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What the First Cause Is

6.1 Introduction

In the previous chapter, I have shown that there exists a First Cause of our existence. But what is this First Cause? Is it God, or part of the universe as postulated by Hawking (see below)? A number of formulations of the Cosmological Argument have arrived at the conclusion of an Ultimate Ground (Deng 2019) or a Necessary Being (e.g. Weaver 2016) without showing that the necessary being/ultimate ground is God. Others have claimed that naturalistic accounts of ultimate origin fare at least as well as theistic accounts (Oppy 2009, 2010, 2013a, b), and that

whatever causal structure for the universe is supposed by the theist can be replicated by the naturalist ... Thus if the free action of God is supposed to be the indeterministic action of a necessary being, the naturalist is free to propose that the universe had an initial state which was itself necessary and indeterministically caused the organized cosmos we experience. (Pearce 2017; following Oppy 2013b)

I shall address these concerns by demonstrating that the First Cause of the universe has the properties of being beginningless, initially changeless (here, 'initial' refers to the first in the series of states [ordered causally], not first the series of changes/events/temporal series), transcendent, immaterial, has libertarian freedom, is enormously powerful and highly intelligent, and therefore worthy of being called the Creator of the Universe. The conclusion follows from premises 6–12 of the KCA-TA and is as follows:

6. Since the First Cause is the first, it is uncaused.

7. Since whatever begins to exist has a cause (Causal Principle), the First Cause is beginningless.

8. Since every change is an event which has a beginning as something/part of a thing gains or loses a property, and since the first change (= first event) does not begin uncaused (given the Causal Principle), the first change (= first event) is caused by a First Cause which is initially changeless. (From 5 and 7)

9. Since the First Cause is initially changeless, it is transcendent and immaterial (i.e. it is distinct from the material universe and is the cause of the universe).

10. In order to cause an event (Big Bang or whatever) from an initial changeless state, the First Cause must have

10.1. the capacity to be the originator of the event in a way that is undetermined by prior event, since the First Cause is the first, and

10.2. the capacity to prevent itself from changing, for otherwise the First Cause would not have been initially changeless and existing beginninglessly without the event/change.

10.1 and 10.2 imply that the First Cause has libertarian freedom.

11. In order to bring about the entire universe, the First Cause is enormously powerful.

12. (+ the Teleological Argument:) In order to bring about a universe with its fine-tuning and order, the First Cause is highly intelligent.

13. A First Cause that is uncaused, beginningless, initially changeless, transcendent, immaterial, has libertarian freedom, and is highly intelligent and enormously powerful is a Creator of the Universe.

14. Therefore, a Creator of the universe exists.

I shall now discuss each of the premises in turn. Among the important contributions of this chapter is a reply to the objections posed by the works of Stephen Hawking (including the objections found in his final book published in 2018), which are of great interest in philosophy of religion debates and science and religion dialogues, as well as the discussion of the relationship between the KCA, the doctrine of *creatio ex nihilo*, and various views and theories of time. The debate between the relational view of time and the substantival view of time continues, just as the debate between the dynamic theory of time and the static theory of time continues. It is beyond the scope of this book to settle the debate. Suffice to note that the KCA-TA defended in this book is compatible with any of these views and theories. I shall explain this point further in what follows, focusing on the relational view and the static theory (because these generate more issues for the KCA which need to be addressed) and commenting on the substantival view and dynamic theory whenever necessary.

6.2 The First Cause Is Uncaused, Beginningless, and Initially Changeless

Premise 6 ‘since the First Cause is the first, it is uncaused’ follows by definition of the word ‘first’ and the word ‘cause’ and ‘uncaused’ as defined in Chap. 2 (see further, Chap. 8). Premise 7 follows from the Causal Principle ‘whatever begins to exist has a cause’ established in Chap. 3.

Concerning premise 8, a ‘change’ is understood as an event that has a beginning at the state of having gained or having lost a property. Thus, a beginningless change is impossible. Even if events are not discrete, they are still distinct, otherwise they would be changeless. Now it has been shown in Chap. 5 that an infinite regress of changes is not the case—and this is true regardless of what dimensions of time there are. Therefore, there is a first change. Given the Causal Principle and the fact that a change is something that has a beginning as explained in Chap. 5, the first change would have a cause. The cause (X) of the first change (Y) cannot have been caused by another cause (W), for otherwise W causing X would be a change that is prior to Y, in which case Y would not have been

the first change. Therefore, given that an infinite regress of changes is not the case, there is a first change which is caused by an uncaused cause, and this uncaused cause would be the first in the series of causes. Now this First Cause cannot be a change prior to the first change (otherwise the first change wouldn't be the first!); thus, the First Cause must be changeless initially. This implies that the First Cause is not an event such as the Big Bang.

Quentin Smith (1996, p. 179) has raised an objection by claiming that only events are causes, and therefore there cannot be a cause for the first event. However, on the one hand, there has been no compelling argument offered to show that causes must be events; one can defend an alternative ontological analysis according to which causality does not have to be a relation between events; rather, the causes can be underlying substances such as agents (Craig 2000c; see the discussion on agent causation in Chap. 3 and below).¹ On the other hand, given the arguments that an infinite regress of events is impossible (Chap. 5) and the argument for the Causal Principle that whatever begins to exist has a cause (see Chap. 3), there must be a first event which is caused by a non-event (e.g. a substance). Given that an event is defined as a change and that the First Cause is initially changeless, the uncaused First Cause is not an event prior to another event. Rather, the First Cause was in an initially changeless state causally prior to bringing about an event, and gained a property (i.e. changed) as it brings about an event; that is, it changed simultaneously with the bringing about of a change. (Thus, there are two events X and Y which happened simultaneously: the change (X) to the First Cause as it brings about Y, and X is concomitant to Y.) This conclusion follows from the previous premises which have shown that the First Cause is beginningless whereas the first event has a beginning, which implies that the beginningless First Cause exists initially without the first event.

It might be objected that, while this view makes sense on a dynamic view of time (given which one can say that the first event 'comes into being'), it seems to be in conflict with the static [B-] theory of time given which the first event does not come into being but exists tenselessly at the first time t_1 alongside God (suppose God is the First Cause). If that is the case, how can God be initially changeless? How can God exist without the first event of the universe? (Craig 2000b, p. 221).

There are three possible responses to this question, and I shall explain that all three of them are defensible and any one of them would suffice to answer this question.

Concerning the first possibility, even if we assume the static theory of time, one can say that the timeline of events does not represent all of reality. There is an aspect of reality that is without any event or time, and this can be called the initial state of reality. An aspect of God's being exists in this eventless/changeless and timeless state ('outside of the time line')—that is one way to understand the First Cause being initially changeless and timeless—while another aspect of God's being exists within the timeline and causally interact with the events in the timeline (e.g. it is simultaneous with the first event and brought about the first event). Given the Causal Principle, the beginning of the first entity of the spacetime block would require a cause just like all the beginning of other later entities, and one could say that there is an aspect of God's being that exists at the first moment of time and simultaneously brought about the first entity of a block that exists at that time, even though there would be no earlier time at which that first entity did not exist. On this view, to say that the First Cause existed initially without the first event means that there is an aspect of reality (an aspect of the First Cause) which is outside of the timeline and is beginningless and without change/event. (One might worry that this response contradicts strict Classical Theism, which affirms the doctrine of divine simplicity; I shall explain below that Classical Theism is unwarranted.) We know that distinctions of changes exist in the present portion of reality, and if there is a prior aspect of reality in which such distinctions are absent, that would be changeless state, which I have shown the First Cause is initially in.

Craig objects that the above response concerning the creation of the first event reduces the doctrine of creation to tenseless ontological dependence and thereby emasculates *creatio ex nihilo* (Craig 2000b, p. 221). However, if *creatio ex nihilo* is understood as affirming that the universe has a beginning and does not have a material cause but has an efficient cause (God), then the above response does not contradict this. The difference between the above response and the view that God merely sustains the universe in being is that the latter view is compatible with the

universe not having a beginning (i.e. being a spacetime block that is an actual infinite in earlier-than extension), but the above response denies this.

The second possibility is 'to posit a hyper-time in which God brings into being the whole four-dimensional block universe at a moment of hyper-time' (Craig 2000b, p. 221; Craig objects that affirming this view would be extravagant; however, my point here is that this possibility is not excluded by the supposed evidences for B-theory). Such a hyper-time would be an A-theoretical time, which implies that the A-theory is fundamentally correct. While this view is not what B-theorists usually affirm, it is consistent with the evidences (e.g. based on the theory of relativity) which B-theorists cite for their theory, for on this view it remains the case that our spacetime is a four-dimensional block and that all the moments within the block are equally real relative to one another. If valid,² the evidences they cite for their theory only imply that an event in the spacetime block does not come into being and go out of being relative to another earlier or later event in the block, but it does not imply that the block itself never comes into being (although this is usually assumed).

