# Defining Original Presentism

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#### Abstract

It is surprisingly hard to define presentism. Traditional definitions of the view, in terms of tensed existence statements, have turned out not to be capable of convincingly distinguishing presentism from eternalism. Picking up on a recent proposal by Tallant, I suggest that we need to locate the break between eternalism and presentism on a much more fundamental level. The problem is that presentists have tried to express their view within a framework that is inherently eternalist. I call that framework the Fregean nexus, as it is defined by Frege's atemporal understanding of predication. In particular, I show that the tense-logical understanding of tense which is treated as common ground in the debate rests on this very same Fregean nexus, and is thus inadequate for a proper definition of presentism. I contrast the Fregean nexus with what I call the original temporal nexus, which is based on an alternative, inherently temporal form of predication. Finally, I propose to define presentism in terms of the original temporal nexus, yielding original presentism. According to original presentism, temporal propositions are distinguished from atemporal ones not by aspects of their content, as they are on views based on the Fregean nexus, but by their form—in particular, by their form of predication.

 $\textbf{Keywords:} \quad \textit{presentism,} \quad \textit{A-theory,} \quad \textit{time,} \quad \textit{tense,} \quad \textit{predication,} \quad \textit{existence}$ 

### Introduction

Presentists uniformly reject any view on which past and future things exist just as much as present things do. Yet it is surprisingly hard to formulate, in a satisfactory manner, what their *positive* view is. Indeed, a small industry has recently developed over the question how best to define presentism. The issue has become all the more urgent through,

amongst other things, charges of insubstantiality [5, 15, 16, 36], and through the infamous truthmaker arguments [3, 4, 6, 7, 8, 10, 13, 19, 29, 39, 41, 42]. At bottom, the problem that the presentist faces is that the seemingly straightforward ways of defining the view—in terms of a suitable, tensed existence claim, that is—turn out to be either trivially true (so that they are acceptable to everyone, including eternalists) or trivially false (so that they are acceptable to nobody, including presentists).

Picking up on a recent suggestion by Jonathan Tallant [39], who is in turn inspired by Trenton Merricks [29], I will propose a fresh look at the problem of defining presentism, that leads to a new definition (of sorts). My hypothesis is that whereas eternalism meshes nicely with standard logical formalisms, including tense logic, presentism in fact does not. If that is right, the problems that plague definers of presentism result simply from the fact that they are trying to formulate their view within a framework that is inherently eternalist. For reasons to be explored, I call that framework the Fregean nexus.

It is pointless to try to formulate, within that framework, a coherent, non-trivial statement on which presentists and eternalists can agree to disagree. Instead, the presentist should step back and develop her views against the background of an alternative framework that doesn't exclude presentism from the start. In this paper, I argue that there is such a framework, and, moreover, that this alternative framework entails presentism. That is to say, the alternative framework is as hostile to eternalism as the Fregean nexus is to presentism. I call this alternative framework the *original temporal nexus*. It is inspired by Sebastian Rödl's highly original work on 'categories of the temporal' [34]. The key to this alternative is a different form of predication—different, that is, from the Fregean form of predication that constitutes the core of the Fregean nexus, and thus underlies standard logical formalisms (again, including tense logic). I sketch that alternative form of predication, and the logical categories to which it gives rise. Presentism can then be defined as the view that the original temporal nexus is incliminable and irreducible. In other words, the difference between eternalism and presentism turns out to be a formal one (in my sense of "formal"—see §2).

I start with a brief review of recent attempts at a definition of presentism in §1, then move on to introduce the notion of forms of predication, including a characterization of the two mentioned frameworks, the Fregean nexus and the original temporal nexus, in §2. It transpires

from these two opening sections that we need to take a thorough look at the understanding of tense that stands in the background of the debate on definitions of presentism. So, in §3, I scrutinize that understanding and show what is wrong with it: it rests on the Fregean nexus. In the final section, §4, I propose my own definition, in terms of the original temporal nexus.

### 1 Defining Presentism

Eternalists say that everything past, present, and future exists. Presentists deny this: only present things exist. They say that past things are no more, while future things are not yet.<sup>1</sup>

Since these claims look like existence claims, it is natural to start formalizing them using the existential quantifier, in order to arrive at a substantial existence claim that eternalists and presentists unequivocally disagree on. Further progress in the debate between eternalists and presentists can then be made by spelling out exactly what it takes to endorse that claim or its negation. Or so it is thought.

Before we assess this strategy, three preliminary remarks on terminology are in order. First, I adopt a broad conception of A-theory—any view on which tense is metaphysically fundamental (in some sense) qualifies as a version of A-theory in my sense.<sup>2</sup> Second, I take presentism to be a version of A-theory; the existence claim that presentists are looking for to identify their position will thus have to be read tensedly. And third, I conceive of presentism's opposite, eternalism, rather broadly as well—encompassing both the more orthodox, B-theoretic versions of the view and also A-theoretic versions such as moving spotlight theory.<sup>3</sup>

Now, Meyer [30] challenges the presentist as follows.<sup>4</sup> He takes the following proposed definition of presentism as his starting point:

P Nothing exists that is not present. [30, p.213]<sup>5</sup>

P is ambiguous in its tense, for "exists" can be read in two ways. Disambiguation yields the following two alternatives:

- P1 Nothing exists now that is not present.
- P2 Nothing exists temporally that is not present. [30, p.214]

P1 is trivially true, and is thus of no help to the presentist. The alternative is to render "exists" as temporally general: has existed, exists, or will exist. That is what P2 expresses, which is clearly absurd: Julius

Caesar, for instance, existed, but is not present. Thus, presentism is either trivial or absurd. $^6$ 

If these were the only options for the presentist, the view would indeed be doomed. For P1, being trivial, fails to capture a distinctive position, while P2 amounts to the absurd thesis that reality is just one snap-shot: it is what we get if we take the eternalist's time line and simply erase everything except for the present moment. It seems that Lewis thought of presentism along the lines of P2—hence his dismissive observation that presentism denies time altogether (see [23, p.204] and [24, p.2]). Serious presentists will want to say that this is a straw man—let us call the straw man position 'negative presentism'. They are under pressure to define their view differently.

Crisp develops an alternative reading of P2 which is carefully crafted so as to be solve this dilemma [11]. In particular, he thinks counterexamples to P2, like "Julius Caesar existed but is not present", can be rejected if we take care to properly delineate the domain over which the temporally general quantifier in P2, "exists temporally", ranges. He urges us to distinguish between a *de dicto* and a *de re* reading of such alleged counterexamples to P2, which he renders as follows (where  $t_{\alpha}$  denotes the present time):

RE<sub>1</sub> WAS(for some x, x is Julius Caesar and x will not exist in  $t_{\alpha}$ )

RE<sub>2</sub> For some x, x was Julius Caesar and x is no longer present [11, p.18; example adapted]

The point, then, is that RE<sub>1</sub> is obviously true but doesn't provide the kind of counterexample that turns P2 into a falsehood, whereas RE<sub>2</sub> is not obviously true (or false) at all. It seems that the eternalist has to accept RE<sub>2</sub>, while the presentist denies it. The key to Crisp's definition is a *dynamic* conception of the domain of quantification: it used to contain Julius Caesar, but doesn't anymore.<sup>8</sup> If we think of the domain as representing reality, it appears that we do get a presentist picture: only present things exist.

Unfortunately, as Tallant shows, Crisp's attempt still falls prey to a Meyer-style objection [39]. For what is the tense of the *quantifier* in RE<sub>2</sub>? Following Meyer, the options Tallant presents are in terms of present existence ( $\exists_n$ : exists now) and temporal existence ( $\exists_t$ : existed, exists now, or will exist):

 $RE_2^*a = \exists_n(x \text{ was Julius Caesar and } \sim PRES x)$ 

RE<sub>2</sub>\*b  $\exists_t$ (x was Julius Caesar and  $\sim$ PRES x) [39, p.481; example adapted]

It seems that the presentist has to be in agreement with the eternalist on both  $RE_2^*a$  and  $RE_2^*b$ : the first is trivially false, while the negation of the second is, again, untenable: Julius Caesar did exist, so the quantifier  $\exists_t$  does range over him.

Again, if these are the only options for the presentist, the view is doomed as it has to choose between a triviality on the one hand and the absurdity of negative presentism on the other.

