

A Critical Examination of Abner Shimony's Transient Now

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Abstract

I criticize Shimony's argument from the *Transient Now* (Shimony 1993) that the B-series view of time is inadequate but offer a reading of that argument that is more charitable than one offered and rejected by Eilstein (1996). Shimony's argument turns on putative phenomenological features of the Now (singularity and numerical identity) but transience only arises as a logical implication of those features. Transience is thus a second order phenomenon. If these two features are accurate then the B-series cannot provide a complete account of the Now and Eilstein misses the role of Shimony's Phenomenological Principle (PP) in this regard. Holding a B-theoretic view then demands giving up the numerical identity of person-slices across time.

1. Introduction. It has been said that to have an adequate picture of animation does not require an animated picture (Savitt 2002b, 163). In the context of the debate over 'Becoming' versus static views of time, this is meant to squelch some prima facie doubts about the viability of a static view of time. One could press the issue though, by insisting that an animated picture nevertheless requires that *something* be animated. In "The transient *now*" (Shimony 1993), Abner Shimony attempts to parlay phenomenological features of the now (features which amount to its being animated) into an argument against the adequacy of a static or inanimate view of time.

There is no entirely satisfactory assessment of this argument. The transience argument appears almost as a sideline to Shimony's broader aim in the paper of arguing for the compatibility of a privileged Now with Relativity. For this reason, responses to the paper likewise focus on the compatibility issue, offering only a surface reading of the notion of transience which Shimony is attempting to explicate. The impression that transience is a sideline is not helped by Shimony's own somewhat cryptic presentation. The main premise, intended to exploit transience, is never stated fully, and the reader easily glosses over any novelty with the standard account of transience.

Shimony's argument is founded on, as is the the standard approach to transience, the widely endorsed and highly plausible intuition that we experience time as flowing. Appeal to the appearance of movement is a natural response to a static view of time and is standard fare in the arsenal of objectors, but no such appeal has yet proved decisive.¹

What is promising and novel about Shimony's version is that it goes beyond a naïve reading by not merely asserting that transience is part of the Now. Instead, we can take transience to be a consequence of two features that are less controversially part of one's

¹ See e.g., Broad (1938), Gale (1968), Geach (1972), Davies (1995), Dainton (2001) and Le Poidevin (2002). Even Smith's "degrees of existence" (2002) has the same flavour.

experience of the Now: **singularity** I am trapped within this Now and **numerical identity** I am identical with the subject that was trapped within that Now that I remember experiencing, say, yesterday.²

To maintain a static view of time in the face of the naïve version of Shimony's argument one need only give up transience as an objective part of experience. On the reconstructed version of the argument however, one or both of the more plausible features I identify must go. Rather than having no import for the static theory, the argument at least restricts the viable notion of personal identity on the theory. This restriction should not be surprising to those who hold a static view of time but at least it should clarify what the implications of the argument from the Transient Now are and in what way the argument betters (or least attempts to better) the Becoming view of time.

The success of Shimony's argument depends on some form of a Transience Condition (TC). Not only does the Now experience have to single out an instant but it must do so transiently and the transience must be of a kind unaccountable for on a static view. The TC must be strong enough to avoid capture by a static view while remaining plausible. I will exhaust the only candidate versions of TC, using some simple formalism to provide an accounting of the readings considered, but none will meet both criteria.

In Section 2 I lay out notation and conventions I'll be employing and some details of McTaggart's A and B theories. With this groundwork laid, I hope the presentation of Shimony's argument in Section 3 will be clearer than in his original paper.

Although Shimony's argument has largely been ignored or misunderstood, Eilstein 1996 is an exception to the former. Eilstein is correct that the argument is fallacious, at least on the reading she gives, but hers is what I've labelled the naïve reading, as I'll show in Section 5. I then turn, in Section 6, to the TC. There I attempt to ground the transience of the Now on the phenomenological features that an experience of the Now singles out the moment at which it occurs to the exclusion of all others and, this being the case, it must do so transiently because of the numerical identity condition. This will then provide a valid reason why the B-theory must, in principle, be inadequate. However, we will find no independent reason for accepting numerical identity. It's this that the B-theorist must give up.