The third possibility is to affirm that God initially exists in a form of time prior to the first moment of the block and is thus earlier than it, just like hydrogen and oxygen exist prior to water inside the block and cause it. Just as water is causally dependent on hydrogen and oxygen coming together to form it, the block is dependent on God (the First Cause). This view is proposed by the so-called Oxford School, which includes John Lucas, Richard Swinburne and Alan Padgett. Padgett writes that 'God is in himself temporal in some ways' (1992, p. 126); his view is 'in harmony with the Biblical witness about God and his eternity' (ibid.), which implies being without beginning, and that God is not in any measured time (ibid.) because He is not subjected to the law-like regularities of nature which allow for the periodic processes that underlie isochronic clocks and hence are essential to the measurement of time (p. 127). Applying Padgett's view to the state before the first event of the spacetime block, this would imply that God is in the dimension of time which is not divisible by periodic processes involving events; it is non-metric and unlimited in the earlier-than direction. This unlimited initial state itself exists an earlier-than direction relative to the first event, and thus is prior

to the first event in that sense. This view assumes a substantival view of time which affirms that time can exist independently of change. Given this view, the First Cause could have been in an initially changeless state with an actual infinite past extension (i.e. without an 'edge' in the earlier-than direction), causally and temporally antecedent to the first change. In this way, God (the First Cause) could have existed beginninglessly before creation in an undifferentiated, non-metric time and God would not be dependent on such a time because such a time would be a property of God (Padgett 1992). This view does not face the problems with postulating an actual infinite number of earlier durations (see Chap. 5), since the earlier extension of time is undifferentiated. The KCA does not rule out an infinite past if this is understood according to the substantival view of time and that the earlier extension of time is undifferentiated; it merely rules out an infinite regress of causes and changes/events. Given the arguments in the previous chapter there must still be a first event/change even if substantival view of time is correct. Craig and Sinclair (2009, p. 192n.100) note that 'the Kalām argument strictly demonstrates only that metric time had a beginning. Perhaps the cause exists changelessly in an undifferentiated time in which temporal intervals cannot be distinguished.' On this view, the First Cause existed literally and eventlessly before creation, but there was no moment, say, 1 hour or 1 million years before creation (ibid.). Even though, according to the substantival view, in the absence of change, time would still exist as a substance ('the container'), in the absence of change there would be no metric. That is why the Oxford School would say that God exists in unmetrified time prior to His free act of creating the universe (Swinburne 1993, pp. 208–9). With the act of creation 'God freely creates a universe with intrinsic laws of nature that serve as a metric for the physical time of that universe' (Mullins 2015, p. 36).

By contrast, on a relational view of time which defines time as a series of changes/events ordered by 'earlier-than' and 'later-than' relations, an initially changeless First Cause would be initially timeless and hence does not exist 'earlier' than the first event.³ While the relational view of time is inconsistent with the view of the Oxford School, it is consistent with the Hybrid view according to which God (the First Cause) 'exists timelessly sans creation and temporally at and subsequent to the moment of creation' (Craig and Sinclair

2009, p. 189). The coherence of this Hybrid view has been defended in previous publications by William Lane Craig, and constitutes a major contribution to the discussion on the relationship between God and time. It should be noted that what Craig means is that the First Cause is timeless *without* agent-causing the first event at t_1 , and temporal *with* agent-causing the first event at t_1 . There is no contradiction with this view since 'timeless' and 'temporal' have different references on this view (see further, below). According to this view, there is a first moment and a beginning where God's existence in time is concerned. However, this does not imply that 'God's existence has a beginning' simpliciter (contra Leftow 2005, p. 66; 2010, p. 281), because God's existence is not limited to existence in time only; rather, God exists timelessly 'sans creation'. God's existence per se does not have a temporal boundary, since He has a timeless phase which is absent from (say) Oppy's view of the initial state of the universe (see Chap. 3). While Craig has defended this Hybrid view on the assumption of dynamic and relational view of time, I have tried to show that it can also be defended on the assumption of static and substantival view of time as well (see, for example, the discussion on the 'first possibility' above).

One might object by claiming that timeless means existing for zero seconds, which would imply non-existence. This is a misconception, for timeless does not mean existing for zero seconds. A second is a measurement of the temporal dimension; it has a beginning and is defined as a sixtieth of a minute of time, and 'zero seconds' by definition implies being shorter than one second within the measurement of the temporal series. Whereas according to the Hybrid view the First Cause is without beginning and initially changeless and timeless, that is, existing without the temporal dimension initially; therefore, it is not appropriate to use 'zero seconds' to refer to it.

It is also inappropriate to think of this view as involving some 'causal point' prior to the beginning of time,⁴ because a point assumes a dimension whereas there was no dimension and hence no point at the initially changeless state which was beginningless and does not require a cause. It is wrong to think that something is changeless if and only if it remains unchanging over an extended time interval. Changeless simply means the absence of change, and since change requires extended time interval, the absence of time interval would also imply the absence of change. Thus,

changelessness does not require a time interval; rather, changelessness is also compatible with timelessness.

In his earlier works, Stephen Hawking proposed that the initial state of the universe consisted of a timeless (no boundary) state (Hartle and Hawking 1983; Hawking 1988). This initial state can be understood as a beginningless impersonal First Cause from which all things came, and which avoids the need for a Creator. (It is similar to Craig's hybrid view explained above, except that instead of God it is the universe itself which has a first moment where its existence in time is concerned and yet the universe is beginningless because it does not have a temporal boundary since it has a timeless phase.) Others have offered timeless interpretations of quantum gravity (e.g. Barbour 1999; Deutsch 1997; Anderson 2012) and/or claimed that time and space could have emerged from a timeless and spaceless natural state (e.g. Arkani-Hamed and Trnka 2014; Oriti 2014; Cao et al. 2017; Carroll 2019; Huggett and Wuthrich *forthcoming*).

However, none of the above can be regarded as established given the lack of a well-established theory of quantum gravity and the problem of underdetermination of scientific theories noted in Chap. 1. Thus, it is not the case that the above scientists have shown that it is possible for the universe to be initially changeless/timeless. On the contrary, Oriti (2014, p. 187) notes 'the ongoing, tentative work of theoretical physicists on models that, most likely, will turn out to be incorrect or only partially understood in the future'.

Moreover, most (if not all)⁵ of the above concern the measurement of time and not time itself. They do not address the issue of a beginningless and initially changeless/eventless state as it is defined in the context of the Kalām Cosmological Argument (KCA). In other words, they are actually addressing a different problem which does not rebut the conclusion that follows from the premises of the KCA.

For example, regarding the Wheeler–DeWitt equation used by Barbour, Hawking et al., physicist Aron Wall argues that the Wheeler–DeWitt equation does not imply timelessness; rather, it concerns the measurement of time. Wall (2014) writes: 'when we say that the wave-function doesn't change with time, what this really means is that the choice of time coordinate is arbitrary', not that time is an illusion or that

it does not exist. “Time’ needs to be measured relative to some physical clock. There is no absolute ‘ t ’ coordinate relative to which everything else moves’ (ibid.).

Regarding Hawking’s use of the so-called imaginary time, while imaginary numbers are used to represent the time coordinate in relativity theory, this does not imply that the mathematical concept has a counterpart in physical reality. As Craig (1990) observes citing Eddington, the use of imaginary numbers for the time coordinate ‘can scarcely be regarded as more than an analytical device’ (Eddington [1920], p. 48). Imaginary time was merely an illustrative tool which ‘certainly do[es] not correspond to any physical reality’ (Eddington [1920], p. 181). It has no concrete meaning (similar to an imaginary number such as $\sqrt{-1}$ which has no concrete meaning) and therefore merely used by Hawking as a mathematical trick for avoiding a singularity. As Erasmus (2018, p. 146) explains,

Wick rotation ‘is little more than a convenient mathematical trick’ (Isham 1997, p. 399) and imaginary time ‘is introduced only for computational convenience’ (Vilenkin 2006, p. 182). Consequently, we should not interpret the tunnelling and no-boundary proposals realistically and, thus, the quantum creation hypothesis cannot be a true description of reality.

Concerning using ‘imaginary time’ to ‘change time into (timeless) space’, Barrow observes that

physicists have often carried out this ‘change time into space’ procedure as a useful trick for doing certain problems in ordinary quantum mechanics, although they did not imagine that time was really like space. At the end of the calculation, they just swop [sic] back into the usual interpretation of there being one dimension of time and three ... dimensions of ... space. (Barrow 1991, pp. 66–7)

However, in the Hartle–Hawking model, ‘Hawking simply declines to re-convert to real numbers. If we do, then the singularity reappears’ (Craig 2000c, p. 228). Since the Hartle–Hawking model does not convert imaginary numbers (which are used instrumentally rather than

realistically as explained above) back to real numbers, his model should be understood instrumentally rather than realistically; that is, it does not correspond to any concrete reality.

Indeed, Hawking himself confesses, ‘I ... am a positivist who believes that physical theories are just mathematical models we construct, and that it is meaningless to ask if they correspond to reality, just whether they predict observations’ (Hawking 1997, p. 169). Since the Hartle–Hawking model is intended to be understood in an anti-realistic manner, the model does not intend to describe what reality is or what reality possibly is—and indeed the model cannot do so because, as explained above, imaginary time does not correspond to physical reality. In that case, Hawking’s model would not achieve Hawking’s intended purpose of justifying the claim that—in reality—the beginning of the universe ... doesn’t need to be set in motion by some god’ (Hawking and Mlodinow 2010, pp. 134–135). Moreover, it would not rebut the KCA which Craig, myself, and others have presented, because the reasons we have offered in support for the cosmological argument imply that the conclusion of the argument (i.e. there is a Creator of the universe) should be taken in a realist manner.

Additionally, Hawking’s proposal ignores the ‘zero-point energy’ which entails that the initial state is metastable (Gott and Li 1998, p. 38). Craig (2018, p. 401) observes that on Hawking’s model, the initial state of the universe ‘cannot exist literally timelessly, akin to the way in which philosophers consider abstract objects like numbers to be timeless or theologians take God to be timeless. For this region is in a state of constant flux, which, given the Indiscernibility of Identicals, is sufficient for time.’ Boddy et al. (2016) note that vacuum fluctuations are a feature of all quantum systems which ultimately arise as a consequence of the Heisenberg uncertainty principle; even though such fluctuations are not regarded as dynamical because they exist even in ‘stationary states’; nevertheless, they give rise to phenomena such as the Lamb shift or Casimir effect. (It should also be noted that the so-called stationary state is called stationary because the probability density does not depend on time; nevertheless, the wavefunction itself is not stationary but continually changes.) What this implies is that there is gaining/losing of properties, which is how change is defined in the context of KCA. Thus, quantum

system is not changeless/eventless/timeless as these terms are defined in the context of KCA. To rebut the KCA, the objector has to rebut its premises or its validity; the objector should not dodge the argument by defining the key terms such as ‘change/time’ and ‘changelessness/timelessness’ differently. (As explained in Chap. 1, to object to an argument by using an alternative definition would be to miss the point of the argument.)

