Creation

Zita V. Toth
King's College London

Abstract

By the time of the early scholastics, the main elements of the Christian doctrine of creation had crystallised: God brought the world into being from nothing; God created everything, all at once; and creation happened in the beginning of time. While none of these claims were contested by early scholastic authors, there was greater disagreement on how precisely to understand them, how they are related to one another, and whether they can be philosophically defended against alternative views, such as Plato's and Aristotle's. This chapter focuses on these core issues as they were developed by Stephen Langton, Philip the Chancellor, William of Auvergne, Alexander of Hales and the *Summa Halesiana*, and Roland of Cremona; with some occasional appearances from Alan of Lille, Hugh of St Cher, and others. As will be seen, when fleshing out some details regarding creation, authors often engaged with other fundamental metaphysical topics, such as the nature of matter and potency, or the relation between eternity and time.

Introduction

"*In the beginning, God created the heaven and the earth*," reads *Genesis* 1:1, arguably containing all essential elements of the Christian doctrine of creation. By the time of the early scholastics, the main parts of this doctrine had been settled:[1] God *created*, i.e, brought the world into being from nothing; created *the heaven and the earth*, i.e., creation extends to everything; and all this happened *in the beginning*, i.e., in the beginning of time. While none of these claims were contested by early scholastic authors, there was less consensus on how precisely to understand them, how they are related to one another, and whether they can be philosophically defended against alternative views, especially Plato's and Aristotle's.

This chapter focuses on the three main points of the doctrine as they were developed by Stephen Langton, Philip the Chancellor, William of Auvergne, Alexander of Hales and the *Summa Halesiana*, and Roland of Cremona; with occasional appearances from Alan of Lille, Hugh of St Cher, and others.[2] Not all of them were equally interested in all these topics, and there is some shift in attention towards the end of our period when it comes to the third one. Nevertheless, most authors considered at least some, and the way they did so also illuminates how they understood adjacent philosophical and theological issues, such as the nature of matter, time, or divine free will.

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[1] Some of it was codified in 1216, at the Fourth Lateran Council, which states: "[God is] the first principle of the universe, the creator of all visible and invisible, spiritual and corporeal things, who by his omnipotent power brought about creation, spiritual and corporeal, i.e., angelic and worldly, at the same time, from nothing, at the beginning of time" (Denzinger, *Enchiridion*, 189 (428)).

[2] This list is necessarily arbitrary, and not meant to indicate that there were no interesting discussions elsewhere; the aim is only to illustrate how a relatively wide sperad of early scholastic authors thought about the core questions. There are other issues in the neighbourhood that received considerable attention – both more fundamental ones, such as whether there is only one principle of all things (often presented as a repudiation of Manicheism), and more particular ones, concerning the specifics of the six days of creation, including the creation of Adam in the image of God. While these issues are significant, they would take us too far from the current concerns.

I start each section with a very brief overview of Augustine's position,[3] which our authors knew well, probably both directly and via Peter Lombard's *Sentences*. Especially in the later half our period, they also engaged with Aristotle's arguments, which will be briefly considered in due course. The influence of Avicenna and Maimonides seems to be present starting from the 1230s, although it cannot be established with certainty how much of their work our authors knew, and it is not my aim here to take a stance on this issue.

From Nothing

By the time of Augustine, the doctrine of *creatio ex nihilo* is more or less settled,[4] that is, Augustine treats it as uncontroversial that God created the world, including all bodily and spiritual creatures, out of nothing. The last clause is explicated as meaning that even if the universe was made from matter, that matter was also made from absolutely nothing.[5] Augustine contrasts creation with the work of the everyday artisan: while the potter cannot make a pot except with the help of clay, "the almighty God did not have to be helped by anything" (*De Genesi contra Manicheos*, c. 6, tr. Teske, 58). From this *nothing*, came unformed matter, which is almost nothing (*prope nihil*); and this was then fashioned into the heaven and the earth and all things in the realm of creation.[6] Augustine's discussion is explicitly targeting Neoplatonic and Manichean views, and the early scholastic authors often do the same, citing especially Plato's *Timaeus*, which they knew at least partly in Calcidius's translation.

The doctrine of *creatio ex nihilo* was also summarised in the Lombard's *Sentences*. The Lombard describes creation as "the forming of corporeal and spiritual bodies" (*Sententiae*, 2.1.1, p. 329), which, he claims, must come from a single principle (*Sententiae*, 2.1.1). What distinguishes creation from making (*facere*) is that the former indicates bringing about from nothing, while the latter is bringing about from matter (*Sententiae,* 2.1.2). He also explains that the term 'acting' refers to creatures and God at most analogically (*Sententiae,* 2.1.3): creaturely acts imply change, while creation does not and cannot, since in God, there is none, and there is no further underlying substrate that could receive such change (*Sententiae,* 2.1.3).

The earliest scholastic discussions of *creatio ex nihilo* reiterate Augustine's and the Lombard's distinction between 'creating' and 'making', and agree that creation implies in its very concept creation from nothing. Later, we find brief treatments of a wide variety of more specifically philosophical issues. Thus, Hugh of St Cher engages with the arguments of Plato and Aristotle, summarising the former's view as positing three, independent principles (God, forms, and pure matter), and noting rather briefly that this is an obvious error if one believes in creation, since to create implies making something from nothing instead of from preexisting matter (*Sententiae,* 2.1, §2–4, pp. 371–372). William of Auvergne's *De universo* offers a farily lengthy refutation of Manicheism, arguing that there is one first principle that brings about everything without presupposing anything else (*De universo*, 1.1.2–11, pp. 594–606).

But the perhaps most interesting treatments of *ex nihilo* creation can be found in Philip the Chancellor, William of Auvergne's *De Trinitate*, and the *Summa Halesiana*. Philip addresses

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[3] I cannot consider here the question of whether or how Augustine changed his mind on some details, and thus I will refer both to his earlier and later writings somewhat indiscriminately.

[4] As May shows, it became significant as the early Church encountered Gnosticism in the second century (see May, *Creatio ex nihilo*, especially ch. 5 for the history of the doctrine in the early Church). See also Torchia, *Creatio ex nihilo*; and McMullin, "Creation *ex nihilo*" for similar claims.

[5] E.g., *De Genesi contra Manicheos*, c. 6; *De Genesi ad litteram*, 1.15.

[6] Ibid.; Cf. also *De Genesi ad litteram*, 1.7.; *De civitate Dei*, 11.5.

Plato's position in detail, as the view that the world was created based on eternally existing exemplars; and William and the *Summa* argue at length that creation did not presuppose matter.