2. A brief look at the A and B-series. The static view of time will be exemplified here by the B-series description of time, referring to the well known A-series / B-series distinction of McTaggart (1908, 1927). The B-theorist understands time to be fully captured by the ordering of events from earlier to later rather than thinking of time, as the A-theorist does, as actually flowing or involving objective becoming. The A-series time ordering is given by some or all of the objective properties of pastness, futurity or presentness. Having merely a Becoming view of time does not commit one to the objectivity of the A-series or all its properties³ but I will use A-theorist here

²Numerical identity, I'll suggest below, is tied to personal identity. I take the subject of my experiences to be one and the same subject as the subject of the experiences I remember from yesterday. But those subjects might not have all, or perhaps even any, of the same properties. The focus on experiential features of the Now distinguishes Shimony's version from, for example, the 'moving now' considered by Horwich in Chapter 2 of 1987.

³An example of this view is held by C.D. Broad who accepts McTaggart's argument for the inconsistency of the A-series but holds that, nonetheless, the flow of time, which he calls Absolute Becoming, is a real

as shorthand for any non-static or non-B-theorist position. Since Shimony's argument turns on the features and inadequacies of only the B-series this shorthand will not make for any loss of generality.

According to various A-theorist positions, if time is real then events must possess at least one of the objective properties past, present or future. An event is 'A-determined' when it possesses one of these properties. Changes in the A-determinations result in (or are the result of) the passage of time. A-determinations are either intrinsic or extrinsic properties of the events but, in either case, the A-theory requires that these properties be real and possessable by events.⁴ The point is that, on the A-theorist view, the properties "responsible" for time are superadded to the events—they are something outside what the B-theorist would call the same event.

The B-series is ordered according to the relation earlier than (or equivalently later than). It used to be held by some that A-propositions were eliminable in favour of B-propositions (e.g. Russell (1937)), but it is now more common to deny that such reductions can preserve all the meaning of the original A-claims. According to this recent position however, the lost meaning must be merely illusory or comprise subjective content precisely because it is lost through re-expression as objective B-determinations. Shimony's argument is indifferent to these details. For any static view to be a target of his argument what is required is that the view take a subject's experiences to (at least) supervene on a single B-series. And, insofar as *all* the experiences someone has supervene on (or stand in some even stronger relation to) a *single* B-series, the experiences are static. If the B-series does not change then the set of experiences does not change (and neither do any of the relationships internal to the B-series.) This does not imply that there is no change *within* the B-series. The B-series is a spatio-temporal structure and it will have different properties at different points in space and time—in this sense its properties do change.

Because of its indifference to many of the usual disputes, Shimony's argument has an appealing cutting-the-Gordian-knot quality to it which I shall try to preserve by construing the B-theory as broadly as possible. However, I will presume physicalism here. The physicalist position provides the strongest rebuttal to Shimony's inadequate-account conclusion and, since Shimony's argument will apply equally well to any B-theory that meets the static condition (or, to put it differently, any theory that fails to meet the Transience Condition), my choice to presume physicalism is not prejudicial. We could take the B-series to include whatever ontology, space-time structures, or even mental / non-physical entities that are needed to determine the entire history of experiential states of subject S as long as we don't let in A-series properties. I prefer just to talk of brain states.

Symbolize then, the B-series of time-ordered events corresponding to the physical states of S's brain with **B**. There may be a parameter *t* which orders the series and

feature of the world (see Broad 1938, 1933.) For an interesting twist on Broad's position see Savitt (2002b) where he argues for the affinity of Absolute Becoming and the kind of B-series temporal change espoused by the rabid anti-becoming-view of Williams.

⁴In fact, argues McTaggart, all three of these contradictory properties must be possessed together, which is the basis of McTaggart's claim that the A-series is therefore incoherent. See Ibid. Another version of the A-series posits that only past and present events are real and so only pastness and presentness are real properties while yet another posits only presentness. For reviews of the B-series / A-series debate see Dainton 2001, Dorato 1995, Savitt 2002a; Savitt 2002b.

