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The Privileged Present: Defending an "A-Theory" of Time

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1 Introduction

The following questions go to the heart of the deepest metaphysical disagreement about the nature of time: (1) Are there objective differences between what is past, present, and future? (2) Are present events and things somehow more "real" than those wholly in the past or future? I should like to respond, "Yes," to both questions. Affirmative answers sound obvious and commonsensical, at least to me. Indeed, I suspect that, for many of us, belief in a deep distinction between past, present, and future can be given up briefly, if at all; and then only by a mighty effort of will! Over the course of the twentieth century, however, more and more philosophers have argued for negative answers to these questions. In many quarters, the impulse to posit a deep difference between past, present, and future is now taken to be no better grounded than the impulse to suppose that there is an objective "downward" direction, the same everywhere in the universe; or that the earth is stationary, while the sun, moon, and stars are not.

There are two parts to my defense of affirmative answers to (1) and (2). First, I describe a number of theories of time that answer "Yes" to (1), and raise a worry about the ones that do not also answer "Yes" to (2). Then I assess reasons to reject or accept a metaphysics of time that answers (1) and (2) affirmatively. I consider some metaphysical and scientific arguments against affirmative answers, and find them wanting. More positively, I argue that belief in a real difference between past, present, and future has a certain positive status: it is "innocent until proven guilty," and guilt remains unproven.

2 A-Theories and B-Theories

At the beginning of the twentieth century, J. McT. E. McTaggart introduced some arbitrarily chosen and rather bland) terminology that has been used ever since. He gave the name "A-series" to "that series of positions which runs from the far past hrough the near past to the present, and then from the present through the near future to the far future, or conversely"; and the name "B-series" to "[t]he series of positions which runs from earlier to later, or conversely" (1998: 68)¹ McTaggart's abels have stuck, and been put to further use. The properties being past, being present, and being future are generally called the "A-properties." The relations of being earlier than, being later than, and being simultaneous with are the "B-relations."

Metaphysicians who argue about time are divided by their attitude toward the A-properties and B-relations. Some regard A-properties as fundamental, and B-relations as derivative – they are "A-theorists" – while others regard the B-relations as fundamental, and the A-properties as derivative – they are the "B-theorists." To be an A-theorist is to believe in some sort of objective distinction between what is present and what is past and what is future. A-theorists answer question (1), above, in the affirmative: the present is distinguished from past and future in a way that is not relative to any other temporal thing, such as a conversation, a time, or a frame of reference. To be a B-theorist, on the other hand, is to deny the objectivity of our talk about past, present, and future. When we say that certain events and times are past, present, or future, we are not describing the world "as it is in itself"; we are merely describing the temporal locations of things relative to one particular (but not at all special) temporal location – the point in time at which the description is being given.

A-theorists disagree about the exact nature of the objective differences they posit between past, present, and future. But most of them would give an affirmative answer to (2), as well: The difference between present events and things, as opposed to those in the past or future, is that the present events and things are in some sense "more real." The future is "open," a realm of "mere possibilities." The past is a realm of things that have "faded away."

3 Competing Versions of the A-Theory

Consider some event that is happening, right now – for example, your reading the words in this very sentence. Too late! That event is over; it is already past. Consider some individual that exists now but soon will not – for example, a positron within the sun. Too late again! It collided with an electron, and both were annihilated in a violent explosion that left behind only a neutrino. The neutrino, with its tiny mass, could hardly be composed of the electron and positron that went into the reaction. So our poor positron is no more; it has utterly ceased to be. I expect that most of my readers would happily agree to the following claim about the two short-lived things I described: because they are entirely in the past, both the event that was your reading of the sentence, and the positron, do not exist. Another sensible-sounding claim: the event of your reading the final sentence in this paper does not exist; nor do the positrons that will be created by proton fusion within the sun later today. And that is

Suppose that a moment of time (say, the instant at which you finish reading this parenthetical clause) is just the sum of all the events going on right then – a popular view, and surely *one* thing that could be meant by the phrase "moment of time." In that case, past and future times would have to be composed of events that, according to the presentist, don't exist. Saint Augustine drew the logical presentist conclusion: "[I]t is abundantly clear that neither the future nor the past exist, and therefore it is not strictly correct to say that there are three times, past, present, and future." Presentists, then, maintain that there exist only *present* events, individuals, and times – assuming times are sums or collections of simultaneous events.

