On Absolute Becoming and the Myth of Passage

In the literature on time in the twentieth century stemming from J. M. E. McTaggart's famous argument for the unreality of time, two gems stand out. The first is C. D. Broad's patient dissection of McTaggart's argument in the chapter "Ostensible Temporality" in his *Examination of McTaggart's Philosophy*. Broad carefully, and to my mind persuasively, uncovers the root errors in McTaggart's argument. In addition he tentatively proposes that the features of time that he calls its transitory aspect can be explained in terms of a dynamic aspect of time that he calls *Absolute Becoming*.

The second gem is D. C. Williams' paper, "The Myth of Passage," a gloriously overwritten rant against the idea that there is something active or dynamic to time over and above "the spread of events in space-time". Broad is mentioned thrice as a proponent of this myth. His contrast of the transitory aspect of time to its extensive aspect and his invocation of Absolute Becoming are mentioned in Williams' survey of attempts to characterize passage. A few paragraphs later Broad is specifically mentioned, along with Bergson and Whitehead, as trying but failing to escape "the paradoxes of passage".

Broad clearly is on Williams' enemies list, and the general intent, as well as style, of Broad's chapter and Williams' paper could scarcely be more opposed. There is, nevertheless, an area of convergence, or even overlap, between the views of Broad and Williams that has not been remarked and that may help clarify the nature of passage. My aim in this paper is to indicate the nature and importance of this surprising common ground.

I. True and Literal Passage

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2 "Ostensible Temporality" is chapter 35 of Volume II of Broad's *Examination of McTaggart's Philosophy*, first published by Cambridge University Press in 1938 and reprinted, with the same pagination, by Octagon Books in 1976. References to Broad in the text will, unless otherwise specified, be to "Ostensible Temporality".

In "The Myth of Passage" Williams commends his view, "the doctrine of the manifold", as an antidote to passage views, but he does little to describe this "doctrine". His most explicit statement of it comes in a later exchange with Milic Capek.

What I advocate as 'the doctrine of the manifold… is simply a philosophical acceptance, as an ultimate literal truth about the way things are in themselves, of the conception that nature, all there is, was, or will be, 'is' (tenselessly) spread out in a four-dimensional scheme of location relations which intrinsically are exactly the same, and hence in principle commensurate, in all directions, but which happen to be differentiated, in our neighborhood at least, by the \textit{de facto} pattern of the things and events in them--by the lie of the land, so to speak. We are all perfectly familiar with the fact that the prodigious difference of the vertical dimension of space, with its terrifying asymmetry of up and down, above and below, from all those comparatively indifferent directions we call horizontal, is not due to any intrinsic difference between vertical and horizontal distances but only to a certain characteristic complex of matter and force in our vicinity whose 'grain,' so to speak, runs one way and not the other. Just so, I argue, there is a somewhat more pervasive pattern of physical qualities and relations which constitutes the even more momentous oddity of the temporal direction, with its even more striking asymmetry of earlier and later, in contrast with all the so-called spatial directions. Very much as the singularities of arrangement which distinguish the vertical from the horizontal were explained by Descartes and Newton, so recent scientific attention to 'the direction of time' has begun the description of the arrangements which distinguish the temporal from the merely spatial. 

It is a nice project, which I will engage in only superficially, to make sense of this doctrine. At some points Williams seems to take the equivalence of the four dimensions quite literally. He writes, for instance:

It is conceivable, then, though perhaps physically impossible, that one four-dimensional part of the manifold of events be slued around at right angles to the rest, so that the time order of that area, as composed of its interior lines of strain and structure, runs parallel with a spatial order in its environment. It is conceivable, indeed, that a whole human life should lie thwartwise of the manifold, with its belly plump in time, its birth in the east and its death in the west, and its conscious stream perhaps running alongside somebody's garden path. (112)

At other places he makes important claims that seem to me inconsistent with the above. For instance:


5 Consider the following remark of Julian Barbour's in page 242 of The End of Time: The Next Revolution in Physics (Oxford, 1999): "The coordinates laid down on space-time are arbitrary. Since the coordinates include one used to labe space-time in the time direction and all coordinates can be changed at whim, there is clearly no distinguished label of time."
The term "the present" is the conventional way of designating the cross section of events which are simultaneous with the uttering of the phrase, and "the present moves" only in that when similar words occur at successively different moments, they denote, by a twist of language essentially the same as that of all "egocentric particulars" like "here" and "this", different cross sections of the manifold. (105)

In my view Williams would not be able to use the definite description "the cross section of events" at some time t if there were not one distinguished (temporal) dimension of the manifold from which to locate a unique corresponding three-dimensional set of simultaneous events. So, while noting that Williams' official doctrine of the manifold runs at some points counter to it, I am going to write below as if Williams shared in a view about the structure of spacetime held more or less articulately by almost all the participants in the debate concerning passage stemming from McTaggart. In this view the basic elements of the spacetime ontology are instantaneous events. These events may be sorted into equivalence classes of simultaneous events and these classes (which I will call moments or times, without wishing to prejudge any questions in the substantivalism/relationism controversy) can be completely ordered by the asymmetric and transitive binary relation is earlier than or its converse is later than.

The defining feature of events is that they happen. As Williams puts it:

"Taking place" is not a formality to which an event incidentally submits--it is the event's very being. World history consists of actual concrete happenings in a temporal sequence... (106)

Williams is a naturalist. The manifold reflects all and only what there (basically) is. It's hard to resist quoting his own way of putting it:

I believe that the universe consists, without residue, of the spread of events in space-time, and that if we thus accept realistically the four-dimensional fabric of juxtaposed actualities we can dispense with all those dim nonfactual categories which have so bedeviled our race: the potential, the subsistential, and the influential, the noumenal, the numinous, and the nonnatural. But I am arguing here, not that there is nothing outside the natural world of events, but that the theory of the manifold is anyhow literally true and adequate to that world; true, in that the world contains no less than the manifold; adequate, in that it contains no more. (99)

Many (and Williams marshals an impressive list) have thought that the manifold missed an important extra ingredient of our world, the passage of time. "This something extra..." writes Williams, "is a myth: not one of those myths which foreshadow a difficult truth in a

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6 Some use the term event to refer also to sets of events extended in space and time, like World War II. I prefer to use the term process for such sets of events. The events considered here have or occur at spatiotemporal locations and may have causal relations to one another. In spacetime theories, the spatiotemporal locations themselves are called events as well.
metaphorical way, but altogether a false start, deceiving us about the facts, and blocking our understanding of them." (102) After burying the reader in a near avalanche of evocative quotations trying to express the idea of passage, Williams comments that "the instant one thinks about them one feels uneasy, and the most laborious effort cannot construct an intelligible theory which admits of the literal truth of any of them." (104) Passage is, to repeat, "an altogether false start".

There is, however, a thread that runs through Williams' essay that has not drawn much comment. Consider the following remarks

- [T]he theory of the manifold provides the true and literal description of what the enthusiastic metaphors of passage have deceptively garbled. (109)

- [T]he dimensional theory accommodates what is true in the notion of passage, that is, the occurrence of events, in contrast with a mythical rearing and charging of time itself... (113)

- There is passage, but it is nothing extra. It is the mere happening of things, their existence strung along in the manifold. (105)

It is not too difficult to see what Williams is getting at. Events in the manifold occur at times, some simultaneously, some earlier than others, some later. True and literal passage is the ordered occurrence of (simultaneity sets of) events in the manifold. If the manifold does have a temporal dimension (as I have argued it does, despite the occasional remark of Williams to the contrary), then it can accommodate or model or provide a representation of this true and literal idea of passage. Indeed, it can hardly avoid so doing. Is this true and literal passage, however, truly and literally passage--the real whooshy, zingy thing that is so salient in our experience? Keeping that question in mind, let us turn to the enemies list.

