Divine Eternity Revisited

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Philosophers tend to be fans of science and, like scientists, they tend to be atheists. But while scientists can happily ignore the God hypothesis, philosophers cannot. Even if atheism is not overrated, to know that it is not we would still have to compare it with the best alternatives. I show that open theism remains one of the best despite T. J. Mawson's recent argument. Mawson argued that if God is keeping His options open, then He is ignorant of some facts about the future and is therefore liable to bodge things up. I show that Mawson misinterpreted the problem of future contingents and that he misconstrued the open theist view of divine action. And since he implicitly assumed that presentism is false, I explain why many theists think that only what presently exists really exists. In particular I outline presentist divine constructivism, as it is an underrated philosophy of mathematics. & Endnotes

1. Introduction

I shall be refuting T. J. Mawson's argument that theists should reject open theism.1 Open theists think that God is 'able to change His mind as a result of His interrelations with His creatures and, more specifically, in response to our prayers' (as Mawson put it).2 Mawson thinks that God is above and beyond time and change, and he addressed his argument to a typical theist:

One will [...] start by thinking of both an atemporal God and a temporal God as prima facie equal contenders for being possible and one will allow reflections on the requirements of omniscience, omnipotence, and perfect goodness (and background knowledge concerning how it is possible to believe in, indeed know, the truth of some statements about the future and what is necessary for genuine freedom) to lead one to develop a preference for one over the other, ultimately using the resulting preference [...] in one's judgements on the plausibility of various theories of time.3

Mawson defined an omnipotent being to be 'a being with the most power-granting set of abilities that it is logically possible anyone might have'.4 We can assume for the sake of argument that God is omnipotent in that sense and, in particular, that He is infallible. Most theists do believe that God is perfectly self-aware and that the world is His perfectly free creation, whence His beliefs would be perfectly justified.

However, there is a well known problem with an infallible God knowing that X will be freely chosen, for any future action X, which follows from a requirement of genuine freedom. Choosing freely between X and Y means being able to choose either, so it means having the power to choose Y even if X is actually chosen. But no one has the power to make an infallible being wrong about anything.

That problem – the problem of future contingents – leaves theists facing a dilemma: Are we never really free, or is God not all-knowing? Richard Swinburne, a prominent open theist philosopher, took God to be 'knowing at any time all that is logically possible to know at that time'.5 But other open theists side-step the dilemma, as you will see in the fourth section. And so do many atemporalists.

Boethius, a famous Roman philosopher, observed that you can act freely if someone knows what you are doing as you do it, even if you would not be acting freely were it known beforehand. And Mawson's God has atemporal knowledge, not foreknowledge:

On the libertarian view of free will [...] all that has to be true for you to be free in the future in your choice to do X is that you have the power at that time to do something other than X and on atemporalism you can have this power—have the power to make God either have the atemporal belief that you do X or the atemporal belief that you don't do X—without having the power to make any belief He actually has false.6

But suppose that Mawson's God had revealed to someone in the past that you will be doing X tomorrow. Then there would be foreknowledge – by divine revelation – and yet the freedom of your choice to do X could hardly depend on there being no such revelation, to anyone in the past. Free will is not so epiphenomenal under theism (e.g. it is required for moral responsibility). So atemporalism has some sort of a problem with libertarianism.7

Is libertarianism the problem? But as Mawson explained, libertarianism is the common-sense view of free will.8 It would be a problematic view if energy was the fundamental stuff – of which all else was made – because particles in force-fields move randomly insofar as they are indeterministic, and we are no more responsible for random twitches than we are for reflex reactions.9 But that problem does not arise under theism because if an omnipotent being – a maximally free being – made everything else by willing it to be, then free will would transcend mechanics.