But Tallant has more to say. His aim, like mine, is to provide a novel definition of presentism. His proposal is, as we will see shortly, to switch from existence claims to a claim *about* existence. He takes his cue from the following passages by Merricks:

Presentists and eternalists alike say that those things that exist at the present time really do exist and, moreover, that properties had at the present time really are had. Thus one might think, whilst presentism and eternalism part ways with respect to other times, they agree about the nature of the present time, and, relatedly, agree about what it is to exist (and have properties) at the present time. But they do not agree about these things. Indeed, their differences with respect to the nature of, and existence at, the present time are as important as their differences with respect to the past and future. [29, p.123]

Since they do not believe in a region called the 'present time', presentists cannot reduce existing at the present time to being located at that region. I think presentists should, instead, say that existing at the present time just is existing. [29, p.125]<sup>10</sup>

Tallant comments on these passages as follows:

It seems right that presentism ought to be understood, not merely as a thesis concerning the *number* of times that exist, but also as a thesis with a commitment to the *nature* of those times. [39, p.493]

This sounds promising. Perhaps the presentist only seems to be stuck between a triviality and the absurdity of negative presentism as long as she assumes the eternalist's understanding of what it means to enjoy temporal existence. Negative presentism indeed accepts the eternalist's take on temporal existence and merely restricts the number of times, as we saw. So perhaps we can escape from triviality and absurdity if we manage to provide a positive account of 'the nature of time', of what it means to exist in time, that differs from the eternalist's.

Tallant's proposal is an attempt to do so. He develops his own formulation of what he takes to be the thought underlying Merricks's remarks<sup>11</sup>, leading to what he calls 'Existence Presentism' (where "presence" is to "is present" what "existence" is to "exists"):

## EP Presence is existence [39, p.494]

Here, Tallant says, the "is" is to be read present-tensed (so no Meyer-inspired potentially threatening disambiguation of the copula is possible). EP is not trivial: past things are not present, hence, by the identity of presence with existence, they don't exist. Eternalists have to disagree here. Moreover, EP is not obviously false either. Thus, it seems that EP does not fall prey to Meyer's complaint. As I announced earlier, we have indeed shifted from existence claims proper to a claim *about* existence. <sup>12</sup>

I think Tallant's solution is on the right track. It points us towards a positive, non-eternalist account of 'the nature of time', of what it means to enjoy temporal existence, in the following way. The eternalist holds that existence is an atemporal notion, which acquires a temporal dimension by being linked to times (which can be done either B-theoretically or A-theoretically; see §§3–4 below). On Tallant's proposal, existence becomes an inherently temporal notion, and therefore no longer requires being linked to times.<sup>13</sup>

Yet a worry remains. For how should we understand the kinds of claims that refuted the other proposals I surveyed—past existence claims such as "Caesar existed"? Presumably, we should render that claim as follows: "WAS(Caesar exists)". By EP, that should be equivalent to "WAS(Caesar is present)". Now, if "is present" here functions rigidly (like the actuality operator in certain modal logics) this is clearly false: it was never the case that Caesar is (now) present. So the temporal operator "WAS" affects the contribution that "is present" makes to a statement. And that seems to suggest that the property which the phrase "is present" in the statement "WAS(Caesar is present)" denotes is different from the property it denotes in the statement "Tallant is present". Perhaps the difference is that the latter denotes the property of being-present-now, while the former denotes the property of having-been-present? And if so, given that there has to be some kind of intimate relation between these two different presence-properties, it is natural to

say that the same should hold for the existence-property with which one of them is identical—differentiating it into existing-now and having-existed. This line of thought reduces EP to a triviality after all: of course existing now simply is being present-now, while having-existed simply is (or was) having been present—every eternalist would agree. (And the radical alternative—denying that Caesar existed—again moves us back to the absurdity of negative presentism.)

But perhaps the worry can be laid to rest if we can clarify how exactly the "WAS"-operator works in a way that prevents this multiplication of presence-properties. That is, we should now discuss A-theory, the thesis that tense is fundamental, and, in particular, its relation to the presentism–eternalism issue.<sup>14</sup>

On this point, Kit Fine has argued that a proper understanding of Atheory in fact motivates a *rejection* of presentism. He puts the thought as follows (where his "ontic presentism" is what I've been calling, following tradition, "presentism"; while his "factive presentism" is what I call Atheory):

Ontic presentism is an ontological position; it is a view about what there is. Factive presentism, on the other hand, is a metaphysical ... position; it is a view about how things are, quite apart from what there is. ... Moreover, ontic presentism is a negative view; it excludes certain things from what there is. Factive presentism, on the other hand, is a positive view; it includes certain ways of being in how things are. ... It is readily possible for a factive presentist not to be an ontic presentist. Indeed, he may endorse a full ontology of things past, present, and future: all such things may figure in his preferred account of reality .... He merely insists that some of the facts (if not all) should concern how things presently are. I am inclined to think that this version of factive presentism is much more plausible than the usual version, in which only present things are taken to exist; and it is a shame that a one-sided conception of the presentist issue has prevented philosophers from taking it more seriously. [18, p.299]

If Fine is right in thus contrasting presentism and A-theory (or, in his words, "ontic" and "factive" presentism), then tensing their statements is not going to help the defender of presentism.

But Fine is wrong. As I will argue below (in §3), Fine's liberal standpoint with respect to eternalism results from his implicitly accepting the eternalist's understanding of temporality. That implicit acceptance infects his understanding of tense—which he inherits from Arthur Prior's tense logic. Whether or not temporal facts are tensed *in this infected sense* is of no help to the presentist: the ensuing A-theory is a mere variant of the underlying, eternalism-friendly understanding of time. It is not surprising that attempts to define presentism on such a basis fail.

Before I turn to a critical examination of the understanding of tense underlying the debate on the definition of presentism, I first have to introduce the alternative understanding that underlies my own proposal. Juxtaposing the prevailing conception of tense with this alternative will help make clear where exactly things go wrong.

### 2 Forms of Predication

The above dialectical exercise motivates the search for a more fundamental point of divergence between eternalists and presentists—which is, in fact, what Tallant, following Merricks, has also been looking for. Put somewhat cryptically, my suggestion is that we need to switch the logical background against which we attempt to define presentism.

Let us first have a brief look at the prevailing logical background. The basis is Fregean: predicate logic. Underlying this logic, we find a certain form of predication: the one that Frege took to be analogous (or even identical) to mathematical function application [20, 21]. That is, the Fregean form of predication unites any given 'concept' (Begriff) with a fitting number of 'objects' (Gegenstände) to yield a unique proposition (Gedanke) that is either true or false. Thus, to this form of predication there corresponds a system of categories or formal concepts, in this case the categories of Begriff and Gegenstand. They are 'formal' in the sense of being defined by the described form of predication. Together, these formal categories constitute what I call the Fregean nexus.

My use of 'form' here requires a bit of clarification. I focus on the form which a proposition has in virtue of the form of predication it embodies. That is an unusual sense of 'form'. Usually, with 'form' one means to denote the diverse forms Fregean propositions can take, depending on the occurrences of logical constants and on the adicity of the predicates involved. I, however, want to focus on differences in form based on differences in form of predication. E.g., Fa, Rab, and  $Fa \rightarrow \neg Gb$  all have different forms on the usual notion of 'form', but they have the same form in my sense: they all involve Fregean predication; F, G, and R fall under the formal category Begriff; and a and b fall under the formal

category *Gegenstand*. This way of looking at the form of propositions is unusual because alternatives to the Fregean form of predication are only very rarely considered.

The Fregean nexus is atemporal: time plays no role in its categories. Typical examples of the Fregean form of predication are atemporal—e.g., "3 [is] a prime number" (where [square brackets] indicate the Fregean, atemporal form of predication). The Fregean nexus lends itself to the kinds of formal systems that analytic philosophers are fond of. Predicate logic can of course be extended in various ways, for instance, by adding modal operators or tense operators. Such extensions do not change the underlying form of predication—as I will argue in the next section below.

Since time plays no role in the form of Fregean propositions, it can only play a role by being introduced as bits of *content*. Temporal propositions are then distinguished from atemporal ones not by form, but by content. The most straightforward way of doing so is by adding argument places for times: e.g., the colloquial "The cat is on the table" gets analyzed as "The cat [is] on the table at t". Thus, temporal propositions are ordered in a series by way of these temporal indices, and the result is (a version of) B-theory. 16 As we will see in the next section, tense logic is another, less straightforward way of supplementing atemporal Fregean propositions with features that yield the right kind of ordering. In both cases, the formal basis is the Fregean nexus, and the temporality of temporal propositions is accounted for by the relevant ordering. That is the hallmark of eternalism: if something exists, has existed, or will exist, there will be a suitable atemporal proposition relating it to the relevant point on that ordering—stating, in effect, that it [exists] at t. In other words, the Fregean nexus is inherently eternalist.

