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Time and Agnosticism

In contemporary analytic metaphysics, the most important debate by far is the debate between Realism and anti-Realism. This debate is the most important simply because it questions our philosophical principles at their most fundamental level: does the world exist apart from the mind? This debate will be my remote target, but my proximal target is actually a lesser debate in metaphysics. There is a parallel between the debate concerning the nature of time—whether it is dynamic or static—and the debate between Realism and anti-Realism. That parallel is, specifically, that both debates seem to have reached an impasse. This impasse which characterizes these two debates is not the same for each; indeed, the two debates represent two philosophical puzzles, one of which informs the other. Or, less cryptically, the solution to the debate concerning time relies on a solution to the debate concerning Realism, but even if Realism is solved, time will not be. In point of fact, though, I will show, over the course of this essay, that both of these debates lack the possibility of solution. The real issues of contention will turn out to be the principles that each side has taken as basic. This is a contention about which there can be no argument. So let us begin with time.

1. The Presentism/Eternalism Debate

In this section, we will discuss the debate about the nature of time—whether time adheres either of McTaggart's so-called "A-series" or "B-series" conceptions of time. We first will lay out McTaggart's argument, describing the features of A-series and B-series along the way. Then we will criticize McTaggart's argument in an attempt to find out which conception is genuinely

the superior. Next we will address some relevant criticisms to these conceptions, for example the criticism that A-series does not respect Einstein's theory of Special Relativity. Finally, we will see that the information necessary for determining which of these two conceptions is superior cannot be found within the debate proper. We will be forced to look for this information within a more fundamental debate—the debate between perdurantism and endurantism.

1.1. McTaggart's Argument

By virtue of historical fact, the argument between A-series and B-series always begins with John McTaggart's argument—indeed, McTaggart invented the distinction. The argument is composed of a distinction and three logical steps based on the distinction. The distinction is between two different concepts of time, named 'A-series' and 'B-series'. McTaggart claims that: (1.1) B-series actually presupposes A-series, (1.2) A-series entails contradiction, (1.3) therefore both concepts are meaningless and there is no such thing as time.

1.1.1. B-Series Presupposes A-Series

McTaggart sets up the argument by identifying two conceptions of time. First, there is B-series, which is time as composed of points which either precede or succeed each other. This conception in terms of succession is considered to be a static model in which every point along the dimension of time really exists just as much as any other point. Then there is A-series, which is time as composed of three distinct groupings: past, present and future. However, these groupings change as the future flows through the present into the past. Thus, this is a dynamic conception of time.

(1)   B-series: For any times t_1 and t_2, t_1 exists in the same way as t_2.

(2)   A-series: For any times t_1 and t_2, t_1 exists in the same way as t_2 only if both t_1 and t_2 have the same tense.

With these two distinct conceptions of time in the background, McTaggart observes that time presupposes change. But what does change mean? For Michael Loux,

"at the very least change involves a variation in the way things are.[1]" Let us then define this as the bare concept of change:

(3)   Minimal Definition of 'Change' (MDC): Change is variation in the way things are.

Though vague, this seems to be a simple truism concerning our concept of change. Additionally, this concept of change seems to be strong enough to support a concept of time. But, for whatever reason, McTaggart defines change in a much stronger way. We will, therefore, come back to the MDC later. For McTaggart, "the way things are" is taken to be the events that make up the world. Thus variation in the way things are is variation in events, and it turns out that the thing that undergoes change over time is an event. Old events cease to be events and new events come to be events, replacing the old ones. Thus, for McTaggart,

(4)   Imprecise Tensed Definition of 'Change' (ITDC): Change is variation in existent events.

So if time occurs in events, then events that are no longer happening must cease to be events and new events must become. But this fact about time is incompatible with B-series, because the static nature of B-series precludes things from becoming or ceasing to be. Recall that in B-series, all events are fixed in their places in space-time. An event, for a B-theorist, is defined as four-dimensional region of space-time and, as such, all events exist in the same way, just at different times and in different places. Therefore, if we are to speak temporally in the case that we believe that time is B-series, the temporal

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[1] Michael J. Loux, *Metaphysics: A Contemporary Introduction*, 3rd ed., (New York, London: Routledge, 2006), 208.

conception must be entirely appropriated from A-series. This observation is nothing more than a logical result of definitions (1), (2) and (4). To arrive at this result, we need only reformulate (4) in the same terms as (1) and (2). An event can be defined as a single slice of time *t*, ranging over some three dimensional space, which comes into being and passes out of being as its tenses change. In other words:

(5)   Tensed Definition of 'Change' (TDC): An event *e*, occurring at time *t*, changes when the tense of *t* changes.

In B-series, an event is defined over a span of time, so there is simply no possibility of change. Change must be appropriated wholesale from A-series. All speech about time, then, is only meaningful in terms of A-series, and B-series treats time in an artificial manner which presupposes A-series. To complete the first step of the argument, then: it follows from (2) and (5) that there is change, but it does not follow from (1) and (5) that there is change.

1.1.2. A-Series Entails Contradiction

With the first step accomplished, McTaggart moves on to the second step. Because time is composed of the changing of events, it turns out that at some point in their careers all events must be all three of past, present and future. This seems like contradiction. A supporter of A-series (an A-theorist) might respond that no event exemplifies all three properties simultaneously, so there is no contradiction. McTaggart, however, anticipates this objection by observing that when we say a thing *x* has a property *P* or '*x* is *P*', the tenseless translation of what we are saying is 'in the present *x* is *P*'. Similarly, in the future, when *x* no longer has *P*, the translation of '*x* was *P*' is 'in the

future *x* is not *P*'; and in the past '*x* will be *P*' becomes 'in the past, *x* is not *P*'. The problem, for McTaggart, is that every past and future moment was once a present moment, so at each moment, past and future ascriptions can be made about *x*. These ascriptions, when broken down into tenseless language, will differ. Therefore, we are ascribing contradictory properties to *x*.

1.1.3. Time Does Not Exist.

Given these two steps, which bring both A-series and B-series to contradiction, McTaggart decides that according to his definitions, time and change are incoherent notions and do not exist.

1.2. Evaluation of McTaggart's Argument

It is unlikely that many people actually believe that time does not exist besides McTaggart. However, most of the responses serve to defend one of either A-series or B-series from attack, which has resulted in the fact that the overarching conception that McTaggart has imposed onto the debate does not receive a criticism. This overarching conception will be my target, and I will consider the claims of A-theory and B-theory as they bear on this goal. Furthermore, debate between A-theorists and B-theorists in current literature is essentially the debate between presentists and eternalists. Although A-series can be interpreted in a number of different ways, such as the notion that only two tenses exist and the third does not, or that all three exist but in different ways, the only live philosophical position in A-series is presentism, which is the contention that only the all existence is existence in the present. Just why this is the only live philosophical position will become evident later—for now we will assume it. B-series, on the other hand,

necessarily entails eternalism, which is the contention that all times exist in the same way. Therefore, from here on the discussion will be in terms of presentism and eternalism rather than A-series and B-series.

1.2.1. An Account of Change in B-Series

What I want to question, first, is the TDC; this definition is very strong and is accepted by McTaggart too quickly, for he ought to have at least considered alternate methods of describing change. Instead, he simply defines change in terms that will render A-series compatible with the definition and B-series incompatible with the definition. For McTaggart, in assuming that time describes the change of events, has also assumed that time is inherently tensed. But according to the definition of B-series, time is not inherently tensed! Clearly, McTaggart himself is guilty of attacking a straw-man.

The assumption that time is inherently tensed does not need to be made, though. In fact, change can be defined as the differences in spatial configuration that obtain between temporally contiguous moments. That is, change is the mere fact that at different points along the temporal axis, the matter scattered throughout space is arranged differently. Thus, change is a description of the differences between moments as a smooth function. Or,

(6) Non-tensed Definition of 'Change' (NTDC): An event e, ranging over times $\{t_1 \ldots, t_n\}$ and over some three-dimensional spatial curve, changes when the spatial curve at any time t_i, within e, differs from the spatial curve at t_{i+1}, where $t_{i+1} \leq t_n$.

