7/15/10

The Unreal Future

word count: 2,989

Abstract: Two prominent A-theories of time, presentism and the growing block theory, hold that the future is unreal. For these theories to be correct, they must pass a crucial test. It must be possible for unreal future events to become real present events. This paper examines the implications of unreal future events becoming real. It shows that such a passage is impossible because the implication of an *unreal* future event *e* becoming real is that very same event *e* is *real* in the future. After laying out the perplexing paradox which undermines A-theories, I anticipate three paraphrasing attempts to get around it. It becomes clear that so long as a theory of time (i) is committed to propositions about the future being tensed and (ii) holds that the future is unreal, attempts to circumnavigate the paradox only run into different forms of it.

INTRODUCTION

Certain A-theories of time claim that the future is unreal. Since this claim is common sense, it appears to be a strength of such views. But actually the unreal future threatens these theories at the core. The reason is simple. A-theories in action imply that the future is real. So the doctrines and implications of A-theories contradict each other.

This paper presents a new paradox for certain A-theories of time. It is revealed to us when we seriously ask, What really happens when unreal future events become present? We find that such becoming is impossible because the implication of an *unreal* future event *e* becoming real is that the selfsame event *e* is *real* in the future. This is revealed by closely observing what happens when future contingent propositions which have *indeterminate* truth-value become *true*. So the paradox contained here shows that even A-theories are committed to a real future.

A-theorists are unlikely to be convinced. They're likely to pursue three strategies to circumnavigate the paradox. First, A-theorists will provide theoretical objections to neutralize it. Second, they'll provide paraphrases of the original proposition to avoid absurdity. Third, they'll use logical symbols to try to show that I've made an error. I find that none of these strategies works. Why theoretical objections founder shall become apparent as we proceed. I examine three plausible paraphrases of the original proposition and show that they fare no better than it does. And a move to symbolism is halted by a reminder of what logical symbols are for.

1. PRESENTISM AND THE GROWING BLOCK

The future is unreal. This claim is shared by two theories of time. Presentism and the growing block theory. Presentists hold that only the present is real, that 'nothing exists which is not present' (Bigelow 1996: 35). So when we speak of future or past events, we do so only in

relation to present events. Future events may become real, but only if they become present. Presentism holds that *being present* is an objective property that certain events have, the only events that exist.

Growing blockers only partly agree with presentists. They agree that the future is unreal. However, they disagree about the past. The past is real and comes to be such through being present. We often speak about past events, and about them we often say what is true. The universe is not static. New events keep arising. So the universe is growing. Hence the label 'growing block.' This theory holds that *being present* or *being past* are objective properties which hold of all real events.

The unreal future is our focus. Because both of these theories hold that temporal becoming is real, and that past, present, and future are objectively different, they are classed together as A-theories of time. Such theories are also called 'tensed' theories of time, for the reason that the propositions most descriptive of properties like being present and being past include tense as part of their content. There is one tensed theory of time which holds that the future is real,'eternalism.' However, because of our focus, we deal only with tensed theories which regard the future as unreal.

2. WEDDING DAY

That the future is unreal is an unreal position. To show that this is true, it would help to concentrate on a particular future event. Well, we are in luck. Tomorrow a beautiful wedding is scheduled to take place. A young couple is looking forward to an unreal future of their own. At the completion of Saturday's wedding ceremony, the couple will become the Joneses.

Tonight is Friday. All the relatives and friends are at the rehearsal dinner. Several philosophers are seated at one table. An A-theorist awkwardly rises to toast the happy couple.

This is what she, somewhat inappropriately, says: 'Remember, the future is unsettled. Both of you are going into this freely. And, besides, weddings are sometimes cancelled, even at the last minute. Therefore, the future cannot be real. But there is much more to our position than that.' The other guests exchange confused looks. 'Time flows. It isn't just some static frame to relate events situated at different points in a block universe.

Here is the proper word-world relationship concerning your wonderful wedding, and all other future events, for that matter. The future-tense expression (*f*) 'Tomorrow the Joneses will marry' captures temporal reality correctly. So *f* has a structure which is identical to the proposition it expresses, (*p*) <Tomorrow the Joneses will marry>. Events have temporal properties, such as being past, being present, and being future. These are 'A-properties.' And only tensed propositions can depict them. Whatever event should unfold tomorrow, it really is in the future. The wedding is currently unreal. When it happens, only *then* does it become real.'

