

Introduction

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In Hexaemeron as early Christian philosophy

There may be few texts more obviously suited to a series dedicated to works of Early Christian Philosophy than Gregory of Nyssa's *On the Hexaemeron*.¹ In this slim work,

¹ The work is often referred to as *Apologia on the Hexaemeron*, according to a title with some support in the manuscript tradition (and printed in the *Patrologia Graeca*), but recent scholarship, including the critical edition of the text, has generally opted for Εἰς τὴν ἑξάήμερον as the likely original title. Gregory of Nyssa, *In hex.* (ed. Hubertus Drobner, GNO 4.1 (Leiden: Brill, 2009), 5, apparatus. Franz Xaver Risch, *Gregor von Nyssa: Über das Sechstageswerk* (Stuttgart: Anton Hiersemann, 1999), 103, n. 1. Throughout this volume, this title will therefore be used. The literature on the treatise continues to be limited. Risch's German translation comes with many invaluable notes. Indispensable, further, is Charlotte Köckert, *Christliche Kosmologie und kaiserzeitliche Philosophie: Die Auslegung des Schöpfungsberichtes bei Origenes, Basilius und Gregor von Nyssa vor dem Hintergrund kaiserzeitlicher Timaeus-Interpretationen* (Tübingen: Mohr Siebeck, 2009), esp. 400–526. Gregory's text is a key reference throughout in Isidoros C. Katsos, *The Metaphysics of Light in the Hexaemeral Literature: From Philo to Gregory of Nyssa* (Oxford: Oxford University Press, 2023). For a rather critical treatment of *In hex.*, see Doru Costache, *Humankind and the Cosmos: Early Christian Representations*. Vigiliae Christianae Supplements 170 (Leiden:

written by Gregory probably around 380 and addressed to his brother, Peter of Sebaste, the author is remarkably outspoken about his intention.² His writing, he announces in the dedicatory section of the work, is not meant to establish ‘dogma’ but rather aspires to be a ‘school exercise’ using ‘the concepts put before us’.³ While this declaration of intellectual

Brill, 2012). See also David C. de Marco, ‘The Presentation and Reception of Basil’s *Homiliae in hexaemeron* in Gregory’s *In hexaemeron*’, *Zeitschrift für Antikes Christentum* 17/2 (2013): 332–52; Anna Marmodoro, ‘Gregory of Nyssa on the Creation of the World’, in *Causation and Creation in Late Antiquity*, ed. Anna Marmodoro and Brian Prince (Cambridge: CUP, 2015), 94–111; and the introduction in Gregory of Nyssa, *On the Six Days of Creation*, trans. Robin Orton. The Fathers of the Church. Shorter Works (Washington, D.C.: CUA Press, 2021), 3–40.

I would like to thank Anna Marmodoro and Andrew Radde-Gallwitz for helpful comments on an earlier draft of this text.

² The date is uncertain, but it seems likely that Gregory composed the treatise after Basil’s death (probably late 378). Moreover, he refers the recipient, his brother Peter, to the previously completed *De hominis opificio* (*In hex.* 77) which seems to have been written around Easter 379. In his *Contra Eunomium* II 226, finally, Gregory refers his readers to his works on Genesis in the plural (τοῖς εἰς τὴν Γένεσιν πεπονημένοις ἡμῖν). As the latter work was produced in late 380 or early 381, this would place *On the Hexaemeron* into late 379 or 380. Köckert, *Christliche Kosmologie*, 400.

³ Gregory of Nyssa, *In hex.* 6 (ed. Drobner, 13.16–20. ET: Radde-Gallwitz, found in this volume. Unless otherwise stated, all translations of the *In hex.* are Radde-Gallwitz’s. Köckert, *Christliche Kosmologie*, 405–6 compares Origen’s ‘zetetisch-gymnastisch’ approach to Scripture.

modesty in goals and methods here is partly meant to mitigate his deviations from the *Homilies on the Hexaemeron* his late brother Basil had published just before his death, Gregory's words seem to carry a broader sense.⁴ We may read his remarks as indicating that he engaged with the cosmological ideas of Genesis 1 with the aim of bringing the words of Scripture into dialogue with contemporaneous philosophical and scientific insight into the origin and the constitution of the material universe rather than proclaim *ex cathedra* the truth of the biblical doctrine of creation. He is not, in other words, preaching here as a bishop to his flock. He is not taking on magisterial authority as he does in many of his other works. His approach is deliberative and open-ended, or this, at least, is what his programmatic statement at the beginning of his work suggests.

