

# 8

# **Ultimate Designer**

#### 8.1 Summary of Important Conclusions from Previous Chapters

We have come to the end of our quest concerning the ultimate design of our universe, a quest that has brought together the disciplines of philosophy, science, and religion. The justification for using such a transdisciplinary approach for gaining a fuller understanding of reality has been given in Chap. 1, where it has been shown that scientism, verificationism, and empiricism are untenable. In particular, it has been demonstrated that philosophical considerations are important for scientific theories, and that what is mathematically possible is not concretely possible if it violates certain metaphysical considerations (while what is mathematically impossible is concretely impossible as well). Hence, even if something is mathematically and/or logically possible but metaphysically impossible, it would still be actually impossible. This is significant because it implies that appealing to cosmological models which postulate an infinite regress of events (e.g. Eternal Inflation Model) or logically consistent closed causal loop are incapable of defeating the metaphysical arguments against the possibilities of infinite regress of events and closed causal loops presented in this book. Instead, those metaphysical arguments stand as a defeater for these cosmological models.<sup>1</sup> In view of the importance of philosophical considerations explained in Chap. 1, cosmologists should not merely construct models of the universe without considering the philosophical arguments against certain models. (The neglect of this point has contributed to the lack of consensus in cosmology; it has been said that one can come up with any theorem to prove that the universe has a beginning or no beginning depending on the assumptions<sup>2</sup>; this book has shown which assumptions should be rejected.)

This book has contributed to the discussion by developing these philosophical arguments in engagement with modern science, and demonstrating that whatever begins to exist has a cause (against recent objections in Linford 2020 and others) and it is not the case that there is an actual infinite regress of events or a causal loop which avoids a First Cause. This implies that there is a first event and a First Cause.

It has often been objected that we cannot observationally confirmed this First Cause caused the universe and that we cannot know the answer concerning ultimate reality because that is far beyond our ordinary experiences. I have replied to these objections by explaining in Chap. 1 that the laws of logic are necessarily true, and that they would hold even at levels of reality far beyond our ordinary experiences, such as at the beginning of time or at the level of timelessness (there cannot be shapeless squares at such levels too). Following the laws of logic, the conclusion of a deductively valid argument from true premises must be true (regardless of whatever realm of reality), and I have explained in previous chapters that the Kalām Cosmological Argument is deductively valid and the premises are true, and therefore the conclusion that there is a First Cause with libertarian freedom is true.

Concerning the Teleological Argument, while many scientists and philosophers have argued that there are evidences of design in fundamental physics, others have objected that there could be alternative hypotheses which have yet to be considered (Ratzsch and Koperski 2019). I have addressed this problem by developing an original deductive argument which demonstrates that the following are the only possible categories of hypotheses: (i) Chance, (ii) Regularity, (iii) Combination of Regularity and Chance, (iv) Uncaused, and (v) Design. I have demonstrated that there are essential features of each category such that, while the alternatives to design are unlikely, the Design hypothesis is not. Since the list is logically exhaustive, the epistemic probabilities of the five categories must add up to 1. Even if one assigns to each of the four alternatives a probability of 1 in 1000 (which is very generous given the arguments presented in this book), that still leaves Design with a high epistemic probability of 99.6%. One can thus argue for Design by exclusion without having to first assign a prior probability for Design (thus avoiding the objection in Sober 2019), and I have shown that my argument avoids the problems that beset alternative forms of design inference.

An objector might complain that the conclusion of the Teleological Argument still falls short of 100 % epistemic certainty. Then again, there isn't 100 % epistemic certainty for most things in life either. For example, there isn't 100 % epistemic certainty that what you are reading now is authored by a human being rather than a randomly typing monkey. The latter hypothesis is logically possible, yet unlikely. The more probable answer ought to be accepted as the true answer; that is, what you are reading now ought to be regarded as the product of an intelligent author, though certainly not as intelligent as the Creator who created such elegant equations of physics and such astonishing degree of fine-tuning! The fine-tuning and order of the universe is therefore a strong evidence for a highly intelligent Creator, and given an epistemic probability of at least 99.6% this ought to be accepted as the true answer.

