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THE PRESENTIST'S DILEMMA

ABSTRACT. This paper defends three theses: (i) that presentism is either trivial or untenable; (ii) that the debate between tensed and tenseless theories of time is not about the status of presentism; and (iii) that there is no temporal analogue of the modal thesis of actualism.

Presentism, we are told by its advocates, is the following thesis about the relation between time and existence:

P: Nothing *exists* that is not present.

In the recent literature, Bigelow (1996) and Markosian (2003) defend presentism as the commonsensical view of time. Sider (1999) is impressed by the ontological benefits of presentism, but ultimately rejects it in his (2001, Ch. 2). However, a majority of authors is opposed to the view: Putnam (1967), Sklar (1981), Savitt (2000), and Saunders (2002) all argue that presentism is incompatible with the theory of relativity, and thus false a posteriori.

There is little common ground amongst these competing views, but the one thing that all sides of the debate seem to take for granted is that the status of presentism raises an important metaphysical question. It is this shared assumption that I want to challenge. In this paper, I argue that presentism is either trivially true or obviously false.

1. THE DILEMMA

The first point I want to make is that the presentist's thesis is ambiguous between different interpretations of the 'exists' that occurs in it. On one reading it is trivial and on the other obviously false, but there is no reading on which it expresses a substantial

metaphysical truth. Similar problems were raised by Zimmerman (1998, p. 209) and Callender (2000), but the objection has not yet received the attention that I think it deserves, and Zimmerman only presents it in order to reject it immediately. I want to give what I hope to be a sharper and more persuasive formulation of the argument. (I will briefly discuss Zimmerman's defence of the presentist in Section 3.)

As I want to present the problem, there are two main ways of understanding the presentist's thesis. The first possibility is to regard the 'exists' in P as the ordinary present tense of the verb *to exist*:[1]

P1: Nothing *exists now* that is not present.

On this reading, presentism is true, but utterly trivial. To exist now and to be present are the very same thing. Since the presentist clearly meant to advance a substantial thesis, it thus seems safe to conclude that P1 is not what he had in mind. But what could he have meant? The apparent problem with P1 is that it interprets the 'exists' in too narrow a sense. To get a non-trivial account of the thesis, we would need a more inclusive notion of existence.

Say that an object *exists temporally* just in case it exists *at* some time or other. By regarding the 'exists' in P as expressing temporal existence, we then get a second reading of the presentist's thesis:

P2: Nothing *exists temporally* that is not present.

Since it does not follow from an object's existing temporally that it exists now, this thesis is indeed non-trivial. But consider:

JC: Caesar crossed the Rubicon.

Caesar only could have crossed the Rubicon if he did exist. Yet if he did exist then he does exist at some past time, and therefore does exist temporally. But Caesar does not exist now; he died on the Ides of March in 44 BC. Hence if Caesar crossed the Rubicon (and he did) then there is an object (namely Caesar) that exists temporally, but is not present. If JC is true (and it is) then P2 is false.

Both P1 and P2 are readings on which the 'exists' in P encodes some temporal information. The presentist might object that by 'exists' he just means *exists simpliciter*, and that neither P1 nor P2 are acceptable interpretations of his thesis. But suppose an object *a* exists simpliciter (whatever that amounts to). Then either *a* exists in the actual world or it exists in some other possible world (if there

are such worlds). And if *a* exists in the actual world then it either exists temporally or it exists "outside" time altogether (*at* no time, if that's possible). So whatever existence simpliciter amounts to, the following conditional is necessarily true, because its consequent is already necessary:

a exists simpliciter ⊃ (*a* exists temporally
                          ∨ *a* exists outside time
                          ∨ *a* exists in some other possible world)

Hence the only way in which a temporally "unindexed" notion of existence could differ from temporal existence is that objects outside time, or those in other possible worlds, might exist simpliciter, but not temporally. However, neither of the following claims is a recognisably presentist thesis:

Nothing *exists outside time* that is not present.
Nothing *exist in other possible worlds* that is not present.

At best, these are roundabout ways of denying that there are objects outside time, or objects in other possible worlds. The only respects in which existence simpliciter could differ from temporal existence are thus irrelevant for current purposes. For assessing presentism, temporal existence is the most general notion of existence that needs to be considered.