Philip the Chancellor discusses eternal exemplars when discussing how the world proceeds from the ultimate good (*De bono nature*, 1.5, pp. 54–56). Since the world must have, apart from an efficient cause, a formal cause as well, some posit this to be an exemplar existing eternally (*De bono nature*, 1.5, p. 55). Philip first clarifies the meaning of 'formal cause': it can either be taken for an intrinsic form, like the human soul; or for the form expressed by the definition; or for the exemplar (*De bono nature*, 1.5, p. 54). Only the third of these is truly extrinsic, and now the question is whether there is a formal cause of the world in this sense. He claims that Plato deviated from the truth by not seeing that in the case of creation, the efficient and the examplar causes coincide (*De bono nature*, 1.5, p. 55). Thus, Philip affirms that God created the world from nothing, being both its efficient and formal (and, we may add, final) cause.

William of Auvergne treats the issue of preexisting matter in the context of the eternity of the world (more about that below).[7] Against the claim that the world had a beginning, he presents an objection "from the better philosophers,"[8] according to which in everything that comes to be, non-being must precede being, and possibility actuality. Since this possibility cannot be nothing (since in that case, it would not precede anything), it must be something. Hence, matter must be eternal, or else, if it came to be from another possibility, we would have turtles all the way down, each possibility relying on the previous possibility for its existence (*De Trinitate*, c. 8, p. 52).

According to William, this argument is nebulous. First, 'possibility' should not be taken as 'temporally prior,' but rather as 'prior according to nature.' Second, he presses the opponent to elaborate on the relationship between matter and possibility.[9] If, on the one hand, matter *is* this possibility, then there will be an accident without a subject – in which case it will not have a being and hence it will be nothing. If, on the other hand, matter is but the underlying subject of possibility, then matter itself will not explain the possibility that it was posited for.[10] Instead, as William concludes, we should understand the possibility of the world's coming to be not as due to matter but as due to the creator (*De Trinitate*, c. 8, p. 53).

The ***Summa Halesiana***[11] repeats the usual definition of 'creation' – to create, properly speaking, is to bring about something from nothing (sec. 1, q. 3, m. 2, c. 1), an act proper to God alone (ibid., c. 4) – and elucidates what 'coming to be from nothing' means with a distinction. In one way, 'coming from' may denote a causal connection, and so taken, the claim 'the world came from nothing' is false (since it would mean that the world was caused by nothing). In another way, 'coming from' may denote some ordering; "according to this way, 'to be created' is to come from nothing (*ex nihilo vel de nihilo*), because the creature comes to be after not being at all" (sec. 2, q. 2, m. 2, c. 2, pp. 58–59; cf. also m. 1, c. 2 in the same question). This also implies

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[7] He discusses these issues both in the *De Trinitate* and in the *De universo*. For a detailed analysis of both, see Teske, "William of Auvergne on the Eternity of the World."

[8] *De Trinitate*, c. 8, p. 51. Teske argues that the immediate source is Avicenna's *Metaphysics*, 4.2 ("Eternity of the World," n. 17), and provides the parallel passages in his translation.

[9] The debate becomes prominent in the later scholastic period, originating perhaps in some of Averroes's remarks; for some overview, see, e.g., Friedman, "Is Matter the Same as Its Potency?"

[10] William's argument is not very clear here; Teske thinks it may be a garbled version of Philoponus's ("Eternity of the World," n. 19).

[11] The discussion is in book 2, pars 1, inquisitio 1, tractatus 1, sectio 1, quaestio 1, caput 1 to sectio 2, quaestio 2, membrum 2, caput 2 in the same. Subsequently, I will omit the liber, pars, inquisitio, and tractatus numbers if I refer to this portion of the text.

that 'nothing' should be taken negatively rather than privatively (sec. 2, q. 2, m. 2, c. 2, ad 3): a privation, such as blindness or even matter as potency, would presuppose some underlying subject, while a pure negation does not.

While arguing that creation does not presuppose a preexisting subject, the *Summa* gives a detailed treatment of the position it attributes to Plato, according to which the creator, like an artisan, fashions something from matter – postulating two eternal, independent principles, one active, the other passive (sec. 1, q. 1, c. 3, a. 3). As the *Summa* argues, however, positing matter as coeternal with and independent of God leads to insurmountable difficulties. First, if matter is (in) potency, it must be the kind of thing that moves from non-being to being (otherwise it would be purely act). But something can only move from non-being to being by something that is already in act; thus, something actual must precede matter. Moreover, act naturally precedes potency; thus, matter can only be posited eternally if form is also posited. Again, matter is susceptible to privation; but the first principle should not be, since it would imply imperfection (ibid.). The conclusion is that while the artisan and matter are, in some sense, both principles, they are not mutually independent of one another. Rather, they are principles differently: the former *a quo*, the latter *de quo*, which means that God brings about matter as well.[12] While matter is indeed immutable as regards natural generation and corruption, it is not immutable absolutely, as it can move from non-being to being and vice versa (ibid.).

When discussing creation *ex nihilo*, most authors focus on explicating how it differs from regular acts of production. While an artisan needs preexisting metaphysical components when she produces, God does not when he creates, as he, by his omnipotence, is a sufficient principle of the creative act. Generally, our authors did not argue for why positing creation was necessary; rather, they focused on showing that if one thought that God created the world, then one should also think that God created it from nothing. In this sense, the discussion was mostly theological. Nevertheless, it also often veered towards issues about the nature of matter, potency, and change in general, which will come to the foreground especially in the late thirteenth and early fourteenth centuries.

Everything All at Once

"Who lives forever, created everything simultaneously (*omnia simul*)" (*Ecclesiastes* / *Sirach* 18:1).[13] Besides *Genesis* 1:1, this was the other often quoted Biblical verse in the dicussions of creation, giving rise to further puzzles. What does "everything" mean, and how can it be squared with the "heaven and earth" of *Genesis*? How could everything come to be *simul*?[14]

Augustine interprets *Genesis* 1:1 as saying that God created all spiritual and corporeal things – 'heaven' standing for the former, including both angels and their dwelling place, the empyrean heaven; while 'earth' standing for the latter, including the physical world. He also

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[12] Cf. Augustine, *Confessions*, 12.2–8; 12.13; 12.29, etc.

[13] This deuterocanonical text mostly survives in Greek. *Simul* translates κοινῇ; the English translations vary from "in general" (KJV), to "in a common fashion" (CEB), to disregarding it entirely (NRSV), and other modern languages seem to do the same. I translated *simul* here with the cognate, but it can stand for "simultaneously," "(all) at once," or even just for "together," with no temporal connotation. This will be important for some of the subsequent interpretations.

[14] For an overview of the problem of simultaneous creation in twelfth-century scholasticism, and its implications to theories of time, see Gross, "Twelfth-Century Concepts of Time." For a general doctrinal introduction, see Rainini, "Creazione e Tempo."

affirms that creation happened all at once (*simul*),[15] and reconciles this with the temporal unfolding of the physical universe by maintaining that all things were present in the act of creation seminally. That is, while some individual creatures acquire their actuality in time, their natural kinds, which were created in the beginning, already contained the seminal reasons from which they develop.[16]

The Lombard also claims that all spiritual and corporeal creatures were created *simul*. But there are complications. First, the text is vague: as he puts it, spiritual natures and corporeal natures or the matter of the four elements were created simultaneously; but there is no mention of individuals (*Sententiae,* 2.2.1, 2.2.3, pp. 336–339). Second, as Alan of Lille points out, the claim of simultaneous creation can easily mislead, since "we can read in the teachings of the church that the human souls were not created at the beginning, among the intellectual natures, nor were they created simultaneously, as Origin would have it."[17]

The question of how exactly we should understand simultaenous creation was discussed in some detail already by Stephen Langton in the 1200s,[18] and received special focus in Philip the Chancellor, Roland of Cremona, and, to a lesser extent, the *Summa Halesiana*.

