CHAPTER 4

THE CAUSALITY OF THE UNMOVED MOVER[1]

4.1 Is the Unmoved Mover a Final Cause, an Efficient Cause, or Both?

While Chapters 1 and 2 have focused on Proclus' integration of the intellect as prime mover in his system of movers, the question still arises regarding the prime mover's causality not just in his own philosophy but also in his exegesis of Aristotle. For, as is widely acknowledged, one of the perennial questions of Aristotelian scholarship concerns the type of causal relationship between the prime mover and the universe. It seems well-established in *Physics* 8 and *Metaphysics* 12 that the unmoved mover is ultimately responsible for the eternal motion of the universe. Yet, it remains obscure how it causes this motion and whether the two accounts are even compatible. This ambiguity is fundamentally due to the limited description – especially in the *Physics* – of the unmoved mover's mode of operation, which has led to fierce debates among scholars. Just to give a brief overview, in recent scholarship Judson (1994; 2019) has maintained that the two accounts are coherent and that Aristotle's unmoved mover is an efficient cause insofar as it is a final cause – that is, by being an object of desire to the heaven it can be regarded as an efficient cause of the heaven's desire and, thus, remotely of its motion. This view has been rejected by Gourinat (2012), who – like Manuwald (1989) before him – maintains that the unmoved mover is in both works only a final cause. In contrast to this position, Berti (2007) claims that the unmoved mover is solely an efficient cause of the heaven's motion. Most importantly, the vast majority of scholars

[1] An abbreviated and revised version of Sections 4.1 and 4.3 of this chapter has appeared as Marinescu (2023a).

who assume the efficient causality of the prime mover only regard it as an efficient cause of motion, not of being.

The origins of the dispute regarding the causality of the Aristotelian prime mover can be traced back to antiquity. Particularly among late Neoplatonists the problem becomes a central concern in Aristotelian exegesis, arguably due to the need to harmonise Aristotle's intellect with Plato's demiurge and to account for the cause of the generation of the cosmos (Simpl. *In Phys*. 1360.24–31). Crucially, the issue is a major source of contention between Neoplatonists who believe there is an essential agreement between Plato and Aristotle and those who do not endorse this view. Unlike many scholars nowadays, the Neoplatonists ascribe to Aristotle a unitary and systematic theory of the unmoved mover, found not only in *Physics* 8 and *Metaphysics* 12 but also in the *De caelo*.[2] The most influential interpretation, especially in consideration of its medieval reception, is the one proposed by Ammonius and his pupil Simplicius. Both argue that Aristotle's unmoved mover is not just a final cause but also an efficient cause of the cosmos' motion *and* being – that is, it generates the cosmos. Especially the latter is in sharp contrast to the opinion of most modern scholars. What is precisely meant by this is obscured by the fact that Simplicius dedicates little space to the question and mostly offers us a few testimonies from Ammonius' – now lost – book on this issue which was central to this debate.

Unlike Ammonius and Simplicius, Proclus criticises Aristotle's unmoved mover for being exclusively a final cause and *not* an efficient cause of being as well:

> And indeed the inspired Aristotle seems to me for this reason, in preserving his first principle free of multiplicity, to make it only the final cause of all things, lest in granting it to produce (ποιοῦν) all things, he should be forced to grant it activity

[2] The interpretation is inspired by Aristotle himself who clarifies in *Phys.* 8.1.251a5–8 that the account of the unmoved mover does not belong to natural philosophy. This, of course, implies that the unmoved mover is properly studied in a work dedicated to the first principles, i.e., *Met*. Nevertheless, the two descriptions of the prime mover share a number of similarities, as Gourinat (2012) shows. Additionally, the Neoplatonists find references to the unmoved mover in *DC*, which makes it compatible with *Phys.* 8 and *Met*. 12. Their unitary view can be contrasted with developmentalist accounts by, e.g., Guthrie (1939) and Judson (1994). See also Section 4.2.2.

towards what follows upon it (τὴν πρὸς τὰ μετ' αὐτὸ ἐνέργειαν); for if it is only the final cause, then everything exercises activity towards it, but it towards nothing. (*In Parm.* 5.1169.4–9)

Thus, for Proclus, Aristotle's intellect is 'in no way productive' (*In Tim.* [1.390.6]: ποιητικὸς δὲ μηδαμῶς). As encountered previously, this attitude is in line with his non-harmonist and more critical approach towards Aristotle. As one of the earliest extensive engagements with the causality of the unmoved mover, Proclus' critique plays a pivotal role and prefigures many ancient and medieval discussions on this issue. Indeed, as I show, some of the arguments employed by Ammonius and Simplicius in defending the unmoved mover's efficient causality are found in Proclus in a more elaborate way. The major difference is that Proclus, unlike Ammonius and Simplicius, does not ascribe the results of these arguments to Aristotle. As I emphasise, Proclus' interpretation is closer to modern views on Aristotle and, indeed, should be preferred to Ammonius'/Simplicius' reading as it is closer to the meaning of Aristotle's text. I will also demonstrate that the way these authors interpret Aristotle is grounded in their general views on Aristotle's relationship with Plato. For this, I offer the first in-depth comparison of these authors on such a challenging issue.

My objective in this chapter is threefold: (1) to set out Proclus' criticism of Aristotle's intellect through a detailed analysis of his objections; (2) to compare it with Ammonius' and Simplicius' position by focusing on their different strategies in reading Aristotle; and (3) to present Proclus' own reasons for making the demiurge a final cause and efficient cause of being, which are connected to his critique. The chapter is split into four sections. I first set out briefly Aristotle's own view on the causality of the intellect (4.2), before I move on to Proclus' critique (4.3). I elucidate how this specific criticism is part of a general attack on Aristotelian metaphysics which Proclus regards as deficient. In defending his view of the demiurge's causality, Proclus chides Aristotle numerous times for rejecting the efficient causality of the intellect. I reconstruct two central objections in which Proclus demonstrates that Aristotle's own principles would have

committed him to accept the intellect as efficient cause of being. Aristotle himself, however, did not draw this conclusion, as Proclus makes clear. Then (4.4) I set out the views of Ammonius and Simplicius, who regard Aristotle's intellect as final cause as well as efficient cause of being. I show that they partly use the same arguments as Proclus with the crucial difference that these Neoplatonists ascribe them completely to Aristotle. As I demonstrate, their strategy of reading Aristotle differs from Proclus' more critical position because of their commitment to harmonising Aristotle with Plato on fundamental issues which Proclus does not share. This emphasises that Aristotle's authority is not the same in Proclus as in Ammonius and Simplicius. By reconstructing this late antique debate I render these different approaches to Aristotle among the Neoplatonists more palpable. Finally, (4.5) I discuss Proclus' positive views on the subject matter. As I show, he backs up his view of the demiurge's causality not only by his general metaphysical theory of causation found in the *Elements of Theology* but also by an exegesis of Plato's *Timaeus*. The former offers an attractive theoretical solution to why we should assume that the intellect is both a final and an efficient cause.

4.2 Aristotle

I briefly outline in the following my own interpretation of Aristotle's views. I do not have space to do justice to the complexity of this question nor to the wide variety of interpretations. It remains, nevertheless, necessary to introduce the discussion of the Neoplatonist positions with a treatment of Aristotle as it inevitably influences my analysis of them. Part of my intention is to show that the unmoved mover's causality is just as controversial nowadays as it was in late antiquity. As it emerges, various points of contention are very similar and centred around the same passages. Since the prime mover's final causality has rarely been called into question, the focus is on the prime mover's efficient causality, which has been negated by Aristotle's commentators since antiquity. The meaning of efficient causality in this context is often obscure in modern scholarship. The majority of scholars

understand it as a cause of motion and not of being like some ancient commentators. Yet, whether this causation of motion implies a transmission of force or energy from the unmoved mover to the cosmos is a matter of debate.

Oddly enough for a treatise meant to explain the origin of the cosmos' motion, Aristotle is surprisingly taciturn in *Physics* 8 when it comes to how exactly the unmoved mover brings it about.[3] Characterisations of the unmoved mover as either final or efficient cause seem vague. This issue becomes even more pressing if we consider Aristotle's effort in *Physics* 2 to set out a nuanced theory of causality (which, however, applies primarily to natural substances).[4] Due to this perceived ambiguity, scholars like Manuwald (1989) and Gourinat (2012) have abandoned the identification of the unmoved mover with efficient causality. Yet, there still remain numerous scholars who take this very position (as we will see in the following sections). The picture differs in *Metaphysics* 12 where the prime mover is described as an object of desire and thought as well as something for the sake of which (οὗ ἕνεκα)[5]: it moves as a beloved (12.7.1072b3: κινεῖ δὴ ὡς ἐρώμενον). These descriptions have led to the widespread view that the prime mover there is a final cause. How then are we supposed to square this position with the view offered in *Physics* 8?

There are strong reasons for assuming that both accounts of the unmoved mover in *Physics* 8 and *Metaphysics* 12 are essentially in agreement and complement each other, although the contexts and approaches clearly differ.[6] The argument for the unmoved mover in *Metaphysics* 12 is highly dependent on *Physics* 8 and, in fact, to

[3] Cf. Graham (1999: 179): 'But how does it cause motion? Curiously, Aristotle does not say anywhere in this treatise' (and 180); Gourinat (2012: 194): 'Aristote reste relativement évasif à la fin du livre VIII sur le mode de causalité du premier moteur'. For similar remarks, cf. Simpl. *In Phys*. 1363.12–14; Ross (1936: 94); Manuwald (1989: 8–9).

[4] As Graham (1999: 104–5) correctly notes, the four causes are already missing in the first half of book 8 where Aristotle is keen to introduce other terms from his conceptual repertoire such as potentiality/actuality and essential/accidental. One possible explanation is that Aristotle takes it for granted that efficient causality is under discussion.

[5] The same description is also found at *DC* 2.12.292b5–6, which I take to refer to the prime mover. Cf. Guthrie (1939: 208, n. a); Easterling (1961: 151).

[6] The different perspectives have been emphasised in antiquity and the Middle Ages, e.g., in Avicenna, cf. Adamson (2018: 199–200). For more recent discussions, cf. Jaeger (1923: 383); Gourinat (2012: 179–85).

a large degree unintelligible without the latter.[7] It is thus incorrect to claim that the 'conceptions of the First Cause developed more or less independently in the *Physics* and *Metaphysics*' (Wardy 1990: 123). Moreover, *De motu animalium* (1.698a7–11, 6.700b7–9) refers indiscriminately to both works for the underlying theory of motion without a hint of a substantial difference between them.[8] In the following, I consider three arguments for the efficient causality of the unmoved mover. The first evidence is the way the argument is sustained in *Physics* 8 (4.2.1). As further proof, I examine the infinite power argument of *Physics* 8.10 which strongly suggests an efficient causality of the unmoved mover and is, most importantly, also encountered in *Metaphysics* 12 (4.2.2) where we find further evidence for this type of causality (4.2.3).

Before I examine these two works, I would like to consider the claim that the prime mover cannot be both an efficient and final cause *on general grounds*. The widespread view that whatever is a final cause cannot be an efficient cause is based on an interpretation of *GC* 1.7.324b13–15:[9]

Ἔστι δὲ τὸ ποιητικὸν αἴτιον ὡς ὅθεν ἡ ἀρχὴ τῆς κινήσεως. Τὸ δ' οὗ ἕνεκα οὐ ποιητικόν. Διὸ ἡ ὑγίεια οὐ ποιητικόν, εἰ μὴ κατὰ μεταφοράν.

The thing which is efficient is a cause in the sense of that from which motion originates. The final cause is not efficient. Therefore, health is not efficient, except metaphorically. (tr. mine)

Proponents of this interpretation are, for instance, Manuwald (1989: 16) and Gourinat (2012: 176), who regard this as evidence that the unmoved mover can be only a final cause.[10] In contrast to these scholars, Sedley (2000: 345) and Judson (2019: 185–6) maintain that the passage does not apply to the unmoved mover.

[7] Cf. Gourinat (2012: esp. 205–6). The view that the two accounts fundamentally agree but still differ somewhat in presentation and emphasis is close to Judson (1994). It differs from some earlier accounts such as Solmsen (1960: 236; 242) or Guthrie (1981: 252) who seem to suppose that the two accounts are doctrinally identical.

[8] On *MA*'s references to the two works, cf. Manuwald (1989: 18; 71); Rapp (2020: 211–20).

[9] On this passage, cf. Philop. *In GC* 152.18–153.2; Wildberg (2004: 238–42); Buchheim (2010: 404); Tuozzo (2011: 459).

[10] Cf. also Rashed (2005: 136, n. 5); Berti (2007: 9).

This is either because *Metaphysics* 12 simply goes beyond the doctrine of *De generatione et corruptione*[11] or because Aristotle refers in the *De generatione et corruptione* passage to 'those cases of being active which involve *interaction*, and by the same token he is thinking of final causes such as health which are clearly not *active*' (Judson 2019: 185).

While I sympathise with Sedley's and Judson's conclusion, that is, that the unmoved mover can have both types of causality, I do not think they offer strong arguments for rejecting the *prima facie* reading of 324b13–15. Rather, I take it that the point of the passage is to emphasise that being *poiētikon* (ποιητικόν) automatically entails being an origin of motion, whereas a final cause – since it is not strictly speaking producing something – does not *have* to be an origin of motion. According to *GC* 1.6.322b22–4, to be productive *stricto sensu* (κυρίως) implies a mutual contact between mover and moved object. This only applies to moved movers but not to unmoved movers who can only have non-reciprocal contact with the moved objects. Nevertheless, in an extended sense[12] a final cause *can* be productive and thus an origin of motion. A good example for this is the soul which Aristotle characterises as final, efficient and formal cause (*DA* 2.4.415b8–12). Additionally, in *GC* 2.9.335a30–2 he admits that there is an efficient cause for eternal beings, that is, the heaven and stars.

4.2.1 *The Argument of* Physics *8 Requires an Efficient Cause*

The line of argumentation developed in *Physics* 8 generally suggests an investigation into the *efficient* cause of the cosmos' motion since Aristotle is looking for the origin of motion and conducts his discussion in efficient terms. The view has been proposed by Broadie and Judson as an evident fact without much further investigation.[13] Aristotle himself refers in *De generatione*

[11] Cf. Sedley (2000: 345, n. 23): '[t]o have identified the world's productive cause with what is also *literally* a final cause is the special contribution of *Metaphysics* Λ'.

[12] On the different ways of understanding κατὰ μεταφοράν, cf. Caston (1999: 218).

[13] Cf. the dogmatic statements of Broadie (1993: 379, n. 4): 'Dans la *Physique*, le Premier Moteur est cause efficiente, et il serait absurde d'appliquer cette argumentation à toute autre chose qu'à une cause' (also at 408–9); Judson (1994: 167): 'The argument for the

et corruptione (1.3.318a1–6) to the prime mover of the *Physics* as an efficient cause. Internal confirmation from *Physics* 8 for this view can be found in chapter 4. There Aristotle proves that everything in motion is moved by something (256a2–3: ἅπαντα ἂν τὰ κινούμενα ὑπό τινος κινοῖτο) – a phrase clearly indicating that efficient causality is discussed here, that is, the moving cause. More specifically, the preposition *hupo* (ὑπό) with the genitive indicates agency in this context.[14] At no point in the argument of chapter 4 does Aristotle distinguish between the causation of the unmoved mover and moved movers. Instead, he talks about causes of motion in general. However, elsewhere he entertains the possibility of only one-sided or non-reciprocal contact in the case of unmoved movers, which would imply that they bring about motion differently from moved movers. For instance, at 8.5 258a18–21 the unmoved part in a self-mover is presented as either being in reciprocal contact or only touching the moved thing while not being itself touched by it.[15] This presumably has to do with the unmoved mover's immateriality. Even if the prime mover causes the cosmos' motion either without any contact or by non-reciprocal contact, it still acts as an efficient cause of the motion and is, as such, treated together with other moving causes. There is no reason to assume that causing motion without contact or, at least, a non-reciprocal one excludes being an efficient cause. More puzzling is rather Aristotle's view that motion can be caused with non-reciprocal contact in the first place. This is due to the non-/super-natural origin of motion in the cosmos.

However, Gourinat (2012) has recently rejected this interpretation: while a great deal of the argumentation in *Physics* 8 seems to be looking for an efficient cause of motion, he argues that the introduction of an unmoved mover changes the type of causation under discussion.[16] According to Gourinat, when Aristotle posits an unmoved mover – either as part of a self-moving animal or as the prime mover itself – he is no longer investigating the *efficient*

necessity of the unmoved mover in *Phys*. VIII is conducted entirely in terms of efficient causation'.

[14] Cf. Broadie (1993: 379, n. 4); Judson (2019: 185).

[15] Cf. Graham (1999: 102) which includes a reference to *GC* 1.6.323a25–32.

[16] Ibid., 194.

cause of motion. He bases his claim on the consideration that unmoved movers cause motion differently than moved movers, which is grounded in a short passage from *Physics* 7.2:

> Τὸ δὲ πρῶτον κινοῦν, μὴ ὡς τὸ οὗ ἕνεκεν, ἀλλ' ὅθεν ἡ ἀρχὴ τῆς κινήσεως, ἅμα τῷ κινουμένῳ ἐστί (λέγω δὲ τὸ ἅμα, ὅτι οὐδέν ἐστιν αὐτῶν μεταξύ)· τοῦτο γὰρ κοινὸν ἐπὶ παντὸς κινουμένου καὶ κινοῦντός ἐστιν.
>
> The prime mover [of a thing] – which does not supply that for the sake of which but the source of the motion – is always together with the moved object (by 'together' I mean that there is nothing between them). This is common to everything moved and moving. (243a32–35; tr. mine)

Here Aristotle distinguishes between a proximate prime mover, which is moved, and the ultimate prime mover, which is unmoved.[17] Gourinat takes this to be a general distinction between the workings of moved movers and unmoved movers. The former act as efficient causes by transmitting motion via reciprocal contact. However, as outlined, the contact between an unmoved mover and moved thing is only one-sided, that is, the unmoved mover touches the moved thing but is not touched by it in turn. This heterogeneity between unmoved mover and moved thing – to be contrasted with the homogeneity between moved mover and moved thing – indicates to Gourinat a 'causal heterogeneity'. He thus concludes that, unlike moved movers, unmoved movers do not cause motion as efficient causes but instead only as final causes.[18]

I do not find this view convincing since Gourinat works with a very narrow understanding of efficient cause, which seems to imply that a mover is only an efficient cause if a contact on both sides of mover and moved occurs.[19] This is due to a tendentious reading of *Physics* 7.2 whereby moved movers are the *only* movers identified with this type of causation. Yet, in this passage Aristotle does not exclude that the prime *unmoved* mover is an efficient cause but only that the prime *moved* mover is a final cause. Aristotle's whole point is to distinguish moved movers from unmoved movers by pointing out the former's lack of final

[17] Cf. Wardy (1990: 121). [18] Ibid., 122 reaches a similar conclusion.
[19] Surprisingly, at the end of the paper Gourinat shows an awareness of the various meanings of efficient cause in Aristotle. Yet, he excludes that any other meaning of efficient cause could be attributed to the unmoved mover. Cf. ibid., 204.

causality. Consequently, this does not entail that the prime unmoved mover is not an efficient cause.[20] More generally, *Physics* 8 should not be read by automatically importing doctrines from book 7 – whose standing in the *Physics* is questionable anyway – as book 8 offers a new start in the discussion. Rather, one has to consider his numerous expressions throughout book 8 which indicate that efficient causality is under discussion. A good example for this is found in the next section.

