

**An Argument by Analogy for a
Presentist Solution to McTaggart's Paradox**

by Lily Morgan

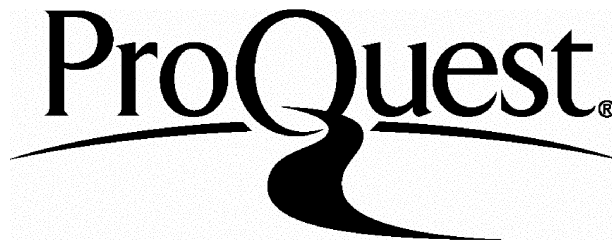
ProQuest Number: U644005

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest U644005

Published by ProQuest LLC(2016). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code.
Microform Edition © ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Contents

	Introduction	3
1.	McTaggart's Paradox	7
2.	Parmenides and Modal Realism	14
3.	McTaggart and Tense Realism	26
4.	Solving the Paradox	39
5.	The Problems of Presentism	49
	Conclusion	63
	Bibliography	66

Introduction

In this thesis I will be defending presentism; the claim that only what is present exists.

Presentism is a version of A-theory. A-theory takes time to be (and thus is named after) McTaggart's A-series (McTaggart, 1908). The A-series is a temporal series whose times and their contents are defined in terms of their A-determinations; of whether they are past, present or future. An A-determination is also known as a *tense*. Accordingly, A-theory is also known as the *tensed* conception of time, and A-theorists (those who ascribe to A-theory) as *tensers*.

All A-theorists agree that, amongst whatever else that exists, what is present is pre-eminent; has, in other words, a certain special significance. What they dispute is exactly what else *does* exist.

Presentism takes *nothing* but what is present to exist. So-called 'future events' are not existing events characterised in some way by their futurity. They are just events that do not *yet* exist, coming to exist only once they come to occur, i.e. come to be *present*. Neither are 'past events' existing events characterised in some way by their pastness. Past events are just events that *no longer* exist, present events ceasing to exist once they cease to occur, i.e. cease to be *present*.

In this thesis I shall be attempting to demonstrate that Presentism is the *only* defensible form of A-theory.

Many philosophers have claimed instead that there is *no* defensible form of A-theory. These philosophers ascribe to B-theory, taking time to be (and hence naming it after) McTaggart's B-series. The B-series is a temporal series whose positions all exist equally, with no *intrinsic* differences between them. B-times and their contents differ only by way of the *extrinsic* B-relations that hold between them; the relations of being earlier than, later than or simultaneous with one another.

B-theory denies any objective reality to tense. Accordingly, B-theory is also referred to as the *tenseless* conception of time, and B-theorists as *detensers*.

B-theorists' stated reasons for denying the reality of tense have been numerous, but one recurring accusation is that tense is in some way contradictory. There have been many versions of this argument, such as Lewis' argument (1986, pp. 202-205) and Mellor's argument (1981b) claiming that tensed predications of intrinsic properties and tensed truth-conditions, respectively, lead to contradiction. The most famous of these arguments however is that made by McTaggart (1908), who claims that predicating tenses of an event leads to a contradiction. This contradiction suggests a paradox: that tense is unreal¹.

For simplicity's sake, I will focus solely on McTaggart's original argument. I shall, for the most part, be arguing with rather than against this argument, agreeing that it succeeds in identifying a real contradiction. What it fails to do, however, is locate its true source. This lies not with A-theory itself, but with any version of it that, *contra* the presentist, posits the existence of non-present times. On the other hand, adopting a presentist conception of time will allow us to avoid both the contradiction and accordingly the paradox.

In the first chapter, I shall set out McTaggart's argument and some responses to it.

I shall then set McTaggart's paradox aside and in the second chapter take up the case of what I shall claim to be an analogous paradox; Parmenides' paradox of non-existence. Parmenides argues that predicating non-existence of an entity leads to contradiction. This contradiction again suggests a paradox: that no subject can be said not to exist. It is widely believed that the source of this contradiction lies with interpreting negative existential propositions on a subject-predicate model, requiring the subject, as subject of predication, to exist.

¹ For the B-theorist, of course, this part of McTaggart's argument is not a paradox, but merely a matter of fact as countenanced by the contradiction, the paradox being thought to lie in McTaggart's subsequent conclusion that time itself is unreal. My justification for also calling the conclusion that tense is unreal a paradox is that this paper argues from *within* A-theory, asking *given* the reality of tense how can we make sense of it? Accordingly, the conclusion that tense is unreal is, to my purposes, paradoxical.

One way of dealing with this seeming contradiction is with the thesis of modal realism; the claim that both what is actual and what is possible exist in some sense. Negative existential propositions can then be interpreted as saying, not that the existing subject does not exist but that it does not *actually* exist, actual existence no longer being the only kind.

I shall explain what I find wrong with modal realism, in what I am calling its *Regardlessness* towards both our semantic and metaphysical intuitions and accordingly offer the usual reinterpretation of negative existential propositions, which is instead in accordance with the intuition that only what is actual exists.

In the third chapter, I shall return to the problems of A-theory and the seeming contradictions of tense predications², hoping to draw out a constructive analogy with my findings in the case of negative existential predications. I shall claim that just as Parmenides' paradox is created by interpreting negative existential propositions on a subject-predicate model, so McTaggart's is created by interpreting tense propositions³ on a subject-predicate model. Such an interpretation gives rise to the analogue of modal realism; *tense* realism, the thesis that takes what is past, present and future to exist equally⁴. I shall demonstrate that in doing so tense realism exhibits a *Regardlessness* towards our semantic and metaphysical intuitions that is analogous to that of modal realism and therefore suggest an analogous reinterpretation of tense propositions, which is instead in accordance with the intuition that only what is present exists.

In the fourth chapter I shall return to McTaggart's paradox, and explain just why and how it is that no tense realist can hope to escape McTaggart's paradox; tense realism involving an unacceptable mixing of A-theory, taking tense to be real, and B-theory, taking all tensed times and their contents to be equally real. Such a combination understandably leads directly to contradiction.

² To be distinguished from 'tensed predications'. By the former I shall mean the predicating of a tense property, by the latter I shall mean a tensed predication, i.e. by way of a tensed copula, of any property.

³ By 'tense proposition' I shall mean a proposition containing a tense predication.

⁴ In fact open futurism, taking only what is past and present to exist, is no less contradictory (though more intuitive) than tense realism, as I shall demonstrate in chapter 5.

In the final chapter I shall address some of the problems that presentism itself gives rise to, suggesting a possible answer to the question of how, if what is past and future do not exist, we can account for the truth of propositions concerning what is past or future or explain what is the difference between them, in which the *asymmetry* of time is thought to lie.

This thesis will have to leave some issues unaddressed. I cannot, for instance, explore the implications of the Special Theory of Relativity (STR) for a presentist conception of time, though I do believe that, at least on some interpretations of it, the two are perfectly compatible. On an anti-verificationist interpretation of STR, for instance, taking it to have implications for *what we can know* rather than *what is the case*, it poses no problem for the presentist.

Neither shall this thesis be an *argument* as such for the reality of tense, though, in showing that there can be a version of A-theory that does not lead to contradiction, I will at least be providing some support for it. Nor will I be taking issue with the B-theorist's position, which, for the most part, despite its complete lack of intuitive appeal, I find as *coherent* at least as the presentist's. It is what lies between these positions that shall be the focus of my attack which, if successful, will leave the determined A-theorist no option, on pain of contradiction, but presentism.

Chapter 1

McTaggart's Paradox

The Paradox

If there is no A-series, then there is no time, says McTaggart, for change is the essence of time, and there can be no change and thus no time in a temporal series that distinguishes its different times and their contents merely by the *changeless* B-relations of 'earlier than' and 'later than'. Change requires more than, for instance, *a* having a property at one time, *t*, which it lacks at a later time, *t*₁, for if it is a fact that *a* is F at *t* and not-F at *t*₁ then this is *always* a fact. Where then is the change?

Real change, says McTaggart, requires a *changing* A-series. For *a* to change from F to not-F, the events involved in *a* becoming first F then not-F must *themselves* change, by way of their position in the A-series; the one *becoming* present as the other *ceases* to be. It is in this dynamic process of becoming and ceasing to be present (shortened to 'becoming' from now on) that the essence of the A-theorist's notion of change is contained. How we understand this process will have vast implications for the success of McTaggart's argument against the reality of the A-series, as we shall see.

McTaggart takes an event's A-determination to be a property of it; something that characterises it in a particular way. Accordingly, he takes 'becoming' to involve a change of tense property; from futurity to presentness, then presentness to pastness. McTaggart finds this two-tiered process both essential to change (and thus also to time itself) and yet in itself paradoxical, the paradox being said to lie in the fact that the having of these A-determinations seems to involve two incompatible truths. The first is that, given these A-determinations are mutually incompatible – i.e. what is past cannot be present or future, what is present cannot be future or past and what is future cannot be past or present – *no* event can have more than one of them. The second is that, despite this mutual incompatibility, *every* event (bar first and last) must, in the course of occurring – i.e. 'becoming' – go through each of these determinations, in the transition from being future to being present to being past.

Here lies the paradox: we seem held to the truth of *both* the premise that *no* event can have more than one of these determinations *and* the premise that, at some time, *every* event has all of these determinations.

Demonstrated in full then, McTaggart's argument against the reality of the A-series is as follows:

- (1) Given their mutual incompatibility, no event can have more than one A-determination
- (2) Yet, at some time, every event must have all of these A-determinations
- (3) Therefore, by 1 and 2, the A-determinations are contradictory
- (4) Nothing in reality can be contradictory
- (5) Therefore, by 3 and 4, nothing in reality can have the A-determinations

One available option in resisting McTaggart's conclusion is to deny premise (4); that nothing in reality can be contradictory. This would be to agree with premises (1) and (2), resulting in the sub-conclusion in (3) that that the A-determinations are contradictory, but to disagree that this must entail (5); that nothing in reality can have them. This would be to ascribe to *dialetheism*; the thesis that there can be true contradictions⁵.

I shall put this controversial response to a paradox aside, both here and throughout the paper. My reasons for this are as follows: firstly, this paper calls itself a *solution* to McTaggart's paradox. It would seem somewhat facetious to call it such if this solution in fact involved merely *accepting* the paradox. A solution to a paradox must show, not that we can live with paradox but that, in fact, there *is no* paradox, only an appearance of one. Accordingly, in trying to resolve the alleged contradictions of A-theory, I will assume the inviolability of the law of non-contradiction throughout.

Secondly, anyone who *desires* to resist McTaggart's conclusion and defend the reality of the A-series – i.e. what we can call an A-theorist – would be loath to admit that the

⁵ See Priest (?)

A-series involves contradiction; defending the reality of tense at the expense of its coherence being an unappealing (and hopefully unnecessary) option for an A-theorist.

If denying (4) is not at our disposal, then the truth of (3) must lead us directly to (5). This puts us back where we started; with the rub between the first two premises stating both that, given their mutual incompatibility, *no* event can be past, present and future and yet that, at some time, *every* event is past, present and future. A solution to this seeming paradox must demonstrate that one or other of these premises is false, or that the reasoning leading from them to the sub-conclusion in (3) is invalid.

The Succession Defence

The usual defence against the conclusion that the A-determinations are contradictory is to take the latter of these two options, saying not that either premises (1) or (2) are false as such but that, read as they must be *in order* for them to be true, they are not incompatible after all. Accordingly, the A-determinations are not contradictory.

Take (1); the claim that no event can have more than one A-determination. The A-theorist will respond that, for the truth of this premise, it must be further specified that no event can have more than one A-determination at *one* time, for having incompatible determinations at *different* times is not (or at least not uncontraversially) contradictory. It is the having of incompatible determinations *simultaneously* that leads to contradiction.

But (2) cannot be saying this, for the claim that every event has these determinations at *one* time would be false. ‘Becoming’ involves change, and a change cannot take place at *one* time but only *over* time (hence why it is thought to be time’s essence). It is not that an event has these determinations *simultaneously*, i.e. that it [is] ⁶ past, present and future, but that it has them *successively*, for an event that *is* present merely *was* future and *will be* past.

⁶ This notation indicates a tenseless verb. Conversely, where a verb is significantly tensed, the verb will be italicised.

Accordingly, to ensure the truth of premises (1) and (2) (as we must for the paradox to go through) they must be further qualified:

- (1*) Given their incompatibility, no event can have more than one A-determination *simultaneously*.
- (2*) Every event has all the A-determinations *successively*, i.e. an event that *is* present, merely *was* future and *will be* past.

But then, interpreted in this way, (2*) is no longer incompatible with (1*), so there is no contradiction to be resolved.

(2*) is what I am calling the Succession Defence. To the A-theorist's ear (and no doubt to the non-philosophers' also, whose everyday language is unavoidably tensed) the matter is at this point closed, the appeal to succession - the *was/is/will be* aspect of 'becoming' - seeming to solve the contradiction by untangling the knot of supposedly contradictory determinations and placing them at their rightful, *successive* times⁷.

However, contrary to what many A-theorists have thought, to merely state this defence will not in itself be enough to guarantee a solution to the paradox. To leave it as such is to assume what needs to be explained; *how it is* that being *successively* future, present and past serves to make being future, present and past, given their mutual incompatibility, any the less contradictory.

McTaggart in fact acknowledges the succession defence but goes on to dismiss it, finding it, on closer inspection, less effective than at first sight. The problem is that in order to solve the paradox of every event necessarily having all these incompatible A-determinations, we must resort to more A-terminology; explaining the tense predicates 'is past', 'is present' and 'is future' by way of the tensed copulas 'was', 'is' and 'will be'. Whilst this may satisfy an A-theorist, one who is already suspicious of tense, will not be impressed, it in fact being far from obvious, apart from in a very pre-philosophical sense, exactly what these tensed copulas are meant to signify; what

⁷ Though whether or not this resolution will remain (virtuously) regressive is a matter of some debate among A-theorists.

semantic role they play that so enables them to untangle the contradiction implicit in the having of incompatible properties.