And the problem of future contingents does not make libertarianism a problem for theism because the God of open theism does not know all that will occur. Open theists think that when God chose to create people with free will He was, in effect, choosing to keep His options open when interacting with them. Open theists emphasise God's openness — His responsiveness and sympathy — where atemporalists stress His holiness and sovereignty. But both sides of this debate take God to be a perfect person who created everything else ex nihilo.10

Now, a perfectly benevolent and omnipotent being would presumably be perfectly beneficent. But the beneficence of the open theist's God is at best a matter of luck according to Mawson, who asked us to imagine an open theist world in which a pregnant woman is praying because she knows she might miscarry.11 Her God is responsive and sympathetic – He wants to make people happy – so He answers her prayer. But He cannot see the future, and as it happens her child is Adolf Hitler. So the result of His intervention was a lot of unhappiness. And even if Adolf had made better choices, this God would only have got lucky.

According to Mawson, the God of open theism is not completely omnipotent because He is not completely omniscient (as defined in the third section). Mawson used the problem of future contingents – the subject of the fourth section – to show that the God of open theism is not completely omniscient:

If God were inside time and His omniscience were to entail that He infallibly knows now that when you've finished reading this you'll rip it up in disgust (because we may suppose for the sake of argument this is what will in fact happen), then God would now have the belief that you'll do this. But, if you're going to be genuinely free to chose whether or not to do this when you get to the end of your reading, then at the time you finish reading you have to

have it in your power either to do it or not to do it. [... and so] make God's current belief that you will do it false. But [...] you cannot ever have the power to make a current belief that He has about the future false, so you cannot be going to have the power either to do it or not. If He now believes you'll do it, you'll have to do it. But if you won't have the power not to do it, then you can't really be going to be free when you choose to do it. What goes for future decisions about ripping up papers goes for all other decisions too. So if God is temporal and completely omniscient about the future, then nobody can be genuinely free. Thus we should say that God does not have infallible knowledge of future free actions and—given that the world's having a future at all is dependent on God's freely choosing to sustain it from moment to moment [...]—then He does not have infallible knowledge of the future of the world in any respect at all.12

I will be arguing that the God of open theism could be omniscient because presentism – the view that only what presently exists really exists – could be true. Mawson did not mention presentism, but he did observe that if the future is not real then statements about the future like 'you rip this up in disgust' would not refer to reality. So he addressed his argument to libertarian theists who accept the reality of the future (as defined in the next section).

You will see in the next section that presentists can accept the reality of the future. Less surprisingly, if libertarian theism is acceptable, then so is presentism, or so I argue in the fifth section. And in the sixth section I argue that Mawson's Hitler scenario failed to show that the open theists' God is not omnipotent.

2. The Reality of the Future

According to Mawson the future is real if 'some statements concerning what is now the future are true',13 and the future is real because:

Either you're going to rip this up when you've finished reading it or you're not. If we assume for the sake of argument that you will rip it up, then that's a fact about the future that someone could in principle have beliefs, hopes and perhaps even knowledge concerning.14

For any future contingency we can indeed assume that the contingent event will occur – that it is a fact that it occurs – or of course that it does not. And for well defined events it will definitely be one or the other. But does it follow that one is already a fact? Not unless libertarian presentism is false. Libertarians like to picture the future as a forking path, or a branching tree, and presentists have no problem with that picture being dynamic. If branches representing different possible futures emerge from the top of a trunk that represents the past, then when some contingent event occurs, its branch becomes the new top of the trunk. There is then a new fact. Before then there were the two equally real – if not equally likely – possibilities of the event occurring or not.