which we take to be representative of time. However, a motivation of the B-theorist position is the lack, implied by the special theory of relativity, of an objective time ordering. Fortunately, no preferred temporal parameterization is required. What we need are at least two brain states, one of which we can say objectively precedes the other. I will therefore say that subject S's brain states at times $t=1$ and $t=2$ can be read off of the B-series, intending only, as regards the times, that $t=1$ is objectively earlier than $t=2$. "Reading off" a brain state I construe as entailment. $\mathbf{B} \rightarrow \mathbf{N}_1$ iff S has the brain state N at $t=1$ and $\mathbf{B} \rightarrow \mathbf{N}_2$ iff S has the brain state N at $t=2$, where $t=1$ and $t=2$ need not indicate strictly instantaneous time slices. \mathbf{N}_1 occurs at or around time 1 and \mathbf{N}_2 at or around time 2. The B-theorist is committed to the entailment between \mathbf{B} and the N states if the B-theory is to account for the experiences of S. We've allowed in to the B-theory whatever it takes to make this entailment hold as long as whatever it takes does not include A-determinations. One B-series must do for all the experiences of S.

3. Shimony's argument. Shimony's argument is set against the background of a reformulation of McTaggart's paradox.

- (a) *A property of an event is not relative to the time of judgment or vantage point of discussion.*
- (b) *A-determinations of events are unusual properties . . . and nonetheless . . . they are properties.*
- (c) *But A-determinations are relative to the time of judgment, for an event which is present when the time is T will not be present when the time is T' ≠ T.*

One might deny the second conjunct of (b) (that A-determinations are 'proper' properties) and maintain that (a), as countenanced by physics, includes all true properties. Our experiences of A-determinations must then be illusion because no such properties appear in the fundamental, physical sciences—this is what makes A-properties unusual, or at least different than B-properties.⁵ Shimony though, endorses Zelicovici's dissolution of the paradox (Zelicovici 1986).

Zelicovici's *tour de force* consists in recognizing the affinity of the conceptual poverty of *nowness* . . . to the conceptual poverty of "existence" that Kant insists upon. There is indeed a kind of richness in both *nowness* and *existence*, but it is existential in character, entirely different from conceptual determination. (Shimony 1993, 275)

To avoid a foray into Kantian philosophy, I'll not talk of concepts and conceptual determination but instead talk only of events (in the B-series, which I'm calling brain states) and event determination. An event determination is the specification of all the properties that an event has definable on the B-series alone. It thus includes all the properties to which premise (a) above refers, while A-properties are outside the event determination.⁶ This raises the danger of begging the question with regard to A-determinations.

⁵Shimony cites as an example of this view (Grünbaum 1971). See also (Russell 1937) or (Smart 1967).

⁶The fact that A-properties are extrinsic this way is important as Shimony intends to leave the B-series "intact" despite his arguing against the static view. In fact, he argues in "The transient now" for the compatibility of his dissolution with Einstein-Minkowski space-time. This is significant to Eilstein's reading below because Shimony has available B as well as A-determinations. We can therefore parse his talk of earlier or later events and of the pastness of events in B-theoretic terms.

We have called an event determination complete just in case it includes all but only tenseless properties but now assert that there are further properties beyond the tenseless ones that need to be recognized. It is the burden of the argument from the Transient Now to give us reason to accept that there are such further properties.

Shimony's argument follows, nearly verbatim but omitting some redundancies, and then my reconstruction.

[On the B-theoretic conception] the complete specification of the properties of an event *E* is intrinsic to *E* and is not relative to the time of judgment. Now an illusion at time *t* in the career of the human being under consideration is one of the properties of *E*. Hence, if nowness is an illusion of the subject at . . . *t*, then it is part of the complete specification of *E* and is not relative to the time of judgment. Thus *nowness as an illusion* applies to the event *E* as well when time *t* is long past as it does at *t* itself—and the singling out of a particular instant as *now, even as illusion*, evaporates. . . . [E]ven though the distinction between appearance and reality is maintained, a minimal condition on ontology is to recognize a sufficient set of realities to account for appearances qua appearances. . . . I propose [as a name for this principle] “the Phenomenological Principle.” Applied to the thesis that A-determinations are illusory, the Phenomenological Principle is devastating. . . . [I]f an A-determination is nothing but an illusion, then it isn't even an illusion! [TC:] An A-determination cannot function as an appearance without transiently singling out an instant of time. But if it is only an illusion, then it cannot function this way as an appearance Nowness must either be more than an illusion or less than an illusion. If it is less, then no justice has been done to the phenomenology of time. If it is more, then either Zelicovici's analysis is required, or something equally strong and explanatory, which I have yet to see. (278–279, emphasis in original but brackets are mine.)

