Aquinas and Us

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Edited by

Timothy Kearns,
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INTRODUCTION

TIMOTHY KEARNS

When we read and study philosophical authors, we cannot help but receive their thought, in a broad sense. But in what does such a reception truly consist? How are Aquinas' readers, especially those who disagree with him, truly to receive his thought without distorting it? How are Aquinas' followers to receive his thought without making him become simply what they want him to be? *Aquinas and Us* explores these questions from three primary directions, by giving an example history of Aquinas' reception on a key doctrine, by articulating what a true reception of his thought in two key areas would need to do, and by outlining three ways of deploying a thorough understanding of Aquinas for the sake of solving contemporary philosophical problems. This is volume eighteen in the Cambridge Scholars Publishing series *Proceedings of the Society for Medieval Logic and Metaphysics*, chiefly focused on analytic metaphysics and philosophy of mind.

First, as an example of how Aquinas' doctrines have been received, Paul Clavier details how contemporary philosophers and theologians have interpreted Aquinas' doctrine of creation out of nothing. More than just an example of a key doctrine, however, what Clavier outlines reveals the deep relevance of Aquinas' account of creation out of nothing for ongoing debates about a wide variety of questions, from cosmology to metaphysics, from logic to theology.

Second, the question of how to make a true reception of Aquinas' thought is directly taken up by Gyula Klima and Therese Cory on Aquinas' metaphysics and philosophical anthropology, respectively. Klima argues that we must begin by receiving Aquinas' semantics and logic on its own terms before we can understand his metaphysics, even the much of interest doctrine of hylomorphism, in the best way. Cory traces the lines of what makes Aquinas' account of human nature distinctive and argues that any reception of him on this must be founded on his central insights of humankind both as a unity and as mediating between spiritual and material

worlds. To what extent Klima and Cory have succeeded is addressed in replies by Turner C. Nevitt and Daniel D. De Haan, Nevitt arguing that Klima has assumed too much and De Haan arguing that Cory has been so general as to lose the distinctiveness of Aquinas' theory.

Third, papers on local motion, self-awareness, and the powers of the soul address these topics in ways that intersect with key modern debates in natural philosophy and philosophy of mind. These three areas (motion, self, and powers of soul) are of central importance for contemporary Thomists because, in the case of motion, Aquinas' account of motion, based on Aristotle's old cosmology, leaves many unanswered questions about how to interpret his views in a modern scientific context; likewise, Aquinas' accounts of self-awareness and the powers of the soul are subjects of key debates on the viability of a hylomorphic account of the human soul, one increasingly of interest to analytic philosophers for its ability to find a middle way between dualism and physicalism. Regarding motion, Timothy Kearns outlines how Aquinas' account of local motion, central to his whole cosmology and philosophy of nature, can be interpreted in light of modern scientific accounts. Kearns shows how to make sense of natural and violent motion in contemporary physics as well as how to see that the principle of inertia follows from Thomistic accounts of natural body and causality. In his reply, John Brungardt challenges Kearns's presentation on whether it combines a Thomistic account of local motion with modern results in a way that is faithful to both traditions. As to self-awareness, Matthew Glaser shows how Aquinas' account of human self-awareness can be meaningfully interpreted on the analogy of information processing—and on this he is arguing against those who claim that the Thomistic account ends up failing to say how any human could ever be aware of himself at all. Emma Emrich considers Aquinas on the soul's powers in light of medieval and modern objections to his account; in particular, her piece brings to light a neglected doctrine of Aquinas, that the powers of the soul have an intermediate place between substance and accidents. As it turns out, Emrich argues, far from being vague or merely metaphorical on the powers, Aquinas is able to say precisely what he means in Aristotelian terms.

These contributions help set up the next stages of research on Aquinas by combining historical, philosophical, and methodological approaches in new ways. But note that the stage they set is not just one of further debates over given doctrines. Here included are explicit discussions of what makes a reception of a doctrine to be a genuine *receiving*, a question that directs us beyond mere texts to the philosophical problems that we ourselves face and how we can use the work of medieval authors to address them.

As noted in the Acknowledgements above, this volume is intended, at least informally, as a companion piece to *The Oxford Handbook of the Reception of Aquinas* (in which two of these articles appeared) furthering some of these debates through critiques and author's replies and beyond them opening new areas of exploration.

THE CONTEMPORARY RECEPTION OF AQUINAS' CONCEPTION OF CREATION OUT OF NOTHING (COCOON)

PAUL CLAVIER

Introduction

Aquinas' conception of creation out of nothing (hereafter c.o.c.o.o.n.) rests on four major claims. 1. The phrase "ex nihilo" does not mean, as literally, "out of nothing", but "not out of anything." 2. Creation does not refer to any movement or change in any state of affairs; it is purely relational (as opposed to the more intuitive transitional account, i.e. the view that creation is a transition from one state to another). 3. Creation does not occur in time, for the temporal dimension is itself created. 4. Creation is continuous, not in the sense that God continuously creates, but the creatures steadily depend on God's timeless operation. Those aspects are of course interrelated and play a crucial role in different contemporary debates. Many of them, above all the relational and timeless accounts of creation, have until recently been attacked or advocated: Aquinas' c.o.c.o.o.n. still deserves attention and comments, as has been recently emphasized (Anderson G., Bockmuehl M., eds, 2017, Soars 2020).