There is, however, a quite different form of predication that is adequately described as being *temporal*. It gives rise to a different (larger) set of categories. It does not obviously lend itself to the kinds of formal systems that analytic philosophers are used to, which are invariably based on the Fregean form of predication. Propositions that exemplify this temporal form of predication are thus temporal not by content, but by form (in my sense).

In fact, we are all very familiar with this form of predication. Consider the following sentences:

- T1 The cat is on the table
- T2 The cat was on the table
- T3 The cat is jumping to the ground

- T4 The cat was jumping to the ground
- T5 The cat has jumped to the ground
- T6 The cat can jump (or: The cat jumps)

Three observations are in order. First, a familiar one: T1 and T2 unite the very same concept (being on) with the very same objects (the cat, the table), but they are different—they are differentiated in tense. I illustrate what this differentiation exactly amounts to below, from which it will become clear that it is impossible to model 'is on' and 'was on' as simply two different concepts in the Fregean sense. Secondly, a perhaps less familiar observation: T3, T4 and T5 also unite the same objects with the same concept in different ways, but here the differentiation is not merely in tense but also in aspect, with T3 and T4 being in progressive aspect while T5 is in *perfective* aspect. And, as has been repeatedly observed, T5 implies T4, but not vice versa, for the following may occur: while the cat was jumping to the ground, I caught it in mid-air so that it is not the case that the cat has jumped to the ground. Thirdly, and finally, there is another way in which activities may be joined to objects, in English expressible by use of a habitual sentence, as in T6: it unites them in a time-general way that is, in fundamental cases, not differentiated in tense or aspect. It is linked to the aspectual forms by entailment: from any sentence of the form T3, T4 or T5 the corresponding version of T6 follows. 18

Thus we have a richly interrelated array of sentence-forms; because of those interrelations I regard them together as guises of one and the same form of predication (just as I consider predications of any arity to be exemplifications of one and the same Fregean, atemporal form of predication). It is apt to call this form of predication temporal predication. In this paper, I focus on how recognition of this form of predication may contribute to a proper definition of presentism.

For that purpose, one observation is of particular importance, namely, that differentiation in tense is not as straightforward as it seems. It is not that, using different tenses, one can construct different propositions from the same materials. For, in the right circumstances, it may be that one says the same thing by uttering, e.g., first T1, then T2. One way to illustrate this is by considering disagreement: if A yesterday said "The cat is on the table", then B can challenge his statement today by saying "the cat was not on the table". And likewise, one can say different things by uttering T1 at different times. That is, the linguistic

forms of the *sentences* T1–T2 do not correspond to the logical forms of the *temporal propositions* they express.<sup>20</sup>

At this point, we can simply register this as a peculiarity of temporal predication: different sentences are required to express the same temporal proposition at different times. <sup>21</sup> We should resist the temptation to settle on a formulation (or formalization) designed to capture the form of the relevant proposition in abstraction from this peculiarity—it is simply the condition of stating (or thinking) temporal propositions in time that enforces the use of differently tensed sentences. I dwell on this point because it is not in line with the very paradigm understanding of tense that underlies most contemporary versions of A-theory, hence also of presentism: Prior's tense logic. In that logic, the basic temporal bearers of truth are present-tensed atomic propositions that can differ in truth value over time. As I argue below, this assumption only makes sense if these basic temporal bearers of truth bear the form of Fregean propositions. And that is, I submit, the root of the difficulty of finding an appropriate definition of presentism.

Anyway, as in the case of Frege's atemporal predication, we may extract certain categories (formal concepts) from this temporal form of predication. Firstly, and most straightforwardly, we have the category of *substance* (corresponding to Frege's *Gegenstand*).<sup>22</sup> Secondly, we have, corresponding to Frege's *Begriff*, *two* categories of predicables: *feature/relation* (such as 'being round' and 'being on') and *activity* (such as 'jumping'). The difference between these two is indeed formal: activities occur in aspectually differentiated propositions, while features cannot.

It is perhaps useful to take this more slowly in order to clarify the way this lifting of categories from a form of predication works. Frege thinks that the form of a thought—any thought—is based on his undifferentiated form of predication: predication as function application. Thus, the basic elements of thought are defined by this form of predication. It differentiates between objects and concepts, and therefore these two categories can be lifted from his form of predication. The temporal form of predication I have introduced is, unlike Frege's, differentiated. Suppose that it is the form of temporal thought as such—all temporal thought shares this form. Then, just as in the Fregean case, the basic elements of temporal thought can be lifted from this form of predication. As it is differentiated in tense and aspect, it gives rise not just to two but to three categories: substance, feature/relation, activity. These are, then, formal notions in the same sense as Frege's categories of Gegen-

stand and Begriff are formal notions. In Frege's case, this gives rise to observations such as that one cannot predicate the object 5 of the object 6. The form of predication forbids it. Likewise, in the case of temporal predication, one cannot predicate 'is round' of 'the ball' in an aspectually differentiated way, nor can one predicate 'jump' of 'the cat' in the manner of a feature. The form of predication forbids it.

Now, given its differentation, the temporal form of predication allows for a perspective that is unavailable in the case of Frege's undifferentiated form of predication. The temporal form of predication includes three fundamentally different ways of joining appropriate elements together: in a tensed way (T1–T2), in an aspected way (T3–T5), and in a time-general way (T6). Temporal thoughts are thus differentiated into three kinds: the tensed ones, the aspected ones, and the time-general ones. (We noted that these are not independent.) One can label the first passage, the second process (or change, or causality), and the third potentiality (or power). I should repeat: the content of these notions lies solely in the distinctions that the temporal form of predication allows for.<sup>23</sup>

This perspective on the form of temporal thought is unusual—I have frequently found it to meet with incomprehension. In the context of this paper, I can do no more than sketch its outline; for a mcuh more thorough articulation and defense of these categories themselves as well as of the understanding of logic and metaphysics that underlies it, I have to refer, again, to Rödl's seminal work *Categories of the Temporal* [34].

Interesting further questions concerning these categories and their interrelations can be asked: for instance, the dependence of aspect on tense is clear from examples like T3–T5, but what about the other direction? Is tense conceivable without aspect? In effect, the question here is whether there can be passage of time without change. (The answer is "no", but I won't argue for that claim in detail here—however, see [34, chpt.5, esp.§4].) This indicates the ambition that lies behind the recognition of temporal predication as providing a logical framework different from the prevailing Fregean one: the framework it provides allows one to formulate metaphysical questions and views concerning a considerable range of topics related to time and causality—such as change, identity, persistence, and essence, to name the more obvious ones.<sup>24</sup>

These 'categories of the temporal' together constitute what I call the *original temporal nexus*: an interdependent cluster of formal concepts. If it is apt to call the system of forms to which Frege's atemporal form of predication gives rise a 'logic' (or a family of logics), then it is equally

apt, though perhaps unusual, to call the system of forms to which the temporal form of predication gives rise a 'logic'. My proposal is, thus, to take this 'logic', and not the Fregean one, as the proper logical background for the project of defining presentism. Therefore, I have to ask the reader to *not* immediately think of the above considerations and the ensuing original temporal nexus as standing in need of analysis in 'more perspicuous' terms (such as tense logic). For what I am after is precisely to define presentism in terms of the irreducibility of this temporal form of predication.

On a very abstract level, the irreducibility claim can be defended by noting, with Rödl, that 'nothing the apprehension of which does not involve the deployment of a given form of thought can justify its application' [35, p.53]. That is, if certain propositions can be apprehended without using the system of forms the original temporal nexus provides, then there can be no justification for its subsequent application to those propositions. E.g., we apprehend mathematical truths, such as "2+2=4", by using the Fregean form of predication. And that prevents the original temporal nexus from being applicable: rephrasing "2+2=4" in temporal terms gives only the semblance of a proposition, but in fact is without sense. So any account of time in terms of the Fregean form of predication amounts to a proposed elimination of the original temporal nexus. Presentists should resist such elimination, on the ground that it amounts to an elimination of time itself.