According to **Stephen Langton**, God created everything all at once, where 'everything' can be expressed by 'the heaven and the earth': just as in Augustine, the former standing for the angelic nature and empyrean heaven, while the latter for the matter of all bodies. Langton also describes it with a list of four: the empyrean heaven, angels, primordial matter, and time,[19] implying that any order among these can only be an order of nobility.[20] He nevertheless thinks that these four do not constitute an exhaustive list, since God also must have created "an infinite number of properties with them, for it could not have been otherwise" (*Quaestiones*, 2.24, tit.). While he does not explain why this is so, he may have in mind Augustine's consideration that since primordial matter cannot exist on its own, it had to be created together with form.[21]

After this preliminary exposition, Langton comments on the *Ecclesiastes* passage. First, we may take it as claiming that all was created at the same time, either in matter (*in materia*) or in exemplar (*in exemplo*) – the former would pertain to bodies while the latter to souls. According to this interpretation, all material things were created *simul* for the reason that they originate from the same matter; while all souls were created *simul* for the reason that their exemplars (the particular angels, not the divine ideas! *Quaestiones*, 2.24, §2) were created *simul*.

Some important metaphysical questions remain open here. Langton also thinks, however, that we need not be committed to this interpretation, since we may also interpret the passage taking *simul* more loosely. 'Socrates came to the feast with Plato' means that they came as each other's company, but not necessarily that they came at the very same time; similarly, the passage

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[15] E.g., *De civitate Dei* 11.9; 12.25–28; *De Genesi ad litteram* 1.1; 1.3; *Confessions* 12.29.
[16] *De civitate Dei* 13.14; 22.24; *De Trinitate* 3.9. For an introduction to Augustine's theory of seminal reasons, see Boyer, *La Théorie Augustinienne*; and Mayer, "Creatio."
[17] *Summa quoniam homines*, tr. 2, §150, p. 290, a verbatim quote from Gennadius(?), *De ecclesiasticis dogmatibus*, c. 14 (*PL* 42:1216), sometimes attributed to Augustine (e.g., *Sententiae*, 2.35.2, p. 530).
[18] I am very grateful to Magdalena Bieniak and Wojciech Wciórka for sharing their forthcoming edition of Langton's *Quaestiones theologiae*, book 2. For his *Sentences* commentary, see *Sententiae*, 2.1–2, all of which takes up only a couple of pages. While Langton was later archbishop of Canterbury, his writings originate from his time in Paris.
[19] While the Lombard does not mention these four in this order, they consistute the usual list, and can be found as early in our period as in Alexander Neckham (*Speculum speculationum*, q. 11, p. 271).
[20] See also *Sententiae,* 2.2, n. 10.
[21] E.g., *Confessions*, 12.6, 12.15.

may just mean that God created things *simul* since he created them all. Langton refers to *Job* 40:10 (40:15): "Behold now behemoth, which I made *with* thee (KJV)" / *Ecce behemoth quem feci tecum* (Vulgate)"; i.e., God telling Job that he created both Job and behemoth, without implying temporal simultaneity.

Langton does not adjudicate between these interpretations. But they are both strategies that will be adopted and adapted by later authors.

Philip the Chancellor treats the question of simultaneous creation at great length in the *Summa de bono* (*De bono nature*, 3.1), describing it as two-fold: First, regarding individuals, i.e., whether God created all individuals *simul*, and if so, in what way; second, what he deems more difficult, regarding metaphysical constituents, i.e., whether God created matter and form *simul*, and how we should understand these constituents exactly. I will treat these questions in reverse order, starting with the more general one.

As Philip notes, 'heaven and earth' in *Genesis* 1:1 may be taken for spiritual and corporeal matter, respectively, each being numerically one. Thus, similarly to how Langton accounted for the simultaneous creation of all corporeal things in terms of their common matter, one may try to account for the simultaneous creation of all spiritual things in terms of their common spiritual matter.

Philip, however, regards this view as difficult to maintain. On the one hand, one may conceive of spiritual matter as the same as its corporeal counterpart (as universal hylomorphists would have it); but this is not consonant with *Genesis*, which refers to 'heaven' and 'earth' as if they were distinct. On the other hand, positing that spiritual and corporeal matter are distinct in kind, is also implausible: this would mean that there were two chaoses, and it also leads to difficulties about the matter of the human soul and its difference from the angelic one. Moreover, we posit a common matter in inferior bodies to explain transmutation from one to another; but there is no such transmutation in spiritual things (as if angel Gabriel's form could take on Raphael's matter; *De bono nature*, 3.1, pp. 117–118).

Although Philip's text is somewhat vague, his conclusion is not that spiritual things do not have matter at all;[22] it is only that there is no spiritual matter that is common and separable from spiritual substances in the way corporeal matter is common to and separable from corporeal bodies. Nevertheless, spiritual and corporeal things are similar insofar as both were created in their actuality: there was no "formless" corporeal matter that preceded the creation of the first form (*De bono nature*, 3.1, p. 120), and the only sense in which we can say that the spiritual substances were created formless is with regard to their second actuality (*De bono nature*, 3.1, p. 118). In this sense, matter and form were created *simul* in both.

What about individuals? Were they all created simultaneously? One easy answer, Philip notes, is to consider this from the part of the creator; the divine wisdom and will is entirely simple, and consequently no priority and posteriority can arise in it. But if we want to consider the question from the part of the creatures, we need to distinguish between *simul* in nature and *simul* in time. In the first sense, it is not true that all things were created *simul*, since some things are prior in nature to others: there is an order of dignity stretching through all creation (*De bono*

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[22] Teske claims, citing Gosselin, that "William [of Auvergne] and Albert the Great were virtually the only theologians of the first half of the 13th century not to hold that angels and the soul were composed of matter and form" ("William of Auvergne's Debt," n. 35), even though Weisheipl had claimed earlier that universal hylomorphism was virtually unknown until Avicebron's writings entered into the West (Weisheipl, "Albertus Magnus"). While the later medieval fate of the theory is better known, some more research would be needed in order to adjudicate this issue.

nature, 3.2). Regarding temporal simultaneity, a further distinction must be drawn. On the one hand, all things were created simultaneously in their species, which contain all individuals "in their seed-like power" (*vi sementiva*); nevertheless, individuals were *not* created simultaneously in their individual acts of existence (*De bono nature*, 3.1, p. 114).