One might speculate that perhaps there is a spaceless void which has been generating bubbles of universes by quantum fluctuations since eternity. This speculation implies that there has been an actual infinite number of changes (each generation is a change), but I have shown in Chap. 5 that an infinite regress of changes is not possible; thus, this speculation is refuted. (Even if Hawking is able to modify his model such that there is no infinite regress of changes and that there is a first change, that is, a first event, his model would still fail to explain the beginning of the first event because, as explained in Sect. 6.4, the first event must have been brought about by an initially changeless First Cause with libertarian freedom, that is, a Creator.)

In his final book *Brief Answers to the Big Questions*, published posthumously after his death, Hawking tried to explain why he thought that ‘the simplest explanation is that there is no God. No one created the universe and no one directs our fate. This leads me to a profound realisation: there is probably no heaven and afterlife either’ (Hawking 2018, p. 38).

He made the astonishing claim that ‘the laws of nature itself tell us that not only could the universe have popped into existence without any assistance, like a proton, and have required nothing in terms of energy, but also that it is possible that nothing caused the Big Bang. Nothing’ (ibid., p. 35).

What made Hawking thought that the laws of nature tell us that it is possible that nothing caused the Big Bang? He began by claiming that ‘When the Big Bang produced a massive amount of positive energy, it simultaneously produced the same amount of negative energy. In this way, the positive and the negative add up to zero, always. It’s another law of nature’ (ibid., p. 32).

However, the claim that the positive and negative energy add up to zero does not imply that the positive and negative energy began to exist uncaused. As noted in Chap. 2, one *can* still ask what made the energy and the laws of nature to be the way they are (indeed, given the Causal Principle defended in Chap. 3, one *should* still ask this question; see below).

Hawking also claimed that at the subatomic level ‘conjuring something out of nothing is possible. At least, for a short while. That’s because, at this scale, particles such as protons behave according to the laws of nature we call quantum mechanics. And they really can appear at random, stick around for a while and then vanish again, to reappear somewhere else’ (Hawking 2018, p. 33).

However, he failed to mention that at the subatomic level quantum particles do not come into existence from absolutely nothing; rather, as noted in Chap. 2, quantum particles are manifestations of pre-existent quantum fields which act according to pre-existent quantum laws.

Hawking seemed to have anticipated the above problems when he asked, ‘but of course the critical question is raised again: did God create the quantum laws that allowed the Big Bang to occur?’ (Hawking 2018, p. 34). Hawking (2018, p. 37) goes on to say:

As we travel back in time towards the moment of the Big Bang, the universe gets smaller and smaller and smaller, until it finally comes to a point where the whole universe is a space so small that it is in effect a single infinitesimally small, infinitesimally dense black hole. And just as with modern-day black holes, floating around in space, the laws of nature dictate something quite extraordinary. They tell us that here too time itself must come to a stop.

One might ask where the black hole and the laws of nature came from. Hawking went on to claim that there cannot be a Creator who made these, because

You can’t get to a time before the Big Bang because there was no time before the Big Bang. We have finally found something that doesn’t have a cause, because there was no time for a cause to exist in. For me this means

that there is no possibility of a creator, because there is no time for a creator to have existed in. (Ibid., p. 38)

In response, first, even if there is no physical time before the universe, this does not imply that there is no metaphysical time before the universe in which the Creator could have existed in. As noted earlier, my argument is consistent with a substantival view of time according to which God exists before creation in an undifferentiated, non-metric time, causally and temporally prior to the first event. Concerning the advantage of this view (which is also known as ‘relative timelessness’), Craig (2011) notes that it may be helpful for those people who stumble at the idea of God’s creating the universe (or the Big Bang) because they assume (unjustifiably in Craig’s view) that causes must be prior to their effects in time, and there is no time prior to the Big Bang. Craig replies:

I’m inclined to say, with most philosophers, I think, that causes need not exist temporally prior to their effects. But for those who are hung up on this difficulty, relative timelessness provides a neat way out: God does exist temporally prior to causing the Big Bang—not in physical time, to be sure, but in His own time, the time in which God Himself endures. (Ibid.)

Second, even if one rejects the above response because one rejects the substantival view of time and embraces a relational view of time instead, there is an alternative response which works on a relational view of time. This alternative response begins by questioning the assumption that underlies Hawking’s claim ‘there is no time for a creator to have existed in.’ One can ask, ‘why does God need to exist in time?’ Hawking’s statement begs the question against a transcendent Timeless Creator who can exist outside of time initially. Earlier on, Hawking (2018, p. 34) attempts to provide a justification for his assumption by claiming that ‘our everyday experience makes us think that everything that happens must be caused by something that occurred earlier in time’. However, this claim does not provide adequate justification for the assumption that a cause must be in such a temporal relation with its effect. As Craig argues, the notion that causes always stand in temporal relations with their effects can be treated merely an accidental generalization of our daily

experiences, ‘akin to Human beings have always lived on the Earth, which was true until 1968. There does not seem to be anything inherently temporal about a causal relationship’ (Craig and Sinclair 2009, pp. 188–9). Likewise, Reichenbach (2021) argues that one need not require that causation embody the Humean condition of temporal priority, but may treat causation conditionally or as a relation of production. Hawking (2018, p. 38) also argues: ‘time didn’t exist before the Big Bang so there is no time for God to make the universe in.’ However, God does not need to make the universe in time. Rather, God can be conceived of as being timeless without the universe and in time with the universe, and He brought about the universe together with time (Craig and Sinclair 2009).

Hawking might object that causes only exist within a time context, but there is no time context prior to the Big Bang.

In reply, one should distinguish between the label with the entity labelled. The entity which we call the First Cause is labelled as a ‘cause’ because it brought about the first event, but this does not mean that the entity cannot have existed in an initially changeless state without bringing about the first event, and entered into time as it brought about the first event. Thus, the Cause of the universe can be initially timeless, and in that initially timeless state it has the capacity (libertarian freedom) to bring about the first event in time (see further, Sect. 6.4.3).

On the one hand, we must be careful not to beg the question against the existence of such an initially timeless Cause, one that is causally but not temporally prior to the universe. On the other hand, a *Modus Tollens* argument has been offered for the Causal Principle ‘whatever begins to exist has a cause’ in Chap. 3, and this argument implies that the Causal Principle would hold regardless of whether time exists before the universe began. Given Hawking’s claim that there was no time before the Big Bang, this implies that the universe has an (initially) timeless Cause.

Following Morriston (2002b, p. 240), Hawking might object by claiming that his principle ‘everything that happens must be caused by something that occurred *earlier* in time’ seems to enjoy the same empirical support as the Causal Principle ‘everything that begins to exist has a cause’, so why does one reject his principle as an accidental generalization while accepting the Causal Principle?

Two points may be said in response. First, Craig explains that ‘the univocal concept of ‘cause’ is the concept of something which brings its effects, and whether this involves causes standing in temporal relations is an incidental question just as whether it involves transformation of already existing materials or creation out of nothing is an incidental question’ (Craig and Sinclair 2009, pp. 188–9, 195). Second, Hawking’s principle is based on *inductive* generalization of ‘our everyday experience’ (Hawking 2018, p. 34), and inductive generalizations are susceptible to the fallacy of accidental generalization. Whereas the Modus Tollens argument defended in Chap. 3 is a *deductive* argument and its premises are not based on inductive generalization but are based on conceptual analysis and denying a particular consequent. Hence, it is not susceptible to the fallacy of accidental generalization.

6.3 Transcendent and Immaterial

By transcendent I mean ‘beyond or above the range of normal or physical human experience’ (*Oxford English Dictionary*). By immaterial I mean fundamentally unlike matter-energy as we know it. (One might imagine a First Cause having spatial extension but is initially changeless; however, this would still be different from matter-energy as we know it, which is constantly changing, as explained below.)

Now it has been established previously that the First Cause is initially changeless. Such a First Cause would be beyond the range of normal human experiences of physical reality which is characterized by change, and hence such a First Cause would be transcendent.

Moreover, it would also be distinct from the physical universe which is constantly changing. For according to quantum field theory, the universe is a continuous fluctuating field. Additionally, as noted previously, according to quantum physics, physical entities constantly fluctuate at the quantum level as described by the Heisenberg uncertainty principle (Boddy et al. 2016).

By contrast, the First Cause is not a series of changes/events describable by physical laws; rather, it is initially changeless (and beginningless) and brought about the first event and these physical laws. To insist on

calling such a First Cause as a *physical* (or natural) entity would be to use the word '*physical*' to refer to something *very different from what physics* tells us about the physical world, which is inappropriate. Thus, it is more appropriate to call this entity non-physical or immaterial.

Moreover, physical entities do not have 'the capacity to be the originator of an event in a way that is un-determined by prior event, and the capacity to prevent itself from changing' which a First Cause must have, as explained below.

One might object that he/she cannot conceive of a First Cause that is immaterial, spaceless, and timeless, that is, something that has no spatial and no temporal extension, which seems to be non-existence. Three points may be said in response.

First, the lack of extension does not imply non-existence. The key issue is how existence should be understood. While Aristotelian substantialism invokes the maxim 'to exist is to exist in space and time' (Earman 1995, p. 28), the problem with this view is that space and time are not themselves located in space and time (Moreland and Craig 2003, p. 189). Others may think that to exist is to be physical, but the problem with this view is that disembodied existence is surely conceivable, and it begs the question against an immaterial God (ibid., p. 190). Existence is better defined as 'either the belonging of some property or the being belonged to by a property' (ibid., p. 191). Moreland and Craig (ibid.) explain:

Things that exist have properties. When something such as Zeus fails to exist, there is no object Zeus that actually has properties. Since unicorns could have existed, this means that the property of being a unicorn could have belonged to something. It would also account for existence itself existing because the belonging-to (exemplification, predication) relation is itself exemplified (a nonfictional, real tiger named Tony and the property of being a tiger both enter into this belonging relation) and the belonging-to relation exemplifies other features (e.g., it has the property of being a relation that belongs to it). (Ibid., p. 191)

Second, one can conceive of immateriality, spaceless, and timeless as the negations of materiality, space, and time. The negation of a meaningful term is meaningful. Materiality is meaningful. Therefore, the

negation of materiality is meaningful, and that is what immateriality means. Likewise, space and time are meaningful terms. Therefore, the negation of space and the negation of time are meaningful terms, and those are what spaceless and timeless mean.

