Causes And Beginnings In The Kalam Argument: A Reply To Craig

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Defenders of the kalam cosmological argument claim that everything that begins to exist must have a cause. But what if there were no time prior to the beginning of the universe? Would the beginning universe still have to have a cause? In his reply to an earlier paper of mine, William Lane Craig defends an affirmative answer. Every beginning, he believes – even the very first event in the history of time – must have a cause. It makes no difference, he says, whether an event is embedded within time or whether it coincides with the beginning of time – in either case a cause is necessary. In the present paper, I clarify and defend my case for taking the opposite view. I take a close look at the most important lines of argument in Craig’s rejoinder, and conclude that his position is supported neither by a trustworthy a priori intuition nor by a sound empirical generalization.

Ordinary causes emerge only within the context of a pre-existent natural order. So if the beginning of the universe is (also) the Beginning of nature itself, then it is impossible for it to have an ordinary cause. This much would be presumably be accepted by all parties to the present dispute. But why suppose that the Beginning of all beginnings must have any cause at all? If the class of things that “begin to exist” is understood to include time and the whole natural order, why believe the first premise of the kalam argument?

(P1) Everything that begins to exist has a cause of its existence.

In his rejoinder to my paper, William Lane Craig strongly defends the view that P1 is metaphysically necessary, that it is supported by a synthetic a priori intuition, and that there is overwhelming empirical evidence for it. Limitations of space make it impossible to respond to all of Craig’s points; so I shall restrict my attention to the most important issues, beginning with Craig’s claim that P1 is a metaphysical necessity backed by a synthetic a priori intuition.

1. Intuition, metaphysical necessity, and the need for analysis

In his rejoinder, Craig stresses the point that metaphysical possibility and conceptual possibility are distinct, and that our ability consistently to
conceive or imagine a world in which things spring into existence uncaused does not prove that such things are metaphysically possible. Craig is right about this. But I never claimed that we could settle the issue about PI merely by imagining a world in which things pop into existence without causes. What I did claim was: first, that such thought experiments constitute some (defeasible) evidence for the metaphysical possibility of uncaused beginnings; and second, that a careful examination of any "intuition" that conflicts with this evidence is called for. I also proposed some criteria to help us sort things out – none of which are helpful to Craig's contention. In this connection, I claimed that Craig's own analysis of "beginning to exist" makes it much less clear that PI is true.

In response to this last point, Craig suggests that the analysis of the concept of "beginning to exist" is irrelevant to the perspicuity of the intuition that PI is metaphysically necessary. "I could have simply taken 'begins to exist' as an undefined primitive in an intuitively true premise", he writes. But, yes, he could have done that. And if he had, a reader might not notice all that Pl commits him to, and this might make it easier to assent to PI. But it seems to me that this is altogether the wrong way for a philosopher to proceed. If one (or more) of the concepts involved in PI is in need of analysis, then I believe we should take a look at the analysis and see what all it commits us to before pronouncing on just how intuitively clear it is that PI must be true.

Craig is not impressed by this line of argument. When an intuitively grasped principle is analyzed, he says, it need not "have the same epistemic obviousness of the analysand. In any case, there are many different degrees of "self-evidence and perspicuity." I have erred, he says, in assuming that there is only one. I do not believe that I did assume that there is only one degree of self-evidence, nor do I think that my argument requires any such assumption. What I do say is that we should ask the following question about PI: "For those who have done an accurate analysis, and know what PI commits them to, how much of its intuitive luster remains?" If the answer is "none" or "very little" or even "much less", then I think a significant doubt has been raised about the trustworthiness of the original intuition.

Just how much muddying of the waters can we tolerate before we give up on the "intuition" we started out with? I don't have a general answer to this question. But I am at least sure that we need to consider what happens to our supposed intuitive certainties when we define our terms.

