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PRESENTISM AND "CROSS-TIME" RELATIONS

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Presentists say that only present things exist.[1] But their theory faces a well-known objection. Yesterday's downpour caused today's flood. So today's flood bears the *is caused by* relation to yesterday's downpour. But, one thinks, for a relation to hold between two things, both must *exist*. So it must not be the case that only present things exist, since yesterday's downpour is no longer present. So it must not be the case that presentism is true.

Call this the objection from "cross-time" relations.[2] This paper will argue that presentists have an adequate reply to the objection from cross-time relations. After explaining the objection in more detail, the paper considers several replies on offer in the literature, arguing that none is entirely adequate as it stands. Finally, a new reply is considered and defended against an objection.

The Objection Explained

A sentence $S(...a...)$ containing a proper name a is *predicative with respect to a*, say, iff $\lceil S(...a...) \supset \exists x(x=a \ \& \ S(...x...))\rceil$[3] is necessarily true, where $\lceil[\Phi]\rceil$ abbreviates "the proposition expressed by Φ". Not every sentence containing a proper name, of course, is predicative with respect to that name: e.g., "Mary exclaimed, 'John is coming!'" contains the proper name "John," but is not predicative with respect to it. But it is plausible that, for any English sentence S of the form "α bears R to β," where α and β are proper names and R names a two-term relation, S is predicative with respect to α and β. Similarly with like sentences containing more than two names and expressing relations of arity higher than two. The point may be expressed as follows:

> **(Principle)** For any English sentences S_1 and S_2, if S_1 is $\lceil \alpha_1$ bears β to $\alpha_2, \ldots,$ and $\alpha_n\rceil$, where $\alpha_1, \alpha_2, \ldots,$ and α_n are proper names and β names an n-term relation, and S_2 is $\lceil \exists x_1 x_2 \ldots x_n(x_1=\alpha_1 \ \& \ \ldots \ \& \ x_n=\alpha_n \ \& \ x_1$ bears β to $x_2, \ldots,$ and $x_n)\rceil$), then $\lceil S_1 \supset S_2\rceil$ is necessarily true.

(Principle) is plausible, even truistic. Could "John bears the *husband of* relation to Mary" be true if there were no John or no Mary? Could "Fred bears the *is taller than* relation to Joe" be true if there were no Fred or Joe? Surely not.

But (Principle) makes trouble for presentism. For consider:

(1) Clinton admires JFK;
(2) Bush is of the same political party as Lincoln;
(3) Today's flood was caused by yesterday's downpour; and

(4) Caroline is the daughter of JFK and Jackie.

All express Moorean facts—facts even philosophers should not deny. Regimented in terms of the "x bears R to y" locution, they become:

(1') Clinton bears the *admires* relation to JFK;
(2') Bush bears the *same political party as* relation to Lincoln;
(3') Today's flood bears the *is caused by* relation to yesterday's downpour;[4] and
(4') Caroline bears the *daughter of* relation to JFK and Jackie.

And now the presentist's difficulty should be clear. For given (Principle), (1') through (4') entail the existence of non-present entities. Take (3'). Given (Principle), it implies that, quantifier wide open, something is identical with yesterday's downpour. But yesterday's downpour is no longer present: it is a fine day today. So (3') entails the existence of a non-present entity. But presentists say there are no such things, and therefore must reject (3') (and for similar reasons, (1'), (2') and (4')). But (1') through (4') are just fancy ways of saying what is said by (1) through (4). ((1') through (4') are just fancy ways of expressing the propositions expressed by (1) through (4).) So presentists must reject (1) through (4). But rejecting claims like (1) through (4) simply is not an option; nor is rejecting (Principle). So it is presentism that must go.

Such is the objection from cross-time relations. Before considering possible responses, a brief word about a distinct but closely related objection to presentism. Consider again:

(1) Clinton admires JFK.

(1) expresses what is sometimes called a *singular* proposition. Now, it is a widely held doctrine about singular propositions that they depend for their existence on the individuals they are about. In this sense: for any predicate F, proper names $n_1 \ldots n_m$, and objects $o_1 \ldots o_m$ such that $o_1 \ldots o_m$ are the referents of $n_1 \ldots n_m$ respectively: necessarily, $\lceil Fn_1 \ldots n_m \rceil$ exists only if $o_1 \ldots o_m$ exist. Following Plantinga (1983), call this doctrine *existentialism*. Existentialism applied to the proposition that Clinton admires JFK says that it depends for its existence on Clinton and JFK: no Clinton or JFK, no proposition that Clinton admires JFK. Since—barring afterlives—JFK is no longer present, and thus, by presentism, no longer exists, the conjunction of presentism and existentialism would seem to imply that there is no proposition that Clinton admires JFK. But this looks bad: surely there is such a proposition. So it must be that one or the other of existentialism and presentism is false. But existentialism looks pretty good. So it must be that presentism is false.

