

# Tenseless Times

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## **Abstract**

I develop a new theory of *times*. I show how to analyze times as tenselessly describable “abstract” (causally-inert) entities. Some philosophers make use of *ersatz* times, which are abstract entities such as maximal states of affairs that bear earlier than and later than relations to one another. Although these times are normally thought to exemplify A-properties (such as *being present*) that cannot be expressed in a purely tenseless language, I explain how a tenseless theory can accommodate abstract times. I do this by (i) getting on the table a new theory of time that combines eternalism with a B-series of genuine, abstract times, and (ii) defending Rasmussen’s *tenseless presentism* against a recent objection. The result is a new way to think about a familiar category: time.

## **Key Words**

Presentism, Tenseless, Eternalism, Times, A-theory, A-properties

# Tenseless Times

## *1. Introduction*

What are times? I begin with recent history on this question. Rasmussen (2012) introduces a tenseless version of presentism in an effort to show that, contrary to conventional wisdom, presentism is not a version of the A-theory.<sup>1</sup> Jonathan Tallant (2012) has joined the effort: he argues that presentism is not a version of the A-theory by developing yet another non-A-theoretic version of presentism—‘existence presentism’, he calls it. Along the way, he raises an interesting objection against Rasmussen’s tenseless presentism.

I will make use of Tallant’s objection to draw attention to a common assumption about abstract times—namely, that they are not genuine times. My aim is to showcase advantages of the view that times (not mere representations of times) are abstract states of affairs. I show that this view of times, though certainly controversial, makes possible not only a tenseless version of presentism but also an “abstract times” version of eternalism. Getting these theories of time on the table advances the debates over the nature of time and improve our understanding of the contemporary theories of time under dispute.

## *2. Tenseless Presentism*

I will first explain how a theory of times as abstract entities empowers Rasmussen’s tenseless presentism. My goal here isn’t to defend Rasmussen’s theory against all possible objections. I aim only to show how a certain theory of times can save Rasmussen’s theory from Tallant’s recent objection.

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<sup>1</sup> Presentists think (basically) that everything *presently exists*. A-theorists think, among other things, that *being present* cannot be analyzed in terms of ‘tenseless’ properties, such as *earlier than* or *timelessly obtains*.

Here is a summary of Rasmussen's theory:<sup>2</sup>

- (1) For any time  $t$ , the fact that  $t$  is present is identical with the fact that  $t$  is true (or obtains).
- (2) For any time  $t$ , the fact that  $t$  is past is identical with the fact that  $t$  is earlier than a time that is present.
- (3) For any time  $t$ , the fact that  $t$  is future is identical with the fact that  $t$  is later than a time that is present.
- (4) Times are abstract objects (such as maximal propositions / states of affairs) that bear primitive earlier than / later than relations to one another.
- (5) There is always only one time that is tenselessly true (or obtains).
- (6) Times change, such that, for example, a time that is 6 years earlier than a time that is true *becomes* 7 years earlier than a time that is true.
- (7) *Being present* and *presently existing* are distinct: all times presently exist, but only one of them is present.

Rasmussen focuses on defending (5) against the charge that whatever is tenselessly true is *eternally* true and so not merely presently true. He argues in reply that 'tenselessly true' may express *true simpliciter*, which need not be treated as identical with *being eternally true* (pp. 273–274).<sup>3</sup> With this distinction of terms, the charge against (5) is blocked, says Rasmussen.

Tallant (2012) presents a different objection to Rasmussen's theory. The objection, in a nutshell, is that Rasmussen's ersatz times are not ordered by *genuine* B-relations (p. 2). For if they were, then they would exist at temporal distances from one another—which contradicts presentism.

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<sup>2</sup> Rasmussen, pp. 273–274.

<sup>3</sup> Note that in arguing that presentism does not entail the A-theory, Rasmussen does not say anything to suggest that presentism is compatible with the *B-theory*. Presumably it is not, since B-theorists presumably think that there is a complete and accurate tenseless description of reality that never changes, whereas presentists deny that (either because they say there is no *complete* tenseless description of reality, or because they accept tenseless presentism and say that the accurate tenseless description constantly changes).

At the heart of Tallant’s objection is the common thought that a time cannot be genuinely earlier than another unless it *exists* earlier than the other. We may state this common view of times as follows:

(Earlier Existence) For any  $x$  and  $y$ , if  $x$  is genuinely earlier than  $y$ , then  $x$  *exists* only at times earlier than the times at which  $y$  exists.