4.2.2 *The Unmoved Mover Transmits Power (*Physics *8.10 and* Metaphysics *12.7)*

The so-called infinite power argument in *Physics* 8.10 implies that the prime mover transmits power (*dunamis*) to the thing it moves and is thereby an efficient cause. This argument, which is taken up again in *Metaphysics* 12 has caused great puzzlement especially among scholars who regard the unmoved mover exclusively as a final cause.[21] As one of the most (in)famous arguments for the causal efficiency of the unmoved mover it has proven to be immensely influential (but also controversial) in late antiquity and the Middle Ages.[22] Aristotle sets out to prove through various *reductiones ad impossibile* the indivisibility of the unmoved mover via its lack of a magnitude:

(1) No finite thing can cause motion for an infinite time. (266a12–23)
(2) No infinite power can belong to a finite magnitude. (266a24–266b6)
(3) No finite power can belong to an infinite magnitude. (266b6–24)

These *reductiones* lead him to the following conclusion regarding the unmoved mover:

εἰ γὰρ μέγεθος ἔχει, ἀνάγκη ἤτοι πεπερασμένον αὐτὸ εἶναι ἢ ἄπειρον. ἄπειρον μὲν οὖν ὅτι οὐκ ἐνδέχεται μέγεθος εἶναι, δέδεικται πρότερον ἐν τοῖς φυσικοῖς· ὅτι δὲ τὸ πεπερασμένον ἀδύνατον ἔχειν δύναμιν ἄπειρον, καὶ ὅτι ἀδύνατον ὑπὸ πεπερασμένου κινεῖσθαί τι ἄπειρον χρόνον, δέδεικται νῦν. τὸ δέ γε πρῶτον

[20] Simplicius reaches the same conclusion at *In Phys*. 1048.11–14.
[21] For a discussion of the argument, cf. Judson (1994: 167–71) and (2019: 235–6); Laks (2000: 241–2); Aubry (2002: 25, n. 41); and now Quarantotto (2024). Specifically for *Phys.* 8.10, cf. Ross (1936); Graham (1999).
[22] For references, cf. n. 81.

κινοῦν ἀΐδιον κινεῖ κίνησιν καὶ ἄπειρον χρόνον. φανερὸν τοίνυν ὅτι ἀδιαίρετόν ἐστι καὶ ἀμερὲς καὶ οὐδὲν ἔχον μέγεθος.

For if it has magnitude, the magnitude must be either finite or infinite. That there cannot be an infinite magnitude has already been proved in the *Physics*. That a finite magnitude cannot have infinite power, and that something cannot be moved for an infinite time by a finite magnitude, has just been proved. But the first mover causes everlasting motion for an infinite time. Plainly, then, it is indivisible and without parts, and it has no magnitude. (267b19–26)

Aristotle deduces that since the prime mover can be neither a finite nor an infinite magnitude it must be without magnitude. He does not attribute infinite power explicitly to the unmoved mover. However, one reason for excluding that the unmoved mover is a finite magnitude is the impossibility of infinite power residing in a finite magnitude. This in turn implies that the unmoved mover must have infinite power and therefore cannot be a finite magnitude. Otherwise, it is impossible to explain why infinite power is even a concern here and part of his argument. Similarly, Aristotle shows that a finite magnitude cannot move something infinitely. Again, here the implication is that the unmoved mover must move something for an infinite time and therefore cannot be a finite magnitude. Thus, both arguments contain attributes of the unmoved mover (i.e., infinite power and capacity to move something for an infinite time) which cannot belong to a finite magnitude. In fact, both are connected: the capacity to move something for an infinite time implies having an infinite power and vice versa.

The same attribution is found in *Metaphysics* 12.7 whose discussion is doubtless referring back to *Physics* 8.10:[23]

δέδεικται δὲ καὶ ὅτι μέγεθος οὐδὲν ἔχειν ἐνδέχεται ταύτην τὴν οὐσίαν ἀλλ' ἀμερὴς καὶ ἀδιαίρετός ἐστιν (κινεῖ γὰρ τὸν ἄπειρον χρόνον, οὐδὲν δ' ἔχει δύναμιν ἄπειρον πεπερασμένον· ἐπεὶ δὲ πᾶν μέγεθος ἢ ἄπειρον ἢ πεπερασμένον, πεπερασμένον μὲν διὰ τοῦτο οὐκ ἂν ἔχοι μέγεθος, ἄπειρον δ' ὅτι ὅλως οὐκ ἔστιν οὐδὲν ἄπειρον μέγεθος)·

And it has also been proved that this same substance can have no magnitude, but is partless and indivisible. For it causes motion for an infinite time, and nothing finite can have an infinite power. Now every magnitude is either infinite or finite;

[23] With Laks (2000: 239) and against Ross (1936: 382), I take it that δέδεικται δέ (1073a5) alludes to *Phys.* 8.10.

but it could not have a finite magnitude for this reason, nor an infinite one because there is no infinite magnitude of any sort. (1073a5–11)[24]

Here too Aristotle connects moving something for an infinite time with having an infinite power to do so. The argument is used, as in *Physics* 8, for the purpose of demonstrating the unmoved mover's lack of spatial extension. Just like there, it seems impossible for the same reasons not to read the passage as ascribing infinite power to the unmoved mover.

Unfortunately, Aristotle fails to explain in both passages *how* the prime mover uses this power to cause the cosmos' motion. The discussion in *Physics* 8.10 seems to make clear that the power is somehow transmitted to an object and allows it to move in a broad sense: Aristotle uses not only the examples of heating, sweetening and throwing but causing motion in general (266a28: ὅλως κινοῦσα). In all of these cases the power or energy of the moving thing is transmitted to the moved object. However, Judson (1994: 165–6) and Laks (2000: 241) point out that the unmoved mover is simply not the type of efficient cause that transmits its own motion or energy like, for example, a human wielding a stick.[25] This is because the unmoved mover is not spatially extended and moves the heaven by instilling desire through its own goodness. As such, the *modus operandi* of an efficient cause like the unmoved mover differs fundamentally from other efficient causes. While this leads Judson to conclude that the infinite power argument is simply incompatible with *any* account of the unmoved mover's causation in the *Physics* and the *Metaphysics*, Laks only points out that the transmission of δύναμις must have a metaphorical sense here.[26] Both of these explanations are far from satisfying.[27] As I show below, the Neoplatonists offer an interesting solution to

[24] Tanslations of *Met*. are – with modifications – from Judson (2019).

[25] On the other hand, Tuozzo (2011) argues against Judson et al.'s distinction between energetic and non-energetic efficient causes that all such causes in Aristotle are energetic and add force to the causal chain.

[26] Laks quotes for this de Corte (1935: 145; 153).

[27] For an emphasis on the importance of the infinite power argument, cf. Bodnár (1997: esp. 117). On δύναμις as motive force, cf. Lefebvre (2018: 509–15). Quarantotto (2024: 399, n. 46) notes in a brief reply to Judson – which she intends to develop further – that movers generally cause motion due to a δύναμις in Aristotle's physics and that in the case of the prime mover infinite δύναμις 'amounts to claiming that it is in actuality (and, therefore, causes motion) for an unlimited time'.

harmonising the infinite power argument with the prime mover's final causality.

Since the infinite power argument suggests that the unmoved mover is somehow an efficient cause and not just a final cause, it is especially problematic for interpretations of the unmoved mover as an exclusively final cause, such as Gourinat's (2012), who offers no explanation of how his interpretation relates to this argument.[28] Yet, it also seems hardly compatible with current accounts of the unmoved mover's efficient causality, as proposed by Broadie, Berti or Judson. Broadie (1993), for instance, ignores it altogether, as do also Ross (1924: II, 382) and Fazzo (2014: 341–2) in their comments on *Metaphysics* 12.7.[29] Additionally, the issue is aggravated by the argument's presence in *Physics* 8 *and Metaphysics* 12.7 so that unlike, for instance, the much-disliked passage on the location of the unmoved mover – which only occurs in *Physics* 8 – this discussion cannot be simply explained away by assuming a development. In this way, both the overall structure of the argument in *Physics* 8 as well as the discussion of infinite power suggest that the unmoved mover is here conceived as an efficient cause. For *Metaphysics* 12, however, there is further proof that this type of causality should be attributed to the unmoved mover.

4.2.3 The Unmoved Mover as kinētikon *and/or* poiētikon *(*Metaphysics *12.6 and 10)*

A crucial passage from *Metaphysics* 12.6 lends further support for this view:

Ἀλλὰ μὴν εἰ ἔστι κινητικὸν ἢ ποιητικόν, μὴ ἐνεργοῦν δέ τι, οὐκ ἔσται κίνησις· ἐνδέχεται γὰρ τὸ δύναμιν ἔχον μὴ ἐνεργεῖν. οὐθὲν ἄρα ὄφελος οὐδ' ἐὰν οὐσίας ποιήσωμεν ἀϊδίους, ὥσπερ οἱ τὰ εἴδη, εἰ μή τις δυναμένη ἐνέσται ἀρχὴ μεταβάλλειν· οὐ τοίνυν οὐδ' αὕτη ἱκανή, οὐδ' ἄλλη οὐσία παρὰ τὰ εἴδη· εἰ γὰρ μὴ ἐνεργήσει, οὐκ ἔσται κίνησις. ἔτι οὐδ' εἰ ἐνεργήσει, ἡ δ' οὐσία αὐτῆς δύναμις· οὐ γὰρ ἔσται κίνησις

[28] Cf. especially Gourinat (2012: 198).

[29] Bordt (2006: 123) tentatively compares the unmoved mover's infinite power with the effect of the general to his army or of the head of a household described in 12.10. Elders (1972: 204–5) seems to take the argument as only showing that the unmoved mover is indivisible.

ἄΐδιος· ἐνδέχεται γὰρ τὸ δυνάμει ὂν μὴ εἶναι. δεῖ ἄρα εἶναι ἀρχὴν τοιαύτην ἧς ἡ οὐσία ἐνέργεια.

Yet if there is something which can cause motion or act upon things, but is not active in some way, there will be no motion; for that which has a potentiality can fail to be active. Nor will it help, then, even if we posit substances which are eternal – as do those who posit the forms – unless there is some principle in them which is able to cause motion. Yet not even this will be sufficient, nor will another substance besides the forms; for unless it is active there will be no motion. Again, it will not be sufficient if it is active but its substance is potentiality; for there will not be eternal motion, since that which is potentially can fail to be. There must, therefore, be a principle of this sort, whose substance is activity. (1071b12–20)

Aristotle argues here that it is not sufficient for the unmoved mover to be a moving (*kinētikon*) or producing (*poiētikon*) cause in potentiality. Rather, it must be so in actuality in order to cause the eternal motion of the cosmos. At any rate, it is clear that the unmoved mover must be an efficient cause, as the expressions κινητικόν and ποιητικόν indicate. This is backed up by his reference to the forms in the next line: insofar as these do not even have potentially a source of motion (δυναμένη . . . ἀρχὴ μεταβάλλειν), they cannot account for the eternal motion. What Aristotle's theory requires is thus clearly an efficient cause in actuality, that is, one that has actual infinite power.

The formulations κινητικόν and ποιητικόν recur in chapter 10 but this time without the disjunctive:

ἀλλὰ μὴν οὐδέν γ' ἔσται τῶν ἐναντίων ὅπερ καὶ ποιητικὸν καὶ κινητικόν; ἐνδέχοιτο γὰρ ἂν μὴ εἶναι. ἀλλὰ μὴν ὕστερόν γε τὸ ποιεῖν δυνάμεως. οὐκ ἄρα ἄΐδια τὰ ὄντα. ἀλλ' ἔστιν· ἀναιρετέον ἄρα τούτων τι. τοῦτο δ' εἴρηται πῶς.

In fact, not one of the opposites will also be able to act upon things and able to cause motion; for it would be able not to be. In fact, acting upon things is posterior to potentiality. Therefore, the things which are will not be eternal. But they are. Therefore, one of these must be eliminated: it has been said how this is to be done. (1075b30–4)

Sedley (2000: 344–6) and Judson (2019: 361–2) rightly see this passage as connected to chapter 6. Unlike there, Aristotle here refers implicitly to the unmoved mover as ποιητικὸν καὶ κινητικόν and not κινητικὸν ἢ ποιητικόν. While it is unclear whether there is a real difference between these formulations, I assume that the

conjunction καί at 1075b31 makes clear that, in fact, the ἤ at 1071b12 presents an equivalence, not an alternative.[30] That is, the unmoved mover can be described correctly by both terms, κινητικόν and ποιητικόν. The proximity of the two terms is also indicated by a passage from *De generatione et corruptione*: ἐν ἅπασιν εἰώθαμεν τοῦτο λέγειν τὸ ποιοῦν, ὁμοίως ἔν τε τοῖς φύσει καὶ ἐν τοῖς ἀπὸ τέχνης, ὃ ἂν ᾖ κινητικόν (2.9.335b27–8). Thus, both passages strongly suggest that the unmoved mover is an efficient, that is, moving and producing, cause.

4.2.4 Conclusion

In conclusion, there is significant evidence in *Physics* 8 and *Metaphysics* 12 for understanding the prime mover not just as a final cause but also as an efficient one. The general argument and especially the infinite power argument of *Physics* 8 present the unmoved mover as an efficient cause of the cosmos' eternal motion – even though the details of the causation remain obscure. This account is then further developed (or at least elaborated) in *Metaphysics* 12. It thus seems fallacious to view the prime mover as solely an efficient cause (Berti 2007) or solely a final cause (Gourinat 2012).

Yet, the lack of an explicit discussion of the prime mover's efficient causality, as well as the ambiguity of some of the passages discussed, posed a difficulty for future exegetes. This left Aristotle's texts susceptible to differing interpretations, as the survey of different positions in scholarship showed. For instance, it remains questionable whether the prime mover is (1) a final cause by being an efficient cause or (2) an efficient cause by being a final cause. Frede (2000: 43–7) and Menn (2012b: 447) opt for (1), while Judson (1994: 164–7) and (2019: 185–6) goes for (2).[31]

[30] This view is close to Judson's who doubts Sedley's conclusion that the unmoved mover causes eternal motion *qua* κινητικόν as well as produces existence of beings *qua* ποιητικόν. Instead, he maintains that both expressions amount to the same, i.e., causing eternal motion, and do not refer to distinct types of causation. Cf. also Berti (2000: 187).

[31] I take the latter to be also the view of Caston (1999: 221). Tuozzo (2011) argues that the prime mover is a final cause *qua* ὀρεκτόν and an efficient cause *qua* νοητόν. Other proponents of the unmoved mover as efficient and final cause (at least in *Met*. 12) are Broadie (1993: 389); Kosman (1994); Berti (2000: 147–8).

As I show, the Neoplatonists who believe that the prime mover has both types of causality believe that one type of cause implies the other and vice versa so that there is no subordination of one to the other. A major issue remains of precisely how we are to understand efficient causality in this context. In the next two sections, I analyse two different reactions to this issue.

4.3 Proclus' Critique of Aristotle's Intellect

In a number of passages from his commentaries on the *Timaeus* and the *Parmenides*, Proclus criticises Aristotle's intellect as being only a final cause and lacking efficient/productive causality.[32] The latter is understood not just as causation of motion, as in most modern scholarship on Aristotle, but also of being. This is a very serious objection given Proclus' Platonist conception of intellect as creative demiurge: 'those, then, who make intellect a final but not a demiurgic cause possess only half the truth' (*In Parm*. 4.842.20–2). Consequently, Aristotle's prime mover is ἄγονος (842.26). The fundamentals of his critique are found in Proclus' teacher Syrianus (see Section 4.3.3.4). However, it is in Proclus that we get the most extensive discussion.

In this section, I argue that

(1) Proclus' critique is part of a more fundamental disagreement with Aristotle's metaphysics.
(2) Consequently, Proclus maintains that Aristotle and Plato have different understandings of efficient causality and that Aristotle's prime mover is not an efficient cause in the Platonic sense.
(3) Yet, Proclus believes that ultimately Aristotle's arguments for establishing the existence of the prime mover commit him to conclusions more in line with Platonist doctrine. That is, if Aristotle had taken the premises of his arguments seriously, he would have been forced to conclude that the intellect is a cause of the cosmos' being and not just of its motion.
(4) However, unlike Ammonius and Simplicius, Proclus does not believe that Aristotle actually drew these conclusions. Instead,

[32] Cf. *In Tim*. 2.90.16–93.19 [1.266.20–268.24], 2.131.11–133.16 [1.294.28–296.12], 2.269.8–11 [1.390.3–6], 3.128.4–9 [2.92.13–18]; *In Parm*. 3.788.8–19, 4.922.2–16, 973.3–12, 5.983.12–14, 7.1167.27–1169.9. For a more general criticism of Aristotle's intellect, cf. *In Tim*. 2.289.19–291.3 [1.404.7–14].

> Aristotle has compromised his metaphysics through a deficient understanding of the intellect's causality. In this way, he is in disagreement with Plato's concept of the demiurge.

Let us first consider Proclus' general misgivings about Aristotelian metaphysics.

4.3.1 The Fundamental Deficiency of Aristotelian Metaphysics

In the following, I argue that, according to Proclus, Aristotle's misunderstanding of the intellect's causality is part of a general deficiency in Aristotle's metaphysics. This, Proclus upholds, is caused by his confusion of the nature and the identity of the highest principle: Aristotle denies the existence of the One and instead mistakenly posits the intellect as first principle. Due to the parsimony of Proclus' remarks,[33] this issue has not been appreciated enough in scholarship: rather, both Steel (1987a) and d'Hoine (2008) have emphasised that Proclus sees an interdependence between denying the intellect's efficient causality and denying the existence of the paradigm.[34] Additionally, Steel suggests that for Proclus Aristotle's rejection of the forms has 'the most disastrous consequence' (225: 'la consequence la plus désastreuse') of his inability to posit a higher principle than intellect. While this might be the case in the passage Steel focuses on (*In Parm.* 4.972.29–973.12; cf. *In Tim.* 2.91.4 [1.266.30]), I show that elsewhere Proclus presents the causal relationship differently: by denying the existence of the One and instead attributing some of its characteristics to the intellect, Aristotle rejects the intellect's efficient causality.[35] In this way, Aristotle's other metaphysical shortcomings follow from his rejection of the Platonic One and not vice versa, as in some of the texts on which Steel and d'Hoine base their analysis.

[33] I was able to identify five passages which are treated below: *In Tim.* 2.132.15–133.4 [1.295.20–7], 2.147.4–5 [305.20–1]; *In Parm.* 7.1214.6–12; *PT* 2.4 31.21–2; *De prov.* §31.1–6.

[34] Cf. Steel (1987a: 224): 'La rejet par Aristote de l'hypothèse des idées explique plusieurs erreurs de sa doctrine: rejet de la causalité efficiente …'; d'Hoine (2016: 390): 'if Intellect is essentially a productive cause, then its self-knowledge must comprise a contemplation of the intelligible paradigms of all that it produces'.

[35] D'Hoine (2016: 390–1) mentions Aristotle's denial of the One but does not connect it to Proclus' criticism of the intellect. In her discussion of Proclus' view on Aristotle, Hadot (2015) fails to acknowledge both aspects.