This ineliminability claim is the core thesis of what I call the *original view*: it takes temporal propositions to be differentiated from atemporal propositions by their form (in my sense of 'form'), which is the temporal form of predication. In §4 below, I will discuss how the original view relates to presentism.

A considerable obstacle for appreciating my proposal stems, interestingly, from Arthur Prior's tense logic—despite his unrelenting engagement for presentism. I have already hinted towards the flaw that his tense logic-based conception of tense incorporates. That flaw takes center stage in the next section, after which I will return to my topic, the definition of presentism, in the final section, §4.

## 3 Tense and Tense Logic

As we have seen in the first section, definitions of presentism essentially make use of tensed statements. We saw that definitions of those shapes are deemed unsatisfactory precisely because the tensed statements they involve are equi-acceptable to presentists and eternalists: apparently, the underlying conception of tense is neutral with regard to the presentism/eternalism controversy.

At the end of that same section, I quoted Fine's remarks in favor of 'factive presentism' (that is, generic A-theory) and against 'ontic presentism' (that is, presentism): according to Fine, the A-theorist insists on temporal facts having a fundamentally tensed form, so to speak, but does not necessarily wish to deny the existence of past and future things. Fine's conception of tense is thus equally neutral with regard to the presentism/eternalism controversy. It is useful to see what exactly his conception of tense amounts to, for it is not the one that finds its home in the original temporal nexus. Rather, it ultimately rests on the Fregean, atemporal nexus, and is thus inherently eternalist.

Fine distinguishes three versions of A-theory,  $^{25}$  all of which state that temporal facts are (or at least include such that are), fundamentally, tensed facts of the forms captured in Prior's tense logic: p (present-tensed),  $\mathbf{P}p$  (past-tensed),  $\mathbf{F}p$  (future-tensed), etc. Consider, now, a standard, B-theoretic eternalist picture: it comprises the full collection of tenseless B-facts, ordered on the time line by the relevant (temporal) aspects of their content. What happens if we replace all these B-facts with tensed facts in this Priorian sense?

The first thing to note is that Priorian tensed facts, unlike B-facts, do not tell us where they are located. Their ordering is lost. Hence the Atheorist needs a way of anchoring such facts to the right moments. The most familiar way is what Fine calls standard A-theory: it privileges the present time and replaces all the B-facts with A-facts oriented towards that time. But that is not the only option: as Fine shows, one can also be a non-standard A-theorist by rejecting such privileging of one point in time. That means that not only the tensed facts oriented towards the present time are included in reality, but also all the tensed facts oriented towards all the other times. Thereby, incompatible facts are included in reality: if yesterday p was true while today  $\neg p$  is true, then both p and  $\neg p$  are included in reality. Again, their ordering is gone. There are, now, two ways of dealing with this situation. The first is to relativize reality: each point in time has its own reality. Thus, the unity of reality is given up in order to sort the tensed facts to their proper 'locations'. The second option is to endorse the incoherence of reality. The incoherence can then be locally resolved by saying that the incoherent "über-reality" decomposes into coherent fragments. Fine calls the first option external relativism and the second option fragmentalism.<sup>26</sup>

The details of these non-standard views do not matter much for present purposes. What does matter are the following observations. First, the standard A-theorist's reality is in its entirety included in the realities of the non-standard realists—either as one of the many relative realities, or (arguably) as one of the many fragments of the one incoherent über-reality. Secondly, and relatedly, the non-standard views incorporate many different versions of what are, from the standpoint of the original temporal nexus, the very same fact: for instance, yesterday's p and today's p. Thirdly, and most importantly, this raises the question as to why we should expect the many realities or fragments to mesh in the expected way: why can it not happen, for instance, that today's reality contains p even though all earlier realities contain p?

This worrying question—and, indeed, the entire possibility of non-standard A-theories—rests on the time-relativity of truth that is inherent in the Priorian conception of tense. Prior's tense logic captures only the interrelations between tensed statements from one and the same temporal perspective, but it doesn't capture their cross-temporal sameness. That is, Prior is expressing something that goes beyond his own logic when he writes:

In tense logic the totalities of tensed propositions which are true at different instants fit together into a system, so that although the total course of history will be differently described at different times, the description at one time will determine what the descriptions at other times will be. [33, p.38]

Take, for instance, a simple present-tensed proposition p that is presently true. Using tense logic, one can infer that, therefore, it will be the case that it was true:  $\mathbf{FP}p$  ( $\varphi \to \mathbf{FP}\varphi$  is included as an axiom in virtually all tense logics). These two formulae are both presently true. One day passes: the proposition  $\mathbf{P}p$  is now presently true, from which we can infer, e.g, that  $\mathbf{PFP}p$  is (presently) true (though not on the basis of the same axiom). But these two collections of truths are logically entirely independent: there is no way to connect yesterday's truths  $(p, \text{ and } \mathbf{FP}p)$  with today's  $(\mathbf{P}p, \text{ and } \mathbf{PFP}p)$  using the resources of tense logic.<sup>27</sup>

Considering an intellect capable only of grasping thoughts of these tense-logical forms, Rödl puts this point as follows:

Such an intellect is a totality of tense-logical contents, wherefore the system of these totalities is not accessible to him. One instance follows the other, and with it one totality takes the place of the previous one. ... The meaning of a tense-logical sentence resides in the conditions under which "ispresent true" applies to it, and these are different at different times. Hence, as time passes, the meaning of all tense-logical sentences shifts. ... Since the meaning of all of his sentences shifts, he has no means to say that it shifts. [34, p.106]

Analogously, we may say that a tense-logical reality is a totality of tense-logical facts (Fine's varieties of A-theory are varieties of this thesis). What this means is best seen when we consider Fine's external relativist version of A-theory. On that view, there are different realities that contain instances of the same fact; e.g., yesterday's reality contains p, today's reality contains  $\mathbf{P}p$ . However, that yesterday's p is identical with today's  $\mathbf{P}p$  (or, if you prefer, that they express the same fact) is something that cannot be included in those realities as additional tense-logical facts. For one thing, the cross-temporal sameness of these additional facts will then once more stand in need of being included by way of further facts of cross-temporal fact-sameness, leading to a regress. And for another thing, tense logic simply has no resources for saying that p and  $\mathbf{P}p$  are (or express) the same fact: to do so, one would need a fact connecting facts from two different realities (in the case of external relativism)—and to which reality would such a fact belong?

Let us take this a little bit slower. The defender of tense logic might say, speaking about tense-logical formulae from a meta-perspective: "p's past truth is mirrored in  $\mathbf{P}p$ 's present truth, and that is ensured by  $\mathbf{F}\mathbf{P}p$ 's past truth". 29 Now, assume that this statement itself is a statement bearing tense-logical form. Focus on the first bit: what would it be to talk, tense-logically, about p's past truth? The notion of past truth will have to be explained in tense-logical terms: "p was true in the past" is true just if  $\mathbf{P}p$  is true'. That is, the notion of 'past-truth' just is the past-operator P. So the first bit of our statement says, in effect, that Ppis mirrored in  $\mathbf{P}p$ . Saying that p was true does not get one beyond saying that  $\mathbf{P}p$  is true. Thus, such an attempt to formulate the cross-temporal interdependencies of time-relative truth, if read as itself a tense-logical statement, simply says something that is-present-true of the sentences (or formulae) p,  $\mathbf{P}p$ , and  $\mathbf{F}\mathbf{P}p$ . It expresses how various present-truths and present-falsehoods, concerning which formulae were, are, and will be true, hang together. That does not tell us how their present-truths and present-falsehoods hang together with truths and falsehoods at other moments. What we attempt to say about this turns out to be, again, present-true or present-false—at least, as long as we are required to move within the realm of tense-logical forms. The point is that, by making truth time-relative, as tense logic does, one is simply deprived from the means of saying anything whatsoever about what is true at other moments. We always and invariably end up saying what is-present-true about what is-past-true (or future-true). We require, for instance, that p's past truth be reflected in  $\mathbf{P}p$ 's present truth. That requirement, if it is to state what we want it to state, cannot itself be a tense-logical statement.  $^{30}$ 

Fine's non-standard versions of A-theory bring out this cross-temporal independence—indeed, they are only possible because of this independence. On standard A-theory, one could argue that all there is is the present-truth of past- and future-tensed propositions; all there is is tensed facts oriented towards the present. Fine shows that this is optional: one can also endorse versions of A-theory that deny this priviledging of the present moment, thus making room for all of the tensed facts oriented towards other moments as well. The totality of tensed facts oriented towards the present is then completely disjoint from the totality of tensed facts oriented towards earlier and later moments (although in the case of fragmentalism they may overlap). Indeed, to repeat Rödl's way of putting things, "one instance follows the other, and with it one totality takes the place of the previous one". There is no way of saying anything about how those totalities relate using tense-logical forms.