This principle is eminently plausible on traditional tenseless theories that treat *existence* and *obtaining* as co-extensive (which is in keeping with a *concretist* ontology). But suppose we distinguish between existence and obtaining: for example, an *abstract* state of affairs may exist without obtaining. In that case, we may suppose that times are ordered with respect to *obtaining* rather than with respect to *existing*—so that  $x$  may obtain earlier than  $y$  without thereby existing earlier than  $y$ . So, for instance, one might suppose that all times necessarily exist (and so exist at all times<sup>4</sup>), even though there is only one time that has the property of obtaining simpliciter (i.e., being present).<sup>5</sup> Just as the *actualist* may suppose that every possible world exists while only one obtains, so too, a presentist may suppose that every time exists while only one obtains (is present). The result of thinking of times in this way—as *existing* at every time—is that (Earlier Existence) is false.<sup>6</sup>

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<sup>4</sup> More precisely, for every time  $t$ , when  $t$  is *present*, every time *exists* (presently).

<sup>5</sup> To be clear, Rasmussen treats ‘obtaining simpliciter’ as expressing a property that is both tenseless and dynamic (p. 273).

<sup>6</sup> This distinction between existing vs. obtaining is familiar in discussions of modality, but it has not been employed in defense of the theory of abstract times under consideration (such as in the major defenses of ersatz presentism or anywhere else I’m aware of). Defenses of ersatz presentism (e.g., in Bourne 2006 or Crisp 2007) have treated the ersatz B-series as a *representation* of genuine times rather than involving genuine times that can enter into genuine earlier than or later than relations. If the times were genuine, then we could exchange tensed talk about what *was* or *will be* for talk about what is earlier than or later than the time that obtains (per the tenseless presentism outlined in section 2). By contrast, a tensed theory is the only serious option for an ersatz presentist who affirms (Earlier Existence): for if all *ersatz* times always exist (as abstracta), then no ersatz time exists strictly earlier than any other—given (Earlier Existence). But suppose (Earlier Existence) is false—i.e. times can be genuinely earlier than one another without existing earlier than one another. Then this previously unidentified barrier to tenseless presentism—and to genuine abstract times—is gone. And, as a bonus, we escape Leininger’s recent and trenchant objection to the versions of presentism on which there are no “non-present” times (Leininger Forthcoming).

It is worth emphasizing that any presentist who takes times seriously is actually committed to rejecting (Earlier Existence) given their presentist ontology: for they must treat all things, including all times, as presently existing, despite the fact that it is the nature of genuine times to be earlier than or later than other times. Of course, a presentist might treat abstract times as mere representations of times (rather than as genuine times). But someone who treats times as *mere* representations of times doesn't take times seriously. Besides, there is another option: abstract times are *genuine* times (despite the misleading label 'ersatz').

The proposal that genuine times are abstract states of affairs may also help the presentist make sense of ordinary talk about the past. Consider that the terms 'earlier than' and 'later than' are part of pre-philosophical conversation. So, for example, English speakers say such things as "the dinosaurs existed earlier than humans" or "great-uncle John lived earlier than great-aunt Sue". Notice here that the term 'existed earlier than' *includes* the term 'earlier than'. One might wonder, then, how 'existed earlier than' and 'earlier than' are semantically related. Here is a proposal available to the presentist:

(Earlier Time) For any  $x$  and  $y$ ,  $x$  existed earlier than  $y$  *iff* there is an un-obtaining time at which  $x$  exists that is earlier than<sup>7</sup> now and earlier than the time(s) at which  $y$  exists.

Note right away that (Earlier Time) does not by itself imply that times *exist* strictly earlier than one another: as I have suggested, if times are abstract, then *earlier than* may ground the order of *obtaining* without thereby grounding an order of *existing*.

To showcase how (Earlier Time) works, take the proposition that dinosaurs existed earlier than humans. A presentist may say that that proposition is true *iff* there is a time at which dinosaurs exist that's earlier than the time(s) at which humans exist (and earlier than now). (One

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<sup>7</sup> The 'earlier than' here expresses the 'genuine' (tenseless) earlier than relation.

may translate “ $x$  exists at time  $t$ ” as “ $t$  entails the proposition that  $x$  exists”. See Merricks 2007: 127; cf. Rasmussen 2012: 273.<sup>8</sup>) This account enables a convenient way for a presentist to avoid saying that dinosaurs *themselves* stand in a temporal relation—and thereby *exist*.

