

Science, Religion, and Human Identity: Contributions from the Science and Religion Forum

with Finley Lawson, "Science, Religion, and Human Identity: Contributions from the Science and Religion Forum"; Susannah Cornwall, "Transformative Creatures: Theology, Gender Diversity, and Human Identity"; Joanna Collicutt, "Religion, Brains, and Persons: The Contribution of Neurology Patients and Clinicians to Understanding Human Faith"; Robert Lewis, "Humans as Interpretive Animals: A Phenomenological Understanding of Why Humans Bear God's Image"; Rebekah Wallace, "The Wholeness of Humanity: Coleridge, Cognition, and Holistic Perception"; James Thieke, "Energies and Personhood: A Christological Perspective on Human Identity"; and Emily Qureshi-Hurst, "Can Sinners Really Change? Understanding Personal Salvation in the Block Universe."

CAN SINNERS REALLY CHANGE? UNDERSTANDING PERSONAL SALVATION IN THE BLOCK UNIVERSE

by Emily Qureshi-Hurst

Abstract. This article brings time and theology together constructively in response to a pressing problem for the doctrine of personal salvation. The problem arises within the physics and metaphysics of time, as these support a so-called temporal B-theory in which time does not pass and reality is comprised of a block universe. Within this static temporal metaphysic, objective change is highly problematized. Yet salvation requires an objective change from fallenness to redemption. So, how can we understand a salvation-transformation in the block universe? In other words, can sinners really change? I argue that on a B-theory of time, a salvation-transformation is best understood as a form of qualitative, phenomenological, and subjective change, rather than a robust ontological change. I conclude that the individual's transformation from fallen to saved is one of mind-dependent becoming. So, sinners can change. But, in this lifetime, that change can only be subjective.

Keywords: B-theory; change; salvation; special relativity; time

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INTRODUCTION

Time is utterly inescapable. So much so, that imagining a life that does not occur within the bounds of time is almost impossible. We understand the persistence of personal identity in the context of the passage of time; tensed experience structures our hopes for the future and memories of the past; temporal metrics are the measure by which we plan our lives. Yet regarding the most fundamental temporal questions, there is little agreement among both the scientific and philosophical communities. Though the nature of temporal reality has been an object of philosophical inquiry since the Ancient Greeks, rich debates in both metaphysics and physics continue on even the most elemental questions. As Huw Price rightly notes, the metaphysics of time “is unusual even by philosophical standards for the durability of some of its main concerns.” (Price 1996, 12)

In the dialogue between science and religion, the nature of temporal reality has not really taken center stage. Yet when answering many of the most important theological questions, understanding time is essential. Not only does time fundamentally shape the lives of human beings, but the relation of God to temporal reality is, implicitly or explicitly, embedded in almost every theological question. If the finite universe is bound by space-time, then temporality must permeate all questions regarding creation and its relation to a Creator. Though the relationship between the nature of time and Christian theology has a long history, it has been dominated by the philosophical question of whether God is temporal or atemporal. Strong arguments exist both for divine temporality (Swinburne 1993; Craig 2001; DeWeese 2004) and for divine atemporality (this was the standard view from the Medieval period until very recent years). Due consideration has also been given to the relation of God to time and space through the lens of the incarnation (Torrance 1969; Holland 2012).

My concern here is the relationship between time (the metaphysics and physics thereof) and soteriology. The nature of time is intimately interwoven with the nature of change, and on the tenseless theory of time, which receives robust support from physics and metaphysics, our intuitive understanding of change must be radically reconsidered. On this view, all moments of time coexist in a four-dimensional “block universe” in which time does not really pass. I argue that tenseless temporal metaphysics raises significant questions for any formulation of salvation that requires a change in time. The issue this article addresses, then, is the following: if a tenseless, B-theoretic, block universe understanding of temporal reality is correct, then how are we to understand any doctrine of personal salvation that requires an objective transformation in time? In other words, can sinners really change in the block universe?

Before delving into this important problem, it is necessary to first establish what issues a B-theory of time does *not* raise. Eschatologies that

focus on future transformations occurring at the *end of time* are not vulnerable to problems with change *in time*. For example, the Pauline scheme sees the future eschaton as the decisive act of divine salvation, at which point the dead are to be raised together and judged. Crucially in Paul, the resurrection of Jesus is the token (in historical time) that this decisive salvific event will come to pass (in the eschatological future). This futurist tradition has occupied a prominent position in much of Christian thought, appearing, for example, in the Nicene and Apostles' Creeds. If one sees salvation largely in terms of a future transformation of the universe, at which point it becomes an entirely new creation, then the spatiotemporal structure of this creation is at best tangentially relevant, since its salvation consists in a total transformation in the eschatological future (*viz.* at the end of time). Clearly, not all variants of soteriology are problematized by questions about temporal metaphysics.

Nevertheless, the problem I raise and address is an important one. To the extent that eschatology is realized, and salvation is understood as a process that at the very least begins in an individual's life, the issues I identify must be addressed. This is acknowledged by Robert Russell in a chapter surveying the literature on the relationship between cosmology and eschatology. He writes:

[20th century] Eschatologies such as [Barth's, Tillich's, Pannenberg's, and Moltmann's] view the new creation not as a replacement of the present creation—i.e., not as a second *ex nihilo*—nor as the mere working out of the natural processes of the world. Instead eschatology involves the complete transformation of the world by a radically new act of God beginning at Easter and continuing into the future. For [some contemporary] scholars ... the transformation of the world happens not only synchronically at the end of time but also diachronically throughout the entire course of world history. (Russell 2007, 564–565)

Russell is right to note the significance of the parts of the soteriological process that occur diachronically within the course of world history and personal lifetimes. It is to these issues that this article is devoted. Paul himself writes in 2 Corinthians 5:17 that “Therefore if anyone is in Christ, he is a new creation. The old has passed away; behold the new has come.” As far back as the Pauline literature, the part of the soteriological process in which an individual changes in their lifetime, that is, becomes a new creation, has been understood as important. This leads us to the question at hand: how can an individual become a new creation in a block universe that does not include temporal becoming?