Thus, the Teleological Argument by itself—in particular, the undeniable evidence of the mathematically describable order of the universe by itself (see for example Steiner's point in Sect. 4.4.1)—is already sufficient for concluding that the universe has a Creator. I have also explained previously that the KCA by itself is sufficient for concluding that the universe has a Creator. Therefore, even if one of these two arguments is refuted, the conclusion that the universe has a Creator can still stand.

I have argued that both arguments are in fact defensible, and that the Cosmological Argument can be used to strengthen the Teleological Argument even further, by answering the question 'Who designed the Designer?' through demonstrating that there is a beginningless and undesigned First Cause with libertarian freedom. On the other hand, the Teleological Argument can be used to strengthen the Cosmological Argument by providing considerations for thinking that a First Cause brought about the first event intelligently rather than accidentally or naturally. In particular, it has been shown in Chaps. 4 and 7 that it is unlikely that unintelligent cause(s) can bring about a universe in which mindless unthinking physical entities constantly behave in ways that can be predicted by mathematical equations, which can be treated by physicists as expressing a kind of software of the universe (Heller 2013, p. 594). It has also been shown that it is unlikely that unintelligent cause(s) can generate an 'explosion' such as the Big Bang that would bring about the creation of ordered systems (solar system, quantum system, etc.) rather than disorder and debris. Thus, the best explanation is that the present universe is the result of an intelligent Designer who programmed the 'software' and engineered the 'explosion'.

## 8.2 Concerning the God-of-the-Gaps Objection

It might be asked whether the arguments defended in this book are Godof-the-gaps arguments and whether the conclusion that the Creator exists is based on ignorance. When ancient people did not understand certain natural phenomena (such as thunder), they thought that these are caused by the gods (e.g. Thor). As scientific understanding progresses, such religious explanations are replaced by scientific ones. Haught (2004, p. 238) notes that the problem with 'God of the gaps' explanations is that they appeal to God 'at a point in inquiry when there is still plenty of room for further scientific elucidation'. Therefore, it might be objected that the fine-tuning argument is based on current science which might be explained away eventually by a naturalistic answer with the progress of science (Loeb 2014). Carrier claims that 'scientists have consistently found physical explanations for every phenomenon they have been able to thoroughly examine .... There is not a single instance on record of any fact that has been thoroughly examined by scientists that turned out to have no identifiable physical origin' (Carrier 2003).

In reply, the conclusion of the KCA is not based on ignorance. Rather, it is based on reasons. The argument is not 'because we still do not know how to explain the origin of the universe, therefore there is a Creator'. Rather, the argument is, because there are reasons (discussed in previous chapters) for thinking that an actual infinite causal regress and a closed causal loop is not the case, therefore there is a First Cause. It is because there are reasons for thinking that whatever begins to exist has a cause, therefore this First Cause is beginningless. The rest of the properties of this First Cause are likewise derived on the basis of reasons rather than ignorance, as shown above. Moreover, as explained previously, each step of the argument is strictly deductive in nature, for which no alternative explanation is possible, whereas 'a 'god of the gaps' explanation is one on which it is at least possible in principle that some nondivine explanation might be correct' (Feser 2017, p. 271).

Contrary to Carrier, scientists have not found physical explanations for the ultimate origin of our universe. While the progress of science would generate newer understandings of the laws of nature as explanations for the phenomena we observe, as shown by the KCA, the progress of science would not replace a First Cause (Creator) as an explanation for the existence of all things, including the laws of nature themselves which must have come from this First Cause.