Some A-theorists are not presentists. Augustine imagines the following sort of objection to presentism. We can, after all, foresee that certain things will happen or come into existence, and we can remember things that did happen or did exist. And so past and future things must have *some* kind of reality, in order for us to stand in these relations to them. "Otherwise, how do prophets see the future, if there is not yet a future to be seen? It is impossible to see what does not exist. In the same way people who describe the past could not describe it correctly unless they saw it in their minds, and if the past did not exist it would be impossible for them to see it at all." Accepting this conclusion would lead to a very different sort of A-theory: the view "that past and future do exist, but that time emerges from some secret refuge when it passes from the future to the present, and goes back into hiding when it moves from the present to the past."³

If an A-theorist follows this line of reasoning, she must admit that past and future things, events, and times all exist. Reality consists of the events of many times, in something like a four-dimensional array. But the A-theory implies that only some events are genuinely present. So the present becomes a kind of "moving spotlight" playing over a four-dimensional universe.

The image of the spotlight was introduced by C. D. Broad in 1923, in the form of a "policeman's bull's-eye" – a lamp that focuses a beam of light:

We are naturally tempted to regard the history of the world as existing eternally in a certain order of events. Along this, and in a fixed direction, we imagine the characteristic of presentness as moving, somewhat like the spot of light from a policeman's bull's-eye traversing the fronts of the houses in a street. What is illuminated is the present, what has been illuminated is the past, and what has not yet been illuminated is the future. (1923: 59)

On the moving-spotlight A-theory (which, incidentally, Broad did not endorse), future and past events and things are just as much a part of "the furniture of the world" as present events and things. But there is something special about the ones that are present – they are "lit up" in some way. Before and after being illuminated, they reside in darkness – in a "secret refuge," to return to Augustine's metaphor.

An intermediate form of the A-theory accepts the existence of past and present events, things, and times; but denies the reality of the future. This is the "growing block" view of time defended by Broad: Although both past and present things and events exist, present events differ from past ones in that there are (ever so briefly!) no events later than them. "[T]he essence of a present event is, not that it precedes future events, but that there is quite literally nothing to which it has the relation of precedence" (1923: 66).4

What makes present things special, according to the moving-spotlight or growingblock A-theories? How do things change as they cease to be present? In his arguments against the reality of time, McTaggart took a moving-spotlight theory as his primary target; and he describes the moving spotlight of "presentness" as a property that events gain or lose without undergoing any other significant changes; and a movingspotlighter might conceive of the passage of presentness in this extremely thin way. Broad's growing-block A-theory is similar to a thin spotlighter's view; it implies that things and events do not change significantly when they cease to be present. For Broad, being present is simply a matter of being on the "cutting edge" of a growing universe spread out in four dimensions; ceasing to be present, and becoming past. involves no intrinsic change whatsoever: "Nothing has happened to the present by becoming past except that fresh slices of existence have been added to the total history of the world" (1923: 66).

These two "thin" conceptions of the nature of the present are A-theories. to be sure; they give an affirmative answer to (1), the first of the two questions with which I began. They do not, however, give an unqualified "Yes" to the second question. The moving-spotlighter, as imagined by McTaggart, answers (2) negatively: past and future things are in no meaningful sense "less real" than present things. They lack a peculiar property called "presentness"; but, as they acquire and lose this property, they undergo no interesting changes of any other kind. Unlike McTaggart's movingspotlighter, Broad grants that future events and things are less real - for, on the growing block theory, they do not exist at all. But Broad gives a negative answer to part of question (2): past things and events are in no sense "less real" than present ones; they undergo no intrinsic changes, but only relational ones, as "fresh slices of existence" are added to the four-dimensional block of which they are parts.

Neither of these is a version of the A-theory I should care to defend. When I notice that a headache, or some other painful episode, has become part of the past, I am relieved that this is so; and when a pleasant experience becomes past, I am often disappointed. If a theory of time makes such changes in attitude utterly mysterious. we should have grave doubts about its adequacy. And neither of the two versions of the A-theory under consideration can explain why we care so much about whether things are present or past.5 If a pain is just as intrinsically painful when it has the spotlight upon it, or when it is on the cutting edge, why should the passage of the spotlight or the adding of slices change our attitude toward it? And even if we did care about these rather obscure changes, how could we ever know when they have occurred? If either view is right, the mental and physical states that now characterize me will continue, intrinsically just the same, for the rest of time. If my state of mind does not change intrinsically when it becomes past, then, even if I am now correct in my beliefs about what is presently happening, won't these beliefs quickly

become mostly false, and go right on being mostly false for all eternity?6 The A-theory certainly loses much of its appeal, if it induces such skepticism.

Some recent defenders of the moving-spotlight or growing-block have ready answers to the questions: "Why should we care whether things are present?" and "How could we know what time is present?" They maintain that at least some objects and events, when they are present, are intrinsically different from the way they are when not present; some things change, drastically, when they cease to be "lit up" by presentness or when they become embedded within the growing block.

