

§0. Introduction

Arthur Prior's argument for the A-theory¹ of time in "Thank Goodness That's Over" is perhaps his most famous and well-known non-logical work; having been responded to in well over 100 journal articles. Still, I think that this paper is one of his most misunderstood works (and, ironically, the largest misunderstandings are of the logic used in the paper) and, because of that, that much of its brilliance has yet to be properly appreciated. As a first approximation, I'd suggest that the explanation of this is that it has been treated as though it were written on (what has been mythologized as) the model of a standard work done throughout the history of analytic philosophy. That is, it has been assumed that what Prior was doing was *deductively* demonstrating the truth of a proposition which can be discussed via any sentences with the same semantic content. In this paper, I hope to show that this assumption is wrong on two fronts:

- (1) Most importantly, the strongest reading of the structure of Prior's argument is as an abduction rather than as a deduction.
- (2) Many of the most important lessons of the argument are lost by focusing on the bare propositional content of its premise and conclusion statements. In other words, we can learn as much from the way this argument is presented and expressed as we can from what is expressed.

For these reasons, I will proceed as follows:

- (i) I will first present Prior's thank-goodness argument deductively as it is traditionally understood and the most damaging response to the traditional formulation.
- (ii) I will then reformulate the thank-goodness argument as an abduction and show how this undermines the critique which is successful against the deductive formulation.
- (iii) I will quickly illustrate a few pieces of what I see to be of lasting and far-reaching importance about this argument outside of the metaphysics of time.

§1. Prior's argument as traditionally understood

In his famous 1959 paper, "Thank Goodness That's Over", Prior gives the following as reason to accept the A-theory over the B-theory of time:

Even in [a] perpetual dateless haze one somehow communicates, one makes oneself understood, and with time-references too. One says, e.g. 'Thank goodness that's over!', and not only is this, when said, quite clear without any date appended, but it says something which it is impossible that any use of a tenseless copula with a date should convey. It certainly doesn't mean the same as, e.g. 'Thank goodness the date of the conclusion of that thing is Friday, June 15, 1954', even if it be said then. (Nor, for that matter, does it mean 'Thank goodness the conclusion of that thing is contemporaneous with this utterance'. Why should anyone thank goodness for that?)²

Typically, this enthymematic prose formulation is made into an explicit premise-conclusion argument in something like the following way:

- P1- When I say "thank goodness that's over" after e.g. I've had a headache, I'm thanking goodness for the fact expressed by the A-statement "my pain is past".
P2- Suppose B-theory is right.

¹ I assume familiarity with this terminology throughout. For its origin, see McTaggart, J.M.E. "The Unreality of Time". *Mind* Volume 13, pp. 457-474 (1908). For a contemporary introduction, see the SEP article on McTaggart.

² P. 17 of Prior, A.N. "Thank Goodness That's Over". *Philosophy*, Vol. 34, No. 128 (Jan., 1959).

- P3- If B-theory is right, for all true (tokens of) A-statements, there is a B-fact which makes the A-statement true. (Definition)
- SC1- For all true (tokens of) A-statements, there is a B-fact which makes the A-statement true. (P2, P3, Modus Ponens)
- SC2- When I say “thank goodness that’s over” after I’ve had a headache, the fact I’m thanking goodness for and which is expressed by “my pain is past” is a B-fact. (P1, SC1, Universal Instantiation)
- P4- All B-facts are eternal (i.e. always exist) and fixed (i.e. never change). (Definition)
- SC3- When I say “thank goodness that’s over” after I’ve had a headache, the fact I’m thanking goodness for always exists and never changes. (P4, SC2, UI)
- P5- If, when I say “thank goodness that’s over” after I’ve had a headache, the fact I’m thanking goodness for always exists and never changes, then I can reasonably thank goodness for my pain being over during my pain.³
- SC4- I can thank goodness for my pain being over during my pain. (SC3, P5, MP)
- SC5- If B-theory is right, then I can thank goodness for my pain being over during my pain. (P2-SC4, Conditional Derivation)
- P6- But, it is absurd to hold that I can reasonably thank goodness for my pain being over during my pain.
- CONCLUSION- B-theory is wrong. That is, there exist A-times. (SC5, P6, Modus Tollens)

As it turns out, what seem to be the most successful counters to this argument from B-theorists don’t deny that the argument is valid or that its premises are intuitively plausible. That is, rather than try to argue that there is some particular weak link in the argument through a direct attack on one of the premises or one part of the chain of reasoning, the method of counterargument almost always involves invoking an analogy between time and space. In doing so, one creates an argument with the same form as this one, only with corresponding spatial concepts substituted for temporal concepts, in the hopes of obtaining an absurd result. Thus, rather than saying precisely where the temporal argument is weak, the B-theorist argues that it *must* be weak somewhere since it’s being strong would mean the spatial argument was strong as well. Doing this, critics of Prior’s argument end up with something like the following analogous argument:

- P1- When I say “thank goodness that’s over there” after e.g. I’ve been in a fire, I’m thanking goodness for the fact expressed by the A-statement “the fire isn’t here”.
- P2- Suppose B-theory is right.
- P3- If B-theory is right, for all true (tokens of) A-statements, there is a B-fact which makes the A-statement true. (Definition)
- SC1- For all true (tokens of) A-statements, there is a B-fact which makes the A-statement true. (P2, P3, Modus Ponens)
- SC2- When I say “thank goodness that’s over there” after I’ve been in a fire, the fact I’m thanking goodness for and which is expressed by “the fire isn’t here” is a B-fact. (P1, SC1, Universal Instantiation)
- P4- All B-facts are eternal (i.e. always exist) and fixed (i.e. never change). (Definition)
- SC3- When I say “thank goodness that’s over there” after I’ve been in a fire, the fact I’m thanking goodness for always exists and never changes. (P4, SC2, UI)

³ Since it is the B-fact I am thanking goodness for and that fact exists and is exactly the same during my pain.

P5- If, when I say “thank goodness that’s over there” after I’ve been in a fire, the fact I’m thanking goodness for always exists and never changes, then I can reasonably thank goodness for the fire being away from me while I’m in it.

SC4- I can reasonably thank goodness for the fire being away from me while I’m in it. (SC3, P5, MP)

SC5- If B-theory is right, then I can reasonably thank goodness for the fire being away from me while I’m in it. (P2-SC4, Conditional Derivation)

P6- But, it is absurd to hold that I can reasonably thank goodness for the fire being away from me while I’m in it.

CONCLUSION- B-theory is wrong. That is, there exist A-places. (SC5, P6, Modus Tollens)

Since nobody is willing to accept the conclusion that there is some ontologically distinct *here*, the arguments share a similar logical form, and the premises are equally plausible, it seems like we are in no place to admit an ontologically-distinct *now* based on the original argument. I agree with the B-theorist on this matter. That said, I simply think that this isn’t the proper way to understand Prior’s argument. Finally, I turn to making good on this promissory note.

§2. Reformulating the argument

Interestingly enough, there was a dispute in the literature some quarter of a century after the publishing of this paper over the exact premises, structure, and conclusion of Prior’s argument. This debate went on under the assumption that it is clear that the general sentiment Prior is expressing is that A-theory is in a better position to account for certain (illocutionary) actions we undertake than is B-theory. That said, it was taken to be unclear whether this conclusion was intended to be shown through an argument directly for A-theory or indirectly through a criticism of B-theory.

Unfortunately, it was never asked whether the argument was intended to be a (deductive) demonstration or, rather, an (abductive) inference to the best explanation. To show that this should’ve been asked, I move to a second version of Prior’s Thank-Goodness argument. As I said, this second version of the argument is abductive in nature, as opposed to the deductive nature of the first version. This is important to notice because it will, in part, be facts about abductive reasoning which will allow us to refute the B-theorist’s counterargument. Specifically, given an abductive argument, it needn’t be the case that admitting A-times requires admitting A-places, *even if* there is a total analogy between the premises in the corresponding arguments. Before we get to justifying this claim, we need to see what this interpretation of Prior’s argument looks like as well as the B-theorist’s response.

P1- A-theoretic claims are not reducible. For instance, “my pain is past” serves roles that its B-theory counterpart cannot.

P2- A-theoretic claims are not dispensable. That is, A-theoretic claims are unavoidably important to our acting in the world. (e.g. “The meeting starts now!”)

P3- There is a necessary temporal presence of experience. That is, every token of “my experience is now” must be true.

CONCLUSION: Since A-theory would best explain P1-P3, A-theory is the correct view of time.

As before, the B-theorist gives a counter-argument based on the analogous nature of space and time. This time, substituting spatial concepts for temporal concepts we get the following:

P1' - A-theoretic claims are not reducible. For instance, "the fire isn't here" serves roles that its B-theory counterpart cannot.

P2' - A-theoretic claims are not dispensable. That is, A-theoretic claims are unavoidably important to our acting in the world. This can be seen by imagining you have fallen down a hole and a search team is looking for you. You hear them nearby, but the fall has left you in a daze and you can't remember anything about your surroundings prior to the fall. In order that they may find you, you yell "I'm over here".

P3' - There is a necessary spatial presence of experience. That is, every token of "my experience is here" must be true.

CONCLUSION': Since A-theory would best explain P1'-P3', A-theory is the correct view of space.

Again, since we're unwilling to hold on to an A-theory of space, the proponent of B-theory says that, without more premises to add to the first argument, we can't hold on to the A-theory of time. That said, such a claim involves mistakenly falling back on one's deductive prejudices. Their reasoning most likely implicitly relies on the following assumption: For any sets of premises, S and P, if S is a subset of P, then the set of consequences of S is a subset of the set of consequences of P. This is why they say that we must add more premises to the temporal argument to establish the conclusion as a real consequence. Unfortunately, this property known as 'monotonicity' doesn't hold when the consequence relation is the abductive one rather than the deductive one. In order to see this, consider the following two (seemingly) good abductions:

P1- Tom hears voices coming from downstairs.