The sentence which I have labeled TC is the crucial but mysterious transience condition. Equally important (but not so mysterious) is what Shimony calls the

Phenomenological Principle (PP) A minimal condition on ontology is to recognize a sufficient set of realities to account for appearances *qua* appearances.

The punch line of the argument is that the B-series either fails to account for appearances as they really are or it needs to be supplemented—in either case the B-series alone provides an inadequate ontology and so fails the PP.

Let **B** be the B-series that represents the “career of the human being under consideration” and **S** that human being. Now1 will be shorthand for ‘Now at time $t=1$ ’; similarly for Now2. Now1 is different than N1, the brain state on which experiencing Now at or around time $t=1$ supervenes.

So the argument reconstructed is

1. $\mathbf{B} \rightarrow (\mathbf{N1} \text{ and } \mathbf{N2})$
2. $\mathbf{PP} \rightarrow \mathbf{TC}$
3. $\mathbf{B-alone} \rightarrow \text{not-TC}$
4. $\text{not-PP or not-(B-alone)}$

This has all the salient features of Shimony's argument. That the B-series is static is represented by premise 1, which I take to be uncontroversial. The dependence of

the transience condition on the phenomenology is captured by premise 2 and the incompatibility of the transience condition with the B-series on its own is captured by 3. The conclusion is a dilemma: either we give up the PP or admit the inadequacy of the B-series.

Since 2, 3 and 4 together are valid, we need only focus then on the conditionals of 2 and 3, though we expect that 3 follows in some way from 1 (and so 1 is not superfluous.) **B-alone** is the position that the B-series is all there is to time and so all there is to temporal experience. Premise 3 is best understood contrapositively: $TC \rightarrow \text{not}(\mathbf{B}\text{-alone})$. I.e., if the Transience condition is true then the B-series cannot be all there is to the experiencing of time.⁷

The reconstructed argument is more precise than the original, is valid, but may or may not be sound. Whether the Now is illusory or not will come down to whether or not TC holds. What remains is to specify plausible versions of the TC and to spell out possible connections between PP and TC. I turn to these tasks . . . right . . . Now.

4. The Transience Condition(s). In Shimony's words, the Now must transiently single out an instant of time. I argue that the singling out (singularity) is the key feature of transience and not, surprisingly perhaps, the motion per se. Helping ourselves to motion of the Now as a first-order phenomenological feature is too easy. The position of the B-theorist has always been—always must have been—that this motion is illusory. To insist otherwise, with regards to the motion aspect, is either begging the question or mistaking the position.

How might we read Shimony's argument as misconstruing the B-theorist position? Assume that Shimony, rather than correctly identifying the B-theorist's position as (ITN) *it is an illusion that there is a transient now (both the nowness and the transience are illusory)*, he mistakenly takes their position to be (TIN) *The now is a transient illusion*. Think of each label as a string of predicates, taking each "predicate" to scope over everything to its right. For TIN the Now is supposed to be illusory (IN) but this illusion is still transient (T scopes over IN.) For ITN the transience itself is part of the illusion.

TIN already goes beyond the naïve view in that it doesn't claim transiency is part of the experience of Now, only that the target of the experience is moving. Since TIN would be enough to establish the inadequacy of the B-theory, this is a plausible reading of Shimony's argument. The mistake though is that the B-theorist has available ITN which claims that, not only is nowness an illusion but the apparent motion of the Now is illusory as well. In the ITN case the B-theorist need only account for the appearance of the motion of the now while denying that the motion is a real feature. This they can do in the same way that they account for the appearance of any motion—different mental states ordered by a B-series. The appearance that the Now is moving may be

⁷This goes beyond just the problem of reductionism or physicalism. Though I'm referring to N1 etc. as brain states, they could easily include any other kind of state—physicalist or not—that might be required for S to have an experience. If these properties can be incorporated into a B-series then they are all true together for a given B-series. In fact, the B-series entails the N states. The question of the relation between N states and experiential states then shifts to whether A-properties are required or not, everything else being granted. I intend to bracket off other questions regarding the relation between brain states and experiential states, such as whether physical states alone are all that are required, whether the description can be deterministic, objective, or whatever. These are questions for the physicalism debate. What is at issue here is the sufficiency of N states qua B-determined states for experiential Now states.

no more than the awareness that the contents of our experiences are changing, and this awareness results from the experience of motions and changes in our environment.⁸

