

GENERIC OPEN THEISM AND SOME VARIETIES THEREOF

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**ABSTRACT:** The goal of this paper is to facilitate ongoing dialogue between open and non-open theists. First, I try to make precise what open theism is by distinguishing the core commitments of the position from other secondary and optional commitments. The result is a characterization of ‘generic open theism’, the minimal set of commitments that any open theist, qua open theist, must affirm. Second, within the framework of generic open theism I distinguish three important variants and discuss challenges distinctive to each. The significance of this approach is that it helps avoid conflating arguments bearing on specific versions of open theism with arguments pertaining to open theism simpliciter.

Even though open theism has been much-discussed in philosophy of religion circles of late, it seems that many critics, and even many proponents, do not fully appreciate the variety of theoretical options available to open theists. The result is that many common generalizations about what open theists believe—generalizations like ‘open theism denies exhaustive divine

foreknowledge'<sup>1</sup> or 'open theism attenuates or restricts divine omniscience'<sup>2</sup>—are inapt because, while they fairly characterize what *some* open theists believe, actually *misrepresent* the views of others. The result is that many discussions of open theism are less productive than they could be because they confuse the genus with one of its species and thereby lose sight of the central issues. In the interests of rectifying this situation, my aims in this paper are twofold. First, I want to set forth a fairly precise definition of 'generic open theism' in order to capture the most fundamental theoretical commitments common to all open theists. Second, within this framework I want to distinguish three distinct species of open theism, all held by prominent proponents, in terms of the additional commitments that each incurs. As I go, I will briefly explore some of the issues that need to be addressed by open theists generally and by proponents of each of these three versions in particular.

### Generic open theism

What is the bare minimum that one must believe in order to qualify as an 'open theist'? The purpose of the question is to distinguish the primary or core commitments of open theism from other, secondary commitments. To define a generic open theism we ought to draw the circle as widely as possible without losing sight of the distinctives of open theism. In this vein, there seem to me to be *four* primary commitments, to which I'll add a few corollaries and qualifications.

The first obvious requirement for being an open theist is that one be a *theist*, as opposed to, say, a polytheist, pantheist, or process theist. Regarding the latter, open theists have been quite insistent that, while their position lies somewhere between the classical theism of high-medieval orthodoxy and process theism, they mean to stay squarely on the classical side of that divide with respect to creation *ex nihilo* and the power of God unilaterally to intervene in the created order as

he desires.<sup>3</sup> Indeed, open theists have generally seen their view as a relatively conservative *modification* or *correction* of the classical tradition—not a wholesale rejection of it—for the purpose of resolving what they see as otherwise irresolvable Biblical and philosophical tensions within that tradition.<sup>4</sup> As a result, I think it fair to nearly all open theists, and certainly to its chief proponents, to describe them as committed to a robust perfect being theology in which God is conceived as a necessary being<sup>5</sup> who essentially possesses a maximal set of compossible great-making properties, including maximal power, knowledge, and goodness. Insofar as there are differences between open theists and non-open theists on this point, it is with respect to what that maximal property set consists in, and not with respect to whether God exemplifies such a property set. And it is important not to overstate the differences here, for it is quite clear that classical theists today are far less unified on whether doctrines such as divine simplicity, impassibility, and timelessness ought to be included among God’s great-making properties than they were in the days of Anselm and Aquinas. Furthermore, as we will see, each of the *core* commitments of open theism also has a large number of adherents among non-open theists. Accordingly, unless we are prepared to restrict the label ‘classical theism’ in such a way that few scholars apart from doctrinaire Thomists would qualify, it is somewhat tendentious to oppose ‘open theism’ to ‘classical theism’ and probably better to say that open theism is a species of classical theism. In sum, then, we have as our first core commitment of open theism:

1. *Theism*: God exists necessarily and possesses a maximal set of compossible great-making properties, including maximal power, knowledge, and goodness. He created the world *ex nihilo*<sup>6</sup> and can unilaterally intervene in it as he pleases.

The other core requirements for being an open theist are what put the ‘open’ in open theism. What is meant here is the openness of *the future*,<sup>7</sup> and that in two distinct senses, one broadly causal; the other, epistemic. We can define these as follows:

- *Causal openness*: The future is *causally open* at time  $t$  with respect to state of affairs  $X$  and future time  $t^*$  if and only if, given all that *exists* as of time  $t$ , it is really possible both that  $X$  obtains at  $t^*$  and that  $X$  does not obtain at  $t^*$ . (In other words, whether  $X$  obtains at  $t^*$  or not is, as of  $t$ , a *future contingent*.)
- *Epistemic openness*: The future is *epistemically open* for person  $S$  at time  $t$  with respect to some conceivable future state of affairs  $X$  if and only if for some future time  $t^*$  neither ‘ $X$  will obtain at  $t^*$ ’ nor ‘ $X$  will not obtain at  $t^*$ ’ is known by  $S$  at  $t$ .