The presentist might grant this point and still object to my discussion of P2. What is at issue, he might claim, is whether names like 'Caesar' have a referent. I seem to assume that the question has already been settled in his opponent's favour by using the existential generalisation from JC to "There is something that exists temporally". But suppose we follow this suggestion and permit existential generalisations only for names that presently have a referent. Then the notion of existence employed is really *exists now* (and not *exists temporally*), and we're back to the trivial P1. If we don't impose such a present referent condition then we do get P2, but we also get the above problems with JC. So the problem for the presentist arises independently of our views about reference.

Perhaps the presentist has a more radical view in mind, and is prepared to reject claims like JC in order to save P2. But if that

were the proposal, nothing more would need to be said in response than to repeat that it *does* deny the true claim JC. Whatever we say about the semantic value of proper names used at times at which their ostensible referents does not exist, any account that ends up rejecting all historical claims like JC is *eo ipso* unacceptable as a theory of names.

We have seen that the presentist's thesis becomes untenable when spelled out in terms of temporal existence, as we did in P2 above. While P1 interprets the 'exists' too narrowly, P2 interprets it too liberally. There remains the question of whether an intermediate notion of existence could improve matters.

We can define such a notion (call it *existence**) by allowing the existential generalisation

$$\text{EG:} \quad \frac{a \text{ is } F \text{ at time } t}{\therefore a \text{ exists}^*}$$

only for certain choices of t, and not for all times, as we would in the case of temporal existence. For example, we might only permit the inference for times later than three minutes ago. In this case, Caesar's existence* would not follow from JC. This is a positive feature, but the revised presentist thesis

P3: Nothing *exists** that is not present,

avoids the problems of P2 only to the extent to which it is trivial. Unless we permit the inference EG only for the present time (in which case P3 would just be a notational variant of the trivial thesis P1), we would still run into problems with objects that exist*, but do not exist now.

There is thus an entire spectrum of interpretations of the presentist's thesis, with the trivial P1 and the clearly false P2 at either extreme. In between, there are views like P3, which combine the disadvantages of the two main views. Since these readings exhaust all possible alternatives, presentism is therefore either trivial, untenable, or a balanced mix of the two.[2]

2. TENSED THEORIES OF TIME

Some readers will object that the discussion in the previous section misses the point at issue. In their view, it is only when we try to spell out the, so far unanalysed, notion of *existence at a time* that

the real issue emerges. There are two ways of accounting for such time-relative existence claims (and time-relative property attributions more generally): the *tensed* and the *tenseless* view of time. The choice between these two views, they would argue, that's what the presentism debate is really all about.

I disagree. While I am happy to concede that the choice between the two accounts of time raises substantial philosophical questions, the status of presentism is not amongst them. The widely held view that tensed accounts of time endorse presentism while tenseless theories reject it, is simply mistaken.

Tensed views of time, advocated most prominently by Prior (1968), propose to account for time-relative property attributions in terms of a family of primitive sentential tense operators such as:

P	It was the case that . . .	*M*	At some time, . . .
F	It will be the case that . . .	*L*	At all times, . . .

Our claim JC would be formalised as '*PRc*', where '*c*' is a singular term that denotes Julius Caesar, and '*R*' stands for the predicate ". . . crosses the Rubicon". Sentences without any tense operators are reserved for making claims about the present moment. The untensed '*Rc*' thus claims (falsely) that Caesar is crossing the Rubicon now. There is also a monadic existence predicate '*E*' that is used to account for time-relative existence claims. So "Caesar did exist" would get formalised as '*PEc*'.

Tenseless theories, on the other hand, trade tense operators for quantification over substantival time points.[3] They analyse "Caesar did exist" as '$\exists t(t < t^* \ \& \ Ect)$', where t is a variable ranging over times, t^* the present time (time of utterance), $<$ the earlier-than relation, and E a temporal "location" relation that objects bear to times.

