

Uncaused Beginnings

There are many possible *models* for the causal shape of reality. Amongst the simple models to be considered—even if only to be subsequently rejected as models of *real* possibilities—we should certainly mention: REGRESS, CIRCLE, NECESSARY INITIAL STATE, and CONTINGENT INITIAL STATE.¹ Each of these simple models admits of both theistic and naturalistic interpretations. It is widely recognised that in several of these cases—REGRESS, CIRCLE, CONTINGENT INITIAL STATE—naturalism would be preferable to theism: if reality had the causal shape in question, then there would be good reason to accept naturalism and to reject theism.

I think that naturalism is preferable to theism even in the case of NECESSARY INITIAL STATE. Consequently, I think that considerations about the causal shape of reality provide grounds for naturalism: for I judge that, on any of the most plausible causal shapes that might be taken by reality, naturalism is more plausible than theism. Of course, these judgments of mine are highly controversial; however, what seems less controversial is that the case for naturalism is strengthened if the models on which naturalism is clearly preferable to theism remain in play.

In this paper, I shall be examining an argument for the claim that CONTINGENT INITIAL STATE is not a model that should be kept in play. This argument runs as follows.

1. If it is possible for reality to have a contingent initial state under the causal relation—i.e. it is possible for reality to have a contingent initial state that has no cause—then it is possible for other (non-overlapping) parts of reality to have no cause. (Premise)
2. It is not possible for other (non-overlapping) parts of reality to have no cause. (Premise)
3. (Hence) It is not possible for reality to have a contingent initial state that has no cause. (From 1, 2)

This argument is my reconstruction of an argument introduced in Craig (1985: 371n3)—repeated in Craig (1986:167-8), Craig (1991), and Craig (1993:7)—which Craig claims has antecedents in the work of Edwards (1754) and Prior (1962). While it may be that this is not the best possible reconstruction of Craig's argument, that will not matter for present purposes, since my main purpose here is to investigate the first premise of this argument, and, in particular, to explore potential naturalistic objections to it. I take it that Craig clearly commits himself to this first premise, and that Edwards and Prior do likewise; further investigation of exactly who argues what and how can be left to some other occasion.

1

If naturalists are to deny the first premise of the argument, then a natural first thought is that they will claim something like this: *a contingent initial state of reality and the contingent things that feature therein are the only kinds of thing that can have no*

¹ NECESSARY INITIAL STATE and CONTINGENT INITIAL STATE come in different sub-varieties, depending upon the number of possible initial states that are countenanced (one or many).

cause. That is, it is necessary that non-initial states of reality, and all of the contingent things that feature therein that did not feature in the initial state of reality, have causes. In other words: anything that comes into existence, other than the contingent initial state of reality and all of the contingently existing things that feature therein, has a cause.

If naturalists are to endorse this claim, then it seems to me to be plausible to suppose that they will also endorse the following claims: first, that *anything that can be a contingent initial state of reality cannot be anything other than a contingent initial state of reality*; and, second, *anything that is a non-initial state of reality cannot be anything other than a non-initial state of reality*. In other words: the properties of being initial and non-initial states of reality are *essential* properties of states of reality. (And likewise for the contingent things that features in states: something that features in a contingent initial state of reality can only come into existence as a feature of a contingent initial state of reality; and something that comes into existence as a feature of a non-initial state of reality can only come into existence as a feature of a non-initial state of reality.²)

Among the questions that Craig poses to proponents of CONTINGENT INITIAL STATE, there are the following two: first, if you deny that it is possible for a raging tiger to ‘suddenly come into existence uncaused out of nothing’ in the room in which you are hearing this talk, how can you allow that it is possible for the initial state of reality to ‘suddenly come into existence uncaused out of nothing’?; and, second, if you suppose that it is possible for the initial state of reality to ‘suddenly come into existence uncaused out of nothing’, how can you deny that it might have been hydrogen atoms or rabbits that ‘sprang spontaneously from the void’?