CONCLUSION: There are people downstairs talking.

P1- Tom hears voices coming from downstairs.

P2- Tom lives alone.

P3- Tom checks downstairs and sees no evidence of people.

P4- Tom has recently taken LSD.

CONCLUSION: There are no people downstairs talking. Tom was hallucinating.

Both of these seem good arguments to the best explanation. Furthermore, the second argument's premise set is a superset of the first arguments and the set of consequences of the first premise set is not contained in the set of consequences of the second premise set.

With these facts in mind, I submit that the correct conclusion to draw here is that it requires more to say that A-places *aren't real* rather than it requires more to say that A-times *are real*. That is to say, if the only things we knew about space were those presented in the three premises, P1'-P3', then it would not be crazy for us to conclude that A-places are real. If all we knew was that A-place statements are irreducible and indispensable, then their expressing objective, mind-independent facts would constitute a good explanation. Thus, what makes us want to say that A-places aren't real must be the existence of some additionally relevant facts in our knowledge of space. In this way, we see that, in addition to being non-monotonic, abduction isn't content-independent like deduction is. When determining whether or not something counts as a good explanation, we cannot rely entirely on the form of the premises involved and the relations between them. This is why we cannot be content with focusing on just the analogies between the premises of the two arguments. Rather, we must take into account other facts contained in our background knowledge which are specific to the subject matter being discussed in each argument.

One such fact that I think is relevant is that A-places are different for different people. Because of this, why would we want to say that A-places pick out some objective feature of the world, rather than something only subject-relative? I simply think that we wouldn't and shouldn't. This can be put in terms which relate it to P3'. In particular, we might say that often times there are tokens of "your experiences are here" which are false. For instance, if I was in Buffalo, NY talking on the phone with my brother in Bethesda, MD and I said to him "your experiences are here", I would be saying something false. On the other hand, if I had said "your experiences are now, I would be saying something true. That is, the necessary temporal presence of experience admits of a second person formulation, whereas the spatial version does not. For this reason, we don't make the conclusion that A-places are real, while holding on to the conclusion that A-times are. Therefore, we have seen that, since abduction is not content-independent, we can deny that if space and time are relevantly analogous, we can admit the reality of A-times only if we admit the reality of A-places. This allows us to accept version two of Prior's argument as a strong one for the A-theorist.

§3. Prior's Modes of Presentation and Argumentation

Another aspect of Prior's work which I believe hasn't gotten enough attention is the extent to which, in formulating it, he is extremely concerned with accounting for the roles time and temporal concepts play in our daily lives and ordinary experiences. The irreducibility and indispensability of A-statements are facts which impact all human beings in very important ways.⁴ I think that this focus may point to important insights regarding the proper roles, methods, and attitudes of philosophy. Most importantly, I think it can form the basis of a refutation of recent claims by Saul Kripke and others to the effect that "the intention of philosophy was never to be relevant to life"⁵. In recent work with Matt Chick, I have argued for the claim that the results of philosophical inquiry are important to the public and their ordinary lives.⁶ Here, I wish to argue that this connection between philosophy and the public is even tighter; by showing that facts relevant to life and to the public should be used in coming to results in philosophical inquiry as well.⁷ Some example questions I would like to ask along this front include the following:

- (Q1) Can this notion of indispensability mentioned in version two of the argument be generalized to give a criterion for prima facie acceptability of a philosophical position?
- (Q2) Does it give us a criterion for determining the burden of proof in a philosophical dispute?
- (Q3) Is there any relationship between the mode of argumentation used here and extant notions of common sense?
- (Q4) Does this argument provide fodder for abstracting to a general principle for what thought experiments in philosophy should be like?

⁴ That these facts were used as evidence on the issue of the metaphysics of time makes Prior's work particularly relevant given that there are many who think that this issue is settled by the Special Theory of Relativity.

⁵ Andreas Saugstad, "Saul Kripke, Genius Logician", accessed October 18, 2013, <http://bolesblogs.com/2001/02/25/saul-kripke-genius-logician/>.

⁶ Chick, Matt and LaVine, Matthew (2014) "The Relevance of Analytic Philosophy to Personal, Public, and Democratic Life," *Essays in Philosophy*: Vol. 15: Iss. 1, Article 10.

⁷ This brings us to the end of the remarks with which I think Prior would be sympathetic. Rather, much like Kripke said of his *Wittgenstein on Rules and Private Language* ("...the present paper should be thought of as expounding neither 'Wittgenstein's' argument nor 'Kripke's': rather Wittgenstein's argument as it struck Kripke..."), the present section should be thought of as expounding Prior's argument as it struck LaVine.