One might try saying that we should thus simply reject Fine's non-standard forms of A-theory. But the point is, precisely, that the underlying understanding of tense allows for them. An adequate understanding of tense should rule out such forms of A-theory—it should incorporate the cross-temporal integration that Prior's tense logic fails to capture.

The understanding of tense embodied in tense logic is thus not the one we found in the original temporal nexus. If my sketch of the Fregean, atemporal and the original, temporal forms of predication is right, one expects that anything falling short of the temporal form of predication (such as Prior's tense logic) must rest on atemporal predication. And so it does.

To see why, it is helpful to reconsider negative presentism—the view that takes the eternalist's time line and erases all but the present moment. A would-be negative presentist will claim that the truths concerning the one moment he acknowledges (the present) are present-tensed truths. But why, we may ask, are these *present*-tensed truths and not simply *atemporal* truths (exemplifying the Fregean form of predication)?

The negative presentist can do nothing to distinguish his view from an eternalist, B-theoretic view of a temporally thin reality.<sup>31</sup> The underlying problem here is, again, nicely stated by Rödl:

[If] a present tense formula is elementary, then the contrast to the corresponding past tense formula is not part of its [content], and without this contrast, "present" has no temporal meaning. [34, p.107]

The original temporal nexus does include that contrast in its conception of temporal truth: differently tensed sentences do not state differently tensed propositions whose truth (or falsehood) is time-relative—rather, temporal propositions whose truth (or falsehood) is time-absolute have to be expressed by using suitable, differently tensed sentences as time passes.<sup>32</sup>

Consider, by way of analogy, a reductive view of modality like Lewis's [23]. What is crucial, for such a reductive project, is to isolate modality completely. In its simplest, propositional form, that is achieved by establishing a stock of a-modal elementary propositions, p, q, etc., to which modal operators can then be prefixed in order to make modal statements. The elementary propositions are true or false, and can be understood, in complete independence from their 'modalized' versions. The reduction then proceeds by analyzing the modalized versions in terms of their elementary counterparts at other worlds. The result is a relativization of truth to worlds.

Something similar happens in the case of tense logic: there is a stock of atemporal elementary propositions,  $p,\ q,$  etc., to which tense operators can be prefixed in order to make 'tensed' statements, that can subsequently be reduced to their atemporal counterparts at other times. The result is a relativization of truth to times. Prior, of course, both resisted the reduction and insisted that the elementary propositions are present-tensed—but, again, mere insistence is not enough. What is required is the kind of temporal integration that, as we saw, is precluded by relativizing truth to times. In other words, what is required is the signature of tense that the original temporal nexus recognizes.

The fundamental claim of eternalism is that time is the time-line: temporal propositions are internally atemporal, that is, they have an atemporal form; their temporality consists in their being suitably ordered, in some way or other. As we have seen, there are various ways of spelling this out. Standard B-theory is one such way: it incorporates temporality, in the end, by way of an extra piece of content—a specification of the temporal location. Fine's versions of A-theory are other such

ways—despite appearances. Even negative presentism is one such way, though a limiting case. Unfortunately, for Prior, his attempt to arrive at a genuinely *non*-reductive logic of tense thus turns out to provide excellent materials for a sophisticated *reductive* understanding of tense.

These considerations shed a new light on my survey of attempts to arrive at a definition of presentism in the first section above. As long as tense is conceived so as to be consistent with this fundamental eternalist claim, it does not matter whether the quantifiers are tensed or not: we will remain stuck with statements that are either trivial, because they are restricted to the present moment, or absurd, because they restrict the whole time line to the present moment. Again, what we need is not a different view on the *number* of times, but rather a different view on what it is to exist in time, that is, on the *nature* of time (as Merricks and, following him, Tallant, suggest). The original temporal nexus promises to deliver such a different view on the nature of time—as I hope to show now.

## 4 The Original View and Presentism

Our situation is as follows. Attempted definitions of presentism were unsatisfactory because they failed to deliver an unambiguous thesis on which presentists and eternalists could disagree. This motivated a look at the logical background against which the search for such a definition proceeds. That logical background is biased towards eternalism: its core is the Fregean nexus, which rests on an atemporal form of predication. My discussion of the tense-logical understanding of tense, which is supposed to provide a presentism-friendly alternative to B-theory, underwrites this conclusion: it too rests on the Fregean nexus. I contrasted the Fregean nexus with the original temporal nexus, which rests on an alternative, temporal form of predication. The original view takes this original temporal nexus as its starting point. We now need to understand how presentism relates to the original view.

As said, eternalism does not take the temporality of temporal propositions to consist in their having a distinctive *form*; temporal propositions are formulable using the familiar, Fregean atemporal form of predication. Thus, the temporality of temporal propositions consists either in some aspect of their content, such as an explicit or implicit reference to a temporal location, absolute or relative, or it consists in some other feature—such as their truth (or falsehood) being time-relative. In all cases, time enters the picture by way of a time line (or a similar order-

ing) on which temporal propositions are to be anchored. And the same holds for the objects such propositions are about: they are objects existing in time by being located on certain location(s) on the time line. Their respective locations are revealed once we have the full analysis of temporal propositions concerning them before us. That is, in the case of classical B-theory, the locations of the objects are given as the temporal references included in such propositions; in the case of A-theoretic versions of eternalism, the locations of the objects figuring in temporal propositions transpire from their position on the ordering grounded in the assumed time-relativity of truth. Therefore, understanding temporal propositions as involving the Fregean, atemporal form of predication implies that for any temporally existing thing x, one can always formulate a true, atemporal proposition of the form "x [exists] at t" (recall that I use [square brackets] to indicate the atemporal form of predication).<sup>33</sup> And that, one might say, is the core thesis of eternalism.

By contrast, the original view does take the temporality of temporal propositions to consist in their having a distinctive form—namely, the temporal form of predication (with its many guises). One may, of course, position propositions of that form on a time line, as is done in chronological overviews of many types, yet the crucial difference is that one does not thereby explain their temporality. This holds also for existence statements: saying "Caesar existed", I am reporting the very same temporal proposition that a contemporary of Caesar could have said by saying "Caesar exists". At I can even say "Caesar existed at t". But due to formal mismatch, there is no proposition of the form "Caesar [exists] at t", and thus temporally existing objects in the sense of the original view (that is, substances) simply cannot function as inhabitants of the eternalist's time line.

The formal mismatch arises as follows. The core thesis of eternalism I mentioned—that for any temporally existing thing x, there is always a true, atemporal proposition of the form "x [exists] at t"—is only formulable using the Fregean, atemporal form of predication. If we depart from the original view, no such statement is formulable. For suppose we start with "Caesar existed": "Caesar", here, names a substance—a category defined by the temporal form of predication. If we replace it with "Caesar [exists] at t", we are doing more than just replacing the form of predication involved. We also change the logical character of the name "Caesar"—in this context, it is a name for a Fregean Gegenstand, a category defined by the atemporal form of predication. That Gegenstand cannot be identical with a substance—for the same reason why

an individual thing cannot be identical with a property: they belong to different categories. Not only the form of predication, but also the formal categories of the things it applies to (substances, features, relations, activities) rests on the original view.<sup>35</sup>

From these considerations, it transpires that eternalism is only formulable within the Fregean nexus. My claim is, now, that presentism is only satisfactorily formulable within the original view. In particular, eternalism is formulable within the Fregean nexus because that nexus includes an atemporal notion of existence. Negatively speaking, then, on the original view presentism can be defined in terms of the rejection, on formal grounds, of a tenseless notion of existence (at least as applied to temporally existing things). Temporal propositions just do not have the right form to allow for anything resembling a statement of eternalism.

From the perspective of the original view, then, the first thing to ask when confronted with a putative definition of presentism is: what is the *form* of the proposed defining statement? Take, for example, Meyer's target definition of presentism, with which I started my investigations:

P Nothing exists that is not present. [30, p.213]

Meyer challenged this claim on the grounds that it is either trivial (on a present-tensed reading of 'exists') or untenable (on a temporally general reading of 'exists'). So there seemed to be no room for a distinctively presentist reading of P.