2. Is PI backed by a trustworthy a priori intuition?

By far the most important of Craig's objections to the argument of my paper has to do with the significance of the fact that "beginning to exist" in PI must be understood in such a way that it embraces all beginnings, whether they are embedded within time or whether they involve the Beginning of time itself. Craig thinks there is no significant disanalogy here at all: "If the universe could not come into existence uncaused at t, where t is preceded by earlier moments of time, why think that if we were to annihilate all moments earlier than t, then the universe could come into
existence uncaused at $t$?""}6

I confess that I do not have any very clear intuitions about this when I consider the matter wholly in the abstract, without any concern for what it is that is supposed to be happening at the various times. I strongly suspect I am not alone in this, and that this is why Craig finds it useful to ask his readers to imagine tigers and such "springing into existence uncaused" in order to stimulate their "intuitions."

But suppose it is agreed that, all other things being equal, if the goings on at a time $t$ need a cause when there are prior moments, then they would still need a cause if there were no prior moments. What follows from that? Very little of interest, it seems to me. The problem is that in the real world, all other things are not equal. The First Moment in the history of our universe is unlike all others because that is when the whole natural order comes into being. Later moments are embedded not only within time, but, more importantly, within a natural order that did not exist prior to the First Moment.

To see why I think this matters, it will be useful to back up a bit and look at the way in which Craig tries to elicit the intuition that P1 is true. For example, he asks, "Does anyone in his right mind believe that, say, a raging tiger could suddenly come into existence uncaused, out of nothing, in this room right now?" Probably no one does. Craig then invites us to apply this "intuition" to the beginning of the universe, and the case for P1 is about as complete as Craig ever makes it.

But surely this is much too quick? Of course, no one thinks a tiger could just spring into existence "in this room right now." But before we jump to conclusions, we need to ask why this is so. What is it that makes it so obvious? Is it, as Craig seems to suppose, that all normal persons possess a clear a priori intuition of P1, which they then apply to the case of the tiger? Call that the top-down explanation. Or is it rather that all normal persons have a lot of experience of animals (and other middle-sized material objects), and they know that popping up like that is just not the way such things come into existence? Call that the bottom-up explanation.

The bottom-up explanation takes note of the fact that we are dealing with a familiar context - one provided by our collective experience of the world in which we live and of the way it operates. It is our background knowledge of that context - our empirical knowledge of the natural order - that makes it so preposterous to suppose that a tiger might pop into existence uncaused. We know where tigers and such come from, and that just isn't the way they come into existence.

Now contrast the situation with regard to the First Beginning. There simply is no familiar law-governed context for it, precisely because there is nothing (read, "there is not anything") prior to the Beginning. We have no experience of the origin of worlds to tell us that worlds don't come into existence like that. We don't even have experience of the coming into being of anything remotely analogous to the "initial singularity" that figures in the Big Bang theory of the origin of the universe. That is why the absurdity of tigers and the like popping into existence out of nowhere tells us nothing about the utterly unique case of the Beginning of the whole natural order.

But what if the very first thing that happened had been a tiger springing
into existence? Wouldn’t that (still) have been absurd? I have two things to say about this:

(1) Even if a tiger could not be the very first thing in an uncaused universe, it does not follow that nothing could be. The apparent absurdity of a tiger popping into existence at the very first moment of time derives from our knowledge of the natural order that has now come into being (including, perhaps, our knowledge of the natural kind, “tiger”). It is highly unlikely (perhaps even impossible) that a world very much like ours could have begun in any such fashion as that. We simply know too much about what it takes to make a tiger to take such a possibility seriously. But this tells us nothing about the “initial singularity” that supposedly marks the beginning of the universe.

(2) At the level of raw intuition, I don’t see that it is any less absurd to suppose that a “timeless agent” started things off by creating a raging tiger ex nihilo. But this is a “metaphysical possibility” that Craig presumably accepts. (I’ll say more about the relevance of our intuitions about creation ex nihilo in a bit.)

Craig is close to a correct understanding of my position when he says: “Perhaps Morriston’s difficulty is that he thinks of the causal principle as akin to a law of nature, like Boyle’s Law or the Second Law of Thermodynamics, which hold only within our universe.” This is almost, but not quite, right. Almost right, because I am here thinking of causation and causal laws largely in terms of intra-temporal processes and regularities. Not quite right, because, subject to further enlightenment, I do not acknowledge the metaphysical necessity of any completely general causal principle.