Whether the treatise really was intended as a merely intellectual exercise or whether there were other concerns Gregory had at the time of writing it is a question that cannot be pursued here. The purpose of this volume is to present the text as a specimen of early Christian philosophy, and the task of this introduction is, therefore, to offer first clues about the character of the treatise as a cosmology, its historical background in Christian and non-Christian cosmologies, and some main ideas developed by Gregory in his text. Before these three questions will be addressed, however, some words need to be said about the author and his writing.

Gregory of Nyssa as a Christian philosopher

⁴ On Gregory's references to Basil's *Homilies* in *In hex.*, see de Marco, 'Presentation', esp. 334–9.

Gregory of Nyssa has been for several decades a central figure in Patristic research.⁵ This makes it easy to forget that, for a long time, he received relatively little scholarly attention. His status in late antiquity appears to have been similarly ambivalent. While Michael Psellos ranks him with Basil, Gregory Nazianzen, and John Chrysostom as one of the four exemplary Christian writers, Gregory's appreciation among other Byzantine authors can appear rather muted and never on a par with that shown to his brother, Basil, and his friend, Gregory Nazianzen.⁶ Gregory of Nyssa's reception throughout the centuries has thus been somewhat mixed.

While it is difficult to identify a single explanation for this state of affairs, it stands to reason that the changing fortunes of Gregory's reception have something to do with the philosophical bent of his works. Where students of early Christian writings were keen to discover speculative ideas in them, Gregory's stock rose, but where, for whatever reasons, the

⁵ Important points of reference are the volumes produced by the regular International Colloquia dedicated to his work the most recent of which took place 2022 in Exeter. Helpful resources include the *Lexicon Gregorianum: Wörterbuch zu den Schriften Gregors von Nyssa*, ed. Friedhelm Mann. 10 vols. (Leiden: 1999–2014); and the *Brill Dictionary of Gregory of Nyssa*, ed. Lucas-Francisco Mateo-Seco and Giulio Maspero (Leiden: Brill, 2009).

⁶ For Psellos, see: Michael Psellos, *Characteres Gregorii Theologi, Basilii Magni, Chrysostomi et Gregorii Nysseni*, ed. Jean-Francois Boissonade, *Michael Psellos: De operatione daemonum* (Nuremberg: Campe, 1838), 124–31. Mostly, however, Gregory was not counted with the 'three hierarchs', Basil of Caesarea, Gregory of Nazianzus, and John Chrysostom: Georgios Gousgouriotis, 'Who Was the Greatest Church Father? A Philosophical Dispute of the 11th Century', *BYZANTINOS ΔΟΜΟΣ* 29 (2021): 145–61.

presence of this kind of reflection was seen as more problematic in a Christian writer, the Nyssen's star would have shone less brightly.

In this regard, Gregory would have shared the fate of his more famous forerunner, Origen of Alexandria, albeit to a lesser extent. Gregory never exerted quite the unique influence the Alexandrian had for some time, but neither did he ever face the outright condemnation directed at Origen from the late fourth century onwards.⁷

Despite those differences, naming these two early Christian writers side by side seems almost inevitable in the present context. There is no doubt that Gregory knew and deeply appreciated the Alexandrian thinker. While the relationship between their systems of thought has been variously assessed in the scholarly discussion, one can hardly deny that they share an intellectual temper that is otherwise quite rare among their Christian contemporaries.⁸ While the belief that the Christian Scripture and the Christian faith are superior to alternative philosophies was widely shared among early Christian thinkers, only some understood this premiss as necessitating the development of a philosophical account of Christianity that would, in ambition and scope, compete with the heights reached by Greek philosophy in late antiquity. Origen and Gregory of Nyssa were clearly in the latter group, and this approach is evident across the latter's oeuvre.

We know little about his life as there is no funerary oration, no early *vita*, and the fifth-century church historians do not have substantive reports about him either. Most of what

⁷ The best account remains Elizabeth Clark, *The Origenist Controversy: The Cultural Construction of an Early Christian Debate* (Princeton: Princeton University Press, 1992).

⁸ For a full investigation of Gregory's debt to Origen see now: Nikolai Kiel, *Das Erbe des Origenes bei Gregor von Nyssa: Protologie und Eschatologie im Kontext des Origenismus* (Münster: Aschendorff, 2022).

we know is inferred from his own writings, but Gregory was the kind of author who tells the reader little about himself.⁹ He was evidently considerably younger than his brother, Basil, whom he regularly calls his ‘teacher’, and would thus have been born in the mid-330s at the earliest. Two great caesuras in his life took place at almost exactly the same time: Basil’s death, traditionally dated to 1 January, 379, and the accession of Theodosius I later in the same year.¹⁰ Until that time, Gregory kept a low profile in the shadow of his celebrated brother. The radical change of church politics under Theodosius with his adoption of Nicene Christianity, however, created an opportunity for Gregory to ascend to prominence across the Eastern provinces of the Empire, doubtless capitalizing on his close relationship to the late Metropolitan of Caesarea. The next five or so years see Gregory active in places from Armenia to Constantinople to Jerusalem. He is named a key pillar of Theodosian orthodoxy, personally close enough to the imperial family to be asked to deliver the funerary oration at the death of Theodosius’ daughter, Pulcheria.¹¹