Today's spotlighters and moving-blockers generally agree that when an object ceases to be present, it loses a great many of its most interesting properties. Quentin Smith and Timothy Williamson, for example, believe that the entire block of past, present, and future individuals and events exists; but that, when objects and events pass from being future to present to past, they change in much more than just their A-properties - i.e., their presentness, or their degree of pastness or futurity. For example, they think that future things and events are not located anywhere in space until they are present; and, when past, they again become non-spatial - though of course it remains true that they once occupied space. These spotlighters strip past and future objects and events of all their interesting intrinsic properties, too. A table yetto-be-made has no shape or mass or color; and when it is destroyed, it will lack these properties as well. On Williamson's view, things even cease to belong to (what one would ordinarily have thought to be) their essential kinds: "A past table is not a table that no longer exists; it is no longer a table" (1999: 195). Robert M. Adams and Peter Forrest are growing-blockers with broadly similar views about the way in which objects and events change when they cease to be on the "cutting edge," and thereby become past.

These versions of the A-theory seem to be able to do justice to the feeling that what's in the past is over and done with, and that what's in the future only matters because it will eventually be present. They can also plausibly explain how we know what time is present. But if past headaches are to be much better than present ones, these A-theorists must say things like: a headache is only truly painful when it is present; yesterday's headache, although it exists, is no longer painful. It has a pastoriented property, having been painful - a sort of backwards-looking relation to the property being painful. But actually being painful is a matter of simply having the property itself, not standing in some other relation to it; and that's why it no longer concerns us. Similar things can be said about someone's past observation that the present time (i.e., the spotlit time, or the cutting edge) is exactly noon. If this judgment about what time is present continues to exist even though it is past, then either it is almost always false, or else the observation of an event (such as the coincidence of watch hands) by a person only actually occurs when the observation is present. The wise A-theorist should take the latter alternative: once the person's observation has ceased to be present, it is no longer in any sense occurring. And the strategy can be extended to all the interesting properties of events and objects; to be truly loud, tall, hungry, etc. is to be presently loud, tall, hungry, etc.

Although this view makes sense of our relief when pain is past, and of our knowledge of what time is present, it has less appealing consequences as well. Headaches can exist but not be truly painful; a horse can exist although it is not actually alive

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or even spatially located. What's left of these past things and events is extremely thin: a physical object can survive a change in which it ceases to have any shape or size; an explosion can continue to exist when all its energy has dissipated. If the spotlighter or growing-blocker tries to tone down her claims about the thinness of past things – if she says, for instance, that past headaches are still "sort of painful" and that we remain "sort of aware" of what we observe even when our observations are no longer present – then it once again becomes difficult to answer the questions, "Why care that the headache is past?" and "How do we know what time is present?"

For the presentist, answering these questions is easy. Past headaches do not exist; consequently, they have no properties whatsoever, including being painful. And we can be sure that we are present, and not buried deep in the past of a four-dimensional block; for, as Braddon-Mitchell points out, "according to the presentist all that exists is the present, so the fact that we know we exist guarantees that we are in the present" (2004: 199). The presentist need not posit "some secret refuge" where past things hide (and, for the spotlighter, future things as well) – no realm of ghostly individuals lacking form and substance. Of course the presentist has other sins to answer for, as shall appear when objections to the A-theory are considered, below; and some of the objections might be easier to answer if one is a growing-blocker or moving-spotlighter. But, when all is said and done, I believe presentism remains the best version of the A-theory going.

4 Yes, But Is It True?

So far, I have distinguished a range of versions of the A-theory; and argued that, if you want to be an A-theorist, you should be a presentist. But that begs the most important question of all: is the A-theory true? In the remainder of this chapter, I defend the truth of the A-theory by criticizing two influential arguments for the B-theory, and then explaining why it is that I accept the A-theory.

An introductory essay of this kind can barely scratch the surface of a debate that has gone on for 100 years or more, with no signs of stopping. B-theorists have developed an impressive array of arguments against the A-theory in general and presentism in particular. Some of them are, I believe, simply specious. But others are quite challenging. Here, I can do little more than mention a couple of the more important objections, and point in the general direction of an appropriate A-theorist response.

Arguments against the various versions of the A-theory fall fairly neatly into two categories: those that could just as easily have been given *before* Einstein's Special or General Theory of Relativity was formulated, and those that could not. I will consider one of each.

