

B-time: a reply to Tallant

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The aim of Jonathan Tallant's recent article 'What is B-time?' (2007) is to demonstrate that B-time – which holds that time consists solely of tenseless temporal relations – is something of which we have no understanding, and that, therefore, if mind-independent time is B-time, then time is unreal. Of course, implicit in his own position is that since time is plausibly real and we *do* understand what time is, the correct ontology of time is A-time or tensed time. How then does Tallant purport to substantiate the crucial claim that 'we have no understanding of what "B-time" is' (2007: 147)?

The overall structure of his argument may be stated as follows:¹

Argument A

- (1) Our only awareness of the reality of time comes via our phenomenology of temporal passage.
- (2) Our temporal phenomenology is mind-dependent and reflects no feature of reality.

¹ We note that from this point on we will always compress Tallant's argument into an enthymeme, suppressing the required premiss 'If real time is B-time, then we would plausibly have an understanding of what B-time is'.

- (3) Our epistemic access to the reality of time is, in fact, simply epistemic access to our own inner phenomenology. It doesn't reflect the way reality is.
- (4) Hence, we have no understanding of what 'B-time' is. (Tallant 2007: 147)

In this paper we shall argue that this argument fails, since it is either invalid because it equivocates on the notions of 'temporal phenomenology' and 'phenomenology of temporal passage', unsound because it rests on one or more false premisses, or question-begging because it assumes an A-theoretic ontology of time.

To see what is involved in these claims and to justify them, consider premiss (1). What does Tallant mean by 'temporal passage'? If by 'temporal passage' Tallant means something intrinsically tensed or A-theoretic (as we shall see he clearly does), then premiss (1) begs the question. We would not accept that our only awareness of the reality of time comes via our phenomenology of events donning and doffing the A-properties of *pastness*, *presentness* and *futurity* or any other A-theoretic account of temporal passage.

For the B-theorist the phenomenology of temporal passage is B-theoretic, that is, temporal passage or the dynamic aspect of time is grounded in a temporal succession or transition from earlier to later temporal items.² Broad and Russell take the relation of 'earlier than' (and hence the 'passage' of time) to be empirically given in cases of a rapid succession of events or rapid change. Consider the following passage from Broad's early B-theory period:

Temporal characteristics are among the most fundamental in the objects of our experience, and therefore cannot be defined. We must start by admitting that we can in certain cases judge that one experienced event is later than another, in the same immediate way as we can judge that one seen object is to the right of another. A good example of the immediate judgment in question is when we hear a tune and judge that of two notes, both of which come in our specious present, one precedes the other. Another direct judgment about earlier

² We believe that B-theorists should not fear that the words 'temporal succession or transition' commit them to A-succession or A-transition. Succession is not an A-relation, but it is not a static relation either. Succession is not a transition from non-existence to existence or from *futurity* to *presentness* to *pastness*, but it does not follow that it is no transition at all. A transition is a temporal succession of opposite states and succession is based on the earlier-than relation (see Tegtmeier 1999). Such a B-fact itself doesn't change, but its object *is* change and in that sense involves a transition from earlier to later events or particulars (or more neutrally, temporal items).

and later is made in genuine memory. On these relations of before and after which we immediately recognize in certain objects of our experience all further knowledge of time is built. (Broad 1921: 334)

If ‘temporal passage’ is understood B-theoretically, as the transition from earlier to later temporal items, then the objects of our temporal phenomenology are *not* mind-dependent and premiss (2) is false. Thus, whether the phenomenology of temporal passage is understood in A- or B-time terms, the argument rests on either a question-begging or false premiss and consequently the conclusion has not been demonstrated. And if the phenomenology of passage is understood B-theoretically in premiss (1) and A-theoretically in premiss (2) then (perhaps in some sense) both premisses are true, but the argument is invalid since it is guilty of the fallacy of equivocation.

The confusions and equivocations continue when we turn to the second premiss, which has a similar ambiguity or, we should say, a double ambiguity. ‘Temporal phenomenology’ may refer to the *awareness* of the reality of time or it may refer to the *object* or *intention* that we are aware of. Clearly, for the B-theorist, the *object* of the phenomenology of temporal passage, namely, B-relations is *not* mind-dependent, although the *awareness* of them is. On the other hand, if Tallant assumes that the object of temporal phenomenology is A-theoretic passage, that is, some kind of tensed fact, then not only the *awareness* of temporal passage, but time itself is not reflective of a mind-independent reality (since there are no tensed facts). But if Tallant concludes that the reality of time is mind-dependent, then his argument is based on the confusion of the *awareness* or *sensation* of passage with the *object* we are aware of, and the A-theoretic with the B-theoretic interpretation of that object.