To a large extent, Aquinas' c.o.c.o.o.n. consists in demythologizing the "making" of the universe, and carefully defining the clause ex nihilo. Nothingness should not be considered as a primitive state of affairs modified by God's creative operation. Following Aquinas, we have to abandon the transitional view of creation out of nothing, since the making involved in creation is not a change. For if it were a change, it would require a substratum that is undergoing change. But in creation, there is no substratum:

> In creation, through which the whole substance of things is brought about, we cannot admit that one and the same thing was first in a state and then in another state, except from the point of view of our understanding, just like we understand that something first did not wholly exist and then existed (*in creatione, per quam producitur tota substantia rerum, non potest accipi*

> *aliquid idem aliter se habens nunc et prius, ni si secundum intellectum, sic ut si intelligatur aliqua res prius non fuisse totaliter, et postea esse*) (*ST* Ia, Q. 45, art. 2, Resp. ad 2).

Aquinas' c.o.c.o.o.n emphasizes the autonomy of the creatural, notwithstanding its ontological dependence. Aquinas admits of a closure of the physical world under natural causality and a metaphysical dependence on God's operation as first supernatural cause. The relational account proves to be relevant in disentangling the metaphysical c.o.c.o.o.n. from physical cosmology: "Inquiring into this origin of things is not up to the physicist (*ad naturalem philosophum*), but to the metaphysician (*ad primum philosophum*)" (*SCG* II, 37).

In the following, we will examine the reception of Aquinas' c.o.c.o.o.n by some of the most influential scholars of the last 80 years. In section 1 of the paper, we will inquire into the reception of Aquinas' claim that creation ex nihilo is "Not out of anything" in Geach, McCabe, and others. In section 2, we will then evoke Aquinas' relational c.o.c.o.o.n., revisited by Sertillanges, before considering, in section 3, how Aquinas' denial of God's "real" relation to the world has been criticized and defended. We will then follow, in section 4, Kretzmann: the essential guide to Aquinas' c.o.c.o.o.n. In section 5, we will be concerned with the debate on continuous creation: the threat of occasionalism. Finally, in section 6, we will consider the reception of Aquinas' c.o.c.o.o.n. and its relation to Big Bang cosmology.

1. 'Not out of anything': Geach, McCabe and others

In a chapter of *God and the Soul* (Geach 1969) devoted to "Causality and Creation", Peter Geach analyzes creation in terms of agent causation. Let *x* be an agent, *y* an object, A some predicate and *p* a proposition. Geach suggests we may express causal agency through: "*x caused y to be an A*" or "*x brought it about that p*" (For instance: "Phidias caused the block of marble to be of human form" or "Phidias brought it about that the block of marble had human form"). But, of course, in the case of creation out of nothing, there is no block of marble, there is no preceding stuff, neither temporally, nor logically (as a necessary condition); there is nothing presupposed to God's creative action.

Geach intends "to show the difference between *God's creating an A* and *God's making something to be an A* - something presupposed to his action". In both cases, God brings about that *x* is an A, but there are two different ways in which we may insert an existential quantifier to bind the "*x*" in "God

brought it about that *x* is an A". The first way (1) is: God brought it about that (∃*x*) (*x* is an A). And the second way (2) is: (∃*x*) (God brought it about that *x* is an A). Clearly proposition (2) "implies that God makes into an A some entity presupposed to his action". Therefore Geach expresses "the supposition of God's creating an A by conjoining (1) with the negation of (2)". So that "God created an A" = $_{\text{Def.}}$ (God brought it about that (∃*x*) (*x* is an A) & ~ (∃*x*) (God brought it about that *x* is an A)).

This echoes perfectly Aquinas' view on the phrase "ex nihilo". In Geach's view, it dismisses apparent difficulties arising 'from illicit manipulations of the word "nothing" in "made out of nothing", but, he adds, "the idea of creation does not require that such manipulation should be legitimate". "Nothing" is not "the stuff we are made of" (Geach 1969: 83). Creation out of nothing is to be conceived in terms of creation not out of anything, which is precisely meant by the clause: ~ (∃*x*) (God brought it about that *x* is an A).

The same point is made in contemporary protestant theology (a few years earlier!): "Creation 'out of nothing' does not mean that there once was a 'NOTHING' out of which God created the world, a formlessness, a chaos, a primal darkness. This idea of creation as the shaping of formless matter, is the content of all creation myths. God is conditioned by nothing, not even a 'NOTHING'. He is self-determining" (Brunner 1964: 9-10). Similarly, A.H. Strong says this: "Creation is not 'production out of nothing', as if 'nothing' were a substance out of which 'something' could be formed. The phrase is a philosophical one for which there is no Scriptural warrant" (Strong 1967: 372). On the same line of reasoning, James F. Ross denies the false assumption that '*x* creates *y*' entails 'there was a time when *y* did not exist' (Ross 1980: 620). "The actual world," Ross writes, "is made actual not after a state of mere possibility but *instead* of being merely possible" (Ross 1980: 621); and "relative to God, it is not true that the Cosmos began after not being but only that it 'has been' instead of not being" (Ross 1980: 622). The question of whether creation out of nothing is a Biblical claim or at least an implicit requirement (see Copan: 1996) is not our concern, since Aquinas himself claims that the fact "that there be creation is not only held by faith but also demonstrated by reason" (*quod creationem esse, non tantum fides tenet, sed etiam ratio demonstrat*) (*Super Sententiis*, Lib. II, dist. 1, art. 2, Respondeo). As also recently remarked, "the theory of *creatio ex nihilo* does not mean that being was called into existence 'out of non-being', but that the Creator is the cause of everything that is – form, matter, properties, and substance – and that nothing exists apart from Him that did not come from Him" (Maryniarczyk 2016: 240).