Aristotle's repudiation of the One emerges more clearly from a passage in the commentary on the *Timaeus* where Proclus compares Aristotle with Plato and emphasises their differences:[36]

(1) ὅσα γὰρ τῷ ἑνὶ Πλάτων, ταῦτα τῷ νῷ περιτίθησι, τὸ ἀπλήθυντον, τὸ ἐφετὸν, τὸ μηδὲν νοεῖν τῶν δευτέρων· (2) ὅσα δὲ τῷ δημιουργικῷ νῷ ὁ Πλάτων, ταῦτα τῷ οὐρανῷ καὶ τοῖς οὐρανίοις θεοῖς Ἀριστοτέλης· παρὰ [τούτων] γὰρ εἶναι τὴν δημιουργίαν καὶ τὴν πρόνοιαν· καὶ (3) ὅσα τῇ οὐσίᾳ τοῦ οὐρανοῦ ὁ Πλάτων, ταῦθ' οὗτος τῇ κυκλοφορίᾳ, τῶν μὲν θεολογικῶν ἀρχῶν ἀφιστάμενος, τοῖς δὲ φυσικοῖς λόγοις πέρα τοῦ δέοντος ἐνδιατρίβων.

(1) What Plato attributes to the One, he ascribes to the intellect, that is, non-multiplicity, being the object of desire and not having any of the secondary things as object of its thought; and (2) what Plato attributes to the demiurgic intellect, Aristotle ascribes to the heaven and the heavenly gods, for it is from them that creativity and providence take place; and (3) what Plato attributes to the essential nature of the heaven, this man ascribes to its circular movement, placing theological principles at a distance and spending more time on physical argumentation than he should. (*In Tim*. 2.132.15–133.4 [1.295.20–7])

Proclus describes here Aristotle's tendency to 'downgrade' (metaphysical) attributes: (1) the characteristics of Plato's One match those of Aristotle's intellect, (2) those of Plato's demiurgic intellect those of Aristotle's heaven/heavenly bodies, and (3) those of Plato's heaven those of Aristotle's heavenly circular motion. This effectively leads to a misalignment of Plato's and Aristotle's principles (Figure 4.1).[37]

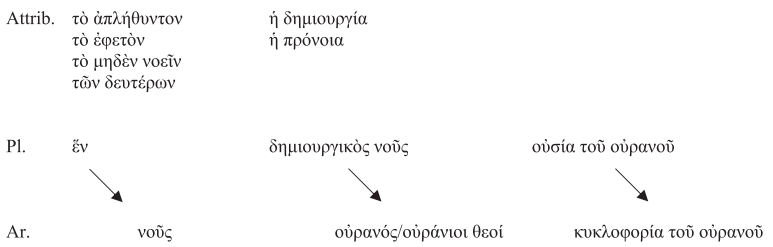

Figure 4.1

[36] Steel (1987a: 225) mentions the text but does not discuss it further. A short, but useful treatment is found in Baltes (1978: II, 66–73). Cf. also the notes in Festugière (1967).

[37] It remains unclear what Aristotle supposedly attributes wrongly to the circular motion of the heaven.

The reason for that is said to be Aristotle's distance from theological principles (τῶν μὲν θεολογικῶν ἀρχῶν ἀφιστάμενος) and undue focus on physical arguments (τοῖς δὲ φυσικοῖς λόγοις). Aristotle thus focused in his investigations too much on physical explanations instead of considering metaphysical causes. According to Proclus, this procedure led to his fallacious views and must be contrasted with Plato's more adequate, theological approach to physics (*In Tim*. 1.3.13–4.14 [1.2.29–3.19], 1.302.7–9 [204.8–10], 2.32.6 [227.2–3]).

A few further remarks on (1) and (2) are necessary here. (1) is especially significant for Proclus' interpretation of Aristotelian metaphysics, as it illuminates that, according to Proclus, the intellect is the highest principle in Aristotle: καὶ ὅ γε Ἀριστοτέλης – τοῦτο [sc. ὁ νοῦς ὁ ἐγκόσμιος] γὰρ ἀπεφήνατο εἶναι τὸ πρῶτον (*In Tim*. 2.147.4–5 [1.305.20–2]).[38] This is again emphasised in a rarely cited passage from the commentary on the *Parmenides* where Proclus points out Plato's superiority in positing the One as first principle:

> These doctrines are normally propounded by the majority of [Platonic] commentators (ἐξηγητῶν) about the One, and considering it the first principle, they say that it is not body, as the Stoics maintained, nor incorporeal soul, as Anaxagoras claimed, nor unmoved intellect (νοῦν ἀκίνητον), as Aristotle said later; by this, they claim, the philosophy of Plato differs from the others, in that it rises up to the cause above intellect (ὑπὲρ νοῦν αἴτιον ἀναδραμοῦσαν). (7.1214.6–12)

In the *Platonic Theology*, he also emphasises Plato's uniqueness in this regard (1.3) and calls Aristotle's view a *Peripatetikē kainotomia* (*PT* 2.4.31.21–2: Περιπατητικὴ καινοτομία), whereby the latter term negatively means a 'departure from established (i.e., Platonico-religious) tradition' or simply a 'modernism'.[39] For Aristotle theology not only stops at the level of intellect but in fact coincides with its study (*PT* 1.3.12.23–13.5, esp. 13.4–5: εἰς δὲ ταὐτὸν ἄγουσι θεολογίαν δήπου καὶ τὴν περὶ τῆς νοερᾶς οὐσίας ἐξήγησιν). In the eyes of Proclus, Aristotle thus commits a grave mistake since the first principle is supposed to be the One/Good

[38] Cf. *De Prov*. §31.1–6.

[39] See note in Saffrey and Westerink (1974: 94–5). Proclus affirms there his allegiance to Plotinus and Porphyry as orthodox interpreters of Plato in this regard. Cf. also Proc. *PT* 1.2.12.23–13.5 and Num. fr. 24.30.

which transcends being and intellect altogether. The seriousness of this objection should not be downplayed, as for instance Baltes does.[40] Proclus' interpretation of Aristotle's highest principle mirrors Plotinus'[41] and Syrianus' position,[42] both of which probably influenced him. At the same time his position must be contrasted with Ammonius' and Simplicius' view according to which Aristotle recognises the transcendent One.[43]

Yet, most interestingly, Proclus claims that Aristotle does not simply reject the One but rather transfers some of its characteristics to the intellect. Accordingly, Aristotle's intellect is similar to Plato's One insofar as it is (i) non-multiplied, (ii) desired and (iii) does not think about lower beings. Proclus implies that these three characteristics should be attributed correctly to the One and not to the intellect. Rightly understood the intellect is not (i) non-multiplied but possesses multiplicity since its thinking involves at a minimal level a subject that thinks and an object that is thought.[44] Instead, (i) must be attributed to the One who is absolute unity.[45] Proclus' objection to (iii) implies that Aristotle wrongly conceived the intellect's thinking as exclusively self-centred and unconcerned with

[40] Baltes (1978: II, 70) characterises 2.132.15–133.4 [1.295.20–7] in the following way: 'Es folgen nun Einzelheiten, die zeigen, dass die Differenzen zwischen beiden Philosophen graduell und **nicht grundsätzlich** sind. . . . Im hierarchischen Aufbau der Überwelt und des Kosmos hat Aristoteles **lediglich** das Eine gestrichen, im übrigen alle Prädikate der jeweils nächsten Stufe zugeschrieben' (emphasis mine). Steel (1987a: 224–5) and d'Hoine (2016: 390–1) rightly emphasise the importance of this criticism.

[41] Cf. 5.1.9.7–12; 5.6.3.22–5; 6.7.37.18–24. Cf. Gerson (2005: 205–8).

[42] Syrianus remarks drily that Aristotle τὸ γὰρ ἓν καὶ ἁπλήθυντον καὶ ὑπερούσιον ἀρνεῖται (118.21–2) and mentions τὴν τοῦ νοῦ τῶν ὅλων ἐπικράτειαν (194.14–15) in Aristotle. Cf. also *In Met*. 55.20–5, 182.5–7, 185.23. Helmig (2009: 378–9) seems to imply that this criticism was a Proclean innovation, which is clearly not the case. *Pace* Hadot (2015: 28, n. 85) who cites Syr. *In Met*. 11.3–5 in support for Syrianus' belief that Aristotle recognised the One. Instead, the passage only refers to the one highest good according to Aristotle, i.e., the intellect of outermost sphere of the cosmos. The *Prol. Plat.* possibly expresses Syrianus' and Proclus' views at 9.28–41, esp. 29–31: τούτων [sc. Περιπατητικῶν] γὰρ οἰομένων τὴν πάντων ἀρχὴν εἶναι τὸν νοῦν, ἔδειξεν [sc. Πλάτων] ὡς πρὸ τοῦ νοῦ ἐστὶν τὸ ἓν καὶ πρὸ τῶν ἄλλων ἁπάντων. Cf. Olymp. *In Alc*. 122.12–18, 145.6–7.

[43] Cf. Section 4.4.3.

[44] Cf. *ET* §20.22.24–5: 'for the intellect, though unmoved, is yet not unity: in knowing itself, it is object to its own activity'. A similar argument involving the multiplicity of thinking is made by Plotinus at 5.1.9.8–9; 5.6.3.22–5.

[45] The term used here, ἁπλήθυντον, is unusual and first attested in Porphyry (*Sent*. 33.33–5, 36.4). It is first used in relation to the One by Syrianus (*In Met*. 5.35). In the latter sense it is used by Proclus at, e.g., *In Tim*. 2.171.16 [1.322.28]; *PT* 2.1.11.23. Cf. Dam. *De princ*. 3.24.24; Olymp. *In Phd*. 4.3.10–11.

essences (or any other characteristics) of other beings. This brings Proclus' reading close to many modern interpreters such as Ross (1924: I, cxli–iii), Guthrie (1981: 261–2) and Brunschwig (2000).[46] Additionally, this objection fits well to Proclus' observation that Aristotle's intellect has no activity towards other beings (*In Parm.* 7.1169.4–9). Proclus believes (iii) must be denied of the intellect and instead applied to the One since the intellect has knowledge of lower beings and is concerned with them due to its providential nature. Indeed, as he argues at *In Parm.* 3.790.12–791.10 and 4. 964.16–25, if intellect has self-knowledge, as Aristotle holds, it knows itself as a cause, which implies knowing *of what* it is a cause. What about (ii)? Proclus, of course, holds fast to the idea that the intellect is *epheton* (ἐφετόν) – he even goes so far to say that it is desired by all beings (*ET* §34.38.3; discussed in Section 4.5.2). However, what he means here is that the intellect should not be seen as the *ultimate* object of desire like in Aristotle. This place should be reserved to the One or absolute Good, as he clarifies in *In Tim.* 1.4.1–2 [1.3.6], *ET* §8.8.31–2 and *PT* 2.9.59.13–16. Perhaps, this is why Proclus uses here the term with an article, that is, τὸ ἐφετόν (just as in τὸ ἁπλήθυντον and τὸ μηδὲν νοεῖν τῶν δευτέρων): the intellect clearly is *an* ἐφετόν but not *the* ἐφετόν.[47] Ultimately, this downgrading of attributes also makes it difficult to compare metaphysical principles, as the table reveals: Aristotle's intellect is not equivalent to Plato's demiurge, since it embodies certain characteristics of Plato's One. Crucially, this seems to compromise any project of harmonising them from the beginning.

In the last part of (2), there is a puzzling interpretation of Aristotle who apparently claims that παρὰ [τούτων] [i.e., heaven and heavenly bodies] γὰρ εἶναι τὴν δημιουργίαν καὶ τὴν πρόνοιαν.[48]

[46] For further literature on divine self-thinking, cf. the summary of the different interpretations in Judson (2019: 311–16 and 326–9). According to his scheme, Proclus' reading would fit either DT2 or DT3.

[47] For Proclus, the characterisation of the highest principle as τὸ ἐφετόν goes back to *Phileb.* where Plato claims that πᾶν τὸ γιγνῶσκον αὐτὸ [i.e., the good] θηρεύει καὶ ἐφίεται (20d8) and then characterises the good as ἱκανὸς καὶ τέλεος καὶ πᾶσι φυτοῖς καὶ ζῴοις αἱρετός (22b4–5). Proclus apparently regards the last expression as synonymous with τὸ ἐφετόν (cf. *PT* 1.22.101.14–16) and dedicates an extensive discussion to this term at *PT* 1.22.101.21–102.26. Cf. also Dam. *In Phileb.* 76.3.

[48] For a similar argument, cf. *In Parm.* 4.922.23–923.2 with comments in Steel (1987a: 218).

According to Proclus, Aristotle ascribes demiurgy and providence only to the heaven and not to the intellect as he should have.[49] The problem is that Aristotle obviously never refers to demiurgy or providence in explaining the nature or activity of the heaven. By demiurgy Proclus means a specific type of efficient causality, namely the one that brings about what is becoming/generated.[50] Since in Aristotle generation occurs only in the sublunary realm and is, most importantly, dependent on the circular motion of the heaven,[51] Proclus is able to claim that for Aristotle the heaven is 'demiurgic', whereas the intellect is not as it does not cause the cosmos' being. What about providence? While Aristotle himself did not develop a theory of divine providence, Alexander filled this gap with his treatise *On Providence*.[52] There, the same view attributed here by Proclus to Aristotle is encountered: providence is exercised by the heaven over the sublunary realm and consists in safeguarding the regular generation and destruction as well as the eternity of species.[53] Given Alexander's significance as a commentator and Proclus' frequent references to the 'Peripatetics', he presumably has here Alexander's interpretation of Aristotle in mind.[54]

Proclus has made clear so far that Aristotle's metaphysics departs in crucial points from Plato's and has thus significant shortcomings. By denying the existence of the One and wrongly attributing some of its characteristics to the intellect, Aristotle fails to make the intellect an efficient cause of the cosmos' being.

[49] Likewise, Atticus (fr. 3.66–71) claims that the Aristotelian intellect has no providential care.

[50] Proclus refers in this context to *Phileb.* 27a11–b2: πᾶν τὸ δημιουργοῦν πρὸς γένεσιν ἀποδίδοται, ὡς εἶπεν ἐν Φιλήβῳ τὸ δημιουργοῦν λέγεσθαι πρὸς τὸ γιγνόμενον (*In Tim.* 2.82.11–13 [1.260.23–5]). Cf. Opsomer (2000a: 115).

[51] Cf. *Met.* 12.6.1072a9–18 with the comments by Judson (2019: 218–20). Simplicius also regards the motion of the heaven in Aristotle as the 'cause of being' (*In DC* 288.28: αἰτία τοῦ εἶναι) for generated things. See Baltes (1978: II, 68, n. 207) for further references.

[52] According to Diogenes Laertius' summary of Aristotle's doctrines, god's providence reaches only the heavenly beings (5.32.466–7: διατείνειν δὲ αὐτοῦ [sc. τοῦ θεοῦ] τὴν πρόνοιαν μέχρι τῶν οὐρανίων). This is probably a Stoic reading (cf. Düring (1957: 75) with further explanations). Alexander (*Problems and Solutions* 2.21.65.24–5) criticises such a view, as Moraux (1949: 33–4) suggests. For further references, cf. Moraux (1984: 571, n. 33).

[53] For ample references and a discussion of this topic in Alexander, cf. Sharples (1982).

[54] It is possible that Proclus was also inspired by *De mundo* whose authenticity, however, he questioned (*In Tim.* 5.144.6–7 [3.272.20–1]). For possible references, cf. van Riel (2022: II, 132–3).

Unlike Baltes (1978: II, 69), who claims that this and the previous passage (2.131.11–132.14 [1.294.28–295.19]) 'stand out in their effort to harmonise the teachings of both philosophers' ('zeichnen sich durch das Bemühen um Harmonisierung der Lehren der beiden Philosophen aus'), I see almost no harmonisation effort on Proclus' behalf in 2.132.15–133.4 [1.295.20–7]. However, Proclus makes clear how Aristotle went wrong and implicitly offers a solution: if one 'upgrades' some of the attributes, for example, by attributing non-multiplicity to the One and so on, an agreement can be established.

He makes this explicit at *In Parm*. 4.973.6–12, where he states that the Peripatetics

> declare that there is one thing only which is non-multiplied and unmoved cause as an object of desire (ἁπλήθυντον καὶ ἀκίνητον αἴτιον ὡς ὀρεκτόν); and they attribute (προσάπτοντες) to the intellect what we say of the cause which is situated above the intellect and intelligible number. Insofar as they consider the first principle in this way they were correct, for the beings must not be governed badly nor should multiplicity be the principle of the beings, but the One; but insofar as they postulate that the intellect and the One are the same thing, they are not correct.

Again, we have here the charge of falsely attributing non-multiplicity to the intellect. Interestingly, Proclus also adds an attribution Aristotle got right, namely the intellect as ἀκίνητον αἴτιον ὡς ὀρεκτόν – an expression which Proclus himself uses (e.g., *ET* §34.38.3). Proclus regards Aristotle's intellect as incorporating attributes from both Plato's One and demiurge. Thus, as Aristotle's metaphysics presents itself, it is not in agreement with Plato. This explains, for instance, why Proclus elsewhere accuses Aristotle of possessing only half of the truth when denying the efficient causality of the intellect (*In Parm*. 4.842.20–2). Plato's views therefore form an indispensable corrective lest the student of metaphysics embraces Aristotelian heterodoxy and καινοτομία. For by studying Plato's metaphysics Aristotle's intellect can be 'purified' of certain inappropriate attributes, such as non-multiplicity and ultimate final causality, in order to reach a correct conception thereof.

4.3.2 *Aristotelian versus Platonic Efficient Causes*

Besides Aristotle's confusion of theological principles and their characteristics, Proclus also accuses Aristotle of misunderstanding what efficient causality is. Aristotle pays only lip-service to the efficient cause since he does not conceive it as a productive cause that brings about being. That is, Aristotle might attribute it to the intellect (as he does to nature), but his understanding of efficient causality is fundamentally misguided so that he effectively denies it of the intellect. Thus, Aristotle does not have an efficient cause in the sense Proclus has in mind. This critique occurs at the beginning of his commentary on the *Timaeus*:[55]

(1) For although they [Plato's successors] may perhaps make mention of the productive cause as well, as when they affirm that nature is the origin of motion, they still deprive it of efficacity and productivity in the strict sense (τὸ δραστήριον καὶ τὸ κυρίως ποιητικόν), since they do not agree that this [cause] embraces the reason-principles (λόγους) of those things that are created through it but allow that many things come about spontaneously too.
(2) That is in addition to their failure to agree on the priority of a productive cause to explain all physical things at once (πάντων ἁπλῶς τῶν φυσικῶν ποιητικὴν αἰτίαν ὁμολογεῖν προϋφεστάναι), only those that are bundled around in generation. For they openly deny that there is any productive [cause] of things everlasting (τῶν γε ἀϊδίων οὐδὲν ποιητικὸν εἶναί φασι διαρρήδην). Here they fail to notice that they are either attributing the whole complex of the heavens to spontaneous generation, or claiming that something bodily can be self-productive. (1.3.3–13[1.2.15–29])

Proclus puts forward two criticisms: (1) nature conceived only as origin of motion is not productive in the strict sense; (2) there is no single productive cause of physical reality since eternal physical beings lack such a cause. Proclus turns here Aristotle's well-known criticism of Plato – namely that Plato was unable to make use of the efficient cause (and the final cause) (*Met.* 1.6; *GC* 2.9) – against Aristotle himself.[56]

(1) Regardless of the specific discussion of nature here, it is important to note the underlying assumptions Proclus makes about

[55] Cf. Marinescu (2023b). See also the discussion below in Section 4.5.
[56] For a defence of Aristotle's critique, cf. Marinescu (2024).

efficient causality which are quite different from Aristotle's.[57] What Proclus says here about nature's efficient causality, applies *a fortiori* to higher causes.[58] Productivity or efficiency here means to be creative and to bring something into existence as well as to cause its being, and not merely to move something, as the choice of words such as δραστήριον, ποιητικόν and ποιουμένων indicates. This usage is primarily influenced by the definition of cause in the *Philebus*.[59] Moreover, it also implies transmitting certain properties to a lower being – just as nature is supposed to do via its *logoi* – as well as preserving and completing the effect.[60] The term 'efficient cause' becomes in this way a richer concept which accounts for a thing's motion and being. Proclus here appears to be well aware that at least Aristotle's conception of efficient causality is not the same as Plato's. He thus departs from a widespread ancient and modern interpretation according to which one can find Aristotle's causes in Plato.[61]

(2) In the second part of the passage, Proclus complains of the lack of a productive cause of physical reality.[62] This includes a relevant claim to my discussion of the unmoved mover's causality. Proclus maintains that Aristotle limits efficient causality to generated (ἐν γενέσει) beings, that is, to the sublunary realm (1.3.8–13 [1.2.24–9]). Most significantly, he then accuses Aristotle of denying that eternal beings (τῶν ἀϊδίων), that is, the celestial beings and the cosmos itself, have an efficient cause – a claim repeated later on in the commentary.[63] The reason, as becomes clear soon, is that Proclus takes Aristotle's intellect not

[57] For a comparison of both views, cf. Steel (2003: 177–83).