The question is then, how are we to understand a copula when it is used in this tensed way; “with a temporal meaning and not simply for predication” (McTaggart 1908, p. 32) McTaggart’s answer is related to his understanding of ‘becoming’. ‘Becoming’, for McTaggart, is a process of qualitative change, involving an event changing its tense property. Accordingly, he interprets the tensed proposition involved in expressing this notion – i.e. the proposition that an event that *is* present *was* future and *will be* past – on the subject-predicate model, taking the event and characterising it in three different ways.

The temporal element in the copula is then taken to be part of that characterisation of the event; its task being to relativise the determination to some moment of time. The proposition that an event that *is* present *was* future and *will be* past becomes instead the proposition that an event that [is] present *at some moment of present time* [is] future *at some moment of past time* and [is] past *at some moment of future time*; three simple, non-temporal predications of three temporally relativised properties.

Going by this method, McTaggart shows how a whole new set of second level tenses are created; every event going through each of the tense determinations at each of the differently tensed moments. Every event therefore [is]

Future		a future moment
Present	at...	a present moment
Past		a past moment

This leads to the creation of a set of nine *second*-level tenses that every event must go through. The problem remains however for moments, like events, also “participate in the passage of time” (Lowe 2002, p. 314) and so every moment, like every event, [is] past, present and future. So whilst an event that is past at a future moment cannot also be past at a past moment, yet “the moments of past time in which it is past are equally moments of past time, in which it cannot be past” (McTaggart, p. 32). It seems then

that whilst *no* event can have both of these determinations yet, at some time, every event must [have] them.

We could try to apply the Succession Defence again, and say that no event [is] past at a future moment and past at a past moment, but rather an event that *is* past at a future moment *will be* past at a past moment, but then these temporal copulas, if understood again as moments to which the determination is being relativised, will only themselves stand in need of being relativised to another moment, and so on, leading to a vicious infinite regress.

Thus McTaggart claims "the attribution of the characteristics past, present and future to the terms of any series leads to a contradiction, unless it is specified that they have them successively. This means, as we have seen, that they have them in relation to terms specified as past, present and future. These again, to avoid a like contradiction, must in turn be specified as past, present and future. And, since this continues infinitely, the first set of terms never escapes from contradiction at all" (p. 32). The Succession Defence, that seemed so effortlessly to solve the paradox in fact, according to McTaggart, serves only to send it spinning into a vicious regress.

This fact to my mind is the source of continuing intrigue that McTaggart's regress inspires. For McTaggart, the appeal to succession is simply *never enough* to rescue the tense determinations from contradiction, and many B-theorists agree, finding his reasoning "beyond all reasonable doubt" (Mellor 1981b, p. 50). On the other hand, for many A-theorists, the opposite is the case, the very *fact* of the appeal to succession meaning that there "*never was* a contradiction in the first place" (Smith 1986, p. 182). To these A-theorists the argument is a mere "philosophical howler" (Broad 1938, p. 79) and McTaggart's reasoning "confused and unconvincing" (Lowe 2002, p. 318).

My own explanation of this blinkered conviction both A and B-theorist have in their own assessment, for better or worse, of the paradox is in only seeing the implications of the Succession Defence from their own perspective. In fact, the notion of succession can be variously interpreted, depending on whether one is an A-theorist or a B theorist, or indeed, if an A-theorist, to what version of A-theory one ascribes. For our present purposes, this latter point is of the essence, for I will be claiming that

these various versions of A-theory, with their various interpretations of the notion of 'becoming', will have varying implications for the success of the Succession Defence in solving McTaggart's paradox.

I will argue that, in some senses, both A-theorist and B-theorist are both right and wrong, this perhaps accounting for the impasse between them. For the A-theorist is right to claim that McTaggart's argument proves less than he would like, yet wrong to think that it only tells against McTaggart's tenseless tense predications. And the B-theorist is right in taking it to have proved more than this, yet wrong as to exactly what it has proved.

The real lesson of McTaggart's paradox is that we cannot consistently understand the process of 'becoming' as a qualitative matter (i.e. a matter of gaining or losing some quality/property). Accordingly, if we interpret the tense propositions of the Succession Defence on a subject-predicate model, as characterising an equally existing event in three different ways, we create, not solve, the paradox. We must instead see 'becoming' as the presentist does; as an existential matter (i.e. a matter of coming or ceasing to exist).

Chapter 2

Parmenides and Modal Realism

Parmenides' Paradox

The seeming paradox of non-existence was first brought to light by Parmenides, in his musings on the notions of 'that which is' and 'that which is not'.

“Come now and I will tell thee – listen and lay my word to heart – the only ways of inquiry that are to be thought of: one, that ‘that which is’ *is*, and it is impossible for it not to be... another, that *it is not*, and must needs not be” (quoted in Cornford 1930, p. 30)

Parmenides here is stating the simple idea that, in inquiring into the existence of something, we *seem* at least to have two choices; to say of the subject of our inquiry either that it *is* or that it *is not*. In fact, says Parmenides, we have no such choice, for to say of something that it *is not* is “utterly indiscernible” (p. 30). His reason for thinking this is that;

“Thou couldst not know ‘that which is not’ – for that is impossible – nor utter it... for what can be spoken of and thought must be.” (ibid., pp. 30-31).

The idea at work here is that our thought and language are somehow *directed*, their meaningfulness coming from a relation with the world and ‘that which is’, existing within it. Consequently, anything *about which* we can meaningfully think and speak *must* exist, or else what is that thing *about which* we take ourselves to be thinking and speaking?

Put in logical terms, the assumption is that a predicate requires an existing subject *of which* to be predicated. This is what I am calling the Parmenidian Assumption (PA); that any subject of predication must exist. It is (PA) that creates the paradox of non-existence. For if any subject of predication must exist then predicating non-existence of something will put us in a strange predicament, for the truth of such a proposition will require the subject of the predication both to exist, to serve as subject of the predication, and yet not to exist, in order that it satisfy the predicate.

This leaves us in the paradoxical situation of seemingly having to deny that we can ever meaningfully (i.e. without contradiction) say that something does not exist. And indeed, if (PA) is true and hence, in the very *act* of predication, regardless of the *particulars* of the predication, the existence of that thing is *entailed*, then how could a subject ever satisfy a predicate also requiring it *not* to exist⁸?

Given his unquestioned acceptance of (PA), Parmenides' accepts this paradoxical conclusion; that, contrary to our beliefs, we can never meaningfully predicate non-existence of anything, it in fact being an entirely unintelligible notion.

This conclusion seems unwarranted. We understand the notion of non-existence perfectly well, even in childhood, when we knowingly tell a friend that, in fact, Father Christmas does *not* exist, or our parents assure us that neither does the bogeyman, or the monsters under the bed. We not only understand these propositions but also take them to be true. How then could they be meaningless?

Accepting the paradoxical conclusion that non-existence is unintelligible seems then unfounded. It is also unnecessary. The usual way of making sense of negative existential propositions is instead to deny that they are, logically speaking, subject-predicate propositions. We can then also deny that the subject, not being a subject of predication, need be assumed to exist.

There have been other attempts at solving the paradox of non-existence. Those, for instance, who sympathise with the general gist of (PA) and the link it wants to forge between words and world, meaning and existence, have instead struggled to account

⁸ There are in fact ways of doing this, as we shall soon see.

for the intelligibility of negative existential propositions *within* its parameters i.e. whilst allowing for the subject to exist in some sense. I will try to show that such an allowance, even if it avoids contradiction, will still remain at the very least deeply unintuitive.

The Being/Existence Distinction

One way to make sense of a subject-predicate interpretation of negative existential propositions is to make an unpopular metaphysical distinction; a distinction between being and existence. A classic account of this distinction is found in Meinong's Principle of Independence (Meinong 1904). This states that whether or not a thing has a given nature, and thus some form of being⁹, is independent from whether or not it actually exists. Actually existing entities are in fact just one kind of entity; there are also possible and indeed impossible entities too.

Impossible entities, like the round square, do not exist. They cannot; their very nature being contradictory. Yet they have some form of being nonetheless; they must do, says Meinong, in order for them to be able to stand as 'logical constituents' in true propositions about them, such as the true negative existential proposition above.

But in what could the being of the round square consist? In its very roundness and squareness, says Meinong, for "the round square is surely as round as it is square" (quoted in Lambert 1983, p. 10). That which consists in the round square's *being* thus turns out to be that which precludes it from *existing*. The one must therefore be independent of the other, and the two sharply distinguished.

Accordingly, we can truly predicate non-existence of an entity because, contrary to what we might think, there in fact *are* entities that do not exist or, as Meinong paradoxically put it, "there are objects such that there are no such objects" (ibid., p.14). The paradox of non-existence is dealt with by simply embracing the category of nonexistent entities.

⁹ I am using 'being', to remain neutral between differing interpretations of Meinong's principle, in the broadest possible sense, taking it to that which any entity over which we quantify has.

Resolve though this may the apparent contradiction involved in a negative existential predication, such entities themselves, being for, instance, both round and square, will nevertheless have an unhappy tryst with the law of non-contradiction, as Quine points out (1953, p. 5). Given our already stated proviso of the inviolability of this law, this makes Meinong's solution to the paradox as unacceptable as Parmenides' acceptance of it. But more than this; this category of impossible entities stands as a serious counter-example to (PA) – that every subject of predication *must exist* –demonstrating that in fact some, like the round square, *cannot*. One possible defence of (PA) would be to take contradictory terms like 'the round square' to be in fact meaningless, a kind of nonsense. For (PA) only requires the world to account for the *meaningfulness* of our propositions. Such contradictory terms, if meaningless, need not involve the world at all, nor the existence (or rather non-existence) of any impossible entities within it. For the sake of argument, and the ensuing analogy, I will accept this controversial defence of (PA), leaving contradictory subject terms out of the picture for now.

Modal Realism¹⁰

The problem for a subject-predicate interpretation of existential propositions that Meinong's third category brings to light is this; such an interpretation is in danger of making it the case that *there are* things that do not exist. This must be avoided at all costs. What exists is 'that which is', what does not exist is 'that which is not'. To say that 'that which is not' *exists* is in itself contradictory, this in fact being the very essence of the paradox¹¹. How can this accusation be answered?

The answer can be salvaged from what is left of Meinong's unruly ontology after (albeit controversially) ruling out impossible entities; a more temperate, two-fold distinction between actual entities and possible entities. For with all meaningless (including contradictory) subject terms excluded, the only subject terms that need involve the world at all will be those describing entities that either do actually exist, like the Queen of England, or do not, but at least could, like the bogeyman (and unlike

¹⁰ I do not take the term modal realism to refer solely to Lewis' reductive thesis, as it most naturally suggests, but to any thesis that takes non-actual entities to exist in some sense.

¹¹ Parmenides of course takes the contradiction to lie in the other direction though; in taking 'that which is' *not* to exist, hence his acceptance of the paradox.

the round square). But not actually existing on this view does not preclude an entity from existing at all. What is said to *not* to exist on such a view *does* in fact exist; it is just not an actual entity. It is a possible entity.

The use of ‘exist’ in ‘does not exist’ is then taken to be a *restricted* use of the term, restricted to actual existence. We often use expressions in this way, claiming to have had no sleep or to have eaten all the chocolate, and by no means meaning that we have *never* slept or have eaten all the chocolate *in the world*. The use of ‘exists’ in a negative existential proposition is said to be similarly restricted. When we say ‘the bogeyman does not exist’ what we mean to say is that he does not *actually* exist. Actual existence no longer being the only kind, however, he can still have some form of being; as an unactualised, possible entity of sorts.

This is modal realism – the view that takes both the actual and the possible to exist. Modal realism provides one way of solving the Parmenidian paradox of non-existence¹²; by providing a subject for negative existential predications of which non-existence can still be truly predicated. This is done without contradiction, not requiring the existence of the nonexistent, but the existence of the non-*actual*.

The Problem of Regardlessness

Modal realism, then, provides one means of disbanding the explicit paradox resulting from a subject-predicate interpretation of ^(some) negative existential propositions. It still fails, however, to make such an interpretation any the more appealing, the thesis of modal realism displaying a troubling (what I am calling) Regardlessness towards our intuitive understanding of negative existential propositions; that there is *no* entity corresponding to the subject term. This Regardlessness has both a semantic and a metaphysical aspect.

¹² Cf course there are other solutions to this paradox (see Evans 1982, ch.10) and other reasons for ascribing to modal realism (see Lewis 1986) but it is often the Parmenidian motivation – the desire to see meaning and existence as intertwined – that brings them together.

Semantically speaking, when we use a *negative* existential propositions we intend it to be a *denial* of the existence of something, assuming this to be the significance of the negation in the predicate 'does *not* exist'. The modal realist's interpretation of negative existential propositions falls foul of this intuitive interpretation by requiring the existence of the subject *regardless* of the negation present in the content of that predicate. Accordingly, it gives an interpretation that is entirely contrary to the intuitive meaning of such a proposition, turning what we intended to be a denial of the existence of something into a closet affirmation.

The modal realist, of course, will respond that they are not *regardless* of the negation as such, they are just seeing it as negating something contrary to what we might have thought; not that something exists but that something *actual* exists. But is this what we *mean* when we deny the existence of something? When we use other terms in a restricted way, i.e. when we say that we have had no sleep, we *intend* the claim to be taken in the restricted sense. The same cannot be said of a negative existential claim.