The tensed and the tenseless view offer rival accounts of what it is for an object to exist at a time, and provide different means of defining present and temporal existence in terms of this basic notion. They can be used to spell out the theses P1 and P2 in two different ways:[4]

	P1	P2
tensed theory	$\forall x(Ex \supset Ex)$	$\forall x(MEx \supset Ex)$
tenseless theory	$\forall x(Ext^* \supset Ext^*)$	$\forall x(\exists t\, Ext \supset Ext^*)$

However, this merely explains the alternatives of the presentist's dilemma; it does nothing to dissolve it. Whichever view of time we adopt, the options for the presentist remain exactly the same. There is the trivial view P1 that nothing exists now that is not present, and the false view P2 that only present objects exist temporally. Explaining what it is for an object to exist at a time has no impact on the dilemma.

The tensed theory of time does accord a privileged position to the present moment in a way that the tenseless theory does not. But that does not show that it endorses a non-trivial version of presentism. To use a different example, suppose there were a special feature that all unmarried people have in common. To find out about this property would be a fascinating discovery, but it would not make 'All bachelors are unmarried' less trivial, or 'All Italians are unmarried' less false. The same holds in our case. Singling out the present as "metaphysically special" does not change the triviality of P1, nor does it alter the falsity of P2.

There are other tensed and tenseless theories of time, which provide further ways of spelling out the alternatives of the presentist's dilemma. Some tenseless views postulate temporal parts instead of time points, and some tensed accounts use different primitive tense operators than the ones listed above. There are also tensed accounts that employ a Kripke-style semantics on which the existential quantifier ranges not over all temporally existing objects, but only over those that exist at the time of evaluation. Such accounts can do without an existence predicate. But while the choice amongst these competing views of time raises significant philosophical problems (they all differ with regard to their ontological and ideological costs), the status of presentism is not amongst them. Tensed theories neither support nor require a non-trivial form of presentism, and even the proponent of the tenseless theory of time has to accept the trivial presentist thesis P1.

I noted above that opponents of presentism often argue that the view conflicts with the theory of relativity. But if there is no non-trivial version of presentism, as I have argued, then the ques-

tion of its compatibility with relativity should never really arise. Empirical considerations of this type do have a role to play in the choice between tensed and tenseless views of time, where some candidate solutions seem to contradict the theory of relativity. But since the choice amongst these various accounts has no bearing on the presentist's dilemma, neither does relativity.

3. ACTUALISM

I think the argument in Section 1 can stand as it is, but there is one further objection that is worth discussing. Some authors argue that presentism is the temporal analogue of actualism, the modal thesis that nothing exists that is not actual. Since actualism is a non-trivial thesis, they claim, the same must hold for presentism. Any argument to the contrary is bound to contain a mistake.[5]

The modal analogue of the tensed theory of time is modal primitivism, which accounts for modal claims in terms of two primitive modal operators '$\square$' ("It is necessary that . . .") and '$\lozenge$' ("It is possible that . . ."). Its main rival is David Lewis's modal realism (1986), which advocates a strategy similar to that of the tenseless theory of time by eliminating modal operators in favour of quantification over concrete possible worlds.

If these were the only ways of accounting for modality then we would get an actualist's dilemma to mirror the presentist's dilemma discussed earlier. If we interpret the 'exists' in the actualist's thesis as *actually exists* then the thesis is trivial. But if we use the more liberal *possibly exists* (which is the analogue of temporal existence in the modal case) then actualism is clearly false. That elephants might have been pink is true, but it can only be true if pink elephants possibly exist, and pink elephants are not actual.

However, modality admits a third kind of view, which is what Lewis calls 'ersatz views' of modality. Like the modal realist, the ersatz theorist eliminates modal operators in favour of quantification over possible worlds. The difference is that the ersatzer does not claim that possible worlds are aggregates of concrete individuals. On his view, possible worlds are "ways the world might have been", abstract objects that exist in the actual world.[6] Let π be the non-modal claim that elephants are pink. According to the ersatz theorist, π is possibly true, $\lozenge\pi$, just in case there is one of his abstract

possible worlds such that π is true according to it. If we abbreviate 'π is true according to w' as '$A(w, \pi)$' then the ersatzer offers '$\exists w\ A(w, \pi)$' as an analysis of the claim that elephants might have been pink – without committing himself to the existence of any non-actual objects. Whether this view of modality ought to be preferred over its primitivist and realist rivals is a different question, but ersatz actualism is at least a contender.[7]