In terms of these definitions, we can state the second and third open theist commitments:

2. *Future Contingency*: The future is, as of now and in some respects, causally open, i.e., there are future contingents.
3. *Divine Epistemic Openness*: The future is, as of now and in some respects, epistemically open for God.

Of these, future contingency is logically prior to divine epistemic openness. To see why, we must remember that the open theist wants to say that God has *maximal* knowledge, as per the commitment to theism. Consequently, if it is *possible* for God to know something he must know it. So if the future is causally open with respect to whether  $X$  obtains at  $t^*$  and if it is possible for God to know either ‘ $X$  will obtain at  $t^*$ ’ or ‘ $X$  will not obtain at  $t^*$ ’, then he knows one of those,

and the future is not epistemically open for him in that respect. The reason, then, why open theists accept divine epistemic openness is that they believe that it is *impossible* for the future to be both causally open in some respect at time *t* and epistemically settled for God in that same respect at *t*. In other words, the future is epistemically open for God only *because* and only *to the extent that* it is causally open. We have, then, a fourth open theist commitment:

4. *EC Incompatibility*: It is impossible that the future be epistemically settled for God in any respect in which it is causally open.

I take (1)–(4) to be the defining characteristics of generic open theism. Actually, since (3) follows from (2) and (4), we could define generic open theism solely with reference to (1), (2), and (4). It is helpful to make (3) explicit, however, since that has been a chief focus of debate. Indeed, the central dialectic consists in whether to accept both (2) and (4), and consequently (3), or whether to reject (3) and with it either (2) or (4). In these terms, open theism falls squarely between two competing traditions *within* classical theism: the theological determinism of the late Augustine, Luther, Calvin, and Edwards; and the ‘free-will theism’ of Ockham, Molina, and Arminius. Thus, open theists side with other free-will theists over against theological determinists by affirming future contingency. But they also side with most theological determinists over against other free-will theists by affirming EC incompatibility.<sup>8</sup>

Before moving on to identify three specific variants of open theism, a few additional comments are in order. First, with respect to future contingency, it should be noted that the type of contingency that open theists chiefly have in mind is creaturely libertarian freedom. Nevertheless, there is some reason for not packing an explicit commitment to creaturely libertarian freedom into the definition of generic open theism. For it seems that one could hold to

a version of open theism by accepting theism, EC incompatibility, and future contingency due to quantum indeterminacy, *irrespective of whether any creatures have libertarian freedom*. In order to allow room for that possibility, I think it best to define generic open theism in terms of a general commitment to future contingency rather than in terms of a more specific commitment to libertarian freedom.<sup>9</sup>

Second, two important corollaries of divine epistemic openness are *divine temporality* and *divine passibility*. For the open theist, the future is epistemically settled for God in all and only those respects in which it is causally settled. This means that the content of God's foreknowledge changes over time, as matters that are future and contingent either cease to be future or cease to be contingent. Consequently, the open theist must allow that God can and does change in his epistemic states, which, of course, implies divine temporality. We should not say, however—at least not without further argument—that open theists are committed to *essential* divine temporality. For it is not immediately clear why open theists could not adopt Craig's suggestion that God is atemporal *sans* creation and temporal since creation.<sup>10</sup>

As for divine possibility, it is helpful to refer to Creel's fourfold distinction between passibility in nature, in will, in knowledge, and in feeling.<sup>11</sup> As theists, open theists will not admit that God is passible in nature. God's fundamental attributes and character are essential to him and cannot change. Open theists are, however, clearly committed to divine passibility with respect to God's *knowledge*, for how God's epistemic states change over time depends on what free choices his creatures make. As for passibility in will and in feeling, these would seem to be optional for open theists. Some will point to Biblical descriptions of God 'changing' his mind, 'repenting', 'feeling angry', and so forth, as evidence that God is passible in both of those respects as well.<sup>12</sup> Others, like Creel, accept passibility in knowledge, but reject passibility in either will or feeling.<sup>13</sup>

### Three versions of open theism

Within the broad framework of generic open theism, there are three important variants. To distinguish between them, we need to define a third sense in which the future may be thought of as ‘open’:

- *Alethic Openness*: The future is *alethically open* at time  $t$  with respect to some conceivable state of affairs  $X$  and future time  $t^*$  if and only if neither ‘ $X$  will obtain at  $t^*$ ’ nor ‘ $X$  will not obtain at  $t^*$ ’ is true at  $t$ .<sup>14</sup>

Insofar as the future is not alethically open, I will say that it is alethically *settled*.