Craig continues his attack: “Morriston has given no good reason for construing such claims as merely physical rather than as metaphysical claims.” But why not construe them my way? Craig simply assumes that his must be the default position. I find this puzzling. After all, it is Craig who is making the really bold claim here. Despite our ability consistently to conceive of its falsehood, he insists that P1 is true in all possible worlds. In defense of this strong claim, Craig says that it is intuitively obvious that tigers and such cannot spring into existence without a cause. But I have offered a likely explanation of this “intuition” — one that does not commit us to a sweeping claim about all possible worlds or even about the beginning of our universe. What more do I need to do?

Quite a lot, apparently. Forget about tigers springing into existence uncaused within time. Craig thinks it is, if anything, even more obvious that the universe (and time) could not have come into existence uncaused. His reason seems to be that prior to the beginning of an uncaused universe, there would be absolutely nothing. Immediately following the tiger passage quoted above, he writes, “If prior to the existence of the universe, there was absolutely nothing — no God, no space, no time — how could the universe possibly come to exist?” Elsewhere he writes, “the first premise of the kalam cosmological argument expresses the intuition ex nihilo nihil fit, which is so perspicuous that only an effete skepticism can deny it.” And in his reply to my paper he again falls back on this same medieval slogan: “Being does not arise from non-being; something cannot come from nothing.”

But that is exactly the move I thought I had decisively refuted in the sec-
tion of my paper titled, "Could something come from nothing?" What is
this "nothing", anyway, and how could it provide any sort of context at all
– much less one that would make it impossible for things to spring into
existence? Either Craig’s claim that nothing comes from nothing says some­
thing analytic and trivial (“if there were nothing at all, then there would
indeed be nothing at all – not even a springing into existence”), or it mis­
takenly represents the “nothing” from which an uncaused universe must
“spring” as somehow “existing” prior to the existence of anything (and
then asserts the impossibility of anything “springing” from that), or, more
likely, it is just a confusing way of reaffirming the metaphysical necessity
of P1. However it is interpreted, this ambiguous formulation provides no
support whatever for P1. It is surprising, therefore, that Craig continues to
rely on it without coming to grips with my objection.

But the confusion surrounding this slogan is not the only thing driving
Craig’s intuition here. He also suggests that there is something about the
very nature of time that supports his claim that the First Moment is no dif­
erent from any other. Time, he believes, involves the ever-repeated coming
into being of something absolutely new. In this respect all moments –
including the very first one – are alike. “[G]iven a dynamic or tensed view
of time”, he says, “every moment of time is a fresh beginning, qualitatively
indistinguishable from a first moment of time, for when any moment is
present, earlier moments have passed away and do not exist. Thus, if the
universe could exist uncaused at a first moment of time, it could exist
uncaused at any moment of time.”

Craig’s claim that “when any moment is present, earlier moments have
passed away and do not exist” must be a slip, given his insistence on the
finitude of the past. At a First Moment there could be no “earlier
moments” that have “passed away.” In that respect, at least, even Craig
must concede that the First Moment is different.

But presumably it is the similarity of the First Moment to all others that
Craig wants to stress here. Each moment is a “fresh beginning.” So each is
(equally) in need of cause. But even if one accepts Craig’s “presentist”
account of time (as many philosophers do not), the premise of this argu­
ment provides no support for its conclusion. Why should we suppose that
every “fresh beginning” must have a cause? As far as I can see, that is just
a restatement of P1.

More importantly, the argument fails to take into account the important
ways in which the First Moment differs from later ones. It differs with
regard both to content (what happened at that moment) and with regard to
its position within the context of the whole natural order. Some of these
differences may be relevant to the need for a cause. Whether the First
Moment requires a cause may depend on just what the universe consists of
at that moment. Is it the sort of thing that falls under some known or
knowable regularity? Or is it absolutely unique and without parallel?
Craig’s argument does nothing to show that such differences as these are
irrelevant to the need for a cause.