Concerning the Teleological Argument, one might attempt to explain away design (using science or otherwise) by appealing to alternative explanations. However, where the mathematical order and fine-tuning is concerned, it has been shown in previous chapters that all the possible alternative explanations (chance, regularity, combinations of chance and regularity, uncaused) would fail as ultimate explanations for these phenomena. Ratzsch and Koperski (2019) note that 'evidence of design in nature does not automatically imply gaps. Design built or "front-loaded" into nature from the very beginning would require no further interventions within the historical flow of nature and therefore no gaps.' Hume et al. have claimed that an infinite regress of causes/events is possible given which there is no beginning for design to be front-loaded into. However, it has been shown in this book that the KCA can be used to strengthen the Teleological Argument by demonstrating that an infinite regress of causes/events is not the case and thus there is a first event, and that this first event cannot have been brought about by a regular/natural/ mechanistic/scientific process but by an act of libertarian freedom of the First Cause. (See also the response by Frederick in Sect. 7.1 concerning the mathematically describable order of the universe. As noted earlier, the undeniable evidence of the mathematically describable order of the universe by itself is already sufficient for the Teleological Argument; the discovery of the evidences for fine-tuning only makes the argument stronger.)

Therefore, while the science concerning fine-tuning will be updated in the future, with regard to whatever scientists discover (e.g. a new law of nature), it can still be asked where did that come from (e.g. where did that law of nature come from). The basic logical form of my argument would still remain, and no matter what scientists discover in the future, there must still be a First Cause for that discovery. Even if scientists discover one day that our universe is a digital simulation (Bostrom 2003) or it was created by intelligent being(s) living in another universe (Harrison 1995), we could still ask where did that digital simulation/intelligent being(s) come from; that is, what caused it? If one claims that the intelligent being or the cause of the digital simulation is uncaused, that would imply that the intelligent being/cause of the simulation is the First Cause of our universe and it would also have other properties which the First Cause must have as deduced by the KCA-TA, namely, is beginningless, initially changeless, has libertarian freedom, intelligence, and is enormously powerful. In other words, the conclusion of the KCA-TA that a Creator of the universe exists would still follow.

Even if we live in an illusory world (e.g. in a matrix), the conclusion would still follow. In such a world, it remains the case that the existence of changes and beginning of changes cannot be denied. As Craig (Copan and Craig 2017 vol. 1, p. 67) notes, on the thesis of the mind-dependence of becoming, there is at least the appearance of temporal becoming of the physical world. An illusion or appearance of becoming involves becoming, so that becoming cannot be mere illusion or appearance. Thus, even the radical sceptic who doubts all of his/her perceptions of the world external to his/her mind must still grant the existence of changes in his or her own subjective mental states. While we observe changes through a filter of perception, we cannot deny that changes exist. Given the impossibility of an actual infinite regress of changes, as well as the truth of the Causal Principle that whatever begins to exist has a cause (the violation of which would entail that his/her subjective experiences would be very different from what they are), the conclusion that an initially changeless First Cause with libertarian freedom and intelligence (i.e. Creator) exists would still follow.

Contrary to Carrier (2003), who claims that all physicists would find a non-naturalistic conclusion to be quite absurd, many of the greatest physicists throughout history (e.g. Newton, Einstein [see Chap. 4, footnote 5) have recognized God as the ultimate explanation for the existence and order of the universe. They do not regard this conclusion as antiscientific because they do not hold to the fallacious ideas of scientism (see Chap. 1). They recognize that philosophy examines primary causes while science examines secondary causes. Cosmologist William Stoeger offers an account of how science, philosophy, and theology can complement one other concerning ultimate origins:

Physics and cosmology as sciences are incapable of exploring or directly accounting for the ultimate source of existence and order which philosophy and theology, properly understood, provide. By the same token, philosophy and theology are not equipped to investigate and describe the processes and relationships which contributed to the expansion, cooling and subsequent structuring of the universe on macroscopic and on microscopic scales. Thus, philosophy and theology seek to provide an understanding of the origin and evolution of the universe which is complementary to that which physics and cosmology contribute. (Stoeger 2010, p. 174)