The latter objection to presentism (henceforth, *the objection from singular propositions*) is orthogonal to the objection from cross-time relations. This is easily seen. Presentists who join Plantinga (1983)[5] in rejecting the doctrine of existentialism—holding that singular propositions can, so to speak, "outlive" the things they were once about—can grant the existence of ["Clinton admires JFK"] with equanimity. The objection from singular propositions makes no trouble for them. But the objection from cross-time relations still gives trouble. For if there is such a proposition as ["Clinton admires JFK"], then, one thinks, it is true. But then given (Principle), it would seem to follow that there is a non-present individual—viz., JFK—and thus that presentism is false.

The crucial point: the objection from cross-time relations is separable from the objection from singular propositions. This paper will be concerned with the former, not the latter. To fix ideas, it shall be assumed that existentialism is false and that the conjunction of presentism and the claim that propositions like ["Clinton admires JFK"] exist is unproblematic.[6]

Some Replies to the Objection

The cross-time objector's tack is to put forward a putatively Moorean claim of ordinary language, e.g.,

(4) Caroline is the daughter of JFK and Jackie,

claim it admits of regimentation along the lines of

(4') Caroline bears the *daughter of* relation to JFK and Jackie,

then point out that the latter is inconsistent with presentism by dint of implication of a non-present entity.

The presentist can resist the argument in several places. She might grant that (4') translates (4), but deny (Principle) and that (4') is predicative with respect to "JFK" and "Jackie." Or, she might reject the cross-time objector's translation of (4) and urge that, properly translated, (4) is not predicative with respect to "JFK" and "Jackie." Finally, she might grant that presentism contravenes (4) and (4'), but argue that, initial appearances notwithstanding, there is no steep price to be paid. This paper will endorse the latter strategy. Before saying why, though, a word about how the other strategies might proceed.

Frivolous Presentism

Actualism is the thesis that, necessarily, everything exists in the actual world.[7] Serious actualism is the thesis that, necessarily, no object has a property or stands in a relation in a world in which it does not exist. Plantinga calls the conjunction of actualism and the denial of serious actualism "frivolous actualism" (1984: 316). Analogously one can define serious and frivolous presentism:

(Serious Presentism) It is always the case that: for every x, x has a property or stands in a relation at a time t only if x exists at t.[8]

(Frivolous Presentism) It is always the case that: (i) for every x, x is present, but (ii) it is, was or will be the case that, for at least one x, x has a property or stands in a relation at a time t such that x does not exist at t.

The frivolous presentist solves the problem of cross-time relations by denying (Principle). She sees no trouble with its being true both that (a) at time t, Caroline stands in the *daughter of* relation to JFK and Jackie, and (b) neither JFK nor Jackie exist at t. Failure to exist at a time, on her view, is no barrier to standing in relations and having properties at that time. Thus, she will say, there is no problem with its being true both that (a) Caroline presently (i.e., at the present time) stands in the *daughter of* relation to JFK and Jackie, and (b) nothing in our most inclusive domain of quantification is (was, will be) identical with either JFK or Jackie. Her central suggestion: (Principle) is false and claims like (4') make no trouble for presentism.

The main problem with this reply to the objection from cross-time relations is that it is so difficult to believe. The suggestion here is that Caroline bears a relation R to JFK and Jackie, but there is nothing to which she bears R. Bizarre. To be sure, some presentists of a more Meinongian bent will see no problem here. But for those suspicious of propertied non-existents, the frivolous presentist's reply simply is not a serious option.

Chisholm's "Overlapper" Approach

Ideas of Roderick Chisholm's suggest the following reply to the objection from cross-time relations.[9] Consider

(2) Bush is of the same political party as Lincoln.

It was claimed above that

(2') Bush bears the *same political party as* relation to Lincoln

translates (2). Proponents of what will be called the *overlapper approach* deny this.

According to them, the proper re-formulation of (2) is something more like:

(2") Bush belongs to a political party *P* such that *WAS*(Lincoln belongs to *P*).[10]

(2"), they will say, commits one to the existence of Bush and his political party, but not to the existence of Lincoln since the name "Lincoln" occurs within the scope of a tense operator. Tense operators, they will say, are like other intensional operators: they work in such a way that singular terms occurring within their scope are not ontologically committing.

Likewise with

(4) Caroline is the daughter of JFK and Jackie.

It was claimed above that it expresses the same proposition as

(4') Caroline bears the *daughter of* relation to JFK and Jackie.