One might object that either something is extended or not extended, and if it is not extended it is a point. However, this reasoning neglected the possibility of spacelessness. A point is something in space, whereas spacelessness is not a point in space. Likewise, timelessness is not a point in time. Rather, a timeless and spaceless First Cause would be something that is not in a temporal or spatial dimension and does not have temporal and spatial extension, and it is not non-existence because it has properties, such as the property of causal power which brought about the first event. Having causal power means having the capacity to bring about something; it does not mean/imply/require having spatial or temporal extension.

Third, it has been explained earlier that my argument is consistent with an alternative substantialist view of time, according to which the First Cause exists before creation in an initially changeless state in an undifferentiated, non-metric time. According to this view, the First Cause may be conceived of as being temporally (and perhaps also spatially) extended, thus resolving the difficulty. Even though the First Cause may be conceived as being extended in this sense, it remains the case that the First Cause should not be regarded as the universe (understood as the totality of physical reality) or as a part of the universe, for it remains the case that the First Cause is initially changeless whereas physical things are in constant change, as explained above. Moreover, as argued below, in order to bring about the first event from an initially changeless and beginningless state, the First Cause must have libertarian freedom, which is characteristic of a personal Creator rather than an impersonal physical reality behaving in accordance with natural laws.

6.4 The First Cause Has Libertarian Freedom

6.4.1 How Could the First Cause Bring about the First Event from an Initially Changeless State

It has been explained above that the First Cause was beginningless and initially changeless; that is, it was in a state where it was not gaining or losing any property. One should ask how such a First Cause could bring about the first event from an initially changeless state.

It should be noted that there is a distinction between ‘not’ and ‘cannot’; initially changeless does not mean ‘cannot change’; rather, it means ‘not-changing initially’. When the First Cause brings about a change, that is, an event, the First Cause itself would undergo a change, that is, a change from ‘existing without the event’ to ‘existing with the event’. But how could that happen?

Could the First Cause be initially changeless due to necessity and initiated the first change out of necessity, that is, in a deterministic, fixed, law-like way? If that were the case, the necessity that initiated the first change would have to overcome the necessity that imposed the initial changelessness, and if it can do so, it would have done so necessarily and the First Cause would not have been initially changeless and the first change would have been coexistent with the First Cause. But this cannot be the case because, as shown in previous sections of this chapter, the First Cause is initially changeless and the first change has a beginning whereas the First Cause does not; thus, they cannot be coexistent. Thus, it cannot be the case that the First Cause was initially changeless due to necessity and initiated the first change out of necessity.

Could the First Cause be a quantum system which initiated the first change contingently? This would be similar to Bohr’s interpretation of quantum fluctuation according to which, although the quantum field is a necessary condition, the fluctuation of the field happened indeterministically. Oppy (2009, Footnote 8) claims that there is no relevant difference between appealing to indeterminism in physical systems and non-deterministic agent causation in this case. As an example, consider the following scenario:

Suppose the laws of nature are such that a ‘primeval atom’ with no internal structure might decay, generating a Big Bang and the universe as we know it. Before it did decay nothing happened. We may suppose that the laws of nature can be formulated to describe this primeval atom as having existed for an infinite time with an unchanging infinitesimal probability of decay per second.⁶

(In this scenario, infinite time without anything happening should be understood in accordance with a substantival view of time which postulates that time can exist without change.)

In reply, on the one hand, while many types of events have been claimed to be subjected to quantum indeterminacy (e.g. radioactive decay), it is not true that quantum physics has proven that an event can begin to exist indeterministically and contingently, given the viability of deterministic interpretations of quantum mechanics such as Bohm’s pilot-wave theory (see Chap. 2) and the possibility of other deterministic theories. On the other hand, a quantum system is constantly changing as explained previously, whereas the First Cause is initially changeless, as argued previously. Therefore, a quantum system cannot be the First Cause. (To elaborate, I shall explain below that the First Cause must not only have the capacity for initiating the first event, but also the capacity for preventing itself from changing. In the case of a quantum system, there is no such preventive condition; that is why fluctuations are constantly happening and therefore a quantum system cannot be in a state which is beginningless and initially changeless.)

Concerning the scenario mentioned above, the postulation ‘with an unchanging infinitesimal probability of decay per second’ is incoherent, since if (according to the scenario) ‘nothing happened’ in that state before decay, then there would be no measure of time and hence no ‘second’. Additionally, while it has been argued that there are instances of time-delayed causation which indicate that not all instances of causation are simultaneous (Grünbaum 1994), in no instance is there a delay of infinite time as the scenario postulates.

On the contrary, Aguirre and Kehayias note (2013): ‘It is very difficult to devise a system—especially a quantum one—that does nothing “forever”, then evolves. A truly stationary or periodic quantum state, which

would last forever, would never evolve, whereas one with any instability will not endure for an indefinite time.’ (Even though Aguirre and Kehayias are arguing against a particular model, namely, the Emergent Universe Scenario, the point they are making is generalizable to those models that postulate something doing nothing ‘forever’. Halper [2021, p. 160] notes that Aguirre has argued elsewhere that the universe may be eternal into the past [Aguirre 2007], but in that model, namely, the Eternal Inflation Model, it is not the case that something ‘does nothing forever’. Rather, that Eternal Inflation Model affirms a beginningless and continuous changing scenario, that is, an inflation that continues forever globally. This implies an actual infinite regress of changes and is refuted by the arguments in Chap. 5.)

Concerning those models in which something ‘does nothing forever’, Chan (2019, p. 251) explains the problem is that

In a stable state, the ‘decay life time’ would be infinite. Without any external causes, this state would exist forever. However, in an unstable state, the initial state would change to other state in a finite time and the ‘decay life time’ is finite ... If the initial state of our universe is a stable state, no Big Bang would occur because this state would exist forever without the Big Bang. Since we have the Big Bang based on observations, our initial state must not be a stable state. If the initial state is an unstable state, Big Bang would occur but the time for this initial state must be finite. This implies that a beginning must exist in the initial state because of its finite life time.

One might ask, if time is composed of chronons with a smallest duration (say) of Planck time dimension—an extended simple—would it be the case that particles are changeless within that dimension, and if that is the case would that not imply that they are changeless and then changed with the next duration? This case however is disanalogous to the First Cause because the chronon has a beginning and these particles within the chronon are caused to change with the next duration by prior events or things and thus have prior causes, whereas the First Cause is beginningless and has no prior cause. Likewise, quantum states transition through a zero point is from an event to another event, it is not the same as

initiating the first event from a beginningless and initially changeless (i.e. eventless) state.

The objector might ask whether, even though the First Cause is not a quantum system, could there be some other form of impersonal entity (one might call it an 'Initial Natural Thing', Oppy 2019b, p. 229) which exists necessarily, beginninglessly, and initial changelessly and initially timelessly as the First Cause, from which the first event indeterministically arose. In this case, the first event could have begun to exist without sufficient condition, that is, have a probabilistic cause (Rasmussen and Leon 2018, p. 64; Pearce 2017; following Oppy 2013b).⁷ On this view, the first event is explained by the initial state of the impersonal entity which exists necessarily and which follows probabilistic natural laws.

In reply, first, I have argued previously that an initially changeless First Cause would be immaterial and thus not describable by science, whereas the 'Initial Natural Thing' is supposed to be natural and thus describable by science. There is no scientific basis for such a natural thing. It is science fiction.⁸

More seriously, the objector's postulation is still plagued by the problem similar to what physicists Aguirre, Kehayias and Chan noted above. Even though their point concerns infinite earlier durations rather than timelessness, nevertheless both infinite earlier durations and timelessness share a point of commonality, namely, both are beginningless, that is, not having any limit in the earlier than direction. As I shall explain further below, that is what is relevant for my argument, given which their point is relevant for illustrating a problem which I shall go on and develop into an argument below. My argument is not dependent on the current state of cosmology but is based on the analysis of the necessary conditions for an event to begin from a beginningless and initially changeless First Cause.

To elaborate, the beginning of the first event would imply a change to the First Cause, as it brings about and exists in a new (causal) relation with the first event. If the First Cause is an impersonal entity and the first event arose indeterministically from it (or if the First Cause is a system of tension of opposites)⁹, that is, if there is a (non-epistemic) probability (between 0 and 1) of the first event arising from the initial state of such an entity, this would imply that the initial state of such an entity is unstable. That is, it has a disposition for changing with the beginning of the

first event. An impersonal entity would not be able to 'hold back' its disposition; this implies that it would exist in the initial state for only a finite duration, rather than beginninglessly and (initially) changelessly/timelessly. This is a problem because the premises of the KCA have shown that the First Cause exists beginninglessly and (initially) changelessly/timelessly. Thus, the impersonal unstable entity cannot in fact be the First Cause, contrary to supposition.

One might ask, 'suppose the indeterministic first cause has a 50% probability of bringing about the first event. Would it not be the case that in half of the possible worlds, the first cause would never change and exists in a timeless state?'

In reply, we know that the First Cause *did* change in the actual world to bring about the first event of our world. The point about impersonal first cause being timeless in possible worlds is irrelevant because the KCA only needs to prove that there is a personal First Cause in the actual world by ruling out the First Cause being impersonal in the actual world. Moreover, in order for such an impersonal first cause to remain unchanging beginninglessly in some possible worlds, it would have to be unlimitedly stable, which means it would not have been able to change and bring about the first event in the actual world. Thus, such an impersonal first cause cannot be the cause of first effect in the actual world; this implies that it cannot in fact be the First Cause, contrary to supposition.