ARGUMENTS FOR A B-THEORY OF TIME

In many ways, the so-called B-theory, or block universe, has its roots in the ancient philosophy of Parmenides. Parmenides held that everything

was ultimately static; the apparent change, flux, and motion we experience does not reflect the fundamental ontology of the world and its contents (Palmer 2016). This commitment to a static metaphysic has echoed down the philosophical generations, and although it has had various different names and several different structural components, the basic ideas have largely remained the same. In brief, the theory of time with which this article is concerned is a theory in which time does not objectively pass. On this view, all moments of time coexist (meaning there is no ontologically privileged time, which we might call an objective *now*), and our temporal experience does not reflect time's underlying structure. Since J.M.E. McTaggart, this view has been called the B-theory, and following insights from Special Relativity regarding the four-dimensional union of the temporal and spatial dimensions into a single spacetime manifold, is also called the block universe.

It is appropriate to briefly set out why the B-theory is a highly credible candidate theory for understanding the nature of temporal reality, as this establishes a need for the somewhat unorthodox soteriology advanced in the concluding parts of this article. Nevertheless, my primary focus here is not to argue for a B-theory. Not only do space restrictions prohibit this, but there are myriad articles who do this expertly. For an overview of this literature, see Baron and Miller (2019, chapter 4). We need not detain ourselves repeating those arguments at great length. Following a brief foray into metaphysics and physics, necessary to justify the need to take the B-theory and its implications seriously, the path will be prepared to turn to the pressing problem of personal salvation in the block universe.

Metaphysics

Contemporary discourse on the metaphysics of time has largely been shaped by J.M.E. McTaggart's 1908 article, *The Unreality of Time*. In this article, McTaggart distinguishes between two systems of ordering positions in time: by their possession of the properties *past*, *present*, and *future*, and in accordance with the two-place ordering relations *earlier than*, *later than*, and *simultaneous with*. He names the former A-properties, and the latter B-relations. The first system, namely the A-series, holds that time is essentially and objectively tensed and that A-properties are fundamental. The second system, namely the B-series, holds that a complete description of time can be given by giving an account of all temporal events and the B-relations that order them. Subsequent scholarship has reified these temporal series into fully-fledged metaphysical theories, namely the A-theory and B-theory.¹

The A-series, and the temporal theory that emerges out of it, claims that time objectively passes. Almost all A-theories (and all those who have a significant number of proponents) are committed to the nonexistence of the

future. The Growing Block, for example, is committed to the existence of the past that grows as ever more present moments are added (Broad 1923; Tooley 1997; Correia and Rosenkranz 2003; Braddon-Mitchell 2004; Forest 2004; Merricks 2006; Forbes 2015; Deng 2017; Correia and Rosenkranz 2018; Miller 2018; Perović 2019). Presentism, on the other hand, holds that only the present moment exists; the past is gone, and the future is not yet here; only and all existing things are present things (Bigelow 1996; Zimmerman 1998; Hinchliff 2000; Percival 2002; Crisp 2003; Zimmerman, 2004, part 1; Bourne 2006; Fine 2006; Zimmerman 2008; Tamm and Olivier 2019; Emery 2020; Tallant and Ingram 2020). Alternatively, the Moving Spotlight view accepts the existence of all moments in time, but contains the additional postulate that an objective present moment moves through these moments picking out metaphysically privileged *nous* like a spotlight moving across a field (Skow 2009, 2015; Cameron 2015).

Despite the existence of various A-theories, the following working definition is sufficient for this article's purpose: an A-theory of time is committed to the ontological reality of tense, which is grounded in some universal, metaphysically privileged present, which moves or changes and which constitutes the passage of time. The change in degree of the pastness of events is not merely a function of our changing perspective on reality, it reflects the way time truly is.

There is less variation within the B-theory as the central claims, namely a denial of the existence of tensed facts and an objective present moment, commits one to a "block universe" in which all moments, objects, and events coexist. The block universe is static; in it time does not objectively flow, and no particular time is metaphysically (as opposed to phenomenologically) privileged. A B-theorist, therefore, holds that temporal reality can be fundamentally described via "an exhaustive catalogue of which events occur, and how they are temporally related." (Pooley 2013a, 324) This means that in at least some important ways our experience of temporal passage is misleading.

There are a range of relevant arguments for and against the A and B-theories. Perhaps the most well-known is McTaggart's, which argued against the reality of time on the basis that the A-series is both essential to time and self-contradictory. The A-series is contradictory, he argued, as it requires each event to possess all the objective (and incompatible) tensed properties at once. Every event must be objectively past, present, and future. As these cannot be held simultaneously, the A-series collapses into contradiction. The astute reader will immediately protest that the very objective temporal passage to which the A-theorist is committed is the solution to this apparent problem. Yet it is in attempting to resolve the contradiction this way that McTaggart's paradox emerges.

By explaining away the incompatibility of the three A-properties by saying some event *e* is present, *has been* future, and *will be* past, one must construct a second A-series in which to root these further tensed claims and which grounds their truth-value. The same problem then arises when trying to account for the truth claims of the second order A-series, in that a further A-series must be constructed to give the truth-value of the second A-series' tensed claims. This process of constructing higher order temporal series' must repeat *ad infinitum*, as there is no point at which one can ascend the hierarchy to a resolution of the contradiction (McTaggart 1908, 468).