Not so, says the Chisholmian. What it says, rather, is something more like:

(4") Caroline is such that *WAS*(she is born to JFK and Jackie),

a claim that commits one to the existence of Caroline, but not to the existence of JFK or Jackie.

The general recipe: (i) take a sentence *S* such that, for some proper names α and β and some two-term predicate *R*: S's grammatical form is "*R*(α,β)," α denotes some present object α*, β does not denote anything but *was* or *will be* such that it denotes some object β* (henceforth, say that any sentence matching this description is a *cross-time relational* claim); (ii) find some object *x* such that, to put it loosely, *x*'s existence "overlaps" α* and β* (in the sense that *x* coexists with α* and was or will be such that it coexists with β*); then (iii) translate *S* as a claim to the effect that α* bears some relation *R'* to *x* and it was or will be the case that *x* bears some relation *R"* to β*. (So in the case of (2), Bush's political party functions as the overlapper; in the case of (4"), Caroline herself is the overlapper.) The recipe requires some fiddling for more complex claims like

(5) Fred is a direct descendant of Samuel Clemens.

Translation of (5) requires not just one overlapper, but a chain of overlappers, something like:

(5") Fred is such that *WAS*(he is born to someone x_1 such that *WAS*(x_1 is born to someone x_2 such that . . . *WAS*(x_n is born to Samuel Clemens) . . .).

Such is the overlapper approach to cross-time relational claims in ordinary language. It suggests the following reply to the objection from cross-time relations: Cross-time relational claims like (1) through (4) are not, on closer inspection, predicative with respect to names of non-present entities. Properly translated, they do not predicate relations of non-contemporaneous entities; thus, they make no trouble for presentism.

But the cross-time objector has a simple reply. For notice that, even if the defender of the overlapper approach is right about how to translate sentences of ordinary language like (1) through (4),[11] her strategy is of no help with sentences like

(4') Caroline bears the *daughter of* relation to JFK and Jackie.

(4'), quite clearly, does not express the same proposition as (4"): (4') predicates a three-term relation of Caroline, JFK and Jackie; (4") predicates an exotic monadic property of Caroline. (4') implies the existence of JFK and Jackie; (4") does not. These are different propositions. Likewise with

(1') Clinton bears the *admires* relation to JFK;

(2') Bush bears the *is of the same party as* relation to Lincoln; and

(3') Today's flood bears the *is caused by* relation to yesterday's downpour.

None are plausibly translated in terms of tense operators and overlappers. But the cross-time objector might well claim that these primed claims are no less Moorean than their unprimed compeers. For is it not obviously *true* that Clinton bears the admiring relation to JFK? And is it not obviously *true* that Caroline bears the *daughter of* relation to JFK and Jackie? These questions will be taken up below. Suffice it to say for now that the cross-time objector is surely correct about this: claims like (1') through (4') are not plausibly translated à la the overlapper approach. Consequently, that approach is at best a partial response to the objection from cross-time relations, leaving unanswered the question what to say about claims like (1') through (4').

Sider's "Quasi-Truth"

It is a good thing for a philosophical theory if it can "save" the truth of our ordinary talk and thought about the world. Theories that cannot do so pay a theoretical price. But perhaps the price is not high if a theory can save, if not the *truth* of our ordinary talk and thought, then something in the neighborhood of truth. Theodore Sider (1999) thinks presentism does the latter. He grants that presentism requires the rejection of sentences like (1) through (4), but suggests that the costs are manageable since the presentist can regard such sentences as "quasi-true."

A sentence *S* is quasi-true when there is a true proposition that would have been true and would have entailed the truth of *S* had presentism been false and eternalism[12] true (1999: 332–333). So, e.g., "Lincoln was wise" is quasi-true given presentism since there are past tensed truths consistent with presentism—e.g., ["*WAS*(Lincoln is wise)"]—that would have been true had eternalism been true, and would have entailed the truth of "Lincoln was wise." Given presentism, claims like (1) through (4), though not true, are quasi-true, since in each case one can find a tensed truth consistent with presentism that would have been true had eternalism been true and would have entailed the relevant claim. (E.g., ["Bush belongs to a party *P* such that *WAS*(Lincoln belongs to *P*)"] is true, consistent with presentism, would have been true had eternalism been true, and would have entailed the truth of (2).)

In sum, presentism's costs would be high indeed if it required wholesale rejection of claims like (1) through (4). But it does not: it is perfectly compatible with presentism that such claims are, if not true, then at least quasi-true.

