

... AND THEN AGAIN, HE MIGHT NOT BE

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Abstract

In reply to Michael Bertrand, I clarify my view that the problem of physical evil is not an *a priori* problem but an *a posteriori* one.

I agree with the claim in Michael Bertrand's title [Bertrand 2009], that God might be responsible for physical evil. But I also think He might not be. These are epistemic 'mights'. I'll make the dialectical position of the brief comments in my [Bird 2005: 546–7] clear. As my target, I had in mind those people for whom it is clear, *a priori*, that God could have created a world with innocent beings who do not suffer from unmerited physical harm. I, however, don't think that this is clear and I don't think it is *a priori*. But equally I don't think it is *a priori* that God could *not* have created a world with innocents who do not suffer. It is just not a question that can be settled that easily either way. Indeed I don't think that the *a posteriori* knowledge we have at our disposal settles the matter either. But if it is to be settled, it will be the *a posteriori* deliverances of science that will be required.

The role that the epistemic possibility of a ubiquitous down-and-up structure plays is principally that it rules out most miraculous interventions. According to the down-and-up structure argument, it is metaphysically necessary that salt dissolves in water. So God could not prevent some calamity by ensuring that on some particular occasion a sample of salt fails to dissolve. That 'could not' is in the context of an epistemically open question, whether the down-and-up structure does exist. *For all we know*, the structure of the world is such that God could not have intervened. So it isn't *a priori* and certainly isn't clear that God could have intervened in this way. A ubiquitous down-and-up structure rules out analogous interventions that would contravene non-fundamental laws.

On the (epistemically possible) assumption of a ubiquitous down-and-up structure, in order to prevent suffering to innocents, God would have had to create a world with different initial conditions or with different fundamental laws. The worry with the first option is that changing initial conditions always has ramifications, so long as we keep the laws fixed. Here is an example. I am observing ripple on a pond caused by the dropping of a stone into it. If I wish to re-run history so that the peak of a ripple reaches a particular point at a slightly different time, then the stone will have to be dropped at a different place or a different time. But that will mean that the ripples' peaks will reach other points on the pond at different times. There is no possibility of the initial conditions differing so as to change the outcome in one part of the pond yet keeping it the same elsewhere. The same point can be made using a variation on John Conway's famous game of life. One set of rules allows for simple initial conditions, in this example a set of seven live cells in an initial 3x3 array of cells as in Fig. 1, to develop into the complex pattern in Fig.2 after 50 generations. The complexity of the latter might suggest that a different outcome is possible at this generation, one which differs from that shown in respect of just one or two cells. Call some local pattern P



Figure 1:

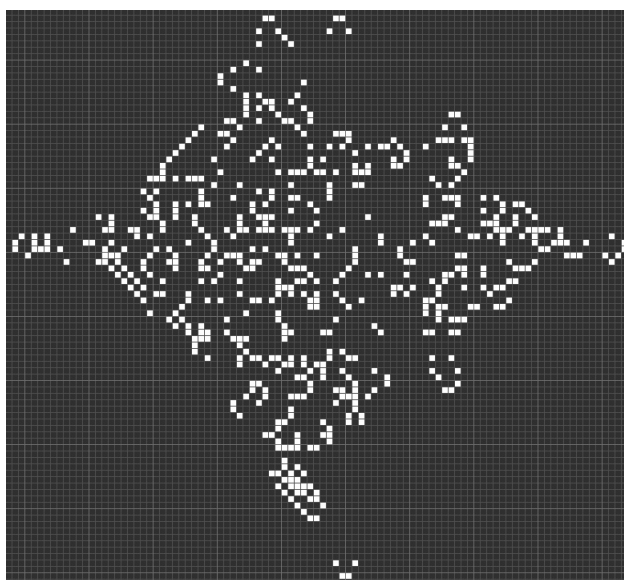


Figure 2:

occurring at a location L and then consider a change to P, P' , differing from P only in one or two cells. One might think that P' could have occurred at L instead of P (and with no other changes), and one might be tempted to think that this could have occurred since local patterns identical to P' do in fact occur elsewhere in the actual pattern: 'if P' actually happened there, P' could have happened here'. But in fact no configuration of the initial 3×3 array will generate such an outcome—slight changes to initial conditions change outcomes globally, not in just one location. (Furthermore, it might even be that there is no initial 3×3 array that will generate P' at L , even allowing for any change whatsoever elsewhere.)

In the case of the ripples, the consequences of a change in initial conditions are obvious and predictable, and in the game of life example they are predictable if not immediately obvious. In other cases the consequences of a change in initial conditions are not obvious and are far from predictable. The initial conditions we are concerned with (given the fixity of the laws of nature) are those obtaining at the Big Bang. Changes at that point, however slight, will have consequences on an enormous scale. For example, one cosmological puzzle is the uniformity of the cosmic microwave background. A favoured solution is that the rapid inflation of the early universe smoothed out local variation; this implies that even small changes to conditions in the early universe will have effects that are enormous in current extent. So it seems implausible that there could have been an initial condition to the universe that would have led to something very much like its current state, with intelligent life on Earth and so forth, but without

storms, earthquakes, tsunamis and so forth that are the manifestations of physical evil. I concede that I don't know this for sure, but it seems epistemically unlikely. Likewise I concede that I don't know for sure that we could not have an Earth-like weather system that has its initial conditions set so that there is moderate weather in populated places with no hunger-inducing droughts and no destruction-wreaking hurricanes or floods *ever* during the duration of humanity's existence. The chaotic nature of such systems is set by the laws, which *ex hypothesi* are necessary. And so my bet is that any set of initial conditions which leads to moderate weather conditions will also lead to extreme ones (although Bertrand is right that one cannot make long-term forecasts about *specific* outcomes, it is in the nature of research into non-linear systems, that one can often make reliable predictions of a general nature: that any system with these characteristics will also display such-and-such features).