Arguments of the first sort generally appeal to metaphysical principles that are independent of the results of the scientific study of time. These principles tend to be controversial, and I usually find the arguments based upon them to be no harder to resist than the arguments against many other philosophical views that are widely admitted to be tenable. One of the most popular of these purely metaphysical arguments against presentist versions of the A-theory is based on something called "truthmaking."

5 An Objection to Presentism Based on the Need for "Truthmakers"

It is fairly natural to suppose that, whenever someone says something, and what they said was *true*, then there must be something "in the world" – some real object, thing, event, state of affairs, or fact – that "makes" what they said true. Philosophers have developed this idea by spelling out various "truthmaker principles." One plausible way to affirm the need for truthmakers would go like this: for every true proposition – where a "proposition" is the sort of thing that can be believed and doubted, the sort of thing that can be true or false – there must exist something that *requires* that the proposition be true – in other words, a thing that could not possibly exist, unless the proposition in question is true.

Frequently, the opponents of a philosophical theory will attack it by alleging that it violates this sort of truthmaker principle. Defenders of the theory are said to posit truths of some kind for which they cannot provide adequate grounding. Here's an example of a truthmaker objection in action. Some philosophers believe that laws of nature are really just ways of summing up the facts about the powers and liabilities of the fundamental particles and fields; and that these powers and liabilities - e.g., the tendency of massive objects to attract one another, of similarly charged things to repel one another, etc. - are "brute"; they are basic to causal explanations of why things behave the way they do, and there is no more to say about these powers other than to describe their causes and effects in various circumstances. Other philosophers are appalled by the idea of "ungrounded" powers, dispositions, or liabilities. Such properties are too "spooky," too "hypothetical," not sufficiently "categorical," etc. And these philosophers are likely to raise a truthmaker complaint against the defenders of basic powers: "Point to something in the world," they will say, "that makes it true that this particle has the power to repel that one, when in fact it is not doing any repelling and may never do any repelling."8

But truthmaker objections are rather blunt instruments with which to attack someone else's theory. For the defender of the theory may always respond by positing "brute facts" involving the problematic notion, and insist that these facts make the problematic propositions true. So, for example, the defender of brute powers and dispositions can simply say: "A disposition or power is a real feature or property of the things that have it; and just as there exist facts about the non-dispositional properties of things in virtue of which it is true to say that they have those properties, there are facts about the dispositional properties of things in virtue of which it is true to say that they have these dispositions. Where's the problem? You want truthmakers, there are your truthmakers." Unless the opponent can say a good deal more, specifically, about why it is wrong to take dispositions as primitive or brute features of things, the truthmaker objection amounts to little more than dissatisfied grumbling. And once those deeper objections to the very idea of primitive dispositions are on the table, one has an argument that ordinary talk about dispositions requires analysis or replacement in non-dispositional terms (or that such talk simply never conveys anything true); and there is no need to drag in the business about "truthmakers."9

The truthmaker objection to presentism is similar to the complaint about ungrounded powers. When dinosaurs roamed the earth, they passed many places without leaving

much of a trace; most footprints were washed away or never allowed to petrify into solid rock, for example. An opponent of presentism could make the following demand about any one of these places: "Point to something in the world," the objector says, "that makes it true that a dinosaur walked past this place 150,000,000 years ago. It is true, but there is nothing about the way the world is now that requires that it be true or that makes it true; and according to you presentists, there is nothing more to the world than the way it is now. So you have no truthmakers for such straightforward truths about the past."

One presentist response mirrors the response of the defender of brute powers: "There are 'backward-looking' properties that objects really have, properties like having been occupied by a dinosaur 150,000,000 years ago; and there are real facts about which objects have these properties, facts that make propositions about the past true. What's the problem?" The opponents of presentism have attempted to answer this challenge; but, by my lights, they are still in the dissatisfied grumbling stage.

6 Objections to the A-Theory Based on Relativity

Many B-theorists have alleged that the A-theory is in conflict with Einstein's Special and General Theories of Relativity. If there is real conflict, A-theorists should be very worried. Philosophers have often given arguments to the effect that space or time must have a certain structure; for instance, that the geometrical structure of space must be Euclidean. Working scientists, meanwhile, have often ignored the philosophers and simply gone about their business, eventually proving conclusively that the philosophers were wrong. The canny A-theorist should be very reluctant to go down this road, banking on the falsity of extremely successful scientific theories.

But what exactly is the nature of the supposed conflict? Why is it harder to combine the A-theory with relativity than with a Newtonian conception of time, say? I cannot begin to do justice to this question here; it demands a detailed comparison of Newton's theory of "absolute" space and time with the radically different conception found in Einsteinian relativity. Since ostensible conflict with relativity is too important to ignore altogether, I simply sketch three objections that seem to me to be the grounds for most allegations of conflict between relativity and the A-theory; and gesture towards the replies I defend at greater length elsewhere.