Despite a general consensus amongst B-theorists that McTaggart's argument is, as Adrian Bardon writes, "both simple and devastating," (Bardon 2013, 81) there is an ongoing debate amongst some other metaphysicians as to whether the regress McTaggart identified is a vicious one (Smith 1994; Mellor 1998, chapter 7; Oaklander 1987). On the one hand, there is a contradiction at each level of the regress; on the other, there is a way out of this contradiction at each level by ascending one level. In my view, the fact that the contradiction is never resolved is a compelling reason to deem the regress vicious. An unresolved contradiction is metaphysically troubling, as there is no stopping point in the regress at which point an event can unproblematically possess a tensed property.

As the A-series requires events to objectively (*not* merely relationally or perspectively) possess the temporal properties *past*, *present*, and *future*, I argue that an unresolved contradiction in the ascription of these properties renders McTaggart's regress vicious. McTaggart concluded from this that time is unreal. B-theorists reject this part of the argument, claiming that a B-series is sufficient to recover the reality of time. This article advocates accepting the contradiction unearthed in McTaggart's paradox and rejecting McTaggart's conclusion regarding the unreality of time. Although the debate on the status of McTaggart's paradox continues, at the very least the principle of parsimony gives us compelling reason to prefer the B-series as it does not contain such a regress, vicious or otherwise. Though there is much more that can be said on this and other arguments against the A-theory, all that is required here is providing at least one good reason for rejecting the A-theory. There is a wealth of literature to which the interested reader can turn, and I have delved deeper into these issues elsewhere (Qureshi-Hurst 2021, Part I).

Physics

The most popular argument in favor of the B-theory comes from physics; more specifically, Einstein's Special Theory of Relativity (henceforth SR). SR, introduced by Albert Einstein in 1905, catalyzed a revolution in our understanding of space and time (Einstein 1905; Einstein 2010 [1920]).

The previously accepted Newtonian theory understood time as absolute, namely wholly independent of physical objects or observers. More technically, the Newtonian temporal metric is independent of the contingencies of any physical processes one might use as a clock, and time flows at a uniform rate everywhere in the universe. In *Philosophiæ Naturalis Principia Mathematica*, Newton argued that “absolute, true, and mathematical time, of itself, and from its own nature, flows equably without relation to anything external, and by another name is called duration.” (Newton, Scholium to Definition viii) From this, we can infer that he believed in the ontological reality of temporal passage and the absolute simultaneity of distant events grounded in an objective present moment. In effect, a single time value can be assigned to every slice of time that passes in the whole universe, and it is meaningful to assign the same time coordinate to events at either side of the universe.

SR violated these assumptions, revealing that space and time are distinct dimensions of Minkowski spacetime, and one’s measurement of length and duration is, to some extent, observer dependent (Maudlin 2012, 67–77). In his 1908 article, Minkowski made his now famous proclamation that following SR, “space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union between the two will preserve an independent reality.” (Minkowski 1908) The four-dimensional spacetime interval between events is fixed, but one’s measurement of duration or distance is relative.² Consequently, different observers will measure different temporal durations between two events or disagree on the time at which an event occurred, depending on their observational perspective. This phenomenon has been empirically confirmed many times over since Einstein introduced it in 1905 (Brown 2005, 82–87).

Though there is some dispute over both the correct interpretation of SR and its domain of application,³ it is the case that pure SR is inconsistent with the existence of absolute simultaneity. Without absolute simultaneity, there can be no objective and universal *now*. The A-theory requires the existence of such a *now* to function as the frontier of becoming—potential (viz. nonreal) future events *come into being* when they become present. If the present cannot be clearly defined, then it cannot be an ontologically privileged boundary between the actual present and the potential future. The A-theory is committed to an objective now and a nonactualized future, and SR seems incompatible with these claims.

Hilary Putnam famously argued, using A-theoretic (specifically, presentist) assumptions, that SR leads us to the conclusion that future things (or events) are already real. These assumptions are as follows: future things (which do not already exist) are not real, though they will become real when they become present. Past things (which have ceased to exist) are not real, although they were real in the past. We can also assume that present

things are real, and that “I am present,” and therefore I am now real. Importantly, relativity also teaches us that there are no privileged observers (Putnam 1967, 240).

Because “is real” is a transitive relation, everything standing in the simultaneity relation with “me-now” is real. As SR indicates, however, an observer simultaneous with me-now could experience events as present (and thus real) which lie in my future—making future events (from my perspective) already real (from another perspective). As there is no objective way to determine which of us is a privileged observer, for no such observer exists within the theory, then from at least one valid perspective future events are already real. If objects or events that are *future* from one perspective *already exist* (as they are present from another perspective) then the present moment, at which point potential future events become actual present events, cannot be such a universal and objective feature of reality. Although Putnam’s argument was aimed at presentism, it is an argument against any A-theory that proposes an objective present (i.e., a universal *now*) and nonreal future.

In SR, the B-theory stands on firm ground. Nothing in the B-theory requires the relation *simultaneous with* to be objective, or to be with some present moment *now*. Furthermore, the existence of future events is part of the ontology of the B-theory. The B-theory is committed to the coexistence of all events, which, together with the spacetime that contains them, comprise a four-dimensional block universe. SR indicates that Newton’s absolute, flowing, time has no place in that universe. This is compatible with the claims of the B-theory. As Oliver Pooley writes, a B-theorist is committed to the claim that a complete account of temporal reality can be given with “an exhaustive catalogue of which events occur, and how they are temporally related.” (Pooley 2013a, 234) SR does not negate temporal ordering relations, though it does indicate that these relations hold only for time-like separated events. Fortunately, the B-theory *simpliciter* does not require B-relations to be invariant.