It has also been explained previously that it is not the case that the First Cause initiated the first change out of necessity, that is, in a deterministic, fixed, law-like way with a probability of 1, for in that case the First Cause would not have been initially changeless and the first change would have been coexistent with the First Cause. On the other hand, if the First Cause exist beginninglessly and changelessly and is impersonal, then it would be unlimitedly stable. There would be no likelihood/propensity/tendency/disposition for change. In other words, the probability of the first event would be 0, which means it would not have happened. (I have argued previously that quantum systems are not changeless; my point here is that, *even if* a quantum system is initially changeless, it would not change because in that case it would be eternally stable. I have also argued in Chap. 3 that it is not the case that the first event began uncaused.)

The only solution to the above problem is a beginningless First Cause with libertarian freedom, that is, a personal agent with control over its action and hence having freedom to change from a beginningless and initially changeless state. The objector might ask, ‘what is the probability of such a First Cause bringing about the first event?’ In reply, an agent free choice is evidently different from (say) coin throwing where there is some definite objective probability of landing heads; it is open to proponents of agent causation to deny that agent acts have objective probabilities (Buchak 2013). It has been argued that control act is not a chance event (Lowe 2008, p. 195). While others have argued that a finite, conditioned agents such as mere humans are often affected by volitional tendencies and preferences such that their free action is characterized by objective probabilities (O’Connor 2016), there is no good reason to think that the First Cause of the universe would be subjected to such limitations and conditioning. On the contrary, the foregoing discussion indicates that there is a First Cause with such absolute control that the first event is not a probabilistic or deterministic event. In other words, the First Cause is a personal agent with the power to control itself by having the following two capacities:

1. The capacity to initiate the first change/event, for the first change cannot be caused by another entity since the First Cause is the First.
2. The capacity to prevent itself from changing initially and hence maintain its stability in the initially changeless state, that is, the capacity to prevent the capacity to initiate the first change from initiating it initially, for otherwise the First Cause would not have been initially changeless and existing beginninglessly without the first change. (The capacity to control itself and prevent itself from changing differentiates indeterministic libertarian freedom from indeterministic quantum system [suppose for the sake of the argument that quantum physics is truly indeterministic; I offered an argument against this in Sect. 3.3]; the latter lack this capacity and hence is constantly changing, although it is still indeterministic in the sense that the results can be different even though the prior condition is the same.)

As I shall explain further below, having the above two capacities implies that the First Cause has libertarian freedom, and hence is a personal agent. The causation of the first event is therefore due to freedom rather than the result of deterministic causation describable by an impersonal law of nature. Moreover, it has been noted that the indeterministic theories of freedom which have been offered fall into three main groups: non-causal theories, event-causal theories, and agent causal theories (Clarke and Capes 2013). Now the cause of the first event cannot be a prior event (since the first event is the first), and thus event-causal theories of libertarian freedom are not relevant here. Non-causal theories are also not relevant, given the causal principle defended in this book. The only relevant theory of libertarian freedom is agent causal theory which affirms that the agent is the ultimate source of the free event. Moreland (2017, p. 302) notes that ‘advocates of libertarian agency employ a form of personal explanation that stands in contrast to a covering law model’.

Oppy (2009) objects that agent causation is controversial and ‘it is not a secure foundation upon which to rest a convincing argument for the existence of God’.

In reply, I do not posit agent causation as a foundation to rest my argument, nor did I build in the concept of libertarian freedom into the indeterminacy of the First Cause. Rather, the conclusion of Libertarian freedom is deduced based on the kind of indeterminacy that is required to bring about the first change from an initially changeless beginningless state, and the conclusion of agent causation is arrived at deductively from the preceding premises of my argument on which the argument rests. In other words, the conclusion that the First Cause has libertarian freedom is not assumed but deduced from the premises of the KCA; that is, the KCA shows that the First Cause exists beginninglessly and the first effect (first event) has a beginning, and in order for this to be the case the First Cause must have libertarian freedom, as I have explained previously.

In response to the objection that the notion of a Divine agent cause of the initial singularity is obscure, Moreland (2017, pp. 306–307) notes:

We understand exercises of power primarily from introspective awareness of our own libertarian acts, and we use the concept of action so derived to offer third-person explanations of the behaviour of other human persons.

There is nothing obscure about such explanations for the effects produced by other finite persons ... In fact, naturalists like John Searle, John Bishop and Thomas Nagel all admit that our basic concept of action itself is a libertarian one.

The possession of libertarian freedom implies that the First Cause is not an impersonal entity such as an initial singularity (contra Oppy 2019a, p. 22). Rather, the First Cause is a Creator God.

6.4.2 Should We Call It Libertarian Freedom?

It might be objected that one should not call the two capacities mentioned above libertarian freedom, because libertarian freedom is associated with a mind with the capacity for reasoning and decision making, but it has not yet been shown that the First Cause has other properties of a mind with the capacity for reasoning and decision making; in particular, it has not yet been shown that the First Cause brought about the first event purposefully rather than accidentally. The two capacities could be something else (call it *Blark power*) not involving agency or decision making.¹⁰

To address this objection, one can argue that, to demonstrate that something *x* has property *y*, one only needs to demonstrate that *x* has the properties sufficient for *y*, one does not need to demonstrate that *x* has the properties associated with *y*. For example, SETI (Search for Extra-Terrestrial Intelligence) researchers can reasonably conclude that Extra-Terrestrial Intelligence exists if they pick up a certain signal under certain circumstances. Even if our understanding of the intelligence that is capable of producing that signal is associated with *human* intelligence, the association with humans is not essential to the definition of intelligence.

Likewise, it can be argued that having the above mentioned two capacities explained above are sufficient for having libertarian freedom. First, it should be noted that the First Cause of the universe was not caused to bring about the first event by some prior causes nor prevented from doing so by outside forces; thus, it is truly free in this sense. Second, the only notion of freedom which has those two capacities is libertarian freedom.

According to the other notion of freedom, that is, compatibilism, the events are determined by prior events and there is nothing with (1) the capacity to initiate change, and also (2) the capacity to prevent itself from changing. Thus, compatibilist freedom is not what the First Cause has; only libertarian freedom follows from the deduction of the KCA. Third, as explained in Sect. 6.4.1, the only notion of causation we have which is consistent with a first cause having the two capacities I mentioned is agent causation having libertarian freedom; thus, it is not ad hoc to call the First Cause an Agent. On the other hand, we have no prior notion of what ‘Blark’ means; thus, it is ad hoc to use it.

It might be objected that simply having a notion of libertarian freedom in no way establishes its reality, just as having a notion of unicorns does not establish its reality, and that it is still being disputed whether human beings has libertarian freedom (which I am ascribing to the First Cause).¹¹ However, this objection is based on fallacious reasoning. No one has yet demonstrated that a unicorn exists, but that does not imply that no one can discover that a unicorn exists in the future. If one day someone discovered a white horse-like beast with a single large, pointed, spiralling **horn** projecting from its forehead, we would say a unicorn has been discovered. One does not have to demonstrate that unicorns exist first before they discover a real-world entity with the characteristics of unicorns. Rather, having a pre-existing notion/concept of unicorn would be sufficient. Likewise, to ascribe Libertarian freedom and agent causation to a First Cause with the relevant characteristics, having a pre-existing notion/concept of Libertarian freedom and agent causation would be sufficient. An instance of *x* does not need to exist first in order for us to discover an instance of *x*; rather, having a pre-existing notion of *x* would be sufficient. I have already shown using the KCA-TA that the First Cause has the characteristics which fit our pre-existing notion of libertarian freedom, thereby demonstrating that libertarian freedom does exist (in the First Cause, at least).

It might be objected that agent causation is not a feature of physics. In reply, that is because physics does not offer a complete explanation of all reality; indeed, physics itself requires deductive and inductive reasoning the justification of which is philosophical. On the one hand, there is no proof that physics offers a complete explanation of all reality. On the

other hand, I have offered a proof that the First Cause brought about the first event via libertarian freedom which is characteristic of agent causation. My argument is coherent and consistent with everything currently known in science. The objection that my argument is not consistent with science is based on the assumption that science offer a complete explanation of everything at all moments, which is a philosophical assumption, not a scientific one (i.e. it is the assumption of scientism, not science), and it is a fallacious philosophical assumption as explained in Chap. 1.

It might be objected it is obscure how libertarian freedom works. Nevertheless, as explained in Chap. 1, the conclusion of a sound argument (i.e. a deductively valid argument with true premises) must be true, regardless of whether we know of other details like further explanations concerning how it works, and I have already explained why my argument for a First Cause with libertarian freedom is sound. It should be noted that physics itself admits some of the lawful relationships among physical entities are brute facts having no further explanations' (Koons and Bealer 2010, p. xviii). Indeed, the impossibility of infinite regress of explanations implies that on any worldview there would be brute facts, and I have explained only a First Cause with libertarian freedom can be the brute fact to terminate the causal regress.

In summary, given the three points mentioned above, it is justified to conclude that the First Cause is an agent having libertarian freedom in virtue of having those two capacities, and it is not necessary to demonstrate that the First Cause has other properties of a mind with the capacity for reasoning and decision making. Nevertheless, I shall provide evidences for the latter as well by arguing that the First Cause brought about the first event purposefully rather than accidentally in Chap. 7. This will be accomplished by completing my defence of the Teleological Argument and combining it with the KCA to demonstrate that the First Cause is an intelligent designer of the universe.

6.4.3 Is the First Event Random?

A libertarian free act does not entail that the act is un-determined and random. While such a free act is not determined by prior events (and

thus is indeterministic in this sense; see below), it is nevertheless determined by a personal agent who is the cause of the action, and the agent freely willed the action rather than randomly, and the agent can will in accordance with reason. On the other hand, calling the first event random does not explain how the first event could have begun from an initially changeless first cause; as explained previously, only libertarian freedom can explain this.