All in all, Philip's analysis is sophisticated and shows that thinking about simultaneous creation prompted authors to consider various more general metaphysical questions, such as the nature of matter and form. The same applies to Roland of Cremona and the *Summa Halesiana*, even if their discussion is shorter.

Roland of Cremona starts his treatment of the six days of creation with the usual citation of *Genesis* 1:1, which he glosses, in the usual fashion, as referring to the empyrean heaven and the matter of the four elements. He agrees with Philip that matter could not have been formless, but adds the consideration that this is because without form, it cannot have quantity and consequently cannot occupy a place (but what exist, must exist somewhere!). This matter that was created in the first instant, is a body that is not identical with the elements but subsequently takes on their substantial forms (*Summa*, c. 84).[23]

But now there is a puzzle. The empyrean heaven is a body, hence must have matter, which, as a metaphysical constituent, is prior to the composite. Thus, apparently, there was matter ('earth') *first*, and the empyrean heaven ('heaven) afterwards, whereas *Genesis* claimed that they were created simultaneously.

Roland's solution reminds us that the matter of the elements is itself a body, distinct from the elements. Consequently, this matter must have had another matter (call it *yle*), which is the ultimate metaphysical root of creation. The empyrean heaven was coeval with the body that is the matter of the four elements, but it was not coeval with *yle*, since *yle* is the primary constituent of both, even if it cannot exist as an act at all (*Summa*, c. 87, p.130).[24]

The ***Summa Halesiana*** considers the issue rather briefly, but it will serve as a good summary of the uncontroversial parts of the doctrine. Just as its predecessors, it argues that God is the origin of both good and evil things (inasmuch as "evil things" can have an origin at all, given that they are privations and hence do not admit of a proper causal explanation (sec. 1, q. 1, c. 3, a. 1)); that God created both spiritual and corporeal things (sec. 1, q. 1, c. 3, a. 2), substances as well as some accidents (sec. 2, q. 2, m. 1, c. 6. It does not endorse Langton's view that infinitely many accidents were created; only those that happened to occur together with the first created substances.) Regarding metaphyiscal constituents, the text makes clear that while in the most proper sense, only matter and form are created – since they are truly *de nihilo* – we can also say, more loosely, that the composite is created even if it comes to be from matter and form: its non-being precedes its being (sec. 2, q. 2, m. 1, c. 4). It also affirms that things were created simultaneously, even if there is an order of dignity among them (sec. 2, q. 2, m. 1, c. 5 / c. 7); but it does not give a clear account of this simultaneity.

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[23] The edition by Humberto and Midali does not contain an apparatus fontium, and, more importantly, does not seem entirely reliable: the editors' choices of readings sometimes make Roland's argument unintelligible, and the punctuation is often misleading. In what follows, I attempted the best reading of the edition occasionally checking the Vaticana manuscript (Vat. Barb. MS 729).

[24] In a much less developed form, but the earlier Alexander Neckham seems to have something similar in mind when dealing with the question (*Speculum Speculationum*, 3.9–11, 3.78–79, pp. 264–272, 338–344). He also calls the effect of the first creative act *yle*, which he characterises both as unformed matter, divided into the heaven and the matter of the four elements, and as a concrete, physical part of every body. In general, Neckham's text often raises many more questions than it answers.

As even this cursory overview shows, the claim that God created *everything, simul* is far form unambiguous, as both components admit of various interpretations. But by and large, our authors accepted that '*simul*' means, in some way, that individuals were at least in their potentiality included in the terminus of God's initial creative act; and that 'everything' means the totality of spiritual and corporeal creation, as well as its metaphysical constituents. We have, however, silently omitted so far one item on the original list of four, namely time, to which we must now turn.

In the Beginning

"*In the beginning*, God created heaven and earth." But how can time, an entity whose essence is to be in motion, have a beginning? Would that also be in time? Can the temporal finitude of the world be demonstrated, either with or without assuming creation? How should one respond to Aristotle's arguments for the opposite thesis?

These were difficult questions, and as is well known, Augustine already puzzled over them.[25] So did the authors in our period, some, especially from around the 1230s, offering such elaborate treatments that would merit a book-length study.[26] Here I can only broach two issues: the puzzle concerning the beginning of time, and the arguments that purport to show that the world began in time. They are intertwined: if we cannot make sense of the beginning of time, then (as Aristotle is keen to point out) we may need to say that the world had no such beginning.

The beginning of time becomes difficult to understand once we accept that time, in its essence, is a successive entity; i.e., it must be continuous and cannot exist without change.[27] Imagine time as a line and its beginning as a point: what is that point like? If it were a part of time, then there could be change even in just one instant.[28] But if it were not part of time, then how can it be its beginning?

The question already emerges in Aristotle, and prompts him to deny that time had a beginning: since 'now' is a kind of boundary between past and future, there could have been no 'now' that did not have a past to precede it (*Physics*, 4.1, 220a25; 8.2, 251b10–28). This was, of course, just one of Aristotle's battery of arguments for the eternity of the world, which we do not have the space to review here.[29] Some brief reminders will suffice: First, if there had been a first motion, we could not explain why that came to be, since all motions are explained by preexisting motions (*Physics* 8.1, 251a8–b10). Moreover, if the world came to exist at a particular time, why didn't it come to exist sooner (*Physics* 8.1, 252a11–19), and (we may add) what was God doing before creation anyway? Finally, circular motion is the most perfect kind of motion, hence it must be eternal; but then so must be the heavens, which have it (*De caelo*, 1.3, 270a12–21).

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[25] There is ample literature on Augustine's understanding of time and eternity. For an introduction with further bibliography, see Knuuttila, "Time and Creation."

[26] See Dales, *Medieval Discussions* for an informative overview.

[27] Augustine famously argues that time and change can only exist together (e.g., *Confessions*, 12.11). There was significant later controversy about how exactly to define successive entities (for an overview, see Pasnau, *Metaphysical Themes*, ch. 18). But now this preliminary definition will suffice.

[28] This should not be confused with what is called 'instantaneous change', where the change occurs from t_1 to t_2 without intermediary. In the present case, by contrast, there is only t_1 to consider.

[29] For a detailed analysis, see Sorabji, *Time, Creation and the Continuum*, ch. 17, 276–283. Interestingly, some of the earliest interpreters called attention Aristotle's treatment in the *Topics*, where he mentions the question of the eternity of the world as an example of a dialectical problem (only to be treated with probabilities as opposed to demonstratively; *Topics* 1.11, 104b8). This led these early interpreters, including arguably Maimonides, to conclude that Aristotle did not take a stance on this issue. See Dales, *Medieval Discussions*, 48.

Augustine is aware of these problems,[30] but thinks that Aristotle's arguments are rooted in a conflation of eternity as infinite duration and eternity as timelessness. As the arguments only apply to natural changes, they cannot establish anything about creation (a claim that many later thinkers will echo). As Aristotle would grant, time depends on movement; but since God is not changeable in any way,[31] there is no time before creation, and hence the question of "why not sooner?" is malformed.[32] Augustine's notion of eternity is developed further in Boethius's classical definition, according to which it is the "perfect possession of interminable life, simultaneously, all at once" (*Consolation of Philosophy*, 5.6; *PL* 53:579).