Metaphysically speaking, the reason that such an interpretation seems so unintuitive is that we take the distinction between what actually exists and what does not to be of huge significance. We would not, for instance, attend a lecture if we heard that the lecturer does not actually exist. This is because we take the distinction between the actual and the possible to be sharply delineated; the former involving existence, the latter non-existence. By taking the subject of a negative existential proposition to exist *regardless* of whether or not it actually exists the modal realist muddies this distinction, bringing matters of degrees into what was formerly a clear-cut notion. Actual existence becomes, on this view, no more than one type of existence, actual objects no more than one type of object, to be distinguished from others merely qualitatively, by the addition (or lack thereof) of some property; 'actual existence'. What it is to actually exist on such a view is thus greatly trivialized, being of no more significance than what it is to be red, or tall, or have any other kind of property. Could the bogeyman in fact even acquire such a property, as I might grow taller, and suddenly become a real live monster, or the Queen of England lose it and become a mere fairy tale queen?

On the flip side, non-actual existence is reified, construed as a *type* of existence rather than, as we might prefer to think, *non*-existence. This leads to such an infinite multiplication of existing entities – any entity that we could possibly dream up in fact existing – as would offend anyone (Occam and Quine for starters) with “a taste for desert landscapes” (Quine, 1953, p. 4).

And possible entities are not only infinite in number but disturbingly “disorderly”(ibid., p. 4), having no determinate criteria of identity. We cannot determinately say of the bogeyman, for instance, what shade of green he is, or even, given we all have our own idea of the bogeyman, how many of these bogeymen are similar or different enough as to make them identical or distinct. These questions of identity seem not to apply to possible entities and, as Quine argues, “what sense can be found in talking of entities which cannot meaningfully be said to be identical with themselves or distinct from one another?” (ibid., p. 4).

Justifying Regardlessness

A Regardlessness towards our semantic and metaphysical intuitions concerning these existential matters can, however, be justified, if we are *reductive* in our modal realism, i.e. if we reduce the modal to the non-modal, and take all types of existence and entity to be ontologically on a par, as Lewis (1986) does. A Regardlessness towards the distinction between what does and does not actually exist, albeit unintuitive, is in fact *required* on a reductive understanding of modal realism as, in reality itself, there is no such distinction, our actual world and its contents being merely one world among many possible worlds, all ontologically on a par.

A reductionist justifies his Regardlessness towards the actual by reinterpreting the significance of the term. Actuality, on this reductive understanding, is just an indexical term, like ‘I’ or ‘here’. Indexical terms are terms whose reference varies with context. Just as *I* merely refers to the person by whom it happens to be uttered, and *here* to the place at which it happens to be uttered, *the actual world* refers merely to the world and its contents at which it happens to be uttered.

Indexicality being associated with subjectivity, the reductive modal realist has the means to justify his *Regardlessness* towards the actual as, indexically understood, actuality is no longer such a good marker for what is objectively real. How could it be, given that in different contexts it will pick out different candidates for such an accolade? Accordingly, the actual is brought down to a level with the merely possible, both being ontologically on a par.

Such a view remains nonetheless *regardless* of our intuitions, but given the reductive modal realist *aims* for *Regardlessness*, to charge him with it is not so much to take issue with the view as to state it. The response Lewis gives to this charge is that a *reductive* understanding of modal realism provides the best means of making sense of modality (1986, p. 4). There is no time (or call) to explore this claim here, however a related question is relevant to present purposes: can we be modal realists, asserting the reality of both the possible and the actual, yet refrain from understanding this distinction reductively? In other words, can we account for our non-reductive intuition concerning the pre-eminence of the actual within a realist framework that posits the existence of *more* than just the actual? If so, this would at least go some way towards answering to the charge of *Regardlessness*.

The task is by no means simple. How can we give back to actuality its pre-eminence if it is merely one type of existence, and its supposedly privileged members merely one type of entity, lost amongst all the infinitely many possible entities that could and in fact, on this understanding, *do* exist alongside them? One way of properly distinguishing between equally existing yet not equally pre-eminent entities is with an abstract/concrete distinction. On this understanding, actual objects are real, concrete entities existing within our spatio-temporal manifold, whereas possible entities do not have this privileged kind of existence, being merely abstract, non-spatio-temporal entities of some kind.

Such a view is still problematic, for many philosophers think that there are abstract, non-spatio-temporal entities, for instance mathematical entities or universals, that are nevertheless *actual*. These entities are not thought to be any less real than concrete entities. In fact many philosophers, in a tradition reaching back to Plato, have taken them to be *more* real, not being subject to the change and decay of temporal reality.

An abstract entity, on this view, is just one that is ‘not a spatio-temporal kind of thing’ (Quine 1953, p. 3). We might even wonder whether possible entities are suited to such a category given, if the bogeyman were to be actual, he would undoubtedly be a frighteningly spatio-temporal kind of thing.

Whether or not such problems can be answered, however, is irrelevant to my present purposes, though I shall come back to the possibility of such a response to the problem of Regardlessness in my analogous discussion of the temporal case. Suffice to say that if there is another way to understand existential propositions that avoids the problems of modal realism, it is bound to be preferable. What we want to say, *contra* the modal realist, is that all that there is is the actual; that merely possible worlds and entities do not exist at all, meant in the non-restricted, literal sense that *there are no* possible worlds or entities.

But how then do we explain our proposition that the bogeyman does not exist, or even does not actually exist, if what we mean by this is that he does not exist at all? For if there is literally no subject for the predication, then we are back with our original problem; of how we can *say of the bogeyman* that he does not exist given that, if the proposition is true, there will be nothing of which to say it.

Reinterpretation

If (PA) is correct and every subject of predication must exist then we should be able to make sense of a subject-predicate interpretation of negative existential propositions. This has proved difficult, the challenge of finding an *existing* subject of which it can be truly said that it *does not exist*, seeming to be somewhat paradoxical. The challenge can be met, however, (impossible entities, albeit controversially, put to one side) if we are prepared to endorse the metaphysical thesis of modal realism. This allows us, by making a distinction within the notion of existence, between actual and non-actual existence, to posit a non-actual, rather than a non-existent entity to serve as subject for the negative existential predicate.

If, however, in so justifying the (PA), the strain on our ontology seems too great, the boundaries between our categories too vague and our intuitions too affronted, as I have suggested is the case, then a reassessment might be in order, beginning with the validity of that very assumption.

One means of doing this is to make a distinction, not between actual and non-actual entities but rather between referring and non-referring subject terms, the former being those that correspond to true logical form and the latter to mere surface grammar. The idea here is that our ways of speaking can at times be *grammatically misleading*. True, we certainly speak as if it were the case that *there are* things that actually exist and *there are* things that do not, just as we might say that *there are* things that are red and there are things that are not. But to accept this as the true form of existential propositions is to be fooled by a manner of speech. Whatever the appearances, we should not, as Quine (1953) puts it

“... labour under the delusion that the meaningfulness of a proposition containing a singular term presupposes an entity named by the term. A singular term need not name to be significant” (pp. 8-9).

Accordingly, we should refrain from making the kind of metaphysical assumptions as made by Parmenides on the basis of surface grammatical form alone; i.e. on the basis of being a subject term.

Some old syllogisms play on these assumptions, by suggesting invalid inferences on the basis of grammatical structure that seem to force us into paradoxical conclusions.

For instance;

- (1) Nothing is better than God
- (2) A sandwich is better than nothing
- (3) Therefore a sandwich is better than God

The trouble here comes from taking the term ‘nothing’ in premise (1) to be what Meinong called a ‘logical constituent’ of the proposition; a term whose task it is to refer to something in the world, and act as subject for the predication. Read in this

way, premise (1) says of the entity referred to by the term ‘nothing’ that that entity is better than God. It is now known that the *logical* form of such quantified terms as ‘nothing’ or ‘something’ are not as their *surface grammatical* form suggests. Propositions containing them are not, to use Neale’s (1990) terminology, ‘object dependent’, but rather ‘object independent’ (p. 5); their truth conditions depending on no object *in particular* but on whether or not there is something, or, in this case, *nothing*, that fits the ensuing description.

To interpret quantifiers otherwise, e.g. to take the term ‘nothing’ to be referring to something, involves the same kind of mistake as taking the subject of a negative existential proposition to be referring to something. To avoid such misunderstandings Russell (1905) advised an extension of this ‘object independent’ interpretation of propositions to cover all propositions containing singular noun phrases (excluding the demonstratives ‘this’ and ‘that’).

To return to an earlier example, one of Meinong’s main reasons for positing the existence of the round square was that it must, *regardless* of its non-existence, act as logical constituent of the proposition ‘the round square does not exist’. How else can we account for the truth of such a proposition? If we take Russell’s advice, however, and paraphrase away any direct reference to such an entity, then the proposition can be understood, and its truth accounted for, in an object independent way and thus without contradiction. Rather than interpreting the subject term in such a proposition as saying ‘take the round square...’ we can instead interpret it like a quantified term, as saying ‘there is a unique x and x is round and x is square’.

Returning to our existential propositions, how does this help us? It allows us to see a positive existential proposition as simply quantifying over this unique thing, and a negative existential proposition as negating this quantification; as saying that *it is not that case that* there is this unique thing. In understanding negative existential propositions in this way, we resolve the apparent contradiction as the existence of the subject is no longer, *contra* Parmenides, assumed and thus is not in contradiction with the content of the predicate. This in turn saves us from having to create new weird and wonderful categories of entity – possible or even impossible entities – for the round square, the bogeyman and their friends to fit into.

This semantic interpretation also fits in neatly with what we have already said about existence. Putting aside the status of the subject, existing (or not existing) is not a qualitative matter, on a logical par with, for instance, being (or not being) a certain colour. There are not actual objects and possible objects like there are red objects and blue objects. Actual and possible entities are in fact no more two types of entity than gold and fool's gold are two types of gold.

For being is in fact not being *a particular way* but being *simpliciter*; not a means of characterising some pre-existing thing but rather *whether or not* there is anything to be characterised in the first place.

Chapter 3

McTaggart and Tense Realism

A Wide Analogy

There are surprisingly many analogies to be drawn between the paradoxes of Parmenides and McTaggart; in the structure of their arguments, their immediate and wider aims, the extent to which these aims meet success and failure, in their analyses of the notions the paradoxes are supposed to disgrace, and in the reanalysis of the significance of these notions and thus the logical form of the propositions in which they occur needed to resolve the paradoxes.

Take the Parmenidian paradox; Parmenides argues that a subject of which non-existence is predicated must both *exist* (as subject of predication) and yet *not exist* (to satisfy the predication). This contradiction leads to a paradox: that no subject can ever be said not to exist. Parmenides, finding the contradiction intractable, accepts the paradox.

Analogously, McTaggart argues that an event of which pastness, presentness and futurity are predicated must both *be* past, present and future (as subject of these predications) and yet *not be* past, present and future (given the incompatibility of the predicates). Contradiction, again, leads to paradox: that no event can ever be said to be past, present or future. Again McTaggart, finding this contradiction not only intractable but also viciously regressive, accepts the paradox.

Parmenides goes on to draw wider conclusions from his paradox, believing it to tell against, not just non-existence, but in fact all negations. The same goes for McTaggart, who uses his argument to demonstrate, not just the unreality of tense, but also the unreality time.

The plausibility of both arguments depends on the plausibility of their analyses of existential and tense propositions. Both in fact give subject-predicate interpretations, Parmenides assuming both existence and non-existence, McTaggart assuming both pastness, presentness and futurity, to be equally predicable of their equally existing subjects. These analyses are not, however, very plausible, requiring us to embrace modal/tense realism, which brings undesirable distinctions into the notion of existence/occurrence, and the categories of what exists/occurs. Seeing what is so distinguished as existing equally, as the subject-predicate interpretation must, also displays a blatant Regardlessness towards the semantic content of existential/tense propositions and their metaphysical implications.

It is these analyses, rather than the notions they are analysing, that are also the true source of paradox. Neither existential nor tense propositions should be interpreted on a subject-predicate model. This is because firstly, the existence or tense of an entity is of *more* than just qualitative significance and so is not, logically speaking, predicable of it. It is in fact of existential significance, meaning that secondly, some of the seeming subjects of existential/tense predications (i.e. of negative existential, past and future tensed predications) do not in fact exist and so are not logically speaking, subjects.

The success of both arguments consists in demonstrating the paradoxical nature of the subject-predicate interpretation that takes what is nonexistent/past/future to be types of existence/occurrence when in fact they are what does not exist/occur. Their overall failure, however, consists in buying into the Parmenidian assumption that this subject-predicate interpretation, requiring the subject to exist, is the only one we can give. I hope to have demonstrated this in the case of Parmenides' paradox. I will try to demonstrate the same, by analogy, of McTaggart's paradox.

Tense Realism

To see that McTaggart's interpretation of tense is indeed analogous to Parmenides' it is necessary only to look at his interpretation of what we called the Succession Defence. To recall, the Succession Defence was the claim that the having of mutually incompatible tense properties is not contradictory because they are had, not

simultaneously but at different, *successive* times. The A-theorist expresses this idea with the use of tensed copula, by saying that an event that *is* present merely *was* future and *will be* past.

McTaggart, in trying to escape the circularity of explaining one series of tense terms (the predicates) by the use of another (the copulas) and thus finding these temporal copulas in need of further analysis, extracts out the temporal elements in the copula – the pastness of ‘was’, the presentness of ‘is’ and the futurity of ‘will be’ – and reinterprets them as part of the complex tense predicate to be predicated of the event. In doing so he makes an explicit, subject-predicate interpretation of the significance of these temporal copulas. With the temporal element removed from them, all that remains are simple, tenseless subject-predicate propositions, the claim that an event *was* future becoming the claim that it [is] future *in the past*, that it *is* present becoming the claim that it [is] present *in the present*, and that it *will be* past the claim that it [is] past *in the future*. The import of the tensed copulas is thus taken to be merely predicative, and tense in general to be merely qualitative, just characterising an event in a particular way.