In other words, in premiss (2) of Argument A ‘temporal phenomenology’ may mean either (a) the experience of A-theoretic passage or A-facts (b) the experience of B-theoretic passage, or B-relations or (c) the *sensation* or *awareness* of A- or B-theoretic passage. If by ‘temporal phenomenology’ we mean (c) then we get the following argument:

Argument B

- (1′) Our only awareness of the reality of time comes via sensation or awareness.
- (2′) Our sensation or awareness of time is mind-dependent and reflects no feature of reality.
- (3′) Our epistemic access to the reality of time is, in fact, simply epistemic access to our own inner phenomenology. It doesn’t reflect the way reality is.
- (4′) Hence, we have no understanding of what ‘B-time’ is.

Understood as (c), the claim in premiss (2') that our temporal phenomenology is mind-dependent is certainly true, our *sensation*, *awareness*, or *perception* of time cannot exist independently of the mind, but premiss (1') is false: we are not only aware of the sensation or perception of B-time, we are also aware of the object of perception or B-time itself and, as we shall discuss below, in reflective judgments we are also aware of the B-relations between states of consciousness and their objects, between states of consciousness themselves and between the objects of states of consciousness. Moreover, premiss (3') is false too, since our awareness of time is not limited to our own inner phenomenology. Only by confusing the awareness of time with B-time itself can epistemic access to time be limited to one's own inner phenomenology. Thus, understanding premiss (2) as (2') preserves its truth, but then it becomes irrelevant to proving the conclusion since it renders the argument unsound.

Interpreting 'temporal phenomenology' in premiss (2) as (a) the experience of A-theoretic passage, fares no better, for then we get:

Argument C

- (1'') Our only awareness of the reality of time comes via the awareness of A-time.
- (2'') Our awareness of A-time is mind-dependent and reflects no feature of reality.
- (3'') Our epistemic access to the reality of time is, in fact, simply epistemic access to our own inner phenomenology. It doesn't reflect the way reality is.
- (4'') Hence, we have no understanding of what 'B-time' is.

However, in this argument, premiss (2'') is extremely misleading, if not question-begging, for it suggests that while 'now-ness' or 'presentness' is not an *intrinsic* property of what we perceive, 'now-ness' is added completely by the mind of the temporally cognizant agent' (Tallant 2007: 148). But the B-theorist need not recognize the existence of 'now-ness' as a property that could be added to anything. The knowledge (at t_1) of an event as presently occurring is my judging (at t_1) that it is occurring simultaneously with my awareness (or perception at t) of it. Thus, even though the judgement wouldn't occur without a mind making the judgement, it does not follow and indeed it is not the case that in making the judgement that an event is present I am adding anything (either mind-dependent or mind-independent) to the event. Nor does it follow that our epistemic access to the reality of time is simply epistemic access to our own inner phenomenology, and thus that time is unreal. For our judging (at t_1) that a perception (at t_1) of an object is simultaneous with the object perceived, is an awareness of an objective temporal relation,

even if one of the terms is mind-dependent. (We shall return to this point shortly.)

Finally, interpreting ‘temporal phenomenology’ as (b) the experience of B-theoretic passage or B-relations, renders the argument unsound, resting on false premisses:

Argument D

- (1^{'''}) Our only awareness of the reality of time comes via our phenomenology of (B-theoretic) temporal passage.
- (2^{'''}) Our temporal phenomenology (cognition of B-theoretic temporal passage, e. g., B-relations) is mind-dependent and reflects no feature of reality.
- (3^{'''}) Our epistemic access to the reality of time is, in fact, simply epistemic access to our own inner phenomenology. It doesn’t reflect the way reality is.
- (4^{'''}) Hence, we have no understanding of what ‘B-time’ is.

Clearly, unless one confuses the cognition (awareness) of B-relations with the B-relations themselves, or assumes that whatever is perceived must be perceived in order to exist, premisses (2^{'''}) and (3^{'''}) are false and *Argument D* is unsound.

Tallant’s argument is analogous to a Berkeleyan or Humean argument against Locke. Since we have never experienced the temporal reality of B-theorists, there is no justification for believing that we can have any concept of what B-time is like, or even that there is such a reality. To put the argument otherwise, since all our experience is intrinsically tensed and so, supposedly on the B-theory, mind-dependent, we have no basis for the concept of tenseless temporal relations or for believing in the mind-independent existence of B-time.