This concept of change seems to me to be both scientifically sound and deeply intuitive. We often say that a surface changes, for example when I describe the topology of

Louisiana, I can observe that the landscape changes from south Louisiana to north Louisiana such that the ground goes from soft and marshy to firm and hilly. This description of change is true even if time does not exist. Therefore, change is not a purely temporal term, and it is inappropriate to define it in terms of events which are purely temporal. Of course, this fact does not prevent us from defining temporality as inherently tensed; rather, it prevents us from assuming that a concept of change is inherently tensed.

1.2.2. Is A-Series Contradictory?

Responses to McTaggart's argument should be relatively evident at this point. His reduction of B-series temporality to A-series temporality simply does not work, because we have seen that there is a second perfectly good description of time to be had. His claim that A-theory entails a contradiction also does not succeed. The argument is, simply, a vicious circle: First, McTaggart assumes a tensed definition of change; then, he reduces B-series to A-series based on this definition; finally, he claims that A-series entails contradiction when he tries to eliminate tenses, which are central to the definition of A-series. McTaggart tries to eliminate both B-series and A-series by defining each in terms of the other, after he has already defined change in terms of A-series. Or, to put the problem yet another way, McTaggart's definitions proceed thus: (a) Change is inherently tensed; (b) B-series is inherently non-tensed; (c) A-series is inherently tensed; (d) Anything inherently tensed is contradictory because it cannot be consistently described as if it were non-tensed. Therefore, B-series precludes change and A-series is contradictory. This argument is just hopeless.

1.3. Additional Arguments on Presentism and Eternalism

1.3.1. Special Relativity

McTaggart's argument aside, there are further (and better) arguments which defend eternalism and presentism against each other. Some of these deserve consideration. The first is that presentism is incompatible with Einstein's special relativity. Loux observes that special relativity suggests to us that there is no such thing as simultaneity because the rate of passage of time is related to the speed at which one is moving. Thus, there cannot be any privileged time. Clearly a presentist, who privileges the present, will have some difficulty explaining special relativity, which is scientifically proven to obtain. Loux seems optimistic that alternate explanation of the phenomenon is possible,[2] but it is not obvious to me how this would work. The most likely defense of presentism against this objection seems to be to extend the concept of relativity into ontology. That is, only the present exists and that which exists is relative to the entity presently experiencing. This, however, extends the entire debate about time into a debate about external versus internal reality, a subject to be covered much later in this essay.

1.3.2. The Problem of 'Now'

Consider:

(7)   It is nighttime now.

Should an eternalist interpret 'now' to mean '8:09 PM on Monday, November 17, 2008', this sentence will be true. However, it will only be true for a minute—that is, until it is 8:10 PM. Unless the eternalist can provide a tenseless translation of 'now' which makes

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[2] Loux, 222.

(7) true whenever it is nighttime, (7) cannot be adequately interpreted via eternalism. This

is a major problem for eternalism, because eternalists want (7) to be true whenever it is

nighttime. The proposed solution to this problem is the New B-Theory, by which (7) is

taken as a sentence-type, whose tokens, or instances, receive date-translations. The type

itself cannot be true, because it does not refer to a specific time; whereas, the tokens can

be true whenever it is nighttime, because there is a sentence-token for every moment at

which it is nighttime. This solution is actually a viable one, because, despite presentist

complaints, it is completely consistent with eternalism. An eternalist should not want (7)

to be literally true at all, because it is a dimensionally complex statement. That is, for an

eternalist, 'now' is the origin on a temporal coordinate system which treats a moving

system as static. In the type-sentence, 'now' is treated as fixed in the same way that a

moving body can be treated as fixed in physics. Just as a moving body is not literally

fixed, (7) is not literally true whenever it is nighttime.

1.3.3. Anthropocentrism

According to Loux,

> What I experience has the kind of reality that only what is going on now has. So in experience we are acquainted with the property of being present. By contrast, we directly experience neither the past nor the future. Instead, we remember the past, and we feel grief, regret, nostalgia with regard to what is past. We anticipate the future, we fear, dread, and hope for the future. And all these different attitudes are appropriate: they fit the ontological distinctions involved in the past, present and future.[3]

Presentists take this as the primary evidence that tenses are "objective features of time,

features that time would have even in a world without thinkers."[4] While the experiences

that Loux describes are undoubtedly irreducibly tensed, this fact does not point to the

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[3] Loux, 218.
[4] Loux, 217.

existence of tense outside the mind. The mere fact that we experience past, present and future does not carry those experiences into the world outside experience. Presentists may well continue to believe that the external world is inherently tensed, but to take our own attitudes as an indicator of this ontological status is to anthropomorphize the world itself. Not only is this a poor argument against eternalism, but it also provides ammunition for an eternalist to attack presentism. However, it is worth noting that the tensed human experience, though not indicative of a tensed world, is still problematic for the eternalist. An eternalist will need some tenseless account of experience, at the end of the day.

1.4. Assessment of the Presentism/Eternalism Debate

I do not find either presentism or eternalism, as discussed, to be superior to the other. Both of them do a good job of describing time, but both are subject to temporal descriptions that the other has difficulty accounting for. Descriptions of human experience are very difficult in eternalism, because experience seems to be inherently tensed. Similarly, descriptions of science are very difficult in presentism because data does not seem to care what the tense is. What this means is that both theories have something to offer concerning time, but which one obtains (if only one does) is underdetermined by the phenomena. We must, therefore, examine both the assumptions and the implications of each concept of time before we can come to a conclusion as to whether and which one obtains.

Prima facie, it seems to me that we ought to retain both conceptions, because, at least as far as human thought is concerned, they provide two different descriptions of the same thing, and each description states something true. The relevant way in which time is

tensed is that it always appears to be so to a human intelligence, for awareness is a fundamentally present-tense phenomenon. We are never aware of existing except in the present, and in the present, we can contemplate the future and the past, but to occupy the future or the past would be to make them present. Thus, time is dynamic at least for human awareness. Time is also static, however. This is so because scientific description of the world is tenseless, and we are certainly not willing to dispense with scientific description. Though it may be that only one theory can be true of the world outside experience, it seems initially plausible that presentism is true of the human mind, and eternalism is true of the world without respect to the human mind.

What we have not yet discussed, however, is that the concept of an event, for a presentist, is still vague. McTaggart suggests that an event is a single slice of time, but how much space is involved in an event? For an eternalist, an event is a space-time worm (a four-dimensional solid), but McTaggart does not specify how we are to classify an event spatially for the presentist. Commonsensically, we do not use the term 'event' to describe a single time-slice of the entire universe, so if the presentist believes she has captured a commonsense notion, then she must account for the finite spatiotemporal nature of events. In order to do this, however, we must first draw another distinction.

2. The Endurantism/Perdurantism Debate

Diachronic sameness, or sameness through time is a fundamental property of our concept of identity. In order to adequately characterize events in any theory of time, one must first have the tools to describe what it means to persist through time. Clearly, if I were to lose a limb tomorrow, something about me would have changed, so what remains

the same? Both eternalists and presentists have an account of how this is supposed to work.

In this section, we will examine the debate between endurantism, which is the presentist account of persistence through time, and perdurantism, which is the eternalist account of persistence through time. We will observe the features of endurantism which tie it to an ontology of abstract entities, and how these features correspond to the features of Alvin Plantinga's actualism. Similarly, we will observe the features of perdurantism, which tie it to an ontology of concrete particulars, and how these features correspond to the features of David Lewis' possibilism.

The debate will prove to be one that cannot be resolved through the standard means of argumentation, because the two sides have, in fact, adopted basic principles which are fundamentally opposed to each other. Specifically, the perdurantist has adopted the stance that all entities are concrete particulars, and the endurantist has adopted the stance that all entities unavailable to experience are abstract entities. We will show that these opposed views concerning both temporality and modality (or mode of existence) are two different versions of realism concerning entities whose existence we cannot, in principle, verify. Out of this, we will develop a maximally intuitive agnostic position, based on the fact that one needs not accept either the principle of abstract entities or the principle of concrete particulars.

