rests on the assumption around which we all organize our lives, the view that the temporal present is absolute, that the expressions 'the present', 'the past', and 'the future' are uniquely (and differently) referring expressions on each occasion of their use, that 'now' is an essential indexical.

On the notion of an essential indexical see John Perry, 'The Problem of the Essential Indexical', *Nous* 13(1) (March 1979), pp. 3—21. We are grateful to Marilyn Adams for letting us see some of her unpublished work which brings out the importance of the notion of the absolute present in discussions of this sort, particularly in the discussion we will take up in section vi below, and for calling our attention to Perry's article.

xxii Most clearly in fr. 8, as we read it. For excellent examples of both sides of the controversy over the presence of the concept of eternity in Parmenides, see G. E. L. Owen, 'Plato and Parmenides on the Timeless Present', *Monist* L (3) (July 1966), pp. 317-340; and Malcolm Schofield, 'Did Parmenides Discover Eternity?', *Archiv für Geschichte der Philosophie* 52 (1970), pp. 113—35.

xxiii See notes 6 and 9 above.

xxiv For some discussion of this analysis of time in Aristotle and Augustine, see Fred Miller, 'Aristotle on the Reality of Time', *Archiv für Geschichte der Philosophie* 61 (1974), pp. 132—55; and Norman Kretzmann, 'Time Exists—But Hardly, or Obscurely (*Physics* iv, 10; 217b29—218a33)', *Aristotelian SocietySupplementary Volume* I (1976), pp. 91—114.

william Kneale has taken this notion to be genuinely incoherent and among the most important reasons for rejecting the classic concept of eternity. See his 'Time and Eternity in Theology', *Proceedings of the Aristotelian Society* 61 (1960), pp. 87—108; also his article 'Eternity' in Paul Edwards (ed.), *The Encyclopedia of Philosophy* (New York, 1967), vol. 3, pp. 63—6. Cf. Martha Kneale, 'Eternity and Sempiternity', *Proceedings of the Aristotelian Society*, 69 (1968—9), pp. 223—38.

xxvi Anthony Kenny, 'Divine Foreknowledge and Human Freedom', in Kenny (ed.), *Aquinas: A Collection of Critical Essays* (Garden City, NY, 1969), pp. 255—70, 264.

xxvii Nelson Pike, God and Timelessness (London, 1970), pp. 104—5.

These ambiguities, like the two interpretations provided for consideration I above, are of the sort extensively investigated by medieval logicians under their distinction between the compounded and divided senses of propositions. Thus (9)(a) and (10)(a) present the compounded senses of propositions (9) and (10), whereas (9)(b) and (10)(b) present their divided senses.

xxix I Samuel I: 9—20.

For a discussion of other philosophical problems associated with petitionary prayer see Eleonore Stump, 'Petitionary Prayer', *American Philosophical Quarterly*, 16(1) (Jan. 1979), pp. 81—91.

Although Boethius treats of the Incarnation and the dual nature of Christ in his theological tractates, especially in his *Contra Eutychen et Nestorium* (in Stewart, Rand, and Tester, *Boethius*), he does not apply his concept of eternity in those discussions as we think it ought to be applied.

wxxiii What we present here is essentially Boethius's line against the suggestion that divine omniscience and human freedom are incompatible, a line in which he was followed by many medievals, especially Aquinas. On Aquinas's use of the Boethian solution, see Kenny, 'Divine Foreknowledge and Human Freedom'; see also note 18 above. xxxiii Aristotle, *Nicomachean Ethics*, vi, 2.

Although the concept of *the* past, dependent on the concept of the absolute temporal present, has no application for an eternal entity, for an omniscient eternal entity there is the awareness of your past, your present, your future as of 1 January 1970, and of your past, your present, your future as of 1 January 1980, and so on for every temporal entity as of any date in its duration.

xxxv These observations regarding God's relationship to the past might suggest further issues regarding petitionary prayer. It is obviously absurd to pray in 1980 that Napoleon win at Waterloo when one knows what God does not bring about at Waterloo, but it might not seem absurd-at least not in the same way-to pray in 1980 that Napoleon lose at Waterloo. After all, your prayer and the battle are alike present to God; why should your prayer not be efficacious in bringing about Napoleon's defeat? But, as a petition addressed to the will of God, a prayer is also an expression of the will of the one who prays it, and any temporal entity who prays in 1980, 'Let Napoleon lose at Waterloo', is to that extent pretending to have atemporal knowledge and an atemporal will. The only appropriate version of that prayer is 'Let Napoleon have lost at Waterloo', and for one who knows the outcome of the battle more than a hundred and fifty years ago, that prayer is pointless and in that sense absurd. But a prayer prayed in ignorance of the outcome of a past event is not pointless in that way. (We are thus disagreeing with Peter Geach, when he claims that 'A prayer for something to have happened is simply an absurdity, regardless of the utterer's knowledge or ignorance of how things went' (God and the Soul (London, 1969), p. 90); but we find much else to admire in his chapter 'Praying for Things to Happen'.) On the hypothesis that there is an eternal, omniscient, omnipotent God, the praying of such a prayer would indeed qualify as 'the only instance of behaviour, on the part of ordinary people whose mental processes we can understand, designed to affect the past and coming quite naturally to us' (Michael Dummett, 'Bringing About the Past', *Philosophical Review* 73(3) (July 1964), p. 341). We are grateful to members of the Sage School of Philosophy at Cornell for pointing out the relevance of Dummett's discussion. Dummett does not draw on the concept of divine eternality, but, if it is acceptable in its own right, its introduction would lead to a modification and strengthening of some of the claims he makes-e.g., 'I am not asking God that, even if my son has drowned, He should now make him not to have drowned; I am asking that, at the time of the disaster, He should then have made my son not to drown at that time' (p. 342).

xxxvi Kretzmann, 'Omniscience and Immutability', *Journal of Philosophy* 63(14) (July 1966), pp. 409—21. This article has been discussed and criticized by a number of writers, including Hector-Neri Castaneda, 'Omniscience and Indexical Reference', *Journal of Philosophy* 64(7) (April 1967), pp. 203—9; Richard Swinburne, *The Coherence of Theism* (Oxford, 1977); Anthony Kenny, *The God of the Philosophers* (Oxford, 1979), esp. ch. 6, 'Omniscience, Eternity, and Time'. We are grateful for having been shown two as yet unpublished discussions: Marilyn McCord Adams, 'Can God Know What Time It Is?' and Walter Horn, 'God and Current Events'. None of the criticisms of the argument in 'Omniscience and Immutability' which we have seen takes the line we take in the rest of this discussion; none of the defences we have seen is effective against our line of attack.

xxxvii In this connection it is interesting to note that Aquinas bases his attribution of eternality to God in *Summa Theologiae*, pt. i, q. 10, on his attribution of immutability to God in q. 9.

xxxviii We benefited a great deal from criticisms and suggestions offered by several people who read or listened to earlier drafts of this paper. We cannot mention them all, but we are especially grateful for thoughtful comments, in some cases very extensive, from William Alston, John Bennett, Richard Creel, John Crossett, Anthony Kenny, William Rowe, Judith Slein, Richard Sorabji, and Richard Swinburne.