Thus, philosophy can let us know about Divine First Cause while leaving scientists (e.g. cosmologists) to find out the secondary causes concerning mechanisms and to work on understanding the details of the process. The fact that the latter is still unknown and there is no consensus among cosmologists at this time does not contradict the conclusion that the former can be known using philosophical arguments such as the KCA-TA. With regard to the objection that we should always try to find a scientific explanation, the KCA-TA demonstrates that the ultimate explanation cannot be a scientific one, because the first event is brought about by a First Cause with libertarian freedom (premise 8) and not by a mechanism describable by a law of nature. The possession of libertarian freedom by the First Cause implies agent causation and a personal explanation. Moreover, being initially changeless, the First Cause is not a physical entity (such as the universe or multiverse) which is characterized by constant changes. While the progress of science would generate new theories to explain various aspects of the physical world, it would not replace the First Cause (Creator) as the ultimate explanation for why the physical world exists in the first place, as demonstrated by the KCA-TA. Thus, the conclusion of the KCA-TA cannot in principle be overturned by future scientific discoveries. Rather, future discoveries would only enhance our understanding of the wisdom of the Creator through understanding the laws which He had created.

#### 8.3 Limitations of the KCA-TA and responses

One might object that that KCA does not rule out other timeless concrete entities existing alongside God, and neither does it prove that there is only one First Cause.

In reply, one can speculate about other entities which may or may not exist, but what needs explanation is the series of changes which we observe within our universe, and I have already explained why an infinite regress of changes is impossible and why this implies that there is an initially changeless First Cause with libertarian freedom. The conclusion that there is a single First Cause is more reasonable than multiple first causes given the widely accepted scientific principle (Ockham's razor) that causes should not be multiplied beyond necessity (Craig and Sinclair 2009, p. 192). This principle is widely used by atheists (e.g. Oppy 2013a), who think that, since thunder (for example) can be sufficiently explained by natural laws, there is no need to postulate a thunder god to explain it; thus, the existence of a thunder god should be rejected. Likewise, theists can argue that, since a single Creator is sufficient to explain the origin of the universe, there is no need to postulate additional creators or other timeless concrete entities.

The conclusion of a single Creator is further strengthened by Sudduth's (2009, p. 210) observation:

The unity of order throughout the cosmos is evidence for a single cause of this order. If we postulate a single designer, then we would expect to find the same fundamental physical laws governing the behavior of objects over vast distances of space and time in the cosmos. We would also expect to find different particular physical laws explicable in terms of these fundamental physical laws.

Concerning premise 6 'since the First Cause is the first, it is uncaused', it has been noted in Chap. 2 that I am referring to the First Cause of change and that this First Cause is not something that is brought into existence. One might object that such a First Cause might nevertheless be something that is sustained in existence, and thus is caused in the sense of having a sustaining cause. If that is the case, then given the impossibility of infinite regress of sustaining causes or a closed loop, the First Sustaining Cause would be the true First Cause (here, the word 'cause' is used in a different sense, not as a cause of change, but as something that sustains another thing changelessly). Such a sustaining First Cause might not be the entity which brought about the first event (cf. premise 10 of KCA-TA), and it might be impersonal.

Two points may be said in response.

First, while Aquinas had famously argued for a First Sustaining Cause and he was not a proponent of the KCA and did not think that a First Cause of time can be demonstrated, he nevertheless affirmed that there is such a First Cause of time on the basis of Christian tradition and that the First Cause of time is also identical with the First Sustaining Cause. Now there are disputes concerning whether the Thomistic Cosmological Argument is sound, and I have argued in Sect. 6.4 that, if there is a First Sustaining Cause, there is no good reason to think that it is a Pure Act which is distinct from the First Cause of time. On the contrary, I have argued that the First Cause of time can also be the One who sustains all else in existence. Therefore, it would be simpler (following Ockham's razor) to regard the First Sustaining Cause to be identical with the First Cause demonstrated by the Kalām.