[58] Philoponus defends Aristotle's characterisation of nature as efficient cause (*In Phys*. 241.27–30). This could be seen as a response to Proclus' objection similar to Simplicius' procedure. See Introduction (especially I.3.2) and Section 4.4.2.

[59] Cf. 26e6–9: ΣΩ. Οὐκοῦν ἡ τοῦ ποιοῦντος φύσις οὐδὲν πλὴν ὀνόματι τῆς αἰτίας διαφέρει, τὸ δὲ ποιοῦν καὶ τὸ αἴτιον ὀρθῶς ἂν εἴη λεγόμενον ἕν; – ΠΡΩ. Ὀρθῶς. Aristotle, of course, calls the efficient cause also ποιητικόν (*Met*. 12.6.1071b12) as well as ποιοῦν (*Physics* 2.3.194b31), but he does not have in mind the strong sense of efficient cause as cause of being like Proclus and other Neoplatonists.

[60] This is made explicit a few lines further down at *In Tim*. 1.4.2–6 [1.3.7–10].

[61] For a critique of this position with further literature, cf. Natali (1997).

[62] Proclus was possibly inspired by Alexander's interpretation of Aristotle in this regard, as Golitsis (2017: 225) suggests.

[63] Cf. *In Tim*. 2.132.11–12 [1.295.16–17]: Aristotle 'does not teach an efficient cause for any of the everlasting beings'.

as an efficient cause of the cosmos' *being* but only as an efficient cause of its *motion*. But the latter, as has been made clear, is not the type of efficient causality Proclus has in mind.

4.3.3 *The Critique of Aristotle's Intellect in the Commentary on the* Timaeus *I*

After these preliminary remarks on Aristotle's metaphysics, specifically on the intellect and the nature of the efficient cause, I now turn to Proclus' main criticism of Aristotle's unmoved mover, which has to be read in conjunction with these general objections. In his criticism, Proclus shows that Aristotle's commitment to both

(1) the intellect as cause of the cosmos' essential desire and
(2) the intellect as cause of infinite power

leads to the conclusion that

(3) the intellect is the efficient cause of the cosmos' being.

Aristotle's mistake lies in not endorsing (3) although it necessarily follows from either (1) or (2).

The passage examined here (*In Tim*. 2.90.17–93.17 [1.266.21–268.23]) has received less attention in scholarship.[64] By analysing it in greater detail I bring to light Proclus' lengthy critical engagement with Aristotle and offer insights into his views of Aristotle's metaphysics. The text starts with a brief doxography (2.90.17–91.8 [1. 266.21–267.4]) and then offers four objections (2.91.8–93.17 [1.267.4–268.22]). The first two are the philosophically most interesting and discussed in detail in Sections 4.3.3.2 and 4.3.3.3.[65]

[64] Steel (1987a) discusses the text only in passing and focuses instead on similar criticisms, mainly from *In Parm*. Brief discussions of Proclus' objections are found in Sorabji (1988: 251–2); Opsomer (2009: 198–200); d'Hoine (2016: 384–5; 390–1); Twetten (2016: 334–5). In her chapter on Proclus, Hadot (2015: 121–5) fails to mention this criticism.

[65] The third objection (2.92.20–93.9 [1.268.6–15]) – which is found in an extended form in *In Parm*. 3.786.14–788.8 – does not seem to relate to Aristotle, as Proclus explains that the demiurge creates through his being (αὐτῷ τῷ εἶναι), not deliberation (λογιζόμενος, βουλευόμενος). The fourth objection (93.10–17 [1.268.15–22]) is meant to underline the importance of an external paradigm for the demiurge by introducing an analogy between a human craftsman and the divine craftsman, both of whom require a blueprint for their productive activity. Just as Aristotle accepts that art imitates nature, so Proclus, he should accept that the divine demiurge uses a paradigm in his creation of the cosmos.

4.3.3.1 Doxography (In Tim. *2.90.17–91.8 [1.266.21–267.4])*

Let us start with the doxography:

ἀποροῦσι δέ τινες, ὅπως ὁ Πλάτων ἔλαβεν ὡς ὁμολογούμενον τὸ δημιουργὸν εἶναι τοῦ παντὸς εἰς παράδειγμα βλέποντα· μὴ γὰρ εἶναι δημιουργὸν εἰς τὸ κατὰ ταὐτὰ ἔχον ὁρῶντα· πολλοὶ γὰρ καὶ τούτου προεστᾶσι τοῦ λόγου τῶν παλαιῶν· οἱ μὲν γὰρ εἶναι δημιουργὸν Ἐπικούρειοι καὶ πάντη τοῦ παντὸς αἴτιον οὐκ εἶναί φασιν, οἱ δὲ ἀπὸ τῆς Στοᾶς εἶναι μέν, ἀχώριστον δὲ ὑφεστάναι τῆς ὕλης, οἱ δὲ Περιπατητικοὶ χωριστὸν μὲν εἶναί τι, ποιητικὸν δὲ οὐκ εἶναι, ἀλλὰ τελικόν· διὸ καὶ τὰ παραδείγματα ἀνεῖλον καὶ νοῦν ἁπλήθυντον προεστήσαντο τῶν ὅλων. Πλάτων δὲ καὶ οἱ Πυθαγόρειοι τὸν δημιουργὸν ὕμνησαν τοῦ παντὸς ὡς χωριστὸν καὶ ἐξῃρημένον καὶ πάντων ὑποστάτην καὶ πρόνοιαν τῶν ὅλων, καὶ μάλιστά γε εἰκότως·

Some people are perplexed about the way that Plato has taken as agreed that there is a demiurge of the universe who looks to a paradigm. For, they think, no demiurge looking to what remains the same exists. In fact many of the ancients were proponents of this argument. The Epicureans deny that a demiurge exists and state that there is no cause of the universe at all. The [philosophers] from the Stoa say he exists, but that he is inseparable from matter. The Peripatetics state that a separated entity exists, but that it is a final rather than an efficient cause. For this reason they have both destroyed the paradigms and placed a non-multiple intellect at the head of the universe. Plato and the Pythagoreans, however, have celebrated the demiurge of the universe as separate and transcendent and founder of all things and providence of the whole. And this is indeed an eminently reasonable view. (*In Tim*. 2.90.17–91.8 [1.266.21–267.4])

This doxographical account – which is in many respects representative of Proclus' views on the history of philosophy[66] – presents the different opinions on the nature of god and his causation in an ascending order. Proclus does not focus on the divine in general but rather on the equivalent of the demiurge in the five philosophical schools he considers. Thus, the demiurge of the *Timaeus*, as creator of the universe (τοῦ παντός), separate (χωριστόν), transcendent (ἐξῃρημένον), founder of all things (πάντων ὑποστάτην) and providential towards the whole (πρόνοιαν τῶν ὅλων), is the benchmark for Proclus.[67] Specifically the last two characteristics,

[66] Similar accounts are found at *In Tim*. 1.2.3–4.14 [1.1.24–3.19] and 9.14–10.18 [1.6.21–7.16].

[67] Elsewhere, Proclus also mentions the contemplation of the paradigm as a crucial condition for the demiurge's production of the cosmos. This in turn is an implicit criticism of Aristotle's exclusively self-thinking god. Cf. *In Parm*. 4.790.16–791.5 with comments by d'Hoine (2008).

which emphasise the productive activity of the demiurge towards the cosmos,[68] are decisive in understanding Proclus' position throughout this passage.

The survey starts with the Epicureans, who are doctrinally the furthest away from the truth espoused by the Plato and Pythagoreans, with whom the account culminates. Most importantly, the Peripatetics – including Aristotle – are presented as closest to Plato and the Pythagoreans, since they maintain that there is an entity which is separate from the cosmos (unlike the Stoics) and also its cause (like the Stoics but unlike the Epicureans). In contrast to *In Tim*. 2.132.15–16 [1.295.20–1], Proclus emphasises here the characteristics that Aristotle and the Peripatetics attributed correctly to the intellect, namely χωριστός and αἴτιον. These can be added to other correct attributes like ἀκίνητος and ὀρεκτός. Yet, their metaphysics is still deficient, very much along the lines discussed above (*In Tim*. 2.132.15–133.4 [1.295.20–7]). For they mistakenly attribute to this separate cause only final and not also efficient causality. For Proclus this has the consequence (διὸ) that they abolish the paradigm and posit a 'non-multiplied intellect (νοῦν ἁπλήθυντον) in front of the whole'. Proclus claims here that, by denying the efficient causality of the intellect, the Peripatetics deny also the existence of the paradigmatic causes and posit the intellect as the first principle.[69] The latter, as has been seen, is the most serious error in the eyes of a Neoplatonist.

Here again, like in Section 4.3.1, it emerges that Proclus' objections to the causality of Aristotle's intellect are part of a general critique of Aristotle's metaphysics. It is thus after this introductory doxography (*In Tim*. 2.90.17–91.8 [1.266.21–267.4]) that Proclus proceeds with his specific criticisms. Proclus' goal in

[68] Proclus emphasises that the demiurge and the forms have to be providential and, in turn, criticises Aristotle and the Peripatetics for denying this. Cf. e.g., *In Parm*. 4.921.14–19 with Steel (1996).

[69] At *In Parm*. 5.983.10–14 and *In Tim*. 2.168.10–13 [1.320.23–6] he claims that by rejecting the paradigm Aristotle takes away the efficient causality of intellect. Aristotle's rejection is also implied at *In Tim*. 2.363.20–1 [1.456.12–13]. As Romano (1993: 187–8) shows, other Neoplatonists like Philoponus (*On Aristotle's Posterior Analytics* 242.10–243.25) and David (*On Porphyry's Isagoge* 115.4–5) have a more harmonising attitude and maintain that Aristotle accepts the existence of forms but locates them in the intellect.

the first (2.91.8–16 [1.267.4–12]) and the second objection (2.91.17–92.9 [1.267.12–24]) is to show that Aristotle's reasoning actually commits him to accept that the unmoved mover is a final as well as an efficient cause of being:

O1 Insofar as the intellect is a final cause, it is necessarily an efficient cause as well. If the intellect causes the cosmos' essential desire, it also brings about the cosmos' being.
O2 Insofar as the intellect possesses infinite power and transmits it to the universe, it is necessarily an efficient cause as well. If the intellect causes the cosmos' eternal motion, it causes the cosmos' eternal being.

4.3.3.2 First Objection (In Tim. *2.91.8–16 [1.267.4–12])*

Let us have a closer look at the first objection.

[O1] εἰ γὰρ ἐρᾷ ὁ κόσμος – ὥς φησι καὶ Ἀριστοτέλης – τοῦ νοῦ καὶ κινεῖται πρὸς αὐτόν, πόθεν ἔχει ταύτην τὴν ἔφεσιν; (i) ἀνάγκη γάρ, ἐπεὶ μή ἐστι τὸ πρῶτον ὁ κόσμος, ἀπ' αἰτίας ἔχειν τὴν ἔφεσιν ταύτην αὐτὸν τῆς εἰς τὸ ἐρᾶν κινούσης· κινητικὸν γὰρ τὸ ὀρεκτὸν τοῦ ὀρεκτικοῦ φησιν εἶναι καὶ αὐτός. (ii) εἰ δὲ τοῦτο ἀληθές, ὀρεκτικὸν δὲ ὁ κόσμος αὐτῷ τῷ εἶναι καὶ κατὰ φύσιν ἐκείνου, δῆλον ὅτι καὶ τὸ εἶναι αὐτοῦ πᾶν ἐκεῖθεν, ἀφ' οὗ καὶ τὸ εἶναι ὀρεκτικόν ἐστι.

If the cosmos loves the intellect – as Aristotle says – and it comes into motion in relation to the intellect, where does it obtain this desire from? (i) It is necessary, since the cosmos is not that which is first, that it obtain this desire from a cause which moves it towards love. After all, he himself says that it is the object of desire that moves the desiring subject. (ii) If this is true and the cosmos is desiring of the intellect through its [i.e., the cosmos'] very being and in accordance with its nature, it is clear that its entire being comes from there, including also its being the desiring subject. (*In Tim*. 2.91.8–16 [1.267.4–12])

This objection is loosely based on *Metaphysics* 12.7 and repeats the charge made against the Peripatetics in the doxography that the intellect is not ποιητικόν. In brief, Proclus argues that if the intellect is the final cause (i.e., the object of desire) of the cosmos, as Aristotle maintains, it also needs to be the efficient cause of the cosmos' being.[70] The argumentation proceeds in two steps. First (i), Proclus claims that the cosmos is not a first or principle

[70] Other versions of this objection in relation to the causality of intelligible entities are found in *In Parm*. 3.788.8–19, 4.842.20–7, 922.2–16; cf. Steel (1987a: 215–16) and the notes in Luna and Segonds (2013; I, 132 and II, 418–19). Asclepius makes the same argument but attributes it to Aristotle (*In Met*. 148.10–13).

(τὸ πρῶτον) – unlike the intellect – and as such is dependent on a cause (ἀπ' αἰτίας) for having a certain desire. That is, insofar as the cosmos desires the intellect, the intellect must account for or cause that desire in the first place. Moreover, the intellect as cause of the desire *moves* the cosmos towards love (τῆς εἰς τὸ ἐρᾶν κινούσης). The reason, so Proclus, is that, according to Aristotle, himself the object of desire (ὀρεκτόν) and the cause of motion (κινητικόν), that is, the final cause and moving cause, coincide – at least in the case of the intellect. *Qua* object of desire the intellect causes the motion of the cosmos. Proclus' interpretation matches modern accounts: Judson (2019: 185–6), for instance, claims that the unmoved mover is an efficient cause of the heaven's desire, which, as proximate cause, brings about the heaven's motion. So far, so Aristotelian, one could say.

Then, in the second step (ii), Proclus' argument takes a decisively Neoplatonist turn. He states that if the object of desire is the cause of the desire in the desiring subject, and the desire for the intellect[71] in the cosmos is essential/due to its being (αὐτῷ τῷ εἶναι) and according to its nature (κατὰ φύσιν), then the intellect is not just the cause of the cosmos' being desiderative but of the cosmos' being (εἶναι) at all. In other words, if x's desire of y is essential, and if y is the cause of x's desire, then y is the cause of x's being. Insofar as y causes not just *a* desire in x – as numerous other objects of desire would – but rather a desire inseparably linked to the being of and thus constitutive of x, y is also an efficient cause of x's being. In turn, x only has an essential desire towards y, if y is the cause of x's being. In any case, Proclus is here not committed to the blatantly false claim that every object of desire is causally responsible for the being of the desiring subject.[72]

Two issues which are crucial for the success of the argument arise here and merit further investigation. First, it is not straightforward why Proclus assumes that the cosmos' desire for the intellect is essential, as Aristotle does not express this explicitly.

[71] I take it that ἐκείνου refers to the intellect and not to ὁ κόσμος, as Festugière seems to take it. Additionally, the term goes with ὀρεκτικὸν, and not with κατὰ φύσιν, as Runia suggests.

[72] As is also pointed out by Steel (1987a: 217).

I take it that Proclus' assumption is based on the view that eternal motion is a *sine qua non* for the cosmos' existence, and in order to maintain it the cosmos has to continually desire the intellect. If the cosmos stops desiring the prime mover, it stops moving. In this way, its desire can be rightly regarded by Proclus as 'essential'.

Secondly, what does Proclus mean by the term *einai* (εἶναι) – as in the intellect is the cause of the cosmos' εἶναι – in this context? Does it denote existence, essence or being (as translated here) – or somehow all three? Although the meaning of this ambiguous term is crucial in understanding this and the following objection, scholarship is silent on this issue. Steel (1987a) in his discussion of this text chooses the translation 'existence', as do also Sorabji (1988: 252) and d'Hoine (2016: 390). The problem is that usually the technical term for 'existence' is *huparxis* (ὕπαρξις) in Proclus, as when he discusses the ὕπαρξις τῶν εἰδῶν at *In Parm*. 4.880.19.[73] Steel is indeed aware of this and, thus, when he cites Proclus' claim that sensibles get their desire 'from the source of their ὕπαρξις and εἶναι' (*In Parm*. 4.842.25), he renders ὕπαρξις as 'existence' and εἶναι as 'being'. I assume that εἶναι does not refer here just to factual existence, whereby the attribution of εἶναι to cosmos simply means that the cosmos exists. Instead, it is a richer notion that includes the mode of existence as well as certain essential attributes, as the expression τὸ εἶναι αὐτοῦ πᾶν and τὸ εἶναι ὀρεκτικόν at 91.15–16 [267.11–12] seem to indicate. Parallel evidence from *ET* suggests the same (e.g., *ET* §28.32.29, §31.34.35, §34.36.24).[74] To put it in contemporary terms, εἶναι here has an *existential* and *predicational* dimension: due to the causation of the intellect the cosmos *exists* and does so *in a certain way*.[75] The best translation therefore seems to be 'being', as it is able to render the term's ambiguity also in Proclus.

[73] According to Steel (1994: 80), ὕπαρξις in Proclus is often synonymous with ὑπόστασις and means 'l'existence, le fait d'exister ou la manière d'exister'. On the distinction of ὕπαρξις from οὐσία among the Neoplatonists, cf. Chiaradonna (2019b). See also P. Hadot (1973).

[74] According to Ammonius *ap.* Simpl. *In Phys*. 1363.4–12, the cosmos receives τὴν ἀίδιον σωματικὴν οὐσίαν from the unmoved mover.

[75] I do not intend to imply here that Proclus or other Neoplatonists actually observe such a modern distinction. Cf. the criticism of transposing these two terms to (at least Classical) Greek philosophy by Kahn (1966: 247).

