

This essay will attempt to reconcile the seemingly opposed implications of God's ability to create *ex nihilo* and the existence of mathematical objects from the divine conceptualist's standpoint. Mathematical objects are necessary beings, but their existence nonetheless depends on God. Regardless of one's attitude towards the Doctrine of Divine Simplicity, a divine conceptualist could preserve the sovereignty of God under the appropriate definition of its effective range.

Implications of God's supposed ability to create *ex nihilo* and the existence of mathematical objects

In traditional Christian religious texts, God is the absolute creator of everything: "The heavens are yours, the earth also is yours; the world and all that is in it—you have founded them."¹ God's ability to create *ex nihilo* implies that God grounds all of reality, including the existence of necessary beings. More than that, God is the ultimate necessary being who has absolute independence and self-existence. That is, God does not depend on any other external things to create, and God is the most fundamental among all necessary beings. The fact that God is the source of everything other than God's self, supposedly should make every other being dependent on God. They owe their existence to God. The things we generally regard as necessarily existing, seem to be no exception to being contingent upon God, either.

It is also generally agreed that abstract objects like logical truth and mathematical objects are real and necessarily exist. For example, one might say that it is counter-intuitive to think against the law of non-contradiction or imagine that numbers do not exist (perhaps it could be said for imaginary numbers, but not real numbers). After all, is it even coherent to think of an individual being both human and not human at the same time (under the same definition of human), or to construct a possible world where there are no numbers at all? We usually take that numbers and mathematical rules are true and true in every possible world, that it is necessary that they are true and have real existence. (Although there are philosophers who argue that mathematical objects do not truly exist², for instance that numbers are merely a

¹ Psalm 89:11. New Revised Standard Version of the Bible.

² Nominalism about mathematics suggests that mathematical objects do not exist, or do not exist as abstract objects. One version of nominalism—fictionalism, states that *only* 'According to arithmetic,

human construct. Or that some abstract objects are actually *concrete* divine mental objects³. It is beyond the aim of this essay to discuss this distinction.) Some abstract objects like numbers and logical rules are normally taken as necessary, because it is difficult, or even incoherent for us as rational beings to imagine them otherwise. Hence, for the sake of this argument, mathematical objects will be treated as non-divine necessary beings (NDNBs) which exist.

The conflict

One could easily see the conflict between God's ability to create *ex nihilo* and the common consensus of necessarily existing mathematical objects. If we start with the Doctrine of Creation that everything other than God is less fundamental and depends on God for their existence, then mathematical objects are contingent upon God. One could argue that they are still true, but only *contingently* true. That is, mathematical objects *can* never have existed, and logical rules *can* never have been true, either. God could make 2 never have existed, or made $2 + 2 = 5$. Both options seem problematic, as we have argued that it is incoherent to picture a world without them, or even imagine them otherwise.

On the other hand, if it is necessary that mathematical objects and logical rules exist the way they do, then usually we say the existence of necessary beings does not depend on anything else. And they are necessarily true in all possible worlds. One could then be tempted to say that mathematical objects do not depend on God for their existence. If there is a possible world where there is no God, or that God did not create, mathematical objects would still exist regardless of God and God's creation. Surely, if mathematical objects could exist where God does not exist, then they are free from God's creative act, and God will cease to be the ultimate creator, who is the source of absolutely everything.

there are infinitely many prime numbers', and 'it follows from the Dedekind-Peano axioms that $2 + 2 = 4$.' Mathematical objects are not necessarily real themselves. Stanford Encyclopedia of Philosophy (Nominalism in the Philosophy of Mathematics 3.1) and Craig, (2017: p240-245).

³ "Craig argues that a Divine Conceptualism adherent ought to view mathematical objects as concrete divine mental objects." Freeman, (2021: p17).

In order to better understand the seriousness of the conflict and the relation between God's ultimate creative ability and the necessary existence of mathematical objects, one might find it useful to turn to some definitions of sovereignty: God is sovereign if Everything non-divine is within God's control.⁴ The necessary beings are usually taken to be non-divine (NDNBs), that they are not God per se, but part of God's creation. They are also free from God's control, since it is incoherent for God to will them otherwise. Then we have something that is both non-divine and outside God's control, namely the mathematical objects and logical rules, which clearly pose a threat to God's sovereignty. Conversely, some philosophers claim that abstract objects like numbers and logical rules have a causal dependence on God, even though God have no control over them.⁵ This is to say that, on the one hand, mathematical objects depend on God for their existence. And on the other hand, God could not annihilate, for example, the number 2; or God could *not* not have created the number 2. The reason for God's inability to alter the necessary beings' existence status is, God's power (omnipotence) ranges "only over the logically possible"⁶. It follows that somehow it should be acceptable that God has no control over the necessary beings. However, this is not an adequate protection of God's sovereignty, if we consider the definition of divine sovereignty to be that God can annihilate anything he has created. The very logical possible, in fact, is the creation of God, determined by God's omnipotence.⁷ If we accept that God is the source of everything, in particular, mathematical objects are causally dependent on God, that God caused them to exist, then mathematical objects are inevitably under the realm of creation. And if God is unable to annihilate the number 2—his own creation, God would not be sovereign. The distinction between causal dependence and control thus fails to preserve divine sovereignty.