II. The Transitory Aspect of Temporal Facts

Whereas Williams barely mentions McTaggart's argument for the unreality of time, C. D. Broad's chapter "Ostensible Temporality" is a full-dress exegesis and criticism of that argument. McTaggart's argument is, in essence, this: there must be passage if there is to be change and there must be change if there is to be time; but passage is a self-contradictory notion, and hence there is no time.

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7 My favorite is from Santayana: "The essence of nowness runs like fire along the fuse of time."

8 As only befits a chapter, Chapter 35 of Volume II, of a massive work entitled Examination of McTaggart's Philosophy.
Broad deals with this argument in great (excruciating, some would say) detail. In all this detail, it may be that the main thread of Broad's argument is occasionally lost. McTaggart, according to Broad, does present a way of construing passage--as events constantly changing with respect to properties like presentness, pastness, and futurity--that is indeed incoherent, but Broad argues that there is a distinct notion of passage, Absolute Becoming, that is not.9

The route to Absolute Becoming starts in a distinction between those aspects of time in which it is like space (duration being like extension), which Broad calls the extensive aspect of temporal facts, and a peculiar aspect of time in which it seems very different from space, the transitory aspect of temporal facts.

The third, and much the most puzzling, set of temporal characteristics are those which are involved in facts of the following kind. An experience is at one time wholly in the future, as when one says "I am going to have a painful experience at the dentist's tomorrow." It keeps on becoming less and less remotely future. Eventually the earliest phase of it becomes present; as when the dentist begins drilling one's tooth, and one thinks or says "The painful experience I have been anticipating has now begun." Each phase ceases to be present, slips into the immediate past, and then keeps on becoming more and more remotely past. But it is followed by phases which were future and have become present. Eventually the latest phase of this particular experience becomes present and then slips into the immediate past. There is the fact which one records by saying "Thank God (on the theistic hypothesis) that's over now!" After that the experience as a whole retreats continually into the more and more remote past. [266-67]

McTaggart takes these facts at face value and treats passage as a kind of qualitative change--events changing with respect to properties like presentness, the various degrees of pastness, and the various degrees of futurity. Broad points out, however, that qualitative change requires the existence of some thing--in this case, an event--that changes its properties by persisting through time. Since events are by definition instantaneous, it is awkward to suppose also that they persist through time. In order to avoid this awkwardness, a defender of the idea that passage is a kind of qualitative change is inevitably tempted to suppose that events do persist (so they can change their properties) but that this persistence is not in ordinary time (in which they are instantaneous). The persistence must then be in a second temporal dimension: but if this second dimension truly is temporal, it too must admit

9 I find the essentials of this argument in section 1.22, "Absolute Becoming," of Broad's chapter. That section appears in part I, "Independent Account of the Phenomenology of Time," before McTaggart's argument officially enters the stage in Parts II and III, and hence it is easy to see how its importance might be overlooked. I ask those who doubt my reading of Broad to reflect on Broad's remark, which seems to appear out of the blue at the very end of his consideration of McTaggart's main argument, that "[t]he fallacy in McTaggart's argument consists in treating absolute becoming as if it were a species of qualitative change..." (317)
of passage and the construction that boosted us from the first to the second temporal dimension bids fair to push us on to a third. Infinite regress beckons.

Broad's response was to propose that we not take the transitory aspect of temporal facts at quite face value:

> When one finds oneself launched on an endless series of this kind it is generally a sign that one has made a false move at the beginning. I think it is easy to see what the false move is in this case. The phrase "to become present" is grammatically of the same form as the phrase "to become hot" or "to become louder". We are therefore tempted to think that sentences like "This event became present" record facts of the same kind as those which are recorded by sentences like "This water became hot" or "This noise became louder." Now a very little reflection is enough to show that this is a mistake. (280)

The mistake is to treat passage as like qualitative change. What kind of fact, then, is recorded by sentences like "E became present" if not the acquisition by an event E of a new property? Here is Broad's answer:

> But a literally instantaneous event-particle can significantly be said to "become present"; and, indeed, in the strict sense of "present" only instantaneous event-particles can be said to "become present". To "become present" is, in fact, just to "become", in an absolute sense; i.e., to "come to pass" in the Biblical phraseology, or, most simply, to "happen". Sentences like "This water became hot" or "This noise became louder" record facts of qualitative change. Sentences like "This event became present" record facts of "absolute becoming".