His adoption of the *vita activa*, however, seems to have ended as suddenly as it started. We do not know why, but there is hardly any mention of Gregory from the mid-380s. We hear of his presence at a synod in 394 which is therefore taken as the *terminus post quem*

⁹ For a recent synthesis of the available information see Anna M. Silvas, *Gregory of Nyssa: The Letters. Introduction, Translation and Commentary*. Supplements to *Vigiliae Christianae* 83 (Leiden: Brill, 2007), 1–57.

¹⁰ The date of Basil’s has recently been controversially discussed, see Silvas, *Letters*, 32–9. She concludes that the most likely date was 20 September 378.

¹¹ Silvas, *Letters*, 46–54.

for his death about which, once again, we have no other information.¹² Gregory's public life thus seems to have occupied little more than half a decade within a rather long life. All the more remarkable is it that within the whirlwind of activities that seems to have consumed the bishop of Nyssa, he still found time during those years to compose a considerable part of his extant writings.

For all the scarcity of information about Gregory of Nyssa as a person and participant in the events of his time, his surviving oeuvre is remarkably extensive. His extant works fill three volumes in Migne's *Patrologia Graeca* and ten in the nearly complete critical edition published by Brill as *Gregorii Nysseni Opera*.¹³ These works can roughly be divided into four major groups: doctrinal works, exegetical works, ascetic works, and sermons.¹⁴ There is also a moderately sized letter corpus.¹⁵ The division is not particularly neat, as Gregory's interest in asceticism, for example, is strongly present in his exegetical works, and the same can be said about his doctrinal commitment to Nicene orthodoxy, which comes to the fore across the whole breadth of his writings.

¹² Ernest Honigman, *Trois mémoires posthumes d'histoire et de géographie de l'orient chrétien*, ed. Paul Devos (Brussels: Éditions de Byzantion, 1961), 37.

¹³ Migne reproduced the edition published by A. Morell in Paris in 1638: *Patrologia Graeca*, edited by Jacques Paul Migne, vols. 44–46 (Montrouge: J.-P. Migne, 1863); *Gregorii Nysseni Opera* (= GNO), edited by Werner Jaeger et al. 10 vols. (in 21) (Leiden: Brill, 1952–present.).

¹⁴ The GNO edition follows this division. Doctrinal works: vols. 1-3; exegetical works: vols. 4-6; ascetic works: vols. 7 and 8; sermons: vols. 9 and 10.

¹⁵ *Gregorii Nysseni Epistulae*, ed. Georgio Pasquali. 2nd ed. GNO 8/2 (Leiden: Brill, 1959).

Philosophical topics and approaches abound in all his works. While it is difficult (and potentially controversial) to identify one area of philosophy that was of particular relevance for this church father, a case can certainly be made for natural philosophy. Every reader of Gregory's texts will know that the Nyssen was nearly obsessed with the observation and the examination of the natural world. Arguments with no overt connection to problems of this kind are frequently embellished with analogies or illustrations taken from the world of natural phenomena which then run on for many lines or even pages and displaying a level of detail that is often hardly required by the argumentative point which they seem intended to illustrate.¹⁶

This evident predilection for the details of natural history in Gregory is, moreover, closely connected with his philosophical approach to reality. It is regularly the observation of the natural world that leads Gregory to deeper insights into the structure of reality and, ultimately, the divine ground of its being.¹⁷ It is therefore hardly coincidence that some of the most overtly philosophical among Gregory's works are writings that permitted him to tackle directly problems arising from the constitution of the world's physical reality.

This was primarily the case in writings on the doctrine of creation and on anthropology. There are three major treatises authored by Gregory of Nyssa that fall into this category. All three are closely related and were produced within a relatively brief period of

¹⁶ In *De anima et resurrectione*, e.g., he offers detailed reflections proving that the moon merely reflects the sun's light (ed. Andreas Spira and Ekkehard Mühlenberg. GNO 3/4 (Leiden: Brill, 2014), 17.4–19.9) in order to make the general point that cognition proceeds from observation but relies ultimately on rationality.