3. BECOMING REAL

It is rude to interrupt a sincere, heartfelt toast. So we don't. But the A-theorist is leaving out one all-important detail. Once that detail is fully understood, it will be clear that the unreal future thesis cannot stand. To see why, we leave the rehearsal dinner and look ahead. We can't fully understand tensed theories of time from a static perspective. We must try to understand what it is for time to flow and must see that flow in operation. A-theories can't rest on the bare claim that the future is unreal. There must be an examination of the implications of future events *becoming real*.

The unreal future thesis requires that future contingent propositions be *indeterminate*. So in our case, *p* is indeterminate. Things change once the marriage becomes present and

3

thereby real. In such an event, *p becomes* true. Future contingent propositions are crucial for examining the unreal future. They shall help us to see the implications of unreal future events becoming real.

Aristotle and, more recently, Łukasiewicz gave future contingents much thought. They believed that if such propositions were either true or false before their event, then such events would be fated. Because of this they thought that the principle of bivalence - that every proposition is either true or false - breaks down where future contingents are concerned. A-theorists have agreed that a 'future-tense proposition is neither true nor false if there is not yet anything in the facts for it to correspond or fail to correspond with' (McCall 1966: 276), and have used this thought to try to undo B-theories (McCall 1966: 273).

Now, here's the problem Aristotle and Łukasiewicz tried to avoid:

The Fatalism Problem

Friday: (A) <Tomorrow the Joneses will marry> is TRUE-at-Friday.

        So, (B)   The Joneses' marriage cannot fail to take place on Saturday.

Now, let's see if the indeterminate truth-value helps to avoid this result:

The Indeterminism Solution

Friday: (1) <Tomorrow the Joneses will marry> is INDETERMINATE-at-Friday.

Saturday: (*M*) The Joneses' marriage takes place.

   Thus,   (2) <Tomorrow the Joneses will marry> becomes TRUE-at-Saturday.

   Therefore, (3) The Joneses' marriage cannot fail to take place *on Sunday*.

4. FUTURE REALITY IS NECESSARY

To adequately represent the unreal future requires a future-tense proposition with indeterminate

truth-value. The problem, as we've just seen, is that the real tomorrow has not gone away, but reemerged in a different, unexpected way. Challenging (A) was thought to be the way to keep future contingents from being true. This way out has nonetheless resulted in (2), a true future contingent. The fated event to avoid in (B) has come to pass in (3), but on a different day. That in essence is the paradox.

Before meeting attempts to defuse the paradox, some points of clarification are needed. First, apprehending the paradox is quite difficult. Doing so requires a Gestalt shift. So some patience is required. The best way, it seems to me, to come to apprehend it, is to take the following steps. First compare (A) and (B) from *The Fatalist Problem* with (2) and (3) from *The Indeterminism Solution*. Next, check to see that there are no significant differences between them, only differences necessary to capturing the different theories. So different days are referred to ('Sunday' instead of 'Saturday' in *The Indeterminism Solution*) and the proposition in (A) *is* true, while the proposition in (2) *becomes* true. The reason for this last difference is obvious. In the *Indeterminism Solution* the proposition in (2) must become true if A-theoretical becoming is to be adequately represented. Lastly, once these comparisons are made, examine how the event *M*, The Joneses' marriage taking place, necessitates that the proposition in (1) becomes true, as is represented in (2).

What's exactly is going on in *The Indeterminism Solution*? There is one proposition (p), <Tomorrow the Joneses will marry> in both (1) and (2). In (1) it is INDETERMINATE-at-Friday because the marriage is scheduled for the following day. So (1) represents a temporal perspective from which the event, the Joneses' marrying, is unreal. Importantly, between (1) and (2) the proposition p retains its self-identity. So nothing intrinsic to the proposition changes. Rather, change, specifically the change from an event *M* being unreal to it becoming real, is represented semantically by p going from being INDETERMINATE-at-Friday to becoming

5

TRUE-at-Saturday. This happens, once more, because of *M*, The Joneses' marriage taking place. Nothing else changes.

