## Ex Nihilo and Post Nihil:

## **Time and Creation in Thomas Aquinas**

In 1215 the Fourth Lateran Council solemnly proclaimed that God created all that is, matter and spirit, earth and angels, from nothing [de nihil condidit], and that this creation occurred ab initio temporis. In this, the first conciliar statement on creation, the Council Fathers were especially concerned to reject any form of Manicheanism, in its modern Albigensian version, which would identify matter with evil or speak of more than one absolutely first principle of all that is. Following in the tradition of the Church Fathers, the Council also sought to make clear that there was a temporal beginning to the universe. In 1277, the Bishop of Paris, Etienne Tempier, following the advice of his theologians, issued a list of propositions condemned as heretical, among them the claim that the universe is eternal. Questions concerning creation and the eternity of the world were lively topics throughout the thirteenth century, especially at the new universities. These questions and others were part of a wide-ranging discourse concerning the relationship between the heritage of classical antiquity and Christianity.

Although issues concerning the relationship between reason and faith were not new in the 13<sup>th</sup> Century, the recently translated works of Aristotle provided an arsenal of arguments which appeared at least to be contrary to the truths of Christianity. The authority of Aristotle, whom Dante would call "the master of those who know," made the challenges seem even more formidable. In particular, how is one to reconcile -- or ought one even to try to reconcile -- the claim found throughout the texts of Aristotle, that the world is eternal, with the Christian doctrine of creation, understood, as the Fourth Lateran Council said, to include the notion of the beginning of time? Bishop Tempier and his theologians were especially concerned that members of the arts faculty at the University of Paris were too often addressing subjects (such as creation) which were properly within the domain of theology, and, at worst, were embracing heterodox views. These theologians feared that perhaps too great a reverence for Greek philosophy, and in particular for Aristotle, could have dangerous consequences for Christian belief. Indeed, on several occasions earlier in the century, there were abortive attempts to prohibit the teaching of Aristotelian texts at Paris.

From his earliest to his last writings on the subject, St. Thomas Aquinas maintains that it is possible for there to be an eternal, created universe.<sup>4</sup> Thomas, adhering to the decree of the Fourth Lateran Council and the tradition established by the Church Fathers, believes that

the universe is not eternal. But he thinks that God could have created a universe which is eternal. Although reason affirms the intelligibility of an eternal, created universe, Thomas thought that reason alone leaves unresolved the question of whether or not the universal is eternal. The development by Thomas of an understanding of creation *ex nihilo*, and in particular, his understanding of the possibility of an eternal, created universe, offers, I think, one of the best examples of Thomas's account of the relationship between faith and reason. In fact, his magisterial treatment of the doctrine of creation is one of the enduring accomplishments of the thirteenth century. It is an accomplishment which sets him apart from his predecessors and his contemporaries. It is important to realize that Thomas's predecessors included not only the Church Fathers, such as Augustine, but also Anselm, as well as Muslim and Jewish thinkers such as Avicenna, Averroes, and Maimonides.

There are two distinct, but related, features of Thomas's analysis of creation which are of fundamental importance: first, his understanding of how God's creative act is fully consistent with there being real causes in the natural order -- and hence, consistent with a science of nature and a science of ethics; and second, the distinction he draws between creation understood philosophically and creation understood theologically. It is this latter distinction which enables him to affirm the intelligibility of an eternal created universe, and to argue that, philosophically, time is irrelevant to the notion of creation: thus, for Thomas, creation *ex nihilo* does not have to mean creation *post nihilo*.

For Thomas, an eternal universe does not have to mean, as some, in the Neoplatonic tradition, argued, a necessary universe, a universe which is not the result of the free creative act of God. An eternal, created universe would have no first moment of its existence, but it still would have a cause of its existence. Nor would an eternal universe have to mean a universe somehow equal to God.

What is particularly impressive, as we shall see, is the role Thomas gives to reason in his analysis of creation. Thomas's own teacher, Albert the Great, denied that reason could come to a satisfactory understanding of creation:

It ought to be said that creation is properly a divine work. To us, moreover, it seems to be astounding in that we cannot conclude to it because it is not subject to a demonstration of reason [eo quod non possumus in id, quia non subject demonstrationi rationis]. And so not even the philosophers have known it, unless perchance someone [should have known something] from the sayings of the Prophets. But no one ever investigated it through demonstration [sed per demonstrationem nullus umquam investigavit ipsum]. Albert, II Sent. 1.A.8 (Borgnet, 27.22)<sup>6</sup>

Bonaventure, although he is often mistakenly thought to have claimed that one can demonstrate that the world is temporally finite and *thus* created out of nothing, makes fundamentally the same point, observing that the truth of creation, although "clear to any believer, has nevertheless lain hidden from philosophical wisdom." Where philosophy has failed, Bonaventure notes, Scripture has come to our aid, revealing that "all things have been created and produced into being according to all that they are." Reason does not contradict the faith on this matter; all attempts to show that the world is not created can be shown to be non-demonstrative.