¹⁷ See again *De anima et resurrectione* (ed. Spira, 11.17–13.5); also *De infantibus praemature abreptis* (ed. Hadwig Hörner. GNO 3/2 (Leiden: Brill, 1986), 86.2–13).

time. Two of them continued to enjoy wide-spread acclaim through the Byzantine period. This was primarily the case for the treatise *De hominis opificio* (*On the Making of Man*), arguably the single most influential treatise penned by the Nyssen outside the strictly doctrinal area.¹⁸ While his conventional title suggests a treatise on the original formation of human beings, the treatise stands in the tradition of treatises *De natura hominis* and consequently addresses a wide range of anthropological questions from strictly theological and exegetical to more physiological ones including reflections on the importance of human hands, the nature of sense perception, and even the causes of yawning and dreams. In many ways closely related is his work *De anima et resurrectione* (*On the Soul and the Resurrection*) which develops further some key issues first broached in *On the Making of Man* even though its focus is more strictly on problems of the soul and its relation to the body.

On the Hexaemeron as a cosmological text

The third treatise in the group is *On the Hexaemeron*, whose fate, however, was to be rather different. Throughout the entire Patristic and Byzantine period, there are few who have

¹⁸ The full story of this treatise's later reception remains to be written, but its significance is indicated by the fact that it is the only major work by Gregory that was widely known in the West as it was translated into Latin twice, by Dionysius Exiguus and later by John Scotus Eriugena. For context, see now also the introduction in Gregory of Nyssa, *On the Human Image of God*, ed. and trans. John Behr. Oxford Early Christian Texts (Oxford: OUP, 2023), 1–141. Note that Behr adopts this title for *De hominis opificio*.

evidently read let alone used the text.¹⁹ Within the rich and continuing tradition of the Christian interpretation of the Hexaemeron, the Mosaic report of the six days of creation, Gregory's text constitutes at best a marginal product. This neglect has been continued by modern research. Translations into modern languages of the text were slow to appear. To this date, there have been two translations into German, one into English, and a partial one into Italian.²⁰ The secondary literature dedicated to the discussion of this work has also been limited.²¹

One can only speculate about the reasons. When Gregory published *On the Making of Man*, in early 379, he related the work directly to Basil's recently completed *Homilies on the Hexaemeron*.²² This text, which was to become perhaps the single most admired treatment of the topic from any Greek theologian, had not covered the creation of human nature in any detail.²³ There are good reasons to believe that this line of argument was not the whole truth.

¹⁹ A rare exception is Eutychius, Patriarch of Constantinople in the sixth century in his *De differentia naturae et personae*, ed. Paolo Ananian, 'L'opuscolo di Eutichio patriarca di Costantinopoli Sulla "Distinzione della natura e persona"', in: *Armeniaca: Mélanges d'études arméniennes: Publiés à l'occasion du 250e de l'entrée des pères mékhitaristes dans l'île de Saint-Lazare* (Ile de Saint Lazare: Imprimerie des Mékhitaristes, 1969), 316–82.

²⁰ There are also two sixteenth-century translations into Latin. For a description of all translations, see Drobner's *Praefatio* in GNO 4/1, cix–cxii.

²¹ See the literature listed in n. 1. More literature will be introduced further down, in connection with some specific issues *In hex.* deals with.

²² Gregory of Nyssa, *De hominis opificio praef.* 2 (ed. John Behr, *Human Image*, 144).

²³ Basil of Caesarea, *Homiliae in hexaemeron*, eds. Emmanuel Amand de Mendieta and Stig Y. Rudberg. GCS, N.F. 2 (Berlin: de Gruyter, 1997).

After all, Gregory begins *On the Making of Man* with a chapter detailing basic ideas about the creation of the material universe which are not evidently culled from Basil's homilies.²⁴ Gregory clearly had his own independent cosmological ideas well beyond problems around the creation and constitution of human beings.

It is intriguing that the need to add to Basil's *Homilies* is once again cited in the opening paragraphs of *On the Hexaemeron*.²⁵ This time, Gregory reports that he has heard of people unfairly critiquing his late brother's work. His intention, therefore, is to defend him. The writing is therefore sometimes referred to as the *Apology on the Hexaemeron*. It is, nevertheless, telling that Gregory's most fundamental defence of Basil's homilies consists in his observation that his brother had adapted his teaching to the limited intellectual capacities of his listeners.²⁶ While it is the case that throughout his *Homilies*, Basil referred to the potential mismatch of his own cosmological interests and the expectations of his

²⁴ Gregory of Nyssa, *De hominis opificio* 1. Intriguing, furthermore, is the existence of homilies *On the Creation of Man* in the Basilian corpus. While some think of them as spurious, the argument has been made that Basil *did* preach on this topic too but was unable to prepare the text for publication. See: Stanislas Giet, 'Saint Basile a-t-il donné une suite aux homélies de l'Hexameron?' *Recherches des Science Religieuse* 33, no. 3 (1946): 317–58. Should Gregory, had his primary interest been to cultivate Basil's memory, not have edited those rather than use the absence of an extended treatment of the subject matter in the published version as a pretext to superimpose his own version?