Mawson had implicitly assumed that presentism is false, by having his fact about the future under libertarian theism. Should we conclude that presentism is false? Mawson seemed to think so. Regarding what he called 'background knowledge concerning [...] statements about the future', he noted that:

[It] can only exist, be knowledge, on the truth of a philosophy of time that endorses 'the

reality of the future', but this does not [...] undermine the methodology suggested [above]. It just suggests that our quotidian beliefs about the possibility of various types of object of belief and knowledge imply directly (without the addition of any beliefs concerning the existence of God) the reality of the future and thus the falsity of certain philosophies of time.15

A complicating factor is that those philosophies do not actually include presentism. Suppose that while the future branches dynamically, God has decided that the earth should continue to spin for at least another week. The sun would then be bound by the power of God to rise tomorrow. Since omnipotence presumably includes the power to stay on some freely chosen course, 'the sun will rise tomorrow' would then be true. The future would be real, in Mawson's sense, because statements like that were not excluded from his definition of 'the reality of the future'.

Presumably that was because the God of open theism 'does not have infallible knowledge of the future'. So note that in order for Mawson's God to be possible, freely choosing to do X has to cohere with X being something that definitely will occur. And intuitively they do cohere. While it follows from my freely choosing not to hit myself, for example, that it was physically possible for me to hit myself, does it follow that I really might have hit myself?

Anyway, we should not reject presentism just because its falsity is implied by some of our quotidian beliefs. We would hardly reject, say, the theory of relativity for such a reason. And some of our quotidian beliefs imply the dynamic branching of the future, e.g. some about the possibility of genuine freedom do,16 as do some about the possibility of rationality.17

3. Complete Omniscience

We can assume, if only for the sake of argument, that God is omniscient, where 'a being is omniscient just if it is the case that for all statements, if a statement is true, then that being knows that it is true'.18 And we can follow Mawson's terminology further by calling an infallibly omniscient being 'completely omniscient' if truth is timeless.19 But we should not assume that truth is timeless.

To begin with, our quotidian beliefs do not imply univocally that truth is timeless. E.g. 'I am writing this' was true only as I wrote it. Some logicians think that all such expressions could be rewritten so that their form is atemporal and their content unaltered. But whether one finds that plausible will depend upon one's theory of time. And if the future does branch dynamically, then it would make sense to think of truth-values as variable.

Furthermore, arithmetic indicates that truth is not timeless. Some collections are variable – e.g. stamp collections tend to grow – but if a collection is non-variable, then we say that it is a set (as with a set of stamps). And the founder of set theory, Georg Cantor, developed arithmetic beyond the familiar arithmetic of the finite whole numbers, into the realm of the transfinite, and thereby proved that even if there is a set of all the finite arithmetical truths, there is no set of all the arithmetical truths, finite and transfinite.

Cantor's proof was based on a diagonal argument that, for any set, the set of all its subsets is a bigger set, in the cardinal sense of 'bigger'.20 Given the set of all the finite whole numbers, reiterating Cantor's diagonal argument shows that there are bigger and bigger sets, with bigger and bigger

cardinal numbers of members. Now, either that endless sequence of sets is a variable collection of sets, or it is not. And if not, then the set of all the members of those sets would be a set bigger than any of them, to which we could again apply Cantor's diagonal argument. So there is no set of all the cardinal numbers – but rather an ever-growing collection of them – and hence no set of all the cardinal arithmetical truths.21

The arithmetic that could in principle be known is too unlimited for it all to be known together. Nevertheless, Cantor was sure that arithmetic is timeless, so he took it to be an inconsistently non-variable collection of truths, with the inconsistency displaying God's ineffability.22 Could Mawson give that answer to the Cantorian argument against complete omniscience? Free will is at least as mysterious as arithmetic, so he would then have to accept divine ineffability as a good answer to his argument against open theism. And of course, he does not want libertarian theists to appreciate how paradoxical divine freedom is, but to reject open theism. Could he give a better answer? But logicians have been looking for better ways to keep arithmetic timeless for over a hundred years, and are still looking.23

4. Future Contingents

Mawson's proof that the God of open theism is not completely omniscient began with a disjunction: Either you will rip this up when you finish it, or you will not. And whichever it is that you end up doing, if you were to believe now that you are going to do that, then you would be having a belief about the future that is – in that sense – true. But the God of open theism cannot be sure that you will do it (whichever it is), and if He knows that He is infallible, then He is sure of all He believes, so He is not infallibly omniscient – not if truth is timeless.