Sider's notion of quasi-truth raises interesting questions. For instance, Sider proposes that a sentence *S* is quasi-true iff it satisfies an instance of the following schema:

> *S* is quasi-true iff there is a true proposition *p* such that, were *X* true, *p* would have been true and would have entailed the truth of *S*,

where *X* states some thesis of ontology like presentism, eternalism or realism about propositions.[13] But consider this thesis of ontology: *goblinism*, the thesis that, necessarily, there are nefarious beings—*Goblins*, for short—bent on the destruction of humanity.[14] Goblinism is, if true, necessarily true. Now, the proposition ["2+2=4"] is true, would have been true had goblinism been true, and would have entailed the truth of "Goblins exist." So, by Sider's definition, "Goblins exist" is quasi-true.

But now it is unclear what the benefits of quasi-truth are. The idea is supposed to be that presentism respects ordinary thought and talk if it turns out on presentism that sentences like "Caroline was born to JFK and Jackie" are, if not true, then quasi-true. But does presentism really respect ordinary talk and thought if sentences like "Caroline was born to JFK and Jackie" turn out on the theory to be no better off than claims like "Goblins exist"?

Perhaps Sider could reply that he did not intend the above schema to work in such a

way that just any thesis of ontology could be substituted for "*X*." Perhaps he only intended it to work for a limited range of ontologies, where the range in question includes the thesis of eternalism but not the thesis of goblinism.[15] Suppose so. Then there is this puzzle. Sider intends "quasi-true" to function as what may be called a "term of alethic commendation" (to borrow from van Inwagen). The idea is that presentism would be costly if it required wholesale rejection of sentences like (1) through (4), but that the costs are mitigated if the presentist can apply "quasi-true" to them because quasi-truth is, intuitively, "close enough to truth" (cf. Sider 1999: 332–333). The last paragraph complained that, given Sider's account of quasi-truth, "Goblins exist" is quasi-true and that if sentences like (1) through (4) are, so to speak, "alethically on a par" with sentences like "Goblins exist," then it is difficult to see why the fact that (1) through (4) are quasi-true given presentism should be thought of as mitigating presentism's costs. The suggested reply: "Goblins exist" *is not* quasi-true if the quasi-truth schema is restricted to a limited range of ontologies, where the range in question includes eternalism but not goblinism. But note that this reply blunts the force of the foregoing complaint only if the property of being quasi-true, so construed, renders sentences like (1) through (4) "alethically better off" than sentences like "Goblins exist." (For suppose it does not. Then the complaint still stands: if sentences like (1) through (4) are alethically on a par with sentences like "Goblins exist," it is difficult to see why the fact that (1) through (4) are quasi-true given presentism should be thought of as mitigating presentism's costs.) Well, does it? Does (4)'s being quasi-true, in the emended sense, make it somehow "close enough to true," in a way that a sentence like "Goblins exist" *is not* "close enough to true"? It is very difficult to see why it would. For to say that (4) is quasi-true in the emended sense is just to say that there is a true proposition that (a) would have been true had eternalism, say, been true and (b) would have entailed the truth of (4). But notice that one can say almost the same thing about "Goblins exist," save one minor difference: one can say, that is, that there is a true proposition that (a) would have been true had *goblinism* been true and (b) would have entailed the truth of "Goblins exist." So (4) has the property *being an x such that there is a truth that would have been true had eternalism been true and would have entailed x*, and "Goblins exist" has the property *being an x such that there is a truth that would have been true had goblinism been true and would have entailed x*. Question: Why should the presentist think that (4)'s having the former property makes it "close enough to true" in a way that "Goblins exist"'s having the latter property does not make *it* "close enough to true"? After all, the presentist who wishes to deploy Sider's strategy will likely think that both eternalism and goblinism are necessary falsehoods. (Most presentists think their theory necessarily true if true.) Given that that is her view, it is *very* difficult to see why the presentist should think that possession of the one property makes for truth, close enough, in a way that possession of the other property does not. But then the above worry still stands: if sentences like (1) through (4) turn out on presentism to be no better off, alethically speaking, than sentences like "Goblins exist," it is difficult to see why the fact that (1) through (4) are quasi-true given presentism should be thought of as mitigating presentism's costs.

Now, there is the possibility of course that some other modification of Sider's account of quasi-truth would avoid the foregoing complaints. But it is not at all easy to see how such a modification would go.

So far, then, some main approaches to the objection from cross-time relations. None seems entirely adequate as it stands.

Moorean Facts?

The cross-time objector's case depends crucially on the conjunction of two claims: first, the claim that sentences of ordinary language like

(1) Clinton admires JFK;
(2) Bush is of the same political party as Lincoln;
(3) Today's flood was caused by yesterday's downpour; and
(4) Caroline is the daughter of JFK and Jackie

express Moorean facts; and second, the claim that these sentences are predicative with respect to the names of non-present entities. But this conjunction looks wrong. It is unclear whether (1) through (4) express Moorean facts (though obviously there are Moorean facts in the near neighborhood of each), but this much *is* clear: if (1) through (4) *do* express Moorean facts, then they are not predicative with respect to the names of non-present entities. Such, anyway, is the conclusion of the argument to follow.