The early scholastic authors agree with the broad strokes of Augustine's response, but their precise understanding of time and eternity, as well as their take on the demonstrability of the finiteness of the world, varies. Some follow Augustine rather closely in their brief treatment (the Lombard seems to be uninterested in the question, apart from noting that God created time (*Sententiae,* 2.1.1, p. 329; cf. also 2.2.2, p. 338); whereas later ones discuss Aristotle's arguments with increasing fervor.

Thus, for instance, when **Alan of Lille** considers the question of whether it is possible for God to make the world eternally (*ab eterno*), he regards it as resting on a logical confusion between the *de dicto* and *de re* understanding of 'possible'. In one sense, the answer is affirmative: God has, from eternity, the power to make the world, and hence can make the world eternally. But in another sense, the answer is negative: God cannot make it the case that the act of creation be eternal. If he did, then the world itself would be eternal, which possibility Alan dismisses without further arguments (*Quoniam homines*, 1.2.1, §90, p. 234).

Stephen Langton also treats the issue rather succinctly, citing Augustine's claim that time was created neither in time, nor before or after time (*Summa*, 2.24.3; *Sententiae,* 2.2, n. 12). He resolves the difficulty by clarifying the meaning of 'time was not created in time': it means that it was not created *under* (*infra*) time (*Sententiae,* 2.2, n. 12, p. 70). To be "under time" seems to mean to be *in* time, in the sense that one's existence is determined by time. By contrast, God, and the creative act, exists *with* (*cum*) time, presumably because the eternal divine existence, while simultaneous with time, is not bound by it.[33] While Langton's distinction leaves some questions open, it fits with Augustine's contention that there could be no time before time was created, therefore creation is not, strictly speaking, a temporal event. As will be seen shortly, William of Auvergne will help himself to a similar distinction.

Apart from trying to make sense of the beginning of time, there are also increasing concerns about Aristotle's other arguments for the eternity of the world. The most interesting examples are in Philip the Chancellor, William of Auvergne, Alexander of Hales's disputed questions, and in Roland of Cremona.

Philip the Chancellor's discussion is brief but important, both for its account of eternity and for its interpretation of Aristotle. He gives a reconstruction of several of Aristotle's arguments for the eternity of the world (*De bono nature*, 1.3, p. 48), and makes three noteworthy points in his response.

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[30] Another important refutation of Aristotle's arguments can be found in Philoponus. It is unclear, however, whether Philoponus's text was available in Latin translation in our period; as Teske claims, its influence, at most, was through the Islamic thinkers ("William of Auvergne's Arguments for the Newness of the World," section 1, citing Davidson, "John Philoponus" as a source).

[31] *Confessions*, 11.13.15; *De civitate Dei*, 11.5–6.

[32] *De civitate Dei*, 11.5.

[33] The Lombard signals towards a similar distinction in *Sententiae*, 2.2.2, but does not elaborate.

First, according to Philip, Aristotle's arguments should be understood as being about natural philosophy rather than theology (*De bono nature*, 1.3, p. 49). While such remarks may be read as expressing the infamous doctrine of double truth,[34] Philip's point is only that the natural philosopher must deal with the world according to its own principles, presupposing its existence, therefore he cannot deal with creation proper. Aristotle was clearly a natural philosopher: e.g., he endorsed the principle that the same cause always brings about the same effect, which does not hold for voluntary causes. Consequently, Aristotle, a natural philosopher, should not be taken to have reached any conclusions about creation.[35]

Second, as Philip claims, Aristotle's arguments consider not eternity but perpetuity. While this may seem like a familiar point, Philip muddies the waters when elaborating on the distinction. Discussing how time and eternity can coexist, he claims that they are both measures but in different ways. On the one hand, time is a proper measure of things with beginning and end (but since nothing can measure itself, time could not have come to be in time); on the other hand, eternity is a transcendent measure that excedes and can measure time (*De bono nature*, 1.4, p. 52).[36] While both time and eternity are durational, Philip argues that even if time were made infinitely long, the resulting perpetuity would differ from eternity. Perpetuity would still be a measure of mutable things, while eternity would be a measure of immutable ones (such as angels or perhaps souls; *De bono nature*, 1.4, p. 53).

The third point Philip makes in his response to Aristotle is what seems to be a consensus in the period: that to be created *ex nihilo* simply *means* to be created in time, since *ex nihilo* means *post nihil*. In other words, he thinks that if we grant that the world was created, we must also grant that it had a temporal beginning.[37]

Alexander of Hales shares some of Philip's contentions,[38] for instance that natural philosophers and theologians approach questions differently. Thus, the claim that "the world always existed" can either mean that the world never had a beginning, and in this sense it is false; or it can mean that there was no time when it did not exist, i.e., the world shares its beginning with time, and in this sense, it is true. Aristotle, as natural philosopher, was only qualified to endorse the second claim (*De duratione mundi*, q. 6, p. 190).

Alexander also thinks, just like Philip, that Aristotle did not have a clear undersanding of the relevant concepts. Taking inspiration from Boethius's definition, he claims that an eternal thing must be simple, invariable, and interminable, and hence only God is eternal, who alone is truly simple (*De eternitate*, q. 1, pp. 68–69). Created things may have what Alexander calls *evum*, which falls between time and eternity: unlike eternity, it is extended, but unlike time, it has

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[34] For an overview of how the question of the eternity of the world may have led to the doctrine, see Dales, "The Origin of the Doctrine."

[35] This, rather charitable interpretation of Aristotle will be controversial; Grosseteste flatly rejects it (see n. 43 below), but it influences Aquinas's discussion in his *De aeternitate mundi* and elsewhere.

[36] Alexander cites explicitly the deuterocanonical book of *2 Ezra* in this context, which says, as an answer to when the end of times will come: "Even when the number of seeds is filled in you…. By measure hath he measured the times; and by number hath he numbered the times...." (2 *Ezra*, 4:36–37, KJV). Philip affirms that eternity is durational when considering whether there is a proportion between eternity and time, or rather they are like a line and a point. While he denies the proportionality, more interestingly, he also dismisses the analogy, saying that a point and a line are not of the same genus, while time and eternity are both durations (*De bono nature*, 1.4, p. 52).

[37] This was also endorsed by such earlier authors as William of Durham (see Dales, "Early Latin Discussions"), and Philip moves over it fairly quickly. The Parisian condemnations of 1277 will agree with the point (prop. 99).

[38] He treats the issue of eternity and creation in various places. The following mostly relies on two disputed questions: "Questio de eternitate, evo, et tempore," and "Questio de duratione mundi seu de materia prima."

no *successive* parts and does not require change. *Evum* measures the duration of changeless beings, such as angels (*De eternitate*, q. 7 , p. 123; Alexander's example is what Philip used for eternity as a transcendent measure).