Of the arguments just presented the cosmological one takes precedence over the meteorological one, in that if the former is correct the latter is otiose. These cases, like the ripple example, and like the argument from the down-and-up structure, have the following common feature. If in order to change some outcome O to O' we must change an upstream explanatory factor E (e.g. initial conditions, fundamental laws) to E' , then we have to consider that some further conditions contemporaneous with O , C may get changed to C' (e.g. a parallel effect of a common cause). In which case no possible change brings about $O' \& C$ (i.e. a change to O but no change to C). And because the explanatory relations in question will typically be *a posteriori*, we may be in the position of not being able to declare *a priori* that $O' \& C$ is possible. In particular, the cosmological and meteorological cases just discussed concern matters of empirical fact that cannot be decided *a priori*; if they can be decided by anyone, they will be decided by the relevant scientists. So I agree with Bertrand that I have not shown definitively that God is off the hook as far as physical evil is concerned, even if the down-and-up structure is ubiquitous. But I do think that these considerations show that it is not in any way obvious or *a priori* that God would be blameworthy (if He exists).

Putting changes to initial conditions aside, could changing the fundamental laws provide a way of avoiding physical evil? Bertrand suggests that although with different laws we might well not have had humans, this nonetheless does not preclude there being other kinds of intelligent being who could lead an existence free from physical evil. (Thanks to the different laws they may be composed of 'twin-atoms', twin biological molecules, and so forth.) If so God would be responsible for having created our world rather than that better one. Here my disagreement with Bertrand is greater. The assumption of a ubiquitous down-and-up structure is that if we change any law we change the one fundamental law (or tightly integrated bundle of laws); in which case such changes ramify everywhere. That in turn means that any such change is likely to have very profound effects inconsistent with there being anything that can be identified as a twin to our atoms. As I briefly discuss [2005: 542–3], the very nature of spacetime is not independent of the laws but is a consequence of them. So if the structure of the fundamental law(s) is as I describe, changes will lead to a *radical* difference in the most fundamental features of reality, such as the number of dimensions of spacetime (note that string theorists consider models with 10, 11, and even 26 dimensions). The structure of familiar matter is a fairly distant downstream consequence of such facts and we cannot assume that there is a different possible world where fundamental facts differ from ours but which does have something we can identify as analogous to our matter. (Indeed such worlds need not have anything identifiable as *time*). Again these are empirical questions, ones that I do not believe have been answered yet. Things might be such that possible worlds answering to Bertrand's description do exist. We

may speculate about their likeliness given our current state of scientific knowledge. But the key message of this reply is that the answer is not to be uncovered by *a priori* considerations, but (if at all) by scientific investigations.

To conclude: I agree with Bertrand that my [2005] discussion does not show that God is *not* responsible for physical evil. For one thing, my argument assumed the ubiquity of the down-and-up structure, and while that looks to be a plausible assumption, it is only a plausible *empirical* assumption, one that has to be tested by science. And furthermore, even given this assumption, there is a question of whether the initial conditions can be tinkered with in a way so as to leave most things as they are excepting the occurrence of physical evil (storms, tsunamis, earthquakes, etc.). Since the initial conditions are so far back in time, any tinkering would have widespread effects, I doubt that the super-fine-tuning required is possible. But again, the key point is that this is an empirical question to be decided by science. That indeed is a central message of my [2005] paper overall, in an extension of Kripke-like conclusions: questions concerning necessity and contingency that we once thought to be *a priori* questions, are shown to be *a posteriori* after all. Furthermore, it might (empirically) turn out that fewer things are possible than we thought. If *p* is a non-trivial statement concerning identity or constitution, then for a Fregean it is an *a priori* question whether '*p* is possibly false' is true, whereas for Kripke it is an *a posteriori* question. Furthermore, if *p* is in fact true, Kripke tells us that it could not possibly have been false, whereas the Fregean holds that it could have been false. According to my [2005] it is a *a posteriori* question whether the non-fundamental laws of nature are necessary; empirically speaking, it might turn out that they are. Likewise, it is an empirical, *a posteriori* question whether God could have created a world with innocent intelligent beings unperturbed by physical evil. That is, we cannot decide *a priori* that He could have done so. This is the take-home message for philosophical theology. Discussions often assume that the very existence of physical evil is straightforwardly inconsistent with a deity who is benevolent, omnipotent, and omniscient.¹ This argument suggests that there is no *a priori* entitlement to make such an assumption.

References

- Bertrand, M. 2009. God might be responsible for physical evil. *Australasian Journal of Philosophy*.
- Bird, A. 2005. Unexpected a posteriori necessary laws of nature. *Australasian Journal of Philosophy* 83: 533–48.
- Tooley, M. Winter 2008. The problem of evil. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*.

¹Michael Tooley [2008], for example, presents a formulation of the argument from evil in which it is analytic that an omnipotent God could prevent physical evil if he knew it was to occur.