²⁵ Gregory of Nyssa, *In hex.* 1–6.

²⁶ Gregory of Nyssa, *In hex.* 4 (ed. Drobner, 9.16–2). On the face of it, this claim is almost trivially accurate as Basil's text was based on homilies, and the genre limited the amount of speculative and scientific detail he could include in his presentation.

congregation,²⁷ Gregory's comment is, nevertheless, deeply ambivalent and arguably indicates his conviction that his own task was not so much the 'defence' of his brother on cosmological issues but rather the improvement of the theories put forward in the *Homilies on the Hexaemeron* by means of a more thoroughly speculative approach to the biblical text.

He does so by means of an account that for the most part roughly follows the biblical narrative in Gen 1 until the fourth day (Gen 1:19). In the course of this account, he addresses variously a number of problems he had identified in his opening section as being in need of a solution.²⁸ Why he concludes his treatise before the fifth day Gregory does not say, but it appears that his interest in the current treatise was limited to the physical universe; the creation of animals and human beings would thus have been outside of his remit. In this connection, it is worth mentioning that in his treatment of the third day Gregory passes over the creation of vegetation or plants although their creation is reported as having taken place on this day. To the continuous exegesis of these verses is added an excursus on the question of the 'third heaven' mentioned by Paul.²⁹ This too was an objection to Basil's *Homilies* according to Gregory's introductory presentation.³⁰

While it would thus be wrong to discard *tout court* Gregory's apologetic purpose *vis-à-vis* Basil's *Homilies*, his *On the Hexaemeron* ultimately represents his own cosmological theories, which are at least in places at variance with Basil's opinions. Especially notable is their disagreement on the waters above the firmament (Gen. 1:6–7). While Basil had proposed a physical explanation for the existence of waters that are above the skies, Gregory

²⁷ Notably at *Homiliae in hexaemeron* 9.1.

²⁸ See Köckert, *Christliche Kosmologie*, 400–1 for a list of these problems.

²⁹ Gregory of Nyssa, *In hex.* 75–6.

³⁰ Gregory of Nyssa, *In hex.* 3 (ed. Drobner, 9.1–15).

spent a considerable part of his treatise arguing that these ‘waters’, rather, must be understood as intelligible being.³¹ His initially cited protestations that he has no interest in contradicting his late brother were therefore arguably intended to forestall the charge that this was what he in fact intended.³² It is quite possible that his readers were not fooled and saw his treatise for what it was, an account in competition with the one prepared by his brother just before his passing. As such, the runaway success of Basil’s homilies may have been at least one reason for the neglect Gregory’s text was to suffer.

It is, moreover, possible that Gregory’s treatise was provocative in yet another way. Recent research has shown that from the middle of the fourth century, an approach to the Hexaemeron took hold among Eastern theologians that was starkly at variance with the older tradition inherited from Philo and Origen. This approach replaced a philosophical reading of the Genesis text with a literalist attempt to identify ‘scientific’ facts from the biblical texts.³³

³¹ Gregory of Nyssa, *In hex.* 18–27 and Basil, *Homiliae in hexaemeron* 3.4–9. See de Marco, ‘Presentation’, 345–52 for a detailed investigation of the issue.

³² See Gregory of Nyssa, *In hex.* 6 (ed. Drobner, 13.11–20).

³³ For this new tendency see Benjamin Gleede, *Antiochenische Kosmographie? Zur Entstehung und Verbreitung nichtsphärischer Weltkonzeptionen in der antiken Christenheit* (Berlin: de Gruyter, 2021). *Id.*, ‘The Christian Rejection of Ptolemean Cosmography in (Late) Antiquity: Motives, Modalities, and Backgrounds’, in Ana Schiavoni-Palanciuc and Johannes Zachhuber (eds.), *Platonism and Christianity in Late Ancient Cosmology: God, Soul, Matter* (Leiden: Brill, 2022), 184–204.

