

Creatio ex nihilo and the eternity of the world in Aquinas and Avicenna

*Creatio ex nihilo y la eternidad del mundo en
Tomás de Aquino y Avicenna*

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RESUMEN

Contrario a la tesis de algunos físicos contemporáneos, según la cual existe una cierta incompatibilidad entre creación y eternidad del mundo (hipótesis presupuesta, por ejemplo, en la teoría de los multiversos), el presente trabajo de investigación analiza el concepto de creación que usan santo Tomás de Aquino y Avicenna, a fin de distinguir entre creación y mutación. Para lograr esto hago dos cosas: por un lado, distingo entre estas dos nociones, a fin de esclarecer en qué sentido toda creación es *ex nihilo*; por otro lado, discuto la compatibilidad entre creación y eternidad, particularmente en santo Tomás de Aquino, quien sostiene que la eternidad no implica necesariamente negar la creación.

Palabras clave: creación, causalidad, pruebas de la existencia de Dios, mutación o movimiento

ABSTRACT

Contrary to the claim of some contemporary physicists, according to which there is a certain incompatibility between creation and the eternity of the world (hypothesis assumed, for example, in the theory of multiverses), the present paper analyzes Aquinas and Avicenna's concept of creation in order to distinguish it from the concept of motion. To achieve this I do two things: first, I distinguish between these two concepts in order to clarify in which sense all creation is *ex nihilo*; then, I discuss the compatibility between creation and the eternity of the world, particularly in Saint Thomas Aquinas, who claims that eternity does not necessarily imply the rejection of creation.

Keywords: creation, causality, God's existence proof, motion

Introduction

One of the main problems with modern physics is the reduction of the study of reality in terms of the pair “action-reaction”, that pretends to replace the notion of causality. Having this in mind, some modern physicists claim that there is no need of God as a first cause. It is clear that not all physicists affirm this, but it is also easy to see that some of them set aside the existence of causality in order to prevent the notion of “creation”. By avoiding “causality” and, in consequence, “creation”, they believe that science and rational knowledge prove that there is no need for any kind of supreme being that gives being to all the things in the world.

Some modern cosmologies sustain that the world does not need a specific beginning. I am not referring to those who support that the Big Bang theory clearly manifests the belief in a particular beginning of the universe¹. I mean those who support the theory of multiverse, a theory that makes of our universe something irrelevant. For those who claim this, our universe is only one of the infinite possibilities of universes. In that way, our universe does not have any particularity or relevance: is just another one. If the world had been created, it would have a particular beginning; but, according to these modern physicists, the world cannot be created, because there is no particular beginning. Our universe is only one of the infinite possibilities, and that means that there is no space for creation.

Furthermore, the theory of multiple universes also maintains not only that there is no special or particular beginning of the world, but also that the whole multiple universes could not have a beginning. That, in philosophy, and also in theology, is what is known as eternity, a thesis which seems to be also contrary to creation. If the universe does not have any particular beginning, then it is possible to state that the universe is eternal, which implies, according to these modern physicists, that there is no room for creation. This notion of creation, however, fails to understand the difference between motion and creation, a difference that is essential to understand Aquinas and Avicennas approach.

In this paper my intention is not to answer directly to those physicists, but to make clear what is creation according to Thomas Aquinas and Avicenna –two medieval philosophers who try to solve this issue–, and why it is not true that

¹ Hawking, for example, sustain that if there is no boundaries in the universe, then there is no need for a particular beginning of the universe and no place for a creation. Without a singularity there is no need for creation. (see: HAWKING, S., *A Brief History of Time*, New York: Bantam Books, 1998, chap. 8). For a further and more detailed discussion about this, see also: SOLER-GIL, F. J., *Lo divino y lo humano en el universo de Stephen Hawking*, Madrid: Ediciones Cristiandad, 2008.

there is an incompatibility between creation and the hypothesis of eternity. To reach this goal, I divide this paper in two parts. The first one deals with the distinction between motion and creation, in order to make it clear what is creation and why creation must be *ex nihilo*. In the second part of this paper, I discuss the compatibility of creation with eternity, especially in Thomas Aquinas, who holds that an eternal world is not equivalent to an uncreated world.