Notice that presentists who accept (Earlier Time) take times seriously, since they think times bear genuine earlier than and later than relations to one another. So, reasons to accept (Earlier Time) are reasons to take times seriously and so to reject (Earlier Existence). Therefore, by treating *genuine* times as abstract states of affairs (i.e., states of affairs that can exist without obtaining), tenseless presentists can answer Tallant’s objection.

I would like to close this section by suggesting how this theory of abstract times may be understood in terms of a modal analogue. On my proposal, presentism is to times as actualism is to worlds. Actualists say that all worlds exist yet only one world obtains. The distinction between existence and obtaining is essential to their theory, for it allows them to have an ontologically robust distinction between the *actual* and the *merely possible*. Similarly, I propose that all times exist yet only one time is present (obtains); once again, the distinction between existence and obtaining is essential, for it allows presentists who take times seriously to have an ontologically robust distinction between the *present* and the *merely past* or *merely future*. Times, like worlds, are abstracta of a maximal sort.<sup>9</sup> Times, like worlds, represent ways things might be. Times, like worlds, bear relations to one another. In particular, times are ordered by primitive earlier than and later than relations. (And if time enjoys a metric, then times are earlier than others to various *degrees*.) We now have the basic picture: just as the actualist’s abstract worlds provide the

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<sup>8</sup> Proponents of this account typically reject the existentialist thesis that necessarily, if  $\langle x \text{ exists} \rangle$  exists, then  $x$  exists (for all  $x$ ).

<sup>9</sup> More precisely: a *time* is a maximal state of affairs, and a *world* is a set  $S$  of times, such that (i)  $S$  is totally ordered by the earlier than relation, and (ii) no time that is earlier than or later than a member of  $S$  fails to be included in  $S$ . (We may call a world “timeless” if it has just one state of affairs—i.e. a state of affairs that fails to be earlier than or later than any other state of affairs.)

ontological ground for modal notions, like possibility and necessity, the presentist's abstract times provide the ontological ground for temporal notions, like change and tense.

I admit this framework of times may take some getting used to, especially for those of us with concretist or eternalist sensibilities. It may be tempting, for example, to think of time as analogous to a dimension or realm *along which* change and events occur. Yet if that is what time is like, then it is utterly mysterious how temporal relations between abstract objects could account for how the world changes with respect to what time it is: *in what* could this change consist?<sup>10</sup> The theory I propose flips things: change itself flows out of—is analyzed in terms of—the existence of times bearing primitive temporal relations to one another together with a basic and ontologically privileged notion of obtaining.<sup>11</sup> Times with these relations are bedrock. Although the theory may be perplexing from certain perspectives, I do not expect it to be an unwelcome option for presentists, especially for presentists who wish to take time seriously. In any case, for those who prefer an eternalist ontology, I have something else to offer next.

### 3. “Ersatz” Eternalism

Presentists aren't the only ones who might be attracted to an abstractionist view of times. Anyone could find the prospect of abstract times intuitively appealing. (To be clear, in speaking of abstract times, I do not mean that the times exist beyond space and *time*; what I mean is that they are causally effete, necessarily existing—but not necessarily obtaining—states of affairs.)

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<sup>10</sup> I am grateful to a referee for drawing my attention to this respectable concern.

<sup>11</sup> See, for example, Rasmussen's account of change in terms of these notions (2012, p. 275). Note that Rasmussen's theory of change depends upon the premise that an accurate tenseless description of reality can genuinely change. In other words, even if statements about bedrock reality are tenselessly true, it doesn't follow that they are eternally true (pp. 273–274). If his defense of that premise succeeds, then the account of times I am proposing here is consistent with the presentist's typical commitment to a dynamic reality. If the defense fails, however, then it would seem my account reduces to a static form of presentism, where there is exactly one time that is unchangingly present. In that case, the lesson of our inquiry would be that presentists face a sobering dilemma: go without times, or go without change.