2.1. Features of Endurantism and Perdurantism

2.1.1. Endurantism

The fundamental claim of the endurantist is that any given concrete particular

exists wholly and completely at every moment of its spatiotemporal career. Under this

view, diachronic sameness is interpreted as literal self-identity at different moments in

time. Because a concrete particular at t_1 is the same concrete particular at t_2 (given that it

exists at both times), the concrete particular cannot have temporal parts; for if the

concrete particular had temporal parts, it could be subdivided into a set of different

entities corresponding to its various temporal parts. We find, then, that endurantism is

associated with presentism: the absence of temporal parts suggests a privileging of the

present. In fact, this is a flat-out rejection of time as a dimension. The endurantist is not

willing to grant all moments in time an equal ontological status. The perdurantist is,

therefore, inextricably tied to presentism. Because there are no temporal parts, the

endurantist is also able to claim that there exists an appropriate way to delimit entities:

according to persistent spatial contiguity. That is, our delimitation of entities is not

arbitrary.

2.1.2. Perdurantism

Contrarily, the fundamental claim of the perdurantist is that it is impossible for

numerically one and the same concrete particular to exist at different times. Instead of

retaining self-identity over time at all costs, as the endurantist does, the perdurantist

prefers to take four-dimensional solids (space-time worms) as describing an object. Just

as the spatial dimensions of an object are infinitely divisible, so is the temporal

dimension infinitely divisible—objects have temporal parts for the perdurantist. It is

worth mentioning that infinite temporal divisibility seems no more problematic than infinite spatial divisibility, so we will leave it as a nonissue.[5] From this definition of identity, two corollaries follow: first the perdurantist is necessarily an eternalist, and second the identity of an object is an arbitrary ascription. The fact of infinite divisibility along all dimensions entails that there is no natural delimitation of entities, so all such delimitations are arbitrary. Thus, for a perdurantist, it is just as natural (though often less useful) to describe disparate spatial masses existing at different times as a single object as it is to describe continuous space-time masses as objects. Loux, for example, defines the object Athanasius as a term that conjoins the Big Ben from 1914 to 1916, Wembly stadium in 1954, and the top two-thirds of the Sears Tower in 1994.[6]

2.1.3. The Static and the Dynamic

We mentioned previously that eternalism is a static concept of time and that presentism is a dynamic concept. We are now in a position to elaborate this claim. The MDC tells us that change is at least a variation in the way things are. Or, to be more precise, change is a juxtaposition of the static and the dynamic. The way things are is what is static and the variation is what is dynamic. So what does this mean for the endurantist and the perdurantist? Well, it means that neither conception is fully static and neither is fully dynamic.

The eternalist believes that time is a static dimension with no privilege granted to any particular time. However, the eternalist, who is also a perdurantist, must grant that there is some sort of variation. For the eternalist, that variation is the definition of objects

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[5] Loux, 233.
[6] Loux, 238.

and events. Objects and events are nothing more than arbitrarily named space-time worms. As such, objects and events are infinitely divisible and therefore infinitely varied; varied enough that no two scientists will agree on exactly which names to give which space-time worms and which space-time worms are the most useful for naming. For the perdurantist, objects are dynamic and dimensions are static.

Contrarily, the presentist believes that time is a dynamic dimension, for the present is always changing as future flows into past. We observed in section 1.4 that the presentist concept of events and objects is vague, but we now have the resources to elaborate this concept. For the endurantist, objects and events are unchanging unities. The properties of these unities inhere in these objects and events for the duration of their spatiotemporal careers, and these properties never change. We find, then, that for the endurantist, objects and events are static and unchanging, while time itself is dynamic and changing. As a presentist, the endurantist believes that the concrete particulars do not change; rather, time changes and heralds with it those properties inherent to the concrete particular which are appropriate to whatever time it is. So I have the property of being in grade school when I am ten years old, and the property of being in graduate school when I am twenty-four years old. Both of these properties inhere in me, but they are not observable until their appropriate time has come.

2.2. Endurantism/Perdurantism versus Actualism/Possibilism

2.2.1. Possibilism

Loux compares endurantism to Plantinga's actualism and perdurantism to Lewis' possibilism. These two positions originally arose as metaphysical explanations of use of

logical modality. According to possibilism, there exist possible worlds which are just like our world, except things happen differently. There exists a world for every possible sequence of events. These possible worlds exist only as a set of concrete particulars, and our world (the *actual* world) is also interpreted in similarly materialist terms. When I say that I could have done otherwise, what I mean is that in some possible world, my counterpart (who is a different concrete particular from me) actually *does* otherwise. It is important to observe that when I say that I do not actually do otherwise, "actual" is a mere indexical. What makes this world actual is only that I am in it; whereas, for each of my counterparts, the "actual world" just means the world that he is in.

2.2.2. Possibilism and Perdurantism

Loux compares possibilism to perdurantism, about which there are five relevant points of similarity. First, Lewis takes all possible worlds and their contents to be real, just as the perdurantist does all times and their contents. Second, Lewis' removal of preference for the "actual" is parallel to the perdurantist's removal of preference for the "present". The relevant expressions ("actual" and "present") are treated as indexicals which can only be used accurately by those in that particular world or that particular time. Third, Lewis' counterpart theory is parallel to the perdurantist's position that preservation of identity, wholly and completely, at different times is impossible (because no configuration of matter is ever exactly the same at any two times). Counterparts are complete and different from each other in the same way as three-dimensional time-slices of a single person are different from each other. Fourth, just as modality is expressed in terms of numerically different yet related entities from other worlds, so also persistence through time is characterized as a relation between the contents of different times. Fifth,

just as a modal individual, for Lewis, is an aggregate of the various counterparts, so also

is the temporal individual is an aggregate of the various time-slices of the individual.

2.2.3. Actualism

Actualism is a response to Lewis' possibilism. The motive for the response is the

intuition that the actual world is the only world that exists; indeed, many balk at Lewis

willingness to conjure infinite universes into existence. For Plantinga, a possible world is

nothing more than a maximally comprehensive state of affairs—an abstract entity that

exists in the actual world. Plantinga is thereby able to claim that when I say that I could

have done otherwise, I am talking only about myself the entire time, rather than

comparing myself to a counterpart. Plantinga insists that transworld identity is an

intuitive phenomenon that must be preserved.

2.2.4 Actualism and Endurantism

The parallels between actualism and endurantism themselves parallel the parallels

between possibilism and perdurantism. Accordingly, they are five. First, Plantinga refuses

to acknowledge the existence any objects not in the actual world, just as the endurantist

insists that only what exists now really exists. Second, Plantinga holds that the only

ontologically significant possible world is the actual world, just as the presentist holds

that the only ontologically significant time is now. Third, modal claims are claims about

the specific individual involved in the claim, not claims about some similar individual.

Similarly, for endurantists, a literal identity is preserved through time, so temporal

identity claims treat persons as identical at different times. Fourth, modal language does

not necessitate ontological commitments to concrete particulars outside the actual world,

just as temporal language does not necessitate ontological commitments to concrete particulars outside the present time. Fifth, there are no modal parts out of which to build a modal aggregate-person. Likewise, for the endurantist, there are no temporal parts out of which to build a temporal aggregate-person.

2.3. The Change in Properties Argument: Revealing Further Similarities

2.3.1. The Argument Itself

Because their position is the less commonsensical of the two, perdurantists are initially on the defensive side. Therefore, it is they who provide arguments against the endurantist position, and to which the endurantist must subsequently respond. There are two such arguments, the first of which is the argument from changes in properties. Consider the example of Henry, who tans in the summer and pales in the fall. Based on this example, the argument goes thus:

(8) Henry in the fall must be numerically identical to Henry in the summer.

(9) Henry in the summer has the property of being tan; whereas, Henry in the fall has the property of being pale.

(10) Indiscernability of Identicals: For any two things, A and B, that are numerically identical, for any given property, φ, φ is a property of A if and only if φ is a property of B.

(11) Harry in the fall is not numerically identical with Harry in the summer.

(9) is obviously true. (8) is the standard endurantist claim, so it cannot be eliminated. Therefore, the only method by which the endurantist can combat this argument is by relinquishing (10), the principle of indiscernability of identicals. This argument, Loux observes, is actually imported from Lewis' arguments against actualism. Lewis makes the

very same argument against transworld identity. We find, then, that trans-time identity is subject to the exact same problems.