SR gives direct and indirect support for the B-theory. It directly supports the B-theory by preserving B-relations and by implying the nonobjectivity of tense (through the existence of future events). It also provides indirect support for the B-theory by rebutting a core claim of its closest and most plausible rival, namely the existence of an objective present moment. We cannot measure absolute simultaneity relations as they do not exist. Without absolute simultaneity, the idea of a metaphysical knife-edge whereby all existing things and events are simultaneous with both the present and each other is incoherent. Though some have argued that General Relativity can save the B-theory, there are several reasons for hesitancy about these arguments (Read and Qureshi-Hurst 2020).

The previous discussion has been but a snapshot of the rich and extensive literature on the A-theory and B-theory. Much has unfortunately been

set aside. For our present purpose, however, it is sufficient to note that the B-theory and the block universe it describes stand on firm ground. The view is therefore worthy of serious theological and philosophical engagement.

THE PROBLEM OF CHANGE IN A STATIC UNIVERSE

The term “block universe” illustrates why the B-theory is sometimes called static. Each event enclosed in the fabric of spacetime exists always, and no slice, frontier, or moment is ontologically privileged. Whilst the objective temporal dynamism of the A-theory intuitively provides sufficient structure within which to understand change, the same cannot be said for the block universe. M. O. Fiocco defines change thus: “an entity changes if and only if it *in itself is one way at one moment and an incompatible way at a distinct moment.*” (Fiocco 2014, 89) In the static temporal ontology of the block universe, this is evidently troubling, as all objects coexist eternally, including each iteration of that object at each moment of its existence. Change, therefore, seems to require absolute and dynamic time to generate the objective distinction between two moments. Without such a distinction, it is hard to imagine on what grounds one could say the object or entity has undergone an objective change.

The block universe’s inability to accommodate objective change thus defined is deeply troubling. As Adrian Bardon rightly points out, “the idea that change is both conceptually indispensable and, apparently, unreal places us in an odd position. On the one hand, logic and science seem to leave no room for dynamic change; on the other, the conceptual indispensability of change would mean that we literally cannot contemplate a world without it.” (Bardon 2013, 109) In short, the block universe is hostile to change, whilst salvation (and much of ordinary experience!) requires it.

Absolute, flowing time also allows the mind-independent *coming into being* of new states or properties. Thus, the A-theory readily supports what I will call *robust change*. Robust change involves the same entity possessing different properties at objectively different times and implies the possibility of *newness*, which seems incompatible with the metaphysics of the block universe. Robust change is particularly important for salvation for two reasons: (1) salvific change is generally understood to be objective and (2) salvation is the result of Christ entering reality at a certain historical moment to be present in creation in a way that he was not before. Both of these seem to require robust change—the saved person comes to possess new soteriological properties, and Christ brought something fundamentally new into the cosmos.

The possibility of such change is inextricably linked with temporal metaphysics. On the A-theory, if entity e is x at time t and y at time t' , then when time objectively passes from t to t' , e has objectively changed

from x to y . Thus, the A-theory accommodates robust change without difficulty. B-theoretically, if entity e is x at time t and y at time t' , then there is no objective way to say whether e is x or y because t and t' are equally, tenselessly, real. Hence, the block universe presents a specific, serious challenge to salvation insofar as salvation requires a robust change from being fallen to being saved.

This stems, in part, from the block universe's rather counter-intuitive consequences for the nature of personal identity. In the block universe, you are a four-dimensional "worm" spread out across spacetime. As Hermann Weyl colorfully explains, in the block universe, "the objective world simply is, it does not happen. Only to the gaze of my consciousness, crawling upwards along the life line of my body, does a section of this world come to life as a fleeting image in space which continuously changes in time." (Weyl 1949)

One way of understanding personal identity in the block universe is the philosophical doctrine known as perdurantism, whereby beings are four-dimensional extensions who possess temporal parts. Your experience of reading this article is the result of one of your temporal parts being contemporaneous with, and reading, one of this article's temporal parts. Past temporal parts of yours are unfamiliar with its arguments; some of your future temporal parts will have forgotten them. Each of these temporal parts makes up *you* without being wholly you. If both an A-theory and perdurantism are correct, then previous temporal parts vanish into the past whilst new ones come into being; if a B-theory and perdurantism are correct, however, then all your temporal parts eternally coexist. The relevance of this for personal salvation is as follows: your four-dimensional ontology does not change. If you have fallen temporal parts in the block universe (which presumably Christians want to say is the case for everyone), you will always have fallen parts. These cannot, truly, be left behind, even if one does possess saved temporal parts later in their life. In other words, a sinner cannot *really* change.

So, the Christian doctrine of salvation often requires that individuals undergo, or at least begin to undergo, an objective, ontological, change in this lifetime. Is this possible in the block universe? Strictly speaking, no. An individual's sinful, fallen temporal parts always exist, and there is insufficient temporal architecture to ground the claim that a sinner has objectively transformed from a state of fallenness to redemption. Therefore, the theological postulate that sinners can change is deeply problematized in the block universe. In the final section, I will sketch out my own solution to this problem, building on arguments I have made elsewhere (Qureshi-Hurst and Pearson 2020).