The only time-related intuition I can think of that is in any way relevant
to the kalam argument is one that is anything but helpful to the case Craig
wants to make. Some people have quite a strong resistance to the whole
idea of a First Moment. The idea of a time prior to which there was no time – of an event before which there were no others – strikes them as profoundly counter-intuitive. Even when they try to imagine a “timeless person” somehow producing the first event, a powerful sense of absurdity may remain. “But where did it come from? What was there before it happened?” At the level of raw intuition, “nothing at all” and “there was no before, before the beginning” do not “feel” to them like acceptable answers.

This intuition may or may not be trustworthy, and it may or may not have been defeated by Craig’s philosophical arguments against the infinite past; but I think it is clear that many people have it, and I suspect that this, rather than any special intuition about what does or doesn’t need a cause, is what some of them really have in mind when they join in the refrain, “from nothing, nothing comes.” Indeed, this may help explain why Craig himself so often equates the denial of P1 with the incoherent suggestion that a Nothingness “preceded” the universe. Phrases like “if there were originally absolute nothingness” and “if prior to the existence of the universe, there was absolutely nothing” appear so frequently in Craig’s defense of P1, that it can hardly be accidental. It is almost as if he himself subconsciously assumes that every moment of time comes from a previous one, so that an uncaused universe could only have come from a prior Nothing.16

3. What about the “intuition” that creation ex nihilo is impossible?

In my paper, I suggested that the lack of a “material” cause is at least as counter-intuitive as the lack of an “efficient” cause. Craig’s response is interesting. There are, he says, just three possibilities with respect to the origin of the universe: “the infinitude of the past, creation ex nihilo, [and] spontaneous origination ex nihilo.” Assuming (as we have agreed to do for the sake of argument) that Craig’s philosophical arguments against the infinite past are sound, we must choose between creation ex nihilo and uncaused origination ex nihilo. Craig says he prefers the creation hypothesis, since it involves only one counter-intuitive element, whereas the spontaneous origination hypothesis “is doubly counter-intuitive in that it denies of the universe both a material and (especially) an efficient cause.”17

This seems to me rather to miss the point I was trying to make. I brought up the intuitive absurdity of creation ex nihilo only in order to suggest that our intuitions about such matters may not be especially reliable. The fact that Craig himself is forced to take a position that runs counter to one of his own strong intuitions merely reinforces this point. It should make us wonder just how much weight such intuitions can bear.

In any case, there is a serious gap in Craig’s argument for creation ex nihilo, since the trilemma – either the infinite past, or creation ex nihilo, or spontaneous origination ex nihilo – fails to exhaust the logical alternatives. There is at least one other possibility that Craig fails to consider – viz., that God made the world out of something-or-other that is (or “was”) eternal.

I confess that I do not have a candidate for material cause of the universe. Craig may be right in suggesting that it could not be our physical matter or energy, since they are temporal in nature.18 And we don’t seem
to be acquainted with any other eternal "stuffs" out of which God might
have made the universe. But that shouldn't stop Craig. We don't
encounter any eternal persons either, but he thinks his commitment to PI
forces him to postulate one. Why, then, does he not simply conclude that
there must be an eternal material cause, on the ground that he can thereby
avoid, not only the "double absurdity" of spontaneous generation, but also
the "single absurdity" of creation ex nihilo?

Better yet, why not simply admit that we don't have enough to go on to
make any very certain pronouncements on the matter? That "our line is
too short to fathom such immense abysses?"

4. Is there a good empirical case for the metaphysical necessity of PI?

Even if you are one of those unlucky (or stubborn) persons who lack the
\textit{a priori} intuition that PI must be true, Craig thinks you needn't go without
this truth. For PI is also (he supposes) the conclusion of a sound empirical
generalization.

I am not sure precisely how the empirical argument for PI is supposed
to go. Is it a simple enumerative induction in which we draw a general
conclusion about all beginnings whatsoever, on the basis of those observed
beginnings for which there are known causes? And how, exactly, is the
empirical argument supposed to support Craig's claim that PI is meta­
physically necessary? There are at least three different problems here.

