



A Critique of Compound Presentism

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Abstract

In this paper I argue that Barry Dainton's proposed Compound Presentist view in (Dainton, 2010) is unsuccessful in solving two of the problems that Presentism incurs; firstly, the relation/relata problem and secondly, the clash with Truthmaker Theory. I begin by outlining Presentism, and describing its advantages and disadvantages. I then describe Dainton's Compound Presentism in Section Two before critiquing it in Section Three. Finally, I conclude that Presentists must do more work to defend their view against the two problems I explore.

Keywords: compound presentism; time; truthmaker theory; extended present.

Section One: Presentism

Presentism, broadly construed, is the view that only the present exists. Future objects and events do not yet exist, and past objects and events no longer exist. This view is opposed most starkly to Four Dimensionalism, which is the view that all of time exists in a 4-dimensional block, i.e. all objects exist forever at the time segment in which they occur and always have done; there is no ontologically privileged time. Another view, not identical to Presentism, but closer to it, is growing block theory which holds that time grows, so that (typically) the past and the present exist, but not the future.¹

A- and B-Theories of Time

Both Presentism and growing block theory are A-theories of time, whereas Four Dimensionalism is a B-theory of time. This terminology comes from McTaggart in his

most famous paper ‘The Unreality of Time’ (1908), where he argues that time is in fact unreal. Though not many philosophers have taken his arguments to be conclusive, the terminology he set out is useful when talking about time. An A-theory of time is that which carves time up into past, present, and future. Time ordered in such a way may be referred to as an A-series. On the other hand, a B-theory sees no such need for past, present, and future, instead terms like ‘before’, ‘at the same time as’, and ‘after’ represent the ordering of time in a B-series.

1.1 What’s so good about Presentism?

Presentism has advantages over other theories of time and is often thought to be the common sense view.² It is more intuitive to think that only present objects and events exist. This is particularly salient when one compares Presentism to the Four Dimensionalist view where everything exists. Furthermore, it is more common to think that the future is open, and Presentism (as well as most forms of growing block theory) characterises this intuition.

Another advantage of Presentism is its simplicity which is manifested through, amongst other factors, its symmetry.³ Unlike growing block theory, Presentism holds that the future is just as unreal as the past, therefore providing an ontological symmetry – a symmetry in the reality of different tenses of time. This can be thought of as advantageous since simplicity is a coveted theoretical virtue.⁴ However, Four Dimensionalists can also claim the advantage of simplicity as compared with growing block theory. It might, however, be argued that Four Dimensionalism though sharing the value of simplicity in symmetry, is less ontologically parsimonious due to the sheer number of things in existence.

A unique advantage of Presentism, as an A-theory of time, is its compatibility with the emotional asymmetry people have towards the future and towards the past. This idea comes from Arthur N. Prior’s ‘Thank-goodness’ argument (Prior, 1959), stating that the way in which we talk about past events and future events cannot be characterised by exclusively using B-theoretic language such as “x is earlier than this utterance” in place of A-theoretic language like “x is past”. When we say, “thank goodness that headache is over” we are expressing relief for something being in the past, but before it has happened we dread it. Just saying that something is earlier than now does not capture this emotional reaction. Both the growing block theorist and the Four Dimensionalist have trouble explaining why we feel relief about the past, if all past events continue to exist. Why do we feel relieved when something is no longer present if it continues to exist in the past? And for the Four Dimensionalist, why do we feel differently about events that happen to be after ‘now’ i.e. future events and events that happen to be before ‘now’ i.e. past events? The Presentist does not have this problem with asymmetrical attitudes towards equally existent events, since attitudes towards the past and the future are attitudes towards non-existent things, so they cannot be inconsistent. Furthermore, for the Presentist, this relief about the past and anticipation

about the future makes sense due to the non-existence of both, coupled with the flow of time. Therefore, Presentism has a number of advantages over its rival theories of time.⁵

1.2 So why isn't everyone a Presentist?

Presentism also has some disadvantages. Here I mention three of them and then focus on the two which Compound Presentism endeavours to solve.