Interpreting propositions concerning the tense of an event in this way, as subject-predicate propositions, requires us to endorse an analogous metaphysical thesis as we were required to endorse in the existential case; that of tense realism. If pastness, presentness and futurity (like existence and non-existence or non-actual existence) are equally predicable of events then that which is past, present and future (like that which is actual or merely possible) must, as subjects of those predications, exist equally. Accordingly, ‘occurrence’ being the existence-verb for events, events must be able to occur, not just presently/in the present, but pastly/in the past and futurely/in the future as well, these just being understood to be three different types of occurrence. Similarly, events must be so distinguishable into past, present and future events, all of which exist equally.

Regardlessness Revisited

The Regardlessness of tense realism and its requisite distinctions is not as obvious as is the Regardlessness of modal realism. This is because the existential implications of tense propositions are not as explicit as the existential implications of existential propositions are.

When we say that something does/does not exist the existential implications of what we are trying to say are so obvious as not to even bear repeating. Modal realism, as we have seen, is shamelessly *regardless* of these implications. But when we say of an event that it is past, present or future the existential implications of such a claim are not so obvious. Accordingly, we could easily have neglected to take a stance.

To say that an event is present clearly has affirmative implications. No one, I think, would deny this. But what are the existential implications of saying that an event this it is past or future? Are these determinations, as McTaggart and the tense realists would have us believe, of predominantly qualitative significance, characterising an existing event in a particular way and thus, by implication, existentially affirmative? I shall argue, by analogy with the existential case, that they are not. Instead we should take past and future predications to be of *negative* existential import, past and future occurrence being not types of occurrence but *non-occurrence*, past and future events not types of event but no longer/not yet occurring events. Taking them to be otherwise leads to a Regardlessness analogous to that displayed by the modal realist (and indeed to McTaggart's paradox). This Regardlessness, again, has both a semantic and a metaphysical aspect.

Semantically speaking, when we predicate pastness or futurity of an event our intention is to deny the occurrence of that event; to say that it is no longer or not yet occurring. The semantic content of these propositions, just as with negative existential propositions (though less explicitly) involves some form of *negation*. As Broad puts it:

“When I utter the sentence ‘It will rain’ I do *not* mean that, in some mysterious non-temporal sense of ‘is’ there ‘is’ a rainy event, which now possesses some determinate form of the quality of futurity and acquires instead the quality of presentness. What I mean is that raininess will be, but *is not being*, manifested in my neighbourhood” (Broad 1938, p. 79).

Tense realism, by requiring the existence of the subject *regardless* of the negation present in the semantic content of the predicate, gives us an interpretation of past/future tensed propositions that is contrary to our communicative intention, turning what we intend to be a denial of occurrence – that the event merely was/will be occurring – into a closet affirmation – that somehow it nevertheless [is].

The tense realist can of course respond analogously to the modal realist; the analysis is not *Regardless* of the negation as such, it just takes it to be negating something contrary to what we might have thought; not the *occurrence* of the event per se, but that it is *presently* occurring, present occurrence no longer being the only kind. But this interpretation must still be admitted to be contrary to intuition.

Metaphysically speaking, the reason why such an interpretation seems so unintuitive is that we assume that the distinction between what is presently occurring and what is not is of huge importance. A merely *pastly* occurring football match, for instance, will not lead us to the stadium. This is because we take the past/present/future distinction to be one that is sharply delineated, a presently occurring event being one that *is* occurring, a pastly/futurely occurring event being one that *is not*. Tense realism falls foul of this intuition by positing the event as occurring *regardless* of whether or not it is presently occurring. This has several unintuitive consequences.

By making there be more than one type of occurrence, tense realism brings matters of degrees into what is intuitively a clear-cut notion, what we formerly thought to be non-occurrence now breaking down into past or future occurrence, to be distinguished from each other and from present occurrence merely qualitatively, by the addition (or lack thereof) of some property; ‘present occurrence’. This not only confuses, but also greatly trivialises our notion of what it is to occur, making it, as the modal realist

makes what it is to exist, of no more significance than what it is to be red, or tall, or have any other kind of property.

This has the effect of robbing the time at which an event *actually* (i.e. presently) occurs, when something *happens*, of any real significance. It is interesting here to note the possibility of swapping ‘presently’ for ‘actually’ in this context without loss of meaning, as in fact can be done in French usage in all contexts. This suggests that non-present events are in fact non-actual. If then we are convinced of the truth of actualism (the thesis that only what is actual exists) then this is some reason for being similarly convinced of the truth of presentism. In fact the former is sometimes called “modal actualism” and the latter “temporal actualism” (Zimmerman 1998, p. 211). Other affirmative modifiers are also happy to slip into this same context, for instance, we might well say that a present event is one that is ‘in fact’ occurring, again suggesting that past or future occurrence might be no more than a fiction.

But on the tense realists modal, actual occurrence is just a momentary glitch in an otherwise eternal existence as a past or future event. Again, it is interesting to note that, when talking about events on the tense realist’s model, as *eternal* events, we switch from talking about them as ‘occurring’ to talking about them as ‘existing’. For what can it mean to eternally occur if it is not taken to mean an event of eternally long duration, or one that is repeated on loop? How can we square this *eternal* element with the fact that, the above exceptions aside, occurrence is a *finite* procedure, of a certain, limited temporal duration? What is there for it to do before or after this time?

Should we take the event to be somehow persisting through these earlier or later, i.e. future or past times, wholly and completely? But this would involve “talking of events in terms appropriate only to continuants” (Smart 1964, p. 86), for events are in fact occurrents, entities which persist through time by *perduring*, i.e. by having different temporal parts at different times, rather than objects which are continuants, persisting through time by *enduring*, i.e. by being entirely present at different times.

It makes more sense to say that *before* the event begins – when it is future – and *after* it has ceased – when it is past – there is *no* event. In saying otherwise, the tense realist muddies not only the distinction between occurrence and non-occurrence, but also between occurrent and continuant, perdurance and endurance.

Just as the modal realist's reification of possible entities seems misguided, so does a reification of past or future events. Far from seeming real, past and future events have an unsettling intangibility about them; something that might make us unsure of their existence. Take a past or future pain. A present pain *hurts*. A past or future one, however, fails to hurt any longer/yet. In this sense, pastness and futurity, understood as properties, are at any rate strange properties. The task of a property is usually to ascribe some quality to the entity of which it is predicated. Pastness and futurity, however, rather than ascribing any quality to the pain of which they are predicated, seem instead to rob that pain of its qualitative aspects. And why should we take seriously the existence of a pain that does not pain one? As Zimmerman (1998, p. 212) puts it, such past or future pains seem 'too ghostly to be real'¹³... mere echoes of their once or future selves'. This is the point of Prior's (1959) 'thank goodness that's over!' argument, for why should we feel *relief* when a troubling event ceases (i.e. ceases to be present) if it does not cease also to exist?

This, of course, is the main *intuitive* motivation (aside from any *logical* one that may follow from McTaggart's argument) for wanting to deny the reality of past and future times and events: they are only of significance for us as present times or events. This is by no means to say that, when past or future, they are of no consequence to us. Most of us spend half our lives reminiscing on times gone by, guessing at what is to come. We may, in a literal sense, live in the present, but in our minds, we roam freely; regretting and reliving past events, fearing and fantasising about future ones. But the point is that what we regret or relive is the time when that past event *was present*, and what we fear and fantasise about is the time when that future event will *become present*.

¹³ This criticism seems to apply as much to non-actual entities as it does to non-present ones, both offending what I think Russell called a "robust" sense of reality.

It is only in their once or future present state that past or future events have any significance for us. So what reality can we give them in their past or future state? As Augustine convincingly argued;

“For if times past and times to come *be*, I would know where they be. Which yet, if I cannot, yet I know, wherever they be, they are not there as future, or past, but present. For if there also they be future, they are not yet there; if there also they be past, they are no longer there. Wheresoever then whatsoever is, it is only there as present’ (repr. in Gale, p. 43)

And if this last sentence is true then, given past and future events are no longer/not yet present, then they are also no longer/not yet in existence.

Justifying Regardlessness

There is an obvious response to all of this; why should the fact of the significance of the present *for us* imply that it is only the present that is *real*? Is such a view perhaps a little egocentric? We may only be aware of the reality of the present time but is this not simply because it is the time we are presently at? This response involves taking the term ‘present’ (as we looked at taking the term ‘actual’) to be of merely indexical significance, referring not to any ontologically privileged time and its contents, but rather to whatever time and its contents that we ourselves happen to be situated at. It is with such a reductive view that, analogously to the modal case, Regardlessness can be justified. It is indeed *required* on such a view.

But this reductive view is of course the province of B-theory. B-theory can justify its Regardlessness towards the present because it is regardless of the distinctions of tense altogether. Time, on the B-theorists model, is tenseless, and all times and their contents equally real, none more privileged than any other, some just at a greater, some at a lesser distance from us and each other.

But this option is not open to the A-theorist. If we want to see time as tensed, then we are not at liberty to justify our Regardlessness towards the significance of the present

by expressing indexical indifference to it. The pre-eminence of the present is the central tenet of the A-theorist's view of time; the intuition from which it gains any strength that it has. To ask why should the significance of the present mean that only the present is real is the kind of question that only a B-theorist would ask. The A-theorist must start from a different position; one that *assumes* the significance of the present. Given this fact, the A-theorist must ask a different question; not *why* should the subjective significance of the present mean that it is ontologically privileged, but rather *given* its objective, ontological significance, *how can we account for this fact?*

The problem facing the tense realist is this; on a realist, non-reductive understanding of tense what is past, present and future all exist equally. Within such an ontologically Regardless framework, in what can we ground the distinction between them so as to account for what, as an A-theorist, we must; the pre-eminence of the present?

Bourne (2002) asks a related question, with similar implications to my own: if all times exist equally then how can we be sure that *we are present?* Any attempt to ground such knowledge in our feeling of presentness is bound to fail, being subject to the B-theorists accusation of subjectivity. Lewis (1986) mounted such an attack on the non-reductive *modal* realist, taking issue with Adams' suggestion in 'Theories of Actuality' that, though both the actual and the possible are real, we can be certain that we are actual because "we are as immediately acquainted with our own absolute actuality as we are with our thoughts, feelings and sensations" (in Lewis 1986, p. 94). Lewis' objection is that

“... if Adams and I and all the other actual people really have this immediate acquaintance with absolute actuality then wouldn't my elder sister have had it too, if only I'd have had an elder sister? So there she is, unactualised, off in some other world getting fooled by the very same evidence that is supposed to be giving me my knowledge” (p. 94).

Craig Bourne (2002) makes the analogous case against the tense realist asking, if the past, present and future are equally real then how can we be sure that we are present, for then;

“Here I am... convinced that my present time is *present*¹⁴. But wasn't I as convinced yesterday when I went through these arguments then? So, there I am as I was yesterday, *as real as I am now*, believing that I am *present*, and thinking pretty much the same things then about my previous selves as I think today. Yet I know my earlier self is mistaken; so how do I know that I now am not?” (p. 362).

The point is that as A-theorists who take the present to be of ontological significance we are not at liberty to ground what we take to be our certain knowledge that our present experience is indeed present in the mere indexical fact that the present simply is the time we are at. Nor will any mere conviction suffice. So in what can we ground the surely indisputable fact that my present (in the indexical sense) experience is indeed present (in the non-reductive sense)?

Could the A-theorist instead deny that past or future experience is really worthy to be called experience at all, allowing our present experience to be the only kind, and thus indisputably *present*? We might do this by trying to understand my experiences of yesterday, not as experiences that *are* being experienced *in the past*, but as experiences that merely *were* or *are-pastly* being experienced?

This attempt solves nothing though, preferring to resort back to the ambiguity of a copula used “with a temporal meaning and not simply for predication” (McTaggart 1908, p. 32) – an ambiguity demonstrated by the sheer mass of differing responses to McTaggart’s argument – rather than square up to the oddities of a realist interpretation of pastness. We cannot settle for such ambiguity but must push further and ask, as McTaggart did, what is the semantic role of the temporal copula ‘was’ or the predicate modifier ‘pastly’?

Lewis interprets any such ‘tensing of the copula’, as turning what was formerly conceived to be “a dyadic relation of things to properties” into “a triadic relation of things to properties *and times*” (Lewis 2002, p. 5). Lowe (who is an advocate of the

¹⁴ This notation is used to denote the tensor’s non-reductive understanding of the present, as distinguished from the detensor’s merely indexical understanding of it, for on the indexical understanding (as indeed on the Presentist’s) the problem of our knowledge of presentness, and indeed the problem posed by McTaggart’s argument, cannot arise.

adverbial solution to both the problem of qualitative change in general and McTaggart's paradox) also explains the relevance of the predicate modifier in this way, as saying that '*relative to different times*, one and same object possesses different qualities' (2000, p. 47)

But if that past time to which the predication is being relativised *exists* then how does this help us, for having-at-an-existing-past-time some experience posits that experience no less than having some experience-at-an-existing-past-time. To claim anything else is to attempt a disappearing act by sleight of hand; to try and make use of the negation implicit in the tensed or adverbially modified copula whilst simultaneously holding onto the existence of past and future events.

So if the times to which past experiences (either them or the having of them) are being related *exist*, then those experiences must surely exist and thus in some sense be being experienced. This thwarts the possibility of knowing for sure that our present (in the reductive, indexical sense) experience is present (in the non-reductive sense). If true, this would be a *reductio* of the tense realist's position.