Second, atheists who affirm a naturalistic First Cause (e.g. Oppy and Hawking) typically assume that this First Cause is not being sustained in existence by (say) a Thomistic First Cause. For the sake of parity, the theistic proponent of the KCA may assume the same, given that (as explained under the first point above) there is no good reason to think that there is a First Sustaining Cause which is distinct from the First Cause of time.

Another objector to the KCA might suggest the hypothesis that there are two beginningless beings—God and primordial matter—and that God (the First Cause with libertarian freedom) caused the primordial matter to change, hence bringing about the first event of physical reality. In this case, the primordial matter would be the material First Cause without libertarian freedom but it might be enormously powerful (like a powerful bomb waiting to be triggered), while the efficient First Cause has libertarian freedom but may have little power (the trigger of a bomb may have little power in itself). In this way, the conclusion that there is one First Cause with both libertarian freedom and enormous power may be avoided.

Three points may be said in response.

First, the above scenario which is intended to avoid the conclusion of this book faces the problem that the efficient First Cause with libertarian freedom would still need to have enormous power and intelligence in order to form a highly ordered and fine-tuned universe from the material according to his intelligent plan.

Second, the so-called primordial matter would be initially changeless and hence (as argued in Chap. 6) immaterial, given which it is problematic to call it matter.

Third, there is no good reason to think that there are two beginningless beings rather than one. Therefore, it would be simpler (following Ockham's razor) and—in light of points 1 and 2—less problematic to think that there is one beginningless First Cause with both libertarian freedom and enormous power.

Goff (2019, p. 106) objects that theism incurs a large cost in terms of qualitative parsimony by postulating an immaterial and necessary being which is an addition type of entity to the physical and contingent universe, and it violates the theoretical virtue of having a unified conception of reality by postulating a supernatural God distinct from the natural world.<sup>3</sup> He propose an alternative view (constitutive compsychism) which postulates that the universe is a conscious subject with a 'basic

disposition to form spontaneous mental representations of the complete future consequences of all of the choices available to it' (p. 112). He notes that proponents of KCA have argued that the universe has a timeless, necessarily existent, and personal cause, and argues that the agentive cosmopsychist can accept their conclusions by adopting the following two theses:

- The entity E that is the physical universe exists necessarily and has its spatiotemporal properties contingently (i.e. 'physical universe' is a phase sortal of E as 'adulthood' is a phase sortal of a person), and
- E as a non-spatiotemporal entity caused the Big Bang (i.e. the non-physical phase of E caused its physical phase) (p. 120).

He claims that 'given that physical science tells us nothing of the intrinsic nature of the universe, physical science can give us no grounds for holding that something with such an intrinsic nature is essentially spatiotemporal' (ibid.).

In reply, although parsimony/simplicity is one of the considerations for evaluating the prior probability of hypotheses, it can be defeated by other considerations. Now Swinburne (2004, p. 53) has stated that

the prior probability of a theory depends on the degree of its fit with background knowledge (an a posteriori matter), and on its simplicity and scope (features internal to the theory and so an a priori matter). A theory fits with our general background knowledge of how the world works in so far as the kinds of entities and laws that it postulates are similar to those that probably (on our evidence) exist and operate in other fields.<sup>4</sup>

The problem with Goff's theory is that it doesn't fit with 'our general background knowledge of how the world works' (Swinburne) and it requires ad hoc postulations in order to make it fit. To illustrate, SETI [Search for Extra-Terrestrial Intelligence] researchers can reasonably conclude that Extra-Terrestrial Intelligent Being exists if they pick up a certain signal under certain circumstances. Suppose someone postulates an alternative hypothesis that the physical universe itself (without the ETI beings) generated the signal. This would be a more parsimonious

hypothesis, but it would rightly be rejected because our background knowledge indicates that the physical universe itself (apart from intelligent beings) does not have the capacity to generate such a signal. Thus, the alternative hypothesis has extremely low prior probability. To object to this conclusion by postulating that the physical universe itself might have the capacity to generate such a signal under special circumstances is ad hoc. Likewise, to postulate that the physical universe itself might have intelligence which can set up itself under special conditions is ad hoc. Note that my objection is not question begging because it does not start by assuming that Goff's interpretation of our observation of the universe is wrong. Rather, it starts by observing physical entities and inferring that his postulation of those additional characteristics is ad hoc.