The solution

By our examination, it seems like there is no escaping the dilemma of God being the absolute creator of everything and the necessary existing mathematical objects. But what if the necessarily existing mathematical objects are not part of the result of

⁴ Plantinga, (1980: p26).

⁵ Morris and Mendals, (1986: p357).

⁶ Morris, (1985: p264-265).

⁷ Welty, (2000: p30-31).

God's creative act? Rather, they are the ideas of God—divine conceptions. I believe Divine Conceptualism provides a successful and satisfactory account of reconciling the problem, by claiming that abstract objects are not a result of God's creative act, but rather, they are the thoughts and conceptions of God.

Firstly, it should be made clear that although abstract objects are not created by God, and they do not causally depend on God, they are still grounded in God. That is to say, God is more fundamental than abstract objects. Following our previous reasoning, both God and the numbers necessarily exist. It is problematic to think one creates the other. But we also usually consider that, God grounds the existence of numbers. It is equally incoherent to think numbers ground the existence of God. This is because there are mainly two ways to see the grounding relationship: one is to say that God *causally* grounds the existence of those non-divine necessary beings; the other reads God grounds the existence of the non-divine necessary beings through divine aseity, that abstract objects like mathematical objects are *identical* with the divine mental conceptions.⁸ While the first interpretation relies heavily on the Doctrine of Creation, the later which finds its roots in divine aseity—God's self-existence, is the key to solve the dilemma—preserving both God's sovereignty and the necessary status of abstract objects.

There are two versions of Divine Conceptualism (DC), differentiated by one's position toward the famous Doctrine of Divine Simplicity. I believe that both versions serve the argument well, for the reason that the problem of sovereignty does not lie in the Doctrine of Simplicity, but in the Doctrine of Creation. DC rejects the idea that mathematical objects are created by God, and this is arguably the most vital ingredient we need to resolve the conflict.

Let us turn to the first version of DC with the Doctrine of Divine Simplicity. The dilemma could be formulated in another way with an example to serve the discussion better. We have two statements here, (1) "2 + 2 = 4 if and only if God *wills* that 2 + 2 = 4", and (2) "2 + 2 = 4 if and only if God *believes* that 2 + 2 = 4."⁹ (1) follows from

⁸ Stanford Encyclopedia of Philosophy—God and Other Necessary Beings, section 1.

⁹ The example is borrowed from Mann, (1989: p91).

God's ability to create ex nihilo, that God is the ultimate source for everything in the world—including mathematical necessities—through God's creative act. The truth and falsehood of $2 + 2 = 4$ rely on God, which means that mathematical objects are contingent. (2) follows from the necessarily existing mathematical objects and logical rules. They are "unchangeable, unrevisable, inescapable" necessities, which God could not even make them otherwise.¹⁰ The problem seems to lie in the decision of the precedence of God's knowledge and God's will. If God's knowledge takes priority, then it is at the expense of divine sovereignty; if God's will takes superiority, then it is unintelligible and has the possibility to be incoherent. This incoherence is exactly what Divine Simplicity rejects, for what God believes equals to what God wills. "It is not as if there were two separate faculties in God, an epistemic faculty and a volitional faculty."¹¹ (1) and (2) are, in fact two forms of one sentence. God's knowledge is God's creative activity, so the problem ceases to exist. Moreover, it follows from the Doctrine of Simplicity that non-divine necessary beings are simply God's thoughts. God's thoughts are not distinct from God. God's sovereignty, however, ranges only over the created realm. If God's thoughts—the abstract objects—are not distinct from God, then surely they do not fall under the range of divine sovereignty. Whether God could freely change or annihilate the existence of mathematical objects does not threaten God's sovereign power in any possible sense, either.

Next, we shall examine the version of DC without simplicity—Theistic Conceptual Realism (TCR). Welty firstly suggested the idea that God's thoughts function as abstract objects in the created level.¹² His model starts from the fundamental idea of divine aseity, that God is totally self-sufficient and independent from anything else. Then Welty accepts that God is necessarily omniscient. God has perfect self—knowledge of his power and knowledge of his will. "Because of the divine aseity, God's knowledge of himself – of his power and of his will – is not knowledge obtained from creatures. It is completely independent of and prior to creatures." Since God's knowledge is independent of creation, that it does not depend on anything distinct from God, then the thoughts as a manifestation of divine knowledge

¹⁰ Mann, (1989: p89).