1. Are creation and motion the same thing?

When we experience the world, we see that there are many things that did not exist originally and only later came to be. This coming into being, as Elders notes, is something that claims the existence of a cause, because nothing comes from nothing². According to Thomas Aquinas, it is not possible to find a thing in the world that is the cause of its own being, because the cause precedes the effect, and it is impossible for a caused being to precede itself³. To understand this affirmation we must have in mind that a cause is “a thing from which something proceeds in such a way that the being of what proceeds is dependent on it”⁴. A cause is something from which something else comes into being, and, in that way, without the cause, the effect does not come into being.

Everything that comes into being must have an efficient cause, and this, according to Thomas Aquinas, implies that there must be a first cause among the efficient causes. If the efficient causes go on to infinite, it would be impossible for something to exist⁵. “For whatever does not belong to a thing as such to it through some cause, as white to man; that which has no cause is primary and immediate, so that it must needs be through itself and as such”⁶. In this way, everything that comes into being has its cause in something whose being has no cause. “Therefore, it is necessary that all beings, except God, are not their own being, but beings by participation, and, hence, it is necessary that all beings, which are more or less perfect because of the different ways of participation, are caused by a First Being that is completely perfect”⁷. And this First Being that is entirely perfect, for Aquinas, can only be God.

² Cf. ELDERS, L. S.V.D., *The Metaphysics of Being of St. Thomas Aquinas in a Historical Perspective*, Leiden: E.J. Brill. 1993, p. 279.

³ Cf. *S.Th.*, I, q.2, a.3, corpus.

⁴ ELDERS, L. S.V.D., *The Metaphysics of Being of St. Thomas Aquinas...*, p. 270.

⁵ Cf. *S.Th.*, I, q.2, a.3, corpus.

⁶ *Summa Contra Gentiles*, Bk. II, Ch.15.

⁷ *S.Th.*, I, q.44, a.1, corpus.

This affirmation can be also sustained if we take Avicenna's distinction between necessary and possible beings. For Avicenna, all being is necessary, but necessity can be in two different ways. Among beings "there will be one which, when considered in itself, its existence would be not necessary. It is [moreover] clear that its existence would also not be impossible, since otherwise it would not enter existence. This thing is within the bound of possibility. There will also be among them that which, when considered in itself, its existence would be necessary"⁸. The beings, whose existence is only possible, are necessary only in virtue of another being; while the second kind of being is necessary in itself. That which is necessary existent in itself, according to this, has no cause, because "if in His existence the Necessary Existent were to have a cause, his existence would be by [that cause]"⁹, and whatever exists by something else, considered by itself, is only possible, but not necessary. And this Necessary Existent, for Avicenna, but also for Thomas Aquinas, can only be God¹⁰.

Only a Necessary Being can be the ultimate cause of existence, and, because of that, possible or contingent beings participate of his existence¹¹. The existence and nonexistence of a possible being, according to Avicenna and, by his influence, to Aquinas, are both due to a cause. "[This is] because, if it comes into existence, then existence, as distinct from nonexistence, would have occurred to it. [Similarly,] if it ceases to exist, the nonexistence, as distinct from existence, would have occurred to it"¹². The existence of a possible or contingent being can only become necessary through a cause, and this causality can only come from God. "[The possible in itself] must become ne-

⁸ AVICENNA, *The Metaphysics of the Healing*, translation by Michael E. Marmura, Utah: Brigham Young University Press, 2005. Bk. I, Ch. 6, 1. This work will be abbreviated *Ilahiyyat* in the notes.

⁹ *Ilahiyyat*, Bk. I, Ch. 6, 3.