What do we make of Proclus' objection here? Proclus might be right in claiming that Aristotle cannot regard the unmoved mover exclusively as a final cause, since causing the desire in the desiring subject can be considered as being an efficient cause. Indeed, as pointed out, this is the interpretation of the intellect endorsed by Judson (1994: 164–5) and (2019: 185–6.) Yet, Proclus goes further than this by concluding that something that causes the cosmos' essential desire also causes the cosmos' being. If εἶναι here meant 'existence', the move would be warranted insofar as the unmoved mover would be the remote efficient cause of the cosmos' existence by bringing about its essential desire and, thus, its eternal motion. But for Proclus, εἶναι seems to mean here more than factual existence. Thus the unmoved mover would not just be the reason why the cosmos exists *full stop* but rather why it exists *in a certain way*. Even here, however, Aristotle could agree: the desire-induced motion makes the cosmos what it is – namely a complex system of spheres that ultimately influence the sublunary realm.[76] In this way, the intellect would be the cause of the cosmos being *in a certain way*.[77]

Yet, while this might be the case in the way the argument is presented here, it becomes clear from other passages that Proclus has a distinctly Neoplatonist conception of the intellect's causality. In *ET* §34, he explains that 'everything proceeds (πρόεισι) from intellect' (38.3–4), including the cosmos. This procession has to be understood of course by considering Proclus' understanding of the constitution of being, which is characterised by the triad μονή – πρόοδος – ἐπιστροφή.[78] According to this, an effect proceeds from its cause, which already contains it in a superior way (*ET* §7), in order to differentiate itself from it.[79] While I do not see any evidence that Proclus would believe that Aristotle agrees to *this*, Proclus' specific objection in 2.91.8–16 [1.267.4–12] still stands as a line of argument that could be accepted by an Aristotelian.

[76] The prime mover's causation of the outermost sphere's motion can be seen as ultimately also influencing the motions of the other spheres, although these each have their own unmoved mover according to *Met*. 12.8. For this view, cf. G. E. R. Lloyd (2000: 259–60).

[77] Cf. *Met*. 12.7.1072b13–14: ἐκ τοιαύτης ἄρα ἀρχῆς ἤρτηται ὁ οὐρανὸς καὶ ἡ φύσις.

[78] See my discussion in Section 4.5.2

[79] Cf. A. C. Lloyd (1976: 152–5); Greig (2021: 79–90).

4.3.3.3 Second Objection (In Tim. *2.91.17–92.9 [1.267.12–24])*

From the fact that the intellect causes the cosmos' essential desire the last objection concluded that it causes the cosmos' being as well. The second objection reaches the same conclusion, that is, that the intellect is the cause of the cosmos' being, by starting from the intellect's causation of the cosmos' eternal motion. Proclus' reasoning here is based on the 'infinite power argument', where δύναμις is understood as a power to do something not as a potentiality to undergo something. Although we find a brief version of the argument in Syrianus (*In Met.* 117.25–118.11), Proclus seems to be the first to make extensive use of it by not only summarising the argument itself and its background, in *EP*[80] and elsewhere, but also by using it against Aristotle.[81]

[2. Objection] πόθεν δὲ τὸ κινεῖσθαι ἐπ' ἄπειρον πεπερασμένον ὄντα; πᾶν γὰρ σῶμα πεπερασμένην ἔχει δύναμιν, ὥς φησι. πόθεν οὖν τὴν ἄπειρον ἔσχε ταύτην τοῦ εἶναι δύναμιν τὸ πᾶν, εἴπερ μὴ ἐκ ταὐτομάτου κατὰ τὸν Ἐπίκουρον; ὅλως δέ, εἰ τῆς κινήσεως αἴτιος ὁ νοῦς τῆς ἀπείρου καὶ ἀδιακόπου καὶ μιᾶς, ἔστι τι τοῦ ἀιδίου ποιητικόν· εἰ δὲ τοῦτο, τί κωλύει καὶ ἀίδιον εἶναι τὸν κόσμον καὶ ἀπ' αἰτίας εἶναι πατρικῆς; καὶ γὰρ ὡς τοῦ κινεῖσθαι δύναμιν ἄπειρον ἐκ τοῦ ὀρεκτοῦ λαμβάνει, δι' ἣν ἐπ' ἄπειρον κινεῖται, οὕτω καὶ τὴν τοῦ εἶναι δύναμιν ἄπειρον ἐκεῖθεν πάντως λήψεται διὰ τὸν λόγον ὅς φησιν ἐν πεπερασμένῳ σώματι μὴ εἶναί ποτε δύναμιν ἄπειρον.

From where, moreover, does the cosmos, though itself finite, derive its infinite motion? After all, as he [Aristotle] says, every body has a power that is finite. From where, then, does the universe derive this infinite power to exist, if it does not obtain it spontaneously in accordance with [the doctrine of] Epicurus? In general, if the intellect is cause of the infinite and uninterrupted and single motion, there exists an entity which is the efficient cause of that which is everlasting. If this is the case, what prevents the cosmos from being both everlasting and derived from the paternal cause? For just as it obtains from the object of desire an infinite power of motion, through which it moves to infinity, so it will certainly obtain the infinite power of being from there in virtue of the argument which states that there can never be an infinite power in a finite body. (*In Tim.* 2.91.17–92.9 [1.267.12–24])

[80] See Section 4.5.1.

[81] Proclus employs the argument also in his interpretation of *Tim.* (*In Tim.* 2.130.17–23 [1.294.9–15]) and Syrianus in an idiosyncratic interpretation of *Phdr.* 245d8–9 (*In Met.* 118.6–9). It occurs also in, e.g., Olymp. *In Phd.* 13.2.38–9 and Alex. *In Phys.* 8.10.818: 639. For a discussion, cf. Steel (1987b); Sorabji (1988: ch. 15); Lerner (1996: ch. 9); Twetten (2016: 334–5 and 2019); Adamson (2018: 201–4) whose formulation of Ammonius' argument differs somewhat from Proclus'.

In brief, Proclus again objects to reducing the unmoved mover to a final cause. Instead, it has to be an efficient cause as well, since it must cause the infinite being of the cosmos.

The argument compressed in the first three lines is:

(1) A finite magnitude has a finite power.
(2) Moving for an infinite period of time requires an infinite power.
(3) The cosmos is a finite magnitude and moves for an infinite period of time.
(4) Infinite power is either intrinsic (in certain unextended entities) or extrinsic (in magnitudes).
(5) Given (3), the cosmos' infinite power is extrinsic.

In establishing that the cosmos' eternal motion requires an external infinite power, the question poses itself as to the origin (πόθεν) of this infinite power. Before Proclus considers the two options, he claims that moving for an infinite period of time (τὸ κινεῖσθαι ἐπ' ἄπειρον) implies being for an infinite period of time (τὴν ἄπειρον . . . ταύτην τοῦ εἶναι δύναμιν). This implication is absolutely crucial for Proclus, as it transforms the proof from an argument about motion to one about being.[82] Again, the same ambiguity concerning εἶναι arises. If it means 'existence' here, Proclus' identification of moving for an infinite period of time with existing for an infinite period of time is warranted insofar as the cosmos cannot exist if it does not move continuously. A stand-still means, in fact, the end of the cosmos' existence. Yet, considering the previous passage (*In Tim.* 2.91.8–16 [1.267.4–12]) as well as other related texts such as *ET* §31 and §34, εἶναι seems to have a broader meaning.

The background of the argument is Aristotelian and found in *Physics* 8.10 and *Metaphysics* 12.7.1073a5–11 which refers back to the *Physics*. As discussed in Section 4.2.3, in these passages Aristotle sets out to demonstrate the indivisibility of the prime mover. According to Proclus' interpretation, Aristotle (1) attributes in these lines infinite power to the unmoved mover, which (2) is transmitted to the cosmos. While some commentators have questioned either (1) or (2), or both, since these claims are not

[82] Again, this transformation goes back at least to Syr. *In Met.* 117.28–118.6. It is taken up – but with a different intention – by Ammonius *ap.* Simpl. *In Phys.* 1363.4–8, discussed in Section 4.4.

mentioned explicitly by Aristotle, I believe Proclus' interpretation is correct and a majority of modern scholars, for example, Judson (1994; 2019), Laks (2000) and Touzzo (2011), essentially concur. In short, Aristotle wants to show that the prime mover must be without magnitude, since due to its lack of infinite power a (finite) magnitude is unable to cause an infinite motion. This, however, implies that the prime mover possesses infinite power. For how – on this reasoning – could it otherwise cause an infinite motion? Moreover, the causation of the cosmos' infinite motion can be considered as a transmission of power, since Aristotle describes how a mover with its power acts on something in order to change it (*Phys.* 8.10 266a24–30). This description clearly implies also the workings of the prime mover.

Given the accuracy of Proclus' reading, I claim that his ensuing objection is well-founded: as shown, many modern scholars have struggled to understand how the idea of the unmoved mover transmitting its infinite power to the universe can be squared with Aristotle's view of the unmoved mover's presumed mode of operation, that is, as an object of desire. Proclus, I argue, rightly recognises that this argument offers a strong foundation for assuming the intellect's efficient causality. He is thus right in his objection: Insofar as we take Aristotle on his word and understand the unmoved mover as transmitting power to the universe – and there are, as I argued, strong textual reasons for assuming that –, the unmoved mover cannot be simply a final cause and also not just a moving cause. Instead, the argument requires a metaphysically richer notion of efficient causality – which Proclus and later commentators readily provide.

4.3.3.4 Conclusion

In order to assess Proclus' approach, I have to consider first how much of the interpretative strategy and arguments are genuinely Proclean. As often with Proclus' philosophy, including his criticisms of Aristotle, a strong influence by his teacher Syrianus is detectable.[83] After all, Proclus himself claims after presenting his objections of Aristotle's intellect: 'In relation to Aristotle, then, many refutations

[83] See Section I.3.2.

have been made by many people' (*In Tim*. 2. 93.18–19 [1.268.23]).[84] As mentioned, Syrianus holds a very similar view of Aristotle's intellect (e.g., *In Met*. 10.33–11.5[85]; 175.21–23) and we find evidence for both of Proclus' objections, O1 and O2.[86] Syrianus, like Proclus, claims that Aristotle failed to draw explicitly the conclusion from these two arguments that the intellect is an efficient cause of being: 'to this extent he falls short of his father's philosophy' (tr. Dillon and O'Meara; 10.37: τοσοῦτον ἀπολείπεται τῆς πατρίου φιλοσοφίας).[87] Yet, since this conclusion follows from his own principles (118.27: ἐξ ὧν δίδωσιν), Aristotle is 'forced to accept the same doctrine whether or not he wants' (ibid.: εἰς ταὐτὸν ἐκείνῳ δόγμα καὶ ἑκὼν καὶ ἄκων καταναγκάζεται). Thus, based on the necessary implications of his arguments, Syrianus claims that Aristotle in this respect 'says the same things as Plato in another way' (27–8: τὰ αὐτὰ τρόπον ἕτερον ἐκείνῳ φθέγγεσθαι). Like Proclus and in contrast to Ammonius and Simplicius, Syrianus believes that, although Aristotle is committed through his own postulates to view the intellect as an efficient cause of being, he fails to take this position himself.[88] Syrianus states clearly that, once the conclusion has been drawn from Aristotle's arguments, there is no doctrinal disagreement between Plato and Aristotle on the causality of the intellect and the intelligibles.[89] Thus, in contrast to Proclus, Syrianus emphasises the resulting agreement between Plato and Aristotle in this respect. At the same time,

[84] As the plural indicates, there existed various critics of Aristotle's intellect. Besides Syrianus, Proclus could have been influenced by Atticus and Plotinus. The former criticises Aristotle's god in frs. 3–4 as lacking providence – the same objection Proclus makes. The latter's focus is mostly on Aristotle positing wrongly the intellect as highest metaphysical principle as well as the confusion between one unmoved mover of the cosmos and multiple unmoved movers for the different heavenly spheres (6.9.7–27); cf. Roux (2013) and n. 41.

[85] Syrianus speaks here of the 'separate immaterial forms' (τὰ χωριστὰ καὶ ἄυλα εἴδη) by which he means the unmoved intellects of the spheres, including the prime mover.

[86] For O1, cf. *In Met*. 11.11–19. For both, cf. 117.25–118.15. Yet, Syrianus also praises Aristotle's investigation of the unmoved movers at 80.10–11.

[87] Proclus uses a similar expression when characterising Aristotle's deficient natural philosophy: ὅσον ἀπολείπεται τῆς τοῦ καθηγεμόνος ὑφηγήσεως (*In Tim*. 1.10.18 [1.7.15–16]).

[88] Cf. *In Met*. 11.11–13: 'But what he does not say from this point on, but which necessarily follows from what he posits, this it is for us to say'. For a similar case *mutatis mutandis*, cf. Chrysippus' determinism as interpreted by Cicero in *De fato* 39.

[89] This seems to be confirmed by a reference to Syrianus in Asclep. *In Met*. 450.22–5.

Syrianus makes clear that this agreement was not Aristotle's intention. Instead, Aristotle has to be forced (καταναγκάζεται) to accept it.

It is likely that Proclus goes further in his criticism than Syrianus – although this cannot be conclusively determined given our limited access to Syrianus' works.[90] At *In Tim*. 2.91.4–5 [1.266.30–267.1] and 2.132.15–133.4 [1.295.20–7] Proclus clearly presents Aristotle's metaphysics as deficient for rejecting the One and the paradigm as well as attributing characteristics to the intellect which actually belong to the One. Some of the objections have no correspondent in Syrianus, although he also maintains that Aristotle rejects the One (*In Met*. 118.21–2). However, in his critique of the causality of Aristotle's intellect Proclus greatly resembles Syrianus. Similarly to his teacher, Proclus criticises Aristotle by starting from Aristotle's own premises. Proclus' view is that by following Aristotle's own reasoning – especially his infinite power argument – Aristotle should have committed himself to the position that the intellect is an efficient cause of the cosmos' being. This is the main difference from modern versions of this interpretation. In both (a) and (b), as set out in Sections 4.3.3.2 and 4.3.3.3, Proclus reaches from unquestionably Aristotelian premises – the unmoved mover causes (a) the desire and (b) the eternal motion of the cosmos – the (questionably Aristotelian) conclusion that the unmoved mover is the cause of the cosmos' being. Aristotle failed to reach this conclusion due to a limited understanding of efficient causality, as seen in the discussion of *In Tim*. 1.2.21–3.13 [1.2.15–29]. His understanding of the efficient cause primarily as a moving cause effectively denies the type of causality Proclus has in mind for the unmoved mover.

In my opinion, Proclus' observation that Aristotle's view of the first principles differs from Plato's metaphysics just as the Aristotelian type of efficient causality differs from the Platonic one makes his exegesis of Aristotle more nuanced and closer to the original than the interpretations of Ammonius and Simplicius (especially, if one considers their shared Platonist

[90] Saffrey (1987: 208–9) and Helmig (2009: 378–9) believe Proclus is more critical of Aristotle than Syrianus. Both contrast Syrianus' respect for Aristotelian physics with Proclus' criticism thereof (*In Tim*. 1.9.14–10.18 [1.6.21–7.16]). D'Hoine (2016) claims that this cannot be established.

commitments) who attribute a Platonic type of efficient cause to Aristotle's intellect. By contrast, Proclus shows clearly that Aristotle's intellect does not share the same characteristics as Plato's demiurge. Yet, at the same time, he paradoxically contributes to the dissemination of this Platonising-creationist reading of Aristotle's intellect, since his arguments are picked up by his pupil Ammonius – but with a different intention.

4.4 Ammonius and Simplicius on the Causality of Aristotle's Unmoved Mover

In the following, I contrast Proclus' interpretation with Ammonius' and Simplicius'. Ammonius wrote a treatise on this issue, excerpts of which are preserved – and endorsed – by Simplicius' commentary on the *Physics*. Since there is no in-depth analysis of Ammonius' work, I first offer a reconstruction of its content, in which I also consider evidence from other commentaries by Ammonius' pupils (4.4.1). Additionally, I set out Simplicius' reasons for Aristotle's reticence regarding the intellect's causality, which, again, possibly mirror Ammonius'. This analysis allows me to situate the treatise within Ammonius' intellectual climate (4.4.2). As I show, Ammonius' main motivation for writing it was his desire to refute the interpretations of some Peripatetics, represented by Alexander, and some Neoplatonists, such as Syrianus and Proclus, which prevented the harmonisation of Plato and Aristotle on this issue. Finally, I reach a more general conclusion about the distinct approaches to Aristotle by Proclus and Ammonius/Simplicius (4.4.3).

4.4.1 Ammonius' Treatise

In regard to their interpretation of Aristotle's intellect, Syrianus and Proclus remained in opposition to other Neoplatonists. Those associated with the school of Alexandria took a different stance, which was strongly propagated by Ammonius, son of Hermias, in a treatise on this issue whose precise title is unknown.[91]

[91] On Ammonius and his school, cf. Verrycken (1990); Blank (2010); Griffin (2016). Specifically, on their harmonisation efforts, cf. Chiaradonna (2019a).

Ammonius himself studied in Athens under Proclus – whom he greatly revered (*In DI* 1.7–11) – and had a personal connection to the Athenian school, since his father Hermias was a student of Syrianus and his mother Aedesia a relative of Syrianus. After his education in Athens, Ammonius left (around 470/5) for Alexandria where he had a rich teaching activity, especially on Aristotle (Phot. *Bibl.* §242.341b24: μᾶλλον δὲ τὰ Ἀριστοτέλους ἐξήσκητο), and counted among his pupils Simplicius, Philoponus, Olympiodorus and Asclepius.[92] While Ammonius' commitment to Syrianus' and Proclus' type of Neoplatonism is debated, he undoubtedly broke with their anti-harmonist stance and (re-)established a more thorough harmony between Plato and Aristotle which is reflected in the writings of his students.[93] It is possible that Ammonius achieved this by simply returning to a position prevalent in the Athenian school under Plutarch of Athens until Syrianus became its head in AD 431/2. While I focus in this section mostly on Ammonius and Simplicius, I also refer to the writings of Ammonius' other students, insofar as they are useful in reconstructing their teacher's arguments or exegesis of a specific passage.[94] These philosophers too regard the Aristotelian god as a final cause and an efficient cause of being.[95]

The most extensive evidence for Ammonius' interpretation is preserved in a well-known passage at the end of Simplicius' commentary on the *Physics* (1360.24–1363.24). The text can be divided in five parts. After briefly (i) introducing the problem and the goal of his discussion (1360.24–31), Simplicius (ii) underlines the final and efficient causality of the Platonic demiurge by

[92] For references, cf. Sorabji (1988: 279, n. 122).

[93] See Section I.3.2.

[94] While not a prolific writer himself, Ammonius gave extensive lectures on Aristotle which were written down by his students, chiefly Philoponus and Asclepius. The latter's commentary on *Met.* is regarded as particularly close to Ammonius' views by Westerink (1962: xi) and Verrycken (1990: 204). However, it differs to a certain extent linguistically from Ammonius' only extant work *In DI*, as Luna (2001: 105–6) shows. Ibid., 108 also highlights that Asclepius later added numerous quotations from Alexander's *In Met*., which due to their proximity to the original cannot stem from Ammonius' oral lectures. For further discussion, cf. Cardullo (2002: 507–13). For a discussion of Philoponus' editorial work of Ammonius' lectures, cf. Golitsis (2019).

[95] Cf. Simpl. *In DC* 271.13–21, *In Phys*. 1360.24–1363.24; Asclep. *In Met*. 28.20–2, 103.3–4, 148.10–13, 225.15–17, 450.20–8; Philop. *In GC* 50.1–5, 136.6–137.3, 152.23–153.2, 297.15–24, *In Phys*. 189.13–17, 298.6–10, 304.5–10. Philoponus then changed his mind on this issue, as Verrycken (1990: 225) notes.

referring to various passages (1360.31–1361.11). He then (iii) turns to Aristotle and demonstrates the efficient causality of the unmoved mover (1361.11–1362.10). Since this does not suffice, he shows in the next step (iv) that it is an efficient cause of the cosmos' being (1362.11–1363.8). He (v) concludes with some final remarks on Ammonius' book and the reasons for Aristotle's reticence in calling the unmoved mover an efficient cause (1363.8–24). While the whole passage has attracted a certain attention in scholarship,[96] a close analysis of the procedure and the arguments is still outstanding as is also a discussion of its intellectual context. Such an analysis will help us in comparing the views of Ammonius/Simplicius with Proclus'.