To elaborate, libertarian free acts are indeterministic but not uncaused. As Randolph Clarke and Justin Capes explain, on agent-causal theories, a free act (or some event internal to such an act) must be caused by the agent; and it must not be the case that either what the agent causes or the agent's causing that event is causally determined by prior events. Thus, an agent is in a strict and literal sense an originator of the free act. This combination of *indeterminism and cause* (origination) is thought to capture best the idea that, when we act freely, a plurality of alternatives is open to us and *we determine*, ourselves, which of these we pursue. In response to the objection that the explanatory role of reasons seems to be excluded, Clarke and Capes (2013) suggest an account in which a free action is caused by the agent *and* non-deterministically caused by agent's recognizing certain reasons for which she acts. Acting for a reason does not mean that the person has a reason which determined her choice for a reason (contra Levy and McKenna 2009, p. 121). Rather, as Lowe (2008, pp. 181–190) explains, acting for a reason means that the reason for which the agent acted is simply the reason which the agent *chose* to act upon. Being 'responsive' to a reason for acting in this manner is not being *determined* to act in a certain way by that reason. Thus, indeterminism and causality can both be affirmed, and it is not a random act given that reason is involved.

One might object that, if every beginning has a cause, then the beginning of the event which is 'an agent's causing an event' has a cause (Rowe 2003, p. 73), which appears to generate an infinite regress of causes. Craig replies that 'Partisans of agent causation typically say that the agent's causing some effect is not an event requiring a cause, either because it is not itself an event, but just a way of describing an agent's causing an event, or if it is an event, then it is not further caused' (Craig and Sinclair 2009, p. 194n. 101, citing O'Connor 2000, Chap. 3). Libertarian

freedom does not posit an infinite regress or random creation without a cause; rather, the agent is the First Cause of the free act (no regress) and he/she acts for a reason (not random).

It might be objected that there cannot be deliberation in timelessness and hence the decision would be random. In reply, the conclusion does not follow, because the decision can still be made for a reason. For the First Cause could be an omniscient Mind who is aware of all propositions in an initially timeless changeless state and therefore does not need time to think about those reasons. The word ‘thought’ essentially refers to something X in the mind, and X can be ideas that one is aware of. Moreover, there is no contradiction in saying that something M has a changeless (i.e. timeless) awareness of ideas (i.e. thought) and their logical relations. Therefore, it is not true to say that time must exist first in order that the First Cause can have a thought.

One might object that, if God (suppose God is the First Cause) has reasons for creation (e.g. bless creatures), then the decision to create is made as a result of those reasons, and the decision would be determined by those reasons and hence is not free but occurred by necessity.

The answer is that those reasons can be understood as a necessary condition but not a sufficient condition for the decision, which can therefore still be caused and free. The intention can be one which is freely chosen. Thus, suppose (for example) God—because of His perfect goodness and love—freely created a universe with humans who have significantly morally valuable freedom for His loving purpose of wanting to bless these creatures with the knowledge of Himself who is the Good.¹² In this case, having reasons to bless creatures does not imply that He has to bless creatures, neither does it imply that God could not have refrained from creating initially. The reasons for creation are not coercive, there might also be reasons for not creating, there may well be goods (related to creating and not-creating) which are incommensurable, and even among equal value options, there may be variation (Pruss 2016). Hence, God did not create out of necessity. According to the Christian tradition, God by definition (*ex hypothesi*) is a free agent who is perfect and therefore has no need; a perfect agent would not experience any insufficiency and hence would have no need to express Himself in creative acts or self-glorification. Rather, He created out of perfectly free love for creatures, and in this way

manifested His perfection, that is, His glory. The creation (which has beginning) by a First Cause (which has no beginning) is therefore an evidence of His perfection.

One might ask whether those reasons would be the First Cause(s) given that those reasons are the necessary conditions of the decision. In reply, against the idea that an action done on the basis of a reason is caused by that reason, Pruss (2018, pp. 184–185) argues:

We can understand a reason as a mental content or a thinkable favoring an action. A reason is thus something abstract. But in addition to the mental contents or thinkables, there are the token thinkings that realize these contents. It is not the reasons considered as abstract thinkables that are causes of an agent's actions. Rather, it is the token thinkings that realize these thinkables that are the causes of an agent's actions.

Pruss goes on to say that, while there are infinitely many reasons on the basis of which God created as He did, this does not imply that there are infinitely many concrete token thinkings in the mind of God given that 'multiple thinkables can be realized in a single act of thinking ... when one believes the moon is round and gray, one thereby also believes that it is round and that it is gray. Likewise, multiple reasons can be realized in a single act of thinking' (ibid.). The reasons are abstract, they do not begin to arise in the Mind of God but are being aware of by the Mind in the initially changeless and beginningless state. 'For a reason' is the aim of the choice. The thinking of these reasons is a necessary condition but not a sufficient condition for a rational free choice; thus, by itself it does not determine the choice. Rather, the thinking of these reasons (the final cause) and free will of the Agent (God) (the efficient cause) are what brought about the first event, and 'the exercise of God's free will' is merely descriptive of this. God had thoughts in the sense of being aware of them in the initially changeless state, but was not choosing to bring about the first event initially. When He freely chose to bring about the first event, time began.

6.4.4 Libertarian Freedom and Time

As noted earlier, being initially changeless does not mean it is not able to change, just as someone not carrying out an action initially does not mean he/she is unable to act. Here, 'initial' refers to the first in the series of states (ordered causally), not first the series of changes/events/temporal series. With regard to the Hybrid view, there is no contradiction in saying that a First Cause is initially timeless, and then entered into time when it acted. 'Enter' is a temporal concept, as the First Cause brought about the first change (=first event) time also began to exist, and the First Cause entered into time as it brought about the first event (temporal causation). Therefore, in this case there is an initially atemporal cause with temporal causation. On this view the First Cause does not come before all else in time. Rather, the first state of the First Cause existed without time as explained above. The First Cause can freely move out of the timeless state and bring about time. On this view, the temporal event of the universe beginning is not caused by the First Cause in its timeless phase, rather, the First Cause is in time as it causes that event. Libertarian freedom is not a temporal concept; it is a capacity. While 'change' necessarily involves time, the 'ability to change' does not. A timeless agent with libertarian freedom may be without change initially, but having the capacity to bring about the first event, and when he does so, change and time would begin. The First Cause changes and enters into time with the exercise of the freedom to create the universe. Now Mullins (2020, p. 226) has raised the following objection to Craig's hybrid view:

A change is things' being one way at a particular moment, and then being different at the next moment. If time exists if and only if change exists, then it would seem that time cannot exist without there being a series of moments. This has a counterintuitive entailment—there is no time at the first moment because there is no change at the first moment.

In reply, as noted in previous chapters, a change essentially involves a thing or part of a thing gaining or losing one or more properties; it does not have to involve 'being one way at a particular moment, and then being different at the next moment', rather, it can involve 'being one way

at a particular state without the dimension of time, and being different at another state with the dimension of time'. Thus, the First Cause can be in an initially changeless state in which it was not gaining or losing property, and as it brings about the universe, there is a gain of a new property and hence a change together with the first moment and time.

The claim that 'to be able to change, one must exist within a time matrix' is inaccurate, for a timeless agent with libertarian freedom may be initially without change but having the capacity to start changing, and when he does so time would begin. To ask 'how long was this cause changeless for? a millisecond? five minutes? etc.' would be to ask a meaningless question given the relational view of time, according to which in the absence of change there is no time, whereas 'millisecond, five minutes, etc.' involve a measurement of time. To claim that 'time would still pass' is to assume change, since 'pass' is a change. Hence, time would not pass if nothing else exist except something that is initially changeless.

Changeless means absence of change; there is nothing in the notion of this absence itself that requires an extent (temporal or otherwise); the notion of 'no extent and no change (i.e. no gaining or losing of properties at the initial state)' is perfectly coherent. The problem is that many people are too used to thinking in temporal terms and subconsciously asking 'changeless for how long', which of course begs the question against the timeless-sans-creation view by presupposing temporal extent ('for how long').

As an analogy for the Hybrid view, one may think of a situation (call this Situation X) in which nothing else (e.g. no clock, no time dimension) exists except a motionless person who exists (initially) changelessly without beginning: he has the ability to move, but as long as he does not actually move there is no change and no time. (On this view, it is false to say that the person is motionless at $t = 0$, for $t = 0$ implies a time dimension, but on this view there is no time dimension in that motionless state.) When he moves and performs an act, that itself is a change, that is, a temporal causation, and that is what bringing about temporality means. When the person causes the effect he would no longer be motionless. Thus, it is not the case that the man is both moving and motionless simultaneously. There is therefore no contradiction.

Hence, it is wrong for Wielenberg (2020, p. 3) to state, 'But Craig also says that the first cause must be timeless; otherwise, how could it have the

power to create time itself?’ Actually, what Craig means is that the First Cause is timeless without ‘agent-causing of B at t_1 ’, and temporal with ‘agent-causing of B at t_1 ’. There is no contradiction.

Concerning Craig’s illustration of ‘a man sitting changelessly from eternity ... could freely will to stand up’, Wielenberg (2020, p. 3) writes: ‘But now suppose that (i) the man causes the effect of standing up while he is sitting.’

Craig can reply that when the man causes the effect he would no longer be sitting. Thus, it is not the case that the man is both seated and fully upright simultaneously. There is therefore no impossibility. (Wielenberg may be presupposing a beginning point. If so, see Chap. 5, where I discuss Craig and Sinclair’s [2012, p. 100] rejection of the idea that having a beginning requires having a beginning *point* because it lands one in the ancient Greek paradoxes of motion.)

Wielenberg (2020, p. 3) writes: ‘Similarly, on Craig’s view, the temporal event of the universe beginning is caused by God in His timeless phase.’ But this is mistaken. On Craig’s view, the temporal event of the universe beginning is *not* caused by God in His timeless phase; rather, God is in time as He causes that event.