MIND-DEPENDENT SALVATION

Leaving behind salvation as an ontological transformation

Christian theological accounts tend to envisage salvation as involving a process of chronological transformation—for example, in Augustine of Hippo’s idea of Christ as a physician who both causes and superintends the healing process in a patient (Martin 2001). While some Protestant thinkers consider justification to be an instantaneous divine pronouncement of the believer being accounted or considered righteous in the sight of God, this is accompanied by an emphasis on the process of sanctification, in which the believer becomes righteous through a chronological process of transformation. A good example of this view is found in Byzantine theologian Gregory Palamas. Palamas understands salvation as a process of deification (or, *theosis*) in which the individual is ontologically transformed into God. This formulation of the doctrine of salvation is found in the Orthodox tradition (Meyendorff 1974; Costache 2011). As Bishop Kallistos of Diokleia writes:

In the Orthodox understanding Christianity signifies not merely an adherence to certain dogmas, not merely an exterior imitation of Christ through moral effort, but direct union with the living God, the total transformation of the human person by divine grace and glory – what the Greek Fathers termed ‘deification’ or ‘divinisation’ (theosis, theopoesis). In the words of St Basil the Great, man is nothing less than a creature that has received the order to become God. (Mantzaridis 1984, 7; cf. Chia 2011, 125)

Salvation as deification holds that in and through the soteriological process, individuals undergo a total ontological transformation in which their entire being is transformed *into the divine*. As Palamas writes, “[We become] entirely God in body and soul through grace and through the divine radiance of the blessed glory.” (Palamas, 3.3.13)

Ben Page examines such ontological transformation. He focuses on the transformation a person undergoes when they become a new creation, as discussed in St Paul’s second letter to the Corinthians: “if anyone is in Christ, there is a new creation: everything old has passed away; see, everything has become new.” (2 Corinthians 5:17) Page is concerned with the instantaneous transformation through which an individual becomes a “new creation,” and therefore this focus is on a very specific facet of salvation, namely the decision to turn to Christ, and not the entire soteriological process. Nevertheless, his assessment of ontological transformations in the context of Christianity is relevant insofar as it reveals to what extent the block universe forces us to leave such views behind.

Page notes that a key feature of an ontological transformation, which he argues is present or heavily implied by many theologians, is that it affects every essential aspect of a person—this must be taken to include the

physical, mental, and spiritual dimensions of an individual's personhood (Page 2018, 526).⁴ Page gives two examples of ontological transformations defined, following the above, as a change in every essential aspect of the person: (1) mixing and (2) radical replacement. In the former, a human person undergoes a mixing of kinds with either created grace or the Holy Spirit (which of these one believes to be the case depends on one's theological predilections). This mixing leads to the saved individual being ontologically transformed through being mixed with a soteriologically significant substance. Like a drop of ink in a glass of water, every essential aspect of the individual's being is permeated by the substance with which it is mixed, and therein lies the complete ontological transformation.

In the latter, the individual is ontologically transformed through the replacement of some of their temporal parts from sinful parts to saved parts. This idea requires both an A-theory of time and a perdurantist theory of identity. Holding these views in combination mean that an individual's temporal parts are continuously replaced at every new moment of time. On this view, God creates the individual anew with saved parts, replacing the old fallen parts, and thus the individual has undergone a complete ontological transformation with respect to those parts.

As Page writes, "on this view nothing endures through the transformation of the believer. Therefore, when God transforms the believer, He goes from creating one temporal part of the believer, which is untransformed, to creating the next temporal part of the believer, which is transformed." (Page 2018, 534) This type of transformation is not possible in the block universe. Sinful temporal parts cannot fall away into the obscurity of a vanishing past, bringing forth freshly redeemed temporal parts. The entire four-dimensional being always exists. Individuals cannot, therefore, undergo a robust ontological change of this nature, which transforms their entire being. Similarly, an individual who undergoes mixing will still have unsanctified early parts no matter how intertwined with a soteriological substance their later parts may be.

Embracing salvation as a mind-dependent transformation

In light of the previous discussion and the viability of the block universe, my argument in this final section is as follows: if personal salvation occurs during an individual's earthly life, it must be understood as subjective. In other words, a salvation-transformation cannot be objective in this lifetime; rather, it is best understood as a form of phenomenological and qualitative change. I call this process *mind-dependent salvific becoming*. I have written elsewhere on how freedom and causation play into salvation so defined (Qureshi-Hurst and Pearson 2020). This article builds upon those arguments, advancing a more detailed articulation of the fine-structure of this proposed mechanism of soteriological change.

Essentially, I argue that as the mind constructs passage phenomenology (i.e., the phenomenal experience of the passage of time) out of ordered events in the block universe, so too can the mind construct a soteriological transformation out of relevant events in the block universe. The saved individual goes through a subjective, psychological, qualitative change, which for them constitutes and corresponds to personal salvation. This is best articulated in dialogue with insights from the philosophy of temporal experience.

Temporal experience plays an interesting role in philosophical discourse on the nature of time. It is generally (though not universally) agreed that we experience time as though it passes.⁵ Many B-theorists are motivated to seek explanations of passage phenomenology, which do not depend on the existence of dynamic time, whilst many A-theorists use temporal experience as evidence for the existence of dynamic time (i.e., Craig 2000, 133). Simon Prosser rightly notes, however, that the debate between the A-theory and B-theory is a *metaphysical* debate. It is odd, he argues, to be “told that a metaphysical debate can be settled by just looking (or just experiencing, at any rate). It is hard to think of any other metaphysical dispute where it has been suggested that the dispute can be settled in that way.” (Prosser 2016, 23). This reflects a general wariness on the part of many philosophers to allow such a debate to be swung by something as notoriously unreliable as first-person experience. There is no compelling reason to suppose that (a) we have direct experiential access to the fundamental nature of time that would make experience a reliable source of knowledge on the subject and (b) that experience can supersede empirical science when it comes to the issue of temporal passage.