Suppose for the nonce that sentences like (1) through (4) are loose and popular ways of saying what is said strictly and philosophically by sentences like

(1') Clinton bears the *admires* relation to JFK;
(2') Bush bears the *same political party as* relation to Lincoln;
(3') Today's flood bears the *is caused by* relation to yesterday's downpour; and
(4') Caroline bears the *daughter of* relation to JFK and Jackie.

The latter sentences, manifestly, are predicative with respect to names that, if they denote anything, denote non-present entities. If they're true, presentism is not. But these sentences do not express Moorean facts. For what is a Moorean fact? Something like: a true proposition only a fool could fail to believe and believe firmly. The obvious candidates for this exalted status fall into two classes. First, there is the class of those deliverances of reason or the senses for which there is no knock-down argument, but one would be crazy not to believe them and believe them firmly (e.g., that modus ponens is a valid rule of inference, or that there are material objects). Second, there is the class of those propositions, the *p*s, for which there are such good arguments that only the intellectually perverse could grasp the arguments and fail to believe the *p*s (e.g., that there was a president of the United States named Lincoln).

What now of the propositions expressed by (1') through (4')? To which of the above classes do they belong? Surely not the first: it is no truth of reason or deliverance of the senses that Caroline bears the *daughter of* relation to JFK and Jackie. Likewise with the other primed sentences. If these sentences express Moorean facts, then, the propositions they express must belong to the class of those propositions for which there is overwhelming propositional evidence. Put differently, if the propositions in question are Moorean, it must be because there is *Moorean evidence* for them, where a proposition q is Moorean evidence for a proposition p, say, iff (i) q belongs to one of the above classes of proposition and the *conditional epistemic probability* of p on q is high, and (ii) conditional epistemic probability is something in the neighborhood of the following:

> the conditional epistemic probability of p on q—$P(p/q)$—is the degree to which a human being of sound understanding[16] could believe p if she fully believed q, had no other evidence for or against p, and considered the evidential bearing of q on p.[17]

If (1') through (4') express Moorean facts, then, it must be because the propositions they express are supported by Moorean evidence, some indisputable proposition or propositions such that the conditional epistemic probability of the propositions expressed by (1') through (4') on them is high.

But consider (4'). What Moorean evidence is on offer for the proposition expressed by it? Well, were there such evidence, it would presumably make mention of certain legal and medical records, newspaper reports, and eyewitness testimonies—items of the sort a competent historian would bring to bear in an attempt to justify the claim that Caroline was born to JFK and Jackie. One who thought of such things as Moorean evidence for the proposition expressed by (4') would try to show, then, that their existence is beyond reasonable doubt, and that the conditional epistemic probability of the proposition expressed by (4') on the proposition that they exist is high. But here there is trouble. Let E be the proposition that the relevant legal and medical records, newspaper reports, etc., currently exist. Suitably fleshed out, one can imagine E's being such that it is indisputably true and also Moorean evidence for the proposition expressed by

(4") *WAS*(Caroline is born to JFK and Jackie).

But it seems doubtful that E or any proposition like it would be Moorean evidence for the proposition expressed by

(4') Caroline bears the *is the daughter of* relation to JFK and Jackie.

It seems doubtful for the following reason. What gets the presentist into trouble is that (4') entails

(5) Quantifying unrestrictedly, something is identical with JFK.

But if so, then it follows by the probability calculus[18] that the conditional epistemic probability (henceforth, *probability*) of the proposition expressed by (4') on E is less than or equal to the probability of the proposition expressed by (5) on E. The crucial question, then: How probable is the proposition expressed by (5) on E? (In terms of the above bracket notation: How probable is [(5)] on E?)

It is not probable at all. Suppose Paul, a presentist, and Ellen, an eternalist, have the following philosophical dispute. They both agree on the truth of

(6) $WAS(\exists x(x = \text{JFK}))$.

But Paul claims that (5) is nevertheless false on the grounds that JFK died in 1963, there are no afterlives, and the most inclusive domain of quantification includes only present things. Ellen grants that he died in 1963 and that there are no afterlives. But she insists that the most inclusive quantifiers range over past, present as well as future entities. That being the case, they range over Kennedy and (5) is true.