2.3.2. Endurantist Response to the Change in Properties Argument

The endurantist solves the problem in exactly the same way as the actualist: by introducing time-indexed properties. At every time, t, I am a composite of all my time-indexed properties, but the only ones evident at t are the ones indexed to t. In this way, the endurantist is able to reinterpret the principle of the indiscernability of identicals. In order for Harry to have the same properties at different times, he must always have all the properties that he will ever have. That is, Harry has the property of being pale in the fall and tan in the summer *at the same time*. There is no contradiction, because it is never both fall and summer at the same time, so Harry need not be both pale and tan. Similarly, all persons have the property of being an infant when they were born and the property of being wrinkly when they are 70 (should they reach that age). Just so with property descriptions in actualism: Plantinga is able to speak of transworld identity by the fact that he has made all possible worlds exist as states of affairs that do not obtain. Both positions privilege one perspective over another (present over past and future, actual over possible), thereby quantitatively differentiating their being.

Endurantists counter Lewis' argument in a two-fold manner. First, endurantists allow the perdurantist to claim that properties are not fundamentally time-indexed. Endurantists, being presentists also, will then claim that for them properties are *also* not inherently time-indexed. They are simply tensed, with the present receiving favor.

Second, they respond that because perdurantists adopt eternalism, they cannot describe an object's identity *without* time-indexed properties.

But this response simply does not work, for three reasons. First, there is no reason to assume that either side must define time-indexed properties in terms of non-indexed properties. Second, there is no effective difference between tensed properties and time-indexed properties, so the endurantist must still rely on time-indexed properties. Third, the perdurantist describes change over time in an inherently different mode from the endurantist. Where the endurantist claims that the same thing exists at all times, the perdurantist claims that there is one thing of which all times are a piece. So perdurantist change over time is more like the sort of change that occurs on a landscape as one scans it panoramically. For a perdurantist, change is a smooth curve along the surface of a four-dimensional space-time object. If the endurantist will not grant the perdurantist this definition, then the endurantist is arguing in bad faith.

It is this argument that demonstrates the full dependency that endurantists have on presentism and that perdurantists have on eternalism. In order for an endurantist to claim that an object is the same over time and still account for change, she must be willing to grant that the object has all its properties presently, but because these properties are time-indexed, they must wait their turn. At this point, it is safe to say that eternalism becomes subsumed into perdurantism, and presentism becomes subsumed into endurantism.

2.4. The Emergent Parallel

2.4.1. What Is Happening Here?

The careful reader will have observed that there seems to be more going on here than Loux tells us. We have seen that all argumentation between sides of the debates is argumentation in bad faith, regardless of whether the argument occurs in presentism/eternalism, endurantism/perdurantism or actualism/possibilism. None of these thinkers seems willing to grant the assumptions of the other side and argue against the position internally. At the same time, none of these thinkers seem willing to attack any particular assumption that the other side has made. Why is this?

The answer begins with the observation that there is a *perfect incompatibility* between each opposed set. The actualist can make his point all day and still never even come close to convincing the possibilist. Every single point that side A makes against side B is formulated in terms that assume the side A in the first place. This is an paradigm case of an argument occurring on the *wrong level*. We have seen clearly that each side is self-consistent granted its own definitions. The argument should, then, occur on the level of definitions. So which definition is the true matter of contention? This will require some digging.

2.4.2. The Privileging of 'Here' and 'Now': Quality or Quantity?

The actualist believes that the only world that exists is the actual world, and all possible worlds are just abstract world-indexed maximally comprehensive states of affairs in the actual world. Similarly, the endurantist believes that the only time that exists is the present, and all other times are just abstract time-indexed propositions existing

eternally in the present. On the other hand, the possibilist believes that all possible worlds exist in the same way without privilege. Similarly, the perdurantist believes that all times exist in the same way without privilege.

What is happening here is that the actualist/endurantist side wants to privilege the actual world and the present time whereas the possibilist/perdurantist side wants to eliminate all privileging. But what does it mean to privilege times and worlds? There are two possible answers to this: either there is a quantitative ontological difference between times and worlds or there is a qualitative difference between times and worlds. For the quantitative actualist/endurantist, being is divisible into levels, and the *here* and *now* are taken as the levels with the most being or the greater being. This answer is the less likely of the two, because very few philosophers are willing to accept the old Augustinian concept of amounts of being.

The fact is that the actualist/endurantist adheres to a qualitative ontology: the *here* and *now* are privileged insofar as they are a different *type* of being, or, more specifically, a more *fundamental* type of being. It is *as* present that the past and the future exist, just as it is *as* actual that possible worlds exist. This much is evident by the fact that the endurantist reduces past and future to a set of propositions that presently exist and describe time-indexed properties; and by the fact that the actualist reduces possible worlds to states of affairs in the actual world.

2.4.3. Temporal and Modal Realism

So how does one evaluate these parallel debates? Well, it turns out that there is an even deeper assumption that *all four* positions maintain. They all maintain that there is

something in experience that demands that these multiple dimensions of possibility and time *do* in fact exist, somehow. They are all realists about either time or modality. The question of how they exist, then, splits into (a) equal existence on the possibilist/perdurantist side or (b) divided privileged and dependent existences on the actualist/endurantist side. The possibilist/perdurantist believes that temporal and modal dimensions exist as concrete particulars. The actualist/endurantist, on the other hand, believes that concrete particulars are three-dimensional, not five-dimensional. For the actualist/endurantist, these dimensions still exist—as abstract entities rather than as concrete particulars. But one might not accept the premise that all these different dimensions necessarily exist at all. Such an agnostic about time and modality would not endorse any of these four positions.

2.4.4. Temporal and Modal Agnosticism

So, *should* we be agnostics about the dimensions of time and possibility? The problem with being realists about these dimensions is that our experience is limited to the *here* and the *now*, so there is really no way to verify that there exists such a place as *there* and *then*. A modal or a temporal realist might be inclined to argue against such an agnostic by analogy: because we can return to spatial regions within this world, we are comfortable claiming that spatial regions in this world all exist even when there is no way to experience them. Therefore, it is would be mere prejudice to refuse to grant an ontological status to different times and/or worlds because of the fact that there is no way to experience them. But this argument is invalid. One can create dimensions out of virtually anything that varies, and by similar comparison to the spatial dimensions, one could always argue that these dimensions really exist: *reductio ad absurdum*.

But the argument from dimensional prejudice is *not* an argument against agnosticism. As a matter of fact, it is an argument most effectively used by the possibilist/perdurantist against the actualist/endurantist. However, the actualist/endurantist has a powerful reply: there is no evidence that these dimensions exist, so we ought not posit anything more than the present and the actual. But the actualist/endurantist who claims this shoots himself in the foot. For such a claim would include existence as abstract entities. Thus, we find that these two arguments, taken in conjunction, amount to an argument for agnosticism.

An agnostic would further respond that the epistemic evidence does not warrant belief in entities whose existence cannot be verified either experientially or argumentatively. The possibilist/perdurantist is willing to multiply time and modality into infinite dimensions of concrete particular entities that really exist. In perfect juxtaposition is the actualist/endurantist who is willing to multiply time and modality into infinite dimensions of abstract entities that really exist. The agnostic questions the need to multiply time and space into really existing entities at all. Though these things may well exist, there is really no strong justification for believing them.

2.4.5. Separating Temporality from Modality

Intuition tells us that it is preferable to preserve realism about time but not realism about possible worlds. One can find either endurantism or perdurantism compelling without believing either of possibilism or actualism. In other words, it is to the benefit of each of the agnostic, the endurantist, and the perdurantist to distance themselves from realism about modality and retain realism about temporality. The way to recreate this

divide between modality and temporality is to observe the varying degrees of empirical evidence for all three of spatiality, temporality and modality. We have very strong empirical evidence for spatial realism because we can return to the same space over and over. We have circumstantial evidence for temporal realism because we can experience different times, though we cannot return to any of them. We have absolutely no empirical evidence for modality, because we cannot visit possible worlds in any way.

So intuitively we find ourselves as realists about spatiality, anti-realists about modality, and somewhere in between about temporality. This suggests (though it does not prove) that the motivations for realism about temporality only take us as far as agnosticism. Indeed, most of us seem to have no motivation at all to be even agnostics about modality – both pluralities of possible entities seem rather absurd.