Thomas agrees with Bonaventure that any proposed demonstration that the world is not created fails, but he goes further to claim: "Not only does faith hold that there is creation, but reason also demonstrates it." [Respondeo quod creationem esse non tantum fides tenet, sed etiam ratio demonstrat.]<sup>8</sup> This text is from his Writings on the 'Sentences' of Peter Lombard, composed during the early stages of his career at the University of Paris [1250's]. It is the first of four times in which Thomas addresses the topic of creation in a magisterial way. In his Writings on the 'Sentences', Thomas says: "the meaning of creation includes two things. The first is that it presupposes nothing in the thing which is said to be created . . . . And [second], since the causality of the Creator extends to everything that is in the thing . . . therefore, creation is said to be out of nothing, because nothing uncreated pre-exists creation." In discussing how to understand the priority of non-being to being in the thing which is created, he writes: "This is not a priority of time or of duration, such that what did not exist before does exist later, but a priority of nature, so that, if the created thing is left to itself, it would not exist, because it only has being from the causality of a higher cause." If these two points are sufficient for the meaning of creation, he concludes, then "creation can be demonstrated and in this way philosophers have held [the doctrine of] creation." If the notion of a temporal beginning is added to the meaning of creation, such that "the creature should have non-being prior to being [even] in duration, so that it is said to be 'out of nothing' because it is temporally after nothing," then, Thomas concluded, such a notion of creation cannot be demonstrated and is only held on faith.

Thomas observes that there are two complementary senses of creation out of nothing: one philosophical, the other theological. The philosophical sense means that God, with no material cause, makes all things to exist as beings that are radically different from Himself and yet completely dependent upon His causality. This philosophical sense of creation has two essential elements: 1) there is no material cause in creation -- no 'stuff' whatsoever out of

which God makes the world; and 2) the creature is naturally non-being rather than being, which means that the creature is completely dependent, throughout its entire duration, upon the constant causality of the Creator. This philosophical sense of creation is the sense in which creation out of nothing can be proven by reason alone, according to Thomas. It is also this sense of creation which he thinks Aristotle demonstrates. The theological sense of creation, that sense dependent upon faith, denies nothing of the philosophical sense, and adds to it, among other things, the notion that the created universe has a temporal beginning. This theological sense of creation cannot be proven philosophically; it is known only through revelation.

Thomas does not interpret the expression ex nihilo, as do so many others in the thirteenth century, necessarily to mean that God makes the being of the creature to exist temporally after non-being. In the theological, revealed sense of creation ex nihilo, it is true that the created world has a temporal beginning. But there is nothing in the philosophical sense of creation ex nihilo to indicate that the created world must have a temporal beginning. The analysis of creation which Thomas offers distinguishes him from Albert the Great and Bonaventure, both of whom thought that ex nihilo had to mean post nihil: that is, they thought that if one accepted the notion of creation one had to accept the notion of a temporal beginning of the world. Albert comments that "[w]hen it is said, 'the creature comes to be from nothing,' it is clear that the preposition 'from' indicates an order of duration of that which is nothing to the creature, such that the nothing is a privation of the entire being of a creature, including its duration." Thomas's position distinguishes him, as well, from Henry of Ghent, one of the theologians who helped to compile the list of propositions condemned by Bishop Tempier. 11 Henry was especially critical of Thomas's claim that a universe, created and eternal, was in any sense possible. According to Henry, the "created world can only have being as an effect" if its non-being precedes its being "in temporal duration." Henry has Thomas in mind when he writes: "Thus we must absolutely say that, since a creature, just by the fact that it is a creature, has been made from nothing by God acting voluntarily [voluntarie a Deo de nihilo facta], it cannot exist from eternity on pain of contradiction, because by being posited with no beginning it is posited to get a being for itself that is not acquired from something else or out of not-being [quia eo quod ponitur sine initio, ponitur habere esse sibi non acquisitum ab alio de non esse], while being a creature it is posited that it gets for itself a being acquired from God out of not-being [et per hoc quod est creatura, ponitur sibi a Deo esse acquisitum de non esse]." 12

For Thomas, the theological sense of creation, known fully only through faith, did affirm that *ex nihilo* meant *post nihil*. It is the genius of his analysis, however, that he distinguishes between what faith reveals and what reason concludes about creation. It is his exposition of the philosophical sense of creation which characterizes his special contribution to the debate in the thirteenth century.