In the same vein, the Dominican Herbert McCabe (1926-2001) elaborates on Aquinas' c.o.c.o.o.n.:

> So creation is making, but not making out of anything. When X is created there is not anything that is changed into X. Creation is *ex nihilo* (not out of anything). Creation, then, is not a change in anything; there was nothing to be changed. There was nothing to suffer an alteration when things were created, and similarly it does not make any difference to a thing that it is created. A created giraffe is just the same as a giraffe. Being created does not add any difference to being a giraffe (McCabe 2013 [1980]: 389).

McCabe underlines that this relationship is not real in the creator, that is, that it makes all the difference for the creatures (their very existence) whereas "being creator does not add anything to him". As he puts it in *God and Evil*, "what we say about the world compels us to make certain statements about God, but no statement about God entails any statement about the world" (McCabe 2010 [1957]: 68).

Following McCabe's understanding of Aquinas' c.o.c.o.o.n, creation does not make changes; therefore, it is neither an active nor a passive power, and it allows the things to be themselves in their reciprocal relationships. No traces of God's creative act are to be found in the creatures. Like Sertillanges (see below), McCabe develops the paradox that creatures are "prior" to creation, which is of course counterintuitive. Nevertheless, creatures can be said to be "prior" to creation itself, just as a substance is prior to its accidents. But, of course, when considering that creatures are causally dependent, creation can be said to be "prior" to creatures. According to McCabe, this relationship between creatures (which could have been nothing, not just "potential" to the world) and God (who cannot not be) is what creation is: "It is clear how far away we are by now from the original idea of making" (McCabe 1980: 388). And, like Sertillanges (again below), McCabe emphasizes that any creature is both dependent and autonomous.

Commenting on McCabe, Manni summarizes:

> In God there is not a real relationship with the universe, whereas there is a real one in the universe. Therefore, it cannot be assumed that the universe can be 'added' to God to make a set of two. From this concept comes the disproof of dualism according to which there are two 'things' (two comparable ways of being), God and the universe; and also comes the disproof of pantheism according to which God is the 'organism' and the particular beings are just its 'organs': in other words that only one 'thing' (the universe) exists but that it is self-animated and self-sufficient. This

doctrine of creation, instead, tells us that only one 'thing' exists, true, but it is not self-sufficient (Manni 2017: 94-95).

2. Aquinas' relational c.o.c.o.o.n. revisited by Sertillanges

The French Dominican Antonin-Dalmace(-Gilbert) Sertillanges (1863-1948) defines creation exclusively in terms of a relationship, specifically "a unilateral relationship of dependence, and nothing else" (Sertillanges 1945: 46). Obviously, Sertillanges is following Aquinas here: "In the creature, creation is nothing but a relation to the creator, as to the principle of its being (*creatio in creatura non sit nisi relatio quaedam ad Creatorem, ut ad principium sui esse*)." (*ST* I, q. 45, a. 3). Therefore, Sertillanges rephrases the definition of creation, focusing on the created being. "Creation," he says, "is the very being of the creatures, as depending on God." Sertillanges considers this amazing fact and wonders: "Very strange situation indeed! . . . [A]ctually, the world exists prior to its own creation" (Sertillanges 1945: 56). Clearly, Sertillanges assumes that Aquinas' c.o.c.o.o.n. not only implies the epistemic priority of the relata to the relation but suggests their ontological priority as well. Sertillanges further unpacks this seemingly absurd account of creation: "In order to be in relation to God, the creature has first to exist. If this relationship is what we call creation, then creation comes after the creature, in the order of existence." He adds: "Truly, the world is upside down!" Are we to understand that being at all is a necessary condition for being created? Sertillanges makes the point more precisely:

> The act of creating is not one for which we have the least analogy. The effect-world does not depend on the creative cause like the effects that are familiar to us depend on the secondary causes. For the sake of our understanding, we put this upside-down world the right way up. The order of the notions is: God, God's action, and finally the being of the world. . . . But God's action . . . has not to deal with nothingness, as if God would fertilize it and so beget something out of nothing: such a conception is purely imaginative. . . . Thus God's action has to join the very being, and then this being must be preceding, although it is described as an effect. As Aquinas puts it: "In creation, what is not does not play the role of a recipient of divine action, but what is created does" (*in creatione, non ens non se habet ut recipiens divinam actionem, sed id quod creatum*) (*De Pot.* Q. III, art. 3, ad 1m). This entails that the above considered order (1. God, 2. God's action, 3. the being of the world) is not the true one, according to the ontological state of affairs; it is but a way of conceiving proper to our acquaintance with human production. (Sertillanges 1945: 44-45 and 46-47)

Sertillanges then focuses on the existential and functional autonomy of the creature. The relational c.o.c.o.o.n. provides the creature with a kind of being in itself.

> The creature is nothing by itself, but not in itself. On the other hand, creation is pure relationship, and unilateral relationship of dependence as for the actuality of beings—whatever may be the conceptual correlations that we cannot help supposing—and this establishes the creature in its most perfect existential and functional autonomy. Obviously not, of course, in front of God or against God, but in virtue of God, given that creation, as we have defined it, leaves to the created being some kind of priority over its own creation. In two words, we shall say that creation is a relationship of dependence; dependence, of course, but as relationship alone, relationship alone, surely, but relationship of dependence as for existence. (Sertillanges 1945: 59-60).

The whole book (which has yet to be translated into English) is worth being quoted. Consider the following *bon mot*: "Due to God, everything is as if there were no God." (Sertillanges 1945: 61). Sertillanges's rediscovery of Aquinas' account of creation in terms of ontological dependence reconciles createdness with autonomy. And it is noteworthy that §36 of the Second Vatican Council's Pastoral Constitution on the Church in the Modern World, *Gaudium et Spes*, contrasts "autonomy" and "independence" in a way very similar to what Sertillanges had anticipated. As he puts it: "God has the power to create autonomies and to posit them" (Sertillanges 1945: 90). But this emphasis on the autonomy of creatures has to be qualified. As explained in the technical comments to his translation of Aquinas' *De creatione*:

> It may sound strange that the creature precedes the creation *as to* being; but this is the case, for every relationship presupposes its *relata*. But I have not said that the creature precedes the creation *in* being, as if it could first exist and then be endowed with the attribute of being created. This would be absurd (Sertillanges 1963: 186-187).