Of course, you probably won't rip this up. But maybe you will, thereby falsifying a belief that you won't. The question is: before your belief (whichever it is) is made true, or maybe false, is it neither true nor false? The word 'made' suggests so; but if it has an indefinite truth-value, then we would effectively have a third truth-value called 'indefinite', so the logic of this possibility is not bivalent. Still, of any well defined future contingency logic says only that either the contingent event will definitely occur or else it will not definitely occur, and that in the latter case either it will definitely not occur or else it is possible that it will and possible that it will not occur, so this is not an illogical possibility.24 And if truth is variable, then the God of open theism could be infallibly omniscient.

Open theists tend to think that the future is not completely definite – in the sense that not all those statements that will ever have been true are now true – because if the ground of all being is keeping His options open, then those will be real options; time will be like a dynamically branching tree.

Swinburne thinks that God is not infallibly omniscient (in our terms). And there is certainly a sense in which your belief will have been true if you turn out to have been right about what you will do. If you are thinking 'I will not rip this up', for example, and you do not rip it up, then you might think 'I was right'. Nevertheless, if 'I was right' means only that you did not rip this up, then 'I will not rip this up' could still be of indefinite truth-value now, in some other sense. Indeed, it could be false, because if you might rip this up, then it is false that you will definitely not rip it up. The three possibilities for the original truth-value – true, indefinite, and false – correspond to three sorts of open theism.25 Mawson focused on the first sort, but if the future does branch dynamically, then the sense of 'true'

that corresponds most appositely with reality would be the one that gives us indefinite truth-values.

And presentism is not too implausible under libertarian theism.

5. Presentism for Libertarian Theists

It is admittedly implausible that there is no more to reality than a fleeting moment. How, if there is only the present, could there be enough time for anything to happen?26 But presentism does not say that the present moment is the whole of reality, it says that only what presently exists really exists. The present moment is by definition part of time, but presentist reality is not so much in time as free to change. Things change, and the temporal dimension is our picture of the possibility of change. As we try to understand time, to see more clearly what it is like, we naturally give it a spatial representation. And under atemporalism time is like space, so the fact that presentist pictures of time are relatively figurative is easily overlooked. But although the place where the branches meet the trunk in our libertarian presentist picture is no more than a cross-section, presentist reality is not small like that. It has no temporal extension, but only because it is not literally inside time. It is at all times, enduring and changing, so events need not be instantaneous under presentism. And it includes you, the ordinary objects around you, and everything else in space. And if it also includes God, then it is far from small.

A presentist God is not much of a temporal God, and not just because He is not literally inside time. Nor are we, under presentism, but we are subject to natural decay in the shadow of death, while a presentist God would have created time as we know it when He laid down the laws of nature. And the very possibility of change would derive from His omnipotence. So the basic difference between a presentist God and an atemporal God is not that, while the former is subject to time, the latter creates it, but that while the former has the power to change, the latter is outside a temporal dimension that is very like the spatial dimensions.

Since the atemporalist theory of time is called 'four-dimensionalism', and time is often called 'the fourth dimension', note that:

Time is a nonspatial variable, so it provides a *possible* fourth dimension, but the same goes for temperature, wind speed, or the lifespan of termites in Tanzania. The position of a point in three-dimensional space depends on three variables—its distance east, north, and upward relative to some reference point, using negative numbers for the opposite directions. By analogy, anything that depends on four variables lives in a four-dimensional "space," and anything that depends on 101 variables lives in a 101-dimensional space.27

Some think that time is, if not static like space, then dynamic. And the dynamic flow of time is problematic. E.g. the Second World War is now receding ever deeper into the past, while at the time it went in the other direction, from 1939 to 1945. So if time does flow, then in which direction does it flow? That is not, however, a problem for presentism. The two directions come from there being two sorts of temporal terms – words like 'past' and 'now' (associated with the dynamic flow of time) and dates and times (associated with the static extent of time) – under any theory of time. And under presentism it is reality that is dynamic.