A key feature of Thomas' analysis is his understanding that creation is not a change; there is no becoming (*fieri*) that precedes the being of the creature. There is no prior matter, nor any prior passive potentiality, which is transformed or made into the creature. Thomas recognizes a debt to Avicenna who had distinguished between two kinds of agent causes: an agent which acts through motion, and a divine agent which is "a giver of being." Such a divine agent needs only the power to create -- and nothing else. It is true with respect to natural agents that something cannot be produced from nothing; that is, any change requires a prior something to be changed: all change involves a material cause.

Creation *ex nihilo* does not contradict the principles of Aristotelian physics -- or of contemporary physics, for that matter; it does not challenge, for example, the principle that something must always come from something. The principles of the natural sciences concern change and changing things, and creation is not a change; it is the metaphysical dependence of the creature upon the creator for its very existence. The demonstration of creation, to which Thomas refers, occurs in the discipline of metaphysics, not in natural philosophy. The distinction between creation and change appears frequently in the writings of Thomas, as well as in the other major thinkers of the thirteenth century. It is a crucial distinction, perhaps the crucial distinction on which Thomas's analysis depends. It is a distinction which he saw more clearly than his contemporaries. As Thomas remarks in his treatise, *De substantiis separatis* [c. 9]: "Over and above the mode of becoming by which something comes to be through change or motion, there must be a mode of becoming or origin of things without any mutation or motion, through the influx of being."

In his most sophisticated discussion of the intelligibility of an eternal world, *De aeternitate mundi*, <sup>13</sup> Thomas concludes: "Thus it is evident that the statement that something was made by God and nevertheless was never without existence, does not involve any logical contradiction." Neither from the point of view of what it means to be a creature, nor from the point of view of what it means for God to create, can one reach a demonstrative conclusion about the temporal duration of the world. For Thomas it is intelligible to say that something could be made, and completely made, but that the non-being of the thing made not precede temporally the being of the thing made. To say that God creates "out of nothing" is

to recognize that there is no material cause in creation and no restriction of any sort on God's act. On the side of the creature, creation is fundamentally a relation of dependence. The creature is completely dependent upon the creative cause of its existence such that, were God to stop creating, the creature would utterly cease existing. Thus, even if the universe had no temporal beginning, it still would depend upon God for its very being. The radical dependence on God as cause of being is what creation means. The question of a temporal beginning is irrelevant to the fundamental, on-going, metaphysical fact that all creatures are absolutely dependent upon God for their complete existence.

Thomas, of course, believed that the universe had a temporal beginning, but, as he said in the *Summa theologiae* "That the world had a beginning. . . is an object of faith, but not a demonstration or science." The reason he advances here is that the world itself offers no grounds for demonstrating that it had an absolute temporal beginning. "For the principle of demonstration is the essence of a thing;" and every science, since its subjects are universals and not particulars, "abstracts from here and now . . . . Hence it cannot be demonstrated that man or the heavens or a stone did not always exist." <sup>15</sup>

Thomas often referred to those arguments which concluded that the world has an absolute temporal beginning because an eternal world would necessarily involve an actual infinity of some sort or other: either an infinite number of past days, or having to traverse an infinite temporal distance to get from some point infinitely distant in the past to the present. <sup>16</sup> With the exception of arguments about an infinite number of human souls having to exist were the world eternal, he found such arguments involving the impossibility of an actual infinity not particularly compelling when applied to temporal succession. The arguments which he was especially concerned to refute, however, were those which claimed that "to be created" means to have being *after* non-being and that God as agent cause *had* to precede, in some temporal sense, what He creates. As I have already indicated, for Albert, Bonaventure, Henry of Ghent, and others to be created *is* to be something new after not being at all. Or, to express this in another way, a created world must necessarily be a world that has had a temporal beginning. God could not have created an eternal world. And, as we have seen, Thomas did not consider these arguments to be demonstrative.