Thus, because realism about modality and realism about temporality seem to rely on the same arguments, it is apparent that the only difference of evidence between the two is empirical. This motivation may take us all the way to temporality-realism or it may not. The difference in weight given to this fact is the basis for the differing intuitions on whether the future and the past exist at all. Our preliminary conclusion on the endurantism/perdurantism debate, then, is that decision between the two comes down to a matter of taste.

2.5. The Change in Parts Argument

This conclusion is not satisfying. The whole point of examining the assumptions of these incompatible theories was to find the reasons for accepting one or the other, but to claim that the reason is a matter of taste is just to say that *there is no reason*. There is,

however, another strong argument that the perdurantist typically uses against

endurantism. It is this argument that reveals the motives behind endurantism and

perdurantism.

2.5.1. The Argument Itself

Let us define 'Descartes' as Descartes himself, and 'Descartes-Minus' as the

entirety of Descartes, except his left hand. Let us suppose that at time t, Descartes loses

his hand (violently, I guess). We can now split Descartes and Descartes-Minus into two

different entities each: Descartes-before-t, Descartes-after-t, Descartes-Minus-before-t,

and Descartes-Minus-after-t. Loux presents the argument concisely:

(12) Descartes-before-t is numerically identical with Descartes-after-t.

(13) Descartes-Minus-after-t is numerically identical with Descartes-Minus-before-t.

(14) Descartes-after-t is numerically identical with Descartes-Minus-after-t.

(15) Descartes-before-t is numerically identical with Descartes-Minus before-t.

(16) Descartes-before-t is not numerically identical with Descartes-Minus-before-t.[7]

(12) is, once again, the standard endurantist claim (compare to (8)). (13) is an extension

of this claim to a new entity, Descartes-Minus. (14) is true by the identity of

indiscernibles. (15) is taken to be true based on identity substitution. And (16) is true

based on the definitions of Descartes and Descartes-Minus.

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[7] Loux, 249-50.

2.5.2. Chisholm's Objection

Unless the endurantist can dismantle this argument, she is forced to admit that her theory leads to contradiction. Loux presents four different objections to this argument, each of which deserves some attention.

Roderick Chisholm claims that there are two types of entities: the primary and what we will call the secondary. Primary entities remain the same in a rigorous sense: none of their parts ever change. Secondary entities, on the other hand, interchange pieces regularly, and can only be said to remain the same in a loose sense. Chisholm proceeds to argue that Descartes himself is a primary entity whereas Descartes-Minus is a secondary entity, because there is only one human person that is Descartes, and that is Descartes himself, not the arbitrary delimitation of his body minus a hand. Thus, (14) is false.

Tangentially, Loux observes that Chisholm's response is intended to be consistent with materialism. He believes that under this view, primary entities simply have certain parts without which they would no longer be primary entities. He suggests the ridiculous notion that persons are nothing more than a tiny object in the brain that is in every person.[8] (The Cartesian pineal gland returns!)

The first and most important problem with his argument is that Loux's Chisholm has not defined what it is to be a primary entity. Do animals count as primary entities? Trees? Houses? Loux does not even suggest what sort of ontology we would be working with, but it is clear that primary entities do not have arbitrary demarcations. Without probing the issue deeply, it appears that Chisholm will need something like an

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[8] Loux, 252. Observe that Loux includes the suggestion as a parenthetical with no criticism.

Aristotelian soul in order to distinguish between material objects in this manner. That is to say, Chisholm is already working within a familiar and very developed ontology. In order to convince a perdurantist with this objection, Chisholm is first going to have to convince said perdurantist that souls exist.

So what's the big deal? Many philosophers (and many well-respected ones) believe that there are souls, so perhaps a great number of these are perdurantists. Chisholm, however wants to include all camps, so he includes a materialist version of his theory. This materialist version, however, clearly does not work, and this is the subtle and more dubious problem with Loux's Chisholm. If Chisholm is going to claim that there is a material part of an object that is essential to the object, then he will have to admit that Descartes-after-t and Descartes-Minus-after-t will both either have it or not have it. If the part is a tiny object in the brain, then both have the object, and Chisholm's objection fails. If the part is in the left hand, then neither have it, and Chisholm's objection still fails. Materialism is quite obviously incompatible with the essentialism that Chisholm is endorsing.

So why is this dubious? Well, the objection to the materialist version of Chisholm's essentialism is so obvious that it is difficult to understand why Loux included it at all. No one includes obviously bad arguments without criticism. One must wonder why Loux and Chisholm do not just bite the bullet and be happy that they have an argument against the perdurantists who believe that souls exist. The problem is that perdurantists are not likely to believe that souls exist. Remember, the perdurantist holds that objects are nothing more than space-time worms arbitrarily delimited. He also holds that we typically delimit these objects in whatever fashion is most convenient, but there is

no other reason to do so. The perdurantist, in other words, is characteristically a nominalist also. It seems that Loux is trying to pull a fast one.

2.5.3. Geach's Objection

Geach claims that in order to say that '*a* is the same as *b*' we need more information about what we mean by 'same': the same what? He answers this question by observing that the identity conditions for two things depend on what those two things are. Saying that I am the same person over time is something different than saying that my cat Steven is the same cat over time. Thus, Descartes is the same human being before and after he loses a hand. But Descartes-Minus, being nothing more than a certain clump of matter, is not a human, so Descartes-Minus is not the same human being before and after losing a hand. Indeed, Descartes-Minus is not a human being at all. Therefore, Geach rejects (13).[9]

This description of identity is indistinguishable from essentialism. It is the same as the claim that Steven has a cat-essence and I have a human-essence. To be self-identical in a human way is just to continue to have a human essence. Again, the classification of this argument is so obvious that it is difficult to believe that Loux does not recognize it. We have already made it clear that the perdurantist is not likely to buy into essentialism, but, for whatever reason, Loux seems to be trying to slip essentialism in through the back door.

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[9] Loux, 253. Observe that Loux never refers to Geach's position as a form of essentialism.

2.5.4. Appeal to Time-Indexed Properties

Loux next introduces his own objection to the change in parts argument. If we assume that to be identical is to be historically identical, then because Descartes-after-t and Descartes-Minus-after-t have different histories, they are not the same entity. Thus, (14) is rejected again.

I don't know why Loux doesn't say it, but this is really just a reintroduction of time-indexed properties. To claim that only the present exists and that all objects are self-identical over time is to claim that their properties are time-indexed. All this objection is really saying is that Descartes-after-t and Descartes-Minus-after-t have a different set of time-indexed properties. What is interesting about this approach is that, unlike the previous two, it does not seem to directly necessitate essences. However, one must remember that the time-indexed properties whose time-index is not the present will not be evident in the object. Such properties are stored in eternal propositions where they wait for the time to which they are indexed to express themselves in the object. Therefore, time-indexed properties must be abstract entities if they are to exist at all.

This objection heralds some serious metaphysical debates into the argument. Loux presents it as a simple objection, but as soon as one claims that a difference in history produces a difference in identity, one must also claim determinism. That is, if I had done otherwise, then I would no longer be me. This objection does not yet beg the question of free-will against Loux, though, because there is a way to avoid this determinism. If one were to adopt Plantinga's actualism, one would find that transworld identity allows endurantism to obtain and it allows Descartes to retain his freedom. In any case, it is clear that this objection is another breed of essentialism.

2.5.5. Van Inwagen's Response

Van Inwagen simply denies that Descartes-Minus is an entity at all. He rejects the delimitation of matter into such arbitrary entities (clearly, he would be disgusted by Athanasius), and thus rejects Descartes-Minus as an entity. Accordingly, (13) is deemed as false.

It is difficult to understand why exactly van Inwagen believes that there is no such thing as an "arbitrary undetached part" such as Descartes-Minus, and Loux does not help relieve this difficulty.[10] Nevertheless, this is Van Inwagen's position. The reader is left to assume that the issue Van Inwagen takes with arbitrary undetached parts is that they are 'arbitrary'. That is, Van Inwagen appears to believe that there are proper parts of an object. A perdurantist might suggest, here, that perhaps Descartes is wearing an earring. Is the earring an arbitrary undetached part of a non-arbitrary undetached part? If it is arbitrary, then Van Inwagen must explain why a hand is an arbitrary undetached part and an earring is not. That is not to say that such an explanation is impossible. On the contrary, it is easy to explain why it is that Descartes' hand is an arbitrary undetached part and his earring is not: it is part of Descartes' essence to have a left hand, but it is not part of his essence to have an earring. Once again, essences lurk just around the corner.