Thus far their dispute. Now, would it shed any light on their dispute to learn of the various legal and medical records, newspaper reports, etc., that make it highly likely that *WAS*(Caroline was born to JFK and Jackie)? Surely not. Assuming this evidence gives no reason to think that JFK is still among the living or possessed of an afterlife, it is the wrong sort of evidence for resolving a dispute like theirs. It is, so to speak, too "coarse-grained" to adjudicate between Ellen's claim that the conjunction of [(5)] and [(6)] holds and Paul's claim that the conjunction of ~[(5)] and [(6)] holds. In terms of conditional epistemic probability: the conjunction of [(5)] and [(6)] is neither more nor less probable on E than the conjunction of ~[(5)] and [(6)]. But if so, it follows by the probability calculus that $P([(5)]/E)$ is not high,[19] and thus that $P([(4')]/E)$ is not high either. The upshot: initial appearances to the contrary notwithstanding, E is not Moorean evidence for the proposition expressed by (4').

If there *is* Moorean evidence for the proposition expressed by (4'), it presumably consists of the conjunction of E with some other Moorean proposition. But what? What Moorean proposition can be conjoined to E so that the resulting conjunction is Moorean evidence for [(4')]? Well, if there were some argument for eternalism whose premises were all Moorean propositions, the conjunction of these premises and E would constitute Moorean evidence for [(4')]. The trouble is, there *is not* any argument for eternalism—or any other substantive metaphysical thesis for that matter—whose premises are all Moorean facts. There are some suggestive arguments for eternalism, admittedly, but even the die-hard eternalist would have to admit that they do not rise to the level of Moorean support for eternalism.

So what Moorean proposition E^* can be conjoined to E thereby yielding Moorean evidence for [(4')]? Hard to say; *very* hard to say. Note well: this is not to deny that there is Moorean evidence for claims in the near neighborhood of (4'), e.g.,

(4") Caroline is such that *WAS*(she is born to JFK and Jackie), and

(4"') *WAS*(Caroline is the daughter of JFK and Jackie).

All can agree that E is powerful evidence for these claims and that these claims are very likely true.[20] But it is hard to see what powerful evidence there could be for [(4')]. Similar reasoning applies to the other primed claims. So, e.g., no doubt there is excellent evidence for

(2") Bush belongs to a party P such that *WAS*(Lincoln belongs to P).

But, by reasoning similar to the above, it is doubtful that there is any overwhelming evidence for

(2') Bush bears the *same political party as* relation to Lincoln.

Analogously, no doubt there is excellent evidence that Clinton accepts propositions like ["JFK was a fine president"], but it is hard to see what overwhelming evidence there could be that he bears an *admiring* relation to JFK.

In sum, it has been argued that (1') through (4') do not express Moorean facts. If these claims are strict and philosophical ways of saying what is said in ordinary language by

(1) Clinton admires JFK;

(2) Bush is of the same political party as Lincoln;

(3) Today's flood was caused by yesterday's downpour; and

(4) Caroline is the daughter of JFK and Jackie,

then it follows that the latter do not express Moorean facts either.

Well, one might say in reply, if (1') through (4') do not express Moorean facts, then they are not strict and philosophical regimentations of (1) through (4) since the latter clearly *do* express Moorean facts. By way of reply: maybe so, but then there is good reason for denying that the latter are predicative with respect to names of non-present entities. Take (4). It is hard to see what evidence there could be for it besides the medical records, newspaper reports, etc., discussed above. But if (4) comes out true only if, quantifying unrestrictedly, something is JFK, then there are the same reasons as explored above for denying that (4) expresses a Moorean fact. Analogous considerations apply to (1) through (3). The upshot: the reasoning of the last several paragraphs leads to the conclusion that if (1) through (4) are predicative with respect to "JFK," "Jackie" and so forth, then they do not express Moorean facts. To put it the other way round, it leads to the conclusion that if they *do* express Moorean facts, then they are not predicative with respect to these names.

In brief, either (1) through (4) are not predicative with respect to "JFK," "Jackie," "Lincoln," or "yesterday's downpour" or they do not express Moorean facts. Since the reasoning that has led to this conclusion may be generalized to other putatively Moorean cross-time relational claims, it would seem that presentists have an adequate reply to the objection from cross-time relations. That objection requires both that (i) sentences like (1) through (4) express Moorean facts, and (ii) such sentences are predicative with respect to the names of non-present enti-

ties. Perhaps one or the other of (i) and (ii) is right, but it has been argued that their conjunction is not.

A Closing Worry: What About Cross-Time Causal Claims?

Well and good, one might say: perhaps it is not a Moorean fact that Bush bears the *same party as* relation to Lincoln. But the discussion thus far has skated blithely past cross-time causal claims like

(3') Today's flood bears the *is caused by* relation to yesterday's downpour.

And are not claims of this sort Moorean?