I will briefly gesture towards two potential reasons one might favor abstract times. First, it may seem that times don't have causal powers. Although events that occur *at* times may have causal powers, one might think it strains credibility to suppose that times themselves cause events to occur. Take, for example, the Twentieth Century. Many things were invented during that time. But the Twentieth Century plausibly didn't *cause* those inventions. One might think that causation is something that takes place *at* or *in* times, not *by* times. If so, then insofar as *concrete* things are the sort of things that have causal power,<sup>12</sup> it stands to reason that times that lack causal power are not concrete; they are more likely abstract.

Second, one might host doubts about whether times could have a shape or mass or spatial extension. When one says "it is 4:30", does one refer to something that could be touched, weighed or picked up? One might think not. One might think that '4:30' doesn't plausibly refer to any concrete object. By the same intuition, one might find it implausible that '4:30' refers to a *mereological sum* of concrete things, including your shoes, my stove, the clocks in your aunt's house, and every other object that exists at 4:30. (You might also wonder what it could *mean* to say that things exist *at 4:30*, if 4:30 is a sum of concrete things. Suppose we say that things exist at a time by being part of that time. In that case, it is perplexing why *certain* complexes count as times, considering that complexes that exist at a time are not "maximal" in the way ersatz times are maximal. To account for existence at a time, it may seem that we need a notion of time that is independent of the notion of a mereological complex.)

These considerations need not persuade you. My goal here is only to suggest why one *could* be motivated to think times are abstract independently of whether or not one accepts

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<sup>12</sup> I am assuming that concrete substances may be properly said to have causal power even if, strictly speaking, events are the primary relata of causation.

presentism. My aim is to get on the table the following option: (genuine) times may be abstract, whether or not presentism is true.

Let ‘ersatz eternalism’ designate the theory that times are abstract and that eternalism is true. I will address one objection to ersatz eternalism and then close. One might object that abstract times are supposed to be *maximal* states of affairs, but that according to eternalism, there is only *one* maximal state of affairs comprising all of spacetime. How, then, can the *ersatz* eternalist suppose that there are *multiple* abstract times?

I answer that eternalists may make use of the indexical term ‘truth at *t*’ to define *indexically* maximal states. Eternalists are already committed to an indexical understanding of talk about times. Consider, for instance, the sentence, “the stick was red yesterday, but it was a different color the day before.” The eternalist may translate this sentence in terms of time-indexed predication, such as “the stick is red-at-*t*” (or “the stick is-at-*t* red”), for there is no contradiction in a stick having distinct time-indexed properties. Similarly, eternalists may speak of a time-indexed maximal state of affairs—that is, a maximal, consistent state of affairs that obtains *at a given time*.

I should emphasize that for the ersatz eternalist, times are not themselves maximal states of affairs. Rather, a time is that *at which* a maximal state of affairs obtains. So, for example, if the stick is red at *t*, then the state of affairs of *the stick being red* is included in a state of affairs that *obtains at t*. To be clear, the eternalist does not join the presentist in translating ‘*s* obtains at *t*’ as ‘when *t* obtains, then *s* obtains simpliciter’. Unlike the tenseless presentist, the eternalist says that a state of affairs obtains *simpliciter* only if it obtains timelessly (or eternally). So, for example, the state of *dinosaurs existing* obtains simpliciter according to the eternalist, but not

according to the presentist. In summary, the ersatz eternalist treats times as primitive abstracta *at which* maximal states of affairs may obtain.

#### *4. Conclusion*

The theories of times that I have proposed are sure to be contentious. Rather than attempt to resolve the controversy, I hope this paper will animate new conversations about time by presenting a new way to think about times. The heart of the proposals is that genuine times are (maximal) states of affairs that bear genuine temporal relations to one another, where those relations hold *not* because different times *exist* earlier than others, but because different times are associated with states of affairs that *obtain* earlier than others. This distinction between *existing* and *obtaining* opens up both a presentist and eternalist theory of tenselessly describable times. I confess that it seems to me that an abstractionist view of times is the *right* view. I propose here merely that the view is a significant conceptual possibility and merits further discussion.

*References*

Merricks, T. 2007. *Truth and Ontology*. Oxford: Oxford University Press.

Tallant, J. 2012. (Existence) Presentism and the A-theory. *Analysis* Advance Access.

Rasmussen, J. 2012. Presentists may say goodbye to A-properties. *Analysis* 72: 270 – 276.

Leininger, L. Forthcoming. Presentism and the Myth of Passage. *Australasian Journal of Philosophy*.

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