The relevance of this notion for open theism depends on the following principle:

5. *AC Incompatibility*: It is impossible that the future be alethically settled in any respect in which it is causally open.

Any open theist who accepts (5) is thereby committed to saying that, if  $X$ ’s obtaining at  $t^*$  is, as of time  $t$ , a future contingent, then it is not true at  $t$  either that ‘ $X$  will obtain at  $t^*$ ’ or that ‘ $X$  will not obtain at  $t^*$ ’. There are two ways in which one might arrive at this conclusion. First, one might hold that pairs of corresponding ‘will’ and ‘will not’ propositions about future contingents are *neither true nor false*. Second, one might hold that all such propositions are *false*. The first option preserves consistency by denying bivalence. The second preserves consistency by holding that pairs of such propositions are contraries, not contradictories.

With these distinctions we can now formulate the three main variants of open theism:

- *Limited Foreknowledge*: The future is alethically settled but nevertheless epistemically open for God because true ‘will’ and ‘will not’ propositions about future contingents are in principle unknowable, even for God.
- *Non-Bivalentist Omniscience*: The future is alethically open and therefore epistemically open for God because ‘will’ and ‘will not’ propositions about future contingents are neither true nor false.
- *Bivalentist Omniscience*: The future is alethically open and therefore epistemically open for God because ‘will’ and ‘will not’ propositions about future contingents are both false.<sup>15</sup>

The limited foreknowledge version of open theism rejects AC incompatibility and accepts that the future is alethically settled. It follows that some ‘will’ and ‘will not’ propositions about future contingents are determinately true. However, given EC incompatibility it also follows that no one, not even God, can know these truths. Hence, on this view, God has maximal knowledge in the sense of knowing as much as any being can possibly know, but he is not omniscient in the sense of knowing all and only truths.<sup>16</sup> By virtue of creating a world populated by libertarian free agents, God willingly accepts a limitation on his foreknowledge. Among prominent open theists, William Hasker<sup>17</sup> has espoused this position.

The primary challenge facing the limited foreknowledge view is to articulate in a principled way why true ‘will’ and ‘will not’ propositions about future contingents cannot be known.<sup>18</sup> Unlike proponents of the other two versions of open theism, a defender of limited foreknowledge cannot say that these propositions are unknowable because they lack a truth value or because they are uniformly false. Moreover, it seems that the primary reason for thinking that



true ‘will’ and ‘will not’ propositions about future contingents are unknowable is also a reason for thinking that such propositions are not true. Thus, as John Sanders puts it, ‘God’s knowledge is coextensive with reality ... [and] the future actions of free creatures are not yet reality, and so there is nothing to know.’<sup>19</sup> But reality doesn’t just limit what can be known. On a correspondence theory of truth, reality also determines what is true. ‘Truth supervenes on being’, as the slogan goes. It appears, then, that in order to maintain the distinction between the knowable and the true that limited foreknowledge requires, its defenders must reject the correspondence theory of truth and deny that God’s knowledge is coextensive with reality.<sup>20</sup> Because that consequence is not particularly attractive, it is unsurprising that many open theists prefer one of the other two versions.<sup>21</sup>

Those versions of open theism that affirm God’s omniscience (in the sense of knowing all and only truths) are distinguished from the limited foreknowledge position by the AC incompatibility thesis. The significance of this thesis may be gathered by reflecting on *why* advocates of the bivalentist and non-bivalentist omniscience positions say that there are pairs of corresponding ‘will’ and ‘will not’ propositions of which *neither* is true. If their reason for saying this were that the future does not exist, the same rationale would yield the implausible result that *no* propositions about the future are true, and, if presentists<sup>22</sup> are right, the utterly bizarre result that no propositions *about the past* are true either.<sup>23</sup> Fortunately, this is *not* their rationale.<sup>24</sup> Instead, what underlies these positions is a (usually tacit) commitment to what Prior has dubbed the ‘Peircean’ system of tense logic and opposed to the more common ‘Ockhamist’ system.<sup>25</sup> Ockhamists hold that truths about the future (past) have their grounding in the future (past). In contrast, Peirceans hold that the grounding for *all* truths lies *in the present*. Thus, whereas Ockhamists say that ‘There will be a sea battle tomorrow’ is true if and only if *tomorrow* there is a sea battle, Peirceans say that ‘There will be a sea battle tomorrow’ is true if and only if