Absolute becoming, as explained by Broad, is just the happening of events. Since events are located at various times or moments, they happen at various times or moments. Some events have happened, some are happening now, and others, we hope, will happen eventually. Some events occur simultaneously, some earlier than others, some later. Absolute becoming is the ordered occurrence of (simultaneity sets of) events. This is how Broad proposed that we should think of passage, and, as far as I can see, there is no difference whatsoever between his understanding of absolute becoming and Williams' true and literal passage. Generally speaking, I think it is more useful to distinguish than to assimilate positions. In this particular case, however, the existence of a surprising common ground shared by a resolutely anti-passage philosopher like Williams and a stalwart (at least at this period of his life) pro-passage philosopher like Broad must be a significant clue to understanding the nature of temporal becoming.

Since Williams objected vociferously to Broad's absolute becoming, might it not be thought preposterous to propose that it is none other than his own true and literal

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10 There is a parallel argument in the text that one should not treat passage as like motion either.
becoming? Williams objects (106) that "the extra idea of passage or absolute becoming" leads one to postulate an infinite hierarchy of times. Then Williams complains that absolute becoming "involves the same anomalies of metahappening and metatime which we observed in the other version." (107) Which other version Williams intends is not entirely clear, but if it is a version which treats passage as a sort of motion or as a kind of qualitative change, the argument is beside the point. Broad, as noted, agrees that treating passage as qualitative change or motion leads to contradiction or regress, and he proposes a different approach. Of course it is possible that Broad's own way of understanding passage leads to contradiction or regress too, but Williams does not address this possibility, relying on the old arguments against the old views. The burden of proof is on Williams at this point, but he does not shoulder this burden at all.

For a second problem with my irenic thesis that is bound to occur to many, note that Williams wrote, "The statement that a sea fight not present in time nevertheless exists is no more contradictory than that one not present in space nevertheless exists." (101) One would suppose that Broad differed here, that he would have denied the existence of tomorrow's sea fight. Is that not an indication that Broad "took passage seriously" whereas Williams did not? How, then, could they have the same concept of passage?

I suggest that the alleged difference expressed in the previous paragraph is no difference at all, but merely a verbal confusion. There is an ordinary tensed sense of 'is' or 'exists' which, in the case of events, simply indicates that they are happening or occurring or that their appointed moment has arrived. Whatever time \( t \) it is now, both Broad and Williams

\[ 11 \] Broad clearly did so in his treatment of time in Scientific Thought, in which he defended the idea that the future is nothing but that once an event becomes (or happens) then it continues to exist forever. I take Broad to have dropped the latter half of this view of absolute becoming by the time he wrote Examination of McTaggart's Philosophy, given his explicitly deflationary line that for an event to become absolutely is just for it to happen.

I find support for my claim, not just in the text of Examination of McTaggart's Philosophy but also in Broad’s later statement (on pp. 766-7 of “A Reply to My Critics” in The Philosophy of C. D. Broad, edited by P. A. Schilpp (Tudor Publishing Company, 1959)) that though he once took seriously the idea of the world's history "growing continually longer in duration by the addition of new slices," he now lumped that idea in with the "policeman's bulls-eye" metaphor as an inadequate way of trying to understand absolute becoming.