Aquinas' c.o.c.o.o.n. in terms of the unilateral relationship of the creature to the creator continues to feed contemporary discussion.

3. Aquinas' denial of God's "real" relation to the world criticized and defended

Because of divine simplicity and immutability, creation as a relation of ontological dependency is said by Aquinas to be real from the point of view

of the creature, but only rational from the point of view of God. As James F. Ross puts it:

> to create *is* to *effect* the *being* of other things, entirely realized in the created being and not in alterations in its source. "To be created by" is a real dependence relation; "to create" is an *explanatory relation* realized in the being of the creature, and is *not* a *transaction* (like event causation) that needs further explanation (Ross 1980: 626).

Since Whitehead and Hartshorne, Aquinas' denial of God's real relation to the world has received severe criticisms, mainly but not only from open theists. Those criticisms have been renewed and logically clarified in the line of Arthur Prior's tensed logic (Pike 1970). But it has also received support elsewhere (Geach 1972, Kretzmann 1999, Stump 2003), even if Craig accuses most defenders of softening or betraying Aquinas' doctrine (Craig 2000).

As noticed by Earl Muller: "It is common to find Thomas censured because he held that there is not a real relation between God and the world" (Muller 1995: 694). The claim that there is not a real relation between God and the world has inspired (sometimes a little hasty) reactions of despite or outraged accusations of indifference: What! the Maker of Heavens and Earth does not really mind the world? Among others, Charles Hartshorne (1897-2000) has defended "divine relativity", against the so-called Mesopotamian impassibility ascribed by Whitehead to classical theism:

> If, then, God is wholly absolute, a term but never a subject of relations, it follows that God does not know or love or will us, his creatures. At most we can say only that we are known, loved, and willed by him. . . . Does this strange combination of words mean anything, even if we suppose them addressed to deity? (Hartshorne 1948: 16).

Moreover, Hartshorne denies it is possible "that everything in God is necessary, including his knowledge that this world exists, unless the world is in the same sense necessary and there is no contingency whatever" (Hartshorne 1948:14). Of course, this is a complete denial of what Aquinas suggests:

> Knowledge relates to things as they are in the knower, will relates to things as they are in themselves. Now all other things exist necessarily as they exist in God, but they have no inherent absolute necessity. So, God knows necessarily whatever he knows; but he does not will necessarily whatever he wills (*ST*, I Q19 art 3, ad 6).

This is a traditional reproach by open theists: a timeless God that makes the world exist out of nothing cannot be really engaged in a relation to the creatures.

Peter Geach (Geach 1972) has renewed the debate far beyond theological spheres. Considering the well-known thesis that "the relations of God to the creatures are not 'real'", he regrets that "real relation" is "a systematically misleading expression . . . for of course we cannot suppose that among the relations that *there are*, only certain ones are *real*" (Geach 1972: 318). Since "God governs providentially the world" and "The world is providentially governed by God" are logically equivalent, we are led to suppose that they are equally true. Both are true, even if, on Aquinas' account, only the second predicates a "real" relation. According to Geach,

> those true propositions about God which seem to involve a change in him . . . are traditionally explained away as involving a 'real' change only in creatures, not in God. . . . God's becoming Creator or Lord of a new creature involves a 'real' change only in the created world, not in God (Geach 1972: 322-23).

Geach does not deny that this conception may raise severe difficulties as regards divine knowledge or will. But in his view, they are not unsurpassable. Actually, Geach borrows from Elizabeth Anscombe the concept of practical (non-observational) knowledge, arguing that "the practical knowledge by which God controls the world may be regarded as eternal and unchangeable" (Geach 1972: 372).

Let us consider once more the doctrine, rephrased as clearly as possible by John Yates:

> Creation . . . actively considered is only a logical relation. The divine power is God himself. When God creates, he does nothing else than to be God. The being of creating is not posited in God as though it were God plus something else . . . . That God creates, and conserves, makes an absolute difference to the creature and no difference to God. This is not a mere corollary of the relationship of creation but its very essence. (Yates 1990: 181)

In order to clarify the debate, Muller recalls that relations as such "indicate only a reference to something". In real relations, the reference lies in the very nature of things (*in ipsa natura rerum*), whereas in rational relations, it is to be found only in our rational understanding (*in ipsa apprehensio rationis*). According to Aquinas, "God does not make creatures because his nature compels him to do so, but by mind and will, . . . that is why in God there is no real relation to creatures" (*non enim producit creaturas ex*

necessitate suae naturae, sed per intellectum et voluntatem, et ideo in Deo non est realis relatio ad creaturas). On the other hand, "in the creatures, this is a real relation to God, because . . . it is inherent to the nature of creatures that they depend on God" (*sed in creaturis est realis relatio ad Deum, quia* […] *in earum natura est quod dependeant a Deo*) (*ST* I Q. 28, art 1. ad 3).