They are not, for reasons given above. But this much is hard to dispute: it is a Moorean fact that past events cause present events. Fortunately for the presentist, there are a variety of presentist-friendly ways of accommodating this fact. First, the presentist might endorse a broadly Humean approach to causation. For example, she might hold some version or other of Hume's constant conjunction theory. Roughly: to say that today's flood is caused by yesterday's downpour is to say no more than that

(3a) Today's flood belongs to an event type *B*, it was the case that yesterday's downpour belonged to an event type *A*, and for every time *t*, if at *t*, some *A*-event occurs, then at some time shortly after *t*, a *B*-event occurs (or, more succinctly, *B* events regularly follow *A*-events).

Or, she could plump for a more sophisticated Humeanism. She might opt for a deductive-nomological approach. Roughly: an event e_1 causes an event e_2 when the proposition that e_1 occurs is a member of a set of truths that, given the laws of nature, are jointly sufficient for the truth of the proposition that it will be the case that e_2 occurs. Or, a counterfactual approach: roughly, an event e_1 causes an event e_2 when the proposition that e_1 does not occur counterfactually implies the proposition that it will not be the case that e_2 occurs. Then she would claim that the strict and philosophical truth in the neighborhood of (3') is something like

(3b) ["*WAS-1-day-ago*(a downpour occurs at thus-and-such place)"] is a member of a set of truths which, given the laws of nature, are jointly sufficient for the truth of ["a flood occurs at thus-and-such place"],

or

(3c) ["~(*WAS-1-day-ago*(a downpour occurs at thus-and-such place))"] counterfactually implies ["~(a flood occurs at thus-and-such place)"],

depending on her view.

These Humean approaches to causation have this in common: each construes talk of a causal relationship between events e_1 and e_2 as reducible to talk about non-causal relationships holding among tensed propositions which are or were about e_1 and e_2. Each endorses a *reductive* account of causation, one that eschews primitive, unanalyzable causal connections.

But suppose one is inclined to reject reductive approaches to causation; the causal relationship, one says, is a primitive, unanalyzable connection. Can the presentist countenance such a view? She can. There are various ways of proceeding. She might think of all causation as happening by way of chains of temporally overlapping events related by a primitive causal connection.[21] On such a view, today's flood is the result of yesterday's downpour because it was the case that yesterday's downpour occurred and was causally connected to some event e_1 such that e_1 would soon be causally connected to an event e_2 such that e_2 would soon be causally connected to an event e_3, and so on, until we reach today's flood.

Some will complain that this view makes all causation *simultaneous*, as its fundamental causal relation links only simultaneous events. For those unable to stomach simultaneous causal connection, there are other options. John Bigelow, following the lead of certain Stoics, suggests a view on which the fundamental causal connection is not between events, but between propositions about events.[22] An event e_1 causes an event e_2, on this view, iff the proposition e_1 *occurs* bears a primitive causal relationship to the proposition e_2 *occurs*. This relation, one might suppose, is the one expressed by "because" in sentences like "Because it is true that the downpour occurred yesterday, it is now true that there is flooding" (cf. Sider 1999: 338).

Now, it is no part of this paper's project to defend any one of these approaches to causation. The point here is just that there are presentist-friendly approaches to causation and that it does not follow automatically from the fact that the presentist is committed to rejecting claims like (3') that she's thereby committed to rejecting the truism that past events cause present events.[23]

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NOTES

1. More exactly, presentism is the thesis that it is always the case that, quantifying unrestrictedly, everything is present. For more on defining presentism, see Crisp 2003, Crisp 2004a, 2004b; Hinchliff 2000: S576–S577; Ludlow 2004; Merricks 1995: 523 and 1999: 421–422; Rea 2003; Sider 1999: 325–327; and Zimmerman 1998: 209–210.

2. For discussion, see Adams 1986; Bigelow 1996; Davidson 2003; Markosian 2004; Quine 1987: 197–198; Rea 2003; Sider 1999 and 2001: chap. 2; and Tooley 1997.

3. Read the foregoing existential quantifier as an unrestricted quantifier, one that ranges over *everything*. Henceforth, all quantifiers should be so read.

4. The conjunction of this sentence and (Principle) makes trouble for presentism, obviously enough, only if "today's flood" and "yesterday's downpour" are taken as proper names and not definite descriptions. Please do so henceforth.

5. See also Bealer 1998 and Davidson 2000.

6. For an ontology of propositions consistent with this assumption, see, e.g., Bealer 1998.

7. Talk of existence *in* a world should be taken in the usual way: something *x* exists in a world *w* iff, were *w* actual, something would be identical with *x*.