The first apparent conflict is primarily between relativity and presentism. Relativity is formulated in terms of a four-dimensional manifold of space-time points. Taken at face value, the theory attributes important spatiotemporal structure to this manifold. One of the most important kinds of structure is exhibited by sets of points that constitute a "straight line" running in a time-like direction. Relativity uses this structure to explain why objects take the paths they do within space-time; a straight line is the path a particle will take if it is not experiencing any forces. Now, the A-theorist must think that one instantaneous, three-dimensional "slice" of the four-dimensional universe corresponds to the *real* present moment. And the *presentist* A-theorist is committed to the view that only that slice of the block *exists*. But these lines are composed of points that must come from different instantaneous slices; so, according

to the presentist, when one of them exists, none of the others does. This leaves nothing to exhibit the important spatiotemporal structure of a straight line in a time-like direction.

But why must a presentist be committed to the non-existence of all but one slice of this four-dimensional manifold? My commitment to presentism stems from the difficulty I have in believing in the existence of such entities as Bucephalus (Alexander the Great's horse) and the Peloponnesian War, my first grandchild and the inauguration of the first female US president. It is past and future objects and events that stick in my craw. The four-dimensional manifold of space-time points, on the other hand, is a theoretical entity posited by a scientific theory; it is something we would not have believed in, were it not for its role in this theory; and we should let the theory tell us what it needs to be like. As a presentist, I believe that only one slice of this manifold is filled with events and objects. The future is determined by the character of these events and objects together with the structure of the manifold in their neighborhood. The fact that a given point lies along a straight-line in a time-like direction amounts to this: those other points are the ones from which a particle could get to this point, and the ones to which a particle would go from this point, if it were undergoing no accelerations or decelerations. The fundamental relations that give the manifold its causally interesting structure can be thought of as relations of "accessibility." Some parts of the manifold are accessible from a given location: others are not. Take the parts of the manifold that like along a straight line with a time-like (positive) length: the later parts of the line are accessible to a particle located at the earlier parts. The straightness of the line tells a particle "where to go next" if it is located at a series of points on the line, and no other forces are at work.

A second objection to the A-theory is that the structure relativity attributes to space-time does not single out just one set of points as "the time" of a given event within the block. There are many different angles at which the block can be sliced into sets of points that look for all the world like instantaneous, three-dimensional states of the universe – or "times." No one of these ways of slicing it into a series of times is better than any other; which angle will seem most natural to a given person will depend upon her state of motion. But the A-theorist must suppose that there is now, has always been, and will always be a fact of the matter about which parts of space-time are really "present" all together; and these facts will privilege one way of dividing the four-dimensional block into a series of *truly* "co-present" slices. Since the A-theory posits structure within space-time that is not countenanced by relativity, it contradicts the theory – which is taken to say that there is a certain amount of structure, *and no more*.

This objector is saying, in essence, "If fundamental physics can't see a distinction between two classes of things, there is no distinction to be made." But we all believe in lots of distinctions physics "can't see." Arguably, fundamental physics does not require the existence of composite objects; all it needs to describe the events with which it concerns itself are things like tiny particles, gigantic fields, and space-time. Is there no difference, then, between groups of particles that make up larger wholes, and groups that do not? Should we conclude that, since physics does not mention things like dogs, there is no reason to believe in such things – as opposed to mere swarms of particles arranged in various canine shapes? (For more on this question,

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see chapter 8 in this volume.) The modal realist (represented in this volume by Phillip Bricker; see chapter 3) provides a different sort of example. He believes in all sorts of space-time universes, spatially and temporally unrelated to this one. We can all certainly contemplate such "other universes" as abstract possibilities. But physics alone will not tell us what they are like; at least, I can see no argument from statements in the language of physics, describing the contents of our universe and its laws, to the conclusion that merely possible worlds are *not* universes much like ours that happen to be spatially and temporally disconnected from us. Still, am I not perfectly justified in maintaining my conviction that *this* universe is special – that it is radically unlike the merely possible ones, if there are any such things? The fact that my belief finds no support from physics, and is not fundamentally a distinction between two physical kinds, is quite irrelevant.