The key premisses in Tallant’s argument are that the B-theoretic account of temporal phenomenology is *wholly* mind-dependent and that ‘Epistemic access to the reality of time is, in fact, simply epistemic access to our own inner phenomenology’ (2007: 147). He gives three arguments for those premisses. The first concerns the ‘1.1 *Experience of now-ness*’ (2007: 148). Tallant quotes Grünbaum, who maintains that ‘an event is now at time *t* only if a *mind-possessing* organism M is conceptually aware of experiencing at that time either the event itself or another event simultaneous with it in M’s reference frame’ (2007: 148), and infers that ‘the “now-ness” [or monadic property *presentness*] is added completely by the mind of the temporally cognizant agent’ (2007: 148). In other words, since the event doesn’t literally possess the property of now-ness or presentness, the mind adds that property to the event and so the experience of now-ness is mind-dependent. But that misunderstands Grünbaum’s analysis, since

he is not claiming that there is a mind-dependent monadic property of presentness added to anything – that would just play into Tallant's hands. Rather, we would say that the experience of 'now-ness' is not the perception of any mind-dependent property, but simply the awareness of experiencing (perceiving) the event. To experience an event as present at time t is just to be aware of it being presented at time t , and while that certainly requires a mind-possessing organism, it does not imply that the object perceived has now-ness or presentness added to it by the mind.

In Tallant's second argument for the mind-dependence of temporal becoming, based on the '1.2 *Sensation of passage*' (2007: 148), an analogous misunderstanding of the B-theoretic account of passage occurs. Tallant quotes Clifford Williams, who says that 'the experience of passage is not the experience of the present being an extra, mind-independent property of events' (2007: 148). Tallant concludes that 'The sensation of movement through time is not a sensation that reflects temporal becoming. Thus, whatever the sensation of passage does show us, it does not reflect any mind-independent feature of reality' (2007: 148). This strikes us as thoroughly confused. Tallant's claim is that the awareness of movement through time is an awareness ('sensation') of temporal becoming only if 'temporal becoming' is understood A-theoretically (for example, as the movement of presentness along a (B-) series of events), but Williams explicitly rejects that interpretation of 'temporal becoming'. Thus, from the fact that the awareness (experience, perception) of passage is not the perception of a moving present, that is, A-theoretic temporal becoming, it does not follow that the sensation of passage does not reflect a B-theoretic temporal becoming which is a mind-independent feature of reality. To think otherwise is to assume that B-theoretic phenomenology is intrinsically tensed and that is to beg the question.

Tallant's third claim in support of the mind-dependence of B-theoretic phenomenology is '1.3 *Experience is only ever experience of one time*' (2007: 149). We believe that this claim is false. While it is true that an experience can only occur *at* a time, it is not true that experience is only ever *about* one time. To see why we need to distinguish between episodic (time-fixed) perceptual consciousness, which humans and most animals possess, reflective consciousness, which only self-reflective beings like humans (and maybe other 'brainy' animals) possess, and the contents of these two states, which overlap in so far as reflection frequently utilizes the contents of perception, but not (usually at least) the reverse. The unique content of reflection contains among other things beliefs – at least those we can designate as objects of reflective thought (that excludes accounts of beliefs as dispositions, etc. that might be included in perception). It is the latter beliefs that Tallant's account runs roughshod over. Call these reflective beliefs. Reflective beliefs (RB) are important in so far as they help nail

down the epistemology of temporal relations. Though RBs may include reference to other beliefs (and even self-reference), they may also simply refer to other acts of consciousness, whether perceptual or reflective, as objects of thought. But more relevantly to our thesis here, an RB of a transtemporal nature that includes references to other mental states at other times also typically includes references to what those states refer to extramentally (in fact, when we are reviewing temporal beliefs about the times of physical events, for example, it is *only* the extramental reference-content we're interested in and not the mental events that convey(ed) them). So, taking that extramental content as relata of a relation that parallels (roughly) the times of the mental states that represent(ed) them, beliefs that are primarily about that extramental objective physical content reflect a parallel correlate of time order accompanying the time order of the mental states more directly related. Thus, the temporal relations between the physical extramental referents are real in part because the temporal relations between the correlate mental states are (though note that some other conditions of perceptual reliability must be fulfilled to exclude imparting real relations to, e.g., well-ordered dream events that appear to refer to physical things). Any B-theorist can make authoritative reflective judgments about different times, and so in the sense of 'experience' as an RB, even at one time, it is an RB about other times. Since an RB 'experience' at a time is 'of' times beyond its own occurrence, 1.3 is false.