The theses sketched above suggest a clear answer to both of these questions. The enunciated causal principle tells us that it is possible for the initial state of reality to have no cause; and, in conjunction with the subsidiary principles about essential properties of states of reality and things that feature therein, it also tells us that it is impossible for a raging tiger to pop into existence uncaused here and now (at least given the further uncontroversial assumption that tigers have come into existence as features of non-initial states of reality). Moreover, in conjunction with those same subsidiary principles about essential properties of states of reality, the causal principle also entails that hydrogen atoms and rabbits could not have come into existence as features of the initial state of reality (at least given the further uncontroversial assumption that hydrogen atoms and rabbits have come into existence as features of non-initial states of reality).

2

Craig—following the lead of Edwards and Prior—has a response to the proposal developed in the previous section. The naturalist cannot seriously maintain that kinds of things that come into existence as features of non-initial states of reality cannot come into existence as features of initial states of reality because *prior to their coming into existence, things do not have natures that could control their coming to be*. If it

² These principles might, in turn, be taken to derive from theses about the necessity of causal origin; however, I do not propose to explore this suggestion here.

were possible for some kinds of things to be features of contingent initial states of reality, then it would have to be possible for *any* kinds of things to be features of contingent initial states of reality, since there is nothing prior to the coming into existence of those contingent initial states of reality to place constraints on their nature and features.

I don't think that this response is satisfactory. Consider, for example, Craig's suggestion that, if we suppose that the contingent initial state of reality had no cause, we are obliged to allow that it might have been a rabbit 'that popped uncaused out of the void'. If it were really possible that a rabbit might have 'popped uncaused out of the void', then it would have to be possible for there to be nothing other than a rabbit in existence. But, I think, it is manifestly impossible for the initial state of reality to be exhausted by the state of a single rabbit. Rabbits are not kinds of things that are capable of that kind of lonely existence.³ On the contrary, rabbits can only exist as part of larger networks of related entities. (It is also true that rabbits necessarily have a particular kind of causal ancestry; however, it would suffice for Craig's purposes if the initial state of reality could be exhausted by a single rabbit 'duplicate'. So this point can be accommodated by appropriate adjustments in Craig's claim.) Moreover, what goes for rabbits goes for almost all of the things that we see around us: all of those things can only exist as parts of larger networks of related entities.

The general point here is that there is a good sense in which natures do constrain 'initial' coming into existence: the initial state of reality has to be the kind of thing that can exist even though there is nothing else in existence; and the things that feature in the initial state of reality have to be kinds of things that can exist as parts of an initial state of reality. If there are very few possible initial states of reality—and if there are very few kinds of things that can feature in initial states of reality—then Craig, Edwards and Prior are just mistaken. The lesson here seems clear: our naturalist could insist that there are very few possible contingent initial states of reality (perhaps no more than one); and our naturalists could also insist that there are very few possible things that could have featured in initial states of reality. One consequence of the latter assumption will be that very few of the things that now exist could have featured in initial states of reality: that consequence will certainly suffice to answer more general versions of Craig's question about whether rabbits and hydrogen atoms might have 'sprung spontaneously from the void'.

3

Even if it is granted that the various assumptions that we have offered to naturalists would suffice to defeat the argument that we are considering, there are clearly further questions about motivation and plausibility that remain to be addressed. Are there deeper metaphysical claims that might be taken to motivate acceptance of the claims that we have offered to naturalists? In particular, are there plausible views about modality and causation that could be taken to underwrite the rejection of the identified premise?

³ In the present context, it would be manifestly irrelevant to object that there are good senses in which it is conceivable or imaginable that the initial state of reality is exhausted by a single rabbit. In those senses, it is also conceivable or imaginable that something might 'pop into existence in my room uncaused out of nothing'. Craig insists on a sense of 'real' possibility that is not contradicted by those kinds of conceivability of imaginability; I simply follow his lead.

The modal case is perhaps easier, so let's start with that. Here's a *very* brief sketch of a candidate theory of real (alethic) modality. There is an alethically possible world in which there isn't anything causal. All other alethically possible worlds have the same initial state as the actual world, and differ from the actual world only insofar as objectively chancy processes have different outcomes. Because objective chance is ubiquitous, there are many alethically possible worlds. Some might want to allow more worlds: for instance, alethically possible worlds that have different initial states, or alethically possible worlds in which there are differences in the evolution of states due to factors other than objective chance. However, the view that I am outlining here does not accept this relaxed austerity: those other worlds might be, say, doxastically or merely logically possible, but that's not enough to establish real alethic possibility.