But which form of predication is used? If we are to understand Meyer's tensed quantifiers along tense-logical lines, we are already in eternalist territory, and the game is lost before we even got started. Now, reading P as involving temporal predication, it still holds good only on its present-tensed reading—and it is, indeed, still trivial. That, however, is no longer a problem, for the defender of presentism can point to the difference in form of predication to mark off his position from the eternalist's, who is committed to there being temporal propositions of the form "x [exists] at t". In other words, the point of endorsing P, for a defender of the original view, lies in endorsing the form of predication it exemplifies. And that is not trivial at all. An eternalist reads P differently: he understands the present tense, ultimately, in terms of a location on his time line. Taken as intended by the defender of the original view, then, P does suffice to generate a difference between presentism and eternalism, albeit in a rather roundabout way, namely, by exemplifying the original temporal nexus.<sup>36</sup>

This sort of definition of presentism, in terms of an existence statement involving the temporal form of predication, is, thus, trivial in a

peculiar way. What the defining statement says—its content—is trivial; its real contribution lies in the form it displays. Moreover, that form prevents an eternalist from recognizing its trivial contents—the eternalist rejects the temporal form of predication. True, she can make a seemingly very similar statement, using the same form of words, and thereby express something that is trivial by her own lights—involving the Fregean, atemporal form of predication. But that does not affect the proposal, of course. The triviality objection against definitions of presentism, with which I started this paper, thus does not get off the ground.

In any case, such a proposal isn't very helpful: the fundamental point of disagreement between eternalism and presentism is only implicit in it, not explicit. Things are different with Tallant's proposal, which is not in terms of an existence statement but rather in terms of a statement about existence:

### EP Presence is existence [39, p.494]

This definition comes closer to making explicit what is only implicit in my original view based rendering of P. It says what existence is, for temporal objects.<sup>37</sup> But, as I suggested at the end of the first section, this definition seems to leave room for a worry, since it is unclear how we should understand past existence claims such as "Caesar existed". Such a claim is plausibly rendered "WAS(Caesar exists)", which is, by EP, equivalent to "WAS(Caesar is present)". Now, my worry was that it is unclear whether "is present" here denotes the same property that it denotes in the context of, say, "Tallant is present". We can now see that that worry only makes sense if we adopt an eternalist point of view on which temporality is to be accounted for in terms of being located somewhere on the time line. From that point of view, there are two options. Either "is present" in the final analysis always denotes the property of [existing] at the present moment, in which case it will not be true to ascribe that property to Caesar (for he doesn't exist now); or, on the other hand, the property "is present" denotes shifts along with the tense operator "WAS", in which case it looks like EP turns into a triviality.

But we can resist this eternalist rendering of EP: instead, we can interpret it from the logical perspective of the original view. On that view, EP implies that "Caesar existed" is equivalent to "Caesar was present". Now, I observed, in §2, that sentences involving the past tense express the very same temporal proposition that would earlier have required a present-tense sentence. Thus, most importantly, I do not suppose the

involvement of a temporal operator, "WAS", that takes us to an earlier point on the time line, where we may then find a true (atemporal) proposition "Caesar [is] present". That is what we get if we take the tense-logical approach, on which truth is time-relative. On the original view, "Caesar was present" simply expresses the very same temporal proposition Caesar himself could have formulated by saying "Caesar is present". That makes clear both that there cannot be different properties of "being present" associated with different times, and that the one unique property of "being present" cannot be rigidly tied to the present moment.<sup>38</sup> On the original view, we simply have truths exemplifying the temporal form of predication. These are basic; their temporality lies in their form, not in their being tied to an assumed time line.

As in the case of proposed definition P, we find, with regard to EP, that the same form of words can be used by a presentist to present his view, and by an eternalist to say something fundamentally different. That is because the difference lies in the form of predication used. A statement always involves some form of predication, and therefore there is no neutral, common ground on which a defining statement can be formulated. Tallant's proposal is a move in the right direction; on my reading, it highlights a feature of the original view. But we can be more explicit. So, here is my proposal:

OP Temporal propositions display the temporal form of predication.

OP says that temporal propositions instantiate the temporal form of predication on which the original view rests, and thus I call a presentist that subscribes to OP an *original presentist*. Original presentism and eternalism disagree on OP: the eternalist has to reject it. That is because the eternalist understands temporal truth in terms of the atemporal form of predication combined, in some way or other, with a time line. And that amounts to an elimination of the temporal form of predication, contradicting OP.<sup>39</sup>

It is likely felt that the question still remains: why should we take OP to yield a version of *presentism*? Why is it not, instead, a novel definition of A-theory, perfectly compatible with a 'full ontology of things past, present and future', as I quoted Fine saying [18, p.299]?

I already gave the short answer to this question above. As I argued, a 'full ontology of things past, present, and future', in the relevant eternalist sense, requires that we be able to say of any object included in that ontology that it (atemporally) [exists] at some t. If temporal propositions involve the temporal form of predication, we cannot say anything of that kind. Hence OP indeed yields a version of presentism.

A much longer answer to this question can be developed, based on a proper elaboration of the original view. I can only sketch the relevant considerations very briefly here. I remarked that the original view exhibits a close interconnection between time and causality—between tense and aspect, that is. From that interconnection it transpires that objects to which temporal predication applies (that is, substances) are enduring things capable of causal interaction. And endurance, in the end, only makes sense against a presentist background (although, like in the case of A-theory, eternalism-friendly versions of endurantism can be formulated as well, based on the Fregean nexus).<sup>40</sup>

As should be clear by now, the original view encompasses more than just presentism. Properly developed, it may yield a comprehensive metaphysics of time, substance, causality, and more. It remains to be seen to what extent the original temporal nexus can indeed serve as a viable basis for such a comprehensive metaphysics. For all I have argued here, it may still turn out that we do best to discard it. But I hope to have made a case for the claim that the future of presentism depends on it.

#### Notes

- 1 I will largely restrict myself to the presentist's attitude towards the past here, since the future invites problems of its own, concerning its being or not being open, determinate, or determined, that are not essential to my argument. Moreover, I ignore abstract objects, which, for most presentists, would exist despite arguably not being present in any interesting sense.
- 2 Hence, I differ from McTaggart's original definition, in terms of properties like "being future", "being present", and "being past", which are thought to be had by times (making up the so-called A-series) [27, esp. p.458]. My reasons for differing in this way will become apparent later on.
- 3 Interesting examples of eternalist A-theories can be found in Kit Fine [18]. I briefly look into those in §3 below. Arguably, there is room for a B-theoretic version of presentism that claims that there is, fundamentally, only one moment—the present—and thus only one B-relation: simultaneity. Such a version would presumably not find many defenders. As we will see below, it is identical with the view I call 'negative presentism'.
- 4 The challenge Meyer develops appears to have found its first serious expression in a discussion between Crisp and Ludlow in *Oxford Studies in Metaphysics*, vol. 1—see [11, 12, 25].
- 5 The very same phrasing of the presentist thesis can be found in, e.g., [9, p.35].
- 6 And, we may add, reading the "is" in P2 temporally general as well again leads to a triviality. In what follows, I will phrase the dilemma that the presentist faces as one of having to choose between a triviality and an absurdity (so that the view is either trivial or untenable). In the discussion, the dilemma is often

phrased as a choice between a reading that is trivially true and one that is trivially false. Although it is a minor point, I think that is a mistake: while P1, for instance, arguably expresses a tautology, and is thus trivially true, P2 is not a contradiction—it's just an absurd claim to make.