Clash with Special Relativity

The first is Presentism's clash with Einstein's Special Theory of Relativity first expounded in his famous 1905 paper (*Zur Elektrodynamik bewegter Körper*). Special Relativity is currently our best scientific theory of the relationship between space and time, according to which there is no absolute simultaneity. This implies that there is also no absolute present, which poses a problem for Presentism, discussed by Dainton (*Time and Space*, 2010, pp. 313-342).⁶ I will not go into these considerations here, needless to say, there are attempts at uniting special relativity and Presentism.⁷ Here I shall not be dealing with that issue, but shall instead focus on two problems addressed by Compound Presentism, namely the relations/relata problem and the clash with Truthmaker Theory.

Relations/Relata Problem

The second problem Presentists must face is what I call the relations/relata problem, which Dainton discusses in connection with causation and perception of change. In general, if there is to be a relationship between two events or states of being, both relata must exist. If only present objects and events exist, how can one say that x is the cause of y when x no longer exists? And how can we perceive the changing of an object if the past object no longer exists? The relations of causation and of change need their relata to exist in order for the relations to hold. Since Presentism has a very narrow selection of things that exist, the existence of relata, or lack thereof, poses a problem: for any cross-temporal relation, the Presentist can hold that only one of the relata exists, namely, the present one.

Clash with Truthmaker Theory

Related to this is the third problem for Presentism, the clash with Truthmaker Theory, also raised by Dainton in Chapter 6 of (*Time and Space*, 2010). Since past events no longer exist, there are no truthmakers for facts about the past. Some Presentists solve this problem simply by rejecting Truthmaker Theory,⁸ but this solution is not widely favoured. Presentists who wish to maintain Truthmaker Theory must explain what it is that acts as a truthmaker for past events. One way to do this is to say that we have evidence in the present that can act as truthmakers for facts about the past. This can work in some cases, but then our evidence, or rather lack thereof, seems to limit not only our knowledge about the past, but also the actual events and objects of the past

itself. For example, we would have to say that only certain individual dinosaurs actually existed, those for which we still have fossils. This is far from ideal.

As I have shown, Presentism generally has its advantages and disadvantages, but what of more specific forms of Presentism? There are many different ways of forming a Presentist view, some of which are outlined in Dainton's *Time and Space* (2010, pp. 81-102). However, in this paper I focus on just one, Compound Presentism. Dainton suggests this is the most viable form of Presentism since it purports to solve both of the issues I will be focussing on in this paper, namely, the relation/relata problem and the clash with Truthmaker Theory.

Section Two: Compound Presentism

Two main features of Compound Presentism distinguish it from other types of presentism: these two features are the concept of the 'extended present' and that of 'becoming and annihilation'.

The 'Extended Present'

For the compound Presentist, the 'extended present' is two coexistent time slices, and therefore, 'extended presents' can overlap. Dainton is inspired by William James' observation that *'the lingerings of the past [drop] slowly away, and the incomings of the new, are the germs of memory and expectation, the retrospective and the prospective sense of time'* (James, 1952).⁹ Dainton recognises that one only needs two "non-simultaneous very brief" time slices in order to maintain this 'extended present' (Dainton, 2010, p. 95).

Becoming and Annihilation

The idea of becoming and annihilation can also be maintained using just two time slices in an 'extended present', though James seems to suggest many more such overlaps. As one time slice comes into existence, another is annihilated. This results in the overlapping of time slices mentioned above; there is simultaneous annihilation and becoming. This view can be represented pictorially as seen in figure 6.5 from (Dainton, 2010, p. 96).

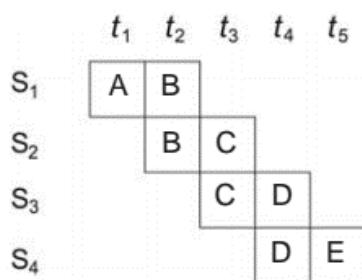


Figure 6.5 Compound Presentism. A doubly dynamic reality: the sum total of reality is not limited to a single present, and absolute becoming is matched by absolute annihilation.

Dainton's proposed Compound Presentism is the most viable of those versions of Presentism he discusses because it purports to solve the two main problems with Presentism outlined in Section One, namely the relations/relata problem and the clash with Truthmaker Theory.