From divine simplicity it follows that God and God's creative power (that is God's mind and will) are identically the same. We then lack the three terms that are necessary to build up a real relation: a subject, a foundation, a term (e.g. father, generation, child). There is nothing distinct from God which serves as the foundation of God's relation with the world. But from the point of view of the creature, the creature and God will be the subject and term of the relationship, and the creature's dependency on God's creative power will be the foundation for the relationship. As Earl Muller puts it: "This dependency is not to be identified in the same way with the creature as God's power is to be identified with God" (Muller 1995: 676-678). The asymmetrical relation of God to the world (real on the side of the creature, rational on the side of God) does not impoverish Aquinas' c.o.c.o.o.n. On the contrary, it emphasizes the unilateral dependency of the creature on the creator. We cannot ascribe operations to God except by separating God and God's power or operation or will. But this separation is pure *apprehensio rationis*, not a reality grounded in God. By denying that God's relation to the world is real, Aquinas does not undermine his c.o.c.o.o.n. On the contrary, he emphasizes both the functional autonomy of the creature and its radical ontological dependence.

Craig marvels (and deplores) that "according to Aquinas, while the temporal world does have the real relation of *being sustained by God*, God does not have a real relation of *sustaining the temporal world*" (Craig 2000: 97). Thus, Craig outlines what he calls the "Implausibility of the No Real Relation Doctrine". He intends to defeat this doctrine as absurd "wholly apart from the problematic notions of God's essence being identical with His act of being and of God's simplicity" (Craig 2000: 98). But Aquinas' denial of God's real relation to the world entirely depends on those notions. And, in his discussion, Craig implies that creation is a causing event, whereas Aquinas' account of creation is that it is not a causal process. Craig's diagnosis is this:

> The question, then, is whether our predicating of God at the moment of creation the relational property of sustaining the world is merely conceptual or ascribes a real property to Him. "Sustaining" clearly describes a relation

> which is founded on something's intrinsic properties concerning its causal activity, and therefore sustaining the world ought to be regarded as a real property acquired by God at the moment of creation. I must confess that I find Aquinas' position, that this property is not really possessed by God, but that the relevant real, relational property is being sustained by God, which is possessed by the world, to be quite incredible (Craig 2000: 99).

To put it briefly, in Craig's view, "Thomism denies that God is literally the cause of the world, though the world is the effect of God — which seems contradictory or meaningless" (Craig 2000: 101). By the way, Craig finally concedes that this doctrine, linked with the doctrine of divine simplicity and timelessness (if God is simple, he has no temporal parts), could be advocated following the B-theory of time (Craig 2000: 111-112).

4. Kretzmann: the essential guide to Aquinas' c.o.c.o.o.n.

The great merit of Kretzmann's approach is his deep acquaintance with Aquinas' systematic project, at least in *SCG*. While focusing on creation, Kretzmann is not content to pick out some claims from whatever anthology (e.g. the nevertheless very helpful anthology edited by Steven E. Baldner and William E. Carroll, *Aquinas on Creation*, 1997), he steadily bears in mind Aquinas' epistemic framework and therefore is able to explain throughout the "relational account" of c.o.c.o.o.n. for Aquinas. Kretzmann recalls that, following Aquinas, God is known to us:

> [1] through negation, as when we call God eternal [i.e. beginningless, endless, timeless] or infinite [i.e. limitless]; or also [2] through a relation he has to other things, as when he is called the first cause, or the highest good. For as regards God, we cannot grasp what he is, but rather [1] what he is not, and [2] how other things are disposed relative to him (*SCG* I.30.278).

This introduces Aquinas' "relational method", which completes the eliminative method (*via remotionis*). This method

> is intended to support the expansion of philosophically justified language about God to include not only negative propositions or fundamentally negative technical terms, but also affirmations involving terms we apply primarily to ordinary things—adjectives such as 'living' and 'good', nouns such as 'intellect' and 'will' (Kretzmann 1997: 144).

When considering Aquinas' "relational account" of creation out of nothing, we must remember not to conceive of creation as a real relation in itself, nor as a making that we could ascribe to God, nor as something that happens to

Him, but just "how other things are related to God". Kretzmann equally notices that:

> All talk of God's power or, for that matter, God's action is justified only to the extent to which it aids our attempt to acquire some provisional, analogical understanding of the absolutely simple nature that we cannot understand as such. Ontologically speaking, God's power, like any other conceptually distinguishable aspect of God's nature, must be really identical with God's substance (or essence), since "in things whose powers are not their substances, the powers themselves are in the categories of accident (*sunt accidentia*)". (Kretzmann 1999: 44)

Kretzmann notes that "since in God there is no real (but only a conceptual) distinction between his power (to produce other things) and his activity (of producing other things), power is attributable to him not as the immediate source of his activity (and thereby the more remote source of its effects) but simply as the source of the effect" (Kretzmann 1999: 46). Kretzmann elaborates on this and provides a serene interpretation of the so often despised doctrine of the unreality of the creative relation in God:

> Obviously, the producer, considered just as such, can neither be nor be understood without things he produces. And then the issue in this argument is whether or not being the producer of created things is essential to being God, an aspect of God's substance. If being the creator is an aspect of God's substance, then God could not be without being the creator, or be understood without being understood as the creator. But if God's substance does include God's being the creator, then, since God's being the creator obviously does depend on there being created things, "God's substance would have to be dependent on something else, extrinsic to it"—dependent on there being something or other besides God—which is absurd.
>
> To drive home the absurdity of that sub-conclusion, Aquinas goes on to conclude this argument by referring to a part of what I consider to be the strongest argument for God's existence in Book I: 'And in that case God's substance would not be necessary being through itself (*per seipsum necesse esse*), as it was shown to be in the first book [in 15.124]. Therefore, relations of this sort are not in God really'. (Kretzmann 1999: 50)

As seen above, this shocking claim that God has only a rational (vs. real) relation to the created world has very often been mocked as heartless intellectualism and scholastic contempt for createdness. Kretzmann recalls that the whole issue is a concern of terminology: "A's having a real relation to B is equivalent to A's being metaphysically dependent on B" (Kretzmann 1999: 51). Since many open theists would like to say that God depends on his creature, therefore they insist that God has a real relation to the world.