I have no idea, by the way, whether Williams ever noticed this passage and commented on it. Any information on this point would be greatly appreciated. In his earlier discussion of Broad's views on time in “The Sea Fight Tomorrow” (in Structure, Method and Meaning: Essays in Honor of Henry M. Sheffer, edited by Paul Henle, Horace M. Kallen, and Suzanne Langer (The Liberal Arts Press, 1951)) Williams noted that Broad had indicated that his views in Examination of McTaggart's Philosophy differed in some ways from those of Scientific Thought. Williams quite understandably took it to be probable that the absolute becoming of the later work should be understood as the becoming of the earlier work, and I suspect that many readers have (mistakenly, in my view) read Broad through his eyes.
agree that all and only those events that occur at \( t \) exist (that is, occur). Williams ought not be saddled with believing that tomorrow's sea fight occurs today.

In thinking of the sea fight, Williams probably slipped into using a tenseless sense of 'exist' in which an event EXISTS (as I will write to indicate the tenseless sense) if it has happened, is happening, or will happen. In this sense, tomorrow's sea fight does EXIST, and Broad should not be saddled with the view that it does not EXIST--that is, is not going to happen. If there is a difference between Broad and Williams about the existence of the past and future, then it lies much more deeply than this objection contemplates. If it lies deep, it may well be entirely unconnected to their shared view of passage.

III. Defending the Radical Middle

I propose that Williams' true and literal passage and Broad's Absolute Becoming is all there is to the passage of time. While I hope that my proposal will satisfy both sides in the dispute over the existence of passage, I fear it will be acceptable to neither. Where, the proponents of passage will ask, is the whiz and go in true and literal passage? How, the opponents of passage will wonder, can absolute becoming not engender paradox or inconsistency?

I have supposed that this investigation of the nature of passage takes place within a given presupposed background spacetime structure--that events can be partitioned into equivalence classes of simultaneous events that then can be completely ordered by an asymmetric and transitive relation such as \( \text{is earlier than} \). The unease with my suggestion that true and literal passage is all there is to passage is that it comes close to merely pointing to this spacetime structure, which, it is often said, is a changeless structure and so hopeless as a model for change or passage. It is always true to say, it will be objected, that the events that occur at \( t_0 \) occur at \( t_0 \), always true to say that the events that occur at \( t_1 \) occur at \( t_1 \), and always true to say that the events that occur at \( t_0 \) occur earlier than the events that occur at \( t_1 \), and so on. These unchanging facts are often illustrated by a picture like the one below, with two-dimensional planes replacing three-dimensional spaces for ease of illustration. Where in this picture, it may be asked, is passage?
My response to this critical question is that change is not in this picture but in what it is a picture of. One who asks it is confusing a static representation with a representation of stasis. If we learn from philosophers of mind that "we must distinguish features of representings from the features of representeds," if we keep in mind that one dimension of this spacetime structure is supposed to represent time, that events occur at times, and that different events occur at different times, I think we should have no trouble in understanding that this static structure can represent a dynamic or unfolding world. We do not need an animated picture to have a picture of animation. In my view, the call for animation in the model (rather than in what it is a model of) is an unnecessary duplication that is at the root of most of the paradoxes and regresses that are supposed to attend upon the idea of passage.

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13 Palle Yourgrau (on p. 22 of *Gödel meets Einstein* (Open Court, 1999)) says that “for Gödel, to spatialize time is to render it ideal (by robbing it of its characteristic mode of existence).” I think that Youngau concurs in Gödel’s view, and these two are but part of a chorus who have complained that spatializing time ignores its essential characteristic, passage. If what I say in the text is correct, however, one can do full justice to both the extensive aspect of time (that is, spatialize it) and to its transitory aspect, at least in the setting of classical spacetime.

In a very important paper, “The Meaning of Time,” Adolf Grünbaum argued that becoming or passage is mind-dependent. But he explicitly contrasted passage with events happening seriatim. He wrote:

It is... this occurring now or coming into being of previously future events and their subsequent belonging to the past which is called ‘becoming’ or ‘passage’. Thus, by involving reference to present occurrence, becoming involves more than mere occurrence at various serially ordered clock times.