2.1 What is an 'extended present'?

First of all, Dainton claims that the use of an 'extended present' allows the compound Presentist to avoid defining a moment. This is an advantage since if a moment is defined as instantaneous, then nothing can actually happen within it. But if a moment is defined as a finite length of time, then this length would have to be small because it may contain only simultaneous events, as opposed to a succession of events. It is unclear just how long a moment ought to be to include only simultaneous events. It might be argued that this concept also restricts what can happen in a moment; essentially nothing can happen in a moment because there is no possibility of change or movement if everything must be simultaneous. As may be clear, the Presentist usually finds it difficult to define a moment.

Dainton's Compound Presentism, on the other hand, ostensibly avoids having to do so. The 'extended present' allows for non-simultaneous events to be contained in the present, so a moment may be defined either as instantaneous or a finite length of time; both can be accommodated because the 'extended present' allows for change and movement to happen within the (extended) present moment (Dainton, 2010, p. 97). It is this idea that is in the background for the solution to the relations/relata problem.¹⁰

2.2 What's the use of an 'extended present'?

Let us examine how Compound Presentism explains the relation/relata problem with regards to causation. Simply put, the cause of an event can be said to exist in the earlier time slice of the extended present; the relata in a causal relationship are temporally distinct. For example, the cause of the window breaking is the brick hitting it. The brick hit the window in the earlier time slice of the extended present and the breaking of the window is in the later time slice of the extended present. In this way the cause coexists with the effect, so both relata for the causal relation exist.

Similarly, one can use this strategy to explain the relation/relata problem with regards to the perception of change. The earlier stage of the change, one relata, is in the earlier time slice and the later stage of change, the other relata, is in the later time slice of the 'extended present'. For example, when a dried camomile flower unfurls in hot water the change from dried closed flower to soaked unfurled flower can be perceived due to the fact that the dried closed flower is in the earlier time slice, and the soaked unfurled flower is in the later time slice of the 'extended present', and we can experience them both in the same moment.

2.3 How do we get facts about the past?

The second problem that Dainton's Compound Presentism solves is the clash with Truthmaker Theory. The 'extended present' is presumably not large enough to contain all the truthmakers for our facts about the past, so how does one maintain that facts about the past still hold? Dainton proposes the Factual Inheritance Principle which states that "*what is true (or factual) as of time t is also true (or factual) as of all other times that coexist with t*" (Dainton, 2010, p. 100). So facts are passed down through coexisting time slices, i.e. overlapping 'extended presents', although the actual truthmakers for these facts may no longer exist. For example, take the proposition q : 'Amelia sits in a blue chair at 5pm on the 6th of April 2015'. This proposition will remain true after 5pm on the 6th of April when the truthmaker no longer exists. Amelia's sitting in the blue chair is initially what makes the statement true and this truthmaker exists in the earlier time slice of the 'extended present'. But this earlier time slice coexists with the later time slice of the 'extended present'. So, according to the Factual Inheritance Principle, the truth of the proposition is passed through to this later time slice and indeed every subsequent time slice. So q remains true the next morning, for example, despite its truthmaker no longer existing. So again, facts about the past maintain their truth value despite their truthmakers no longer existing.

Thus it seems that Compound Presentism is the most viable version of Presentism given Dainton's proposed solutions to both the relation/relata problem and the clash with Truthmaker Theory. However, in the next section we shall see how in fact, Compound Presentism fails on both counts.

Section Three: Critique of Compound Presentism

There are two ways in which I will critique Compound Presentism. The first concerns the solution to the relation/relata problem and the concept of the 'extended present', specifically, the definition, or rather lack thereof, of the length of a time slice (sections 3.1 and 3.2). The second critique concerns the Factual Inheritance Principle and what it entails when facts about the future are considered (sections 3.3 – 3.8).

3.1 The 'extended present' won't get you out of being late for class

As discussed before, Dainton's 'extended present' allows for non-simultaneous events to coexist in the present and therefore purportedly avoids the relation/relata issues, whilst not committing to defining a moment as any given amount of time. But when we take a closer look, it is not clear that the problem really disappears.