A Disanalogy

Bourne's question of how we can know that we are present is related, and bears upon, my own question of in what we can ground the pre-eminence of the present. And both seem to get the same answer; that, if present occurrence is only one type of occurrence, to be distinguished from past or future occurrence, then neither of these essential requirements of an A-theory can be met.

What is needed is to find some distinguishing mark of presentness allowing what is present to stand out from the crowd. It is at this point that a certain disanalogy between the modal realist's and the tense realist's positions arises, for there is an option open to the modal realist, that which we noted earlier, in which to ground the pre-eminence of the actual that is not open to the tense realist. This is to take what is actual to be concrete and what is possible to be merely abstract. Of course, as we also noted, this distinction is by no means clear-cut, given the existence of actual abstract

entities. My point however is not to either defend or attack this position; just to note it as a possibility. For there seems to be no such possibility available to the tense realist, no distinction within time (as there is within reality itself) in which to ground the pre-eminence of the present over other times. If they all exist, then all tensed times, being *in* time, must be as real, i.e. as fully concrete, as each other.

Smith (2000) has recently, no doubt due to an awareness of these difficulties, advocated a 'degree presentist' solution to this problem. Degree Presentism takes non-present times and their contents not to be completely unreal as (what he calls) the 'solipsistic presentist' does, but rather less real by degrees the further they are from the present time. Though an intuitive idea in many ways, this would not only bring the degrees back into the notion of existence that we had decided, in looking at the attempted solutions to Parmenides' paradox, to ban from it, but would also seem nevertheless to be subject to Bourne's knowledge of presentness argument for, as he asks, "how then do we know that we are not in this impoverished state of having shady existence?" (p. 364).

Reinterpretation

For the tense realist then, all avenues seem barred. Amongst a multiplicity of equally existing times, there is no means of giving an objective explanation of the pre-eminence of the present, as any A-theory must be able to do. If, on the other hand, we refrain from reifying what is past and what is future, we will avoid the Regardlessness that comes with tense realism, whilst ensuring that that the present is of objective ontological significance, it in fact being all that there is.

But what then of (PA); the assumption that every subject of predication must exist? How can what is past or future not exist, as we might intuitively think, given that, as subjects of these predications, we seem to require their existence? Answering to the assumption here is however no more difficult than in the existential case for, as we have seen, it is simply not the case that "a singular term presupposes an entity named by the term" (Quine 1953, p. 9). Assuming the subject of a past/future tense predication to exist seems to lead to analogous problems as assuming the subject of a

negative existential predication to exist. We should therefore no more interpret tense propositions on the subject-predicate model than we would existential propositions.

In fact, the significance of a tense predicate is more than merely qualitative. Its significance is in fact implicitly as existential as existential predications are (hence the analogy); a present tense predication, like an existential predication saying simply that there is such a thing, a past or future tense predication, like a negative existential predication, saying that it is no longer or not yet the case that there is such a thing.

For 'being present', like 'being' itself, is not being *a particular way*, as opposed to being *past* or being *future*, but being *simpliciter*; these predicates not being a means of characterising some existing thing, of but telling us whether or not there is anything to be characterised in the first place.

Chapter 4

Solving the Paradox

Parmenides' Paradox

I have shown that a subject-predicate interpretation of existential propositions and, by analogy, tense propositions, is at the very least, deeply inappropriate, seeming to involve a certain *Regardlessness* towards our semantic and metaphysical intuitions.

I have also shown how (PA), the assumption that every subject of predication must exist, provides some motivation for this otherwise inappropriate interpretation and, more generally speaking, our seemingly irrepressible “tendency to reify... to force propositions into a subject-predicate pattern” (Prior 1962, p. 42).

When we subject tense propositions to such reification, we get tense realism; the thesis that all tensed times and their contents exist equally. It seems hardly surprising then that this thesis of tense realism, given its Parmenidian motivation, should lead to confusion, and indeed paradox. To understand why we must recall the philosophical context into which (PA) was introduced.

(PA) was formed in part as an argument against the dynamic conception of reality put forward by Heracleitus. Heracleitus found reality to be in constant conflict within itself, a conflict giving rise to dynamic forces that we are forever in the swell of. These forces ensure that “you cannot step into the same river twice... for fresh waters are ever flowing in upon you” (quoted in Russell 1946, p. 63). As it is with the river, so it is with reality in general for, according to Heracleitus, “all things are flowing” (ibid. p. 63); the old continually passing on and giving way to the new.

As we see things now, a dynamic conception of reality such as this involves a dynamic conception of time; for the waters of the river to be able to flow in the manner Heracleitus describes, i.e. for *new* waters to be forever flowing from source to

the sea, the ‘river of time’ must also flow, must carry the event of the waters arrival at the sea from the future into the present, and then off into the past; i.e. subject it the process of ‘becoming’. Obviously, such ways of speaking are merely metaphorical – time does not literally flow, nor should its passing be understood as a literal movement, on the spatial model. However the basic point stands: the kind of change and flow that Heraclitus found *in reality* requires a more basic kind of change and flow – changing tense and the flow *of time*; that which brings ‘becoming’ into the world.

Parmenides found *logical* fault with this dynamic conception of reality, being deeply suspicious not just of the notion of ‘that which is not’ in itself, but also with this notion of ‘becoming’, that seems to entail the former notion.

“Nor shall I let thee say or think that ‘it’ *came* from that which is not; for it cannot be said or thought that it is not...Thus becoming is extinguished and perishing is not to be heard of” (p. 36).

It was to this end that he introduced (PA), for (PA) rules out the possibility of anything ‘becoming’ (or ceasing). If any subject of predication must exist, then how could we intelligibly say of anything that it has ‘become’ (*will be* but *is not yet*) or that it has ‘ceased’ (*was* but *is no longer*)?

What we have here is the tensed analogue of the paradox of negative existential propositions, involving the same seeming contradiction we have been discussing all along; that of needing to both deny (through the content of the predicate) and affirm (through requiring a subject for the predication) the existence of the subject. Parmenides concluded that ‘becoming’ and ‘ceasing’ must be unintelligible, aiming with this proclamation to bring Heraclitus’ dynamic reality to a standstill, and leave it there, in eternal, unchanging stasis.

As we now know, there is no more problem with the notions of ‘becoming’ or ‘ceasing’ than there is with the notion of non-existence itself, as long as we refrain from interpreting these notions on a subject-predicate model. We have said that being (or not being) is in fact not being *a particular way* but being (or not being)

simpliciter. To avoid this tensed version of the Parmenidian paradox and defend Heraclitus' dynamic conception of reality all we need do is say the same of propositions involving the notion of 'becoming' that we have said of propositions involving the notion of 'being'; that they cannot coherently be interpreted on the subject-predicate model, 'becoming' (or ceasing) not involve coming (or ceasing) to be *a particular way* but coming (or ceasing) to be *simpliciter*. In this way, what is said to have not yet become or to have already ceased, not being a logical subject, does not need to exist to be called such.

McTaggart's Paradox

From the seeds of this ancient debate between Heraclitus and Parmenides, grew two philosophical camps, in steadfast opposition. As Grey puts it;

“On the one side there are the followers of Greek philosopher Heraclitus, for whom the world is in perpetual flux. On the other side there are the metaphysical heirs of Parmenides, who hold that truth and reality are stable and eternal” (Grey 1999, p. 57).

The former conception of reality, as we have seen, leads to a tensed conception of time. The latter, conversely, lends itself to a tenseless conception, Parmenidian suspicion finding a happy home in B-theory.

B-theory is as suspicious of the A-theory notions of 'becoming' and 'ceasing' as is Parmenides; again, one suspects, due to the notion of 'that which is not' that these notions, as we have seen, entail. The B-theorist thus prefers to reduce all three – what *will be*, what *is* and what *was* – to something uniformly affirmative; a tenseless [is]. And it is the Parmenidian assumption that every subject of predication must exist that gives force to this tenseless reduction.

How surprising then to find this same assumption, sharing the sympathies of B-theory, at the heart of an A-theory, and thus how unsurprising that, on finding it there, we find paradox alongside it. We have already seen that this combination, of A-theory

and a tense realism that posits a multiplicity of equally existing times and their contents will not allow us to adequately guarantee what is the backbone of A-theory; the pre-eminence of the present. More than this; it is this very combination and not in fact A-theory itself, that gives rise to McTaggart's paradox, and the inability of the Succession Defence to resolve it.

To explain, let's return to the Succession Defence; the claim that the contradiction involved in the having of incompatible tense properties can be defended against if it is specified that these properties are had successively, i.e. that an event that *is* present merely *was* future, and *will be* past.

The controversy surrounding whether or not the Succession Defence is able to solve the paradox is explained by the fact that, as I suggested in Chapter 1, the notion of succession can be variously interpreted, and these various interpretations will have different implications for the success of the Succession Defence in solving McTaggart's paradox.

For instance, on the B-theorist's model of time, the notion of one thing having incompatible properties cannot be defended against by the appeal to succession. This is because there is no element of 'becoming' in B-theory, and 'becoming' (or one interpretation of it, as I shall explain in due course) is what makes sense of the Succession Defence. In B-theory, three successive times do not successively 'become', they simply [are]; existing equally, side by side, as it were. There is no ontological difference between these three successive times and their contents; they differ only in respect of the extrinsic B-relations (of 'earlier than' and 'later than') holding between them. Accordingly, on the B-theorist's understanding of succession, just to state the Succession Defence is to say nothing capable of removing the contradiction. If the successive times and/or what exists at them exist equally, then what has those properties will have them equally; this sense of *equality* being what the tenseless '[is]' signifies and what, given the mutual incompatibility of the properties, what leads to the contradiction.

This is why many (though not all¹⁵) B-theorists, declining to find any ontological difference between the different times themselves, adopt a Perdurantist response to the problem of qualitative change (McTaggart's paradox, interpreted as McTaggart or the tense realist does, being an example of this problem) building the temporal element from the copula into the subject itself. This splits the subject into temporal parts, and these separate temporal parts can then share the mutually incompatible properties around, thus avoiding contradiction.

Unsurprising then that for the B-theorist, given his tenseless understanding of succession devoid of the notion of 'becoming', the Succession Defence does not pack much of a punch and McTaggart's reasoning seems 'beyond all reasonable doubt'. The B-theorist's dismissal of the Succession Defence is in fact no more than a trivial consequence of his dismissal of the notion of 'becoming', and indeed of temporal passage itself.

That said, not just any understanding of 'becoming' will enable the Succession Defence to solve the paradox. Any conception of the process that takes it to be a qualitative matter – a matter of becoming (and ceasing to be) *a particular way*, as opposed to becoming (and ceasing to be) *simpliciter* – will find itself no better equipped.

Many A-theorists have disagreed; thinking that the argument demonstrates only that the tense of an event cannot be coherently explained in terms of a *tenseless* predication of a tense property, McTaggart in fact *creating* the paradox by "trying to explain in tenseless terms what the copula means" (Broad 1938, p. 78). Accordingly, A-theorists have often responded to the paradox by trying to return to the tensed propositions involved in the Succession Defence the tensed element that McTaggart's interpretation stripped them of. Smith suggests two ways of doing this; seeing the temporal element in the copula as either affecting "the sentence upon which it operates or the referent of this sentence" (Smith 1986, p. 189). Though the notion of the 'referent of a sentence' is a problematic one, the idea at work here is clear: the temporal element in the copula can be interpreted as in some way affecting the

¹⁵ See Mellor (1981) for alternative explanation

predication, as a predicate modifier of sorts, or as affecting the proposition as a whole, as an operator. It is in which of these options that we pick that the success of the Succession Defence lies.

The former option involves sticking with McTaggart's subject-predicate interpretation, but merely 'tensing the copula'; in one way or the other putting the tensed element straight back into the copula from which it was originally taken. This can be done in various ways.

Smith (1986), for example, takes this temporal element to be not a moment to which the property is relativised, but itself a property; a property of the inherence of the property in the event, what Smith calls an "ontological adverb" (p. 190). The A-propositions that make up the Succession Defence – that an event *is* present *was* future and *will be* past – is understood not as saying that the event [is] present in the present, [is] future in the past and [is] past in the future, but that the event's presentness *is* present, its futurity *is* past and its pastness *is* future, where the tensed copula has the additional *reflexive* function of indicating the (present) tense of the inherence of the property in the inherence of the property in the event. That tenses are reflexive properties in this way (i.e. their present inherence *itself* being present) is then thought to account for the regress, which, given the supposed success of the Succession Defence, is thought no longer to be vicious.

Lowe (2000), alternatively, gives an adverbial interpretation of the significance of these copulas. Like McTaggart, he sees the temporal element in the copula as temporally relativising the predication in some way but, unlike McTaggart, he denies that this relativisation should involve relativising the property to some moment of time, 'reifying' these moments, which then also need to be relativised, being that which, to Lowe's mind, creates the regress¹⁶. He instead, like Smith, takes the temporal element in the copula to be affecting, not the property but the inherence of the property in the event; as adverbially modifying that inherence. The succession

¹⁶ Though why temporally relativising *the having* of a property is supposed not to require the moment to which it is relativised being reified (or why, if it does, this does not lead also to a regress) I am not quite sure.

defence is thus understood as saying that an event that *is-presently* present, *is-pastly* future and *is-futurely* past.

I will not compare the relative merits of these tensed re-interpretations of the significance of the Succession Defence, as it is what they have in common – and, more importantly, what in common with McTaggart’s interpretation – that is of interest to me.

What they share with McTaggart’s interpretation is interpreting the tensed propositions comprising the Succession Defence on a subject-predicate model, differing from it only in terms of what aspect of the predication the temporal element in the copula is supposed to be affecting; that being changed to the copula – to the having of the property – rather than the predicate – the property itself.