sufficient conditions obtain *today* for a sea battle tomorrow.<sup>26</sup> AC incompatibility is an immediate consequence of the Peircean semantics. Hence, it is because sufficient conditions for the realization of future contingents do not yet obtain, that omniscience-affirming open theists believe that neither ‘will’ nor ‘will not’ propositions about future contingents are true.

Turning now to the non-bivalentist omniscience version of open theism, this view accepts both AC incompatibility and the common view that pairs of corresponding ‘will’ and ‘will not’ propositions are contradictories. Given those commitments, the only way to retain the contingency thesis is to give up bivalence. Thus, ‘will’ and ‘will not’ propositions about future contingents are said to be *neither true nor false*. In contrast with the limited foreknowledge view, this position does affirm that God knows *all* truths, including all truths about the future. As matters stand, there just aren’t any ‘will’ or ‘will not’ truths about future contingents for God not to know. Consequently, God, on this view, does *not* have limited foreknowledge. Rather, he knows the future exhaustively. The phrase ‘the future’, however, does not pick out a unique sequence of events, but instead refers to a branching array of causal possibilities stemming out from the present. Among prominent open theists, J. R. Lucas has espoused a sophisticated form of this position.<sup>27</sup>

The primary challenge facing the non-bivalentist omniscience position is to motivate and defend the denial of bivalence and the attendant departure from standard logic. Denying bivalence for ‘will’ and ‘will not’ propositions about future contingents has a long history in philosophy, but for many giving up standard logic is an unacceptably high price to pay. For example, since this position accepts that pairs of ‘will’ and ‘will not’ propositions are contradictories, it seems to lead to counterintuitive truth values for propositions like ‘Either X will happen or X won’t’ and ‘X both will and will not happen.’<sup>28</sup> One solution is to adopt Thomason’s ‘supervaluationist’ semantics according to which ‘X will happen’ is true if and only if X occurs on *all* causally

possible branches of the future and ‘X will not happen’ is true if and only if X does not occur on *any* causally possible branch of the future.<sup>29</sup> This solves the above problems, but at the cost of denying that ‘and’ and ‘or’ are truth-functional. Furthermore, Thomason’s approach admits the existence of a *tertium quid* between ‘will’ and ‘will not’, namely, the case in which X happens on *some but not all* causally possible branches of the future. In so doing, the supervaluationist approach undermines the assumption that ‘will’ and ‘will not’ are contradictories, which in turn undermines the motivation for denying bivalence for future contingents. This takes us to the third version of open theism.

The bivalentist omniscience version of open theism accepts AC incompatibility but retains bivalence by holding that pairs of ‘will’ and ‘will not’ propositions are not contradictories but contraries. Thus, for future contingent X, both ‘X will obtain’ and ‘X will not obtain’ are false and, instead, ‘X *might and might not* obtain’ is true. Unlike the limited foreknowledge position, an open theist who holds to bivalentist omniscience can affirm unrestricted divine foreknowledge. Unlike the non-bivalentist omniscience position, no departure from standard logic is required. For those reasons, the bivalentist omniscience enjoys a natural advantage over both of its chief rivals. Among prominent open theists, Greg Boyd espouses this position.<sup>30</sup>

The primary challenge facing the bivalentist omniscience position is to motivate and defend what may initially seem to be the implausible claim that pairs of ‘will’ and ‘will not’ propositions are not contradictories, but contraries. One obstacle here is to account for the common linguistic practice of retroactively describing statements about future contingents as ‘true’ simply because matters later turned out as the statement said they would.<sup>31</sup> A negative response to this objection requires advocates of this version of open theism to reject the assumption that common usage is an accurate guide to meaning in such cases. A positive response requires giving reasons why we *should* accept the claim that ‘will’ and ‘will not’ are contraries.

Recent work drawing on insights from Arthur Prior suggests that there is a positive case to be made,<sup>32</sup> but as yet these arguments have not received detailed critical scrutiny. If this position can be sustained, then the advantages of bivalentist omniscience over its competitors make it the natural default position for open theists. If, however, it cannot be sustained then limited foreknowledge and/or non-bivalentist omniscience may serve as fall-back positions, assuming, of course, that the major difficulties facing them can be satisfactorily defused.