2.5.6. A Plausible Objection?

Loux ends his chapter on the endurantism/perdurantism debate with these four objections, but he does not provide any serious criticism of them. As the minimal criticism in this essay has shown, these objections all reduce to a single objection that the change in parts argument does not respect the essence of Descartes. Of course, this is not

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[10] Loux, 255.

to say that these objections are implausible; on the contrary, they are all entirely plausible. However, their plausibility rests directly on the plausibility of a theory of essences.

2.6. A Tentative Solution

2.6.1. The Impasse

Over the course of the discussion about perdurantism and endurantism, I believe I have made it evident on numerous occasions that this debate takes is roots in prior debates in metaphysics, ranging from metaphysical realism, to essentialism, to the identity of indiscernibles, even to free-will via Plantinga's actualist modality. Within the endurantism/perdurantism debate there are numerous direct dependencies on various questions located in disparate regions of the metaphysical ocean. And yet, in spite of all these dependencies, perdurantists and endurantists still cannot reach consensus. What does this mean? Quite simply, it means that endurantists and perdurantists are located on separate islands with no possibility of a bridge. No matter which metaphysical issue the endurantist brings to bear on the argument, the perdurantist finds herself in direct opposition to the claim being made, carrying a plausible alternative couched and waiting to strike. And similarly for the endurantist.

Clearly, we have an ideological impasse on our hands. At this point, it is safe to say that we have gotten to the bottom of matter concerning the grand motivation for either endurantism or perdurantism. What began as a harmless argument about the nature of time has turned into a debate whose sides are perfectly balanced with hefty loads of metaphysical structure. The endurantism/perdurantism debate is clearly a debate that is

subject to prior debates of metaphysics. Most philosophers have bigger fish to fry than time. So it should be no surprise that a philosopher's stance concerning time is entirely dependent upon his stance concerning essences and the realism/nominalism debate.

Even further, the similarities across the debate for both perdurantists vs. endurantists and for possibilists vs. actualists lead one to wonder what exactly the effective difference between the two opposing sides *is*. Where one side posits a series of abstract entities, the other side posits a series of concrete particulars. Where one side posits time- and world-indexed properties, the other side posits time-and world-indexed objects. Essentially, when a philosopher holds one of any two correlate variables constant (such as the opposed stances on indexicals and entities), the other must vary.

So why should one adopt one side rather than the other? This amounts to the question of what it is that really separates the two in the first place. As we have discovered, neither camp can be adequately motivated against the other, which suggests that there is a difference in fundamental principle. That is, one side adopts a certain principle as basic, while the other side adopts a different principle as basic. Based on the shape that these debates have taken, it appears that the relevant principles taken as basic are the principles as to which types of entities are preferred. Simply, the actualist/endurantist claims that it is better for there to be abstract entities; whereas, the possibilist/perdurantist claims that it is better for there to be concrete particulars. It is reasonable to expect that, should we examine these two principles, it will be found that neither bears the rational force to undermine the other. That is, if I believe one principle, familiarity with the other principle will affect my beliefs in no way. In point of fact, some philosophers support the principle of abstract entities and some philosophers support the

principle of concrete particulars. We can be sure that whatever the motivation for acceptance of these principles might be, it is neither *a priori* nor *a posteriori*. That is to say, acceptance of one principle versus the other is, as we had previously suspected, a matter of taste. The realist camp, then, splits into two further camps: those who accept the principle of concrete particulars and those who accept the principle of abstract entities.

2.6.2. The Solution

And yet, despite all of this, there exists a plausible solution. The endurantist's grand insight is that all experience of time occurs in the present, and we who have this experience claim self-identity over time. This intuition is simply impossible to deny. The perdurantist's grand insight is that experience does not determine existence. It is anthropocentric to claim that only the present exists for the mere fact that it is the only time we experience. The agnostic's grand insight is that the only things that must exist *a priori* are the actual world and the present time. Thus, regardless of whether they occur in the guise of concrete particulars or in the guise of abstract entities, all existence claims about past, future and modality are indeterminate both *a priori* and *a posteriori*.

Therefore, should we be inclined to adhere to all these intuitions, we would end up combining elements from all three perspectives. First, we would take the perdurantism to be true of the entire world except for minds (for minds exist only in the present). Second, we would take endurantism to be true of only minds (for, again, minds only exist in the present). Third, we would take an absolutely agnostic position on Lewis' possible worlds. Fourth, we might be able to maintain that something recognizably similar to

actualism is true of minds (for, it is only minds that experience modality and freedom). Call this a plausible agnostic position motivated by intuitive pragmatism.

3. The Realism/Anti-Realism Debate

We have discovered that the debate between endurantism and perdurantism is an opposition between two ontological principles, each taken as basic by its respective camp. That is, realists are of two breeds: those who accept the principle of concrete particulars and those who accept the principle of abstract entities.

In 2.4.4, we outlined a debate between realists and agnostics which further divides the possible camps concerning ontology. In this outline, we had opposed realists about temporality and modality to agnostics about temporality and modality; however, there is a yet another candidate camp for belief about temporality and modality: anti-Realism. In fact, as our discussion in 2.6.1 suggests, Realism includes far more than just temporality and modality. For the Realist,

> "The world consists of objects whose existence, nature and relations are fixed independently of what we happen to think, feel, or desire. We, in turn, form beliefs and make statements about those objects. Those beliefs and statements are representational: each represents the world or some sector of it as being some way or other."[11]

Simply, the Realist believes that there exists an external world and that we can know it.

The anti-Realist, on the other hand, maintains that "what we talk about and think about – 'the world' – is somehow tinged with mentality, that it is a structure that is constituted, in part at least, by the conceptual tools we employ in carrying out our inquiry."[12] Because, again, the Realist takes himself to be presenting an intuitive position,

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[11] Loux, 260-1.
[12] Loux, 260.

it is the anti-Realists whose arguments against the Realist really start the debate. Loux presents the arguments of three different anti-Realists: Michael Dummett, W. V. Quine, and Hilary Putnam.

In this section, we will examine the anti-Realist arguments presented by each of these three philosophers, and discover that the anti-Realists and Realists hit the same wall that the endurantists and perdurantists hit. The arguments on both sides serve only to show that the evidence does not support belief in either Realism or anti-Realism. Therefore, those who adopt these positions have already adopted respective principles of Realism and anti-Realism, and out of these principles they have built their positions.

3.1. Dummett's Anti-Realism

3.1.1. Explicit and Implicit Knowledge

Dummett's argument against Realism is a *reductio ad absurdum* which begins with an assumption of what he takes to be the Realist position. For Dummett, the Realist claims that to understand the meaning of a statement is to know which state of affairs is that statement's truth condition.[13] With this assumption in mind, then, Dummett draws a distinction between what he calls explicit knowledge and implicit knowledge: explicit knowledge is knowledge that can be verbalized. This amounts to the colloquial truism that one does not really know something unless one can teach it. In any case, to be able to demonstrate knowledge by description is to have explicit knowledge. Thus, any knowledge that is not explicit is implicit, such as the knowledge of how to ride a bicycle.

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[13] Loux, 267.

Let us say that a speaker claims to understand a statement *S*. She must show that understanding either through *S* itself or through another statement *S′*. But if she merely repeats *S*, we wouldn't say that she had any understanding of the statement, so it must be through *S′* that she has understanding of *S*. But then how do we know that she understands *S′*? This understanding can come from *S* or from a third statement, *S″*. She must still support whatever statement she uses with some other explanation of understanding. Thus, Dummett demonstrates that if we try to obtain explicit knowledge of all statements, then we are stuck with either circularity or regress. Therefore, we necessarily understand some statements implicitly. But because states of affairs are nothing more than a collection of statements, then we cannot have wholly explicit knowledge of states of affairs.