Basil, it seems, sought to trace a path close enough to this new norm to be later seen as its champion but without adopting its Philistine rejection of Greek culture in its entirety.³⁴

At first sight, Gregory's approach is similar. Like Basil, he rejects allegory or, at least, pretends that he does.³⁵ Moreover, his emphasis on natural history aligns well with the recent turn in the interpretation of the Hexaemeron. Upon closer inspection, however, the divergences between Gregory's *In Hexaemeron* and the broader trends emerging in post-Nicene cosmology appear stark. Where others emphasize the contrast between Scriptural revelation and pagan science, and the superiority of the former, Gregory's plea is to bring the two together. At the end of his work, he writes, 'We have followed the sequence of nature throughout our study of the words [sc. of the Bible], and through them we have demonstrated, to our ability, that there is no conflict, though some seem on a more superficial reading to be mutually discordant'.³⁶

³⁴ Centuries later, Anastasius Sinaïtes writes of those who replaced the older, allegorical with a literalist approach to the Hexaemeron (κατὰ τὸ γράμμα τὰ συγγράμματα ἑαυτῶν περὶ τῆς ἑξαήμερου ἐξέθεντο). Among them, he names Basil in the first instance, followed by Chrysostom, Theodore of Mopsuestia, Severianus of Gabala, Eusebius of Emesa and others: *In Hexaemeron* VIIb.4.695–703 (ed. J. D. Baggarly and C. A. Kuehn. *Orientalia Christiana Analecta* 278 (Rome: Pontificio Instituto Orientale, 2007)).

³⁵ Gregory of Nyssa, *In hex.* 77 (ed. Drobner, 83.11–2). It is arguable, however, that Gregory's claim that the waters above the firmament of Gen 1:7 refer to intelligible being relies on allegory.

³⁶ See *In hex.* 77 (ed. Drobner, 83.13–8): ὡς ἦν δυνατόν, μενούσης τῆς λέξεως ἐπὶ τῆς ἰδίας ἐμφάσεως, τῷ τῆς φύσεως εἰρμῷ διὰ τῆς θεωρίας τῶν ὀνομάτων ἠκολουθήσαμεν, δι' ὧν τὸ

Crucially, perhaps, Gregory emphatically embeds his extensive scientific elaborations within a philosophical and speculative framework hewing closely, as this volume will show in detail, to a long tradition in pagan, Jewish, and Christian cosmology. His apparent intention to integrate the recent interest in Genesis as a ‘scientific’ text with the older approach that considered the biblical account an expression of Moses’ superior philosophy may not have meshed well with the predominant exegetical trends of his time. For today’s reader, however, it is arguable this very ambition that makes *In hexaemeron* worthy of serious attention.

The historical background

The tradition within which Gregory locates himself can ultimately be traced back to Plato’s dialogue, *Timaeus*, which, with its mythologically presented philosophical cosmology, became to his readers the source of much fascination but also of irritation.³⁷ Easily the most influential among Plato’s written works in the imperial era, its impact reached far beyond the group of philosophers now referred to as Middle Platonists. Most important for later Christian cosmologists became the work of Philo, the great Jewish philosopher of the first

μηδὲν ὑπεναντίως ἔχειν τῶν δοκούντων κατὰ τὴν ἐπιπολαιότεραν ἀνάγνωσιν ἀσυμφωνεῖν ἀλλήλοις, καθὼς ἦν δυνατόν, ἀπεδείξαμεν.

³⁷ See Thomas Leinkauf and Carlos Steel (eds.), *Plato’s Timaeus and the Foundations of Cosmology in Late Antiquity, the Middle Ages and Renaissance* (Leuven: Leuven University Press, 2005), especially the studies collected in part one: ‘Spätantike’.

century.³⁸ Philo pioneered an approach to the Book of Genesis, specifically its account of the creation of the world in six days (the Hexaemeron), that was *inspired* by the *Timaeus* but aimed at proving the ultimate superiority of the Mosaic report as revealed source of cosmological knowledge.³⁹ The relationship of the tradition initiated by Philo to the *Timaeus* was therefore always ambivalent, displaying both interdependence and competition, agreement as well as sharp divergence.

The tension between Jewish-Christian cosmology, developed through the interpretation of the Hexaemeron, and the Platonic tradition, built on the *Timaeus*, ran deeper than a mere rivalry for antiquity and authority. For all its mythological and anthropomorphic presentation, there were theological and philosophical ideas inscribed in the Hexaemeron, or at least plausibly imputed to it on the basis of other parts of Scripture, that were at variance with the Platonic tradition.

Key for the *Timaeus* and for Platonic philosophy in general was the division of being into sensible and intelligible. Whether Genesis and the Bible in general offer support for this ontological distinction was (and is) a matter of debate.⁴⁰ Philo and those who followed him down to Gregory of Nyssa in the fourth century accepted that it did. Nevertheless, the question of what this meant for their interpretation of the Hexaemeron had no self-evident

³⁸ See now: Maren Niehoff, *Philo: An Intellectual Biography* (New Haven, CT: Yale University Press, 2018).