Now, it is not ad hoc to conclude that the universe has a First Cause which is initially changeless, necessarily existent, personal (has libertarian freedom), and intelligent, since this is justified by the reasons and evidences presented in the earlier parts of this book. However, it is ad hoc to postulate that the initial state of the universe is a First Cause which is initially changeless, necessarily existent, personal (has libertarian freedom), and intelligent. The reason is there is no independent evidence that the physical universe which we observe has such properties. On the contrary, all the evidence we have of the universe shows that it does not (for example) freely moves around the planets in ways other than that described by the laws of nature. In other words, our observation of the universe implies that Goff's hypothesis has extremely low prior probability. It is inadequate to respond by saying that our universe does have the property of following the laws of nature which have teleological properties. The reason is because the problem concerning the origin of the universe and fine-tuning does not merely concern the present laws of nature but also the arrangement of the initial conditions. It is like arranging different parts of a factory together (before those parts run according to programmed laws). When we observe the universe it is obvious that it does not have the capacity to bring together different parts of the factory to set up a factory; the laws of nature are unintelligent in that sense. Likewise, it is implausible to think that it could have fine-tuned and set up itself. Consider the analogy of discovering a car factory in a jungle mentioned in Chap. 7. Even if the parts of the factory are faulty for whatever reason (cf. problem of evil Goff mentioned), it is still reasonable to conclude that the factory had an independent designer rather than to think that it designed itself, since it is obvious that the factory is unintelligent and does not have that capacity to set up itself.

Goff might reply by speculating that the universe has a mind and is trying to maximize the good under certain limitations as expressed by the laws of physics.<sup>5</sup>

However, scientific evidence has shown that (regardless of whether the universe has a mind or not) the 'limitations' are very severe. That is, the physical universe behaves in law-like regular ways rather than behaving in ways which indicate that it is capable of arranging things together to form something like a car factory which can set up different systems of an automobile. Therefore, it is unlikely that the universe could have set up itself, or fix its initial conditions in such a way that different systems (e.g. quantum systems, solar systems, biological systems) would eventually form.

Goff might reply by postulating that, because the limitations were broken during the Planck epoch at the beginning of our universe where physical laws break down, the universe might have the capacity to finetune itself during that epoch. To illustrate the absurdity of his ad hoc hypothesis, one can postulate that, because the limitations were broken during the Planck epoch at the beginning of our universe where physical laws break down, the universe might have the capacity to generate finetuned special signals during that epoch, signals which (because of the fine-tuning and the breaking down of physical laws) cannot be traced back to the Planck epoch but which can be translated as intelligent messages later on. SETI scientists would reject the above hypothesis as ad hoc. They would object that the fact that our current scientific models break down during the Planck epoch does not mean we can postulate anything we want to the universe during the epoch to explain anything we want, even if the resultant hypothesis might be more parsimonious than postulating a universe with aliens. Likewise, scientists ought to reject Goff's hypothesis by arguing that the fact that our current scientific models break down during the Planck epoch does not mean we can postulate any kind of 'theory of everything' to the universe during the epoch to explain anything we want (such as evidence of fine-tuning), even if the

resultant hypothesis might be more parsimonious than postulating a universe with the God of traditional theism.