Modal metaphysicians are not of one mind about what thesis deserves the name "actualism." Some talk as if actualism is the thesis described above: necessarily, everything exists in the actual world. On this definition, notice, Plantinga is an actualist and Lewis is not. Others talk as if actualism is the thesis that there neither are nor could have been things that do not exist (see, e.g., Plantinga 1984: 314). On this definition, notice, both Plantinga and Lewis are actualists. This paper will assume the former definition.

8. Can the presentist believe in times? She can. She will understand times like the actualist understands worlds: both are abstract objects of some sort. See, e.g., Zalta 1987 for a view along these lines.

9. See Chisholm 1990. For discussion, see Davidson 2003, Markosian 2004, and Sider 1999.

10. Cf. Davidson 2003: 81. Here and in the sequel, "*WAS*(. . .)" and "*WILL*(. . .)" are the tense operators of orthodox tense logics like Prior's. ⌜*WAS*(*S*)⌝ abbreviates ⌜it was the case that *S*,⌝ and ⌜*WILL*(*S*)⌝ abbreviates ⌜it will be the case that *S*⌝.

11. And this is a big "if." For animadversions on this and related translation strategies, see Davidson 2003.

12. Eternalism: the thesis that reality is spread out in time as well as space and includes past, present and future entities.

13. See his 1999: 343–347.

14. This objection is briefly discussed in Crisp 2003: 226.

15. Thanks to an anonymous referee for suggesting this line of reply.

16. I.e., a human being whose cognitive faculties function properly, and, say, is as good at first-order logic and probabilistic reasoning as a human could be.

17. Cf. Plantinga 1993: 168.

18. It shall be assumed without argument that a human of sound understanding—again, one whose cognitive faculties function properly and is as good as a human could be at first-order logic and probabilistic reasoning—will be such that her degrees of belief conform to the calculus of probabilities specified by the usual axioms ($\ulcorner \vdash p \urcorner$ abbreviates $\ulcorner p$ is expressed by some sentence S such that S is a theorem of first-order logic$\urcorner$):

(1) $0 \leq P(p/q) \leq 1$;
(2) If $\vdash (p \supset q)$, then $P(q/p) = 1$;
(3) If $\vdash \sim(p\&q\&r)$, then $P(p \vee q/r) = P(p/r) + P(q/r)$;
(4) $P(p\&q/r) = P(p/q\&r) \times P(q/r)$;
(5) If $\vdash (p \equiv q)$, then $P(p/r) = P(q/r)$ and $P(r/p) = P(r/q)$.

N.B.: the probability calculus is sometimes formulated as above except that above instances of "$\vdash$" are replaced by a "$\Box$" expressing truth in all possible worlds. The calculus resulting from this substitution, important and interesting as it is, is not plausibly thought of as governing conditional epistemic probability (construed as above). For suppose that serious actualism is true. Then it is true in all possible worlds. But, one thinks, the conditional epistemic probability (construed as above) of serious actualism on the proposition that Bill Clinton had eggs for breakfast this morning is not 1. (Cf. Plantinga 1993: 173–175.)

19. As follows: Suppose that the probability of [(6)] on E is quite high, say around 0.9. Suppose too that the probability of [(5)]&[(6)] on E is about the same as the probability of ~[(5)]&[(6)] on E. Then the probability of each conjunction is around 0.45: it is a theorem of the probability calculus that $P([(5)]\&[(6)]/E) = P([(6)]/E) - P([(6)]\&\sim[(5)]/E)$. The probability of [(5)] on E, then, is calculated as follows: $P([(5)]/E) = P([(5)]\&[(6)]/E) + P([(5)]\&\sim[(6)]/E)$. The missing value here is the probability of [(5)]&~[(6)] on E. To calculate this, note that $P([(5)]\&\sim[(6)]/E) = P(\sim[(6)]/E) - P(\sim[(6)]\&\sim[(5)]/E)$. Since $P(\sim[(6)]/E)$ is around 0.1, it follows that $P([(5)]\&\sim[(6)]/E)$ will be no larger than around 0.1. Accordingly, it follows that $P([(5)]/E)$ will be no higher than around 0.6.

20. All can agree that (4") and (4"') are true because, given this paper's working assumption that existentialism is false, both are consistent with presentism: names of putatively past objects occur in each case within the scope of a tense operator, and by the anti-existentialist's lights, singular terms occurring within the scope of a tense operator are not ontologically committing.

21. For a related approach, see Zimmerman 1997.

22. Bigelow 1996 suggests this sort of view, as does Adams 1986. For criticism of this approach, see Sider 1999: 337–339.

23. Thanks to Ben Caplan, Alison Crisp, Matthew Davidson, Brian Kierland, Alvin Plantinga, and an anonymous referee for helpful comments and conversation.

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