## Conclusion

Open theism is not a monolithic movement. While all open theists subscribe to the core theses characterizing what I have called ‘generic open theism’, there remain significant in-house debates centering on issues like AC incompatibility, bivalence, the precise nature and scope of divine passibility, and so forth. Consequently, I would urge both critics and supporters of open theism to be more aware of the range of options. General criticisms should stay focused on one or more of the theses or corollaries of generic open theism. Criticisms that pertain to only some versions of open theism, like the charge that open theism diminishes God by denying that God knows all truths or the charge that open theism denies exhaustive foreknowledge, should not be generalized to open theism as a whole. Likewise, defenses of open theism should make clear when they are supposed to be defenses of generic open theism as opposed to defenses of specific versions thereof.<sup>33</sup>

## NOTES

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<sup>1</sup> See Bruce A. Ware *God’s Lesser Glory: The Diminished God of Open Theism* (Wheaton IL: Crossway Books, 2000), esp. ch. 4. See also John Sanders *The God Who Risks* (Downers Grove

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IL: InterVarsity Press, 1997), 198. Sanders refers here to ‘presentism’, which, in his usage, is an alternate name for open theism (*ibid.*, 12).

<sup>2</sup> See Paul Helm *Eternal God* (Oxford: Oxford University Press, 1997), 125, 195. See also Richard Swinburne *The Coherence of Theism*, rev edn (Oxford: Oxford University Press, 1993), 180.

<sup>3</sup> See Clark H. Pinnock *et al.* *The Openness of God* (Downers Grove IL: InterVarsity Press, 1994), 156. See also John B. Cobb and Clark H. Pinnock (eds) *Searching for an Adequate God: A Dialogue Between Process and Free Will Theists* (Grand Rapids MI: Eerdmans, 2000).

<sup>4</sup> See Pinnock *et al.* *Openness of God*, esp. chs. 2-4.

<sup>5</sup> The precise nature of God’s necessity is a matter of some debate among theists. Some think that God is necessary in the broadly logical sense of existing in all possible worlds. Others think that God is ‘metaphysically’ necessary in the sense of existing in all non-empty possible worlds, such that *if* anything exists, then God does too. For present purposes it is not necessary to take a stand on this debate, so let us say that ‘God exists necessarily’ means that God is *at least* metaphysically necessary.

<sup>6</sup> By creation ‘*ex nihilo*’ I simply mean that God did not fashion creation out of any preexisting matter or stuff á la Plato’s Demiurge.

<sup>7</sup> The phrase ‘the future’ should not be understood as implying a unique, linear sequence of events. Most open theists, when they speak of ‘the future’, have in mind a non-linear, branching structure consisting partly of determinate ‘will be’s’ and partly of indeterminate ‘might and might not’s’. For elaboration, see Alan R. Rhoda, Gregory A. Boyd, and Thomas G. Belt ‘Open theism, omniscience, and the nature of the future’, *Faith and Philosophy* **23** (2006), 432-459.

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<sup>8</sup> The dialectical situation among these three camps parallels the ongoing free will debate between hard determinists, soft determinists, and libertarians. The open theist position parallels libertarianism by affirming both contingency and incompatibilism. The non-open free-will theist position parallels soft determinism's 'have your cake and eat it' approach. And the theological determinist position parallels hard determinism by giving up contingency on account of incompatibility.

<sup>9</sup> For a contrasting view, see Pinnock *et al.* *Openness of God*, 156.

<sup>10</sup> William Lane Craig *Time and Eternity: Exploring God's Relationship to Time* (Wheaton IL: Crossway Books, 2001).

<sup>11</sup> Richard Creel *Divine Impassibility* (Eugene OR: Wipf and Stock, 2005 [1986]), 9-12.

<sup>12</sup> This seems to be John Sanders's view. He clearly wants to go further than Creel does in the extent to which he attributes passibility to God. See Sanders *God Who Risks*, 196-197 and note 117.

<sup>13</sup> In my opinion, open theists would do well to endorse Creel's position that God is passible in knowledge, but impassible in nature, will, and feeling. Creel's case against passibility in feeling is impressive. As for passibility in will, there seems to be no good reason for a God who knows all possibilities in advance not to form conditional resolutions on how he would respond in every possible situation.

<sup>14</sup> In previous work (Rhoda, Boyd, and Belt 'Open theism, omniscience, and the nature of the future') I used the phrase 'semantic openness' to refer to what I now call 'alethic openness'. Since the issue is primarily one of truth and not meaning, 'alethic' is more accurate.