Since the ersatzer is still taking the notion of *ways the world might have been* as primitive, he does not eliminate all modal concepts. But that wasn't his project, anyway: his aim was to make a point about the ontological commitments of modal discourse, not to reduce it to non-modal talk. The ersatz theorist successfully avoids commitment to concrete *possibilia*, but he does not avoid commitment to concrete *actualia*. Amongst his possible worlds, there is one that is special. It describes not how the world might have been, but the way the world actually *is*, and which possible world this is depends on the contingent features of the *actualia*. A possible world is actual just in case any statement φ that is true according to it is true simpliciter:[8]

ACTUAL: w^* is *actual* if and only if $\forall\varphi(A(w^*, \varphi) \supset \varphi)$.

The ersatzer cannot eliminate all unmodalised claims in favour of something like '$A(w^*, \varphi)$' ("According to the actual world, φ") because he needs to appeal to such claims in order to specify which possible world *is* the actual one.[9]

This point becomes important when we try to adapt the actualist's construction to the temporal case. Impressed by the success of the ersatz theorist, it is tempting to propose a similar strategy to the presentist. The idea would be to interpret times as "ways the present might have been"; as abstract representations of "possible presents". But this project quickly runs into trouble. While every way the world might have been qualifies as a possible world, not every way the present might have been is a time. At best, times are ways the present *was*, *is*, or *will be*, and not every way the present might have been is of this kind: some possible presents never happen. To pick out past, present, and future times amongst all possible presents, we need something like ACTUAL, only more complicated:

$$\text{TIMES: } p \text{ is } \left\{ \begin{array}{l} past \\ present \\ future \end{array} \right\} \text{ if and only if } \left\{ \begin{array}{l} \forall\varphi(A(p, \varphi) \supset P\varphi) \\ \forall\varphi(A(p, \varphi) \supset \varphi) \\ \forall\varphi(A(p, \varphi) \supset F\varphi) \end{array} \right\} .$$

To illustrate this, consider our sample sentence JC, and let 'γ' denote the untensed claim that Caesar crosses the Rubicon. We cannot say that JC is true just in case there is *some* possible present according to which γ is true. At best, JC asserts that there is a possible present p such that γ is true according to p *and p is now past*. The problem lies with the second conjunct, which reintroduces the temporal modifier that we are trying to get rid of.

Similar remarks apply to Dean Zimmerman's proposal for eliminating tense operators in favour of individual essences (1998, p. 211). Zimmerman suggest that problematic claims like "There is something that has existed but does not presently exist" can be analysed as "There is an individual essence that is not now exemplified but was once exemplified". In specifying which individual essences were once exemplified, we again need to use the past tense operator, and we're back to where we started.

If we accept TIMES then tense operators cannot be eliminated in favour of quantification over abstract possible presents. It is a contingent matter which possible presents are times, and to pick out past, present, and future times amongst all possible presents, we would need to employ the very apparatus of tenses that we are trying to eliminate. So there is no temporal analogue of ersatz actualism. Presentism is either trivial or obviously false, and actualism is neither.

4. PRIMITIVE TIMES

The discussion in the previous section naturally leads to the question whether the presentist could improve his lot by rejecting the problematic principle TIMES. Could he not claim that it is a primitive fact which possible presents are past, present and future times?

Someone who advocates a view like this (even though he does not put it in these terms) is Bigelow (1996). He would disagree with what I have said in Section 1, and argue that the non-trivial thesis P2 *is* compatible with JC. Let n be the *now-stuff*, the mereological sum of everything that exists at the present moment. Then what makes JC

true, according to Bigelow, is that the now-stuff has the property *C* of being-such-that-Caesar-crossed-the-Rubicon. This is an unusual property (to say the least), but '*Cn*' has the advantage of being only committed to the temporal existence of the now-stuff, which is present. Moreover, Bigelow can even accept that JC entails that Caesar did exist, for that would just mean that *n* also has the property of being-such-that-Caesar-did-exist. While his opponents postulate "the existence of past, present and future individuals", Bigelow "trades off this ontological expenditure on individuals against a lavish outlay of properties of present individuals" (1996, p. 47).