First take the causation case. Here is another example of cause and effect: the cause of my being late for class is the fact that I woke up late. In this instance, the cause and the effect are at least forty-five minutes apart (since this is how long it takes to

travel to university); my waking up happens at 08.30, at which point I am not late for class since class starts at 9. However, I get to class at 09.15 at which time I *am* late for class. To maintain that the cause of my being late for class was my waking up late, one has to concede that the ‘extended present’ is at least forty-five minutes long so that my waking up can coexist with my walking in to class late in consecutive time slices.

This is problematic firstly because it is unintuitive to say that the present moment is forty-five minutes long. Secondly, this is one step towards the difficult proposition that the whole of the past can be named in the ‘extended present’ in order to account for the causes of all the current events. Admittedly, the ‘late for class’ example is quite contentious: one might argue that the cause of something must be an immediate cause (such as my opening the door to the class room fifteen minutes later than it should have been opened by me), as opposed to being the first in a string of events that led to an effect. Indeed, it may be argued that the first in any string of events can be traced right back to the beginning of time. This would be the way in which the whole of the past could be contained in the one ‘extended present’.

Nonetheless, one could make the argument that any amount of time allowed between cause and effect might commit one to the slippery slope, that leads to the claim that the whole of the past can be just one time slice in the ‘extended present’. The only way to avoid this is to specify an exact length, or at least a limit to the length, of a time slice. To do this non-arbitrarily is not easy, as we shall see next.

3.2 Insects perceive change too

When we look at the perception of change example, the time scale is much smaller; it takes just a few seconds for the unfurled flower to open up in the hot water. This is a more plausible length for an ‘extended present’, but then the question arises as to who it is that must be able to perceive the change. Some humans can detect change more sensitively than others, and then there are many different creatures one might take into account. Many creatures, particularly small insects, perceive the world as if it were in slow motion, compared to the way we see the world (Silverman, 2013). Thus, their perception of change would be much sharper and the length of the ‘extended present’ for them wouldn’t need to be as large as for humans. It seems necessary, if there is to be an objective length of the ‘extended present’ (or any present for that matter), that it takes into account the different perceptions of different creatures. One might argue that it would be arbitrary, or at least anthropocentric, to choose humans as the creatures for which we define the objective length of a time slice. How the compound Presentist might define the length of a time slice non-arbitrarily is unclear, and particularly so if there is to be no bias towards human perception and experience.

Perhaps a solution to this problem would be to specify two lengths of time between which the length of a time slice might fall. One problem with this, however, would be that the objective length of the present might not be the same for each time

slice. Rather, it would merely be in the same range. The defining of the length of a time slice is a tricky task and one that the compound Presentist unfortunately cannot avoid.

3.3 How do we know Amelia really did have eggs for breakfast?

The second difficulty with Compound Presentism is that the Factual Inheritance Principle, as it stands, entails some unpalatable consequences for the Presentist. The problem is that calling things ‘facts’ doesn’t change their need for a truthmaker; facts need the same support as past events. To see this take the proposition p : ‘Amelia has eggs for breakfast on Tuesday the 7th of April 2015’. According to the Compound Presentist, this proposition is true because Amelia really did have eggs for breakfast on Tuesday the 7th of April 2015. This event is the truthmaker for p . Though the event itself is not in existence any longer, the event made it the case that one time slice contained a truthmaker for p . This event together with its existence within a time slice is counted as a fact. This fact is then passed down to the subsequent time slices in accordance with the Factual Inheritance Principle. There is something strange about the actual truthmaker being erased, but the ‘fact’ remaining.

As well as this strangeness, what do we say about before the 7th of April 2015? What was the truth value of p on, say, the 5th of April 2015? Since, according to all Presentists, the future does not exist, then the truth value of p must be metaphysically (as opposed to epistemologically) indeterminate. But if p is indeterminate on the 5th of April 2015, then according to the Factual Inheritance Principle, this fact is passed down not only to the relevant time slice where the truthmaker for p is actually taking place, but also to now. So if we take this route, the Factual Inheritance Principle implies that all propositions that concern the future are indeterminate and stay indeterminate even after the proposed event has taken place. This implies that all propositions are indeterminate since all propositions were about the future at some point. So, it seems we cannot take this route.