Most people think that presentism is contradicted by the physics of spacetime. But although we do

usually give the equations of relativity an atemporalist interpretation, the evidence for relativity coheres with there being an absolute present.28 And a wave-function seems, prima facie, to be describing propensities to yield possible results of measurements of the physical system that it models (where 'measurement' just means whatever physical process is modelled by the wave-function's collapse).29 Time is dynamically branching under that interpretation of quantum mechanics, because such possibilities interact as though they were all real, even though most of them will not have been how things were.

Not all physicists like that interpretation, but the usual objection is that there is nothing outside the universe that could collapse the universal wave-function, and under theism there is God. And interpretations that avoid collapse describe you as continually splitting into infinitely many copies of you – one for each physically possible future – which do everything that you could physically possibly do, whereas you are presumably a responsible agent. Conversely, collapses can help libertarians to understand human action.30

Furthermore, God's memory could make all the truths about the past true, which answers the objection that there is no such truth-maker under presentism.31 So in short, presentism is not too odd under libertarian theism.

6. Divine Action

Libertarian theism is best known for its free will defence of theism against the problem of evil, according to which the desirability of freely chosen good is what makes the associated possibility of freely chosen evil acceptable. An omnipotent God could presumably deal with any evil that actually occurs. And a presentist God could completely remove evil from reality. If a presentist God had decided to allow only such evil as could be vanquished, then because He is omnipotent – and omnipotence includes the power to stay on some freely chosen course – He could know that evil would be vanquished.

But an atemporal God could at best restrict evil to parts of reality before a certain date in spacetime, had He allowed any evil. Furthermore, since He is perfectly beneficent and omnipotent, why would He allow any? A spacetime in which no one suffers too much or makes the wrong choice is a logically possible world, so why would He not create such a world? Mawson thinks that under atemporalism we 'have the power to make God' have some of His beliefs about us. But the atemporal creation of people who will be making choices does not occur before the atemporal creation of the consequences of those choices. So Mawson faces another dilemma: Is his God too good to be true, or was the evil caused by Hitler not really that bad?

Mawson told a story about the God of open theism answering Mrs Hitler's prayer because He wanted to 'increase the aggregate happiness of the world'.32 And whether very bad or not, there was certainly a lot of unhappiness. So if that is the sort of thing that could happen under open theism, then the God of open theism would be liable to bodge things up. But, the immediate effect of Adolf's birth was more joy in the Hitler household; and surely God would have intervened further, as necessary to ensure a continuing increase of happiness, had that been His motivation. In fact, a more plausible motivation would have been the eventual perfection of happiness, e.g. by our becoming a communion of saints, those of us who were not too undeserving.33 Open theism does

not deny God's holiness, or His sovereignty. But again, if He had answered Mrs Hitler's prayer in order to help her to relate to Him better, then He could have continued to intervene until she became more saintly, or less deserving.

A failure to be completely omniscient does not seem to lead to a failure to be omnipotent. Now, maybe that will be shown one day; but then, we might instead find that individuals with libertarian freedom could not have been created by a completely omniscient God. We have already seen that atemporalism has some sort of a problem with libertarianism. And we have also seen that there is too much arithmetic for there to consistently be a set of it all. So maybe an atemporal God could not even create individuals. By contrast, arithmetic is unproblematic under open theism.

The obvious meaning of '2 + 2 = 4' is that if we had two things of some kind, then if we got another two of that kind we would have four. Could arithmetic be constructed from such concepts as those of logical object, logical class and logical possibility? Constructive arithmetic would be no more subjective than physics were it constructed by God. And being able to construct arithmetic could be more power-granting than being able to grasp it.34 And God would know each arithmetical truth when it exists, under divine constructivism, so He could be omniscient under presentist divine constructivism. We usually think of arithmetic as timeless, but by 'arithmetic' we usually mean finite arithmetic, and it is only the higher reaches of transfinite arithmetic that need to be growing forever, for consistent omniscience.