3.1.2. The Manifestation Argument

This is not yet a problem. Dummett thinks that so long as the Realist can find some way to demonstrate implicit knowledge, such a Realist is safe and knowledge of the external world can be had. Loux observes that implicit knowledge is often demonstrated behaviorally, as when we assent to the statement

(17) Grass is green,

whenever the grass is green. However, there are some statements that we cannot demonstrate knowledge of either behaviorally or explicitly, such as

(18) Magenta was Charlemagne's favorite color;
(19) A city will never be built on this spot;

(20) If Clinton had not been elected, the US would have fallen into recession.[14]

Dummett describes statements like (18)-(20) as undecidable in principle. These are examples of statements about inaccessible regions of space-time, statements about infinity, and statements about modality, respectively. These three types of statements Dummett labels undecidables. He notes that if we are willing to claim understanding of undecidables in spite of the fact that we cannot demonstrate any sort of knowledge of the truth conditions of these statements, then we are willing to claim that there are private epistemic states in which knowledge is accessible only to the person privy to these states. But, for Dummett, it is incoherent to claim that a person has knowledge whose existence is impossible to verify. Indeed, this is usually the sort of thing that we call an opinion. Therefore, the Realist position entails an unintelligible epistemic claim.

3.1.3. The Acquisition Argument

In addition to the Realist's inability to formulate any demonstration of knowledge of undecidables, the Realist cannot account for the acquisition of knowledge of undecidables. Our method of learning language involves assenting to statements in the appropriate situations. This is especially true of implicit knowledge, but, for Dummett, it is also true of explicit knowledge. Nevertheless, in order to acquire such an understanding, one must be able to get into a position to assent to the statement in the first place. No one will ever be able to get into a position to assent to (18)-(20) in the appropriate situation (that is, the situation in which one of them demonstrably obtains), so no one will ever be able to acquire knowledge of them.

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[14] Loux, 268.

The final step in both of these *reductios* is the observation that it is absurd to claim that we do not understand statements like (18)-(20). The fact is that we want to preserve our ability to speak meaningfully about inaccessible regions of space-time, infinity and modality. Dummett uses this as evidence that the truth-conditional theory of meaning on which the Realist relies is an unsatisfactory theory of meaning.

3.1.4. Dummett's Epistemic Theory of Meaning

> Dummett thinks that the standard or received theory of meaning has insuperable epistemological problems. He thinks, however, that an epistemic theory of meaning avoids those problems. The central theme in Dummett's attack on the truth-conditional theory is that linguistic understanding must be a practical skill that has a public manifestation; but the capacity to recognize the sort of thing that would provide evidence or support for a statement is, he thinks, a skill of just that sort; and that capacity is precisely what linguistic understanding comes to on an epistemic theory[15]

The basic principle of Dummett's epistemic theory of meaning is that to understand a statement is to recognize the sort of things that would count as evidence for the statement. This allows the knower to be able to grasp undecidable statements without either explicit knowledge or a private epistemic state.

An epistemic theory of truth follows closely behind Dummett's epistemic theory of meaning. What is subject to truth-value is just what is subject to conclusive justification. But, then, undecidables would have no truth-value, because they cannot be conclusively justified. Thus, the anti-Realist must be prepared to relinquish the Principle of Bivalence. Indeed, for Dummett, acceptance of the Principle of Bivalence is the litmus test of Realism: acceptance indicates Realism, rejection anti-Realism.

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[15] Loux, 269.

Dummett's theory of truth can now be easily exported into metaphysics: we have facts only where we have truths. There is a fact that *P* if and only if it is true that *P*. But the world is just a totality of facts, so is if is not true that *P*, then *P* does not describe anything in the world. Because Dummett's truth is defined epistemically, epistemology is transported all the way to the world itself.

But, Loux's Realist will ask, what exactly is the difference between 'what counts as evidence' and 'truth conditions'? In fact, Loux observes, Dummett begs the question but does not answer it.[16] Consequently, Dummett's anti-Realism is no more plausible than the Realism he purports to displace. Unless Loux's Dummett is a straw-man, this position just will not work.

3.2. Quine's Anti-Realism

3.2.1. The Radical Translator

Quine's anti-Realist attack begins with a thought experiment. Suppose a radical translator were to translate a language about which he had no prior knowledge. Such a translator would rely entirely on the behavior of the native speakers of this new language for his translation. Suppose also that the word 'gavagai' is found to be associated with rabbits. So what does 'gavagai' mean to our native speaker? It could mean undetached rabbit part, instantiation of rabbit-hood, rabbit time-slice, etc. How do we determine which of these the native speaker intends?

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[16] Loux, 271.

3.2.2. The Inscrutability of Translation

We need to ask more questions of our native speaker. But this is problematic: if we were to ask more questions, we would need to translate more words. But the meanings of any other words that we translate behaviorally are equally indeterminate to us. In order to determine the meaning of any given word in a language, we would need some words that we knew would be fixed in meaning, but this is impossible to secure. Thus, the meaning of any word within a given language is relative to the other words in the language. Therefore, "there is nothing in the native behavior to fix the referential force of the native term 'gavagai'. Different and incompatible accounts of the reference of the term are all equally compatible with the totality of behavioral evidence available to the linguist."[17]

Quine concludes from this that translation of any language assumes a background language whose meanings we import into the translated language. Because of this inscrutability, there is no matter of fact about which of these translations (viz. rabbit, instantiation of rabbit-hood, rabbit time-slice, etc.) is the true reference of the term 'gavagai'. This inscrutability is evident even in my thought about the meaning of my own sentences. Thus, reference fixing is always in reference to a background language. Quine holds, nevertheless, that this inscrutability is not a threat to the possibility of cogent thought.

It is important to note that Quine's alternative to the view that there is a word-world relationship is unclear. Surely *something* is required in order to preserve the

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[17] Loux, 275.

cogency of language and thought. Quine claims that it means that our words and thoughts do not reach out to a mind-independent reality.

For Loux's Quine, it is a mistake, then, to expect a non-relative answer to the question "What does that person mean by the term '*T*'?"[18] Thus, the semantical work done by keeping the reference of a background language fixed is analogous to the mathematical work done by fixing a coordinate system. In this case, our questions and answers all make sense, but only with reference to the background language used. We can conclude that Quine's anti-Realism ultimately holds that the question "what is there?" is nonsense. The attentive reader will note that this is a familiar argumentative move. Recall that the perdurantist and the possibilist both suggest that the spatiotemporal orientation of experience is merely a co-ordinate system used as a backdrop for the experience itself. The possibilist takes the denotation 'actual' as locating the origin of the modal coordinate system at our own world; the perdurantist takes the denotation 'now' as locating the origin of the temporal coordinate system at the moving reference-point called the present; and, finally, the linguistic anti-Realist takes the denotation 'reference' as locating the origin of the linguistic coordinate system at the background language used for translation.

One must be careful not to construe Quine's inscrutability as broader than it is. The varying definitions of 'gavagai' all refer to the same concrete particular—the rabbit. What they disagree about is not the object in experience, but the interpretation of what the object is. That is, the various interpretations of 'gavagai' are really just the various ontological commitments that a description of what a 'gavagai' is might entail. The

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[18] Loux, 277.

inscrutability of translation, then, is actually an inscrutability of ontological commitment, or metaphysical knowledge.

3.3. Putnam's Anti-Realism

Putnam can be viewed as expanding Quine's restricted anti-Realism about ontological reference to an anti-Realism about any sort of specific evidence at all. Putnam intends to retain the same epistemological theory of meaning that both Quine and Dummett support, but he wants a more drastic anti-Realism than Quine and Dummett describe. For Putnam, the native speaker might be referring to a rabbit, an instantiation of rabbit-hood, an undetached rabbit part, etc., but he might also be referring to cherries or trees, or ontological variations thereof.

3.3.1. The Cat* and the Mat*

Like any good argument, Putnam's argument begins with a set of definitions:

(21) A-type situation obtains if: (a) Some cat is on some mat, or (b) some cherry is on some tree.

(22) B-type situation obtains if: (a) Some cat is on some mat, or (b) no cherry is on any tree.

(23) C-type situation obtains if: No cat is on any may.

Putnam uses these terms to define two new terms: 'cat*' and 'mat*'.

(24) An object, x, is a cat* if: (i) An A-type or a C-type situation obtains and x is a cherry, or (ii) A B-type situation obtains and x is a cat.

(25) An object, y, is a mat* if: (i) An A-type situation obtains and y is a tree, or (ii) a B-type situation obtains and y is a mat, or (iii) a C-type situation obtains and y is a quark.