Grünbaum adds that “nowness, in the sense associated with becoming, plays no role as a property of physical events in any of the extant theories of physics.” In the picture on the previous page derived from classical physics, there is indeed no noweness to be seen. But, as I have claimed, it is all too easy to miss the becoming.

Grünbaum and I agree, I think, on what is the case. We agree that events occur at various serially ordered clock times, and we also agree that nowness is not a property that hops from event to event. What we disagree on seems close to emphasis, for I would drop the ‘mere’ in his second sentence and would then explain the absence of nowness from the mind-independent world by treating ‘now’ as an indexical, like ‘here’.

With respect to objections from the opponents of passage, who believe that the idea of passage involves paradox or regress, I have tipped my hand above. I think all such objections are objections to models of passage that construe it as a kind of motion or as qualitative change. Such objections, I believe, do not apply to the modest conception of passage as the successive happening of events advocated above.

Passage deniers might fret that the account of passage above is too modest—that it is, in fact, threadbare because it assumes too much or leaves too much unexplained. I identify passage with absolute becoming and Broad wrote, "I do not suppose that so simple and fundamental a notion as that of absolute becoming can be analyzed..." (281) As I understand Broad, he is saying that the happening of events is so fundamental a notion that it cannot be explained in terms of simpler or more basic ideas, and I have considerable sympathy with this claim. The authors of the entry on Time in The Cambridge Dictionary of Philosophy note, with disapproval I think, "Broad attempted to skirt these perplexities [in giving an account of passage] by saying that becoming is sui generis and thereby defies analysis, which puts him on

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15 In Basic Issues in the Philosophy of Time, Eugene Freeman and Wilfrid Sellars (eds.) (Open Court, 1971), pp. 195-228.


17 Ibid, p. 211.

18 Of course, indexical expressions like ‘now’ can be used only in circumstances much like those that Grünbaum took to show that becoming is mind-dependent—especially if there is a close connection between conceptualization and possession of a language.
the side of the mystically inclined Bergson..." I've not noted a mystical streak in Broad, and I do think that one has to start somewhere, has to have some primitives. If and when I can say more about the happening of events, I will; but until then it does not seem to me either unreasonable or mystical or question-begging to start with it as a basic notion.\(^{19}\)

Passage affirmers may also find my account of passage too modest in another way. I suspect that J. J. C. Smart was not exaggerating when he wrote, at the conclusion of a chapter purporting to show that there was no genuine passage or becoming:

In this chapter I have been defending the view of the world as a four-dimensional system of entities in space-time. Concepts such as ‘past’ and ‘future’ have been shown to be anthropocentric in that they relate to particular human utterances. My advocacy of the four-dimensional picture of the world is, therefore, among other things, part of the same campaign against anthropocentricity and romanticism in metaphysics that I have been waging elsewhere… It is surely no accident that romantic, vitalistic, and anti-mechanistic philosophies such as those of Bergson and Whitehead are also those which lay great emphasis on the alleged transitory aspect of time, process or absolute becoming. While I concede that our present notions of space and time may perhaps have to be revised, the idea of the world as a space-time manifold is nearer the truth than these romantic and obscure philosophical theories.\(^{20}\)

When fancy verbiage, like ‘Absolute Becoming’, is stripped away, the notion of temporal becoming defended here is rather plain, homespun, humdrum, deflated, dowdy. There is no special connection between this sort of passage and either freedom, spontaneity, and emergence on the one hand or determinism, necessity, and reductionism on the other. It neither supports nor discourages romanticism and may therefore disappoint those who feel that passage must be portentous. It is root and branch neutral but, in my view, none the worse for that.

IV Conclusions

I have argued that there is a kind of passage or temporal becoming espoused by at least one classic proponent of passage and admitted by at least one classic opponent of passage. This common or garden variety of passage is, I suggest, robust enough to satisfy those who insist on the dynamic or transitory aspect of time, yet weak enough to avoid any metaphysical or \textit{a priori} objections. If this suggestion is correct, then one no longer need try

\(^{19}\) Incidentally, if I can infer from the above remark that I have both Broad \textit{and} Bergson on side for my account of passage, what more could I need to establish its \textit{bona fides} to supporters of passage?

to construe passage in terms of qualitative change or motion. If this suggestion is incorrect, then one is left with either the task of reducing this minimalist notion of passage even further to make it acceptable or, more likely, expanding it in some way that yet avoids the traditional metaphysical pitfalls.