Kretzmann carefully notes that Aquinas very often states that God is for some/many things the cause of their being but that Aquinas treats separately the universal scope of creation. This is how Kretzmann summarizes Chapter 15's fifth argument for the universality of God's production:

> Every existent being is either contingent or necessary; the ultimate source of the existence of contingent beings is itself non-contingent, or necessary; every necessary being is either caused or uncaused; the ultimate source of the existence of caused necessary beings (and thereby of contingent beings) is itself an uncaused necessary being; there can be only one such being; and that is God (Kretzmann 1999: 57).

Aquinas means that it is theoretically impossible for the series of dependent explanatory beings to be beginningless, even if Aquinas sometimes expressly supports the theoretical possibility of a regress that is infinite, as he says, only accidentally (*per accidens*). Kretzmann explains how the nature of God's role as the universal source and cause of being may be construed in terms of the ultimate explanation of the existence of a series S, that can be defined a beginningless series of dependent beings all of which are brought into existence by earlier dependent beings (Kretzmann 1999: 60). This presupposes that it makes sense "to ask what explains S's sempiternality, its beginningless, continuous, operational ongoingness" (Kretzmann 1999: 61). Borrowing Rowe's terminology of "essentially ordered causes", Kretzmann shows how Aquinas' argument succeeds, by excluding the brute-fact alternative (Kretzmann 1999: 65), and assuming a weak form of the PSR (principle of sufficient reason): "every existing thing that considered on its own is disposed to either existing or not existing has a reason for its existence . . . in the causal efficacy of some other beings" (Kretzmann 1999: 66).

That God is the producer of everything else was established in *SCG* II, 15, which Aquinas himself entitled "God is for all things the cause of being". Kretzmann puts forth: "The causal claim isn't merely 'God is for all things the cause'. If it were, there would be no good reason not to read it simply and broadly as 'God is the cause of all things'. That God is for all things the cause of being is a narrower, and immeasurably stronger, claim." Kretzmann illustrates the point with a comparison:

> When you make a salad, you are the (efficient) cause of the salad. And since without you that particular salad would not have been, it might seem right, if a little stilted, to say that you are for that salad the cause of being. But putting it that way exaggerates your role, which might be described more accurately as your being for that salad a cause of being (Kretzmann 1999: 71-72).

By the way, Kretzmann suggests that we are never *per se* causes of being. By contrast, he emphasizes the scope of God's creative activity:

> If in that context we take seriously the thesis that God is for all things the cause of being, that God's productive action is the ultimate explanation of the existence of whatever else exists, artificial as well as natural, then we are supposing that God's productive action is the cause of being for (at least) all the primordial stuff of the universe and the dispositions natural to that stuff (the natural laws), and that God is in that way (at least) the cause of being for everything other than God (Kretzmann 1999: 73).

Kretzmann is thus establishing a strong conceptual link between creation of everything and creation "out of non-antecedent matter". Therefore he speaks of "Creation as doubly universal production" (Title of chapter 3, Kretzmann 1999: 70). Kretzmann draws attention on the first sentence of *SCG*, II, 16: "Now on that basis it is apparent that God has produced things as regards their being out of no pre-existing [subject], as out of matter" (*deus res in esse produxit ex nullo praeexistente sicut ex materia*). Commenting on this, he writes: "God's production of things is (A) distributively universal and (B) intrinsically universal. God is (A) for all things (B) the cause of being" (Kretzmann 1999: 77). It is because everything owes its existence to God that creation is "the emanation of the whole of being (*totius entis*) from the universal cause, which is God" (*ST* Ia. Q. 45, art. 1, resp.).

Further, Kretzmann shows how "to produce something as regards its being without antecedent matter" does not contradict the ENNF principle (*Ex Nihilo Nihil Fit*), which remains valid for particular agents. According to Kretzmann, "we're inclined to read ENNF simply as 'nothing from nothing', and when it's read that way, it seems not at all to conflict with creation ex nihilo, just because although what is created is something, it's from God" (Kretzmann 1999: 86). The reader will appreciate the very precise points made by Kretzmann in his meticulous reading of *SCG* II (Kretzmann 1999: 88, n153) which no doubt will remain for long the essential contemporary guide to Aquinas' c.o.c.o.o.n. Note that a parallel and very valuable analysis of Aquinas' *Summa Contra Gentiles* has been written in French by Cyrille Michon, who also translated the two first books of *SCG* (Michon 1999) and published an anthology entitled *Aquinas and the controversy on the eternity of the world* (Michon 2004).

5. The debate on continuous creation: the threat of occasionalism

Aquinas formulates *creatio continua* in the following terms: "The conservation of things by God does not occur through some new action, but through the continuation of the action by which he gives existence" (*ST* I, Q. 104, art. 1, ad 4). Obviously, if God acts timelessly, the very notion of continuation of his action is pointless. It is then helpful to disambiguate the phrase "continuous creation". God does not *go on* creating. As emphasized by Sertillanges:

> God creates timelessly, by an action that is not to be distinguished of Himself. Only some being in time is likely to continue. . . . Creation is a timeless act . . . and within the creature it is mere relational, in itself timeless. . . . Creation does not continue; things continue and creation brings about their duration as well (Sertillanges 1945: 74, 162-163).