Before I proceed, it is necessary to discuss to what extent this material is directly excerpted from Ammonius' treatise. Given that much of its content as well as its overarching goal are obscure, much depends on how we understand the following lines:

> My teacher Ammonius has written an entire book (βιβλίον ὅλον) that provides many proofs (πολλὰς πίστεις) of the fact that Aristotle considers god to be also the efficient cause (ποιητικὸν αἴτιον) of the entire world (τοῦ παντὸς κόσμου), and I have here taken over (μεταγαγών) some points sufficiently for my present purposes. His more complete instruction on this topic (τελειοτέραν περὶ τούτου διδασκαλίαν) can be found in that book. (1363.8–12)[97]

Simplicius refers here to the 'many proofs' (πολλὰς πίστεις) in favour of the efficient causality of the unmoved mover towards the whole cosmos which Ammonius brought forward in his book. Indeed, in a parallel passage, Simplicius states that Ammonius there demonstrates that 'Aristotle recognises that the god is not only a final (τελικόν) but also a productive cause (ποιητικὸν αἴτιον) of the cosmos' (*In DC* 271.19–21).[98] Simplicius admits to using some of these πίστεις freely in this passage (ἐγώ τινα μεταγαγὼν ἐνταῦθα τοῖς προκειμένοις ἀρκούντως). This clearly refers to (iii) and (iv) which are mostly interpretations of various passages. Whether Ammonius' treatise included a short section on Plato's

[96] Cf. Verrycken (1990: 216–18); Twetten (2016: 337–8); Golitsis (2017: 220); A. Ross (2020).

[97] Translations of Simpl. *In Phys.* 1360.24–1363.24 are from McKirahan (2001) with some modifications.

[98] Cf. also *In DC* 154.7–10 where Ammonius is not explicitly mentioned.

views on the demiurge, as Simplicius does in (ii), cannot be excluded. At any rate, it seems clear that Ammonius' book was primarily exegetical and consisted in a wide-ranging collection of passages which were then interpreted to yield a certain result. Such a type of work seems to be the exception in Aristotelian exegesis, as few known treatises on Aristotle from late antiquity deal exclusively with a single interpretative question.[99] There is, however, a rich tradition among Neoplatonists of writing μονοβίβλια on specific topics, of which Ammonius himself published a few.[100] This emphasises the importance of the problem for Ammonius and his desire to create an agreement in this respect by counteracting dissenting views of certain Peripatetics and Neoplatonists.

Simplicius starts (i) the discussion by addressing other exegetes and stating the goal of his endeavour:

Ἐπεὶ δέ τινες οἴονται τὸν Ἀριστοτέλη τὸ πρώτως κινοῦν, ὅπερ καὶ νοῦν καὶ αἰῶνα καὶ θεὸν ἀνυμνεῖ, τελικὸν μόνον, ἀλλ' οὐχὶ καὶ ποιητικὸν αἴτιον λέγειν τοῦ κόσμου καὶ μάλιστα τοῦ οὐρανοῦ ὡς ἀιδίου ὄντος καὶ διὰ τοῦτο ἀγενήτου, ἀκούοντες αὐτοῦ πολλάκις λέγοντος, καὶ ὅτι κινεῖ ὡς ἐρώμενον, καὶ πολλάκις ὡς τελικὸν αἴτιον ἀνευφημοῦντος, καλῶς ἔχει κἀν τούτῳ δεῖξαι συμφώνως αὐτὸν τῷ σφετέρῳ καθηγεμόνι μὴ τελικὸν μόνον, ἀλλὰ καὶ ποιητικὸν αἴτιον τὸν θεὸν λέγοντα, τοῦ τε κόσμου παντὸς καὶ τοῦ οὐρανοῦ.

Some think that Aristotle says the prime mover – which he hymns as intellect, eternity and god – is only a final cause and not also an efficient cause of the cosmos and in particular of the heaven, since it is eternal and consequently ungenerated. They think this because they hear him often saying that it causes motion as the object of love, and often proclaiming it as a final cause. It is a good idea, then, to prove that here too he is in agreement with his teacher in calling god not only a final cause but also an efficient cause both of the entire cosmos and of the heaven. (*In Phys*. 1360.24–31)

Casting aside for a moment the question of who Simplicius' addressees are, Simplicius intends – in his typical manner – to

[99] Another such treatise is Philoponus' *Against Aristotle on the Eternity of the World* which can be reconstructed from Simplicius' refutation in *In DC* and *In Phys*. Alexander wrote two (now lost) monographs: *On the Disagreement Between Aristotle and his Associates Concerning Mixed Premises* and *Refutation of Galen's Attack on Aristotle's Doctrine That Everything That Moves is Set in Motion by Mover* (possibly spurious). Porphyry's *Against Aristotle on the Soul Being an Entelecheia* also merits mention.

[100] Cf. Blank (2010: 662).

demonstrate even in this respect the agreement between Aristotle and his teacher Plato.

In order to do this, he first (ii) sets out Plato's own position: 'from what he says in the *Timaeus* . . ., Plato clearly calls god the final and efficient cause of the cosmos' (1360.31–4). Simplicius refers to various passages from this dialogue which he takes to be descriptions of the demiurge's goodness as well as productive activity.[101] He also mentions that the demiurge himself 'looks at the Good' (1360.36–7) which I take to mean that the final causality of the demiurge is ultimately dependent on the One/Good.[102] Moreover, he specifies that while the demiurge himself creates (ὑφίστησι) the heavenly gods, that is, the heaven itself and the planets, they in turn create the sublunary realm (1360.37–1361.1). The demiurge's creation of the whole cosmos is thus mediated through proximate causes, the heavenly gods.[103] Generally, this preliminary discussion of Plato emphasises Simplicius' allegiance to Plato, which guides his specific reading of Aristotle.

Turning then to the latter, Simplicius claims that he only needs to 'defend' (ἀρκεῖν) the efficient causality of Aristotle's unmoved mover, since no one 'disputes' (ἀμφισβητεῖ) its final causality (1361.11–12). In order to do so Simplicius (iii) establishes that the unmoved mover is an efficient cause – presumably copying here Ammonius' πίστεις. He does so by listing five passages from four different works where Aristotle supposedly refers to the intellect as an efficient cause. These are the following (-1361.12–1362.10):

[101] These are *Tim*. 29d7–8, 30b4–6, 41a7, b7–8, c1–5. Asclepius also cites 41a7 (*In Met*. 103.11) as evidence for the demiurge's efficient causality and mentions 29e1 to emphasise the demiurge's goodness (21.21). Additionally, in his discussion of *Met*. 1.6 Asclepius mentions *Tim*. 28c3–4 for the efficient causality of the demiurge and the *Second Epistle* 312e1–3 for the final causality of highest principle (52.21–8; cf. 55.25, 103.12, 158.20). Interestingly, *In Met*. 52.21–8 is taken almost *verbatim* from Alex. *In Met*. 59.28–60.2.

[102] In the discussion of Aristotle, the One/Good is left unmentioned. However, elsewhere Ammonius and Simplicius attribute the One as the highest principle above the intellect to Aristotle (see Section 4.4.3).

[103] This distinction in the creation-process is important, as it agrees with his interpretation of Aristotle whereby the unmoved mover brings about the heaven and the heaven then the sublunary realm (see below argument (4)). Similarly, the unmoved mover is an origin of motion to the sublunary beings proximately via the heaven (*In Phys*. 1362.19–20).

(1) *Phys.* 2.3.194b29–31. This is the definition of the efficient cause as first origin of motion. It is important for Ammonius, I take it, that the section includes as example the producer of the produced object (τὸ ποιοῦν τοῦ ποιουμένου).
(2) *DC* 1.4.271a33. Ammonius quotes (approximately) the phrase that 'neither god nor nature do anything in vain', where 'god' is presumably interpreted as the prime mover.[104]
(3) *DC* 1.9.279a27–30. Ammonius refers here to Aristotle's description of the αἰών (eternity/everlastingness), on which the other beings' existence and life depend (1.9.279a29–30: ὅθεν καὶ τοῖς ἄλλοις ἐξήρτηται . . . τὸ εἶναί τε καὶ ζῆν). He seems to take here αἰών as a reference to the intellect, which – in his view – is responsible as an efficient cause for the being and life of other entities.[105] Regardless of the identification of αἰών with intellect, it is above all problematic to construe αἰών as subject of ἐξήρτηται, which is rather governed by οὐρανός.[106]
(4) *GC* 1.3.318a1–5. Aristotle here sets out two causes responsible for the being of perpetual generation (τοῦ γένεσιν ἀεὶ εἶναι): efficient and material. Regarding the former Aristotle states that he has treated it in his work on motion, that is, *Phys.* 8, where he discussed the unmoved mover and the ever-moving heaven. Ammonius takes this to mean that Aristotle understands both unmoved mover and heaven as efficient causes: the one of all things, the other only of sublunary beings.[107] Although he does not mention it, Ammonius probably also favours this passage because of its portrayal of the unmoved mover as cause of the *being* of generation.
(5) *Met.* 1.3.984b15–22. Here, Aristotle lauds Anaxagoras and Hermotimus for having attributed efficient and final causality to the intellect. Ammonius regards this as evidence for Aristotle's own position.[108]

Except (3) and (4), these passages are not conclusive, as they can be understood as referring to the intellect as an efficient

[104] Cf. also Simplicius comments *ad loc.* in *In DC* 154.7–16, where he emphasises that 'god' refers here to the unmoved mover (and not the heaven) and is presented as an efficient cause.
[105] Simplicius shares the same interpretation at *In DC* 290.32–291.2.
[106] Cf. Guthrie (1939: xxi, n. a). Proclus, however, also takes the subject to be αἰών (*In Tim.* 4.12.18–19 [3.9.33–10.2]) in which he is followed by Cherniss (1944: 588). Leggatt (1995: 205–6) and Bodnár (1997: 110, n. 50) remain agnostic.
[107] 1361.30–1: 'Therefore, he too declares that there are two efficient causes: the unmoved one is the cause of all things, and the heavenly bodies are the cause of the sublunary ones'. At *In GC* 50.1–6 Philoponus also interprets the passage in a similar way to his teacher.
[108] The same view is expressed in Asclep. *In Met.* 28.20–2.

cause of *motion*, that is, a motive/kinetic cause, but not of *being*, that is, a 'Platonic' efficient cause – like Ammonius and Simplicius intend. The former is precisely the way most modern scholars understand the efficient causality of the unmoved mover – insofar as they attribute it to the unmoved mover in the first place.[109]

The authors realise this and briefly interrupt their exposition of arguments (iv):

> Alexander and some other Peripatetics hold that Aristotle believes in a final and motive cause (τελικὸν αἴτιον καὶ κινητικόν) of the heaven, but not an efficient cause (ποιητικόν) – as indeed the passage of Alexander cited shortly above revealed, which says, '[t]he prime mover is the efficient <cause> of the motion of the divine body (τῆς τοῦ θείου σώματος κινήσεως ποιητικόν), which is ungenerated.' (1362.11–15)

Simplicius clearly states that Alexander conceived the unmoved mover as final cause and efficient cause of motion.[110] Since being an efficient cause of *motion* is not enough to create an agreement with Plato, Ammonius' remaining discussion serves to show that the intellect is an efficient cause of *being* (1362.20–1363.8):[111]

(6) *Phys.* 2.6.198a2–13.[112] Here Aristotle claims that chance and luck as efficient causes are posterior to intellect and nature: 'so however much chance may be the cause of the heaven, intellect and nature are necessarily prior causes both of many other things and of this universe (τοῦδε τοῦ παντός)' (198a11–13; tr. Charlton, modified). Since Ammonius admits that Aristotle's argument could be purely hypothetical, that is, 'if someone were to take chance and luck as efficient causes, then etc.', he follows up – unconnected to the passage discussed – with a general argument: whatever is moved by something else must have its ὑπόστασις from something else 'if οὐσία is superior to motion'. The idea is that if y receives a lower-order characteristic, such as motion, from cause x, y needs to

[109] E.g., Broadie (1993); Frede (2000: 43–7); Berti (2007: 26); Menn (2012b: 443; 447).
[110] On Alexander's view of the unmoved mover, cf. Bodnár (2014).
[111] 1362.16–20 is not a further argument, as Twetten (2016: 337–8) claims, but rather a recapitulation of the claim that the unmoved mover is an efficient cause of the motion of the heaven.
[112] Simplicius provides an extensive discussion of this in *In Phys*. *ad loc*. He puts there an emphasis on showing that the passage refers to the intellect as efficient cause of the universe (356.17–30).

receive a higher-order characteristic, such as substance, from x as well.

(7) Infinite power argument (based on *Phys.* 8.10.266a10–b27, 267b17–26 and *Met.* 12.7.1073a5–11). This is a shortened version of the same argument we encountered in Proclus – with the important difference that its result (i.e., the intellect as an efficient cause of the cosmos' being) is here attributed to Aristotle.

In summary, Ammonius and Simplicius believe that an exegesis of these passages as well as the infinite power argument shows that in Aristotle the unmoved mover causes the being of the cosmos. This causation is not temporal, since the being of the cosmos is eternal (1363.7: τὴν ἀίδιον σωματικὴν οὐσίαν). An assessment of the persuasiveness of the reasons given varies: from the inconclusive (e.g., the apparent figure of speech that 'god makes nothing in vain') to convincing arguments (e.g., the infinite power argument).[113] Strikingly, *Metaphysics* 12 does not occupy a more central role in the discussion, as in modern scholarship, although it could offer evidence for Ammonius' position.[114] At any rate, the interpretation here of Aristotle's intellect makes it possible for Ammonius and Simplicius to establish an agreement with Plato's demiurge.

Simplicius' discussion, however, does not end here. For there remains at least another pressing question: if Aristotle had this view in mind, why was he not more explicit in his writings? Simplicius gives an answer in the final part of his exposition (v) which again possibly derives from Ammonius:

> If someone inquires why in the world Aristotle does not say that god is an efficient (ποιητικόν) as evidently (φανερῶς) as <he said that he is> a final cause, I will now again state the account I gave earlier about what is subject to generation (περὶ τοῦ γενητοῦ). For since what works as an efficient cause produces something that is generated (τὸ ποιοῦν γινόμενον ποιεῖ), and what is generated seems to bring with it a temporal origin (χρονικὴν ἀρχὴν) of its generation, this is why he refuses to speak of eternal bodies as coming to be and to identify their cause frequently and evidently as efficient. (1363.12–18)

[113] Arguments (2) and (7) appear also in Simpl. *In DC* 271.13–21 which refers to Ammonius' book.

[114] See my discussion of *Met.* 12.6 and 10 above in Section 4.2.3.

Simplicius' explanation is based on Aristotle's use of the term ποιοῦν/ποιητικὸν.[115] Since in Aristotle the product of a ποιοῦν or ποιητικὸν αἴτιον is something generated (γινόμενον)[116] and everything generated has a temporal origin, he – so Simplicius – shuns from using the term γινόμενον for eternal bodies and, likewise, ποιητικὸν for describing their cause. This accounts for the lack of references in Aristotle to the unmoved mover as ποιητικόν. Is Simplicius right in assuming that in Aristotle something generated necessarily has an origin in time? Regarding the latter, Aristotle lists three possible meanings of γενητόν (which I take to be synonymous here with γινόμενον) at *DC* 1.11.280b14–20: (1) something which is at some time and is not at another; (2) something which is capable of generation; (3) something which is subject to generation, leading it from non-existence to existence. All three strongly suggest a temporal occurrence, making Simplicius' interpretation very probable.[117]

Additionally, Simplicius had earlier differentiated between Plato's and Aristotle's use of the terms γένεσις and κίνησις (1359.30–40).[118] Simplicius holds that Plato's γένεσις covers a similar semantic range as Aristotle's κίνησις, insofar as both refer to μεταβολή (change). Hence, Plato's γινόμενον is conceptually equivalent to Aristotle's κινούμενον: everything changeable is described as 'moved' in Aristotle but 'generated' in Plato. However, in Aristotle a γινόμενον covers only a restricted range of κινούμενα, namely those which have a temporal origin. In contrast, Plato applies the term more generally to all changing and moving beings, including all eternal, corporeal beings.[119]

[115] Such explanations seemed common: Philoponus provides a similar reasoning at *In GC* 152.29–153.2. In a somewhat different direction is his claim at *In GC* 136.33–137.3: in Aristotle – so Philoponus – ποιεῖν means to bring about a qualitative change (κατὰ ποιότητα μεταβάλλειν). But since god causes the οὐσία of the cosmos, Aristotle refrains from using the term. Instead δημιουργεῖν and παράγειν should be used according to Philoponus. These terms, however, do not appear in Aristotle in connection with the unmoved mover's causation.

[116] This is very similar to *Phileb.* 27a1–2 where ποιούμενον and γιγνόμενον are said to differ in name only.

[117] Additionally, there is no evidence that Aristotle took 'generation' in his criticisms of earlier cosmogonies (*DC* 1.10) as meaning anything else than the cosmos' coming to be at a certain point in time.

[118] Cf. the discussion in Gavray (2018).

[119] Cf. 1359.10–14: 'He distinguishes what has real being from what comes to be, . . . defining what comes to be as that which has its existence in coming to be, in that it is changing and

Aristotle restricts the application of γινόμενον to perishable beings 'because the imagination easily suggests a temporal origin for things that are said to be generated' (1359.39–40).[120] Simplicius further emphasises that in both philosophers the changeable (μεταβαλλόμενον) depends on the unchangeable (ἀμετάβλητον) (1360.17–18): just like in Plato γινόμενα are caused by ἀγένητα, that is, the demiurge, so in Aristotle κινούμενα are brought about by ἀκίνητα, that is, unmoved mover(s).

Thus, according to Simplicius, Aristotle shies away from calling the unmoved mover an efficient cause of the cosmos' being in order to prevent his readers from attributing a temporal generation to the cosmos – something that Aristotle, like Plato before him, strictly denies according to Simplicius. This, however, does not exclude a non-temporal generation of the cosmos (like in Plato). Thus, both agree that the cosmos' being is brought about by god. Aristotle himself is aware of this according to Simplicius.[121] Fundamentally, there is only a difference in vocabulary between Plato and Aristotle – who have different linguistic preferences – but not in the matter itself. The disagreement is over words (ὀνόματα), not reality (πράγματα).[122]

4.4.2 The Context of Ammonius' and Simplicius' Discussion

Was Ammonius the originator of the interpretation of the Aristotelian unmoved mover sketched in the previous section and, thus, the reconciliation of Aristotle's intellect with Plato's demiurge? There is considerable uncertainty about this issue which – given the significance of this interpretation of the

being moved. And he posits that every corporeal structure is subject to generation . . .' (tr. McKirahan).

[120] Aristotle 'evidently refuses to say "subject to generation" in the case of eternal things, but employs the term "motion", which signifies the same thing but does not demand a temporal origin' (1360.11–13).

[121] Cf. *In DC* 296.12–16: 'And Aristotle also knows that Plato speaks of its [i.e., cosmos'] being generated insofar as it is perceptible and corporeal, because something of this sort, not being capable of dragging itself into being, has its existence as a result of something else which produces it, and moreover that it could not, on account of its being a corporeal substance, be at once a complete whole and yet still be coming to be rather than being.' (tr. Hankinson).