Given this, many B-theorists are rightly distrustful of temporal experience and seek explanations for passage phenomenology that do not hinge on the reality of passage, that is, the truth of an A-theory. Adolf Grünbaum is one such thinker, who locates the source of temporal experience in the mind’s subjective interpretation of the world as apprehended through sensory experience, rather than some ontological feature of mind-independent reality. Grünbaum notes that the respect with which events are deemed to change is intimately connected to passage (Grünbaum 1971, 195). The experience of successive present moments is an essential feature of passage, and as such his account of temporal experience hinges on the concept of *presentness* or *nowness*. More specifically, Grünbaum centers his account of becoming on the status of the present as a property of events, which is encountered in perceptual awareness. Along with twenty-first century B-theorists,⁶ Grünbaum forges analogies between temporal properties and sensory properties, including color and taste, when introducing the concept of *mind-dependence*, which is so central to his analysis of temporal experience.⁷

With regards to time, as with regards to color and taste, the mind apprehends certain external stimuli and then constructs powerful but subjective meaning out of these. For Grünbaum, *presentness* is more than event e being simultaneous with time t , and it being objectively the case that t (and therefore e) is *now*. Instead, what is necessary to qualify e as being present at t is at least one conscious, mind-possessing being (i.e., a person) M being conceptually aware either of experiencing e or of experiencing some other event that is simultaneous with e in M 's reference frame (Grünbaum 1971, 206). By experiencing successive subjectively defined presents, dynamic temporal experience is generated. In effect, persons subjectively construct becoming or passage through experience of successive *now* moments that are perceptually immediate, and that the mind takes to be present. Through the attribution of the adverbial property *now*, and the experience of successive *nows*, the mind constructs becoming, and we experience time as dynamic.

This can be applied to an individual's experience of a salvation-transformation. On this view, conscious awareness plays a highly important role in phenomenologically substantiating the type of change required to transform an individual's life from a state of fallenness to a state of salvation. Essentially, individuals can choose to instantiate actions that lead to an authentic, soteriologically directed, life, and then experience a transformation from fallenness to salvation. Though it will always have been in one's future, and so in that sense it is not radically new or undetermined, one's (apparent) future salvation comes into one's perceptual awareness as something apparently new.

Mind-dependent becoming is, I argue, a suitable mechanism of salvation in the block universe, but it remains to address what kind of change this involves. C. D. Broad's assessment of McTaggart in *An Examination of McTaggart's Philosophy* introduces a useful concept that he calls qualitative change. Qualitative change, as defined by Broad, is a type of change in which an enduring subject acquires qualities it did not possess previously. Broad acknowledges McTaggart's premise that events do not change; however, he distinguishes between events that do not change, and *things* that do (Broad 1938, 317). Things—persisting entities—can possess different properties at different times and as such are susceptible to qualitative change.

Qualitative change can be understood as the possession of different properties at different temporal points in the four-dimensional extension of oneself. Individuals—persisting entities—possess different properties at different times and as such can undergo qualitative change so defined. It is perfectly reasonable to hold that the subject can possess different properties in their various temporal parts without having to invoke the reality of tense to say which set of properties the thing possesses *now*. The best way to imagine this is to draw an analogy with a metal poker heated at one

end. On one end, it is white hot, and at the other end, it is dark silver and much cooler; in between these, the poker ranges from yellow to orange, cherry red to a deep burgundy. It would be nonsensical to ask which single color or temperature the poker is objectively; it is each color at various points. If your line of sight was moving up the poker, you would subjectively experience a qualitative change in the color and temperature of the poker. But this change is a product of your perception, not evidence that the whole object has undergone an objective change.

The hot poker is analogous to a four-dimensional extension of the self, possessing different properties in different parts of that extension. There is no observer-independent way in the block universe to say which property you possess objectively, or which property you possess *now* if that now is understood as absolute and universal. Rather, you possess all of them at different times. I argue that the only way a salvation-transformation can occur given this state of affairs is subjectively, that is, through mind-dependent becoming. Though this more impoverished form of change does not pass the threshold of robust change, it can still hold soteriological relevance.

Mind-dependent becoming offers a B-theoretic explanation for our experience of passage whereby the conscious mind constructs passage phenomenology out of experiencing events in a certain order. Applying this to salvation, an individual in the block universe can undergo a qualitative change from fallen to saved when they possess the mental properties associated with each at different times. They then *experience this as* robust change, analogous to the experience of time as robustly passing, despite neither robust change nor robust passage being real (i.e., mind-independent or objective). Thus, our experience of such change is illusory in the same way our experience of passage is illusory.

Nevertheless, this does not mean that the salvation itself is illusory. On the contrary, it is still possible for the saved individual to objectively possess the property of being fallen at certain B-series points and objectively possess the property of being saved at later B-series points. The experience of robustly changing between these two states is illusory insofar as neither is a genuinely new state that was not already present in the block universe or the four-dimensional extension of an individual's being. Yet just as the events in the block universe are real and ground an (illusory) phenomenology of robust passage, so too are the properties of being fallen and being saved objectively real. It is the experience of a robust change from one to the other that is illusory and is accounted for by mind-dependent becoming.

CONCLUDING REMARKS

In this article, I have argued that the temporal B-theory, or block universe, poses a genuine threat to the possibility of personal salvation insofar as it is hostile to robust change. I then offered a solution to this problem that draws on insights from the philosophy of temporal experience. Through experiencing your life-events successively, you experience qualitative change. I argue that this can, and actually should, be applied to salvation. The result is mind-dependent salvific becoming, a subjective and qualitative change that nonetheless holds deep soteriological significance for the saved individual. Though this may be a weaker form of soteriological change than some may like, it is the best possible model of personal salvation in the block universe.

NOTES

1. He also introduced the C-series, which holds that complete descriptions of time can be given by describing three-place relations of temporal betweenness. It has not featured prominently in the literature due to its highly counter-intuitive denial of time's directionality. Nevertheless, interest in this view is growing, and one can turn to Matt Farr for an exposition and defense of it (Farr, 2020). As the C-theory is also committed to a block universe metaphysic, its implications for the doctrine of salvation are largely the same as those identified in this article and a parallel analysis of salvation given a C-theory is not necessary. Perhaps interesting work might be done on the soteriological implications of a time-directionless universe (meaning there is no objective sense in which one's saved parts are later than, or take precedence over, one's fallen parts). I leave this question open.