The concept of continuous creation does not make God's action depend upon the duration of creatures. As Philip Quinn puts it:

> For God to create or conserve an individual at an instant is merely for him at that instant to bring about the existence of the individual at the instant . . . Seen in this light, the question of whether the cosmos of contingent things was introduced into existence *ex nihilo* after a period of time when nothing contingent existed becomes relatively unimportant for theistic orthodoxy (1983: 70).

Again, Harry Frankfurt puts, in a chapter entitled "Continuous creation, ontological inertia and the Discontinuity of Time":

> Created things, besides owing to God their creation, owe to Him at each moment the continuation of their existence as well. They could no more endure without God than they could begin to exist without Him (Frankfurt 1999: 55).

There is a claim that the thesis of continuous creation is likely to entail disastrous consequences for a theistic worldview. According to Timothy Miller: "Continuous creation is subject to two serious objections: first, that it is incompatible with the persistence of created things, and second, that it is incompatible with secondary causation" (Miller 2011:3). Continuous creation is suspected of potentially leading to occasionalism.

> When God (continuously) creates or sustains substances, it *seems* He must create them in determinate ways, with all their modes or features; but that suggests that causal responsibility for all their features rests solely with God,

> leaving nothing over for creatures to contribute" (Pessin 2000: 418, emphasis added).

Nevertheless, Andrew Pessin claims that:

> Continuous creation—that God sustains all substances—can lead to occasionalism, but only when supplemented with two premises: (i) that God explicitly wills all determinate modes and (ii) that there is no overdetermination (Pessin 2000: 433).

Addressing this problem, Alfredo Freddoso considers Suarez's attempt to show that God's causal contribution to effects occurring in the ordinary course of nature goes beyond His merely conserving created substances along with their active and passive causal powers. In doing that, Freddoso steadily relies on Aquinas' conceptual framework (Freddoso 1991). Freddoso revisits Aquinas' account of creation, conservation, and secondary causality in three texts:

> God Himself is properly the cause in all things of the *esse* itself, taken in general—which is more intimate to things than anything else; it follows that God operates intimately in all things. And it is because of this that in Sacred Scripture the operations of nature are attributed to God as operating in nature. (*ST* I, q. 105, a. 5, resp.)

The primary thing in all effects is the *esse*; for all other things are certain determinations of it. Therefore, *esse* is the proper effect of the primary agent, and all other agents affect it insofar as they act in the power of the primary agent. By contrast, secondary agents, which, as it were, particularize and determine the primary agent's action, produce as their own proper effects the further perfections that serve to determine the *esse*. (*SCG* III, 66)

> Instances of the causing of being-taken-absolutely [*ens absolute*] are traced back to the first universal cause, whereas the causing of the other things which are added to the *esse*, or by which the *esse* is made specific, pertains to the secondary causes, which act by informing—presupposing, as it were, the universal cause's effect. And from this it follows . . . that nothing gives *esse* except insofar as there exists in it a participation in the divine power. (*De Potentia Dei*, q. 3, a. 1, resp.)

Yet, as emphasized by Freddoso, Aquinas explicitly denies that an effect produced jointly by God and creatures is a conjunction of two independently produced *per se* effects:

> It is not the case that the same effect is attributed to a natural cause and to the divine power in such a way that it is effected partly, as it were, by God and

> partly by the secondary cause. Rather, the whole is effected by both of them according to different modes—just as the same effect is attributed as a whole to the instrument and also as a whole to the principal agent (*SCG* III 70) (Freddoso 1994: 147-148).

Inquiring into the nature of creation ex nihilo, by commenting on *SCG* II, 17-19, Freddoso carefully underlines some similarities to ordinary efficient causality: 1. Creation involves action, i.e., the communication of an effect by an agent; and 2. creation involves the communication of *esse*. But Freddoso also stresses differences from ordinary efficient causality: 1. Creation involves no patient and so is not a change—either a qualified (accidental) change or an unqualified (substantial) change; 2. creation is both (i) instantaneous and (ii) such that no causal processes lead up to it; and 3. creation involves the giving of *esse*-as-such (i.e., *esse* "from the bottom up" or, better, "from the top down") and not just such-*esse* (form). According to Freddoso, here lies "the heart of the doctrine of creation: Necessarily, for any entity *x* distinct from God, God gives *x esse*-as-such at every moment *x* exists; that is, God gives *esse* to *x* and to all its accidents and parts and components (including primary matter if applicable) at every moment at which *x* exists" (Freddoso, courses).

6. The reception of Aquinas' c.o.c.o.o.n. as regards Big Bang cosmology

An important tenet of Aquinas, related to the timeless and relational c.o.c.o.o.n., is the epistemic status of a temporally finite world:

> It is only by faith that we hold that the world has not everlastingly existed (*mundum non semper fuisse, sola fide tenetur, et demonstrative probari non potest*) . . . that the world has begun to exist is an object of faith, not of science or demonstration (*mundum incoepisse est credibile, non autem scibile vel demonstrabile*) (*ST*, Ia, Q. 46, art 2, resp.).

In other words, "God is prior to the world only in nature, not in duration" (*Deus prior mundo natura tantum*, non *duratione*) (*ST*, Ia, Q. 46, art. 1, ad 8).

Interestingly enough, this tenet has revealed itself to be still perfectly relevant as regards some interpretations of Big Bang cosmology. Surely, we do not need to preserve the hypothesis of an eternal world, since modern cosmology provides us with a temporal beginning of the universe. But this would not be fair, for standard models of Big Bang cosmology just favor a finite duration of our observable universe *a parte ante*. Even according to

views like Borde, Guth, and Vilenkin, arguing that "inflationary space-times are incomplete in past directions" (Borde, Guth, and Vilenkin 2003), a finite duration of the universe does not *entail* that it succeeds to nothingness. For nothingness precludes a spatio-temporal framework; "it" cannot precede any state of affairs. Contemporary physics does not provide us with the claim that it has an absolute beginning out of nothing. As Georges Lemaître (1894-1966), founder of the Big-Bang theory, put it:

> Physically it is a beginning in the sense that if something has happened before, it has no observable influence on the behaviour of our universe. . . . The question if it was really a beginning or rather a creation, something starting from nothing, is a philosophical question which cannot be settled by physical or astronomical considerations (Lemaître: 1985 [1938]).