Each time Thomas comments on the impossibility of demonstrating that the world has a temporal beginning, he observes, as he does in the *Summa theologiae*, that "we do well to keep this in mind; otherwise, if we presumptuously undertake to demonstrate what is of faith, we may introduce arguments that are not strictly conclusive; and this would furnish infidels

with an occasion for scoffing [materiam irridendi], as they would think that we assent to truths of faith on such grounds."

In defending the intelligibility of a universe created and eternal, Thomas would not deny the importance of time in the theological notion of creation. The fact, accepted only in faith, that human beings are creatures in a world that has been brought into being *ab initio temporis* means that we are beings with a story. For believers, this is not merely a story; it is sacred history, the history of our relationship to the God who gave us meaning and destiny from the beginning, who has intervened decisively in human history. For the believer, the temporal beginning, which is essential to salvation history, is fundamental to the understanding of creation. It is a clear revelation of the complete dependence of all that is on God.

Thomas Aquinas offers us, I think, the best of the heritage of the Middle Ages on creation and temporality: philosophically and scientifically – then and now, time is irrelevant to creation; theologically, time is very important to creation. He reminds us, however, as a good theologian should, of the limits of reason with respect to matters of faith. Thomas's analysis provides welcome correction to those in our own day who seek to employ Big Bang cosmology to support the doctrine of creation as well as to those who think that cosmological theories such as quantum tunneling from nothing or various multiverse proposals deny the doctrine of creation.

Thomas's more general claim that faith perfects reason can be seen in his philosophical and theological accounts of creation. No matter how important the philosophical analysis is, Thomas would note that faith adds more than just extra information. In his commentary on Paul's second epistle to the Corinthians, Thomas says: "The knowledge of God which is had by other sciences [other than *sacra doctrina*] enlightens only the intellect, showing that God is the first cause; that He is one and wise, etc. But the knowledge of God had through faith both enlightens the mind and delights the affections, for it not only tells us that God is the first cause, but also that He is our Savior, that He is our Redeemer, that He loves us, that He became incarnate for us, and all this inflames the affections." 17.

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## Ex Nihilo and Post Nihil: Time and Creation in Thomas Aguinas

**Abstract:** The distinction Thomas Aquinas draws between creation understood philosophically and creation understood theologically allows him to argue that an eternal, created universe would not involve any contradictions. Thomas's position differs from that of Albert the Great, Bonaventure, Henry of Ghent, and others, who thought that a created universe had to mean a universe which was temporally finite. Although the temporal finitude of the universe is crucial for the theology, from a philosophical point of view, according to Thomas, time is irrelevant to creation.

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<sup>&</sup>lt;sup>1</sup> "We firmly believe and simply confess that there is only on true God, . . . one origin [principium] of all things: Creator of all things, visible and invisible, spiritual and corporeal; who by His own omnipotent power from the beginning of time [ab initio temporis] all at once made out of nothing [de nihil condidit] both orders of creation, spiritual and corporeal, that is, the angelic and the earthly . . ." Enchirdion Symbolorum 428, ed. Heinrich Denzinger (Freiburg: Herder, 1932), 199.

<sup>&</sup>lt;sup>2</sup> Already on 10 December 1270, Bishop Tempier had condemned thirteen propositions, including that the world is eternal. Roland Hissette, *Enquête sur les 219 articles condamnés à Paris le 7 mars 1277* (Louvain: Publications universitaires; Paris: Vander-Oyez, 1977); Kurt Flasch, *Aufklärung im Mittelalter? Die Verurteilung von 1277: Das Dokument des Bischofs von Paris übersetzt und erklärt* (Mainz: Dieterich, 1989); David Piché, *La condemnation parisienne de 1277: Nouvelle édition du texte latin, traduction, introduction et commentaire* (Paris: J. Vrin, 1999); Luca Bianchi, *L'errore di Aristotele: La polemica contro l'eternità del mondo nel XIII secolo* (Firenze: La Nuova Italia Editrice, 1984); Luca Bianchi, *Il vescovo e i filosofi. La condanna parigiana del 1277 e l'evoluzione dell'Aristotelismo scolastico* (Bergamo: Pierluigi Lubrina Editore, 1990); Luca Bianchi, *Censure et liberté intellectuelle à l'université de Paris (XIII-XIVe siècles)* (Paris: Belles Letres, 1999); Jan Aersten, Kent Emery, Jr., and Andreas Speer (eds.), *Nach der Verurteilung von 1277. Philosophie und Theologie an der Universität von Paris im letzten Viertel des 13. Jahrhunderts*. Miscellanea