³⁹ The classic treatment remains David T. Runia, *Philo of Alexandria and the Timaeus of Plato* (Leiden: Brill, 1986).

⁴⁰ Origen famously argued that the biblical term ‘invisible’ should be understood to refer to intelligible being: Origen, *De principiis* I.7. For Gregory of Nyssa, see *Contra Eunomium* I 270.

answer. Whereas Philo veered towards the view, popular also among Middle Platonists, that the paradigmatic Forms of Plato's dialogue were thoughts in the mind of God, Christian authors beginning with Origen tended to search for a different solution.⁴¹

Influential were attempts to read the first verse of Genesis ('In the beginning God created heaven and earth') as implying that God created the world 'in' a principle called the *arche*. From the late second century, Christian thinkers identified this *arche* (through a complex combination of biblical passages) with the pre-existent Christ.⁴² Christ is thus an ontological mediator containing the paradigms of material beings, the genera and species, within himself from eternity. In this sense, Origen identified Christ as God's Wisdom 'in which' he created all things (Ps. 104:24).⁴³

Despite the significance of Plato's *Timaeus* for authors such as Philo and Origen, it would be mistaken to consider early Christian cosmology merely as an extension of the Platonic tradition. Rather, other philosophical sources were used and adapted where appropriate and needed. This was above all the case for Stoic cosmology, which had much to offer Jewish and Christian readers as it avoided the ontological dualism inherent in Platonism and added a dynamic and developmental element to cosmology. The integration of Stoic

⁴¹ Philo, *De opificio mundi* 5. For the context see John Dillon and Daniel J. Tolan, 'The Ideas as Thoughts of God', in Alexander J. B. Hampton and John Peter Kenney (eds.), *Christian Platonism: A History* (Cambridge: CUP, 2020), 34–52.

⁴² A notable text is Theophilus of Antioch, *Ad Autolyicum* II.10.7–12. This text is discussed in the contribution of Johannes Zachhuber to the present volume.

⁴³ Origen, *In Johannem* I.19.22.114.

ideas with the tradition flowing from the *Timaeus* was made easier by the fact that Middle Platonists had already used Stoic ideas in their interpretation of Plato's dialogue.⁴⁴

One question on which Christian authors parted ways with practically the entire cosmological consensus was in their notion that God created the world 'from nothing' (*ex nihilo*). This notion, accepted universally by Christian authors from the turn of the third century, was directed against prevalent ideas according to which the divinity only shaped or formed pre-existent matter. Creation in the Christian sense, by contrast, was supposed to mean the production of being from non-being making the cosmos in its entirety contingent on the creative agency of the deity.⁴⁵

Main ideas in Gregory's treatise

If Gregory inherited the Philonic-Origenian cosmological tradition, this does not mean that his account of creation was a mere rehash of earlier conceptions and theories. Rather, the Nyssen boldly developed and transformed the material he used up to and including the *Homilies on the Hexaemeron* of his brother, Basil.⁴⁶

⁴⁴ Gretchen J. Reydams-Schils, *Demiurge and Providence: Stoic and Platonist Readings of Plato's Timaeus* (Turnhout: Brepols, 1999).

⁴⁵ Gerhard May, *Creatio e Nihilo: The Doctrine of 'Creation out of Nothing' in Early Christian Thought*, trans. A. S. Worrall (Edinburgh: T&T Clark, 1994).

⁴⁶ A full study of the precise relationship of Gregory's and Basil's cosmologies in their respective texts remains a desideratum, but see de Marco, 'Presentation', 339–45 for a comparative study of their interpretation of Genesis 1:1.

One characteristic example of this approach is his doctrine of simultaneous creation. This remarkable theory is fully discussed in Benjamin Gleede's contribution to the present volume but considered in other chapters as well. Gregory understands the words 'in the beginning' (Gen 1:1) as referring to a proto-temporal instant in which God brought forth the world in full, but only in a state of potentiality, like the seed from which a plant is yet to grow. This initial creation, Gregory argues, subsequently develops into its complete physical actuality by moving along an orderly path (ἀκολουθία) which, however, was itself inscribed into the original creation by God's power and wisdom.⁴⁷ This principle of cosmic development, Gregory aligns with the divine commands reported in the Genesis account. These 'words' (λόγοι), for Gregory indicate the existence of dynamic principles in creation, as argued in Johannes Zachhuber's chapter.

Regardless of how precisely one understands Gregory's view of simultaneous creation, his adoption of this theory indicates that his cosmology draws on more than Platonic influences. The idea of a world developing from seed-like origins was of Stoic provenance.⁴⁸ In her chapter, Gretchen Reydam-Schils shows in detail how much the reconstruction of Gregory's thought in *On the Hexaemeron* benefits from a careful consideration of the Stoic background. That said, Gregory's cosmology as a whole is neither Platonic nor Stoic but rather an original development building on a variety of earlier ideas.