Could there be a created thing that is at least eviternally infinite, with no beginning? Alexander argues for the negative. First, having only an end is more noble than having only a beginning; consequently, something that has only an end must be above the angels, which have only a beginning – but this could only be God (*De duratione*, q. 1, pp. 165–166). Moreover, along the lines of the consensus, Alexander argues that what does not have a beginning, does not have a being after non-being, or a "mixed" being (i.e., non-being mixed in its being), and consequently cannot have an end either. This means, however, that having only an end implies a contradiction (*De duratione*, q. 1, p. 167). Finally, further affirming the consensus, "having a principle of being from something else, and a starting point of duration are the same" (*De duratione*, q. 1, p. 168); i.e., it contradicts creaturely nature to be perpetual. As Alexander claims, the only eternal production is the Trinitarian one, which does not result in a creature (*De duratione*, q. 2, p. 173); hence, if we accept that the world was created, we must also accept that it had a temporal beginning.

William of Auvergne grants Philip and Alexander that Aristotle did not distinguish clearly between eternity and perpetuity, even though he also warns against overly charitable interpretations, and thinks that Aristotle was committed to the mistaken metaphysical idea that the world did not have a beginning.[39] Eternity proper is "indivisible with respect to earlier and later," having a permanent and immutable being (*De universo*, 1.2.1, p. 683); in this sense, only God is eternal, who alone is entirely immutable. On the other hand, what Aristotle called 'eternity' is only "eternal time, that is, duration unlimited in either direction" (*De universo* 1.2.4, p. 688). Since eternity and time are vastly different, they are incommensurable. Although God created time, he is not *in* time, properly speaking or *mensurabiliter,* but only *comitabiliter* (William seems to have something like the Lombard's and Langton's distinction in mind; to be in time *mensurabiliter* is to be bounded by time, while *comitabiliter* means to be *with* time but not *in* it.)

Having clarified this, William argues in agreement with the consensus that the world must have had a beginning because it was created, that is, brought from possibility into act (*De Trinitate*, c. 10, pp. 67–68). But he clarifies: the impediment to being perpetual was on the part of the world only, incapable of receiving perpetual existence, and not on the part of the creator (*De universo*, 1.2.10, p. 694).

More than some of his predecessors, William also responds to the philosophers, including what he regards as their strongest argument,[40] a version of the "why not sooner" objection. According to this, "if an essence is the same now as it was before, then if something was not produced by it before, then it won't be produced by it now either" (*De Trinitate*, c. 10, p. 69; cf. *De universo*, 2.1.8, p. 691). Accepting this, one may argue that if God was the sufficient principle of the world once, he must have been sufficient for it always; but then the world must have always existed. William's response is based on the refutation of the major premise, given in the quotation. As he argues, either everything is eternal, or there is something new. The former

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[39] Grosseteste echoes the admonition, and claims that those trying to "make a Christian out of the heretic Aristotle" are simply wrong (*Hexaëmeron*, 1.8, p. 61). The chronology and possible direction of influence between Willam and Grosseteste is complicated (see, e.g., Teske, *Studies*, ch. 1); they were roughly contemporaries, and at least on this particular question, have a lot in common.

[40] The source is Avicenna, *Metaphysics*, 9.1 (Teske, "Eternity of the World," n. 30).

being manifestly false, take *A*, which is something new. Had all the conditions jointly sufficient for *A*'s existence existed before *A* came to be? If so, then *A* must have existed already, which is false, *per* the assumption. So at least one condition must have been lacking; call it *B*. Now the same question can be asked: did *B*'s sufficient conditions exist? If they did, then *B* must have also existed already, contrary to our assumption. If not, take *C*.... – it turns out that explaining a new *A* will require turtles all the way down, again! Hence, the original premise must have been false (*De Trinitate*, c. 10, p. 71).

William thinks that with this, he has disposed of the Aristotelians' chief argument for the perpetuity of the world, and goes on to offer some of his own for the opposite. For instance: if the world had existed from eternity, an infinite time would have been traversed; but, even according to Aristotle, it is impossible to traverse an actual infinity, and hence there would be no 'now' (*De Trinitate*, c. 10, pp. 68–69). Or: a beginningless and endless world would lead to the absurdity that, since both the past and the future are infinite, there is no change of time as time passes (*De Trinitate*, c. 10, p. 69). Most of these positive arguments are not highly original, but show a growing interest to challenge the philosophers on their own ground.

Roland of Cremona develops this interest much further. He separates the question of whether the world *could have been* eternal from that of whether the world *is in fact* eternal;[41] and, when dealing with the latter, offers a plethora of purely philosophical arguments for the negative.

In his discussion of whether God could have, in principle, created anything from eternity, we see many of the now familiar considerations. He agrees with the consensus that being created implies having a temporal beginning (*Summa*, 1.58, p. 104); 'creation' is the making of something from nothing, but something is from nothing only if there had been 'nothing' *before* it was made. Roland also utilises the distinction that we have seen as early as in Alan's text, warning against a logical fallacy: for while it is true that God, eternally, had the power to make something, it does not follow that God had the power to eternally make something (*Summa*, 1.58, p. 104).

The more interesting part of Roland's discussion is the second one, aiming to demonstrate the actual finitude of the world. He introduces the discussion by saying that "we only give these arguments so that they would not say that the Church is full of idiots" (*Summa*, 2.8, p. 25), and just like William, but much more elaborately, offers a refutation of Aristotle's arguments before presenting his own.

The first Aristotelian argument Roland considers is a version of what William also refuted, although their approaches differ. How is it possible that God, immutable and eternal, produces a new effect? As we have just seen, William thought that this objection relied on a generally false metaphysical principle, but Roland's answer follows the more customary route: this would be a problem if we were talking about a natural cause that causes by necessity, but it is not a problem if we are talking about a voluntary agent that can will something freely before bringing it about (*Summa*, 2.9, p. 29). Roland also thinks that we can demonstrate that God acted freely and not by the necessity of the divine nature: the same natural cause cannot produce contrary effects, which, however, we do observe around us, including souls and bodies, more and less noble things, or

[41] Indeed, he treats these two in different parts of his *Summa*, in book 1, question 58, and book 2, questions 7–11, respectively (devoting the majority of the discussion to the latter).

even the different colours of the stars (*Summa*, 2.9, p. 30). The only way to explain this diversity is to maintain that the first cause acted freely and not by necessity.[42]

Concerning the circular motion of the heavens, Roland responds that it can be finite temporally even if a circle has neither a beginning nor an end. As he points out, positing a starting point of a circular motion is no more puzzling than positing a starting point of a rectilinear one: even in the latter case, it can be difficult to account for the body's state in that exact starting point (*Summa*, 2.10, pp. 31–32).[43]

Having refuted Aristotle's arguments, Roland offers some of his own. Although more research needs to be done to properly evaluate his originality, some of these are rather unusual when compared to the ones discussed above (and so is Roland's pungent style presenting them).