¹⁰ It is important to mention that, for Avicenna, every being has existence and an essence – a distinction that is also important in order to understand Aquinas' thesis that angels and God are radically different. The essence and the existence can be unified, as it occurs in the case of God, or can be separated, as it happens in contingent beings. The being in which essence and existence are unified, is a being in itself, while the rest of the beings, in which essence and existence are not unified, can only exist through another whose existence is necessary. "In other words, the contingent beings are products of the divine creation or, in a more precisely sense, they have emanate from God". LOPEZ-FARJEAT, L. X., "Avicena", in FERNÁNDEZ, F.; MERCADO, J. A. (Eds.), *Philosophica: Enciclopedia filosófica on line*, URL: <http://www.philosophica.info/archivo/2009/voces/avicena/Avicena.html>, revised the 10 of November of 2011, 15:00.

¹¹ According to the *Summa Contra Gentiles*, Bk. II, Ch. 15: "Moreover, the cause of everything said to be such and such by way of participation is that which is said to be so by virtue of its essence. Thus, fire is the cause of all hot things as such. But God is being by His own essence, because He is the very act of being. Every other being, however, is a being by participation. For that being which is its own act of being can be one only, as was shown in Book I. God, therefore, is the cause of being to all other things".

¹² *Ilahiyyat*, Bk. I, Ch. 6, 4.

cessary through a cause and with respect to it. For, if it were not necessary, then with the existence of the cause and with respect to it, it would [still] be possible. It would then be possible for it to exist or not to exist, being specified with neither of the two states"¹³.

For Avicenna and Aquinas, the Necessary Being, as the ultimate cause of being, is more perfect than its effect: not only because his existence does not depend of another, but also because it is the only Being that causes the existence of the other possible beings. For this reason, the causality of the Necessary Being cannot be the same kind of causality of all created beings¹⁴. If everything that is imperfect is caused by something that is perfect in its genera, and everything that have either the possibility of existing or not is imperfect, then "is necessary that everything, according to all that is in it, comes from the first and perfect being"¹⁵. In the words of Avicenna:

By agent [we mean] the cause which bestows an existence that is other than itself. In other words, it would not in itself, by a primary intention, be a receptacle of that which acquires from it the existence of something that is informed by it-whereby it would possess in itself the existence [of the former]-except accidentally. Notwithstanding this, it is necessary that that existence should not be for the sake [of the agent] by way of its being an agent, but, if inevitably so, then through some other consideration. This is because the metaphysical philosophers do not mean by "agent" only the principle of motion, as the naturalists mean, but the principle and giver of existence, as in the case of God with respect to the world¹⁶.

Creation, that is the name of this kind of causality¹⁷, is not motion, since creation is "the on-going causing of the complete reality of all that exists. Were God's not causing all that is to exist, in whatever way or ways things are, there would be nothing at all"¹⁸. Creation and motion are not the same: first, because

¹³ *Ilahiyyat*, Bk. I, Ch. 6, 6.

¹⁴ According to Thomas Aquinas: "Moreover, to act only by motion and change is incompatible with the universal cause of being; for, by motion and change a being is not made from absolute non-being, but this being from this non-being. Yet, as was shown, God is the universal principle of being. Therefore, to act only by motion or by change is contrary to His nature. Neither, then, is it proper to Him to need pre-existing matter in order to make something". *Summa Contra Gentiles*, Bk. II, Ch. 16.

¹⁵ *In II Sent* d1, q.1, a.2, corpus.

¹⁶ *Ilahiyyat*, Bk. VI, Ch. 1, 2.

¹⁷ Cf. *S.Th.* I, q. 45, a. 1, corpus.