ITN properly identifies the B-theorist claim that the transient Now is an illusion and awareness of change simpliciter does not give us any reason to accept that a B-theory cannot, in principle, account for that awareness. Arguing that the B-series cannot adequately account for TIN and insisting that the illusion itself must be transient commits a kind of scoping error. I point out the scoping error reading since it is very similar to Eilstein's reading of Shimony's argument. There too, the simple assertion that the Now must move fails because it has no force to sway the B-theorist. If the TC amounts to no more than an assertion of an A-determination then the B-theorist, who denies the reality of any A-determination, will deny the Transient Now too. This reading, however, is off the mark.

5. Eilstein's reading of the argument. Eilstein claims that Shimony illicitly helps himself to A-series talk and that the argument is therefore fallacious. The move is illicit on her reading because the argument is meant to be a *reductio* on the B-theory.

Since Prof. Shimony intended to argue from the permanentistic [B-theorist] premiss (in order to reduce it *ad absurdum*), he was not permitted to use the expression about an instant of time "being long past", because, alike events, instants of time do not "pass" according to the permanentist but are permanent components of the space-time (Eilstein 1996).

This is a misreading. There is nothing necessarily illicit about "being long past" since this notion is easily read in B-theoretic terms. Being long past is implicitly meant with respect to some time T and could be read as 'located in the B-series at a point earlier than location T by some sufficiently large amount.' For an event or instant to be in the past does not require that time actually passes since it doesn't require that there be an absolute past. What is "past" is relative to which point in the B-series we consider. Notice that on the reconstruction an event (Now1) being in the past is reduced to a strictly B-theoretic notion using N1 and N2 at different places in the B-series.

Assuming she has established the fallaciousness of the argument, Eilstein goes on to explicate the Now illusion on behalf of the B-theorist.

[I]f at some later time [*t'*] the subject *S* Thinking of [event *E*] Considers it not an event that is happening now but rather an event that belongs to the Past, then that does not, in the view of the permanentist, free these consecutive judgments of the character of ones based on illusions. According to the permanentist *S* consecutively Errs . . . by attributing to [events] at different instants different ontological statuses (Eilstein 1996, 232).

Eilstein is right that the question comes down to the ontological status of different instants. But her position is that, since Shimony has, by her lights, begged the question against the B-theorist, the B-theorist is not compelled to accept the absurdity that events both are and are not "past". Without an argument that the ontological status of these instants must be different the B-theorist is not compelled to accept that they are. If all

⁸Awareness of the changing contents of my experiences can be based on memory, for example. Examples of memory-based accounts of the phenomenology of the experience of motion have been described and criticized in Friedman 1990 and more recently Dainton 2001, Ch.7. The common thread among these accounts is a move away from the naïve picture of experiences coming in slices like movie frames. Not only is the movie-frames view open to criticisms having the flavour of Zeno's arrow-paradox, such as advanced by Le Poidevin (2002), but it seems to run afoul of empirical investigations. But whether such accounts succeed or not is properly an empirical matter.

instants have the same ontological status then there is nothing on which to base even a distinct Now, let alone its movement, and so no reason *not* to say that later attributions of pastness, in an A-theorist sense, are errors and illusions.⁹

On my reading Shimony's argument is not a reductio but a dilemma, concluding that we either accept that the B-series provides an inadequate ontology (we give up on B-alone) or we give up explaining what we experience as a criterion for the adequacy of our ontological commitments (i.e. we give up on PP.) There are two points to be made. First, Shimony does not beg the question. However, even so, it's not enough. He still needs to establish some difference between earlier and later events that cannot be captured by the B-theory. And he cannot simply assert transiency as part of the phenomenology. The argument for the ontological difference rests on a proper treatment of the TC and PP.

Misreading the argument leads Eilstein to misconstrue the role played by phenomenology and by the PP. The principle, she claims, is too strong. She is in agreement with Shimony that we should expect science to provide us with explanations of illusions we have since "having an illusion is objective fact" (Eilstein 1996, 233). But she goes on that it is unreasonable to "insist that [the] illusionary character of the intension of some mental events cannot ever be recognized by anyone unable to furnish a satisfactory explanation why such mental events occur." (Ibid.) In other words, it is too strong to assert that the current lack of an available explanation implies the lack of one in principle.