Putnam next invites us to consider two sentences:

(26) The cat is on the mat,

(27) The cat* is on the mat*.

We will take (26) and (27) both to be sentences about two objects, x and y, respectively, and which objects these sentences refer to will depend upon the referential definitions we have provided (naturally, 'cat' and 'mat' refer to some cat and some mat). If we substitute terms into (27) and determine the truth-values of A-, B- and C-type situations, we will find the following. In A-worlds, (26) and (27) are both true; in (26), x is a cat and y is a mat, while in (27), x is a cherry and y is a tree. In B-worlds, (26) and (27) are both true again; in both (26) and (27), x is a cat and y is a mat. In C-worlds, (26) and (27) are both false; in (26), x is a cat and y is a mat, while in (27), x is a cherry and y is a quark.

Putnam's conclusion is that in A-type situations, there is no fact of the matter that entails that we are referring to cats and mats rather than cats* and mats*. (26) and (27) are true under exactly the same conditions, but whether we are talking about cats and mats depends on whether there are any cherries on trees. Furthermore, in C-type situations, what causes (27) to be false is completely different from what causes (26) to be false. The fact that no cat is on any mat is a contingent fact about C-worlds, but the fact that no cherry is on any quark is a necessary fact about cherries and quarks. The complexity of this system of reference, for Putnam, casts great doubt on what it means to refer in the first place.

3.3.2. Objections to Putnam's Argument

Putnam preempts many different objections, which ought to be mentioned briefly. First, one cannot claim that the term 'cat*' is hopelessly disjunctive, because we could have taken 'cat*' as primitive and defined 'cat' in terms of 'cat*'.[19] This is an important observation, because the only complaint against this observation is that the *concepts* 'cat' and 'cat*' are disjunctive. The problem is that this objection *assumes* the meaning of 'cat' and 'cat* in the first place!

Second, one cannot claim that there is some sort of direct intuitive correlation between 'cat' and cats. This is essentially an appeal to mysticism.

Third, the possible world cannot pick out whether x is a cat or a cherry by some causal connection C, because C would also be subject to the same problem of divergent interpretations. This is nothing more than a pseudo-solution.[20]

3.3.3. Putnam's Epistemic Theory of Meaning

Putnam believes, though, that "the idea of completely mind-independent objects is incoherent."[21] The reason for this is that reference, by any analysis of language, seems to do nothing more than correlate different items *within* a conceptual structure. Setting aside Putnam's complex and implausible example, it is apparent that the common usage of metaphor has very strong implications about what it is we are referring to when we speak. Lets us borrow Marijo Cook's useful example, 'The eagle has landed.' Whenever this sentence is used, one must determine the context of the usage in order to determine the reference of the word 'eagle'. It is always true that a person who speaks the sentence

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[19] Loux, 282.
[20] Loux, 283.
[21] Ibid.

might be saying nothing more than that a specific eagle has landed, even if that person has no knowledge of any eagles in flight. But it might also be a metaphor. We find that Quine's inscrutability will hold true for this sentence just as with (26) and (27).

Truth, then, operates within a conceptual scheme, just as reference does. And so truth becomes defined epistemically, as Dummett suggests. Truth is defined in terms of concepts like justification or warrant. Putnam does *not*, however, define truth in terms of warranted- or justified-assertability. Because truth is a non-relative term and warranted-assertability can vary, the definition simply will not work. Putnam solves this problem easily: "To say that a claim is true, Putnam tells us, is to say that its assertion or acceptance would be warranted in epistemically ideal circumstances."[22] Of course, this brings on problems about what exactly the phrase 'epistemically ideal circumstances' means for an anti-Realist, but we will put this problem aside.

3.4. A Criticism of Anti-Realism as Such

For Loux, it is easy to show that Dummett's anti-Realism does not solve the problem that motivated the position in the first place—it is a pseudo-solution. But this is not to say that Quine and Putnam are not subject to complaints of their own. There can, indeed be criticism of Quine's and Putnam's positions, but this criticism will not take us all the way to rejection of their views. All three philosophers support an epistemic theory of meaning, which translates to support for a constitutive skepticism: all three are not only skeptical concerning knowledge of the external world, but also skeptical concerning the *existence* of the external world. In fact, it is this last line of reasoning that leads the anti-Realist astray.

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[22] Loux, 284.

Quine and Loux have both mistaken the direct implications of the strange 'gavagai' linguistic experiment. Should Quine's claim be correct—that is, should it be the case that all reference in language is only in terms of an assumed linguistic background—then the immediate consequence is that linguistic reference *cannot* serve as justification for *any* Realist claim. Thus, only if the Realism holds that linguistic reference relies on the existence of the external world (and it may not), is Quine's argument an argument against Realism. That is to say, the fact that metaphysics does not motivate language is built into language itself: language provides its own alternatives to the metaphysical claims that we feel the need to insert into it. As Quine himself has observed, ontological commitments are not behaviorally determined, so one may choose whichever ontological interpretation one wishes. This means that language seems to function not *because* of ontology, but *despite* ontology.

Similarly, the heart and soul of Putnam's anti-Realist argument is really just Occam's Razor in action. There is no reason to assume that the idea of completely mind-independent objects is incoherent merely because they are neither determined by nor necessary to language. Language itself is a context, and there is always an outside to any context; Putnam just wants this *particular* context to be the ultimate one, because we cannot describe what lies outside it (one can imagine, here, how Wittgenstein would respond to Putnam).

4. Beyond the Realism/Anti-Realism Debate

Our discussion concerning anti-Realist arguments ought to have struck the reader as similar to the pragmatic solution to the perdurantism/endurantism debate offered in section 2.6. It is this similarity in the two debates which, in closing, I intend to bring out.

We have seen that human experience, as such, is hopelessly anthropocentric—all of the evidence that there is, in fact, a world outside experience is entirely circumstantial and depends on that very experience in the first place. In light of this fact, we can characterize the Realist as an optimistic anthropocentrist, and we can characterize the anti-Realist as a pessimistic anthropocentrist. The Realist believes that human experience, as the only experience possible, ought to be exported to the world outside experience. The Realist, then, takes the being of the world to *directly correspond to* the seeming of the world, and metaphysical entities are then devised to support this belief. The anti-Realist, on the other hand, interprets the anthropocentrism of human experience as evidence that the Realist's claims about the world outside experience are entirely unfounded and most likely false. The anti-Realist rejects all thought about the world outside as nonsense, so she takes the being of the world to *be identical to* the seeming of the world.

As such a pessimist, it is the anti-Realist's place to eliminate existence claims wherever they are found. That is, where the Realist's maxim is that the experience gives the world, the anti-Realist's maxim is Occam's Razor. Therefore, pace the perdurantist and the possibilist, the anti-Realist must maintain that the actual world and the present time are the only time and the only world to which we can ascribe truth. Therefore, he is

bound to claim that the past, the future and possible worlds do not literally exist as concrete particulars. The anti-Realist must come to grips with the fact that Occam's Razor cuts on both sides: the metaphysical and the physical. In eliminating excess entities, we must also eliminate literal interpretations of perdurantism and possibilism.

Recall, however, the agnostic position we suggested in section 2. It is the agnostic's place in this debate to remind both the Realist and the anti-Realist that their respective slogans are interpretations which are entirely unsupported by the evidence. That is, the anti-Realist slogan is a normative principle that eliminates entities not required for explanation of the phenomena; whereas, the Realist slogan is a normative principle that ties human experience to the world.

But the agnostic has been slacking in his duty to arbitrate the debate between the Realist and the anti-Realist. The agnostic must remind both camps that these normative principles ought to be accepted when they are appropriate and rejected when they are not. We do not want to reject the external physical world, just as we do not want to reject that time really does exist. However, there is no need to multiply possible worlds into either concrete particulars or abstract entities; few people have any interest in believing these positions.

This essay has served to reveal that ontological commitments come bound together in two very large groupings which are opposed to each other in such grand ideological fashion, that we have devised for ourselves not one, but two descriptions of the world. Each description is completely self-consistent and virtually impervious to attack from the other. Of course, if we only had one position, we would have reason to

believe that that one position obtains, but in such a grand pluralism of ontological

perspective, agnostic pragmatism will have to be our orientation.