¹⁸ CARROLL, W. E., "Thomas Aquinas on Aristotle, the Eternity of the World, and the Doctrine of Creation", in VELÁZQUEZ, H. (Comp.), *Tomás de Aquino. Comentarador de Aristóteles*, México: Universidad Panamericana, 2010, p. 25. Avicenna was the first in notice that motion is not the same as creation, the former is only causality as in physics, but not in the order of being, as in proper metaphysics. This is clear when he said that: "As far as issues related to physics are concerned, this is the efficient principle; however, when the efficient principle

creation does not presuppose pre-existence of something of the creature before the act of creation (not even matter as with Plato's Demiurge); and second, because in the created thing the "not being" is before "being"¹⁹. From the first thing follows that motion, according to Aristotle's philosophy of nature, presupposes the existence of something else other than its efficient cause. For example, in a substantial change, "that is the coming into-being and the perishing of things: the substantial form disappears to be replaced by a different form"²⁰, it is presupposed the existence of primary matter that still remains while the substance change. Every kind of motion, substantial or accidental, is a kind of transition from one state into another in which we can distinguish "(a) the subject which changes; (b) the point of departure of a movement (*terminus a quo*); (c) the destination to be reached (*terminus ad quem*); (d) change itself, that is the actual passing from one state to another"²¹. And, in this sense, every kind of motion presupposes the existence of the main subject of change²².

On the contrary, to create means to produce the whole subsisting thing, and not only a change of form²³. For Avicenna, this also means that the efficient causality requires to be continuous, something that we cannot see in motion: "The cause of [the error] of the one who thinks that the son [as the effect] continues to exist [independently of a cause] after the father [as the cause], that the building continues to exist after the builder [has built it], and that the warmth continues to exist after the fire [is removed] is a confusion resulting

is not concerned with issues of physics, but, instead, with existence itself, the sense is more general than this one, where whatever is a cause of some separate existence is essentially as such separate and as such that existence" (AVICENNA, *The Physics of the Healing*, translation by Jon McGinnis, Utah: Brigham Young University Press, 2009, Bk. I, Ch. 10; this work will be abbreviated *Tabi'iyat* in the notes). This distinction is fundamental to understand not only Avicenna's theory of efficient causality, but Aquinas' doctrine of creation. To study this influence of Avicenna in Aquinas doctrine of creation see also: MARMURA, M. E., "The Metaphysics of Efficient Causality in Avicenna (Ibn Sina)", in MARMURA, M. E. (Ed.), *Islamic Theology and Philosophy*, Albany: Suny Press, 1984, pp. 172-187; and MCGINNIS, J., *Avicenna*, Oxford: Oxford University Press, 2010, pp. 149-208.

¹⁹ *In II Sent* d1, q.1, a.2, corpus.

²⁰ ELDERS, L. S.V.D., *The Philosophy of Nature of St. Thomas Aquinas: Nature, the Universe, Man*, Frankfurt: Peter Lang, 1997, p. 76.

²¹ ELDERS, L. S.V.D., *The Philosophy of Nature...*, p. 75.

²² Cf. *Summa Contra Gentiles*, Bk. II, Ch. 18: "Furthermore, motion or change must precede that which results there from; for in the being of the made lies the beginning of rest and the term of motion. Every change, then, must be a motion or a terminus of motion, which is successive. And for this reason, what is being made is not; because so long as the motion endures, something is coming to be, and is not; whereas in the very terminal point of motion, wherein rest begins, a thing no longer is coming to be; it is. In creation, however, this is impossible. For, if creation preceded its product, as do motion or change, then some subject would have to be prior to it; and this is contrary to the nature of creation. Creation, therefore, is neither a motion nor a change".

²³ Cf. *Summa Contra Gentiles*, Bk. II, Ch. 16.

from the ignorance of the true nature of the cause]”²⁴. The father, for example, is only the cause of the movement of the sperm, but not of the existence of his child²⁵. This means that for Avicenna, the true causes coexist with the effect, in way that if we remove the cause, we must remove the effect.

Efficient causality not only implies that creation does not need anything pre-existing, but also that in the creature, “not-being” is before “being”. On this second implication, the priority of “not-being” over “being” is not a priority in time, that is to say: creation does not imply a specific moment in time. In other words, we can be in a created universe that does not have a temporal origin²⁶: the priority of “not-being” over “being” is not in time, but in nature. The created being only has being by the influence of a superior cause²⁷. To understand this, then...