- 7 Crisps definition reads:  $Pr''_b$  For every x, x is a present thing [11, p.18].
- 8 Crisp is thus gesturing towards a tensed model theory for his temporal quantifiers.
- 9 Tallant discusses more proposed definitions than the ones I here present; for instance those by Sider, who tries to establish inferential differences between the presentist and the eternalist quantifiers [37], and by Stoneham, who thinks a difference in the attitude towards truthmaker principles can be established [38]. And still others can be added. Though interesting in their own right, my selection provides me with enough materials to make my point.
- 10 As Tallant also notes, the same definition has been proposed by Zimmerman, who writes that "to be present *just is* to be real or to exist" [45, p.117].
- 11 Tallant thinks that Merricks's (and Zimmerman's) formulation is flawed because we can still apply a Meyer-style objection. If existing at the present time just is existing, we can read the "just is" either as present-tensed or as temporally general: the first reading, says Tallant, is then trivial, the second absurd. But the first reading is not trivial: Tallant confuses the non-trivial (1) "existing at the present time just-is-now existing" with the trivial (2) "existing at the present time just-is existing now". This observation doesn't affect Tallant's proposal, however, because (1) is plausibly a statement of that very proposal.
- 12 Tallant goes on to consider how one might understand the identity claim EP: it can be read as the identification of the properties of existence and presence—but, of course, there are those who don't accept existence as a property. Thus, an alternative is to read it as identifying the ontological category of existence with that of presence. For reasons of scope, I ignore such considerations concerning the wider debate on existence in the present paper.
- 13 Notice that Tallant thereby in effect rejects the very idea of times as locations, central to the eternalist picture. That will turn out to be a crucial ingredient in my own proposal as well; see §4 below.
- 14 As I noticed at the beginning of this paper, I conceive of A-theory broadly, so as to be compatible with eternalism.
- 15 Notice that these two statements have a different 'form' on the usual understanding of that term (namely, Rxy and Rxyz, respectively), but not on my understanding. I say that it is a difference in content because it is just a matter of putting together different ingredients with the help of the Fregean form of predication. Of course, adding an argument place to a given predicate invites the familiar question whether that doesn't amount to changing the topic—but that is not my concern here.
- 16 The index may be built into the content of temporal propositions in different ways, depending on one's preferred views on the matter—e.g., as an index to the object(s) in question specifying the relevant temporal part(s), yielding perdurantism, or simply as an argument place for the predicate, yielding a form of endurantism.
- 17 This is called the 'imperfective paradox' in linguistics [17]. In action theory, attention was drawn to the progressive by Anscombe [1], and, more recently, by Rödl [35, chpt.2] and Thompson [40, chpt.7–8]. Notice, by the way, that no

- interesting differentiation in tense applies to T5: the past perfect tense (e.g., "The cat had jumped to the ground") expresses the same completeness of a process that the present perfect expresses. It does serve further, pragmatic functions—but that is not relevant for my purposes. In other languages (such as Russian, with its lexical duplication of each verb into a progressive and a perfective one) aspect and tense are in this respect somewhat more cleanly separated.
- 18 For simplicity, I do not discuss T6 in much detail, nor its further generalization to the generic "Cats jump"—that would get us into complex considerations concerning the nature of cats (and concerning natures generally—but see [31]). And, to repeat, for similar reasons I eschew discussing the future tense. For a much more elaborate investigation into tense, aspect and the time-general as interrelated characteristics of the temporal form of predication, see, respectively, chapters 4, 5 and 6 of Rödl's [34].
- 19 Does this mean that that 'very same temporal proposition' is an atemporal B-fact? No: that only follows if one insists that there must be a presentation of that proposition that is independent of its expression using tensed sentences. See also note 32.
- 20 Similar, but slightly different, observations apply to the aspectual differentiation displayed by T3-T5. In particular, while one is saying different things by uttering T1 at subsequent times, the same doesn't hold for T3: there, the very same statement remains true for as long as the cat jumps (in other words, processes, like substances, endure). Such observations are, however, not central to my aim in this paper.
- 21 My insistence on tense as a feature of the form of predication might be thought similar to the 'multiple instantiation tie' approach to presentism developed by McKinnon and Bigelow [26]. They write: "it is curious that this thought—that pastness and futurity are to be located in instantiation—has been neglected by presentists." But the peculiarity of temporal predication I just noticed, concerning the way in which past- and present-tensed statements relate, sets my approach apart from theirs. And the same holds with regard to the tensed quantifier approach explored by Baron [8] as a way of dealing with truthmaker issues. Thanks to an anonymous referee for pointing out these relations to me.
- 22 There are good reasons for choosing the Aristotelian term "substance" here: Aristotelian substances are what remains constant through change, and that is precisely the role that the temporal form of predication has them play. For present purposes, however, I do not need to defend this claim—here, I simply need a term different from 'object', to flag the distinction from Frege's Gegenstand category.
- 23 Like the categories of substance and potentiality, others from our list can be associated with certain notions central to Aristotle's metaphysical thought: in particular, the category of feature/relation corresponds to stasis, while process corresponds to kinesis.
- 24 Given this broad scope, I can only sketch the rough outline of this logical framework in the present paper, geared towards my topic: the definition of presentism.
- 25 Fine calls this 'tense-theoretic realism' or just 'realism'. For clarity, I here stick to the label 'A-theory' instead of 'realism'.
- 26 Fine argues that fragmentalism is to be preferred, because it promises to make more sense from the point of view of relativity theory—it allows, for instance, for overlapping fragments.

- 27 Nor does it help to resort to tense-logical meta-propositions about the truth or falsity of tense-logical formulae: the present truth of "' $\mathbf{P}p$ ' will be true" remains unconnected to the present truth, one day later, of "' $\mathbf{P}p$ ' is true". The problem lies in the time-relativity of truth.
- 28 As Wittgenstein notes in Zettel 693 [43], the problem of an infinite regress is not so much its infinity but rather its disabling any understanding of its members—in this case, any understanding of cross-temporal fact-sameness. See also [35, p.25].
- 29 This sentence comes from an anonymous referee, whom I thank for pointing out the need to clarify this.
- 30 Thus, it doesn't matter for the point I am raising to which 'grade of tense-logical involvement' one is willing to subscribe [32, chpt.XI]—all of them are, after all, grades of tense-logical involvement. One can see this from what Prior writes, towards the end of his explorations of these grades, about "the vacuity" that "'It is now the case that—' has in ordinary tense logic; it does not need to be expressed, but is understood in all that we say." (p.134, my emphasis). If it is really understood in all that we say, we are indeed forever banned within 'what is now the case'—within what is-present-true. Prior's 'translation project' in the mentioned paper succeeds insofar as it enables one to translate everything one can say using the 'earlier-later calculus' using only tense-logical propositions, the truth or falsity of which is relative to the present moment. The success of that project, however, does not address our worry.
- 31 This is the one non-A-theoretic version of presentism I mentioned in note 3 above.
- 32 This time-absolute understanding of temporal truth is criticized by Cord Friebe [22, §I.A.2.1], who follows Mellor [28, p.30] in concluding from a temporal truth being time-absolute that that truth has to be a B-theoretic truth. That, however, merely shows how entrenched the assimilation of temporal predication to Prior's tense logic has become: if truth is not time-relative, then only B-theory remains. And that is a non sequitur.
- 33 In case one wants to hold onto A-theory in the way Fine does, there will be no such propositions, as it is denied that there are any propositions whose truth is time-independent. However, we saw that in that case, there still is, for any temporally existing thing x, the proposition 'x [exists]', which is true relative to some t.
- 34 Does this mean that that 'very same temporal proposition' is an atemporal B-fact? No: that only follows if one insists that there must be a presentation of that proposition that is independent of its expression using tensed sentences. See also note 32.
- 35 In fact, the formal mismatch goes even deeper. In the case of Fregean propositions, one can safely abstract from the fact that judgments, thoughts, utterances etc. are made in time. While, as can be seen from my exposition of the original temporal nexus in §2, that is not so easy in the case of temporal propositions bearing the form captured in the ogirinal temporal nexus. That is the reason why Rödl, to whose work I owe my approach to the presentism issue, gave his book the subtitle "An Inquiry into the Forms of the Finite Intellect" [34]. That is also the reason, I should add, why I refrain from proposing any serious formalization of the claims I use for explicating the original temporal nexus and the version of presentism it yields (see below). It is the downside of the habit of supplying formal renderings in analytical philosophy that these are always derived from