Here is an example even closer to the current controversy, and more telling. Would anyone want to say that, if space-time were Newtonian - and therefore divisible into a privileged series of instantaneous slices - then our best theory of motion would be in conflict with the A-theory? No.10 Yet, if the objection from relativity is just the positing of a distinction not found in the physics, Newtonian physics should also provide an objection to the A-theory. Suppose the complete physical description of a Newtonian world is taken to consist in just Newton's timeless laws plus a "tenseless" description of the locations of particles and associated forces. Newtonian physics, so understood, would not "tell us" which time is present; and so the Newtonian B-theorist could mount a similar argument against the A-theory: physics cannot "see a difference" between the time that is present and the ones that are not, so there is no difference to be seen. Of course, if the description of the particles contained statements about where they are now, Newton's picture of the physical world would include a privileged present. But the same could be said about the relativistic four-dimensional block: If a description of the present distribution of matter were added to relativity (along with information concerning which distributions of matter were or will be present), then a privileged slicing of the manifold would reappear.

What should one conclude from the parity of Newton's theory and relativity on this score? At the very least, it appears that a simple "physics-doesn't-see-it" objection to the A-theory is not a radically new kind of objection that only became available after Einstein. If relativity is to provide a powerful new argument against the A-theory, the A-theorist must be convicted of something worse than merely positing a layer of space-time structure that relativity fails to mention. If that is the extent of the A-theorist's crimes, she cannot be convicted of the wholesale rejection of a perfectly good physical theory on metaphysical grounds.

But many have thought the conflict between relativity and the A-theory is much worse. The A-theorist does not just posit more space-time structure than is strictly needed to do physics; she is forced to reject relativity altogether, retreating to a theory of motion like Lorentz's. If this were what the A-theory requires, it would be deeply revisionary indeed. Lorentzian space-time is not just relativistic space-time plus some extra facts about a privileged slicing. A Lorentzian space-time manifold has Newtonian, not relativistic, structure. It includes absolute simultaneity and absolute sameness of position, neither of which has a place in relativity. And Lorentz's theory makes no use of the space-time distance relations that are fundamental to the relativistic

7 Why Think the A-Theory Is True?

My reason for believing the A-theory is utterly banal (some philosophers reading this essay will want to say "insipid"): it is simply part of commonsense that the past and future are less real than the present; that the difference between events and things that exist at present, and ones that do not, goes much deeper than the difference between events and things near where I am and ones that are spatially far away – in Australia, for example. These platitudes about past, present, and future may not immediately imply one particular version of the A-theory; perhaps no very specific metaphysical theory deserves to be called "the" common-sense view about time. But the various versions of the A-theory – at least, presentism and the most plausible versions of the growing-block and moving-spotlight theories – are metaphysical pictures that preserve this commonsense conviction. And the B-theory does not.

J. J. C. Smart is a B-theorist who is particularly forthright in his rejection of the platitudinous beliefs that imply the A-theory. The source of these beliefs is, he thinks, a kind of misguided "anthropocentrism" – though perhaps "egocentrism" would be just as appropriate a label for what Smart has in mind. At each moment, I am, quite naturally, especially interested in the place in time that I happen to occupy right then; and, from this special interest, I slide into the false conviction that my place in time is also *objectively* more important than the others. According to Smart, when you become a B-theorist, you adopt a more accurate perspective: you come to recognize that this particular time is no different than any other – it merely happens to be more important to you while you are located at it.

In this final section, I first explain what I mean by saying that the A-theorist's favorite platitudes about the deep difference between past, present, and future are "part of commonsense." And then I say why their having this status should be thought to count in their favor.

It would be a mistake to think of "commonsense" as a faculty, in the full sense of the word. It is not a special source of human knowledge – a distinctive and innate method by means of which we human beings gather information about the world, like sight or hearing. What it is for some statement to be commonsensical is just for it to seem obviously true to most sane human beings; for it to be part of the stock of things we all – or at least almost all of us – take for granted. Is the A-theory part of commonsense? I think so. Everybody knows that when events and things "recede into the past" they are very different from the way they are when present; and that the future is a "realm of mere possibilities, not realities." These are truisms denied by

a relatively small group of people – basically, people who have become accustomed to using spatial metaphors to understand temporal notions (as one does when drawing space-time diagrams or reading the more consistent science fiction stories about time travel).

Still, how does the ubiquity of belief in the A-theory constitute serious support for the view? Haven't we discovered that, at various times in our history, the vast majority of us have taken things to be obvious that turned out to be provably false – for instance, that the sun rotates around the earth? Why think the A-theory is any better?

Of course it is true that a great many things that have seemed obviously true to most people have turned out, upon inspection, to be false. All I insist upon, however, is that something's being commonsensical must be allowed to count very strongly in its favor, other things being equal. Those who deny this relatively modest role to commonsense are courting extreme skepticism about much more than just the A-theory.