Secondly, the conclusion (justified by the arguments in previous chapters) that this First Cause (A) is initially changeless and (B) has libertarian freedom to initiate or prevent itself from initiating the first event already implies that the First Cause is utterly different from the physical world and not describable by natural laws. Concerning (A), as noted previously, according to quantum physics, physical entities constantly fluctuate (i.e. change) at the quantum level as described by the Heisenberg uncertainty principle (Boddy, Carroll & Pollack 2016). To suggest that our current scientific model collapses in the Planck epoch to such an extent that even the fundamental understanding of physics and of natural law that 'physical entities change' no longer applies seems to be equivalent to postulating a non-physical and 'supernatural' origin, rather than origination by the physical universe itself. Goff might reply by postulating that the universe is not essentially physical, and that he is hypothesizing that a 'nonphysical God became the universe'. But how is the change from 'non-physical' to 'physical' not supernatural? Moreover, Goff's hypothesis that 'God became the universe' requires that God must still have been distinct from the universe before 'becoming' the universe. Additionally, his hypothesis is as implausible as suggesting that 'the alien which generated the signal message became the signal'. The 'becoming' involves an (unnecessary) extra step which is less parsimonious. It is simpler to postulate that 'the alien created the signal' without postulating that 'the alien became the signal'. Likewise, it is simpler to postulate that 'God created the fine-tuned universe' without postulating that 'God became the universe and allowed the natural laws to limit himself after the Planck epoch'. Concerning (B), our background knowledge of the scientific evidence indicates that no causal relation found in the hard sciences resemble anything like having the (libertarian) freedom to initiate or prevent itself from initiating an event. Again, this indicates that Goff's hypothesis has extremely low prior probability, and that it is ad hoc for Goff to postulate that the physical universe has this freedom which manifested under special consideration. The point concerning the initial changelessness and libertarian freedom of the First Cause is that we are warranted by the evidence to conclude that there exists an entity with a nature which is

distinct from physicality as described by natural laws. The term supernatural is usually used for such an entity. Goff might refuse to use this term, but this does not deny the conclusion that such an entity exists. I have argued above that the conclusion that such an entity is non-identical with the universe is less ad hoc and more parsimonious than his hypothesis that they are identical.

Hence, the First Cause should be regarded as something that is distinct from the physical world. Given this, and given that properties such as being (initially) changeless, necessarily existent, having libertarian freedom and intelligence are contrary to our observation of the physical universe but are what theists traditionally meant by 'God',, who is supposed to be very different from the observed universe, the conclusion of theism and the associated cost of violating qualitative parsimony and unified conception of reality are warranted.

#### 8.4 Significance of the Conclusion of KCA-TA

The conclusion that the First Cause is initially changeless as well as immaterial and has libertarian freedom indicates that the First Cause is ontologically distinct from the material universe; this is a hallmark of traditional theism in distinction from pantheism (Forrest 2016). It implies that events describable by physical law have a beginning; that is, there is a first event, which implies that materiality has a beginning, which is consistent with *creatio ex nihilo*.

It is true that the KCA-TA by itself does not prove that this First Cause has other properties which many people associate with God, namely, morally perfect, Triune, and so on. Nevertheless, we still need to consider who is this First Cause of our universe who is immaterial, has libertarian freedom (and hence personal), is intelligent, and enormously powerful (and who might well be morally perfect, Trinity, etc.)? If we do not call this First Cause God, then what shall we call Him? There are good reasons for calling Him God, given that hardly any atheist (a person who affirms that there is no God) would acknowledge that there is such a First Cause and still remain an atheist. Even if we do not call this First Cause God, we should at least call Him the Creator, given that the First Cause has libertarian freedom and is the designer of our universe. One might seek to find out whether there are evidences which indicate that this Creator had revealed Himself in other ways—for example, through the moral law in human conscience (Baggett and Walls 2016) and His acts in history (Loke 2017, 2020, 2021)—to provide us with additional reasons for thinking that He is indeed morally perfect, and so on, and to reveal to us His ultimate purposes for creation and His plan for our lives.