Furthermore, a presentist God could construct every possible arithmetical truth, each one arbitrarily quickly. That is because it is logically possible that time is such that for any duration, and for any number of changes, that duration could contain that many changes.35 And it is not a problem that anything that will have been possible was always possible because constructive truths are constructed out of more general possibilities. Similarly, although there was always the possibility of people just like you, the possibility of the particular person that you are was not a distinct possibility before you were there to be directly referred to. Whether the birth of someone just like you was inevitable or – more likely – not, the possibility of your birth is only distinguished from that more general possibility now that you exist.

To sum up, the God of open theism can be omniscient, omnipotent, and perfectly good, for all that Mawson has shown. And we have also seen that the more traditional atemporalism is paradoxical, because of arithmetic if not free will. And atheism also finds it hard to account for numbers and minds (although that is another story),36 so Mawson's methodology has led us back to Swinburne's view:

Scientists, historians, and detectives observe data and proceed thence to some theory about what best explains the occurrence of these data. We can analyse the criteria which they use in reaching a conclusion that a certain theory is better supported by the data than a different theory [...]. Using those same criteria, we find that the view that there is a God explains everything we observe, not just some narrow range of data. It explains the fact that there is a universe at all, that scientific laws operate within it, that it contains conscious animals and humans with very complex intricately organized bodies, that we have abundant opportunities for developing ourselves and the world [etc.]. In so far as scientific causes and laws explain some of these things (and in part they do), these very causes and laws need explaining, and God's action explains them. The very same criteria which scientists use to reach their own theories lead us to move beyond those theories to a creator God who

sustains everything in existence.37

Notes

- 1. T. J. Mawson, 'Divine eternity', International Journal for Philosophy of Religion 64 (2008), 35–50.
- 2. Ibid, 36.
- 3. Ibid, 41.
- 4. Ibid. For details see T. J. Mawson, *Belief in God: An introduction to the philosophy of religion* (Oxford: Oxford University Press, 2005), 28–35.
- 5. Richard Swinburne, *Is There a God?* (Oxford: Oxford University Press, 1996), 8. Incidentally, this was Swinburne's definition of 'omniscient'.
- 6. Mawson, 'Divine eternity', 40.
- 7. For the underlying problem see David Kyle Johnson, 'God, fatalism, and temporal ontology', Religious Studies 45 (2009), 435–454.
- 8. T. J. Mawson, Free Will: A guide for the perplexed (London: Continuum, 2011).
- 9. For the underlying problem see Alfred Mele, *Free Will and Luck* (Oxford: Oxford University Press, 2006); Timothy O'Connor, 'Is It All Just a Matter of Luck?', *Philosophical Explorations* 10 (2007), 157–161.
- 10. For more on open theism see Alan R. Rhoda, 'The Philosophical Case for Open Theism', *Philosophia* 35 (2007), 301–311.
- 11. Mawson, 'Divine eternity', 47 f.
- 12. Ibid, 38.
- 13. Ibid, 37.
- 14. Ibid.
- 15. Ibid, 41 n. 4.
- 16. Johnson, op. cit.
- 17. Nicholas Denyer, *Time, Action and Necessity: A proof of free will* (London: Duckworth, 1981).
- 18. Mawson, Belief in God, 35.
- 19. Mawson, 'Divine eternity', 37 f, 41 n. 5. Note that complete omniscience as so defined is not more complete than presentist omniscience. Although Mawson's God knows statements that would not be facts under presentism, He does not know some statements that would be, e.g. that the future is dynamically branching.