This is not, however, the point of the PP. Rather, at the very least, a promissory note is needed when no explanation of a phenomena is provided. Moreover, if the Now really is experienced as transitory and if this transience cannot, *even in principle*, be accounted for on the B-theory, then we should accept that the theory is inadequate in this regard. This should not be controversial given the strength of the antecedent condition: viz., if the B-theory cannot, even in principle, explain a transitory Now. On the reconstruction the PP is crucial. It's the reason the B-series can be judged inadequate without having to show an internal inconsistency (à la McTaggart) and, hopefully, without merely assuming an A-determination. Shimony takes transiency to be a phenomenological feature that needs accounting for but he cannot, on pain of begging the question, take it to be a first order feature. What the scoping error and Eilstein's readings have in common is that they take direct experience of the movement to be the phenomenological linch pin of Shimony's argument. Without agreement that the experience is transient this will get us nowhere. Let's turn instead to features on which we might have agreement: singularity and numerical identity.

6. Transience Condition 2. When the subject of 'the now' is broached the natural focus is on the nowness. "We feel ourselves," as Eilstein puts it, "to be always confined in the current Now, to experience . . . only those events which are 'just happening'." (231) The "confining" aspect I've called singularity but this says little about the transiency of the experience. "But what I think of as transiency," the B-theorist might argue, "is due to my mistaken notion that I can infer from my memories of other Nows that they must have a different ontological status. This difference is reflected in the fact that I

⁹I should point out that the main thrust of Prof. Eilstein's paper is not the Transient Now argument—just as it's not the main thrust of Prof. Shimony's paper. What both are chiefly concerned with is the compatibility of any A-theory with the Special Theory of Relativity. See Note 6.

did experience the other Nows but I'm not experiencing them now." What one wants to infer (mistakenly, according to the B-theorist) is that there must be some ontological difference that makes remembered past events Now events when they are happening but makes them only memories when they are not. It is this ontological difference that, as Eilstein alerted us, Shimony must establish.

Shimony is limited to asserting a transiency which is not given directly in the phenomenology. By "singling out a moment of time" I take Shimony to have in mind that my experiencing Now about this moment (or at this moment) bars the Now from applying to any other moment. But since it doesn't only single out *this* moment—I've had Now experiences about other moments—the Now must single out moments transiently, just as the Present was to single out events transiently according to the original A-theorists. This superadded property of being Now would then be the ontological difference not included in the B series alone. Note that the singularity aspect is still phenomenologically first order, i.e. given in the phenomena themselves.

This new version of the moving Present, in the guise of the transient Now, therefore still derives from the phenomenology and we would like to express a transience condition in terms of the singularity of experiences of the Now. Using the shorthand Now2 for 'Now at time 2', etc., take the minimum transience condition, based on singularity, to be the following.

TC: S experiences Now2 \rightarrow not-(S experiences Now1)

This gives a gloss on "singles out a moment" without asserting movement of the moment directly. If TC is true it places a constraint on the relation between the N states of the B-series and the Now states of S's experiential history. Namely, the N states cannot be sufficient on their own to entail experiential states. If the N states were sufficient then, since **B** entails both N1 and N2, **B** would also entail that S experiences both Now1 and Now2, in conflict with TC. This makes clear the point of the third premise (the B-alone premise) in the reconstruction—if the B series is sufficient on its own for Now experiences then apparently TC cannot hold.

There are three plausible ways to parse the TC phenomenologically. We might grant that "if S experiences some moment as Now then S is also experiencing that no other moment is Now." Or we might allow "if S experiences this moment as now, she cannot be experiencing any other moment as Now." Finally, "if S is experiencing this moment as Now, any other subject experiencing a different time as Now cannot be S." So, from S experiences Now2 it seems plausible to infer one or all of these consequents: S experiences not-Now1; S does not experience Now1; not-S experiences Now1. Any one of these on its own will give us the truth of TC. If none of them stand we have no way left to (plausibly) parse TC.

The first danger to avoid is that we not equivocate on 'experiences' in these propositions—not all of these experiences occur at the same time. Consider the first consequent. When we make the inference from S experiences Now2 to S experiences not-Now1 we must take into account the time at which each experience occurs. That is, we must express TC fully as (TC1) 'S experiences at time 2 Now2 \rightarrow S experiences at time 2 not-Now1'. The general principle is that S can only experience Now2 at time 2 and can only experience Now1 at time 1.