3.4 Are all propositions indeterminate, or does the future exist?

The alternative is to say that all propositions have a determinate truth value, i.e. are either true or false, and therefore that p is true on the 5th of April 2015, and indeed was always true, and will always be true.¹¹ But then one might wonder where the truthmaker for p came from before the relevant state of affairs took place, that is, before Amelia had her eggs. It can’t be from the future since, for the Presentist, the future does not exist. Does the Compound Presentist have to commit to the existence of the future in order to avoid all propositions being indeterminate? It seems that either the Factual Inheritance Principle implies that all propositions are indeterminate, or that the future exists.

3.5 The future doesn’t exist

One way in which the compound Presentist might avoid saying that the future must exist is to suggest that the Factual Inheritance Principle works backwards as well as forwards. In that case, the truthmaker for p , which does not yet exist, makes the time slice in which it actually occurs pass *back* the fact of the truth of p to times *before* the relevant state of affairs took place. However, this is rather unintuitive. Where states of affairs in the *past* can provide truthmakers for facts passed down, it is difficult to see how, if the states of affairs are yet to take place, they could act as truthmakers for facts in the past.

3.6 Is the present determined?

Another option the Compound Presentist might take is to admit determinism in the strongest sense. It could be the case that the truth value for any proposition is fixed, not by an existent state of affairs, but by the fact that the laws of nature are such that nothing that happens is random and there is only one way in which events can take place. In this way propositions about the future have a metaphysically determinate truth value, which in theory one could ascertain were all the relevant facts known.¹² This would mean that one doesn't need the Factual Inheritance Principle to work backwards as in the previous solution; instead facts are fixed by what has previously taken place.

3.7 One truthmaker to rule them all

The problem with this solution, aside from potential misgivings about the truth of determinism, is that it no longer adheres to Truthmaker Theory. In principle, if this strict sort of determinism is true, there need only be one truthmaker for all truths, the beginning of the universe. The beginning of the universe, according to this strict determinism, is the "truthmaker" for all facts and therefore passes down all facts to the present moment through the Factual Inheritance Principle.

However, it does not seem necessary to say that the truthmaker for p is anything other than the state of affairs where Amelia is eating eggs for breakfast on the 7th of April 2015. To deny this would be to deny, at least traditional Truthmaker Theory, which as I mentioned at the beginning, is not a popular stance. Furthermore, Dainton's solution to the clash between Presentism and Truthmaker Theory via his Compound Presentism implies that he also wants to maintain Truthmaker Theory. Therefore a commitment to strict determinism cannot help us here.

3.8 Can a Presentist be a determinist?

Aside from this complication, determinism does not fare well with the openness of the future (the idea that there is more than one way in which events after now could take place), which Presentists seem to want to hold true.¹³ Strict determinism doesn't exactly assert the existence of the future, but it certainly asserts that the future is *not* open and

for many this is enough for it to clash with arguably one of the key motivations for a Presentist view, i.e. characterising the intuition that there is more than one way events after now can take place, and that the future has not yet been written.

So it seems that the Factual Inheritance Principle either fails to solve the clash with Truthmaker Theory rendering all propositions indeterminate, or the compound Presentist must admit the existence of the future and cannot therefore call their view Presentism.

Conclusion

Compound Presentism is a problematic version of Presentism on two counts. Firstly, the solution offered to the problem of relation/relata does not work since in order to avoid saying that the whole of the past is contained in the earlier slice of the ‘extended present’, one must define the length of the ‘extended present’, which is difficult to do non-arbitrarily. Secondly, the Factual Inheritance Principle, which is used to solve the clash between Truthmaker Theory and Presentism, implies either that all propositions are indeterminate, or that the future must exist.

The failure of Compound Presentism in these respects does not bode well for Presentism in general, since Compound Presentism is supposed to solve at least some of the problems other Presentist views incur. However, there are other views that I have not considered here, so Presentism in general cannot be said to be defeated. Nonetheless, Compound Presentism is not the most viable version of Presentism, as Dainton suggested.¹⁴

Notes

¹ The direction in which time grows is difficult to fix non-arbitrarily; the growing block and the shrinking block have the same benefits when it comes to fixing facts. See Dainton (2010) for a discussion of these problems.