[122] See Section I.3.2.

Aristotelian god – is crucial for the history of late antique and medieval philosophy. For instance, Hadot (2015: 28) chides Verrycken (1990) for wrongly regarding Ammonius as originator of this interpretation. However, I find no evidence that Verrycken actually claims this; he merely points out the importance of Ammonius in establishing this view. While it seems unlikely that Ammonius was the first to propose this interpretation, I argue that his crucial – albeit not pioneering – role should still be emphasised. For Ammonius is the first to offer an interpretation of Aristotle's intellect as a final cause and efficient cause of being in a separate treatise where he closely analyses relevant passages and actively seeks to refute divergent interpretations. As part of that, he makes use of arguments already employed by Syrianus and Proclus – yet with a different intention. In consequence, this interpretation then allowed him to harmonise the Aristotelian intellect with the Platonic demiurge. This harmonisation was meant to counteract Christian objections to the disunity of Pagan philosophy.[123] His reading greatly influenced his students and found its way into medieval philosophy via Al-Farabi who refers to the treatise and presupposes its notoriety among his readers.[124]

Yet, there have been suggestions that also earlier authors regarded the Aristotelian unmoved mover as a final cause and an efficient cause of being. For instance, the fourth century philosopher Themistius describes the Aristotelian intellect as 'craftsman' (צורף) and 'creator' (בורא) – at least in the extant Hebrew source (e.g., *In Met*. 5.20–1). Both terms, I assume, could stand for the *Timaean* expressions δημιουργός and ποιητής, suggesting that the Aristotelian intellect is a creative cause of being according to Themistius.[125]

Hadot (2015: 100) speculates that Hierocles of Alexandria, a pupil of Plutarch of Athens, not only had a similar view but also intended – based on this reading – to reconcile Aristotle with Plato. Similarly, Sorabji (2004: III, 37) claims (without a reference) that

[123] *Pace* Westerink (1976: 24) who claims that Ammonius' 'ultimate motive (as already in Hierocles) was to adapt [Plato and Aristotle] to Christian monotheism'.
[124] Cf. *Harmony of the Two Philosophers* §58. For a brief discussion, cf. Sorabji (1988: 279–81); Adamson (2018: 203 and 2021: 189–1).
[125] Cf. Meyrav (2020: 8–9).

'Hierocles of Alexandria … made Plato and Aristotle agree on God's causal responsibility for the cosmos'. While this cannot be excluded due to Hierocles' strong harmonist tendencies in his work *On Providence*, there is no explicit evidence in our extant testimonies in Photius. Photius only states in his report that '[Hierocles] wants to connect the thoughts of these men [sc. Plato and Aristotle] not only in their accounts of providence, but also in all those in which they consider the soul to be immortal and wherever they have philosophised about heaven and earth' (*ap*. Phot. *Bibl*. §214.171b35–38; tr. Schibli, modified). A reference to god is here conspicuously absent, although one could argue that his intent to prove the agreement 'in the important and most necessary dogmas of Plato and Aristotle' (172a7–8: ἐν τοῖς ἐπικαίροις τε καὶ ἀναγκαιοτάτοις τῶν δογμάτων Πλάτωνός τε καὶ Ἀριστοτέλους) implies also god's nature.[126] Hadot's – self-admitted – speculation (e.g., 2015: 153) that this view goes back even further to Porphyry and Iamblichus seems baseless without any explicit proof; a simple nod to their general harmonising tendency is insufficient.[127] I can only find evidence for Porphyry's view that god is an efficient and final cause[128] – which, however, does not mean that he regards *Aristotle's* god in the same way. Most importantly, we do not find a systematic and argumentative engagement with Aristotle's intellect and its relationship to the Platonic demiurge like in Ammonius. In this way, Ammonius clearly stands out from previous commentators.

What can be ascertained with some certainty is Ammonius' motivation for writing the treatise. At the start of the discussion (1360.24–8; see Section 4.4.1), it is claimed that 'some' (τινες) exegetes take Aristotle's prime mover to be only a final cause. Who are these τινες? Alexander and 'some other Peripatetics'

[126] For a discussion of these passages, cf. Schibli (2002: 26–30) and the comments on his translation; Hadot (2004: 10–14).

[127] Hadot (2015) also fails to mention the Middle Platonists as possible sources for this specific harmonisation effort. Although already Alcinous identifies Plato's demiurge with Aristotle's intellect, he neither engages in Aristotelian exegesis nor specifies the type of causality involved. Nevertheless, this is an important step towards a more conscious and explicit harmonisation of the two principles which occurs in Neoplatonism. The preparatory work and background of the Middle Platonists should be thus not discounted.

[128] For references and a brief discussion, cf. Karamanolis (2006: 279–80).

(οἱ ἄλλοι τινὲς τῶν Περιπατητικῶν) must be among them, as they are mentioned later on (1362.11).[129] The reason for their rejection of the intellect as efficient cause of the cosmos' being is apparently based on the cosmos' eternity and ungeneratedness (ὡς ἀιδίου ὄντος καὶ διὰ τοῦτο ἀγενήτου). That is, because the cosmos is eternal and ungenerated, it cannot have been brought into being by a cause – so the argument of Alexander according to Simplicius.[130] Another reason for this misunderstanding is Aristotle's regular insistence on the unmoved mover's final causality (1360.27–8)[131] and, implicitly, his reticence to state its efficient causality, which has prompted these one-sided and fallacious interpretations.

However, based on my previous discussion, I submit that Proclus must be also among the addressees.[132] Proclus, like Alexander, maintained that the Aristotelian unmoved mover is only a cause of the cosmos' motion and not of its being. As pupil of Proclus, Ammonius had a first-hand acquaintance of his master's views on this intricate issue. Presumably out of his dissatisfaction with Proclus' interpretation, Ammonius wrote a treatise and adopted more general harmonist views, which departed from Syrianus' and Proclus' position on Aristotle. These, then, he transmitted to his pupils.

Simplicius, who held Proclus in great esteem, likewise disagreed with his views on Aristotle and took him to be generally prejudiced against Aristotle (*In DC* 297.1–5).[133] Simplicius' – implicit or explicit – rebukes of Proclus' objections to Aristotle are evidence

[129] Simplicius also mentions Alexander as a proponent of this interpretation at *In Phys*. 258.13–15, 1354.34–5 and *In DC* 271.13–15. Alexander is the commentator most often mentioned by Simplicius. He respects him as an authority on Aristotle but is also often at odds with his interpretations, especially when dealing with Aristotle's criticisms of Plato (cf. *In DC* 297.14, 377.20–34). For Simplicius' use of Alexander, cf. the literature in Guldentops (2005; 196, n. 6); Baltussen (2008: ch. 4); Golitsis (2017); Menn (2022b).

[130] Cf. Simpl. *In DC* 301.4–7 which is part of a larger critique of Alexander (297.1–301.28) who did not see an agreement between Aristotle's and Plato's views on the (un)generatedness of the cosmos. See n. 147.

[131] In fact, Aristotle states only once that the intellect moves as an object of love (*Met*. 12.7.1072b3).

[132] This has been proposed by Verrycken (1990: 216, n. 139) and, more recently, D'Ancona (2015: 383). Many scholars, however, still assume the work is only addressed to the Peripatetics: e.g., Blank (2010: 664); Twetten (2016: 335–7); Adamson (2018: 201).

[133] On the latter text, cf. Section I.3.2.

of this stance.[134] I limit myself to the most prominent examples. (1) Proclus and Simplicius have diverging views on the history of natural philosophy and Aristotle's place in it, which are found in their respective prologues to the commentaries on the *Timaeus* (1.2.14–4.14 [1.2.9–3.19]; 1.9.14–10.18 [1.6.21–7.16]) and the *Physics* (6.31–8.15).[135] While Proclus emphasises the inferiority of Aristotle's natural philosophy vis–à–vis Plato's and criticises him for ignoring the whole array of causes, as well as unduly focusing on matter in his study of nature, Simplicius takes a different view which should be rightly regarded as a response to Proclus' portrayal of Aristotle.[136] According to Simplicius, Aristotle stands out even before Plato in investigating all parts of physics. (2) Also, Simplicius refers to Proclus' refutation of Aristotle's objections to the *Timaeus* (*In DC* 640.21–32) – a work which is noticeably critical in its attitude to Aristotle – before referring again to his own harmonistic views.[137] Clearly, this adjacent exposition of the harmony-doctrine is meant to contrast with Proclus' approach to Aristotle. (3) Lastly, Simplicius criticises Proclus in his *Corollaries on Place and Time* (*In Phys*. 601.1–645.19; 773.8–800.25) when he departs from Aristotle's view of these two notions.

4.4.3 Comparison with Proclus

If one were to ask Proclus and Ammonius the question 'Are Plato and Aristotle in agreement in regard to the causality of the intellect?' their replies would be obvious. While Ammonius – and by implication Simplicius and his other pupils – seems to clearly think so, Proclus would give a clear negative response: 'the one [Plato] has posited an efficient cause from which the universe derives its existence [as being] prior to the universe; the other [Aristotle] does not teach an efficient cause for any of the everlasting beings.' (*In Tim*. 2.132.10–12 [1.295.15–17]). Yet, by making

[134] The relationship between Simplicius and Proclus has not been well researched. Useful comments are found in Steel (2016); Baltussen (2008: 155–7).
[135] For a discussion of these texts, cf. Section I.3.2.
[136] Simplicius also defends Anaxagoras from Proclus' objections. Cf. Golitsis (2008: 89–93; 207–9).
[137] I discuss this treatise by Proclus and some of its content in Section 3.4.1.

the right assumptions and positing correct premises Aristotle's argumentation is still useful according to Proclus. It just requires a Platonist corrective, otherwise the student of Aristotle is led astray and denies the intellect's productivity.[138]

Generally, the views of Syrianus and Proclus on Aristotle's metaphysics vary greatly from those of Ammonius and Simplicius. The latter two are for instance able to find the highest Neoplatonist principle, the One, in Aristotle.[139] Simplicius claims at *In DC* 485.19–22 (= fr. 49 Rose^3): 'that Aristotle has a conception of something above intellect and substance is clear at the end of the book on prayer where he says clearly that god is intellect or even something which transcends intellect (ἢ νοῦς ἐστιν ἢ καὶ ἐπέκεινά τι τοῦ νοῦ)' (tr. Mueller).[140] Statements like that put Gerson's (2005) claim that 'Neoplatonists generally recognized that Aristotle's account of the first principle of all was defective' (10–11, n. 32) into serious doubt. Instead, Aristotle's and Plato's principles are perfectly aligned for these philosophers:

Pl.	ἕν	δημιουργός	οὐρανός
Ar.	ἕν	νοῦς	οὐρανός

This must be contrasted with Syrianus and Proclus who outright deny that Aristotle recognised the One, positing the intellect as Aristotle's highest principle.[141] More specifically, as we have seen, Proclus claims that Aristotle unduly assimilated the intellect to the One. This, however, goes to the heart of Ammonius' project of harmonising Plato's demiurge with Aristotle's intellect: if these principles differ so much and do not serve the same function in

[138] Syrianus also mentions the dangers of Aristotle's criticisms (especially for more inexperienced listeners/readers) at *In Met*. 80.4–81.6.

[139] For references to Ammonius' views, as reported by Asclepius, cf. Verrycken (1990: 218); Griffin (2016: 404) for further literature. David/Elias also addresses those who deny that the Good is the first principle in Aristotle at *In Cat*. 120.23–30. On the transcendent One as the goal of Aristotle's philosophy according to Ammonius, Simplicius, Olympiodorus and David/Elias, cf. Hadot (2015: 129–136).

[140] For further literature on this fragment, cf. Cherniss (1944: 609) who believes that it is 'probably only a reference to Aristotle's own distinction between human and divine νοῦς . . ., perhaps even specifically to the supreme state of god as νόησις νοήσεως'. For a different, more Platonising interpretation, cf. Chroust (1973: 16–18).

[141] Cf. Section 4.3.1 with n. 42. Additionally, Proclus believes that Aristotle rejects the transcendent paradigm; Simplicius does not (*In DC* 86.34–87.11).

their respective philosophical systems – as Proclus claims – they cannot be reconciled with each other.

The causality of Aristotle's intellect is thus clearly only one issue where Syrianus and Proclus had diverging views from Ammonius and his students.[142] This brings me back to a more general point of my study: unlike Ammonius and Simplicius who wanted to establish the wide-ranging agreement within Greek philosophy with particular focus on its most significant exponents, Plato and Aristotle, Syrianus and Proclus are not guided by this harmonising spirit towards Aristotle.[143] While Proclus denies that Aristotle regards the intellect as cause of the cosmos' being or essence, Simplicius asserts exactly this: 'just as [the cosmos] has its eternal motion from the unmoved cause, so also it receives its eternal corporeal essence (οὐσίαν) from the incorporeal cause' (1363.7).

Yet, the accounts of Proclus and Ammonius/Simplicius differ not just in the result of their interpretation but also in the way they present the arguments. This has been ignored in scholarship so far, since important discussions such as Verrycken (1990) and d'Hoine (2016: 392) point out only the interpretative differences. Ammonius and Simplicius focus closely on the textual evidence and quote or paraphrase passages which support their interpretation.[144] In contrast, Proclus' exposition is less text-based and exegetical but much more argumentative.[145] When Proclus discusses the infinite power argument, he does so at greater length than Ammonius/Simplicius. While Ammonius and Simplicius set out their views in the context of Aristotelian exegesis, Proclus discusses Aristotle's god as part of his Platonic

[142] The same difference is found in their interpretation of Aristotle' objection to Plato's self-moving soul, as shown in Section 3.4.2.

[143] Syrianus and Proclus, however, are harmonists regarding Plato and certain theologians. Cf. Section I.3.1.

[144] Ammonius himself emphasises the diligence required of the exegete at *In Cat*. 8.11–19.

[145] According to Baltussen (2008), the use of text marks a difference between Simplicius and other Neoplatonists: 'To support his argument he variously uses paraphrase and quotation, two devices which we saw he used for specific reasons (atypical for the Neoplatonic school, though present to some extent in Porphyry and Proclus), in particular based on the view that accurate citation can be more useful than paraphrase . . .' (109). These devices are present in Proclus' exegesis of Plato but not of Aristotle. On Simplicius' use of quotation, cf. ibid., 42–8.

exegesis. Additionally, one of the main reasons for this different approach is of course that Simplicius presents here in summary-form a version of the more detailed investigation of Ammonius' book (*In Phys*. 1363.12). It must be assumed that this treatise included much more elaborate interpretations of the passages quoted and also focused more on expounding the arguments for understanding Aristotle's intellect as an efficient cause of the cosmos' being. Also, based on the lecture notes of his students, it is very likely that his treatise included more passages than cited here by Simplicius. For instance, Philoponus uses also *GC* 1.6.323a15 (τὸ κινοῦν ποιεῖν τί) to establish the efficient causality of the unmoved mover (*In GC* 136.6–137.3).

It must be stressed that, in their project of establishing a harmony between Plato and Aristotle, Ammonius and Simplicius fight a battle on two fronts. On one hand, there is the general accusation for a lack of unity among philosophers made by Christian intellectuals. On the other, there is the threat posed by certain Peripatetics and Platonists, which is more imminent and internal to their discussions.[146] Hence, they not only have to refute Platonists like Syrianus and Proclus who regard some of their doctrines as incompatible but also a Peripatetic like Alexander.[147] Ammonius and Simplicius aim at creating an agreement in Greek philosophy by disagreeing with philosophers like Alexander and Proclus, who rejected such a fundamental harmony in their respective interpretations of Plato and Aristotle. This slightly paradoxical situation makes their project not only stand out but also shows that there was no universal spirit to harmonise Aristotle with Plato in late Neoplatonism, and

[146] Notable examples for their distinct approaches are Syrianus' and Asclepius' commentaries on *Met.* which both deal with Aristotle's anti-Platonist objections differently: 'Par rapport à Syrianus, le commentaire d'Asclépius est moins polémique à l'égard d'Aristote et recherche avec zèle l'accord entre Platon et Aristote, toujours considéré comme appartenant à l'école de Platon. Dans cette perspective concordiste, la véritable cible d'Aristote, pour Asclépius, n'est pas Platon, mais les fausses interprétations du platonisme.' (Luna 2001: 188–9).

[147] A similar example is the problem of the cosmos' generation. Both Alexander and Proclus believe there is a disagreement between Plato and Aristotle – which Simplicius rejects in his commentary on *DC* 1.10 (e.g., at *In DC* 296.26–30). In a few prominent passages Simplicius expresses openly his disagreement with Alexander's interpretations of Plato, e.g., at *In DC* 297.1–301.28, 377.20–34. Cf. Baltussen (2008: 129–31); Gavray (2018).

certainly no unified approach in doing so. It also points towards the different kind of authority that Ammonius and Simplicius were willing to attribute to Plato and Aristotle as compared to Alexander and Proclus.

Lastly, there remains no doubt as to whose interpretation was more successful and influential. By appropriating his teacher's infinite power argument and by expounding some rather doubtful passages, Ammonius is able to establish an interpretation which is eagerly picked up by philosophers and theologians adhering to the creationist God of the Abrahamic religions. In this way, Ammonius and his students have contributed to the success of Aristotelian theology in the Middle Ages.[148]

4.5 Proclus on the Causality of the Demiurge

In Section 4.3, I have delineated the main reasons why Proclus holds that Aristotle wrongly attributed only final causality to the intellect and, thus, fatally diminished the value of his metaphysics. Based on Aristotle's own premises, he has shown that accepting the intellect's causation of the cosmos' desire as well as infinite power in fact amounts to accepting the intellect – or its equivalent, the demiurge – as efficient cause of the cosmos' being. While these reasons, especially the infinite power argument, are also brought up by Proclus for his views on the demiurge (and other unmoved movers), he has also Platonist reasons for conceiving the demiurge as such a cause. In order to explore these, I now turn to Proclus' theory of the intellect's causality in various passages from *ET* as well as the commentaries on the *Timaeus* and the *Parmenides*. In these works, he lays out general, metaphysical grounds as well as exegetical motivations for conceptualising the demiurge's causality in a specific way.[149] Before I analyse these texts, I would like to

[148] Cf. Sorabji (1990c); D'Ancona (2015: 383–4) and also Twetten (2016: 343): 'Arabic Aristotelian cosmology represents a continuation of the Neoplatonizing Aristotelianism found in the commentaries of Ammonius's Alexandrian School and of Simplicius.'

[149] There is, of course, no strict distinction between these two, since Proclus regards his whole metaphysics as derived from Plato. However, one can differentiate between his systematic approach in *ET* and the text-based exegesis of his commentaries and (partly at least) *PT*.

briefly consider *EP*, as this treatise will naturally lead us to Proclus' own views.