Epistemology is the philosophical examination of knowledge and related notions. such as evidence and rationality. One task of epistemology is to explore the question each of us can put by asking, "What is it reasonable for me to believe?" Epistemologists have learned something from the failure of modern attempts, from Descartes onward, to find absolute certainties and infallible chains of reasoning that take us from these certainties to the rest of the things we think it is reasonable for us to believe. The moral is this: unless we are willing to become extreme skeptics, we must allow that it is reasonable to believe things that seem obviously true, in the absence of special reasons to doubt them; and we must allow this even if the beliefs are admittedly not certainties, and cannot be "proven" in any interesting sense of the word. This conclusion privileges commonsensical beliefs. To be part of commonsense, a thing must seem obvious to almost everyone. So, for almost everyone, it is reasonable to believe it - in the absence of serious objections. It is "innocent until proven guilty." Now, one reason to doubt the truth of some seemingly obvious statement would be the fact that it is disbelieved by many other people whom one takes to be equally well placed to have an opinion on the matter. But if some particular example of an obvious truism is part of commonsense, then it is widely held; and so, assuming most people are well placed to have an opinion about its subject matter, it has passed a further test of reasonableness. For a belief to be part of commonsense is, then, a considerable "epistemic boon" or "plus."

Those who accept the commonsensical platitudes about the past, present, and future, are, therefore, at least justified in regarding the A-theory as "innocent until proven guilty." I take it to be as innocent, at least on first pass, as many other commonsensical beliefs that skeptical philosophers have tried to undermine: for example, the belief that there is a world of objects "outside" my mind, not dependent upon anyone's awareness of them for their existence; the belief that others have experiences much like mine and are not mere "zombies"; and the belief that we can reach justified conclusions by relying upon induction (an example of "relying upon induction" is postulating laws of nature that are universally true on the basis of a limited number of observations confirming the laws). All these commonsensical beliefs (and many more besides) have been challenged by skeptics; and their arguments often have a

certain plausibility – that is, their weakest premises are philosophical statements that sound at least moderately reasonable. Most intelligent adults, when confronted by the cleverest skeptical arguments for the first time, do not immediately see the best way to resist them. (Indeed, in some cases, there is considerable disagreement about how to resist them even among philosophers; and widespread agreement only that, one way or another, the skeptical arguments must be unsound.) When typical skeptical arguments are brought to bear upon beliefs as innocent as these targets, it is more sensible to conclude that there is something wrong with the premises (even if one cannot quite put one's finger on it) than to accept their conclusions. And it is more reasonable to reject the least plausible premise of these skeptical arguments on the basis of the falsehood of the conclusion – even if that premise seemed true, when one first heard it – than to become a skeptic. Why? Because the conclusion is the rejection of something that is part of commonsense – something that all but a few of us take to be utterly obvious.

So, unless we are prepared to become serious skeptics, we should admit that being part of commonsense gives a belief a *non-negligible* positive status. Such beliefs are not something that skeptical philosophers should expect us to give up at the merest hint of controversy, or in the face of anything but a powerful case against them. Everything turns, then, on positive arguments against the A-theory. I was not much impressed with the truthmaker objection against presentism; and I can here only report that other metaphysical arguments against the A-theory in general and presentism in particular leave me unperturbed, though sometimes not sure *exactly* what to say. Skepticism on the basis of these arguments seems to me to be no more warranted than in many other cases in which we side with commonsense, while not being entirely certain what is wrong with the skeptic's argument.

Objections to the A-theory based on relativity are more troubling – mainly because the progress of science has taught us to be extremely wary of putting much stock in the details of our untutored judgments about how causes operate, and what the laws of nature are like. We have ample evidence that, in these matters, not everyone is equally well placed to know the truth; and in that case, we should trust the experts, not the deliverances of commonsense. Now, the scientific experts support relativity (though not unequivocally, given the difficulty of unifying relativity and quantum mechanics). Fair enough. But, if I am right, the arguments that are supposed to lead from relativity to the falsehood of the A-theory are not very impressive.

To sum up: I find that – like most people throughout history – I believe things that imply the A-theory. Indeed, affirmative answers to (1) and (2), the questions with which we began, seem obviously right. It is, I claim, reasonable to believe something that seems obvious, unless there are significant reasons to doubt it; the commonsensical is "innocent until proven guilty." If I have correctly assessed the collective force of the arguments against the A-theory – those from metaphysical principles and relativity – then the innocence of the A-theory remains relatively unsullied. I would not claim to know that that the A-theory is true; but, in my view, few philosophers should claim to know the substantive philosophical doctrines they defend against their equally intelligent and well-informed philosophical opponents. I do insist, however, that it remains reasonable for me to believe it. And that is often the best one can say for a metaphysical theory.¹³