2. The separation of two events in Minkowski spacetime is described by the following equation: $s^2 = x^2 + y^2 + z^2 - c^2 t^2$

3. See, for example, William Lane Craig's neo-Lorentzian interpretation (Craig 2001; Craig 2008). For a detailed review of its failings, see Balashov and Janssen (2003).

4. He gives these examples: Grudem (1994, 699), Erickson (1998, 957), McCabe (2010, 41), and Wright (2013, 1072).

5. For a survey of the relevant literature, see Deng (2013).

6. Laurie Paul, for example, argues that perceptual illusions can illuminate how we perceive temporal dynamism where there is none objectively. She uses experiments like the so-called color-phi experiment in which participants perceived motion and change purely out of static inputs. (Paul 2010, 348). Paul suggests that we experience life as a viewer sees a film—static constituent parts are perceived as dynamic. Robin LePoidevin develops similar arguments about how temporal passage phenomenology can emerge out of the static ontology of the block universe. His central argument is that A-properties are projected onto the world in response to certain features of experience in a process closely analogous to the projection of secondary qualities (i.e., colors) onto objects (Le Poidevin 2007, 95).

7. This is not to say that Grünbaum understands *now* to be a sensory quality, only that like sensory qualities, *nowness* depends on awareness (Grünbaum 1967, 386).

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REFERENCES

- Balashov, Y., and M. Janssen. 2003. "Review: Presentism and Relativity." *The British Society for the Philosophy of Science* 54:327–46.
- Bardon, A. 2013. *A Brief History of the Philosophy of Time*. Oxford: Oxford University Press.
- Baron, S., and K. Miller. 2019. *An Introduction to the Philosophy of Time*, Cambridge: Polity Press
- Bigelow, J. 1996. "Presentism and Properties." *Philosophical Perspectives* 10:35–52.
- Bourne, C. 2006. *A Future for Presentism*. Oxford: Oxford University Press.
- Braddon-Mitchell, D. 2004. "How do we Know it is Now?" *Analysis* 64:199–203.
- Broad, C. D. 1923. *Scientific Thought*. London: Kegan Paul.
- . 1938. *An Examination of McTaggart's Philosophy*. Cambridge: Cambridge University Press.
- Brown, H. 2005. *Physical Relativity: Spacetime Structure from a Dynamical Perspective*. Oxford: Clarendon Press.
- Cameron, R. P. 2015. *The Moving Spotlight: An Essay on Time and Ontology*. Oxford: Oxford University Press.
- Chia, R. 2011. "Salvation as Justification and Deification." *Scottish Journal of Theology* 64:125–39.
- Correia, F., and S. Rosenkranz. 2003. "Living on the Brink, or Welcome Back, Growing Block!" In *Oxford Studies in Metaphysics*, edited by D. Zimmerman, Vol. 8, 333–50. Oxford: Oxford University Press.
- . 2018. *Nothing to Come: A Defence of the Growing Block Theory of Time*. Cham, Switzerland: Springer.
- Costache, D. 2011. "Experiencing the Divine Life: Levels of Participation in St Gregory Palamas' *On the Divine and Deifying Participation*." *Phronema* 26:9–25.
- Craig, W. L. 2000. *The Tensed Theory of Time: A Critical Examination*. Dordrecht: Kluwer Academic Publishers.
- . 2001. *Time and the Metaphysics of Relativity*. Dordrecht: Kluwer Academic Publishers.
- . 2008. "The Metaphysics of Special Relativity: Three views." In *Einstein, Relativity, and Absolute Simultaneity*, edited by W. L. Craig, and Q. Smith. London: Routledge.
- Crisp, T. 2003. "Presentism." In *The Oxford Handbook of Metaphysics*, edited by M. J. Loux, and D. Zimmerman. Oxford: Oxford University Press.
- Deng, N. 2013. "On Explaining Why Time Seems to Pass." *The Southern Journal of Philosophy* 51:367–82.
- . 2017. "Making Sense of the Growing Block View." *Philosophia* 45:1113–27.
- DeWeese, G. J. 2004. *God and the Nature of Time*. Aldershot, UK: Ashgate.
- Einstein, A. 1905. "Zur Elektrodynamik bewegter Körper" [On the Electrodynamics of Moving Bodies]. *Annalen der Physik* (in German) 17 (10): 891–921.
- . 2010 [1920]. *Relativity: The Special and General Theory* (Robert W. Lawson D.Sc. Translation). Manfield Centre: Martino Publishing.
- Emery, N. 2020. "Actualism, Presentism and the Grounding Objection." *Erkenntnis* 85:23–43.
- Erickson, M. 1998. *Christian Theology*. Grand Rapids, MI: Baker Academic.
- Farr, M. 2020. "C-Theories of Time: On the Adirectionality of Time." *Philosophy Compass* 15 (12): 1–17.
- Fine, K. 2006. "The Reality of Tense." *Synthese* 150:399–414.
- Fiocco, M. O. 2014. "Becoming: Temporal, Absolute, and Atemporal." In *Debates Within the Metaphysics of Time*, edited by L. N. Oaklander. London: Bloomsbury.
- Forbes, G. 2015. "The Growing Block's Past Problems." *Philosophical Studies* 173:699–709.
- Forest, P. 2004. "The Real but Dead Past: A Reply to Braddon-Mitchell." *Analysis* 64:358–62.
- Grudem, W. 1994. *Systematic Theology*. Leicester: Inter-Varsity Press.
- Grünbaum, A. 1967. "The Status of Temporal Becoming." *Annals of the New York Academy of Sciences* 138:374–95.
- . 1971. "The Meaning of Time." In *Basic Issues in the Philosophy of Time*, edited by E. Freeman, and W. Sellars, 195–228. LaSalle, IL: Open Court.
- Hinchliff, M. 2000. "A Defence of Presentism in a Relativistic Setting." *Philosophy of Science* 67:S575–86.
- Holland, R. A. 2012. *God, Time and the Incarnation*. Eugene, OR: Wipf and Stock.