- 20. For the diagonal argument see any introduction to set theory, or Michael Clark, *Paradoxes from A to Z* (London: Routledge, 2002), 29–33.
- 21. For details see Peter Fletcher, 'Infinity', in Dale Jacquette (ed.), *Philosophy of Logic* (Amsterdam: Elsevier, 2007), 523–585. Incidentally, there is a better known Cantorian argument against the timelessness of truth; Patrick Grim, 'There is no set of all truths', *Analysis* 44 (1984), 206–208. But there would be no set of all truths if truth was in general a matter of degree, even were truth timeless. And if X is as blue as not, then 'X is blue' is as true as not. So the black-and-white propositions of cardinal arithmetic give us a stronger argument.
- 22. Michael Hallett, *Cantorian set theory and limitation of size* (Oxford: Clarendon Press, 1984), 12–48.
- 23. Agustin Rayo and Gabriel Uzquiano (eds.), Absolute Generality (Oxford: Clarendon Press, 2006).
- 24. For details see Grzegorz Malinowski, 'Many-valued Logic and its Philosophy', in Dov M. Gabbay and John Woods (eds.), *The Many Valued and Nonmonotonic Turn in Logic* (Amsterdam: North-Holland, 2007), 13–94.
- 25. Alan R. Rhoda, 'Generic open theism and some varieties thereof', *Religious Studies* 44 (2008), 225–234.
- 26. For more on this problem see H. Scott Hestevold, 'Presentism: Through Thick and Thin', *Pacific Philosophical Quarterly* 89 (2008), 325–347.
- 27. Ian Stewart, Why Beauty is Truth: A history of symmetry (New York: Basic Books, 2007), 226.
- 28. E.g. see Bradley Monton, 'Presentism and Quantum Gravity', in Dennis Dieks (ed.), *The Ontology of Spacetime* (Amsterdam: Elsevier, 2006), 263–280; Craig Bourne, *A Future for Presentism* (Oxford: Oxford University Press, 2007), 141–203.
- 29. For a defence of this view see Mauricio Suárez, 'On Quantum Propensities: Two arguments revisited', *Erkenntnis* 61 (2004), 1–16.
- 30. Henry P. Stapp, 'Quantum Interactive Dualism: An alternative to materialism', *Journal of Consciousness Studies* 12 (2005), 43–58; 'Quantum Interactive Dualism, II: The Libet and Einstein-Podalsky-Rosen Causal Anomalies', *Erkenntnis* 65 (2006), 117–142.
- 31. Alan R. Rhoda, 'Presentism, Truthmakers, and God', *Pacific Philosophical Quarterly* 90 (2009), 41–62.
- 32. Mawson, op. cit, 47.
- 33. Keith Ward, Divine Action (London: Flame, 1990), 135 f.
- 34. Paul Copan and William Lane Craig, *Creation out of Nothing: A biblical, philosophical, and scientific exploration* (Leicester: Apollos, 2004), 173–210.
- 35. Martin C. Cooke, 'To Continue with Continuity', *Metaphysica* 6 (2005), 91–109; Philip Ehrlich, 'The absolute arithmetic continuum and the unification of all numbers great and small', *The Bulletin of*

Symbolic Logic 18 (2012), 1–45.

- 36. Stewart Shapiro, *Thinking about Mathematics: The philosophy of mathematics* (Oxford: Oxford University Press, 2000); John R. Searle, *The Mystery of Consciousness* (London: Granta, 1997).
- 37. Swinburne, op. cit, 2. When Swinburne was looking at the justification of human beliefs, he suggested that we could for the sake of tidiness think of beliefs that *p* as beliefs that *p* is more likely than not; Richard Swinburne, *Epistemic Justification* (Oxford: Clarendon Press, 2001), 35 f. And Mawson implied that if open theists do not want to think of God's beliefs in that way since that would lead to their God being fallible then they should also reject Swinburne's Bayesian methodology; Mawson, op. cit, 45 f. So note that he did not say why they should.