- the Fregean nexus—as my critical discussion of tense logic in the previous section illustrates. Perhaps a radically different formalism can be developed for the original temporal nexus—but I would not know how.
- 36 Similarly, Crisp's definition of presentism is acceptable to a defender of the original view, though equally trivial. Moreover, Crisp's tensed reading of the domain of temporal quantification, which he uses in his attempt to rebut counterexamples that rely on past objects, can be understood to be in line with the original view. On such a reading, the domain of temporal quantification changes over time: it used to contain Julius Caesar, but doesn't do so anymore. As long as we understand tense, as it figures in this view of quantification, in terms of the original temporal nexus (and not, say, in terms of Priorian tense logic), all of this is perfectly fine.
- 37 This is analogous to Aristotle's famous remark explicating what existence is for living things: 'to exist, for a living thing, is to live'—see [2, p.27; II.5, 415b12–14].
- 38 I speak, here, of the "property of being present", following Tallant, whose claim EP is after all to be understood as an identification of properties. I do not think this ultimately makes sense; I am more inclined to accept Tallant's alternative rendering of his proposal in terms of the identification of the ontological category of existence with that of presence [39, §3.3]. However, I would then urge for an understanding of ontological categories based on my notion of forms of predication, in which case there would be room for more than one notion of existence. However, I cannot develop the details of such a proposal here.
- 39 A pessimistic thought may come to mind at this point: the eternalist may simply disagree on the question whether or not there is something to be eliminated here at all. He may claim that there is no such thing as the 'original temporal nexus', that there is only tense, aspect, and the like in the sense in which they fit his theory (however that may be). If so, I don't think there's much more to say: like Quine's denial of modal talk (of sufficiently robust grades), such a denial of the temporal nexus is just that: an outright denial of a fundamental element of our understanding of reality.
- 40 For a detailed investigation into the temporal form of predication, see [34]—as I said earlier, I owe my approach to the presentism issue largely to Rödl's work.

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### References

- [1] G. E. M. Anscombe. *Intention*. Cambridge, Mass.: Harvard University Press, 1957.
- [2] Aristotle. On the Soul. Princeton: Princeton University Press, 1984.
- [3] Jamin Asay and Sam Baron. "The Hard Road to Presentism". In: *Pacific Philosophical Quarterly* 95.3 (2014), pp. 314–35.
- [4] Alex Baia. "Presentism and the Grounding of Truth". In: *Philosophical Studies* 159.3 (2012), pp. 341–56.
- [5] Mark Balaguer. "Anti-Metaphysicalism, Necessity, and Temporal Ontology". In: *Philosophy and Phenomenological Research* 89.1 (2014), pp. 145–67.
- [6] Sam Baron. "Presentism and Causation Revisited". In: *Philosophical Papers* 41.1 (2012), pp. 1–21.
- [7] Sam Baron. "Talking About the Past". In: Erkenntnis 78.3 (2013), pp. 547–60.
- [8] Sam Baron. "Tensed Truthmaker Theory". In: *Erkenntnis* 80.5 (2015), pp. 923–44.
- [9] John Bigelow. "Presentism and Properties". In: *Philosophical Perspectives* 10 (1996), pp. 35–52.
- [10] Ben Caplan and David Sanson. "Presentism and Truthmaking". In: *Philosophy Compass* 6.3 (2011), pp. 196–208.
- [11] Thomas M. Crisp. "On Presentism and Triviality". In: Oxford Studies in Metaphysics, Vol. 1. Ed. by Dean W. Zimmerman. Oxford: Clarendon Press, 2004. Chap. 2, pp. 15–20.
- [12] Thomas M. Crisp. "Reply to Ludlow". In: Oxford Studies in Metaphysics, Vol. 1. Ed. by Dean W. Zimmerman. Oxford: Clarendon Press, 2004. Chap. 2, pp. 37–46.
- [13] Rafael De Clerq. "Presentism and the Problem of Cross-Time Relations". In: *Philosophy and Phenomenological Research* 72.2 (2006), pp. 386–402.
- [14] Dennis Dieks, ed. *The Ontology of Spacetime*. Amsterdam: Elsevier, 2006.

- [15] Mauro Dorato. "Presentism/Eternalism and Endurantism/Perdurantism: Why the Unsubstantiality of the First Debate Implies That of the Second". In: *Philosophia Naturalis* 49.1 (2012), pp. 25–41.
- [16] Mauro Dorato. "The irrelevance of the presentism/eternalism debate for the ontology of Minkowski spacetime". In: *The Ontology* of Spacetime. Ed. by Dennis Dieks. Amsterdam: Elsevier, 2006, pp. 93–109.
- [17] D. Dowty. "Toward a Semantic Analysis of Verb Aspect and the English 'Imperfective' Progressive". In: *Linguistics and Philosophy* 1.1 (1977), pp. 45–77.
- [18] Kit Fine. "Tense and Reality". In: Modality and Tense: Philosophical Papers. Oxford University Press, 2005, pp. 261–320.
- [19] Marcello Oreste Fiocco. "A Defense of Transient Presentism". In: American Philosophical Quarterly 44.3 (2007), pp. 191–212.
- [20] Gottlob Frege. "Funktion und Begriff". In: Funktion, Begriff, Bedeutung. Fünf logische Studien. Ed. by Günther Patzig. Göttingen: Vandenhoeck & Ruprecht, 1891, pp. 18–39.
- [21] Gottlob Frege. "Über Begriff und Gegenstand". In: Vierteljahresschrift für wissenschaftliche Philosophie 16 (1892), pp. 192–205.
- [22] Cord Friebe. Zeit Wirklichkeit Persistenz: Eine präsentistische Deutung der Raumzeit. Paderborn: mentis, 2012.
- [23] David K. Lewis. On the Plurality of Worlds. Blackwell Publishing, 1986.
- [24] David K. Lewis. "Tensing the Copula". In: *Mind* 111.441 (2002), pp. 1–13.
- [25] Peter Ludlow. "Presentism, Triviality, and the Varieties of Tensism". In: Oxford Studies in Metaphysics, Vol. 1. Ed. by Dean W. Zimmerman. Oxford: Clarendon Press, 2004. Chap. 2, pp. 21–36.
- [26] Neil McKinnon and John Bigelow. "Presentism, and speaking of the dead". In: *Philosophical Studies* 160.2 (2012), pp. 253–63.
- [27] John M. E. McTaggart. "The Unreality of Time". In: *Mind* 17.68 (1908), pp. 457–74.
- [28] David H. Mellor. Real Time II. London: Routledge, 1998.
- [29] Trenton Merricks. Truth and Ontology. New York: Oxford University Press, 2007.

- [30] Ulrich Meyer. "The Presentist's Dilemma". In: *Philosophical Studies* 122.3 (2005), pp. 213–25.
- [31] Jesse M. Mulder. "The Essentialist Inference". In: Australasian Journal of Philosophy 91.4 (2013), pp. 755–69.
- [32] Arthur N. Prior. *Papers on Time and Tense*. Oxford: Oxford University Press, 1968.
- [33] Arthur N. Prior and Kit Fine. Worlds, Times and Selves. Amherst: University of Massachusetts Press, 1977.
- [34] Sebastian Rödl. Categories of the Temporal: an Inquiry Into the Forms of the Finite Intellect. Cambridge, Mass.: Harvard University Press, 2012/2005.
- [35] Sebastian Rödl. Self-Consciousness. Cambridge, Mass.: Harvard University Press, 2007.
- [36] Steven Savitt. "Presentism and Eternalism in Perspective". In: *The Ontology of Spacetime*. Ed. by Dennis Dieks. Amsterdam: Elsevier, 2006, pp. 111–27.
- [37] Theodore Sider. "Quantifiers and Temporal Ontology". In: *Mind* 115.457 (2006), pp. 75–97.
- [38] Tom Stoneham. "Time and Truth: The Presentism-Eternalism Debate". In: *Philosophy* 84.2 (2009), pp. 201–18.
- [39] Jonathan Charles Tallant. "Defining Existence Presentism". In: *Erkenntnis* 79.3 (2014), pp. 479–501.
- [40] Michael Thompson. *Life and Action*. Cambridge, Mass.: Harvard University Press, 2008.
- [41] Giuliano Torrengo. "Ostrich Presentism". In: *Philosophical Studies* 170.2 (2014), pp. 255–76.
- [42] Giuliano Torrengo. "The Grounding Problem and Presentist Explanations". In: *Synthese* 190.12 (2013), pp. 2047–63.
- [43] Ludwig Wittgenstein. Zettel. Ed. by G.E.M. Anscombe and G.H. von Wright. Berkeley and Los Angeles: University of California Press, 1967.
- [44] Dean W. Zimmerman, ed. Oxford Studies in Metaphysics, Vol. 1. Oxford: Clarendon Press, 2004.
- [45] Dean W. Zimmerman. "Persistence and Presentism". In: *Philosophical Papers* 25.2 (1996), pp. 115–26.