What they share with each other’s interpretation then, (as belied in the subject-predicate interpretation) is interpreting the notion of ‘becoming’ that the tensed proposition in the Succession Defence expresses to be a qualitative process, characterising the event as becoming *a particular way*, the temporal copula being in some way part of this characterisation; whether a property of the having of a property (e.g. Smith’s reflexive interpretation) or as temporally relativising the having of a property (e.g. Lowe’s adverbial interpretation).

No matter which; the point is the same, for any subject-predicate interpretation, whatever its specifics, must nevertheless presuppose, in accordance with (PA), that the event, as subject of each of these predications, exists equally as all of these things, regardless of the particulars of the predication.

This notion of equal existence is that which we find in B-theory. It was this notion of equal existence that we admitted, when applied to the notion of succession, would preclude it from being able to solve the paradox, stripping from it any sense of ‘becoming’ that the Succession Defence requires in order for it to be successful. What we find in tense realism is a notion of ‘becoming’ that seems, in making ‘becoming’ a qualitative matter, *equally* unable to solve McTaggart’s paradox; as unable as it was to escape from Parmenides’ paradox.

The problem, on such an understanding of ‘becoming’, is how we justify the banning of the tenseless [is] that creates McTaggart’s paradox.

For, on a qualitative interpretation of becoming, that which ‘becomes’ (and ceases) exists as equally, *regardless* of its becoming and ceasing, as it does in B-theory. Not only as equally as in B-theory but also as eternally; the distinctions of tense merely serving to characterise an event in different ways along this eternal journal from the distant future into the depths of the past. Given this conception of events as existing equally and eternally *regardless* of the particulars of their characterisation, then aren’t we at liberty to talk about the event as *abstracted* from the particulars of its characterisation as either past, present or future; as something that [is] in fact all of these things (and thus contradictory). ?

After all, if the tense of an event is something to be merely predicated of it – something thus *additional* to it – it is something that, at least in principle, it could do without. This provides us with further justification for a tenseless abstraction away from any particular characterisation of the event; for seeing it, *in itself*, as just a bare, *tenseless* event, something that merely [is].

No, says the tense realist, for we have tensed these offending tenseless copulas. The point is however that when considered in this light, this act of ‘tensing’ seems to be no more than grammatical as, given the event’s status as *eternal* entity, *existing equally* and *regardlessly* of its tense, the banning of the tenseless [is] that creates the paradox seems metaphysically unjustified.

Tense realism entails equal existence – this much is not in dispute. My claim is that equal existence is in fact incompatible with the sense of ‘becoming’ that the A-theorist must employ if she is to be able to find a version of A-theory that is not susceptible to McTaggart’s paradox. ‘Becoming’ is a process. A process is of course intimately related to its constitutive states. The B-theorist, taking all times to exist equally, none of more ontological significance than any other, is thus suspicious of the process of ‘becoming’ – this being a trivial consequence of his suspicion of the

passage of time itself – and so reduces this process to no more than its equally existing constitutive states.

If we are A-theorists, then this process of ‘becoming’ – being the very essence of A-theory’s dynamic conception of time and its passing – must be taken to be in some way fundamental, not reducible to its constitutive states but that which explains them; brings them about even. The tense realist, however, tries to be both realist *and* reductive about the significance of ‘becoming’; taking both the process – the ‘becoming’ of A-theory – and its constitutive states – the equal existence of B-theory – to be *equally* fundamental.

He cannot; for, as an A-theorist, the time at which an event actually becomes, i.e. becomes present, must, *contra* the B-theorist, be of more ontological significance than the time before or after. And as we have seen, positing all three times as existing equally will not allow us to do this; to guarantee the pre-eminence of the present.

Accordingly, we should refrain from interpreting the temporal copulas in the tense predications that constitute the Succession Defence, that which in turn expresses the notion of ‘becoming’, as modifying these predications in some way. The temporal copula in the claim that ‘e was F’, for instance, is not saying something about e’s Fness. Such an interpretation is problematic because it takes these tense propositions to be subject-predicate propositions, and thus must assume there to be, in line with (PA), equally existing subjects of which to predicate. And equal existence implies not a tensed copula but the tenseless [is] of B-theory, that which justifies McTaggart’s final damning claim that the A-series must be paradoxical as every event in it [is] past, present and future. Equal existence must then remain the province of B-theory and B-theory alone. Merely adding the qualitative distinctions of tense to this multiplicity of equally existing times and/or what exists at them yields not A-theory, but paradox; McTaggart’s paradox.

Instead, we must take the other option; seeing the temporal element in the tensed copulas as an operator, saying something not about e’s Fness but about proposition ‘e is F’ as a whole; that it is only pastly/futurely the case, in other words, no longer/not yet the case. For ‘becoming’ is not, as Broad says, “a species of qualitative change”

(1938, p79). As we said of 'being', 'becoming' involves an event not in coming (and ceasing) to be *a particular way* but coming (and ceasing) to be *simpliciter*.

There is no other way of being than being present, and therefore nothing to be in contradiction with it. McTaggart's paradox can thus never arise.

Chapter 5

Problems for Presentism

Presentism solves McTaggart's paradox and its related problems concerning the significance of pastness and futurity and in what we should ground the pre-eminence of the present. It also, however, comes with its own set of related problems. I shall suggest a possible way of addressing what I take to be the most pressing of these; how we account for both the truth of propositions concerning the past and future, and the difference between the past and the future, given neither exist.

The Truthmaker Assumption

It is an oft stated platitude in philosophy that for every truth, there must be something in the world that makes it true. This is what I am calling the Truthmaker Assumption (TA).

(TA) asks of us that we account for the truth of a proposition, and suggests how we should do this. It requires that for every true proposition, something must *exist* which will "ensure, make true, underlie, serve as the ontological ground" (Armstrong 1997, p. 116) for the truth of that proposition.

(TA) seems analogous in this way to (PA). (PA) is about how we account for the meaning of a proposition. It tells us that for any meaningful proposition, something corresponding to the subject of that proposition must *exist* in order for that proposition to be meaningful.

(TA) assumes of truth as (PA) assumes of meaning that, as Austin puts it, "it takes two" (Austin 1950, p. 23); the true/meaningful proposition and something in the world that makes it true/meaningful. Consequently the problem they pose for presentism is that, if what is past and future do not exist, then there is nothing in the

world to account for the truth/meaning of propositions concerning past or future times and/or their contents (what I shall call P/F-propositions).

It is not only P/F-propositions (on the presentist's understanding of them) that fall foul of (TA) however. (TA) has problems in accounting for the truth of *any* negative truth. What existing thing, for instance, could make true the claim that I have *no* siblings or that my friend is *absent* from the lecture? Some outwardly positive truths also seem to entail negative truths, the quantified claim, for instance, that *all* fish can swim requiring the truth of the additional negative proposition that there are *no* fish that *cannot* swim.

Negative truths then are aplenty, and as problematic for (TA) as negative existential propositions are for (PA). And (TA), when applied to negative truths, employs us in as thankless a task as (PA) employed us in; the task of finding an *existing* truthmaker (as (PA) had as searching for an existing 'subject') for a proposition whose truth entails the *non-existence* of something.

The problem is that (TA) takes truth to involve *a relation*. In doing so it faces an analogous problem to that recognised by Lewis (1999) with respect to taking causation to involve a relation. If truth/causation is a relation, what then when our true proposition/causal process involves some kind of negation e.g. for our specific purposes, the proposition that something does *not* exist/exist yet/exist anymore or, for Lewis' purposes, a causal process such as *not* having food causing one to die? A relation, as Lewis puts it, "requires relata"; given many propositions/causal processes involve there *not* being something, any relational theory will have in these cases to deal with "the problem of the missing relatum" (Lewis 1999, p. 4).

Given these problems, should we proclaim the mission set by (TA) to be as misguided as that set by (PA)? It certainly sounds as paradoxical. Given the sheer mass of exceptions to (TA) – negative truths being only one counter-example – would it not be better to disregard it?

The problem is that disregarding (TA) altogether is much less appealing than disregarding (PA), the link between truth and existence that (TA) posits seeming to

have much more of a basis in reality than the link between meaning and existence that (PA) posits. This is because meaning is essentially a *mind-dependent* phenomenon. Why then should it necessarily be grounded in *mind-independent* reality? Conversely, most contemporary philosophers of a realist persuasion take truth to be a *mind-independent* phenomenon. Asking that every truth has something in the world that makes it true is thus thought by many to be synonymous with good, sensible realist practice. As Bigelow puts it, a truthmaker is like “an anchor to hold me from drifting onto the shoals of some sort of pragmatism or idealism”. (1988, p123).

Alternatively, could we restrict the scope of (TA) so as to exclude the offending propositions? The case for excluding P/F-propositions, however, seems much less founded than the case for excluding, say, true negative existential propositions. Whilst the ‘subject’ of a true negative existential proposition *never* existed, the ‘subject’ of a P/F-proposition either *did* or *will* exist and thus, intuitively speaking, it is in the once or future existence of that very thing that its truth must inhere.

If this intuition is founded, does this require us to posit past and future entities as existing in some sense after all? It should of course be noted here that if we are A-theorists, then agreeing to this will merely lead us back into the realm of B-theory and the equal existence of things that the tense realist ascribes to, which I hope to have shown, when not fully reductive, leads to contradiction. Are we then forced, if held to (TA), to accept a B-theory of time, which is able to posit the equal existence of all times and what occurs at them *reductively* and thus without contradiction? Or can the presentist (who, as we have seen, also evades contradiction) manage somehow to stay within the bounds of (TA)?

This is a difficult task, contemporary presentists willingly admitting that “a satisfactory account of present truthmakers for past-tensed propositions is yet to be given by presentists” (Bourne 2002, p. 371), the few suggested strategies for dealing with other counterexamples to (TA) seeming unable to aid the presentist’s cause.

One such solution often offered to counter-examples to (TA) is to simply “abandon the generality of the axiom by restricting it to atomic claims” (Fox 1987, p. 204). An atomic claim would be a proposition of the form [Fa], a molecular claim being an

atomic claim that is operated on in some way, or sententially connected to another; i.e. $\neg [Fa]$ or $[Fa \vee Ga]$. We could restrict (TA) so as to exclude molecular claims altogether (which would so weaken the principle as to make it nearly insignificant) or instead deny that they need *separate* truthmakers from those had by their atomic constituents, from which their truth-values are functions.

This however, whilst helping with the problem of many true molecular propositions, (e.g. conjunctions and disjunctions) does not help us with our negative truths, which are left with nonexistent truthmakers. To explain, take our P/F-propositions; presentism interprets these as functions from (i.e. negations of) core, atomic propositions concerning a present time/entity (an N-proposition). If the truthmakers for molecular claims are just (functions from) the truthmakers of these atomic N-propositions, then the truthmakers for P/F-propositions will be the (once or future) present entity referred to in that core atomic claim. The problem is that, as a presentist, only what *is* present (rather than what *was* or *will be* present) exists. P/F-propositions will thus be landed with nonexistent truthmakers. This is contrary to the spirit of truthmaking, which gains any strength it has from the purported link between truth and existence.

Another solution is to take truthmakers to be states of affairs rather than things. This helps with truthmakers for negative truths as a negative state of affairs or a “totality state of affairs”, listing an inventory of what there is that excludes that which is being negated (Armstrong 1997, p. 196), can then serve as their truthmaker. This solution cannot help us with our presentist understanding of P/F-propositions however for which we would need an inventory of, not just what *does* exist, but also what *did* and *will* exist.

And beside, the solution is not a satisfactory one anyway, needing us to be convinced that the world is “a world of states of affairs” (Armstrong 1997) rather than a world of things, which we may well not be. Also to take a “totality state of affairs”, involving *everything that exists*, to be the truthmaker for a proposition involving the *one thing that does not*, seems somewhat “metaphysically extravagant” (Dodd 2002, p. 74). It seems in fact to be the very height of what I have called Parmenidian suspicion; the

suspicion of ‘that which is not’ and its consequent urge to explain negation in terms of affirmation, non-existence in terms of existence, what merely *was* or *will be* in terms of some kind of [is]. Again it is demonstrated how this urge (the very same one we have found responsible for all kinds of confusions, not least of which being McTaggart’s paradox) however forgivable in its motivation, is leading us astray.

I say forgivable in motivation because, as we have suggested, (TA) is associated with good realist practice; with the desire to ground truth in mind-independent reality, rather than letting it run away with itself. And true enough, in rejecting the existence of past or future times and their contents, we are rejecting a kind of realism; what we have called tense realism. But this does not make us non-realist in the sense of being *idealists*. We do not, at any rate, take what is past or future to be some kind of mind-dependent entity. We take them in fact to be no kind of entity at all. The opposite of realism in this sense is not in fact idealism but rather *anti-realism*, involving us in the much more respectable task of trying to explain the truth of one class of proposition reductively in terms of the truth of another class of proposition. For the presentist, this task is to explain P/F-propositions in terms of a function from an N-proposition; the claim that something is no longer/not yet present, that also implying no longer/not yet in existence.

Bigelow (1988) has suggested a weaker version of (TA) that could make this reductive project possible. He claims not that truth involves a relation with what exists but that it is rather “supervenient on being”. The revised assumption, let’s call it (SA), entails that that “you could not have any difference in what things are true without some difference in what things exist” (1988, p. 132). (SA) suggests that it is not necessarily in *what* exists, but rather in *whether* something exists that we should ground the truth of our propositions. The truth of positive truths can thus still supervene on the fact that something *does* exist, whereas the truth of negative truths can supervene instead, as intuitively they do, on the fact that something *does not* or (for our purposes) *does not anymore* or *does not yet* exist.