And, in 1958: "Such a theory remains completely outside the field of religious and metaphysical issues. It leaves the materialist free to deny any transcendent being" (Lemaître 1958: 7). In a 1963 lecture, unpublished until 2007, Lemaître writes: "I might have shown to you that the hypothesis of the primaeval atom is the antithesis of a supernatural creation" (Lemaître 2007 [1963]: 210-212). And, in his last interview:

> The problem of creation should retain its complete metaphysical meaning, the meaning of the dependence of every being, of ourselves. . . . The problem of creation should be completely disentangled from that of cosmogony. . . . Physics and astronomy do not exhaust the whole reality (Lemaître 1966: 160).

Contrary to Lemaître, the famous address of Pope Pius XII to the Pontifical Academy of Sciences (*Un'ora di letizia serena*… 22nd November 1951) seems to deny the Thomistic position of Lemaître, which is scientifically agnostic as regards the absolute beginning of the universe. In a first move of the talk, Pius XII is encouraging a concordist interpretation of modern cosmology:

> Indeed, it seems that the science of today, by going back in one leap millions of centuries, has succeeded in being a witness to that primordial Fiat Lux, when, out of nothing, there burst forth with matter a sea of light and radiation, while the particles of chemical elements split and reunited in millions of galaxies (Pius XII: 1951).

But in a second move, more cautious and less enthusiastic, a scientific "absolute proof" of creation in time is denied, and the sphere of the natural sciences is carefully distinguished from that of metaphysics and revelation:

> It is true that the facts verified up to now are not arguments of absolute proof of creation in time as are those which are drawn from metaphysics and revelation, in so far as they concern creation in its widest sense, and from revelation alone in so far as they concern creation in time. The facts pertinent to natural sciences, to which we have referred, still wait for further investigation and confirmation, and theories founded upon them have need of new developments and proofs, in order to offer a secure basis to a line of reasoning which is, of itself, outside the sphere of the natural sciences. (Pius XII: 1951)

Creation is a concern of metaphysics, not of science, and creation in time a matter of revelation alone: this is Thomistic orthodoxy and, by the way, the voice of prudence.

On the other side, William Lane Craig has been campaigning for the renewal of the "kalâm cosmological argument" (Craig 1979), inferring creation from the finite past duration of the universe. This argument is inspired by the Christian John Philoponus (6th century) and his mediaeval Islamic followers, notoriously Al Kindi (10th century) and Al Gazhali (12th century). The argument runs as follows: (1) Whatever begins to exist has a cause of its existence. (2) The universe began to exist. (3) Therefore, the universe has a cause of its existence.

Following Craig, premise (1) is supported by the "metaphysical intuition that something cannot come into being from nothing". As regards premise (2), Craig considers it is easily granted: "That the universe is a thing which began to exist becomes all the more obvious in light of modern cosmology" (Craig 1992: 235). Unfortunately for Craig, no serious cosmological theory is able to state absolutely: once there was nothing, then the universe began to exist. And, as noted above, even the incompleteness of inflationary space-times in past directions does not provide us with Craig's premise (2). Anyway, Craig also undertakes to support that premise (2) by conceptual considerations: (4) An actual infinite cannot exist. (5) An infinite temporal regress of events is an actual infinite. (6) Therefore, an infinite temporal regress of events cannot exist. And, in order to support this additional premise (4): (7) A collection formed by successive addition cannot be an actual infinite. (8) The temporal series of past events is a collection formed by successive addition. (9) Therefore, the temporal series of past events cannot be actually infinite (Craig 1979: 103, Oppy 1991: 189-190). Contrarily, on Thomistic lines, the phrase "after nothing" (*post nihil*) has no meaning at all. Against Bonaventura, who claims that, "on the side of the product, production out of nothing posits being after non-being (*productio ex nihilo ponit esse post non esse ex parte producti*)" (Bonaventura 1886:

259a), Aquinas argues that nothingness cannot be involved in timely relations (*De Pot*. Quaest. III, art. 1, ad 7m).

Other scholars have preferred to present an inductive argument to the beginning of the universe. Richard Swinburne denies that a universe endowed with an infinite past, or an infinite succession of bouncing universes, is logically impossible. To this extent, he shares Aquinas' agnosticism as regard the past duration of the universe. But he nevertheless states that an infinite past duration, although logically possible, turns out to be highly improbable (Swinburne 1996). Ironically, the same kind of argument is suggested by J. L. Mackie, Swinburne's atheist challenger, who admits: "If each thing were impermanent, it would be the most improbable good luck if the overlapping sequence kept up through infinite time" (Mackie 1982: 89).

Aquinas' philosophical agnosticism as regards the duration of the physical universe remains a cautious warning against hasty inferences from cosmology to metaphysics. Since there is no physics of nothingness, since we cannot infer the non-existence of the physical universe from any state of affairs, we can stick to Maxwell's advice: "Science is incompetent to reason upon creation of matter out of nothing", which is properly a Thomistic doctrine, and a sensible recommendation. Aquinas' timeless and relational c.o.c.o.o.n. has turned into a smart butterfly, and still has a great future ahead of it.

Suggested Reading

Kretzmann (1999), Stump (2003), Soars (2020).

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