The first group of arguments are various versions of a *reductio*, relying on the assumption that a thing can change neither its nature nor its characteristic effects.[44] Now, Roland argues, if the earth is perpetual, and it characteristically brings forth human beings now, then it must have brought forth human beings always – producing an infinite chain of generations. But this is impossible. Roland's main point, unlike William's more usual one (*De universo*, 1.2.11, p. 697), is not that this would involve impossibly traversing an actual infinity. Rather, he points out that we know from historical testimony that human beings grow in stature across generations; but then, if the world were eternal, we would see, looking backwards, a diminution to no quantity of stature whatsoever (a certainly absurd implication), or to such a small body that not even God could infuse the human soul in it! This would mean that the earth could not have always brought forth human beings, contrary to the original thesis (*Summa*, 2.8, p. 26).

Second, some similarly absurd consequences would follow with regard to the earth itself. If the earth had existed for an infinitely long time, then there must have been an infinitely large number of deluges, just like the one described in *Genesis*.[45] But, Roland goes on, sea water is salty and makes the earth barren – even the Bible attests that there was more abundance before Noah's time. Thus, if there had been infinitely many deluges, the salty water would have, by and by, already made the earth entirely barren, which is false (*Summa*, 2.8, pp. 26–27). Moreover, Roland observes, we see that valleys rise and mountains diminish with time; therefore, had the world existed perpetually, they would have had infinitely long time to rise and diminish, and consequently the earth would now be perfectly flat (*Summa*, 2.8, p. 27). Lastly in this group, Roland relates a (somewhat obscure) story. When he was digging outside and found what looked like the vein of the earth (*vena terrae,* i.e., sulphur),[46] he asked a knowledgeable person, who had traveled broadly, what it was. The man said that it was remains from the sea that had once covered the earth, and that the same appears in distant lands. But then, Roland argues, the surface

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[42] The *Summa Halesiana* presents a similar if less developed argument (sec. 1, q. 2, m. 4, c. 3). Of course, that God created the world by his free will, is a trope that all of our authors accepted (inspired by Augustine, and usually contrasted with the Neoplatonic understanding of creation), and often employed to answer worries regarding how an unchanging eternal cause can produce a new effect (see also Hugh of St Cher, *Sententiae*, 2.1, §9, p. 373).

[43] This issue was extensively discussed by Aristotle in *Physics* 4, and also by Augustine in *De civitate Dei*, 13.9–11, considering the puzzling question of when someone is dying exactly. (As Knuuttila notes, the example may have originated in Aulus Gellius's *Attic Nights* ("Time and Creation," 111–112).)

[44] Some later thinkers, especially in the fourteenth century, started to wonder about whether substances and their powers are necessarily connected; Roland takes it both on Aristotelian and Biblical authority that they must be.

[45] Augustine tells us this much in *De civitate Dei*, 12.10, when considering the same issue, but here the similarity ends.

[46] See, e.g., Bartholomaeus Anglicus explaining the name in *De rerum proprietatibus*, 16.94, p. 764. He does not make a reference to the Deluge in this context.

of the earth must have risen since the Deluge (as one had to dig about an arm's length in order to reach this relic); so if the earth were perpetual, "[it] would have outgrown the heavens by now" (*Summa*, 2.8, p. 27).

The next argument relies on what Roland had claimed earlier: that being created implies having a temporal beginning. But instead of stopping here, he now offers a *reductio* for those who deny creation altogether. If the world is not created, it does not have an efficient cause, or "what moves a thing to be" (*Summa*, 2.8, p. 28). This means, however, that it cannot have a final cause either, since the final cause is what moves the efficient cause to act, and thus if we eliminate the latter, we also eliminate the former. But this implies further that there is no formal cause ("according to you, oh you Aristotelians, since you say in your *Physics* that the formal and the efficient cause coincide" (*Summa*, 2.8, p. 28)), and consequently no material cause, since matter cannot exist without form. Putting all together, if the world is perpetual, it does not have any cause whatsoever, and thus it is nothing – a claim that, according to Roland, Parmenides or Melissus may accept, but the Aristotelians should not.

Finally, we also see a number of arguments relying on various Aristotelian claims about matter and form as metaphysical principles. The proper examination of these would take us too far, but they all point to difficulties in maintaining that matter, form, and the composite are all perpetual, and yet there are various priority relations between them (*Summa*, 2.8, p. 28).

All in all, the questions concerning the beginning of time and the world provided extremely fertile grounds for discussing a wide range of issues. While disagreements surfaced regarding many of them, the central tenets remained mostly the same. For the readers familiar with the earlier or later discussions (Boethius, Eriugena, Aquinas, or even Bonaventure), some of these central tenets may seem surprising. Whereas earlier and later there seems to be a broad agreement about understanding eternity as durationless and simple, in our period this understanding resulted from a gradual development, as illustrated by Philip's, Alexander's, and William's analysis of the concept.[47] Interestingly also in light of the later discussions, none of the early scholastics seem to think that creatio *ex nihilo* is compatible with a perpetual universe, as they treat *ex nihilo* as synonymous with, or at least implying, *post nihil*.[48] Accordingly, the arguments resting on the assumption of creation were relatively straightforward. Apart from these, however, the later thinkers often directly engaged with Aristotle's arguments for the opposite view, and, especially as William's and Roland's works show, came up with new ways to establish that the world did not always exist.

Conclusion

This chapter discussed three basic elements of the Christian doctrine of creation: (1) that the world was created *ex nihilo*; (2) that creation extends to everything, and all was created *simul*; (3) and that creation happened at the beginning of time. There was broad agreement on the basic issues. Everyone agreed that the concept of creation itself implies (1), which means that creation happened without any pre-existing aid, and consequently (2) must hold. Further, it was

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[47] Grosseteste falls outside the remits of this volume, but the classical concept of eternity appears clearly in his *Hexaëmeron* (1.8 p. 61). Brown, "The Eternity of the World" offers an informative overview of the early debate in Oxford, which shows roughly similar trends to the one on the continent. For Grosseteste in particular, see Dales, "Robert Grosseteste's Place."

[48] It lies outside the scope of this study to say much about what prompted later authors to question this implication. The shift had a tremendous impact, however; for one, with the possibility of continuous creation, preserving creaturely causation became an especially pressing concern.

also agreed upon that (1) in turn implies (3). But even given this relatively stable framework, opinions varied on many of the details: what does *nihil* exclude directly, and how should we imagine the creation of the world's metaphysical consitutents? How should we understand simultaneous creation without contradicting the obvious fact that some things in the world begin and cease to be? What is eternity exactly, and how can we show that the world is not eternal or perpetual? While this chapter could not aim to give an exhaustive overview of these disagreements, it has hopefully highlighted some that will prompt further research.

Bibliography

Alexander Nequam. *Speculum speculationum*. Edited by Rodney Malcolm Thomson. Auctores Britannici Medii Aevi 11. Oxford: Oxford University Press, 1988.