Now for causation. The key thought here is that causation is the glue that unifies reality: what makes a given non-initial state a state of reality is that it is causally consequent upon earlier states of reality. Moreover, what makes some non-initial thing that features in a state of reality a part of reality is that it is causally consequent upon things that featured in earlier states of reality. (Given this way of talking, it is at least a doxastic possibility that, in the actual world, there are independent realities: causal networks between which there is no causal interaction. But, of course, in that case, I would use the word 'reality' to refer to the causal network in which *we* are embedded. And, in any case, on the view that I'm developing, the claim in question is *only* a doxastic possibility.) Given the account of modality—with its acceptance of objective chance—there is some sense in which this view denies that causation is deterministic; however this account leaves it open whether causation should be analysed in terms of probabilities, or counterfactuals, or networks, or INUS conditions, or transfers of conserved quantities, or whether causation should be treated as a theoretical primitive.

It seems to me to be plausible to claim that these views about causation and real (alethic) modality provide support for the various principles that were offered to naturalists as a way of objecting to the first premise in the target argument. Given this view of alethic modality, there is only one possible initial state for reality, but it is a contingent matter whether that initial state obtains. Moreover, given the role that causation plays as the 'glue' that unifies reality, it is at least natural to suppose that, on these views, the properties of being initial and non-initial states of reality will be *essential* properties of states of reality, and that the contingent initial state of reality and the contingent things that feature therein are the only kinds of thing that can have no cause. And so forth.

Of course, what has been offered here is, at best, a *very* rough sketch. But it seems to me that, at the very least, it suffices to show that, until you explore the range of possible naturalistically acceptable accounts of modality, causation, and so forth, you cannot be in a good position to assert—as Craig does—that if one holds that it is possible for something [an initial contingent state of the universe] to come into existence uncaused out of nothing, then one is simply unable to explain why there are no other things that do or can come into existence uncaused out of nothing.⁴

⁴ Of course, naturalists can ask Craig how *he* proposes to *explain* why there are (and can be) no non-initial things that come into existence uncaused out of nothing. True enough, the causal principle that he accepts—that nothing can come into existence uncaused—*entails* the claim to be explained. But it is

4

So far, this discussion has proceeded at a very high level of abstraction, thereby avoiding questions about the nature and extent of natural reality. (Is natural reality exhausted by something rather like a single big bang universe; or is natural reality comprised of something rather like a large collection of big bang universes, causally related to one another through singularities, or wormholes, or some such? Is natural reality universally spatio-temporal, or are there some parts of natural reality that are ‘framed’ by other kinds of external relations? Where reality is spatio-temporal, is it the case that causal priority and temporal priority are everywhere perfectly aligned? Etc.) However, it is worth asking whether, if we descend from these heights and focus on well-established features of the part of reality that we inhabit, we might be able to construct a plausible case, for the claim that it is impossible for a raging tiger to ‘suddenly come into existence uncaused out of nothing’ in the room in which you are reading this article, that is pretty obviously independent of assumptions about whether it is possible for reality to have a contingent initial state under the causal relation. In this discussion, I take it for granted that, at least at the macroscopic level, temporal order and causal order coincide in the part of reality that we inhabit.

Suppose that there is a table in the room in which you are hearing this talk. Is it possible that a tiger ‘come into existence uncaused out of nothing’ where that table is? I don’t think so. I assume that it is just impossible for the table and the tiger to simultaneously occupy the same spatial location: if there is to be a tiger where the table now is, then it cannot be that the table also continues to be there. Thus, in the causal order, before the tiger can come to occupy a spatial location that overlaps with the current spatial location of the table, the table must cease to occupy that location. Moreover, it cannot just be the coming into existence of the tiger that brings it about that the table ceases to occupy that location: non-existent things do not have causal powers, and the tiger does not begin to exist until it occupies some spatial location or other. However, if that’s right, then I think that we should say that the table’s ceasing to occupy the location that it currently occupies is *a cause* of the coming into existence of the tiger (given that the tiger comes into existence where the table now is). But, if the table’s ceasing to occupy the location that it currently occupies is *a cause* of the coming into existence of the tiger, then it isn’t true that the tiger ‘comes into existence uncaused out of nothing’.