<sup>15</sup> The terms 'non-bivalentist omniscience' and 'bivalentist omniscience' were suggested to me by Thomas G. Belt.

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<sup>16</sup> Proponents of this view usually define ‘omniscience’ in terms of what it is logically possible to know, in parallel with the common practice of defining ‘omnipotence’ in terms of what it is logically possible to do (see, e.g., Swinburne, *Coherence*, 180). The key issue, though, is whether there are any truths that it is not logically possible to know.

<sup>17</sup> William Hasker *God, Time, and Knowledge* (Ithaca NY: Cornell University Press, 1989), 187; idem ‘The foreknowledge conundrum’, *International Journal for the Philosophy of Religion* **50** (2001), 97-114, esp. 110-111.

<sup>18</sup> William Lane Craig ‘What does God know?’ in Douglas F. Huffman & Eric L. Johnson (eds) *God Under Fire: Modern Scholarship Reinvents God*, 147-148.

<sup>19</sup> Sanders *God Who Risks*, 198.

<sup>20</sup> A parallel problem confronts proponents of Ockhamism who affirm the nonexistence of future events. For the Ockhamist, the future is alethically settled and what is *now* true about the future depends entirely on what happens *in the future*. But if future events do not exist, then there is nothing (yet) in reality to ground the *present* truth of propositions about the future. It appears, then, that Ockhamists of this sort must deny that truth supervenes on being and admit that God’s knowledge as of time *t* can outstrip what is real as of time *t*.

<sup>21</sup> See Dale Tuggy ‘Three roads to open theism’, *Faith and Philosophy* **23** (2006).

<sup>22</sup> Presentism is the view that only what exists *now* has any reality.

<sup>23</sup> Thanks to an anonymous referee for bringing this issue to my attention.

<sup>24</sup> To become convinced of this all one has to do is reflect on what open theists typically say about prophecy. Nearly all open theists have been quite explicit that there are truths about the future that God knows, such as God’s own unilateral decisions and the inevitable consequences of present causes. See, e.g., Pinnock *et al.* *Openness of God*, 51.

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<sup>25</sup> Prior develops the ‘Ockhamist’/‘Peircean’ tense logic distinction in Arthur Prior ‘The formalities of omniscience’, in *Papers on Time and Tense*, Per Hasle *et al.* (eds) (Oxford: Oxford University Press, 2003), 39-58.

<sup>26</sup> *Ibid.*, 52: ‘nothing can be truly said to be “going-to-happen” . . . until it is so “present in its causes” as to be beyond stopping.’ In a similar fashion, many presentists will say that what can be truly said *to have happened* is ‘present in its effects’. I apply Peircean semantics to truths about the future in Rhoda, Boyd, and Belt ‘Open theism, omniscience, and the nature of the future’. I apply it to truths about the past in Alan Rhoda, ‘Presentism, Truthmakers, and God’ (currently unpublished).

<sup>27</sup> J. R. Lucas *The Future: An Essay on God, Temporality, and Truth* (Oxford: Basil Blackwell, 1989).

<sup>28</sup> A good overview of the controversies surrounding multi-valued logics can be found in Susan Haack *Deviant Logic, Fuzzy Logic: Beyond the Formalism*, 2nd edn (Chicago IL: University of Chicago Press, 1996).

<sup>29</sup> Richmond Thomason ‘Indeterminist time and truth-value gaps’, *Theoria* **36** (1970), 265-281.

<sup>30</sup> Boyd’s most explicit endorsement of this view occurs in Rhoda, Boyd, and Belt ‘Open theism, omniscience, and the nature of the future’.

<sup>31</sup> For a clear presentation of this challenge, see Alfred J. Fredosso ‘Introduction’ in Luis de Molina *On Divine Foreknowledge: Part IV of the Concordia*, tr. Alfred J. Fredosso (Ithaca NY: Cornell University Press, 1988), 71-72.

<sup>32</sup> See Rhoda, Boyd, and Belt ‘Open theism, omniscience, and the nature of the future’ for a development and defense of two independent arguments for the thesis that pairs of corresponding



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‘will’ and ‘will not’ propositions are contraries. Both arguments stem from Prior’s rejection of ‘Ockhamist’ tense logic in Prior ‘The formalities of omniscience’, 49.

<sup>33</sup> Special thanks to Thomas G. Belt and an anonymous referee for constructive feedback on an earlier version of this paper.