¹¹ Ibid, p92.

¹² Welty, (2000: p42).

could function as abstract objects for the created world. God's thoughts and human thoughts are different in the way that God's thoughts determine the actual world, but ours do not.¹³ We have argued that if God could not annihilate the number 2 or choose not to create it, it would pose a threat to divine sovereignty, but this problem would not arise in this case. Numbers are thoughts of God, they are not distinct from God but *parts* of God.¹⁴ Hence "we simply have the unchanging and unchangeable content of God's own self-knowledge."¹⁵ Welty also says that "TCR grounds the existence of abstract objects in the divine aseity, rather than in divine creation,"¹⁶ hence abstract objects are in God's necessary omniscience, instead of God's creaturely beings. Following the same definition of sovereignty that it only ranges over created beings, it is clear to see that mathematical objects are not under the scope of divine sovereignty.

Possible objections and replies

Objection 1: One might still ask, even though we accept that the reason God could not *make* $2 + 2 = 5$ is that this is God's knowledge, that this is what God believes. It seems problematic that God cannot *believe* $2 + 2 = 5$. How is this sovereign?

Reply 1: First of all, it is important to reiterate the range of divine sovereignty that it only applies to God's creation, not God's own self. Therefore, it is not the problem of sovereignty that God could not believe in a different statement than God does now (the problem would arise in the next objection). Moreover, Welty suggests that "it would be strange to say that God would be more sovereign if only he could choose to disbelieve a necessary truth."¹⁷ It is not the case that if some being could freely believe a wrong statement, then that very being is more sovereign than God. Omniscience should be considered as a virtue, not a vice to God's nature. Lastly,

¹³ This paragraph briefly summarizes Welty's model of TCR, from page 43-50.

¹⁴ Philosophers and theologians differ on their opinion towards the Doctrine of Divine Simplicity, one certainly has good grounds to reject it (but it is not the aim of this essay to discuss the plausibility of the Doctrine of Divine Simplicity), and this is exactly what Welty did. So there is no surprise to see that he thinks thoughts are not distinct but parts of God, that God has parts. Welty gave a couple of reasons to defend this view from Craig in *Do Divine Conceptualist Accounts Fail?* (2019). It is commonly accepted and even necessary, that the Trinity are also parts of God. So why cannot thoughts be parts of God too?

¹⁵ TCR does not violate the sovereignty intuition. Welty, (2000: p59).

¹⁶ Ibid, p61.

¹⁷ Ibid, p59.

Welty thinks that it is even incoherent and absurd to ask, “Why can’t God think differently?”, because we are not explaining God’s nature, and we could not explain God’s very nature either.¹⁸ The reason being that God is ontologically necessary and exist necessarily in itself, God’s existence and nature are just brutal facts, there is simply no explanation of why God believes what God believes instead of other statements whatsoever.

Objection 2: Since God could not have untrue knowledge or disbelieve a necessary truth, God’s will is, and must be perfectly rational. Hence God’s creative actions are under the “constraint” of rational necessity. “God’s freedom in this realm is his rational autonomy, and that the necessary truths and absolute values are the expression of that rational autonomy.”¹⁹ God’s creative power and freedom thus are limited by God’s own knowledge. If God knows that God cannot have made mathematical objects otherwise, then one could perhaps make the claim that God’s wisdom renders him impotent.²⁰

Reply 2: Divine conceptualists like Welty would respond as follows that that part in which God operates under rationality only happens at the divine level, not the created level.²¹ Even God is “impotent” in this sense, that God would not make God’s self believe other than what God already believe, it would not affect God’s sovereignty over his creation, which ought to be the proper definition of sovereignty as we have established at the beginning of this essay. In other words, whether God’s creative power is limited by God’s wisdom would make no difference to the divine sovereignty for us—God’s creations. God is nonetheless the ultimate creator who has total sovereignty over the created world. The problem of God’s sovereignty at the divine level is less than a critical issue for philosophers, as some see it (myself included). If anything, we as philosophers should prefer to preserve God’s omniscience over absolute sovereignty, “this is in part because philosophy is itself a

¹⁸ Welty, (2000: p79).

¹⁹ Mann, (1989: p98).

²⁰ Steve Nadler quotes from Malebranche’s *Traite*, that “His wisdom in a sense renders him impotent... God loves his wisdom more than his work ... because his wisdom prescribes means which most bear the character of his attributes.” Nadler, (1994: p581).