This variety is reflected in contributions to the present volume. While Benjamin Gleede and Jonathan Greig contextualize Gregory in the tradition of Platonic cosmologies,

⁴⁷ Gregory of Nyssa, *In hex.* 9.

⁴⁸ Aëtius, *De placita philosophorum* 1.7.33 = Hans Friedrich August von Arnim (ed.), *Stoicorum veterum fragmenta*, vol. 2 (Stuttgart: Teubner, 1964), 1027. See Gretchen Reydam-Schils chapter for a detailed discussion of this text.

Anna Marmodoro reads Gregory against the background of Aristotle's *Metaphysics*. Andrew Radde-Gallwitz, who discusses Gregory's remarkable theory of particles, refers to atomism, a tradition going back to Empedocles.

Directly connected with Gregory's theory of simultaneous creation is his account of the origin of matter. Among all of Gregory's cosmological ideas, this is easily the one that has received the widest scholarly attention. Whereas Arthur H. Armstrong contrasted Gregory's teaching with ideas in Plotinus, Richard Sorabji presented him as a forerunner of Berkeley's idealism.⁴⁹ In the present volume, Gregory's account is further discussed by Anna Marmodoro, Andrew Radde-Gallwitz, and Jonathan Greig.

Gregory believes that, by conceiving of creation as brought forth by God 'in an instant', he has resolved the notorious difficulty of how an immaterial God could create matter. His claim is that 'matter' (ὕλη) is only a word for what results from the combination of qualities and natural kinds which in themselves are incorporeal. In bringing forth material creation, then, God had no need to produce being that was metaphysically opposed to his own, immaterial way of being.⁵⁰

In recognizing the conceptual difficulty of the origin of matter, Gregory appears once again as a reflective and conceptually creative advocate of Christian creationism. He starts

⁴⁹ Arthur Hilary Armstrong, 'The Theory of the Non-Existence of Matter in Plotinus and the Cappadocians' *Studia Patristica* 5 (1962), 427–9 (= id., *Plotinian and Christian Studies* (London: Variorum, 1979)). Richard Sorabji, *Time, Creation and the Continuum* (London: Duckworth, 1983), 290–4. See now also: Gerd Van Riel and Thomas Wauters, 'Gregory of Nyssa's "Bundle Theory of Matter"', *Journal of Early Christian Studies* 28, no. 3 (2020): 395–421.

⁵⁰ Gregory of Nyssa, *In hex. 7* (ed. Drobner, 15.8–16.11).

from the Christian doctrine of *creatio ex nihilo*, but also the principle that like causes like.⁵¹ On this basis, he seeks to rebuild key cosmological and ontological concepts. Scholarship has disagreed not only on whether Gregory's argument succeeds but even on its meaning and reconstruction. Contributions to the present volume continue to this debate without claiming to resolve it. Radde-Gallwitz's and Greig's interests are primarily in interpreting Gregory's teaching, whereas Marmodoro's chapter probes the philosophical coherence of his argument.

One of the most fascinating aspects of Gregory's work on the Hexaemeron is the attention he devotes to questions that enter deeply into the field of ancient natural science. These passages in his work have rarely been examined in detail; their prominent place in the treatise may well be a reason for its overall neglect in past scholarship. In a recent study, Isidoros Katsos has analyzed Gregory's account of light in the context not only of philosophy more narrowly understood but also of ancient physics.⁵² His work shows the potential of reading Gregory's work against the backdrop of ancient natural science. In the present volume, he offers insights from his research into this problem which is also an indication of just how much more research is needed into this aspect of Gregory's cosmological treatise.

Conclusion

Gregory of Nyssa's *On the Hexaemeron* is a writing that has not been treated too kindly by posterity. Whatever the reasons for this neglect, the treatise deserves careful study for its fascinating, uncompromising, and unprecedented attempt to use the biblical Hexaemeron as

⁵¹ More on this in Anna Marmodoro's chapter in this volume.

⁵² Katsos, *Metaphysics of Light*.

the basis of a highly technical account of the origins of the physical cosmos from God's unique creative acts. In thinking through this most fundamental question, Gregory made use of a wide range of earlier authors and traditions—even if it is mostly impossible to identify which precise sources he used—to sketch out his own vision of what a proper understanding of God and world would mean based on the principles of the Christian doctrine of creation. Regardless of the validity of all or indeed any solutions he proposes, his writing is testimony of genuinely philosophical reflection in the context of early Christianity.

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