I stress these points about propositional identity and truth-value change in anticipation of a certain response. Some will claim that as *M* occurs, there is a different proposition involved than <Tomorrow the Joneses will marry>, perhaps (*t*)<Today the Joneses are married>. Of course, we can express another proposition on Saturday if we like. But doing so does not capture the whole sequence of events. Nor does it adequately represent the claims of A-theories, and so defeats the purpose of defending them. And as I'll show in Section 7, any attempt to evade the paradox by providing a materially equivalent proposition like *t* collapses under its own weight.

There is one more thing it is important to make clear. What is laid out under *The Indeterminism Solution* is not an argument. So (1), (*M*), and (2) are not premises which are claimed to imply (3) as a conclusion. What this arrangement of propositions and facts shows is what happens when a single proposition, the A-theorist's future-tense *p*, becomes true. All of these points of clarification should be borne in mind as we face the different attempts to paraphrase the paradox away.

A-theorists hold that it is false that *M* was real all along. But their theory is committed to *M* being real the day *after* it first occurs, no matter what happens on the following day. For the Joneses, this means that if the marriage happens on Saturday, it necessarily happens on Sunday as well. Again, A-theories hold that the future is unreal. But in action A-theories imply that the future is real. So A-theories hold that the future is unreal and that the future is real.

5. INTRODUCING INDEXICALS

A-theorists are not likely to think their theory is flawed. They're more likely to think the preceding reasoning flawed. The first line of defense is to offer a different translation of *p*, yet a translation which retains *p*'s tense. Perhaps a more explicitly indexical formulation for *p* will accurately depict the coming into being of the wedding, but this time without a hitch.

Tonight, when wedding guests say, 'Tomorrow the Joneses will marry,' they mean something quite specific. 'Tomorrow' is an indexical term. There is no generic tomorrow which can slide from day to day, as it seems to above. Given that the context of utterance is Friday, one who now says 'Tomorrow the Joneses will marry' means <Saturday the Joneses will marry>. Such a formulation should help to avoid the problem in (2) and (3). Let's see if this works.

The Explicit Indexical Solution

Friday: (4) <Saturday the Joneses will marry> is INDETERMINATE-at-Friday.

Saturday: (*M*) The Joneses' marriage occurs.

  Thus,   (5) <Saturday the Joneses will marry> becomes TRUE-at-Saturday.

  Therefore, (6) The Joneses' marriage cannot fail to occur the *next* Saturday.

The Explicit Indexical Solution is no solution. It only generates new problems. It is true that the absurdity exhibited in (2) and (3) is no longer. But the event *M* has generated a *duplicate event* on *the following Saturday*. And even though no one intended to say that *M*'s identical twin must take place on the following Saturday, logic is indifferent to our intentions.

6. CAN DATING SAVE THE MARRIAGE?

The Explicit Indexical Solution didn't help the A-theorists. Maybe a 'dated formulation' will avoid both the first and the second problem. A date specifically targets a particular, unique day. Perhaps a dated version of *p* won't play tricks. So if someone on Friday, October 15, 2011 says 'Tomorrow the Joneses will marry' it means <October 16, 2011 the Joneses will marry>. If this works, A-theories can maintain their adherence to the unreal future. Let's see:

The Dated Indexical Solution

Oct/15/2011:(7) <Oct 16, 2011 the Joneses will marry> is INDETERMINATE-at-Oct/15/2011.

Oct/16/2011:(*M*) The Joneses' marriage occurs.

   Thus,   (8)<Oct 16, 2011 the Joneses will marry> becomes TRUE-at-Oct/16/2011.

   Therefore,(9) ?

The two previous absurdities are gone, only to be replaced by a new one. This absurdity is less easy to understand. The Joneses' marriage *must* take place after October 16. The future-tense 'will marry' in the proposition assures that. At the same time, the date given is unique to this day. *M* must take place for (8) to result. So it's not clear how *M* will recur in this particular scenario. Perhaps Nietzsche's doctrine of eternal recurrence can help explain how the Joneses' duplicate wedding will take place on October 16, 2011 and yet be in the future.