...we must consider not only the emanation of a particular being from a particular agent, but also the emanation of all being from the universal cause, which is God; and this emanation we designate by the name of creation. Now what proceeds by particular emanation, is not presupposed to that emanation; as when man is generated, he was not before, but man is made from “not-man”; and white from “not-white”. Hence, if the emanation of the whole universal being from the first principle be considered, it is impossible that any being should be presupposed before this emanation. For nothing is the same as no-being. Therefore as the generation of man is from the “not-being” which is “not-man”, so creation, which is the emanation of all being, is from the “not-being”, which is “nothing”²⁸.

The distinction between motion and creation, for Avicenna and Aquinas, suggests not only a different efficient causality between physics and metaphysics, but also that we can provide a rational proof of creation, even if the world does not have a particular beginning. Motion, according to Avicenna, “does not maintain the one thing in one state”²⁹ – a son can still maintain his being even if the father disappears; but the essential causes of existence must exist together with his effect. What prevents a thing to collapse into nonexistence, “It is the one that gives complete existence to the thing. This, then, is the meaning that, for the philosophers, is termed “creation”. It is the giving of existence to a thing after absolute nonexistence”³⁰.

²⁴ *Ilahiyyat*, Bk. VI, Ch. 2, 1.

²⁵ Cf. *Ilahiyyat*, Bk. VI, Ch. 2, 3.

²⁶ About this, Carroll states that: “Creation is not a motion, and thus the initial coming-into-existence of the world –its creation- could mean that there is an absolute beginning of motion, and hence of time, a beginning which is not the result of another motion, but of creation”. CARROLL, W. E., “Thomas Aquinas on Aristotle...”, p. 28.

²⁷ Cf. *In II Sent* d1, q.1, a.2, corpus.

²⁸ S.Th. I, q. 45, a. 1, corpus.

²⁹ *Ilahiyyat*, Bk. VI, Ch. 2, 8.

³⁰ *Ilahiyyat*, Bk. VI, Ch. 2, 9.

2. Creation, First causality, and the eternity of the world

Creation, according to Avicenna and Aquinas' doctrines of creation, and against the theory of the multiple universes –which try to eliminate the doctrine of creation through the postulation of some sort of eternity-, does not mean that the created being necessarily requires a particular beginning. For Aquinas, faith reveals that the world is not eternal, but “From his earliest to his last writings on creation, Thomas maintains that it is possible for there to be an eternal, created universe”³¹. Besides God, nothing can exist since eternity, this is what faith states; but by reason we can defend the possibility of an eternal world. “We only know that the world had not always existed by faith, and that it cannot be rigorously demonstrated, following what we said before above the mystery of the Trinity (q. 32, a. 1). The reason of this is that the newness of the world cannot be demonstrated from the world itself”³².

Considering the infinite power of God (*potentiam ipsius infinitam*), Aquinas claims that He can create something that exists always³³. In this sense, there is no incompatibility between creation and eternity: something can be created and also exist always. To create something is to give its entire being to that thing, and, in this way, creation only can be possible if it is *ex nihilio*. If creation were motion, it would demand the preexistence of something: in motion, nothing can change if there is nothing before; there must be a subject that receives the change. On the contrary, creation, at the same time that does not require a preexisting matter or subject, is not necessarily related to a temporal beginning. “God is a cause that produce its effect, no through motion, but instantly. Then it is not necessary that He precedes his effect in duration”³⁴. Motion presupposes that from nothing, nothing comes; but creation “is not a <<change>> that constitute a mutation in a proper sense”³⁵.

³¹ CARROLL, W. E., “Thomas Aquinas on Aristotle...”, p. 19.

³² S.Th. I, q. 46, a. 2, corpus.

³³ *De aeternitate mundi*.

³⁴ *De aeternitate mundi*. Let's see the latin version: “sed Deus est causa producens effectum suum non per motum, sed subito: ergo non est necessarium quod duration praecedat effectum suum”.

³⁵ *In II Sent* d1, q.1, a.2, Respondo 2.

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