(1) The class of observed cases may, for all we know, be an unrepre sen­
tative sample of the whole territory about which Craig wants to generalize.
One reason why this is so is that all the comings-to-be that fall under our
observation are comings-to-be \textit{within} time, whereas the beginning of the
universe is (also) the coming-to-be \textit{of} time – and, I would now want to
stress, of the whole natural order. For the reasons given above, I do not
think Craig has succeeded in showing that this difference is unimportant.

(2) But even if we had a sound generalization about all beginnings in the
actual world, how could we draw a conclusion about what is true in all pos­
sible worlds?

Craig doesn't see a problem here. He points out that many philoso­
phers have come to recognize a large class of metaphysically necessary
truths for which the evidence is empirical. Water is H\textsubscript{2}O. The atomic
number of gold is 79. And so on. "It could well be", Craig concludes,
"that only logically posterior to our experience of reality do we intuitively
grasp the necessary truth of the causal principle."

If Craig wants us to take seriously the idea that we can somehow "intu­
it" the metaphysical necessity of PI in the wake of an empirical identifica­
tion of the sort that is involved in showing that water is H\textsubscript{2}O, he needs to
explain in some detail how this is supposed to work. A bit of hand-waving
in the direction of the \textit{a posteriori} necessities allegedly discovered by Kripke
and Putnam will not do the trick.

So how does empirical evidence establish (e.g.) that water is \textit{necessarily}
H\textsubscript{2}O? It works something like this. We have \textit{already} decided that water
(whatever it is) is a \textit{natural kind}. We are, to use Kripke's expression, already
\textit{rigidly referring to that} natural kind (whatever it is) when we use the word
"water." But we don’t yet know what the nature of that kind is, and we need the empirical scientists to get out their instruments, do the appropriate chemical analysis, and identify it for us. Once they have done their job, we know what water is, and we can then go on to make the claim that anything lacking that chemical structure would not be the same kind of stuff.

Plainly, this type of empirical support is not available for P2. In the first place, none of the terms involved in P1 ("cause", "thing", "beginning to exist") refers to a natural kind that might be identified by the empirical sciences. In the second place, the concepts that make the scientific identifications possible contain a crucial indexical element. Only if we refer (rigidly) to that stuff can we ask the empirical sciences to identify it for us. Since the concepts involved in P1 lack this indexical element, it is hard to see what there is here for the empirical sciences to "identify."

Craig may say that the examples of scientific identifications should not be taken so literally. But then how are we to take them? How are they even relevant to the issue under discussion?

3) The third problem for Craig’s claim that there is a strong empirical argument for P1 is that there are many other equally well-attested “empirical” generalizations about causes and effects – ones that Craig would not want to accept because they are incompatible with the requirements of the kalam argument. In addition to the examples mentioned in my paper, consider the following one.

(TC) At least part of the total cause of every event precedes it in time.

Even if one grants (as many philosophers do not) that some (partial) causes are simultaneous with their effects, those causes are themselves states of other things that pre-exist the effects in question. Suppose, to borrow a well-worn illustration from Kant, that one thinks the pressure of a man’s posterior on a cushion is simultaneous with the depression in that cushion. The pressure is due to the position and posture of the man’s body, and this in turn is a state of something – the man’s body – that existed prior to the depression in the cushion. The total cause thus includes something – the man’s body – that existed prior to the depression in the cushion.

(TC) has at least as much going for it as P1. Indeed, I have been unable to think of any counter-examples to it. But (TC), combined with P1, would make it impossible to sustain Craig’s claim that there is a very first event and a very first moment of time. It seems, then, that Craig must reject (TC) in spite of its overwhelming (in excelsis, as Craig might say) empirical confirmation.