If this line of thought is plausible, then it generalises. Pick any tiger-shaped space in the room. In order for a tiger to occupy that tiger-shaped space, that space must have appropriate internal and boundary properties: there are, after all, lots of ways that the boundary and interior of that space could be that are simply inconsistent with the occupation of that space by a tiger. But, if that’s right, then it seems to me that we should allow that the consistency of the boundary and interior of the space with occupation by a tiger—or, more strictly, the coming about of the consistency of the boundary and interior of the space with occupation by a tiger—is *a cause* of the

clear that the causal principle that we are here investigating—that no non-initial thing can come into existence uncaused—*also* entails the claim to be explained. As far as explanatory credentials go, the two cases seem to be on a par. Before we can make any further comparison of the merits of theistic and naturalistic explanations of the claim, we also need to have some properly elaborated theistic theories on the table!

coming into existence of the tiger. And, as before, if this is *a* cause of the coming into existence of the tiger, then it is isn't true that the tiger 'comes into existence uncaused out of nothing'.

Might one object that, if the table's ceasing to occupy the location that it currently occupies—or the coming about of the consistency of the boundary and interior of the space with occupation by a tiger—itself has no cause, then we would have a situation in which the tiger 'comes into existence uncaused out of nothing'? I don't think so. Compare with a situation in which there are several causes of an explosion: the presence of oxygen, the presence of gas, the lighting of a match, and so forth. If we suppose that one of these factors—say, the presence of oxygen—has no cause, that seems to make no difference to its status as a cause of the explosion, nor to the status of the claim that the explosion had a cause. Even if there is no cause of the table's ceasing to occupy the location that it currently occupies, it will still be the case that the table's ceasing to occupy the location that it currently occupies is a cause of the coming into existence of the tiger; even if there is no cause of the coming about of the consistency of the boundary and interior of the space with occupation by a tiger, it will still be the case that the coming about of the consistency of the boundary and interior of the space with occupation by a tiger is a cause of the coming into existence of the tiger.

Might one object that it is a mistake to suppose that, in the imagined circumstances, the table's ceasing to occupy the location that it currently occupies—or the coming about of the consistency of the boundary and interior of the space with occupation by a tiger—is *a* cause of the coming into existence of the tiger? Again, I don't think so. Compare with the case of the explosion: nearly everyone accepts that it is right to say that the presence of oxygen, the presence of gas, the lighting of the match, and so forth, are all causes of the explosion. But the role of the table's ceasing to occupy the location that it currently occupies—or the role of the coming about of the consistency of the boundary and interior of the space with occupation by a tiger—in the coming into existence of the tiger seems to be on all fours with, say, the role of the presence of oxygen in the explosion. (They both support appropriate counterfactuals; they're both probability raisers; etc.)⁵

Might one object that it is a mistake to suppose that, in the imagined circumstances, the table must cease to occupy its current location before the tiger can come to occupy a spatial location that overlaps with that current spatial location of the table, *on the grounds* that there could be an uncaused instantaneous reorganisation of the constituents of the table in which they become the constituents of a tiger? I don't think so. On the one hand, it seems to me that there are good grounds for thinking that it is not really possible that mere instantaneous rearrangement of constituents could transform a table into a tiger (or, at any rate, a tiger 'duplicate')⁶. On the other hand—

⁵ Perhaps it is worth noting that we can make the same kind of point in cases in which we're inclined to judge that there is just one salient cause. Consider a case in which a stationary billiard ball starts to move because it is struck by another moving ball. Suppose that this is a case in which we're disposed to say that *the* cause of the movement of the hitherto stationary ball is the collision with the moving ball. If we suppose that the moving ball has 'popped into existence out of nothing' just prior to its collision with the stationary ball, that supposition seems to have no effect at all on our judgment that the collision with the moving ball is *the* cause of the motion of the hitherto stationary ball.