Notes

- 1 The terms "A series" and "B series" were introduced in McTaggart (1908).
- 2 Augustine, p. 269 (Book XI, §20).
- 3 Augustine, p. 267 (Book XI, §18).
- 4 Broad's defense of the growing block view is reprinted as ch. 12 of van Inwagen and Zimmerman 2007.
- 5 Arthur Prior is famous for lodging a similar objection against the B-theory of time, under the slogan "Thank goodness that's over!" See Prior (1996: 50).
- 6 The question is asked by Braddon-Mitchell (2004) and Merricks (2006).
- 7 Those based upon McTaggart's argument against the reality of time are singularly unimpressive. For criticism of McTaggart, see Broad (1998).
- Chapter 2 of this volume continues the long-running debate about laws of nature.
- 9 For an in-depth discussion of "truthmaker objections," see Merricks (2007).
- 10 This is not strictly true! My colleague Frank Arntzenius would say this (and did). But he is gutsier than most; not many will be prepared to go so far.
- 11 See Zimmerman (forthcoming). Other A-theorists e.g. Craig (2001) argue that Lorentzian space-time is not so bad, after all.
- 12 See Smart (1963: 132-42).
- 13 This paper benefited from comments I received in conferences or colloquia at the University of Texas (Austin), Leeds, Geneva, and Oxford. In addition, I am grateful to Frank Arntzenius, John Hawthorne, Franklin Mason, Tim Maudlin, Ted Sider, and Jason Turner for discussions in which I learned (or tried to learn) a great deal about relativity and the ways it might conflict with presentism. None of them should be held responsible for whatever confusions remain in this paper - with the possible exceptions of Ted and Frank, who went above and beyond the call of collegial duty, providing comments and suggestions on late drafts ... and this is the thanks they get!

References

- Adams, Robert M. 1986. "Time and Thisness," in Peter A. French, Theodore E. Uehling, and Howard K. Wettstein, eds., Midwest Studies in Philosophy: Volume 11 (Minneapolis: University of Minnesota), pp. 315-29.
- Augustine. 1961. Confessions, trans. R. S. Pine-Coffin (Harmondsworth: Penguin).
- Braddon-Mitchell, David. 2004. "How Do We Know it is Now Now?" Analysis 64: 199-203.
- Broad, C. D. 1923. Scientific Thought (London: Routledge & Kegan Paul).
- -... 1998. "McTaggart's Arguments Against the Reality of Time: An Excerpt From Examination of McTaqqart's Philosophy," in van Inwagen and Zimmerman, eds. (1998), pp. 74-9 (also to appear as ch. 10 in van Inwagen and Zimmerman, eds. (2007).
- Craig, William Lane. 2001. Time and the Metaphysics of Relativity (Dordrecht: Kluwer Academic Publishers).
- Forrest, Peter. 2006. "General Facts, Physical Necessity, and the Metaphysics of Time," in Zimmerman, ed. (2006), pp. 137-52.
- McTaggart, J. McT. E. 1908. "The Unreality of Time," Mind 17: 457-74.
- -... 1998. "Time: An Excerpt From The Nature of Existence," in van Inwagen and Zimmerman, eds. (1998), pp. 67-74 (also to appear as ch. 9 in van Inwagen and Zimmerman, eds. (2007)).

- Merricks, Trenton. 2006. "Goodbye Growing Block," in Zimmerman, ed. (2006), pp. 103-10. -.. 2007. Truth and Ontology (Oxford: Clarendon Press).
- Prior, Arthur. 1996. "Some Free Thinking About Time," in Jack Copeland, ed., Logic and Reality (Oxford: Clarendon Press), pp. 47-51; repr. as Ch. 14 in van Inwagen and Zimmerman (2007).
- Smart, J. J. C. 1963. Philosophy and Scientific Realism (London: Routledge & Kegan Paul). Smith, Quentin. 1993. Language and Time (New York: Oxford University Press).
- van Inwagen, Peter and Dean Zimmerman, eds. 1998. Metaphysics: The Big Questions (Malden, MA: Blackwell).
- -, eds. 2007. Metaphysics: The Big Questions, 2nd edn. (Malden, MA: Blackwell).
- Williamson, Timothy. 1999. "Existence and Contingency," Proceedings of the Aristotelian Society, suppl. vol. 73: 181-203.
- Zimmerman, Dean, ed. 2006. Oxford Studies in Metaphysics, vol. 2 (Oxford: Oxford University Press).
- -... Forthcoming. "Presentism and Other A-theories," in Craig Callendar, ed., The Oxford Handbook of Time (Oxford: Oxford University Press).