²¹ In his section “It is precisely because nominalism obtains at the divine level that realism obtains at the created level,” Welty agrees with Mann on this point and quotes “logical necessity does not exist for God in some abstract, realist sense, independently of God’s thoughts and constraining God’s thoughts. Logical necessity just is how God thinks.” Mann, (1997: p269).

matter of pursuing knowledge, so that philosophers are led to value omniscience more highly. Were we generals, say, or politicians, our priorities might be quite the opposite.”²²

Although the reply to objection 1 seems plausible, it is indeed strange to say that God would be more sovereign if only he could choose to disbelieve a necessary truth. Still, I think we should not just accept God’s nature as a brutal fact without good reasoning and reject inquiring about God’s nature once and for all. I believe it should not be the time yet, to play the mystical card to claim that God’s nature is just the way it is, and there is nothing else we could know or learn about it. After all, we just argued that philosophers love knowledge so much that we put God’s omniscience over divine sovereignty. It is one issue that proper reasoning is much in need to construct a convincing argument for those who are not religious. It is another that, even if one took the leap of faith, our human rationality still craves explanations for difficult problems. Arguably, one would wish to understand God better by seeking explanations. And this seems to be what God wants, too, for there is little dispute that our rationality, the ability to reason is the greatest gift given by God. One might argue that God has *no* nature, instead of claiming that God has distinct natures, or that his natures are all in one (divine simplicity). However, this should be the topic for another essay and will not be discussed further here.

In conclusion, I think both versions of divine conceptualism provide a coherent answer to the conflict of mathematical truth as necessary beings and God’s sovereignty, by excluding mathematical objects from the created realm and defining sovereignty only to the range of creation. Abstract objects like numbers and logical truth are necessarily true but yet they are grounded in God. God is indisputably the absolute creator but nonetheless could not make necessary truth otherwise. The solution to the conflict is to argue that abstract objects are, in fact thoughts of God, that they are divine conceptions. God, on the other hand, is incapable of changing God’s own thoughts, because God has perfect knowledge of God’s self, and consequently the knowledge of creation. In addition, God’s inability to believe

²² Stanford Encyclopedia of Philosophy, Divine Providence, 3.

otherwise is not a threat to God's sovereignty, as God is distinct from creation, and sovereignty only ranges over the created realm. The reason that both versions are all qualified as a resolution is that the Doctrine of Divine Simplicity is not the centre of the conflict. With or without divine simplicity, God's thoughts are distinct from God's creation. Thus, they do not fall under the scope of divine sovereignty. One might freely choose either version depending on their attitude towards the Doctrine of Divine Simplicity. Regardless of whichever side they find themselves on, they could successfully escape the dilemma of preserving both God's ability to create ex nihilo and the necessary existence of mathematical objects.

Reference

--Bueno, O. (Fall 2020 Edition). "Nominalism in the Philosophy of Mathematics", *The Stanford Encyclopedia of Philosophy* Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2020/entries/nominalism-mathematics/>.

--Craig, W.L. (2017). Fictionalism, in *God and Abstract Objects*. Springer, Cham. https://doi-org.ezproxy.st-andrews.ac.uk/10.1007/978-3-319-55384-9_7

--Davidson, M. (Fall 2019 Edition). "God and Other Necessary Beings", *The Stanford Encyclopedia of Philosophy* Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2019/entries/god-necessary-being/>.

--Freeman, D. (2022). A Belief Expressionist Explanation of Divine Conceptualist Mathematics. *Metaphysica*, 23(1), 15-26. <https://doi.org/10.1515/mp-2021-0011>

--Mann, W. E. (1989). Modality, Morality, and God. *Noûs*, 23(1), 83–99. <https://doi.org/10.2307/2215830>

--McCann, H J. and Johnson, D M. (Spring 2017 Edition). "Divine Providence", *The Stanford Encyclopedia of Philosophy* Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2017/entries/providence-divine/>.

--Morris, T. V. (1985). Necessary Beings. *Mind*, 94(374), 263–272.

<http://www.jstor.org/stable/2254751>

--Morris, T. V., & Menzel, C. (1986). Absolute Creation. *American Philosophical Quarterly*, 23(4), 353–362. <http://www.jstor.org/stable/20014160>

--Nadler, S. (1994). “Choosing a Theodicy” in The Leibniz-Malebranche-Arnould Connection in *Journal of the History of Ideas*, 55(4), 573–589. University of Pennsylvania Press.

--Plantinga, A. (1980). *Does God Have a Nature?*, Milwaukee: Marquette University Press.

--Psalm 89: 11 in *New Revised Standard Version of the Bible*.

--Welty, G. (2019). Do Divine Conceptualist Accounts Fail? A Response to Chapter 5 of God over All in *Philosophia Christi*, Vol. 21, No. 2, 1-10.

--Welty, G. (2000). An Examination of Theistic Conceptual Realism as an Alternative to Theistic Activism. (Thesis for the M.Phil.) 1-86.