Contrary to Wielenberg (2020, p. 3), this view does not imply ‘the causal inertness of God in His timeless phase’, for in that timeless phase God possesses the causal power to bring about the first event which He refrained from exercising in that timeless phase, and which was exercised at the first duration of time. Having that power (which He refrained from exercising) in that timeless phase distinguishes God from (say) abstract objects which are timeless but have no such power—that is why we say that abstract objects are causally inert. Neither is it accurate to characterize this view as saying that ‘a temporal being caused the universe’ (ibid.) simpliciter. Rather, according to this view the universe is created by a God who is timeless without creation and temporal with creation.

Wielenberg also claims that the view that God caused the beginning of time has the problem of implying that God’s exercise of causal power (GA) is a temporal event ‘causally prior to the beginning of time, which is impossible, since it would make the existence of time a prerequisite for an event that is causally prior to the beginning of time and hence would require time to be causally prior to itself’ (2020, pp. 4–5).

In reply, instead of saying that ‘God’s exercise of causal power (GA) is an event that caused the beginning of time’, one can say ‘God’s exercise of causal power’ (GA) is just a way of describing an agent (God) causing an event/change (the beginning of the universe in this case), and the beginning of time (the first moment) is concomitant to the event (‘the beginning of universe’). Hence, God’s act of creation does not depend on the pre-existence of time (a moment at which He creates); rather, the existence of time is dependent on God’s act of creation.

Wielenberg (*ibid.*, p. 7) claims that the intrinsic change of God entailed by GA implies that GA is an event which is both caused and uncaused. However, this is a non-sequitur. As noted earlier, rather than saying that GA is an event, GA can just be a way of describing God causing an event, and this can entail an ‘intrinsic change’ as follows: The first state of not-causing exists without change initially, and thus is timeless (on a relational view of time). As God causes the first change, this entails the second state of causing which is concomitant to God causing the first change, and the difference between the first and second state is an ‘intrinsic change’ which is not-uncaused but is concomitant to (and simultaneous with) God causing the first change. There is no uncaused event in the above scenario.

Thus, one can coherently affirm:

1. God is initially timeless.
2. God’s exercise of causal powers brings about the initial state of the universe.
3. As God exercises His causal power, time begins.
4. The universe is caused by God in His temporal state.

It might be asked, ‘since there is a succession of distinct states (initial changelessness followed by change), would it be coherent to state that God’s timeless state does not temporally precede the existence of the universe? How are we to make sense of the notion of the succession of states not being a temporal sequence?’¹³

In reply, the First Cause being changeless-sans-first-event and changes with the first event does not imply a temporal succession of two states, because according to the Hybrid view the initial changeless state is not a

state in time but timeless, that is, without a temporal dimension which only exists with the first event. Hence, this is not a case of succession of two temporal states. One can make sense of the notion of the succession of states not being a temporal sequence by thinking of time as involving a dimension and/or change, and according to the Hybrid view in the original state there is neither. In this way the First Cause can be causally prior but not temporal prior to the first event.

One might ask, ‘if there is no time separating the timeless First Cause and the first event, then the two must coexist. In that case, how can it be that the First Cause is timeless sans (without) the first event?’

In response, on the Hybrid view, the difference in properties between timelessness (which is beginningless) and time (which has a beginning) implies that the timeless First Cause and the first event do not coexist, and that the First Cause can be timeless without the first event. God was (1) initially changeless without creation—there was no event in that state and no universe as well; (2) God changed with the bringing about of the beginning of the universe, in which state the universe existed alongside God. There is distinction with a difference between (1) and (2), and it shows that it is not the case that the universe and God coexisted.

One might object that for x to change is for x to have property p at t_m that x does not have at t_n , and therefore it is impossible that timeless entities change. However, proponents of the Hybrid view can argue that ‘for x to change is for x to have property p at t_m that x does not have at t_n , *or for x to have p in timelessness that x does not have at t'* , and thus there is no incoherence there.

It might be objected that, while it is easy to conceive of how the First Cause can have libertarian freedom on a dynamic theory of time, it is difficult to conceive this on a static theory of time. In reply, Craig argues that static time is compatible with human libertarian freedom; if that is so, it would be compatible with the Divine First Cause having libertarian freedom as well. Craig (2015) explains that

the B-theory does not imply that events which lie in our future are causally determined with respect to antecedent event. Indeed, some such event could be wholly undetermined by antecedent causes. On any standard

definition of libertarian freedom, therefore, such an event could be a genuinely free choice.

He also argues that, ‘on a B-theory of time, although we cannot change the future, we can act in such a way that if we were to act in that way, the future would be different’ (ibid.).

Likewise, one can argue that, on a B-theory of time, God can refuse to act in such a way that, if He were to refuse to act in that way, the universe would not have existed at t_1 .

One might object: if God is initially changeless, then His willing of the universe must be without beginning, in which case the universe should also be without beginning, but this contradicts the KCA which argues that the universe has a beginning (Morrison 2000).

Citing J.P. Moreland, Craig replies that it is insufficient for P to have merely the intention and power to bring about R; rather, there must also be a basic action on the part of P, a free undertaking which took place simultaneously with the first effect in time. Craig concludes the failing of Morrison’s objection is that in speaking of God’s willing that the universe exists, he does not differentiate between God’s timeless intention to create a temporal world and God’s undertaking to create a temporal world. Once we make the distinction, we see that creation *ex nihilo* is not an instance of state–state causation (Craig 2002).

In short, one should note the distinction between God’s *intending* to create a universe and His *undertaking* it, that is, His bringing about that intention. Given this distinction, Craig argues that it’s possible for God to eternally intend to bring about the universe, and then to freely and spontaneously undertaking to create it a finite amount of time ago. Thus, the universe was freely brought about by the Divine Agent who has libertarian freedom, and the ‘undertaking’ is for the purpose of accomplishing something; therefore, it is not random.

One might object that the distinction between God’s intending to create a universe and His undertaking it does not exist if there are no actual distinct differences intrinsic to God in the initially changeless state.¹⁴ This objection confuses between conceptual distinction and distinction-in-the-concrete. Conceptually, there is a distinction between God’s intending to create a universe and His undertaking it—these two mean different

things. However, concretely, such a distinction does not exist in the being of God in His initially changeless state. Nevertheless, His capacity for the exercise of libertarian freedom existed in that state, and when He exercised this capacity He undertook the creation of the universe and the distinction began to exist concretely.

Leon (in Rasmussen and Leon 2018, p. 63) objects that the distinction between deciding and undertaking that decision arises ‘in three main types of case: When you do not yet know what you will decide to do; when a decision the time for carrying out your decision has not yet arrived; and when you have weakness of will that (at least temporarily) prevents you from carrying out your decision’, but none of these conditions applies to an omniscient, timeless, omnipotent, and morally perfect God. Likewise, Morrision argues that ‘An omnipotent being cannot suffer from weakness of will. An omniscient being cannot change its mind. And a timeless being cannot meaningfully be said to “delay” undertaking to carry out its intentions. So it is very hard indeed to see how God's eternal will to create can fail to be sufficient for His undertaking to do so’ (Morrision 2002a, p. 107).

However, the three main types of cases that Leon explained can be regarded as accidental to humans but not essential to the distinction between deciding and undertaking that decision. An omniscient, timeless, omnipotent, and morally perfect God could have known what He would decide to do with the beginning of time, while also willed to initially refrain from undertaking creation because it is consistent with divine perfection to be initially changeless (the conclusion of initial changelessness follows from the premises of the Kalām as argued previously). In that case there is no weakness of will that prevents God from carrying out His decision to create; rather, God not carrying out His decision is due to His will to initially refrain. There is no changing of mind, since the divine mind has always planned to initially refrain and to create at the first moment. This refraining is not a delay (since delay involves time but there is no time in the state of refraining) but rather an exercising of the capacity to prevent itself from changing initially, as argued previously.

It might be objected that a decision seems to be an action that only makes sense in time.¹⁵

In reply, the term ‘decide’ refers to the end result of consideration of reasons. While humans require time to consider and make up their mind because human mental capacity is limited, a superior Being who does not suffer from this limitation would not have this requirement. There is no contradiction in saying that a superior Being has an initially changeless (i.e. initially timeless) awareness of ideas and reasons (i.e. thought), their logical relations, and the resulting freely made decision. Therefore, it is not true to say that time must exist first in order that the Superior Being can have a thought. What is essential to the consideration of ideas and a decision is logical sequence, not temporal sequence, which, although necessary for humans, is unnecessary for a Superior Being who can be aware of all logical sequences timelessly. God decides in an initially timeless state (He does not require time to make up His mind) and acts with the beginning of time; therefore, it is not the case that God decides and acts at the same time. These two are not ‘at the same time’ because God decides in an initially timeless state, not at the same time with the action.

6.4.5 Contradiction with Classical Theism

It might be objected that the conclusion that the Divine First Cause changed with the exercise of libertarian freedom is inconsistent with the doctrines of a strong notion of divine immutability, essential divine timelessness, and divine simplicity, which has been held by many Christian theologians (e.g. Augustine, Anselm, and Aquinas) and is known as Classical Theism.

Classical Theism however has been rejected by many theologians today for being contrary to the Scripture and philosophically untenable (Mullins 2015). I have argued in Loke (2014, 2018) that there is insufficient philosophical, theological, or Scriptural justification for a strong notion of divine immutability, essential divine timelessness, and divine simplicity; that these views are not required for Perfect Being Theism; and that these views face difficulties concerning the doctrine of the Incarnation, which is of central importance for understanding the divine (and human) in Christian Theology. Additionally, these views face difficulties concerning the doctrine of creation. For in order for a universe with beginning to

be caused by a God without beginning, this would require God to refrain from using His active powers in the beginningless-state-sans-the-universe, and use His powers at creation. This implies that God is not Pure Act, since Pure Act entails intrinsic essential changeless-ness, whereas refrain-use implies that the First Cause is not essentially changeless but only initially changeless as explained in previous sections. By contrast, a beginningless (first) cause which (as Aquinas claimed) is Pure Act would (contrary to Aquinas) bring about a beginningless universe. However, this consequence is contrary to orthodox Christian doctrine that the universe has a beginning, and this consequence is also contradicted by the conclusion established previously that the First Cause brings about a first event which has a beginning whereas the First Cause has no beginning. Moreover, since God is the Creator and since creation involves God using His powers, which He does not use in the initially changeless state, this would imply that God's internal properties do change with creation.