7. MATERIAL EQUIVALENCE TO THE RESCUE?

Tensed propositions seem to be responsible for all these absurdities. If tense must be eliminated to make sense of the world, it seems that temporal properties of the A-sort can be no part of reality. We've just seen three excellent reasons to believe this. A-theorists are likely to be

steadfast in their commitment to tensed propositions and their corresponding temporal properties.

Perhaps there is hope for A-theories if we think about *p* differently. Suppose that the tensed *p* has a materially equivalent non-tensed *q*. So (*p*) <Tomorrow the Joneses will marry> is materially equivalent to (*q*) <Saturday, the Joneses' marriage is taking place>. Both *p* and *q* are indeterminate before the wedding day. And when *M* comes about, all that this means is that *q* becomes true. No absurdity is produced by *q*. And since *p* and *q* are materially equivalent, no absurdity is generated.

Two problems attend this approach. The equivalent proposition *q* is without future tense. And it is not clear whether it is present-tensed or tenseless. So resorting to detensing puts A-theorists on shaky ground, if not squarely on B-territory. More problematically, since *p* and *q* are materially equivalent, this relation goes in two directions. When the unproblematic *q* becomes true, no absurdities result. But if *q* is true at the moment *M* comes into being, and *p* and *q* are materially equivalent, then *p* must be true then as well. And that takes us right back to our first absurdity. And this will hold for any semantic equivalent to *p* that A-theorists may find. That means that any future-tense preserving paraphrasing attempt will fail.

8. PRESENTISM WITHOUT THE PRESENT?

Only the present is real for presentism. Future events don't exist. Future contingent propositions about such events must be indeterminate. As we've seen, such propositions become true if the event in question happens. The problem is this. If a future contingent proposition like *p* becomes true, then that implies that the following day the very same event must take place.

There is one other way for presentism to escape the paradox. The unreality thesis is only plausible when we are unaware of the problems that arise from unreal events becoming real.

The presentist must claim that future contingent propositions such as *p* never become true. So there must never be present events like *M* to make such propositions become true. The only way to save presentism, in short, is to eliminate the present.

9. THE GROWING FUTURE

The growing block theory has suffered its own setbacks. The reason the block was said to be growing in the first place was to keep the future unreal. The growing blockers may accept our results gracefully, and admit there is but one giant block covering every temporal nook of the universe. If, however, they cling to the growing block, then it's a block that is impossibly strange.

A growing block generates more than the past. It must produce duplicate events which grow into the future. The future is unreal. But once something happens the duplicates of all present events are thrown into the future. The only real future events have already happened.

10. THE FUTURE OF A-THEORIES

A-theorists cannot paraphrase their way out of the paradox. Or, at least, it seems they cannot. At this paper's start, I mentioned two other possible routes for avoiding the paradox. A-theorists could translate the paradox-generating propositions into symbols and try to show I have erred in my reasoning. This retreat to symbolism won't work. First, none of the three 'Solutions' is an argument. Each simply shows the results of a particular future-tense proposition becoming true. Second, *p* isn't a proposition. It stands for one. And if the proposition which *p* symbolizes generates a paradox, then so does *p*.

A-theorists will surely lodge theoretical objections against the paradox. But, I believe, the whole of this paper has shown why none will work. I do, however, understand that A-

theorists will try. In anticipation of such attempts, all that I ask is this. Whatever objection you have, simply provide the proposition that is consistent with your A-theory, and subject it to the same test to which the other propositions were subject. That is, provide a proposition which (i) contains future tense within it and (ii) goes from being *indeterminate* to *true*. Then we'll see what happens.

REFERENCES

Bigelow J (1996)   Presentism and properties. Philos Perspect 10: 35-52

Craig WL (1997) Is presentness a property? Am Philos Q 34: 27-40

Markosian N (2004).   A defense of presentism In: Zimmerman D   (ed) Oxford studies in metaphysics, Volume 1: 47-82 Oxford University Press, Oxford

McCall S (1966) Temporal flux. Am Philos Q 3: 270-281

McTaggart JME (1908) The unreality of time. Mind 18: 457-474

Zimmerman D (2005) The a-theory of time, the b-theory of time, and 'taking tense seriously', dialectica 59: 401-457