⁶ Remember: we're following Craig's lead, distinguishing carefully between real possibilities and logical possibilities. You might think that it is logically possible that the constituents of a table be

and more importantly—I take it that, even if there could be an uncaused instantaneous reorganisation of the constituents of the table in which they become the constituents of a tiger, that would not be a case in which a tiger came into existence ‘uncaused out of nothing’. Rather, that would be a case in which a tiger came into existence ‘uncaused out of the constituents of a table’—and so it would not be a counterexample to the claim that it is impossible that a tiger ‘come into existence uncaused out of nothing’ where the table is.

Might one object that it cannot be right to claim that it is impossible for a tiger to suddenly come to occupy a tiger-shaped location in the room in which you are reading this article on the grounds that quantum mechanics makes provision for just these kinds of sudden appearances? I don’t think so. It may be so that there are various mechanisms embraced by contemporary physics that could bring it about that a tiger suddenly appeared in the room in which you are reading this article where there was no tiger beforehand—quantum tunnelling, travel through space-time wormholes, etc. However, if such things are really possible, they are certainly not cases in which a tiger ‘comes into existence uncaused out of nothing’, since they are one and all causal processes. If a tiger quantum tunnels into the room from somewhere else, then that plainly isn’t a case in which a tiger ‘comes into existence uncaused out of nothing’; likewise for a tiger that is transported into the room via a space-time wormhole. (While it is strictly irrelevant to the present argument, it might be worth noting that, even if this kind of quantum tunnelling were possible, we could explain why we’ve never observed a case of it involving macroscopic objects: such events are so massively improbable that there is virtually no chance of a single event of this kind in a volume the size of the observed universe over a time period longer than the currently estimated age of the observed universe.)

Again, what I have provided here is no more than an incomplete sketch. But, again, it seems to me that, at the very least, it suffices to show that, until you have explored the prospects for direct arguments on behalf of the claim that that it is impossible for a raging tiger to ‘suddenly come into existence uncaused out of nothing’ in the room in which you are reading this article, you cannot be in a good position to assert—as Craig does—that if one holds that it is possible for something [an initial contingent state of the universe] to come into existence uncaused out of nothing, then one is simply unable to explain why there are no other things that do or can come into existence uncaused out of nothing.

5

In this paper, I have conducted a rough preliminary investigation of the claim that, if it is possible for reality to have a contingent initial state under the causal relation—i.e. if it is possible for reality to have a contingent initial state that has no cause—then it is possible for other parts of reality to have no cause.

instantaneously reorganised to form a tiger; but even if you do think that, you’d need further reason to suppose that this is a *real* possibility. (Suppose that we adopt the theory of alethic modality described in section 3. I reckon that in the set of worlds that have the same origin as ours, and which differ from ours only in the outcomes of objectively chancy processes, there isn’t even one world in which the constituents of a table are instantaneously reorganised to make a tiger. So, on that account of alethic modality, I reckon that such instantaneous reorganisation is not a real possibility.)

I have suggested that there are various grounds—theoretical and commonsensical—for maintaining that it is simply not possible for non-initial parts of reality to have no cause; and I have also claimed that these grounds are pretty clearly consistent with the claim that it is possible for reality to have a contingent initial state under the causal relation. Of course, I don't claim to have provided an exhaustive investigation of grounds of this kind; there may well be many other ways in which one could argue for the same conclusion.

Because this investigation is rough and preliminary, it may have gone wrong in various ways. However, even if that is so, it may still be that the main aim of the paper is achieved: for the points that I most want to emphasise are (i) that it is possible for naturalists to engage in this kind of metaphysical theorising, and (ii) that there can be no justified assessment of the theoretical merits of the products of such theorising that doesn't look at the details of the theories in question. It isn't possible to assess the merits of theories until those theories have been constructed and tabled; in particular—despite Craig's implicit suggestion to the contrary—it isn't possible to make justified claims about what certain types of theories can and cannot explain until you have the relevant theories in hand.

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