² For example, Dean Zimmerman argues for Presentism on the basis of its commonsensical nature, see (Zimmerman, 2008).

³ Dainton alludes to this advantage in (Time and Space, 2010) having outlined the growing block theories of time and their downfalls owing to their ontological asymmetry.

⁴ Quine is a proponent of simple theories, see for example, (Quine, 1963). See also (Baker, 2013).

⁵ One might wonder why these experiences of time need be vindicated by metaphysical reality since, in terms of experiences, past events have ended and future ones have not begun. This is true, but the Presentist has a much easier time of explaining why our experience of time is this way than does the Four Dimensionalist or the growing block theorist. This is not to say that the Presentist’s explanation is the only plausible one, but it is certainly the most obvious, at least on the face of it. Nonetheless,

this particular issue that Prior raised has been discussed in the literature, and the broader issue of time and experience is beyond the scope of this paper.

⁶ See also (Balashov & Janssen, 2003) for a comprehensive account of Presentism's clash with Special Relativity, which also argues against the possibility of other interpretations of Special Relativity such as Craig has argued for (see below).

⁷ William Lane Craig argues for a neo-Lorentzian interpretation of special relativity which reconciles special relativity with Presentism (Craig, 2000).

⁸ See (Goff, 2010) and (Tallant, 2009)

⁹ From (Dainton, 2010)

¹⁰ This solution will be called into question since it seems to produce some problems as I shall explain in Section 3.

¹¹ Assuming truth values cannot change once assigned.

¹² Though in principle this seems possible cf. Pascal's Demon, it would include unfathomably detailed facts about a great number of things that might affect any given event. Indeed, some, such as Peter Van Inwagen (Inwagen, 1983), have raised doubts about whether this sort of thing is even possible given the supposed indeterminacy in quantum mechanics amongst other things (see also (Earman, 1986) for information on the truth or falsity of physical determinism).

¹³ For example, Craig Bourne's book *A Future for Presentism* (Bourne, 2006) details the ways in which the Presentist can make sense of the future as indeterminate.

¹⁴ I wish to thank my professor, Philip Goff, my Grandmother, Anne Darrell, and the anonymous editors of this journal for their illuminating comments on earlier versions of this paper.

Bibliography

- Baker, A. (2013). Simplicity. Retrieved from Stanford Encyclopedia of Philosophy: <http://plato.stanford.edu/archives/fall2013/entries/simplicity/>
- Balashov, Y., & Janssen, M. (2003). Presentism and Relativity. *The British Journal for the Philosophy of Science*.
- Bourne, C. (2006). *A Future for Presentism*. Oxford University Press.
- Craig, W. L. (2000). *The Tensed Theory of Time: A Critical Examination*. Kluwar Academic Publishers.
- Dainton, B. (2010). *Time and Space*. Acumen Publishing Limited.
- Earman, J. (1986). *A Primer on Determinism*. D. Reidel Publishing Company.
- Einstein, A. (1905). *Zur Elektrodynamik bewegter Körper*. *Annalen der Physik*.
- Goff, P. (2010). Orthodox truthmaker theory cannot be defended by cost/benefit analysis. *Analysis*.
- James, W. (1952). *The Principles of Psychology*. Chicago: Encyclopedia Britannica.
- McTaggart, J. M. (1908). *The Unreality of Time*. *Mind*.
- Prior, A. N. (1959, January). Thank Goodness That's Over. *Philosophy*, 34(128).
- Quine, W. V. (1963). *On Simple Theories of a Complex World*. *Synthese*.
- Silverman, R. (2013, September 16). *Flies See The World in Slow Motion, Say Scientists*. Retrieved 2015, from *The Telegraph*:

<http://www.telegraph.co.uk/news/science/science-news/10311821/Flies-see-the-world-in-slow-motion-say-scientists.html>

Tallant, J. (2009). Presentism and Truthmaking. *Erkenntnis*.

Zimmerman, D. (2008). The Privileged Present: Defending an A-theory of Time. In T. Sider, D. Zimmerman, & J. Hawthorne, *Contemporary Debates in Metaphysics*. Blackwell Publishing.