Mediaevalia 28 (Berlin/New York: Walter de Gruyter, 2001); Luca Bianchi, "New Perspectives on the Condemnation of 1277 and its Aftermath," Recherches de théologie et philosophie médiévales 70, n. 1 (2003), 206-229; J.M.M.H. Thijssen, Censure and Heresy at the University of Paris 1200-1400 (Philadelphia: University of Pennsylvania Press, 1998); John F. Wippel, "The Condemnations of 1270 and 1277 at Paris," The Journal of Medieval and Renaissance Studies 7 (1977), 169-201; John F. Wippel, Medieval Reactions to the Encounter between Faith and Reason (Milwaukee: Marquette University Press, 1995); John F. Wippel, "Thomas Aquinas and the Condemnation of 1277," Modern Schoolman 72 (1995), 233-272; John F. Wippel, "Bishop Stephen Tempier and Thomas Aquinas: A Separate Process Against Aquinas?" Freiburger Zeitschrift für Philosophie und Theologie 44 (1997), 117-136; John F. Wippel, "David Piché on the Condemnation of 1277: A Critical Study," American Catholic Philosophical Quarterly 75, n. 4 (Fall 2001), 597-624.

<sup>3</sup> In the late twelfth and early thirteenth centuries there was considerable disagreement about the position of Aristotle on the eternity of the world. Not only was there the authority of Maimonides, who denied that Aristotle held that the world is eternal, but there were problems of accurate translations, spurious and ambiguous texts (e.g., from Aristotle's *Topics*), as well as the predisposition to read Aristotle in the "best light," an *expositio* reverentialis, according to which Aristotle could not be construed as having contradicted a fundamental Christian doctrine. See Luca Bianchi, L'errore di Aristotele, op. cit.; Luca Bianchi, L'iniizo dei tempi. Antichità e novità del mondo da Bonaventura a Newton (Firenze: Olschki, 1988); Richard C. Dales, Medieval Discussions of the Eternity of the World (Leiden: E.J. Brill, 1990); and J.N.M. Wissink (ed.), The Eternity of the World in the Thought of Thomas Aquinas and His Contemporaries (Leiden: E. J. Brill, 1990). In all his writings until the late 1260s, Aquinas accepted the position that Aritstotle never claimed to demonstrate that the world is eternal. In commenting on the Physics, Aquinas (perhaps reluctantly) came to the conclusion that Aristotle did hold it to be demonstratively true that the world is eternal; Aquinas corrects Aristotle's arguments.

<sup>&</sup>lt;sup>4</sup> For a discussion of Aquinas' analysis, including a translation and commentary on his first magisterial treatment of creation, see: Steven E. Baldner and William E. Carroll, Aquinas on Creation (Toronto: Pontifical Institute of Mediaeval Studies Press, 1997). John Wippel thinks that only in De aeternitate mundi does Thomas defend explicitly the possibility of an eternally created world. Wippel thinks that in his earlier writings Thomas has only argued that it is not possible to demonstrate that the world is temporally finite or eternal. John F. Wippel, "Did Thomas Aquinas Defend the Possibility of an Eternally Created World? (The De aeterniate mundi Revisited)," Journal of the History of Philosophy, 29:1 (January 1981), 21-37.

<sup>&</sup>lt;sup>5</sup> Post nihil means that the created order has a temporal beginning; it does not mean that there was a time before creation. John Pecham observes that, whereas one might say that the world always existed [mundus semper fuit] since it is coterminous with the whole of time, one cannot say that the world is eternal, in the sense of not having a beginning of time. See Richard C. Dales, Medieval Discussions of the Eternity of the World, 125.

<sup>&</sup>lt;sup>6</sup> For a discussion of Albert's position on creation and the philosophers, especially as it differs from that of Thomas Aquinas, see: Lawrence Dewan, "St. Albert, Creation, and the Philosophers," Laval théologique et philosophique 40:3 (octobre 1984), 295-307. Steven Snyder argues that, later in his career, especially in commenting on Aristotle's Metaphysics and on the Liber de causis, Albert changed his mind and concluded that creation can indeed be demonstrated. Dewan argued against this claim since he thought that for Albert the creation of matter itself cannot be demonstrated and, hence, creation cannot be demonstrated. Steven C. Snyder, "Albert the Great: Creation and the Eternity of the World," in Philosophy and the God of Abraham: Essays in Memoray of James A. Weisheipl, O.P., edited by R. James Long (Toronto: Pontifical Institute of Mediaeval Studies Press, 1991), 191-202.