Robert Lawrence Kuhn (2020) has observed that the question 'Why there is something rather than nothing?' is a question that supersedes all other questions. Against this, Maudlin (2018) claims that this question is 'a silly question which obviously has no satisfactory answer', 'for to "explain" existence you either cite something that exists or you don't. If you do you have begged the question, and if you don't then you haven't provided an explanation.' However, Maudlin fails to note that it is not question begging to cite something with properties which logically terminate the question.

To elaborate, when one asks 'why?', one is looking for an explanation. For example, when one asks 'why is there something called Andrew Loke rather than no Andrew Loke?', the answer is his parents brought him into existence and therefore explain why he exists. Since there cannot be an infinite regress of explanations (see Chap. 5), the series of explanations must terminate in an uncaused First Cause with libertarian freedom, that is, a personal Creator God (Chap. 6). Such a First Cause does not need to be explained, since it is beginningless, unsustained, and necessarily existent (Chap. 3). It would therefore be meaningless to ask why is there a First Cause rather than nothing, because there cannot be an explanation for this First Cause since this First Cause is the terminus to the series of explanations. In other words, this First Cause (God) has properties which logically terminate the question. Therefore, this First Cause is the answer to the question 'Why is there something rather than nothing?' Contrary to Maudlin, this question is not a silly question. Rather, it is one of the most important questions humanity has ever asked, a question which leads humanity to God.

Stephen Hawking (2018, p. 29) has observed that 'it is hard to think of a more important, or fundamental, mystery than what, or who, created and controls the universe'. Albert Einstein has stated that 'everyone who is seriously engaged in the pursuit of science becomes convinced that the laws of nature manifest the existence of a spirit vastly superior to that of men, and one in the face of which we with our modest powers must feel humble' (Jammer 1999, p. 93). Richard Dawkins has acknowledged:

When I lie on my back and look up at the Milky Way on a clear night and see the vast distances of space and reflect that these are also vast differences of time as well, when I look at the Grand Canyon and see the strata going down, down, down, through periods of time when the human mind can't comprehend, I'm overwhelmingly filled with a sense of, almost worship ... it's a feeling of sort of an abstract gratitude that I am alive to appreciate these wonders. When I look down a microscope it's the same feeling: I am grateful to be alive to appreciate these wonders. (Dawkins 2006)

The Teleological and Kalām Cosmological Arguments have shown that there is indeed Someone to worship and to be grateful to, that the universe with its astonishing fine-tuning, amazing mathematical laws of nature, and billions of spectacular stars and galaxies is not the result of 'blind pitiless indifference' (Dawkins 1996, pp. 131–132). Rather, it is the work of a transcendent Ultimate Designer and necessarily existent First Cause who is the Source of these wonders and the 'Maker and Father of all' (Plato, *Laws* 10.893b–899c). It is hard to think of a more important, humbling, and joyful discovery than this, and a more important quest in life than to know the God who created the universe.

#### Notes

- 1. I thank Lucas Giolas for emphasizing this point to me.
- 2. https://www.youtube.com/watch?v=pGKe6YzHiME.
- 3. Goff also claims that theism makes false prediction concerning the problem of evil (p. 107). For reply, see Sect. 7.3.
- 4. Now Swinburne also states that 'a "Theory of Everything" will have no contingent background evidence by which to determine prior probability.

Prior probability must then be determined by purely *a priori* considerations' (2004, p. 60). Swinburne's statement might be explained by the fact that, by the 'theory of everything', he is thinking of an entity (i.e. the God of traditional theism) which is different from the contingent universe and which explains the universe. In which case our contingent background evidence concerning our universe would obviously not apply to such an entity since it only applies to the universe. However, Goff's case is different, since Goff's 'theory of everything' is that the universe itself explains its own fine-tuning. In which case our contingent background evidence concerning our universe does apply. In any case, whether Swinburne himself accepts my objection or not is irrelevant to the soundness of my objection against Goff's theory, which I explain below.

5. I thank Goff for helpful discussion in what follows.

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