Through his argument from motion Aristotle had concluded that for any motion to occur there must be some unmoved mover, that is, God, who, being fully actual, cannot change because He has no potentiality not already fully realized (Aristotle, *Metaphysics* 12.5–9). Thomists have similarly argued that changes involve the actualization of potentials (Feser 2017, p. 26) and are explained by a hierarchical causal series (the cup of coffee is held up by the desk, which is held up by the floor, which is held up by the foundations, which is held up by the earth...) with a first member 'without any potential for existence requiring actualisation. This is pure actuality ... uncaused cause, Aristotle's "Unmoved Mover" ... unactualized actualizer' (ibid., p. 27). Concerning Aquinas' Fifth Way, it has also been argued that, since its purpose is to explain the teleological potential that is present in all things, the explanation cannot have such a potential in itself, but must be Pure Act (Newton 2014, p. 576).

In reply, while one can agree that changes involve the actualization of potentials and that there is a First Cause of a hierarchical causal series, this does not imply that such a First Cause must have no potentiality not already fully realized (by 'potential' I am referring to 'active power in the state of not-being-used', i.e., the state of refraining from using active power, see above). Rather, a beginningless First Cause having libertarian freedom to freely actualize its own potential (e.g., to use its active power to create

the universe, and hence is the first cause of this actualization and explains why that potential is actualized rather than not-actualized) would terminate the hierarchical causal series just as well. On this view, the First Cause was initially changeless sans the first event, but it has the un-actualized potential to bring about the first event, and as it actualizes its potential to bring about the first event, it also actualizes its potential to sustain the things that are brought about by the first event. (This does not mean that the First Cause actualized all its potentials at the first event; rather, it is possible that the First Cause could have other potentials, such as [as Christian theologians affirm] the potential for Incarnation [see Loke 2014], which was actualized at a later time. The possibility of such a view implies that it is not necessary the case that the First Cause must be a Pure Act.) While the Thomist assumes that something cannot actualize its own potential, a libertarian agent who is a beginningless First Cause can do that, and this does not involve something bringing about its own existence since the First Cause is beginningless and eternally existed. On this view the change in God's properties was brought about by God Himself as He brought about the first event and continues to freely choose to sustain the world in existence. God can change His initially state of changelessness given that that state is not essential to divine nature (I argue for this in Loke 2014, chapter 5) and given that God has libertarian freedom. Affirming that God can change properties that are non-essential to divine nature does not imply that God can change properties essential to divine nature (such as properties of being uncaused, beginningless, omnipotent, etc.).

6.5 The First Cause Has Tremendous Power

The enormity of the power of the First Cause is indicated by the enormity of the effect down the causal chain, namely, the entire universe. Scientists have discovered that the sun which illuminates our earth is merely one of the over 200 billion of stars in our galaxy. Even if we could travel at the speed of light—about 300,000 kilometres per second—it would take about 100,000 years to travel from one end of the galaxy to the other. More astounding still is the fact that our galaxy is merely one of the over 100 billion galaxies in existence, many of which have hundreds of

millions of stars. And this is merely the currently observable universe; the actual universe is much larger than this. The universe is truly awesome, and as shown in previous chapters, these billions of stars and galaxies ultimately came from a First Cause who is the Creator of the universe.

Against the First Cause having enormous power, one might object that one cannot make such deduction of the degree of power from the effect. For example, while we can infer from the effects that the atomic bomb causing the destruction of Hiroshima in 1945 was tremendously powerful, it might be argued that the bomb was the end result of a process leading from less powerful entities, such as the tiny elements of uranium and the little ‘bullet-like’ mechanism shot in to the uranium to start the reaction.¹⁶ Sceptics might object that the bullet, which has little energy, is analogous to the First Cause.

Further reflection reveals that the above example is disanalogous to the First Cause of the universe in the following way. The tremendous power of the atomic bomb is due to the mass of the uranium, which contains a lot of energy given the conversion of mass into energy in accordance to $E = mc^2$. While the bullet brought about the conversion of the mass of the uranium into energy, the existence of the mass-energy of the uranium was not brought about by the bullet. Whereas the existence of the entire universe with its tremendous amount of mass-energy was ultimately brought about by the First Cause, which therefore has tremendous power to bring about all these.

As noted in Chap. 2, some cosmologists have proposed the Zero Energy Universe theory according to which the net energy of the universe is zero. One might think that, if that is true, then there is no reason to think that the First Cause would be required to possess tremendous power to bring about zero energy.

However, this is a misconception. I have explained in Chap. 2 that, even if Zero Energy Universe theory is true, one still has to ask what made the energy and the laws of nature to be the way they are. The First Cause must still be enormously powerful in order to be able to make the tremendous amount of positive and negative energy to be the way they are—out of zero energy! While humans with limited powers require pre-existing matter-energy to work from in order to create (say) an atomic bomb and the feeble bullet trigger requires pre-existent uranium to start

the nuclear reaction, the First Cause does not require pre-existing matter-energy in order to bring about a series of events that resulted in the billions of stars and galaxies as well as the negative energy of gravity and the amazing laws of nature. This is an indication that the power of the First Cause far surpasses ours; indeed, it far surpasses anything else we know.

6.6 Conclusion

I have defended premises 6–11 of KCA-TA and show that the First Cause is not a series of changes (= events) describable by physical laws; rather, it is initially changeless (premise 8) and brought about the first event with the physical laws. It is also distinct from the physical universe which is constantly changing according to quantum field theory, and which does not have ‘the capacity to be the originator of an event in a way that is undetermined by prior event, and the capacity to prevent itself from changing’, which a First Cause must have (premise 10). I have explained and defended the claim that these two capacities imply that the First Cause has libertarian freedom.¹⁷ Thus, the First Cause cannot be part of the physical universe as postulated by Hawking’s no-boundary proposal, which as explained above is unproven and scientifically flawed. Rather, as shown by premises 6–11 of KCA-TA, the First Cause is uncaused, beginningless, initially changeless, has libertarian freedom, and is enormously powerful, that is, a transcendent immaterial Creator of the Universe. With regard to the relationship between the First Cause and time, I have shown that both the Hybrid view and the view of the Oxford School are defensible; any one of them would be sufficient for the conclusion of this book. I have also shown that the conclusion of KCA, as well as the doctrine of *creatio ex nihilo*, is consistent with the relational view of time and the substantival view of time, and it is also consistent with the dynamic theory of time and the static theory of time. Thus, for the purposes of this book it is not necessary to settle the debates between these views and theories. I personally think that there are other philosophical reasons for thinking that the static theory of time is false, but the point here is that, regardless of which of these view or theory is true, there must still be a First Cause which is uncaused, beginningless, initially changeless, has

libertarian freedom, and is enormously powerful. The conclusion that the First Cause is a Creator who brought about the first event purposefully rather than accidentally can be further strengthened by considering the evidences of fine-tuning and order of the universe, which have been explained in Chap. 4. I shall complete my demonstration that the First Cause is a Designer in the next chapter.

Notes

1. See also Alfred Freddoso's comparison of Suarez's analysis of causation with contemporary theories in Freddoso's *Introduction to Suarez* (2002).
2. A-theorists such as Craig deny that these purported evidences support the B-theory; see Craig (2000a, 2000b).
3. Some philosophers have argued that time could continue to exist even if all events were to cease (Shoemaker 1969). I think this argument can be rebutted, but rebutting it will take us too far afield; in any case, Craig and Sinclair (2009, p. 192) notes that the arguments of Shoemaker 'are inapplicable in the case at hand, where we are envisioning, not the cessation of events, but the utter absence of any events whatsoever'.
4. As Oppy did during the debate: <https://www.youtube.com/watch?v=a8NrTv-Durc&t=129s>.
5. Except perhaps Oriti (2014), who proposes geometrogenesis, that is, the coming of spacetime into being with the physical condensation of the 'spacetime atoms'. As noted above, Oriti acknowledges that this view is not well-established.
6. Koons (2014, pp. 261–262), attributing it to an anonymous referee. Koons replies by pressing a dilemma: 'either there is an intrinsic metric to the pure passage of time, or not. If there is, then the infinite past is actually divided into an infinite number of periods, contrary to the conclusion of the Reaper paradox. If there is no intrinsic measure of time, then the imagined scenario is impossible, since it supposes an extended period during which absolutely nothing happens' (ibid.). However, the second horn of the dilemma presupposes a relational view of time. The opponent could deny this and hold to a substantival view of time, according to which there can be time without change or process.

7. While Oppy has called it the Initial Singularity, he writes that “Initial Singularity” is just a convenient label for whatever it is that exists in the initial state of natural reality. It would work equally well to use, instead, the label “Initial Natural Thing” (Oppy 2019b, p. 229).
8. I thank William Lane Craig for helpful input here.
9. I thank Andres M for suggesting this.
10. I thank Vaal for raising this objection.
11. I thank Vaal for raising this objection.
12. I discuss God’s reasons for creation in *Evil, Sin and Christian Theism* (Loke 2022).
13. I thank John Pascal for raising this question.
14. I thank Mediator media for raising this objection.
15. I thank Louigi Verona for raising this objection.
16. I thank Vaal for raising this objection.
17. This conclusion also provides a response to Kant’s First Antinomy; for details and replies to other objections concerning the properties of the First Cause, see Craig (1979); Loke (2017a, chapter 6).

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