Unfortunately this does not give us a transience condition at all. What we need for the argument is a consequent about what S experiences at time 1. To put it another way, TC1 is not incompatible with the sufficiency of N states. N1 and N2 together, even if sufficient, entail only that S experiences at time 2 Now 2 and at time 1 Now 1.

A similar problem undercuts the second version of the consequent which, fully expressed, ought to be (TC2) 'S experiences at time 2 Now2 \rightarrow S is not experiencing at time 2 Now1.' But again, nothing has been inferred about experiences at time 1 from those at time 2 and no inconsistency has been generated with the sufficiency of N-states.

There is some hope for the final version of the consequent. Not-S can range over all space-time. If S is experiencing anything at time 2 then S is only experiencing at time 2. We are trapped within the Now. It is at this point that singularity enters. This is where I think the deepest intuitions lie about the experience of the flow of time since they come down to our intuitions about self-identity. We each identify entirely and so strongly with the current subject of our experiences that we do not believe ourselves (our conscious selves, at least) to exist anywhere else other than in the here and now. And so if it is true, as the B-theorist would have it, that some S is experiencing Now1 at some other time $t=1$, then that S cannot be me. I am busy experiencing Now right now.

However, subject S does identify with the subject that experiences Now1 because S at time 2 remembers Now1. It is the tension of the intuition that S is trapped in Now2 but is also the same S that experiences (or experienced) Now1 that leads S to attribute a different ontological status (or such like) to the different Nows in order to discharge the contradiction. It is in this way—by coupling singularity with the numerical identity of S—that the Transient Condition lives up to its name.

Sadly yet again, this version of TC has the same problem that the others had. It puts no constraint on the sufficiency of N states for Now states. The B-theorist can claim that it is 'S at time 2' (S2) that experiences Now2 and 'S at time 1' (S1) that experiences Now1 and that S1 is not numerically identical with S2. The B-theorist can then still take N states as sufficient for Now states, $N1 \rightarrow Now1$ and $N2 \rightarrow Now2$. TC becomes '(TC3) S2 experiences Now2 \rightarrow not-S2 experiences Now1' which is compatible with the B-theory since the B-theory, taking in to account these different S's, is committed only to 'S2 experiences Now2 and S1 experiences Now1'.

The mistake that the A-theorist makes then, is taking S2 and S1 to be numerically identical on the basis of our attributing personal identity to them. This is the illusion. It is based on S2's having memories of Now1. But it is a much different—and much easier—task for the B-theorist to account for how it is that S2 comes to have memories of things that happened to S1 then it is explaining how the same S is supposed to feel that both time 1 and time 2 are Now.

Notice that this puts constraints on other ways we have of talking about our histories. For instance, I cannot claim that because I'm not hungry now that I must have eaten breakfast this morning without the danger of equivocating on "I". One construal of this claim is that 'S1 ate breakfast at time 1 \rightarrow S2 is not hungry at time 2'—an inference which fails as a causal explanation when S2 is me while S1 is Jean Chrétien. This brings to light the need for identity conditions between subjects in causal claims if cashed out carefully. Alternatively, one could avoid objectifying time slices—but this

too would run counter to our intuitions about our identities.¹⁰

7. Conclusion. I have tried to get clear on what the transience condition must be in Shimony's argument and to interpret it in a way that is charitable to his phenomenological principle (PP). The most the B-theorist is forced to give up, even on this reconstruction, is the numerical identity condition. Ironically, what this means is that the B-theorist may, in a sense, have to accept an ontological difference between present experiences and past ones after all. But it's an ontological difference in the subjects of those experiences. If a temporal "slice" (of whatever width) is an object in the ontology of space-time then the two slices that are me today and me yesterday are different objects. The mistake of the Transient Now argument is taking these two putative objects to be one and then proposing another ontological difference to account for the different experiences of the one thing. The plausibility of the argument stems from our deep conviction about the identity of our time slices. This identity requires careful explication though, despite its eminent intuitability. There is no plausible equivalent, though, of the PP for our intuitions.

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¹⁰The thread has now led us squarely into the perdurant vs. endurant objects debate. See, e.g (Hawley 2001; Sider 2001) or (Balashov 2002; Haslanger 2003).

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