- Le Poidevin, R. 2007. *The Images of Time: An Essay on Temporal Representation*. Oxford: Oxford University Press.
- Mantzaridis, G. L. 1984. *The Deification of Man*. Crestwood, NY: St Vladimir's Seminary Press.
- Martin, T. F. 2001. "Paul the Patient: Christos Medicus and the "Stimulus Carnis" (2 Cor. 12:7): A Consideration of Augustine's Medicinal Christology." *Augustinian Studies* 32 (2): 219–56.
- Maudlin, T. 2012. *Philosophy of Physics: Space and Time*. Princeton, NJ: Princeton University Press.
- McCabe, H. 2010. *The New Creation*. London: Continuum.
- McTaggart, J. M. E. 1908. "The Unreality of Time." *Mind* 17 (68): 457–74.
- Mellor, D. H. 1998. *Real Time II*. London: Routledge.
- Merricks, T. 2006. "Goodbye Growing Block." In *Oxford Studies in Metaphysics*, edited by D. Zimmerman, Vol. 2, 103–10. Oxford: Oxford University Press.
- Meyendorff, J. 1974. *St. Gregory Palamas and Orthodox Spirituality*. Crestwood, NY: St Vladimir's Seminary Press.
- Miller, K. 2018. "The New Growing Block Theory vs Presentism." *Inquiry* 61:223–51.
- Minkowski, H. 1908. "Die Grundgleichungen für die elektromagnetischen Vorgänge in bewegten Körpern." *Nachrichten der Gesellschaft der Wissenschaften zu Göttingen* 53–111.
- Oaklander, L. N. 1987. "McTaggart's Paradox and the Infinite Regress of Temporal Attributions of Temporal Attributions: A Reply to Smith." *Southern Journal of Philosophy* 25 (3): 425–321.
- Page, B. 2018. "If Anyone is in Christ - New Creation!" *Religious Studies* 56 (4): 525–41
- Palmer, J. 2016. "Parmenides." *Stanford Encyclopaedia of Philosophy*, edited by E. N. Zalta.
- Paul, L. 2010. "Temporal Experience." *Journal of Philosophy* 107:333–59.
- Percival, P. 2002. "A Presentist's Refutation of Mellor's McTaggart." In *Time, Reality, and Experience*, edited by W. L. Craig. Cambridge: Cambridge University Press.
- Perović, K. 2019. "Three Varieties of Growing Block Theory." *Erkenntnis* 86 (3): 623–645.
- Pooley, O. 2013a. "Relativity, The Open Future, and the Passage of Time." *Proceedings of the Aristotelian Society* 113:321–63.
- Price, H. 1996. *Time's Arrow and Archimedes' Point*. Oxford: Oxford University Press.
- Prosser, S. 2016. *Experiencing Time*. Oxford: Oxford University Press.
- Putnam, H. 1967. "Time and Physical Geometry." *Journal of Philosophy* 64:240–7.
- Qureshi-Hurst, E. 2021. Time and Tillich: Re-Examining Salvation Through the Lens of Relativity [PhD thesis]. University of Oxford. <https://ora.ox.ac.uk/objects/uuid:7095e566-df3e-4603-b111-3483bdcd8b70>
- Qureshi-Hurst, E., and A. Pearson 2020. "Quantum Mechanics, Time, and Theology: Indefinite Causal Order and a New Approach to Salvation." *Zygon: Journal of Religion and Science* 55 (3): 663–84.
- Read, J., and E. Qureshi-Hurst 2020. "Getting tense about relativity." *Synthese* 198:8103–25
- Russell, R. J. 2007. "Cosmology and Eschatology." In *The Oxford Handbook of Eschatology*, edited by J. L. Walls. Oxford: Oxford University Press.
- Skow, B. 2009. "Relativity and the Moving Spotlight." *Journal of Philosophy* 106:666–78.
- . 2015. *Objective Becoming*. Oxford: Oxford University Press.
- Smith, Q. 1994. "McTaggart's Paradox and the Infinite Regress of Temporal Attributions." In *The New Theory of Time*, edited by L. N. Oaklander, and Q. Smith. New Haven, CT: Yale University Press.
- Swinburne, R. 1993. "God and Time." In *Reasoned Faith* (pp. 204–22). Ithaca, NY: Cornell University Press.
- Tallant, J., and D. Ingram. 2020. "The Rotten Core of Presentism." *Synthese* 199:3969–91.
- Tamm, M. & Olivier, L. eds. 2019. *Rethinking Historical Time: New Approaches to Presentism*. London: Bloomsbury Academic.
- Tooley, M. 1997. *Time, Tense, and Causation*. Oxford: Oxford University Press.
- Torrance, T. 1969. *Space, Time and Incarnation*. Oxford: Oxford University Press.
- Weyl, H., 1949. *Philosophy of Mathematics and Natural Science*. Rev. and augm. English ed., based on a translation of Olaf Helmer, Princeton, NJ: Princeton University Press.
- Wright, N. T. 2013. *Paul and the Faithfulness of God*. London: SPCK.
- Zimmerman, D. 1998. "Presentism and Temporary Intrinsic." In *Metaphysics: The Big Questions*, edited by P. van Inwagen, and D. Zimmerman, 206–89. Oxford: Blackwell.

- Zimmerman, D. ed. 2004. *Oxford Studies in Metaphysics* (vol 1). Oxford: Oxford University Press.
- Zimmerman, D. 2008. "The Privileged Present: Defending an 'A-Theory' of Time." In *Contemporary Debates in Metaphysics*, edited by T. Sider, D. Zimmerman, and J. Hawthorne. Oxford: Blackwell.