Alexander of Hales. *Quaestiones disputatae quae ad rerum universitatem pertinent*. Edited by Hyacintho Matthaeo Wierzbicki. Rome: Ad Claras Aquas, 2013.

———. *Summa theologica*. Edited by PP Collegii S Bonaventurae. Vol. 2.1. Quaracchi: Collegium S Bonaventurae, 1928.

Augustine of Hippo. *Two Books on Genesis Against the Manichees and on the Literal Interpretation of Genesis: An Unfinished Book*. Translated by Roland J Teske. Washington, DC: The Catholic University of America Press, 1991.

Bartholomaeus Anglicus. *De rerum proprietatibus*. Frankfurt, 1601.

Boyer, Pascal. *La théorie Augustinienne des raisons séminales*. Rome: Miscellanea Agostiniana, 1931.

Brown, Stephen F. "The Eternity of the World Discussion at Early Oxford." In *Mensch und Natur im Mittelalter*, edited by Albert Zimmermann and Andreas Speer, 259–80. Miscellanea Mediaevalia 21. Berlin: de Gruyter, 1992.

Dales, Richard C. "Early Latin Discussions of the Eternity of the World in the Thirteenth Century." *Traditio* 43 (1987): 171–97.

———. *Medieval Discussions of the Eternity of the World*. Leiden: Brill, 1990.

———. "The Origin of the Doctrine of the Double Truth." *Viator* 15 (1984): 169–79.

———. "Robert Grosseteste's Place in Medieval Discussions of the Eternity of the World." *Speculum* 61, no. 3 (1986): 544–63.

Davidson, Herbert A. "John Philoponus as a Source of Medieval Islamic and Jewish Proofs of Creation." *Journal of the American Oriental Society* 89, no. 2 (1969): 357–91.

Denifle, Henricus, ed. *Chartularium Universitatis Parisiensis*. Sub Auspicis Consilii Generalis Facultatum Parisiensum. Paris: Delalain, 1889.

Denzinger, Heinrich. *Enchiridion symbolorum definitionum et declarationum de rebus fidei et morum*. Fribourg: Herder, 1911.

Friedman, Russell L. "Is Matter the Same as Its Potency? Some Fourteenth-Century Answers." *Vivarium* 59 (2021): 123–42.

Glorieux, Palémon. "La Somme quoniam homines d'Alain de Lille." *Archives d'histoire doctrinale et littéraire eu Moyen Âge* 20 (1953): 113–364.

Gross, Charlotte. "Twelfth-Century Concepts of Time: Three Reinterpretations of Augustine's Doctrine of Creation Simul." *Journal of the History of Philosophy* 23, no. 3 (1985): 325–38.

Knuuttila, Simo. “Time and Creation in Augustine.” In *The Cambridge Companion to Augustine*, edited by Eleonore Stump and Norman Kretzmann, 103–15. Cambridge: Cambridge University Press, 2001.
May, Gerhard. *Creatio ex nihilo: The Doctrine of ’Creation Out of Nothing’ in Early Christian Thought*. Translated by AS Worrall. Edinburgh: T&T Clark, 1994.
Mayer, Cornelius. “Creatio, Creator, Creatura.” In *Augustinus-Lexikon*, edited by Cornelius Mayer, 2:56–116. Basel: Schwabe, 1996.
McMullin, Ernan. “Creation *ex nihilo*: Early History.” In *Creation and the God of Abraham*, edited by David B Burrell, Carlo Cogliati, Janet M Soskice, and William R Stoeger, 11–23. Cambridge: Cambridge University Press, 2010.
Nekhaenko, Fedor. “Between Eternity and Divine Dualism: Hugh of Saint-Cher’s Opus II, Pars i.” *Ancient Philosophy and the Classical Tradition* 18, no. 1 (2024): 347–86.
Pasnau, Robert. *Metaphysical Themes, 1274-1671*. Oxford: Clarendon Press, 2011.
Petrus Lombardus. *Sententiae in IV libris distinctae: Liber i et II*. Edited by PP Collegii S Bonaventurae. Vol. 1.2. Grottaferrata: Ad Claras Aquas, 1971.
Philip the Chancellor. *Philippi Cancellarii Parisiensis Summa de bono*. Edited by Nikolaus Wicki. Bern: Francke, 1985.
Rainini, Marco. “Creazione e tempo nella constituzione I del concilio Laternense IV: Prime ricognizioni intorno alle urgenze e alle contingenze della stesura.” *Divus Thomas* 110, no. 2 (2007): 119–50.
Robert Grosseteste. *Hexaëmeron*. Edited by Richard C Dales and Servus Gieben. London: Oxford University Press, 1982.
Roland of Cremona. *Summae Magistri Rolandi Cremonensis O.P.: Liber primus*. Edited by Aloysio Cortesi and Humberto Midali. Bergamo: Corponove Editrice, 2015..
———. *Summae Magistri Rolandi Cremonensis O.P.: Liber secundus.* Edited by Aloysio Cortesi and Humberto Midali. Bergamo: Corponove Editrice, 2017.
Sorabji, Richard. *Time, Creation and the Continuum: Theories in Antiquity and the Early Middle Ages*. Studies in Irish Society. London: Duckworth, 1983.
Stephen Langton. *Der Sentenzenkommentar des Kardinals Stephan Langton*. Münster: Aschendorff, 1995.
Teske, Roland J. *Studies in the Philosophy of William of Auvergne, Bishop of Paris (1228-1249)*. Marquette Studies in Philosophy. Milwaukee, WI: Marquette University Press, 2006.
———. “William of Auvergne’s Arguments for the Newness of the World.” *Mediaevalia: Textos e Estudios* 7–8 (1995): 287–302.
———. “William of Auvergne’s Debt to Avicenna.” In *Avicenna and His Heritage: Acts of the International Colloquium, Leuven-Louvaine-La-Neuve September 8-September 11, 1999*, edited by Jules Janssens and Daniel De Smet. Leuven: Leuven University Press, 2002.
———.“William of Auvergne on the Eternity of the World.” *The Modern Schoolman* 67 (1990): 187–205.
Torchia, N Joseph. Creatio ex nihilo *and the Theology of St. Augustine: The Anti-Manichaean Polemic and Beyond*. New York: Peter Lang, 1999.
Weisheipl, James A. “Albertus Magnus and Universal Hylomorphism: Avicebron.” *Southwestern Journal of Philosophy* 10, no. 3 (1979): 239–60.
William of Auvergne. *De Trinitate: An Edition of the Latin Text with an Introduction*. Edited by Bruno Switalski. Toronto: Pontifical Institute of Mediaeval Studies, 1976.

———. *Guilielmi Alverni Opera Omnia*. Vol. 2. Paris: Johannes Lacaille, 1674.
———. *The Trinity, or, the First Principle*. Translated by Roland J. Teske. Medieval Philosophical Texts in Translation 28. Milwaukee, WI: Marquette University Press, 1995.