In Bigelow's proposal, properties like *C* play a similar role as possible presents did in the previous section. The difference is that there is no principle TIMES to spoil the presentist's game. Which of these properties is a "time" only depends on the primitive fact of whether or not the now-stuff *n* possesses it. Bigelow thus success-fully avoids asserting the (temporal) existence of past or future objects. But the problem is that this proposal leaves it completely unclear why we should accept '*Cn*' as an *analysis* of JC. On the face of it, the former has nothing to do with the latter. All we're told is that *n* has some properties that stand in certain inferential relations to one another, and that Bigelow likes to *call* them 'being-such-that-Caesar-crossed-the-Rubicon' and 'being-such-that-Caesar-did-exist', respectively. What we haven't been given is an explanation of what *n*'s possessing these properties has to do with Caesar and his crossing of the Rubicon.

The underlying point is that the presentist cannot relinquish TIMES any more than the ersatzer could do without ACTUAL. It is only thanks to these principles that possible presents and possible worlds are even *relevant* to the task of analysing tensed and modal claims. By giving up TIMES, the presentist would abandon the project of analysing tensed talk in terms of possible presents. Yet unless '*Cn*' is a plausible analysis of JC, the presentist cannot avoid rejecting the latter by asserting the former.

Faced with similar problems, Sider (1999) and Markosian (2003) suggest that the appropriate response by the presentist is to deny claims like JC. Bigelow's '*Cn*' should not be regarded as a proposed analysis of JC, but as a substitute. Such an exchange of the prob-lematic JC for a presentist surrogate would have the benefit of reducing ontological commitment to philosophically suspect entities

(past and future objects). However, while most philosophers would agree that we ought to simplify our ontology whenever we can do so, what we are being asked to do here is to indulge our preference for a frugal ontology at the expense of truth. Even if the presentist can offer us '*Cn*' as a substitute, he is still rejecting JC, and that's still bad. To paraphrase Lewis (1991, p. 59), how would *you* like the job of having to tell historians that they need to rewrite their history books now that *philosophy* has discovered that Caesar didn't cross the Rubicon because Caesar *didn't exist*? Caesar did cross the Rubicon; that's what started the civil war. Any philosophical view that forces us to deny claims like JC is for that reason unacceptable.[10]

NOTES

[1] In P1, the 'nothing' is to be understood as negation, not as an existential quantifier in addition to the 'exists now'. Put semi-formally, P1 claims that: $\sim$ (*exists now x*) $\sim$ *x* is present.

[2] Here, as elsewhere in this paper, I am ignoring presentists who are Dummettian antirealists about the past by identifying truth with warranted assertability. Michael Dummett's discussion of this view raises important issues, but it would go beyond the scope of this paper to try to address them here. See his (1978, 2003) for more details.

[3] Versions of this views are defended by Smart (1955), Quine (1960, §36), and Mellor (1998).

[4] Some readers might ask what the initial quantifiers range over. For the two readings of P1, this question does not matter, for they are in any case trivial. But for the P2 readings to be any different from the trivial P1 accounts, we have to be permitted to instantiate them with names that lack a present referent. (See also the discussion on page 3 above.)

[5] This argument is suggested in Sider (1999, Sec. 1) and Zimmerman (1998, p. 211).

[6] Also the modal primitivist might talk about abstract "possible worlds", but he would do so in the context of providing an abstract model theory for his modal logic, and not as part of a proposed elimination of modal operators. Unlike what the realist and the ersatzer propose, this use of possible worlds is ontologically innocuous.

[7] Ersatz theorists disagree amongst themselves about the precise nature of possible worlds and the "according to" relation *A*, but these differences are irrelevant here. For further details, see Stalnaker (1976) and Lewis (1986).

[8] Here I am tacitly assuming that possible worlds satisfy a suitable maximality constraint that ensures that there is exactly one possible world that is actual. The details of this constraint do not matter for current purposes.

[9] Note that, on the ersatz view, the actual world is a proper part of the aggregate of everything that exists actually. It is that abstract possible world that accurately describes the actually obtaining states of affairs.

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