Now Craig may say that the strong empirical case for (TC) is “simply overridden” by his a priori arguments against the infinite past when they are taken together with P1. If every beginning has a cause, and there is no time prior to the beginning of the universe, then (TC) is false. But even if Craig’s arguments against the infinite past are better than I think they are, this is quite a dangerous line for him to take. For the critic can make precisely the same move, arguing the P1 is “simply overridden” by the same arguments when they are taken together with (TC).
But this is not all. In my experience, enumerative inductions that satisfy the canons of inductive logic do not run afoul of truths that are known \textit{a priori}. If an inductive argument were incompatible with some truth that I believed myself to know \textit{a priori}, I would expect something else to be wrong with it.

So where, exactly, does the empirical case for (TC) go wrong? Will Craig now be willing to say that the sample of observed cases is unrepresentative of the whole class about which we are being asked to generalize? That what goes for causes and effects embedded within time need not apply to the Beginning of Everything? Presumably not. But what else is there for him to say?

5. The "conviction of mankind?"

I had asked how Craig can explain the fact that so many intelligent, well-informed philosophers, having looked into the matter and made the relevant distinctions, have doubts about the metaphysical necessity of Pl. If it is so blindingly obvious, why don’t they “get it?” This seemed relevant to me because one of my proposed standards for a trustworthy \textit{a priori} intuition was that someone who carefully considers all that it involves, ought to “see” that it is true.

As nearly as I can tell, Craig does sometimes propose a kind of explanation. He thinks that at least some of those who don’t “see” it are simply trying to avoid the commitment to theism that he believes falls out of Pl.\textsuperscript{21} In his reply to my paper, Craig does not defend his remarks on the intellectual dishonesty of unbelievers. He takes the point up in a rather different way. “The shoe is on the other foot”, he says. “If there is any explaining to be done”, he says, “it falls to Morriston to explain why his little band of skeptics fail to see what the vast majority of people, both philosophers and non-philosophers, do claim to see and to explain how the bulk of mankind, in his view, can be so deceived.”\textsuperscript{22} Later on, Craig refers to Pl as “the conviction of mankind.”\textsuperscript{23}

But what is it that “the bulk of mankind” are supposed to agree in “seeing?” It is no doubt true that heads generally nod when someone says, “Nothing comes from nothing,” or, “Nothing begins to be without a cause.” But that isn’t to the point. What we need to know is whether heads continue to nod when careful distinctions are made. Do they continue to nod when the sheer oddity of a First Moment is brought into the picture? When we step back from the natural order within which the demand for a cause has its ordinary meaning?\textsuperscript{24}

It is easy enough to see how Craig’s principle – or rather, the \textit{words} in which that principle is expressed – can come to have a sort of intuitive sheen for many people. For some, this may be due to their failure to pay attention to just what Pl commits them to. They may think they have to believe that every beginning must have a cause because tigers and such don’t spring into existence without (natural) causes. They may have failed to notice the lack of a natural context for the First Beginning, and the gulf that lies between familiar intra-temporal beginnings and the Beginning of the natural order, including time itself. Others may believe Pl because it is
entailed by a stronger principle – the Principle of Sufficient Reason, for example – which seems intuitively obvious to them. Still others may be confused by obscure slogans like “from nothing, nothing comes.” They may even think they believe PI, when what they really believe in their heart of hearts is that there could not have been a very first moment of time.

The sources of confusion are legion, and even physicists may not be exempt from them when they form “intuitions” about matters that lie outside their special expertise. But when all the pertinent distinctions are made, I believe that many (I do not say all) intelligent, well-informed, and honest people will have reasonable doubts about the metaphysical necessity of PI, and I see no reason to credit the “intuitions” of those who have not so much as considered the issues I have raised. Here, as elsewhere, “the slow and deliberate steps of philosophers” must be distinguished from “the precipitate march of the vulgar.”

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NOTES


2. Craig also claims that the kalam argument would not be “even ostensibly defeated” by the argument of my paper. Even if were not backed up by a legitimate a priori intuition or by a strong empirical argument, Craig feels sure that PI would still be at least “more plausible” than its denial. And that, he supposes, is all that is required for a “successful piece of natural theology.” (Rejoinder, 97) I find this claim difficult to interpret. What does Craig have in mind when he says that PI is “more plausible” than its contradictory? Is it that many people find it to be more plausible? If so, we must ask why they find it to be so. Without a proper account of what makes a proposition plausible, I see no reason to give mere subjective feelings of plausibility any epistemic weight.