<sup>&</sup>lt;sup>7</sup> II Sent., dist. 1, p. 1, a. 1, q. 1.

<sup>&</sup>lt;sup>8</sup> In II Sent., dist. 1., q. 1, a. 2.

<sup>&</sup>lt;sup>9</sup> Bonaventure's arguments in this respect proceed from his view that creation must fundamentally be understood as the sort of act which is a change. Creation must be a change, because it is said to be *out of nothing*, ex nihilo. What sense, asks Bonaventure, does it make to affirm that creation is out of nothing, unless a sort of change from nothing to something is meant? If one does not affirm a change, then one must mean that "out of nothing" means that nothing itself is that which is a constituent of a creature, as when I say that a table is made out of wood, I mean that wood is actually now in the table as the cause of the table. We cannot, however, mean that about the creature, for *nothing* is no real principle of anything. We cannot mean that the creature is somehow composed of a principle that is non-being. If, then, we are to affirm that the creature is created out of nothing,

we can *only* indicate some sort of order between nothing and being. To say that the creature is created out of nothing is, for Bonaventure, *necessarily* to say that the creature is created *after* nothing. [*II Sent.*, dist. 1, p. 1, a. 3, q. 1 (resp. and ad 7m)] The sort of supernatural change that creation is does not involve any sort of motion, for only that change which is from some preceding material conditions involves motion, but it is a change that necessarily involves a before and an after.

- <sup>10</sup> Albert, *Summa theologiae*, Pars 2, tr. 1, q. 4 (Borgnet 32: 108a). Steven Snyder thinks that Albert changes his mind on this question as well as on the demonstrability of creation. "Certainly by the time of the *Metaphysics* paraphrase (c. 1265) Albert had determined that 'after' in the description of creation was to be taken logically but not temporally to mean that apart from God's causality things are nothing." Snyder, *op. cit.*, 201. At the end of the section in the paraphrase on the *Metaphysics*, Albert remarks: "even if we the being never began but always was, still it follows that it is from another, and is out of nothing." ["... si etiam supponamus, quod hoc esse numquam incepit, sed semper fuit, nihil minus sequitur ex dictis ipsum et ab alio esse et ex nihilo esse"] Albert, *Metaph.* 5, 1, 3.
- <sup>11</sup> Henry taught at Paris from 1276 to 1292.
- <sup>12</sup> *Quodlibet* I, qq. 7-8. For the Latin text, see: R. Macken, "La temporalité radicale de la créature selon Henri de Gand," *Recherches de théologie ancienne et médiévale* 38 (1971), 211-272.
- <sup>13</sup> Aquinas poses the crucial problem in this way: "The whole question, therefore, comes to this, whether to be created by God according to a thing's entire substance [esse creatum a Deo secundum totam substantiam] and not having a beginning of duration [non habere durationis principium] are mutually repugnant or not."
- <sup>14</sup> De aeternitate mundi, 306. See also *In VIII Phys.*, lect. 1, n. 970. Thomas distinguishes between "eternity" predicated of God, which means non-successive, totally actual existence, with no before or after, and "eternity" as predicted (at least hypothetically) of the universe, which means an unending (and beginningless) duration of time, in which there is succession in terms of before and after.
- <sup>15</sup> Summa theologiae I, q. 46, a. 2. "When we speak of the production of a particular creature, it is possible to gather the reason why it is such and such, from some other creature, or at least from the order of the universe to which every creature is ordained, as part to the form of the whole. But when we speak of the production of the whole universe, we cannot point to any other creature as being the reason why the universe is such and such. Wherefore since neither on the part of the divine power which is infinite, nor of divine goodness which stands not in need of creatures, can a reason be assigned for the particular disposition of the universe: this reason must be found in the mere will of the Creator: so that if it be asked why the heavens are of such and such a size, no other answer can be given except that their maker willed it so." De potentia Dei, q. 3, a. 17.
- <sup>16</sup> Such arguments can be found in William of Baglione and Matthew of Aquasparta; the latter's work comes after Thomas's.
- <sup>17</sup> Super II Cor., cap. 2, lect. 3. "Nam notitia de Deo quae habetur per alias scientias, illuminat intellectum solum, ostendens quod Deus est causa prima, quod est unus et sapiens, et cetera. Sed notitia de Deo quae habetur per fidem et illuminat intellectum et delectat affectum, quia non solum dicit quod Deus est prima causa, sed quod est salvator noster, quod est redemptor, et quod diligit nos, quod est incarnatus pro nobis: quae omnia affectum inflammant."