(SA) allows for there to be a difference between what makes true an affirmation and what makes true a negation, that being, in the first instance, a ‘that which is’ and in the second, a ‘that which is not’. We need there to be this distinction precisely

because we respect the assumption of (TA) in so far as we take the world – both what is and isn't in it – to be relevant to what propositions are true. (SA) is thus infinitely preferable to (TA) in that it considers existence without assuming it. It pays heed to the world in accounting for the truth of our propositions, yet without needing to conjure up some entity (a past or future entity, a state of affairs) to do so. It also ties in neatly with our reductive semantic analysis of tense predicates, which we interpreted not as taking something that *exists* and characterising *that thing* in a particular way but as saying *whether or not* there is anything there to be characterised in the first place.

We could then take tense propositions, and similarly existential propositions, to be made true by *whether or not* something exists; N/existential propositions being made true by *there being* something, P/F/negative existential propositions being made true by there no longer/not yet/not being something.

Directionality

This possible solution to the truthmaker problem might seem, however, to be lacking in some way. For if we look solely to *whether* something exists in accounting for the truth of P/F propositions then, then given neither exist, what is the difference between what makes true a P-proposition and what makes true an F-proposition? Before we can answer this question we must ask another; what is the difference between the past and the future *simpliciter*?

Having an answer to this question is an essential requirement for any conception of time, for time, unlike space, is an asymmetrical, *directed* dimension; anisotropic, not isotropic. This asymmetry reveals itself to us in many different ways. For instance, as Sorabji points out, for whatever reason “we feel more horror at the thought of our future non-existence than at the idea of our past non-existence” (Sorabji 1983, p. 8). Similarly, whilst we take the past to be causally inaccessible to us, we feel that we can affect the future; that it is, in some sense, up for grabs. These intuitions, though not enough in themselves on which to base time's asymmetry, are nonetheless an

indication of it; the past seeming to us to be fixed and determinate, the future open and indeterminate; a realm of mere possibility.

Accounting for this difference between the past and the future is as difficult for the B-theorist and the tense realist – taking *both* to exist – as it is for the presentist – taking *neither* to exist. The B-theorist can at least do this reductively, explaining it in terms of the direction of increase in entropy, or of causation. It is harder for the tense realist and presentist, however, for whom this difference between the past and the future must in some way be grounded in their pastness or futurity.

This difficulty has led many A-theorists to opt instead for the doctrine of the ‘open future’. The ‘open futurist’, as we can call them, takes the fact of this difference to be explained in terms of a difference in what exists; the future and the past being thought to be “modally and ontologically different” (Lucas 1989, p. 8). The modal aspect of the past – its fixity – is then explained by the fact that it exists, the modal aspect of the future – its openness – by the fact that it does not (yet).

Becoming, on this model, *contra* the B-theorist and the tense realist, is not like the unrolling of some giant rug, all there but mostly hidden. It is instead likened to the weaving of a web (Lucas 1989, p. 6); not a passive, determined unfolding, but something in which we (and other forces) take part; something the outcome of which is as yet unsettled. To show that these and our earlier noted intuitions have any objective significance, reality must be shown to be indeterministic.

“For if determinism is true, then, granted the initial conditions, it would be impossible for the future to be any different from what it was already determined to be, and so the future would be no more alterable than the past.”
(Lucas 1989, pp. 6-7)

And this indeed was how the classical physicist took things to be, the height of this presumption being LaPlace’s (1814) bold claim that, if we were to know all the minutiae of detail concerning some ‘initial condition’, then we could not only retrodict back to any past state but also predicate forwards to any future one with complete accuracy (from Lucas 1989, p. 6).

If true, this would seem to relieve us of any responsibility or control over our choices and consequent actions. And we do feel that we have choices, the freedom to pick our path and a will that thus can carry us down it, or else decide at the very last moment to thwart it in favour of doing something entirely different. This feeling of freedom suggests to us that our behaviour is not determined¹⁷. Such subjective, human considerations, however, can give us no guarantees, feelings not entailing their own objective validity. Luckily, however, they do not have to, for it is not just in human behaviour that there is this appearance of indeterminism. At the most microscopic level of reality, at the subatomic level, we find what is known as ‘quantum indeterminism’.

“Take the decay of atoms of radioelements. These are radioactive isotopes of chemical elements like radium and uranium whose atoms decay when subatomic particles, such as α or β particles, ‘tunnel’ out of their nuclei, thereby turning them into atoms of other elements. This process of decay is not deterministic: its laws do not make any atom of a radioelement E certain to decay (D) in any given interval of time. Instead they give each such atom x in its normal state a certain chance of decaying within any subsequent time interval...” (Mellor 1995, p52).

If this is so, then quantum events are in fact no more than probabilistically caused. Some have disagreed, however, preferring to say that these events are in fact entirely *uncaused* rather than admit to causal indeterminism. As Paul Davies (1983) argues:

“Some events are linked by causal relations to prior events, others, like the decay of a radioactive nucleus, are labelled ‘spontaneous’. It’s all *there*, whether the causal links are incorporated or not” (p. 132).

¹⁷ Of course, determinism does not *have* to imply that we are not free. A compatibilist such as Lewis would urge us that just because the outcome of a choice is determined does not make it any the less a choice. However, taking this response to rely on a somewhat dubious definition of a choice my own sympathies are with the incompatibilist.

The problem with this though is that apparent *effects* involving the decay of a radioactive nucleus can no longer be seen as *caused*. Mellor (1995) cites the example of an atomic explosion, caused when

“...a high explosive is used to force *subcritical* masses of fissile material together into a *supercritical* mass, which then explodes. But this process is not deterministic. As with the forced decay of single E atoms, the chance that a supercritical mass will explode is still less than 1, and the chance that a subcritical mass will explode is greater than 0. So if causes must be sufficient and necessary for their effects, an atomic explosion cannot be caused by turning a subcritical mass of fissile material into a supercritical one. Yet that is how it is caused.” (pp. 53-54)

The implication of this, in line with open futurism, is that the event of the explosion has *no determinate reality* until such a time as the event *becomes present*¹⁸. This further implies that becoming present involves not one thing, characterised differently yet *equally real* both before and after the moment of occurrence, but rather one thing ‘becoming’ in a more absolute sense; i.e. coming to exist. And of course the presentist agrees with the open futurist’s indeterministic understanding of becoming. What the presentist disputes is that what becomes must continue to exist after it has ceased to be present. Ceasing to be present should no more be understood as ceasing to be a particular way than becoming present should be. We must take both to be equally absolute processes for a coherent understanding of occurrence and one not susceptible to McTaggart’s paradox; for a view taking only what is past and present to be equally real will be no less contradictory than one taking the past, present and future to be, McTaggart’s paradox ruling out not just that any event can have all of these determinations but that any event can have more than one of them.

If this is indeed so, then if we want to account for the difference between past and future times *within* A-theory yet *without* paradox then we must be able to explain the

¹⁸ My feeling is that (unless we are prepared to countenance indeterminate existence, as the modal realist does) indeterminism must be problematic for any temporal realist, especially for the tense realist, who cannot understand the present time at which the event ‘becomes’, or indeed its ‘becoming’ reductively. However, I do not require that indeterminism implies the unreality of the future. I simply require indeterminism, for I suspect that Presentism requires it.

difference between the past and the future on the presentist's model; taking the past to exist no more than the future does.

But is the presentist not then in a similarly awkward position to the tense realist or the open futurist? ~~Am I~~ not, in other words, subject to my own objection; taking different times to be equally unreal leaving me no better able to distinguish between them as making them equally real does? Does saying that the past and future are equally *unreal* mean that they must be equal in every way? Some presentists, for instance Lukasiewicz (1937), have been happy to assent to this.

“We should not treat the past differently from the future. If the only part of the future that is now real is that which is causally determined by the present instant, and if causal chains connecting to the future belong to the realm of possibility, then only those parts of the past are at present real which still continue to act by their effects today. Facts whose effects have disappeared altogether, and which even an omniscient mind could not infer from those now occurring, belong to the realm of possibility. One cannot say about them that they took place, but only that they were possible. It is well that it should be so. There are moments of suffering and still harder ones of guilt in everyone's life. We should be glad to be able to erase them not only from our memory but also from existence” (pp. 38-9).

Whilst ingenious, this seems deeply wrong. In denying *reality* to the past as well as the future we do not want this to mean that the past is as *indeterminate* as is the future. The difference between the two must be maintained. Can we do this on the presentist's model of time; i.e. without that difference needing to be a difference in what exists?

We have noted that the difference between the past and the future seems to be a modal difference; the past being a determinate realm of “unalterable necessity” and the future an indeterminate realm of “mere possibility” (Lucas). We have also noted how truth can be accounted for without requiring the existence of something that makes it true; truth involving, not *what* exists necessarily but *whether* something exists; what is present *existing* and what is past and future *not existing*.

Could we not thus also explain the difference between the past and the future – that which we suggested was lacking from our attempted solution to the truthmaker problem – without assuming the existence of something? For if indeterminism is true, and the future occurrence of events, unlike their past occurrence, is not fully determined, then it is plausible to argue that propositions concerning the future occurrence of an event, as opposed to their past occurrence, will have no determinate truth-value, as there *is* no fact of the matter as to their occurrence.

This of course is to go against not just metaphysical thesis of determinism but also the semantic principle of bivalence; that any proposition must be either true or false. This is one of the longest standing principles in philosophy, the source of which is Aristotle's claim that "there is nothing between asserting and denying" (quoted in Quine 1970, pp. 83-5). This principle implies another, the law of the excluded middle, that either *p* or not-*p* must be the case. It is this law that gives force to Aristotle's sea battle argument – that either there will or there wont be a sea battle tomorrow – this being taken to imply that whether or not there will or wont must be a determinate fact. However such semantic laws cannot dictate our metaphysics. If it is proven to be the case that the time at which some quantum event will occur is only probabilistically determined, propositions *concerning* that event – even seemingly logically intractable ones of the form of Aristotle's, saying that either the quantum event will or it wont occur by a certain time – might have to remain of indeterminate truth-value.

A determined determinist could reply with the famous old adage that, regardless of whatever we do or do not know now, 'what will be will be' and in due course that will make itself known. Is this F-adage not determinately true? Perhaps, but this should not be taken to imply that 'what will be is now' or rather 'what will be [is]'. What will be will indeed be; it just isn't yet.

This response of the determinist seems analogous to an entirely misplaced criticism often made of the presentist's position: that it implies that there is no future (or past).

Hence Lewis (1986) argues:

“No man, unless it be at the moment of his execution, believes that he has no future...” (p. 204)

And Maudlin (2002);

“I know what it would be... to believe that the future is unreal (i.e. all will end, I will not exist tomorrow, I have no future). I do not believe these things...” (p. 237)

And even Lucas (1989), still more surprisingly given his belief in the open future;

“We may take no thought of the morrow, but we cannot make out that it will not come...” (p. 2).

Why should a presentist say any of these things? Of course I have a future in the sense that (touch wood) a series of events involving me are yet to occur. But that said, I could, as the superstitiously minded often say, get run over by a bus tomorrow, so to assume the existence of these events might seem like bad faith. Accordingly, I just don't assume that these future events exist now, or rather [exist]. Such views, in a mistake directly analogous to McTaggart's own, are trying to understand an F-proposition in terms of a tenseless one, assuming misguidedly that we can “view things *sub specie aeternitatus*” (Lowe 1987, p. 63).

There are other good reasons for rejecting the principle of bivalence and the law of the excluded middle. The fact of *vagueness*, for instance – is my jumper blue or is it green? – often makes it impossible to say that something is determinately one way or the other, or to take a proposition asserting it to be one way or other to be determinately true or false. Again we find such vagueness not just at the macroscopic level but at the subatomic level, in the mystery of *superposition*, which seems to show that “in the quantum world there are not only states of ‘here’ and ‘there’ but a whole host of other states that are mixtures of these possibilities... states that classically would be mutually exclusive of each other” (Polkinghorne 2002, p. 21).

This all seems to suggest that, contrary to the prescriptions of the principle of bivalence and the law of the excluded middle, there is also “a middle term undreamed of by Aristotle” (Polkinghorne 2002, p. 24).

If all of this is true and not only is the case that the future is not fully but only probabilistically determined but also that propositions concerning it can only be of indeterminate truth-value, then perhaps we have all the materials we need to explain the difference between the past and the future without it needing to involve a difference in what exist; it instead manifesting in a difference in the truth values of P/F propositions, the former having determinate truth-values, the latter not. And why? Because future events, having *not yet* ‘become’, have not yet become the subject of determinately true propositions concerning them. Conversely, given past events have *already* ‘become’, then propositions about them can acquire a determinate truth-value. And no matter that, being past, they have already ceased on the presentist’s model. For once it is a fact that an event has become, this fact *remains* a fact, even after what made it true has ceased to be present, i.e. ceased to exist. This is one of the few eternal truths that a presentist will countenance. As Prior puts it,

“Although Whitrow’s lecture isn’t now present and so isn’t real, isn’t a fact, nevertheless its pastness, its *having* taken place, *is* a present fact, *is* a reality, and will be one as long as time shall last.” (Prior, 1970, p82).

It is in this quite obvious fact that the asymmetry of time lies; that, although neither past nor future (not being present) exist, yet what is past *has been* present, and so has left its stamp, in the form of having ‘become’ and thus having also become the subject of determinately true propositions, which remain true (though changing tense) even after what made them true ceases to exist. Conversely what is future, *not having been* present, has no determinate reality, having not yet ‘become’ (and, for all we know, it may never) cannot yet become the subject of any determinately true propositions. It is in this way that we can account for the modal difference between the past and the future as required, the present remaining the link between “possibility and unalterable necessity” (Lucas, p. 6); it is just that the determinate truths concerning the past no longer have to entail that what is past *exists*. The necessity of what is past, that which distinguishes it from the realm of possibility that is the future, need not then be

explained with recourse to any ontological difference between them and so can be reconciled with presentism.