3. See Morriston, 156-9. It should be noted that while Craig does not accept the standards I proposed for assessing putative a priori intuitions, he offers none of his own. Indeed, he seems to have a very casual – one might almost say cavalier – attitude towards such issues. He (and almost all mankind, apparently) just have this intuition, and the burden of proof (he supposes) falls entirely on the shoulders of the “small band of skeptics” who doubt that it is a genuine insight into the metaphysical structure of reality.

4. Craig, Rejoinder, 97.

5. Craig, Rejoinder, 99-100.

6. Craig, Rejoinder, 96.


8. Craig, Rejoinder, 97.

9. Craig, Rejoinder, 97.


12. Craig, Rejoinder, 97.


15. In fact, I believe that both of his arguments have been refuted. See my "Must the Past Have a Beginning" (Philos. 2, no. 1, 5-19) for a detailed consideration of Craig's attempts to defend the "successive addition" argument against the standard criticisms. See Paul Draper, "A Critique of the Kalam Cosmological Argument," Philosophy of Religion: An Anthology, ed. Louis Pojman, 3rd. edition, (Belmont, Calif.: Wadsworth 1998), 42-46, for a refutation of both of Craig's arguments against the infinite past.

16. Even when these confusions are cleared up, it may still seem to some people that PI is necessarily true. But I think this probably has less to do with their intuitions about time than with a deep-seated resistance to the brute facticity of the sheerly uncaused, and a lingering commitment to something like Leibniz's Principle of Sufficient Reason. They may be tempted to think that the first state of the universe must have a cause because, deep down, they feel sure that any state of anything (and not merely the comings-to-be of things) must have a sufficient cause. So I wonder: Just how much of the "intuition" that beginnings-to-be must have causes remains when we acknowledge (as I think we must, in light of contemporary quantum physics) that there are exceptions to the Principle of Sufficient Reason? Can PI stand on its own apart from the stronger principle? Craig has given us no reason to think that it can.

17. Craig, Rejoinder, 97.

18. On second thought, perhaps matter and energy enter time only when God creates the universe! If Craig's timeless creator can put himself into time, presumably he can do the same for a timeless material cause of the universe. So on the ground marked out by Craig, it is not at all clear the matter and energy could not be the material cause of the universe.


22. Craig, Rejoinder, 100.

23. Craig, Rejoinder, 100.

24. It is interesting to note that Craig's causal principle fares rather poorly among the philosophy faculty at the University of Colorado, Boulder. I did an informal survey of my colleagues, asking them two questions: "(1) Is it intuitively obvious to you that everything that begins to exist must have a cause? And (2) If you thought that time itself had an absolute beginning, and that there was a very first event in the 'history of everything', would you think it intuitively obvious that this first event must have a cause?" I received sixteen responses. Here are the results. In response to (1), six said yes, and ten said no. In response to (2), three said yes, twelve said no, and one was undecided. The only obvious pattern I can discern is that those respondents whose area of research interest includes metaphysics were significantly more likely to say "no" to both questions. It is also worthy of note that two of the theists in the group said "no" to both questions.

25. Whatever the cosmologists Craig quotes may say, I suspect that the general unease about our current understanding of the origin of the universe has less to do with commitment to some completely general causal principle than with the fact that no one can explain why the Initial Singularity was followed by a rapid expansion; and with the fact that the characterization of the Initial Singularity as an infinitesimal point is extraordinarily problematic.
(How could such a thing exist at all?) Merely trotting out creation *ex nihilo* as the one-size-fits-all “explanation” that somehow or other plugs the gaps in our understanding of the origin of the universe does nothing to solve either of these puzzles.

26. David Hume, *Dialogues Concerning Natural Religion*, II.

27. I would like to thank Jeff Lowder, Jeff Yim, and Michael Tooley for their very helpful comments on an earlier draft of this paper. I would also like to thank the Editor of *Faith and Philosophy* for his astute comments and criticisms.