Tallant argues that we can have no concept of what 'time' is on the B-theory since its temporal phenomenology – the B-theoretic experience of passage or now-ness – is purely mind-dependent and does not reflect any feature of a mind-independent reality. We have argued that his reasoning for that conclusion rests on his ambiguous use of the terms 'sensation' and 'experience' and his question-begging assumption that B-theoretic experience is of an A-theoretic ontology.

Tallant attempts to reply to some of these objections, but never, in our opinion, quite manages to avoid the problems that vitiate his arguments. For example, he considers the B-theoretic objection that his view fails to distinguish between *awareness* of passage as a mind-dependent entity and what that awareness is about, namely a mind-independent B-fact. But this, Tallant says, is to 'wilfully misunderstand' (2007: 151) his claim that B-theoretic phenomenology is *purely* mind-dependent. His point is that there is no feature of reality that is reflected by our experience of time in the way in which there is a feature of reality (such as the internal structure of light radiation) reflected by our experience of the secondary quality of colour. But this is not true. For example, as argued above, succession of events in reality is correlated with the perception of succession which in turn is the basis of our experience of time.

Tallant also considers the objection that our temporal phenomenology is B-theoretic since we experience temporal succession in a single experience. As Russell once put it,

Succession is a relation which may hold between two parts of one sensation, for instance between parts of a swift movement which is the object of one sensation; it may then and perhaps also when one or both objects are objects of immediate memory, be immediately experienced, and extended by inference to cases where one or both of the terms of the relation are not present. (Russell 1915: 213)

Thus, for Russell, temporal phenomenology is mind-independent since we are acquainted with the (tenseless) relation ‘earlier’ when we see a rapid movement or hear a sequence of two tones.

Tallant replies to this objection by quoting a self-ascribed B-theorist:

Our experience of this ‘earlier’ and ‘later’ structure is intrinsically tensed. That is to say that when I experience the extended nature of the specious present, when I experience temporal priority, it is as a *part* of the now. There are B-theorists [Falk] who have explicitly acknowledged this: ‘I for one cannot have non-A-perceptions’ (Falk 2003: 221). (Tallant 2007: 152)

There are, however, two problems with this argument. First, we do not accept the claim that one cannot have non-A-perceptions. For example, it is not my perceiving that an event, say, the clock striking 1 p.m. exemplifying *presentness* that gets me to believe that it is now time to go to my 1 p.m. meeting, but rather it is my being conscious (or judging) that ‘this’ perception of the clock striking at 1 p.m. is occurring at roughly the same time as the striking of the clock that does so.³ Second, and more importantly, it is simply not the case that our experience of the ‘earlier’ and ‘later’ structure is intrinsically tensed, that is, somehow founded on A-properties or A-facts. Since the ‘now’ is, for Russell, what is simultaneous with *this*, where *this* is an object of perception, it is consistent to say that I experience temporal priority as part of the now without that implying that the temporal phenomena, that is, the experience of succession, is intrinsically tensed, or founded on tensed properties or facts. The perceptual now is mind-dependent only in the sense that we would have no idea of it without our *perception* of objects, but it does not follow that the objects we perceive, which we judge through a reflective consciousness to

³ For those who might object that ‘this’ means ‘the perception occurring now’ we would reply that ‘this’ simply refers to the perception directly without attributing any property of *presentness* to it.

be simultaneous with the perception of them, do not contain real time, that is, parts that occur in succession.

In conclusion, what we have attempted to demonstrate is that Tallant's argument is a web of confusions and question-begging assumptions. He assumes at the outset and employs throughout the belief that temporal phenomenology is A-theoretic. He confuses (or fails to distinguish) 'experience' as a pre-reflective consciousness or as a perceptual consciousness, and 'experience' as a reflective consciousness or judgment whose objects may be successive pre-reflective consciousness (or the objects of such) that stand in mind-independent B-relations. In addition, he blurs the distinction between mental acts and their objects, and by so doing he supports his conclusion that temporal awareness, as explained by the B-theory or B-phenomenology of time, does not grasp any extra-mental B-relations.

Once the proper distinctions are made, however, and the question-begging assumptions avoided, we can see that the B-theory can maintain that the reality of time comes via our phenomenology of temporal passage, but deny that our temporal phenomenology is intrinsically tensed and mind-dependent and claim instead, as the early Broad once did, that 'On these relations of before and after which we immediately recognize in certain objects of our experience all further knowledge of time is built' (Broad 1921: 334).⁴

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⁴ We thank Heather Dyke and Joshua Mozersky for useful comments on an earlier draft of this paper.