Returning to our attempted solution to the truthmaker problem, we can now distinguish between truthmakers for past and future truths for, if future truths are not yet of determinate truth-value, then neither can they yet be made true. This would mean that future truths do not in fact require truthmakers.

Conclusion

Even for an A-theorist, whose byword is the pre-eminence of the present, the urge to demote the present time to merely one among many is strong. But, as I hope to have shown, once the need to break with this urge in one direction is recognised – for most, motivated by a stronger urge; that of accounting for the openness of the future – then breaking with it in the other direction seems not so contraversial. And once we realise that we do not need something to exist in order to account for the truth of our P-propositions, then realising that we do not need something to exist in order to account for the difference between the past and the future follows naturally, as we can explain this difference in terms of truth itself.

There are many reasons why taking non-present times to be real has been so popular. One important one is that positing a plurality of times allows us to envisage time by analogy with space, i.e. as extended, as it is in our calendars; days in the month sitting side by side on the page, months in the year all there to be flicked through at our leisure. Our metaphorical talk about time is similarly ‘laden with the spatial metaphor’ (Christensen, p139). The river of time metaphor suggests that temporal passage can be understood by analogy with spatial movement, implying an extended dimension through which to move. How else would we be able to adequately conceive of time? As Christensen points out ‘visualisation is highly important to human conceptualisation’ (Christensen, p140). A thing with no extent, being unvisualisable, is near inconceivable to us.

That said, we do not want the present to be entirely without extent, an entirely durationless instant. This would leave us with the problem that troubled Augustine, who assumed that, with reference to any given length of ‘present’ time, ‘if it has duration, it is also divisible into past and future’. Accordingly, to find a time that is *truly* present, we must look for ‘some bit of time which cannot be divided... that alone is what we can call ‘present’. And that time flies so quickly from future into past that it is an interval with no duration’ (repr. in Gale, p. 41).

This works on the assumption that any duration will be divisible into past, present and future. But for thought, action, perception to be possible then, as the A-theorist has it, they need a present duration in which to occur. How in fact could any event occur if the time during which it was occurring was over before it had started? That the present moment in which the event begins to occur will itself be divisible does not have to entail that it is divisible into past, present and future. These divisions can all be parts of the same present moment. When that present moment becomes past and is supplanted by another is not something that can be philosophically discerned, any more than it is something that is philosophically problematic. This is the question of 'the specious present', which I cannot go into at this late stage.

The point is, however, that perhaps time need not be seen as extended beyond whatever extent we take each successively existing present moment to have. Perhaps time's main extent is just the spatial one on which it plays, successively thrusting moment upon moment onto its shores. Could we come up with less a 'spatially laden' metaphor that might belie this radically different conception? Perhaps we could think of time by analogy with, for instance, the pulse pumping blood round the body; something not itself extended but giving life to an extent. Time does at any rate seem to be life-giving in this way, for if time (like our hearts) were to stop then we would all be frozen in motion.

Such a presentist conception of time will admittedly leave us bereft of the ontology of eternally, equally existing times which, at least as it appears in B-theory, is no doubt a most "lucent frame" for a philosopher to work within; perhaps indeed, as Williams (1951) says, "the very paradigm of philosophical understanding" (p. 471). As well as providing us with a means of conceiving of time, of explaining its asymmetries, it promises us something in the world on which to pin all our temporal references, in which to ground the truth of all our tensed propositions.

More than this, it ensures us that all such truths will remain eternally true, for that which exists, in which their truth inheres, will itself remain eternally. And, as Russell says, "this search for something permanent... for something not subject to the empire of Time... is one of the deepest of the instincts leading men to philosophy." This

search, we are also told, “begins with Parmenides.” (Russell, 66) And it is this very search and its motivating fear of ‘that which is not’ that in turn provide motivation for the reductive premise of B-theory and equal existence.

No wonder then that even A-theorists, however confusedly, should aspire to such a framework. That said, as a picture of temporal reality, it is to my mind unconvincing. Why should we believe, other than for our own comfort, that something in time might not be subject to it? This sounds like a philosopher’s wishful thinking, for as Smith points out, from Plato’s day to our own “philosophy has been and still is a flight from temporal reality” (Smith 2000, p. 119).

There is nothing comforting about presentism. It leaves us forever teetering on the knife-edge of a moment, with no safety net on either side. What’s done, on this view, really is done and what’s to come is not lying in wait but of our own making. All there is is now, and admittedly that’s not much. But if any of what I have claimed is true, and if we are convinced of the reality of tense, of the pre-eminence of the present, then we are left with no choice. So far from it being the case that “the present may be pre-eminent but it cannot stand alone” (Lucas, p3), in fact the opposite is the case, for if we are to *account* for this pre-eminence adequately and without contradiction, it must.

Bibliography

- Armstrong, D.M (1997) *A World of States of Affairs*. Cambridge: Cambridge University Press
- Augustine, St. (397-400) 'Some Questions About Time' in *The Philosophy of Time*. ed. Le Poidevin and MacBeath. (1993) Oxford: Oxford University Press
- Austin, J.L (1950) 'Truth' reprinted in *Truth* ed. G. Pitcher (1964) Englewood Cliffs: Prentice-Hall
- Barnes, J (1987) *Early Greek Philosophy*. London: Penguin
- Bigelow, J (1988) *The Reality of Numbers*. Oxford: Clarendon Press
- Bourne, C (2002) 'When am I? A Tensed Time for Some Tense Theorists' *Australasian Journal of Philosophy* Vol.80 No.3. pp. 359-371
- Broad, C.D (1938) excerpt from 'An Examination of McTaggart's Philosophy' repr. in *Metaphysics, The Big Questions*. ed. Peter van Inwagen and Dean W. Zimmerman (1998) Oxford: Blackwell
- Christensen, F (1976) 'The Source of the River of Time' in *Ratio*. 18. pp. 131-144
- Cornford, F.M (1939) *Plato and Parmenides*. London: Routledge
- Craig, William Lane (1998) 'McTaggart's Paradox and the Problem of Temporary Intrinsic' in *Analysis* 58. pp.122-127
- Davies, Paul (1983) *God and the New Physics*. Harmondsworth: Penguin
- Dodd, Julian (2002) 'Is Truth Supervenient on Being?' *Proceedings of the Aristotelian Society*. Vol CII Part 1. pp. 69-86
- Donnellan, K (1974) 'Speaking of Nothing' in *Philosophical Review*. 83. pp. 3-31
- Dummett, M (1964) 'Bringing about the Past' in *Truth and Other Enigmas*. (1978) London: Duckworth
- Dummett, M (1978) 'The Reality of the Past' in *Truth and Other Enigmas*. (1978) London: Duckworth
- Evans, G (1982) *The Varieties of Reference*. Oxford: Clarendon Press

- Fox, J. F (1987) 'Truthmaker' *Australasian Journal of Philosophy* 65. pp. 188-207
- Frege, On Concept and Object
- Grey, W (1999) 'Troubles with Time Travel' *Philosophy* 74. pp. 55-70
- Haslanger, S (1989) 'Endurance and Temporary Intrinsic' *Analysis* 49. pp. 119-25
- Horwich, P (1987) *Asymmetries in Time*. Cambridge: MIT Press
- Lambert, K (1983) *Meinong and the Principle of Independence* Cambridge: Cambridge University Press
- Levison, A.B (1987) 'Events and Time's Flow' *Mind* 76. pp. 341-53
- Lewis, D (1986) *On The Plurality of Worlds*
- Lewis, D (1999) 'Void and Object'. Forthcoming.
- Lewis, D (2002) 'Tensing the Copula' *Mind* Vol III No. 441. pp. 1-13
- Loux, M.J (1998) *Metaphysics: A Contemporary Introduction*. London: Routledge
- Loux, M.J.; (2001) *Metaphysics: Contemporary Readings*. London: Routledge
- Lowe, E.J (1987) 'Indexical Fallacy in McTaggart's Proof of the Unreality of Time' in *Mind* 96. pp. 62-70
- Lowe, E.J (1987) 'Reply to Mellor and Le Poidevin' *Mind* 96. pp. 539-42
- Lowe, E.J (2002) *A Survey of Metaphysics*. Oxford: Oxford University Press
- Lucas, J.R (1989) *The Future*. Oxford: Basil Blackwell
- Lukasiewicz (1967) 'On Determinism' in *Polish Logic* ed. Storrs McCall. Oxford: Clarendon Press
- MacBeath, M (1988) 'Dummetts Second-Order Indexicals'. *Mind* 97. pp. 113-6
- Martin, C.B (1980) 'Substance Substantiated' *Australasian Journal of Philosophy* 58. pp. 3-10
- Maudlin, Tim (2002) 'Remarks on the Passing of Time'
- McCall, S (1994) *A Model of the Universe*. Oxford: Clarendon Press
- McTaggart, J.M.E (1908) 'The Unreality of Time' *The Philosophy of Time* ed. Le Poidevin and MacBeath (1993) Oxford: Oxford University Press

- Meinong, Alexius (1904) 'On the Theory of Objects' in *Realism and the Background of Phenomenology* ed. R.M. Chisholm (1960) New York: The Free Press
- Mellor 'Truthmakers'. Forthcoming.
- Mellor, D.H (1981) 'McTaggart, Fixity and 'Coming True''. *Matters of Metaphysics*. (1991) Cambridge: Cambridge University Press
- Mellor, D.H (1981a) *Real Time*. Cambridge: Cambridge University Press
- Mellor, D.H (1986) 'Tense's Tenseless Truth-Conditions'. *Analysis* 46. pp.162-172
- Mellor, D.H (1995) *The Facts of Causation*. London: Routledge
- Mellor, D.H (1998) *Real Time II*. London: Routledge
- Mellor, D.H. and Le Poidevin, R (1987) 'Reply to Lowe' in *Mind* 96. pp. 534-38
- Mellor, D.H (1981b) 'The Unreality of Tense' in *The Philosophy of Time* ed. Le Poidevin and MacBeath (1993) Oxford: Oxford University Press
- Merricks, T (1995) 'On the Incompatibility of Enduring and Perduring Entities' in *Mind* 104. pp. 523-31
- Newton-Smith (1985) 'Space, Time and Spacetime: A Philosopher's View' repr. in *The Nature of Time* ed. Raymond Flood and Lockwood (1986) Oxford: Blackwell
- Oaklander, L.N (1994) 'Reply to Smith'. *The New Theory of Time*. ed. Oaklander and Smith (1994) New Haven: Yale University Press
- Polkinghorne, J (2002) *Quantum Theory: A Very Short Introduction*. Oxford: Oxford University Press
- Priest, G (1986) 'Tense and Truth-Conditions'. *Analysis* 46. pp. 162-172
- Prior, A.N (1958) 'Time After Time' in *Mind* 67 pp. 244-6
- Prior, A.N (1959) 'Thank Goodness That's Over' *Philosophy* 34. pp. 12-17
- Prior, A.N (1962) 'Changes in Events and Changes in Things' in *The Philosophy of Time*. ed. Le Poidevin and MacBeath. (1993) Oxford: Oxford University Press
- Prior, A.N (1967) *Past, Present and Future*. Oxford: Clarendon Press

- Prior, A.N (1970) 'The Notion of the Present'. *Metaphysics, The Big Questions*. ed. Peter van Inwagen and Dean W. Zimmerman (1998) London: Blackwell
- Quine, W.V.O (1953) 'On What There Is'. *From a Logical Point of View*. (1980) Cambridge, Mass.: Harvard University Press
- Quine, W.V.O (1970) *Philosophy of Logic*. Englewood Cliffs: Prentice-Hall
- Read, S (1994) *Thinking About Logic*. Oxford: Oxford University Press
- Russell, B (1946) *The History of Western Philosophy*. London: Allen and Unwin
- Russell, B (1905) 'On Denoting'. repr. in *The Philosophy of Language* (1985) Oxford: Oxford University Press
- Savitt, S. F (2000) 'On Absolute Becoming and the Myth of Passage' in *Time, Reality and Experience* ed. Craig Callender (2000) Cambridge: Cambridge University Press
- Schlessinger, G.N (1982) 'How Time Flies'. *Mind* 91. pp. 507-23
- Sklar, L (1977) *Space, Time and Spacetime*. Berkeley: University of California Press
- Smart, J.J.C (1964) 'Time and Becoming'. *Essays Metaphysical and Moral*. (1987) Oxford: Blackwell
- Smith, Q (1986) 'The Infinite Regress of Temporal Attributes' in *The Philosophy of Time* ed. Le Poidevin and MacBeath (1993) Oxford: Oxford University Press
- Smith, Quentin (2000) 'Time and Degrees of Existence: A Theory of 'Degree Presentism'' in *Time, Reality and Experience*. ed. Craig Callender (2002) Cambridge: Cambridge University Press
- Sorabji, R (1983) *Time, Creation and the Continuum*. London: Duckworth
- Stout, R (1997) 'Processes' *Philosophy* 97
- Tooley, M (1997) *Time, Tense and Causation*. Oxford: Clarendon Press
- Williams, C.J.F (1981) *What is Existence?* Oxford: Clarendon Press
- Williams, D.C (1951) 'The Myth of Passage' in *Journal of Philosophy* 48. pp. 457-72

- Zimmerman, Dean. W (1998) 'The Problem of Temporary Intrinsic'. *Metaphysics, The Big Questions*. ed. Peter van Inwagen and Dean W. Zimmerman (1998) London: Blackwell