Recognizing passage as no more (or less) than absolute becoming may help to solve some problems. I have suggested above, for instance, that it provides a helpful way to look at questions about the reality of past and future (though I have by no means tried to provide a complete discussion of the issues involved). Also, in a recent paper, Clifford Williams claims that Bergsonian intuition can not distinguish between classical passage and non-passage metaphysics. If these two ostensibly opposed metaphysics are each committed to a minimal common concept of transience, then it is no mystery why Bergsonian intuition should fail to find a difference.

Good solutions raise problems too. If it does turn out that absolute becoming is the best way to understand passage in the spacetime structure described at the beginning section III of this paper and presupposed throughout, then passage becomes mysterious again as soon as one turns to the spacetime of special relativity and, perhaps, to other more general spacetimes. Minkowski spacetime could scarcely be less hospitable to absolute becoming, since its geometry does not admit a unique partitioning into the sets of simultaneous events needed to occur successively. General relativistic spacetimes most likely do not admit any privileged partitioning either. Can a differentiable manifold, then, provide "the true and literal description of what the enthusiastic metaphors of passage have deceptively garbled", as Williams claimed his "theory of the manifold" could?

This question seems to be the important and puzzling question concerning passage. I hope this paper helps to make it more central to philosophy of time in the 21st century than it was in the 20th.

21 In any case, Broad's arguments against construing passage in these ways seem quite difficult to evade McTaggart's own regress argument, however, may not be so formidable. I have tried to show why it fails in "A Limited Defense of Passage" (unpublished).


23 I discuss the difficulties of importing the metaphysics of presentism into Minkowski spacetime in "There's no time like the present (in Minkowski spacetime)," Philosophy of Science 67 (2000; Proceedings): S663-S574.

24 This paper appeared in Time, Reality & Experience, ed. by Craig Callender (Cambridge University Press, 2002).
These common myths seem true because we've heard them time and time again—we may have even learned them from our parents, or been taught them at school. Nevertheless, it's more important than ever to call out the false facts that far too many people still believe, whether they're related to our furry friends or the current pandemic. Read on to discover the truth behind some of the most persistent common myths. And for more recent myths to dispel, check out these 5 Dangerous Myths About the Coronavirus Vaccine You Need to Stop Believing.

1. Bulls get angry when they see the color red. And then they find the "passage." Demon Lord used it to come here in person. And went out to meet the enemy. 10 Years after saying "Leave this to me and go." I Became a Legend manga about: They were able to inflict critical damage "Demon Lord" and deprive him of his hand. They fought with him abroad of their own world. But to completely destroy the threat their forces were not enough. So they decided to return to their world. But the Invasion Army is not just words. So they were intercepted before they left the interspace passage. The force of the Hero and the Warrior is required to mankind when "the Lord of demons" will return in the world. And it has happened ten years ago! Koko wa Ore ni Makasete Saki ni Ite kara 10-nen ga Tattara Densetsu ni Natte Ita manga Encounters with the beautiful and the sublime in the science of "the single most dangerous object known to humanity." On July 13, 1862, while a young experiment in democracy was being ripped asunder by its first Civil War, The Springfield... A calculation in the 1990s suggested that the comet's passage on August 14, 2126 could result in a collision with Earth. By the end of the decade, Comet Swift-Tuttle was deemed "the single most dangerous object known to humanity," given the damage it would inflict in case of actual collision—an impact many times more powerful than that of the asteroid that killed the dinosaurs, with a trillion times the energy of the Hiroshima atomic bomb. On Absolute Becoming and the Myth of Passage.