4.5.1 The Unmoved Mover's Causality in EP

As already extensively discussed, in *EP* Proclus establishes an unmoved mover as origin of motion by rehashing passages from *Physics* 8.10:

> The prime mover of the circular motion is indivisible.
>
> Let A be the mover of the primary motion. For there must be such a thing since everything in motion is moved by something. If A is the prime mover, it will be unmoved. For the unmoved is prior to the things in motion. And since A causes an eternal motion, it possesses an infinite power to move. For finite powers have also finite activities because the activity depends on the power, so that, if the activity is infinite, so is also the power.[150] It is then necessary that the prime mover of the circular motion is either a body or incorporeal. If it is a body, either finite or infinite. But there is no infinite body (§2.15), and if there were one, it could not move the finite, as has been demonstrated (§2.12). But if the first mover is a finite body, it would not have an infinite power. For finite magnitudes have finite powers, as has been demonstrated (§2.8). Thus, the prime mover of the circular motion is not a body. It is then incorporeal and possesses infinite power, QED. (§2.21.58.11–27)

Does Proclus endorse here Aristotle's view that the unmoved mover is an efficient cause of motion, considering that he reaffirms the claims that everything in motion is moved by something (πᾶν τὸ κινούμενον ὑπό τινος κινεῖται) and that the prime mover must possess infinite power to cause the cosmos' motion, which in Aristotle suggested efficient causality? Although this has been claimed by Opsomer (2009: 198), I do not think this needs to be assumed here, since Proclus has a different understanding of efficient causality, which goes beyond just causing the motion of something, as I have shown above at Section 4.3.2. In fact, he criticises Aristotle in his commentary on the *Timaeus* for *not* attributing this type of causality to the unmoved mover. I thus believe that Proclus is simply content in *EP* to point out that the

[150] Aristotle does not make this explicit in the text. It is certainly Neoplatonist doctrine, though it already can be found in *Met*. 12.7.

unmoved mover is the cause of motion in the cosmos through its infinite power.

Proclus says almost nothing about how the unmoved mover causes the cosmos' motion – which is in line with the reticence of *Physics* 8. Indeed, besides indivisibility and lack of motion, he barely specifies its characteristics. I propose that another reason for why Proclus does not go further here are his aforementioned critical views of Aristotle on this issue. As I have demonstrated in Chapter 1, Proclus presents in *EP* Aristotelian doctrines in such a way as to fit a Platonist framework. This in turn implies that contentious issues are either excluded (e.g., self-motion) or only superficially treated (e.g., nature of the heaven, generation of the cosmos). The causality of the unmoved mover belongs to the latter group of issues and like those it is discussed at length elsewhere. *EP* thus serves a preparatory function appropriate to its place in the curriculum of establishing that the unmoved mover is causally responsible for the eternal motion of the cosmos. Yet, the mode of this causal interaction is discussed in a more advanced work where Platonic doctrine can be considered as well. Precisely such works are *ET* and his commentary on the *Timaeus*. These are discussed in the next two sections.

4.5.2 The General Metaphysical Background of ET

In *ET*, Proclus provides us a metaphysical theory for why efficient and final causality coincide in certain higher beings, among which we must consider also the demiurge. Proclus' solution to this puzzle is thus grounded in his elaborate metaphysics. This theory is based on his triadic conception of causation as μονή (remaining) – πρόοδος (procession) – ἐπιστροφή (reversion), which I have briefly set out in Section 3.4.4.1. Proclus argues at length in *ET* §§31–4 that a being reverts to the cause from which it proceeds and likewise proceeds from the cause to which it reverts – so that a being's ἀρχή and τέλος coincide. The reversion of the effect, moreover, occurs through as many causes as the effect proceeds through. Procession and reversion can thus include a number of intermediate efficient and final causes. Proclus emphasises that while an effect has its being through procession, it gets its

well-being only through reversion. It is noteworthy that a similar terminology is also found in Asclepius' discussion of the causality of the Aristotelian god (e.g., *In Met*. 28.28–32).

Since an analytical discussion of Proclus' crucial argument is outstanding, I now offer a close analysis of §31 and §34. In §31, Proclus explains that a being reverts 'according to its essence' (κατ' οὐσίαν) to that from which it proceeds – that is, final cause and efficient cause are identical. As Proclus makes clear, both reversion and procession occur through a number of proximate causes:

Πᾶν τὸ προϊὸν ἀπό τινος κατ' οὐσίαν ἐπιστρέφεται πρὸς ἐκεῖνο ἀφ' οὗ πρόεισιν.

εἰ γὰρ προέρχοιτο μέν, μὴ ἐπιστρέφοι δὲ πρὸς τὸ αἴτιον τῆς προόδου ταύτης, οὐκ ἂν ὀρέγοιτο τῆς αἰτίας· πᾶν γὰρ τὸ ὀρεγόμενον ἐπέστραπται πρὸς τὸ ὀρεκτόν. ἀλλὰ μὴν πᾶν τοῦ ἀγαθοῦ ἐφίεται, καὶ ἡ ἐκείνου τεῦξις διὰ τῆς προσεχοῦς αἰτίας ἑκάστοις· ὀρέγεται ἄρα καὶ τῆς ἑαυτῶν αἰτίας ἕκαστα. δι' οὗ γὰρ τὸ εἶναι ἑκάστῳ, διὰ τούτου καὶ τὸ εὖ· δι' οὗ δὲ τὸ εὖ, πρὸς τοῦτο ἡ ὄρεξις πρῶτον· πρὸς ὃ δὲ πρῶτον ἡ ὄρεξις, πρὸς τοῦτο ἡ ἐπιστροφή.

All that proceeds from any principle reverts according to its essence upon that from which it proceeds.

For if it should proceed yet not revert upon the cause of this procession, it must be without desire of that cause, since all that has desire is turned towards the object of its desire. But all things desire the Good, and each attains it through the mediation of its own proximate cause: therefore, each has desire of its own cause also. Through that which gives it being it attains its well-being; the source of its well-being is the primary object of its desire; and the primary object of its desire is that upon which it reverts. (34.28–36.2)

Proclus reaches his conclusion through a *reductio ad impossibile*. He thus assumes the opposite of what he wants to prove: (T) effects do not revert to their cause and, hence, do not desire their cause (whereby desire implies a turning towards the desired objects). This assumption is absurd, if we consider that (1) all things desire and hence turn towards the Good – here conceived as the metaphysical principle[151] – and (2) the Good is only acquired by the effect

[151] Cf. *ET* §12.14.18–21. The axiom that 'everything desires the Good' is a commonplace among Platonists (e.g., Plot. 6.7.20.18; Asclep. *In Met*. 103.10) and already ascribed to Plato by Alexander (*In Top*. 226.14–15). Surprisingly, the formulation does not occur in Plato – the closest parallel is *Phileb.* 20d8 which, however, refers to πᾶν τὸ γιγνῶσκον – but in Aristotle (e.g., *NE* 1.1.1094a3). Asclepius (*In Met*. 15.8) and Ps.-Simplicius (*In DA* 299.2) seem to be conscious of the latter.

'through the mediation of its proximate cause' (διὰ τῆς προσεχοῦς αἰτίας). The impossibility is guaranteed by considering (1) and (2) in conjunction. On its own (1) is not sufficient, since one could object, for instance, that soul's desire of the Good does not imply its desire of one of its proximate causes, such as intellect. And this in turn would mean that (T) is correct. That is why Proclus makes the crucial addition (2): in order for soul to obtain the Good it needs to revert through (and, hence, desire) its proximate causes as well. Just as soul proceeds ultimately from the One/Good through all the proximate causes, so it returns through these preceding causes to the ultimate principle. This means that soul's desire of the Good implies its desire of its proximate cause, intellect. Proclus concludes (34.34) by stating that the effect reverts to its primary object of desire, that is, the Good.[152]

This result is of course significant for reconciling intellect's efficient and final causality with the Good's. Although Proclus often does not make this explicit, the intellect is only a proximate cause in his system. This has significant implications for his view of the Aristotelian intellect and the reason(s) why he cannot accept it as the first cause, as outlined above. However, insofar as all the beings caused by intellect desire the Good, they must also desire intellect. At the end of the proposition (34.34–36.2), Proclus further emphasises that the origin of the effect's being (τὸ εἶναι) is also the origin of its well-being (τὸ εὖ). Hence, efficient *archē* (ἀρχή) and final *telos* (τέλος) coincide in caused beings (i.e., all beings except the One/Good). Through procession an effect acquires its being and through reversion its well-being.

After two intervening propositions,[153] he proves in §34 the reverse of §31: 'everything whose nature it is to revert reverts upon that from which it derived the procession of its own substance', that is, a final cause is also an efficient cause.

[152] This is similar to Aristotle's formulation that 'the primary object of wish is that which is fine [i.e., good]' (*Met.* 12.7.1072a28: βουλητὸν δὲ πρῶτον τὸ ὂν καλόν). The main difference is that the primary object of desire for Proclus is the absolute Good.

[153] In §32, he specifies that the reversion of an effect to its cause implies a communion (κοινωνία) and conjunction (συναφή) with the cause, which in turn means there is a likeness (ὁμοιότης) between both, effect and cause. In §33, he asserts that procession and reversion constitute a single cyclic activity (κυκλικὴ ἐνέργεια).

Πᾶν τὸ κατὰ φύσιν ἐπιστρεφόμενον πρὸς ἐκεῖνο ποιεῖται τὴν ἐπιστροφήν, ἀφ' οὗ καὶ τὴν πρόοδον ἔσχε τῆς οἰκείας ὑποστάσεως.

εἰ γὰρ κατὰ φύσιν ἐπιστρέφεται, τὴν κατ' οὐσίαν ὄρεξιν πρὸς ἐκεῖνο κέκτηται, πρὸς ὃ ἐπιστρέφεται. εἰ δὲ τοῦτο, καὶ τὸ εἶναι αὐτοῦ πᾶν εἰς ἐκεῖνο ἀνήρτηται, πρὸς ὃ τὴν οὐσιώδη ποιεῖται ἐπιστροφήν, καὶ ὅμοιόν ἐστιν ἐκείνῳ κατ' οὐσίαν· διὸ καὶ συμπαθὲς ἐκείνῳ κατὰ φύσιν, ὡς τῇ οὐσίᾳ συγγενές. εἰ δὲ τοῦτο, ἢ ταὐτόν ἐστι τὸ εἶναι ἀμφοτέρων ἢ ἐκ θατέρου θάτερον ἢ ἄμφω ἐξ ἑνὸς ἄλλου τὸ ὅμοιον ἔλαχεν. ἀλλ' εἰ μὲν ταὐτὸν τὸ εἶναι ἀμφοτέρων, πῶς κατὰ φύσιν θάτερον πρὸς θάτερον ἐπέστραπται; εἰ δὲ ἐξ ἑνὸς ἄμφω, πρὸς ἐκεῖνο ἂν εἴη τὸ κατὰ φύσιν ἐπιστρέφειν ἀμφοτέροις. λείπεται ἄρα ἐκ θατέρου θάτερον τὸ εἶναι ἔχειν. εἰ δὲ τοῦτο, καὶ ἡ πρόοδος ἀπ' ἐκείνου, πρὸς ὃ ἡ κατὰ φύσιν ἐπιστροφή.

Everything whose nature it is to revert reverts upon that from which it derived the procession of its own substance.

(1) For if it reverts by nature, it has essential desire of that upon which it reverts. (2) And if so, its being also is wholly dependent on the principle upon which it reverts essentially and (3) in its essence it resembles this latter: hence it is naturally sympathetic with this principle, since it is akin to it in essence. (4) If so, either the being of the two is identical, or one is derived from the other, or else both have received their like character from a single third principle. But if they be identical, how comes it that one is by nature reverted upon the other? And if the two be from one source, that source must be the goal of natural reversion for both. It remains, therefore, that one has its being from the other. (5) And if so, its procession is from that upon which it naturally reverts. (36.20–38.2)

Proclus makes a number of interconnected claims. He proceeds in a hypothetical manner that differs from his argumentative strategy in §31. The first condition is: (1) if x reverts naturally (κατὰ φύσιν) to y, then x has an essential (κατ'οὐσίαν) desire of y. What does it mean for x to revert according to its nature? Presumably the addition κατὰ φύσιν distinguishes this type of reversion from other types – such as Socrates desiring to eat an apple – by being in some way more fundamental. In this sense, Proclus uses it at *ET* §7.8.23–4: 'all things desire the good *by nature* (κατὰ φύσιν)'. This then allows Proclus to conclude that an effect reverting in this way has a desire κατ' οὐσίαν of that to which it reverts. It thus seems that reverting naturally implies reverting essentially, since they are inextricably linked to an entity's being. Based on (1), Proclus then establishes (2): if x has an essential desire of y, x's being is completely dependent on y (τὸ εἶναι αὐτοῦ πᾶν εἰς

ἐκεῖνο ἀνήρτηται[154]). That is, x's being – understood here as factual existence as well as essential features – is inextricably linked with and, possibly, derived from y. Insofar as x's desire for y is essential and constitutive of x's being, Proclus can claim that at least a significant part of x's being is dependent on y. Since, if y were non-existent, x would have no essential desire. This presumably would have the consequence that x does not exist. (3) Granting that x has this relation to y, x must essentially resemble y. Proclus here deduces from the ontological dependency of x on y an essential similarity between them. Establishing this resemblance between x and y is important for Proclus in order to specify their type of relationship, which in §31 has been presented as a causal one. (4) If x and y are like each other, there are three possible reasons for their likeness: either (i) they are identical or (ii) one derives from the other (iii) both derive from a third, higher principle. Proclus excludes (i) and (iii), settling for option (ii): x derives its being from y. This, however, means nothing else than: (5) x proceeds from y, that is, the object of x's reversion. In this way, ἀρχή and τέλος coincide again, as in §31.

In a corollary to §34, this line of thought is applied specifically to the intellect:

ἐκ δὴ τούτων φανερὸν ὅτι καὶ ὀρεκτὸν πᾶσι νοῦς, καὶ πρόεισι πάντα ἀπὸ νοῦ, καὶ πᾶς ὁ κόσμος ἀπὸ νοῦ τὴν οὐσίαν ἔχει, κἂν ἀΐδιος ᾖ. καὶ οὐ διὰ τοῦτο οὐχὶ πρόεισιν ἀπὸ νοῦ, διότι ἀΐδιος· οὐδὲ γὰρ διὰ τοῦτο οὐκ ἐπέστραπται, διότι ἀεὶ τέτακται· ἀλλὰ καὶ πρόεισιν ἀεὶ καὶ ἀΐδιος κατ' οὐσίαν, καὶ ἐπέστραπται ἀεὶ καὶ ἄλυτος κατὰ τὴν τάξιν.

From this it is apparent that as the intellect is an object of desire to all things, so all things proceed from the intellect, and the whole world, though eternal, has its essence therefrom. The eternity of the world affords no ground for denying that it proceeds from the intellect; just as it keeps its own station forever, yet is nonetheless reverted upon the intellect. It proceeds eternally, and is eternal in its being; it is eternally reverted, and is steadfast/indissoluble in its own station. (38.3–38.8)

[154] The idea of ontological dependence comes up also in Aristotle's discussion of the prime mover: ἐκ τοιαύτης [sc. τοῦ πρώτου κινοῦντος] ἄρα ἀρχῆς ἤρτηται ὁ οὐρανὸς καὶ ἡ φύσις (*Met.* 12.7.1072b13–14). Cf. also *MA* 4.700a5–6. A similar usage of the verb ἀρτάω can be found already in Plato: ἀρχὴ δέ, ἐξ ἧς καὶ ἃ νυνδὴ ἐλέγομεν πάντα ἤρτηται, ἥδε αὐτῶν, ὡς τὸ πᾶν κίνησις ἦν καὶ ἄλλο παρὰ τοῦτο οὐδέν (*Tht.* 156a3–5).

Proclus describes here intellect as a final and efficient cause of all beings. That does not mean that intellect is the cause of *all things tout court* but only of those which *are*. This, of course, excludes the One and the henads which transcend even being[155] and do not desire it.[156] Although he refers to the causation of the cosmos, it is unclear whether νοῦς should be understood here in a generic sense as the hypostasis νοῦς or more specifically as the demiurgic νοῦς. Both are certainly involved in the cosmos' causation, the latter, however, more directly. Moreover, he makes clear here that procession and reversion are not distinct processes which occur at a specific time or in time at all. Rather, they describe an atemporal causal relationship between the intellect and the cosmos. This secures the eternity of the world (38.5) against possible objections such as 'if the world is caused by the intellect, it is not eternal' or 'if the world is eternal, it is not caused by the intellect'. Both of these were objections common at the time: the former stemming from certain Platonists and Christians, among whom also Philoponus, the latter from Alexander.[157] Clearly, for Proclus the world can be both eternal and caused, insofar as its causation – that is, its procession from intellect – does not refer to a temporal process.

In summary, Proclus incorporates in *ET* the explanation of the intellect's causation in his general theory of causality, without having recourse to other philosophical authorities in his explanations. This has the advantage of offering a solution to a specific problem by using universal laws which are purportedly the result

[155] Cf. *ET* §115.100.34–6: 'Again, if the first principle transcends being, then since every god [i.e., henad] *qua* god, is of the order of that principle, it follows that all of them must transcend being'. Specifically on the One, cf. *PT* 3.7.29.10–30.2. It is unclear whether the henads are a Proclean innovation, cf. Dodds (1963: 257–60); van Riel (2017: 89–93).

[156] In this more comprehensive sense Proclus states that the Good τῇ ἐφέσει σῴζει τὰ πάντα (*PT* 1.22.102.24). Plotinus is more precise when claims that νοῦ μὲν οὐ πάντα, ἀγαθοῦ δὲ πάντα [sc. ἐφίεται] (6.7.20.18).

[157] On the eternity of the world, cf. Proclus *In Tim*. *ad loc*. 27c5, 28a1–4, 28b6–7, 28b7–c2, 29e1–3, 30 a3–6, which are all discussed by Baltes (1978: II). Proclus also wrote a separate – now lost – treatise defending the eternity of the world in eighteen arguments which can be reconstructed through Philoponus' polemical response and an Arabic translation. For an overview, cf. Luna and Segonds (2012a: 1622–3); Baltes (1978: II, 134–63). Gleede (2009) offers a minute and up-to-date discussion of each argument. On Alexander see n. 129.

of strict deductions in *ET*. Such arguments can be more persuasive since they are not based on the exegesis of a specific text – as elsewhere in Proclus (or other Neoplatonists, for that matter). Additionally, this discussion in *ET* underlines why Proclus and likeminded Platonists considered it absolutely crucial to attribute both types of causality to intellect. A failure to do so amounts indeed to a grave misconception of metaphysics as the existence of reality depends to a significant degree on the intellect's causality. Denying one type of causality means disturbing either the procession from the One or the reversion to this principle. That is, if the intellect is not efficient, the procession of reality stops at the level of intellect, as the last entity to proceed from the One. However, if the intellect is not a final cause, there is no reversion of lower beings to the One.

4.5.3 Platonic Exegesis in the Commentary on the Timaeus

Besides these systematic considerations, Proclus attributes efficient and final causality to the demiurge on exegetical grounds.[158] In this he resembles other Neoplatonists, including Ammonius and Simplicius.[159] For Proclus the evidence for the demiurge's efficient causality is easy to produce, as Plato often refers in the *Timaeus* in 'efficient' terms to his activity: e. g., ἀπεργάζηται (28a8); δεδημιούργηται (29a7); συνέστησεν (29e1); δρᾶν (30a7); συνετεκταίνετο (30b5). The productive activity is already indicated by the name δημιουργός but also by its other terms such as πατήρ and ποιητής (28c3) as well as συνιστάς (29e1). Yet, in the *Timaeus* Proclus also finds corroboration for the demiurge's final causality. The latter might seem surprising, as the very presence of final causes in the *Timaeus* has been questioned in recent scholarship.[160] Thus, when interpreting Plato's demiurge we have the reverse situation to Aristotle's intellect: the demiurge's

[158] The identification of the Platonic demiurge with an intellect can be found in, e.g., Alc. *Didask.* 10.164.27–31 and Plot. 5.1.8.5. Cf. Chapter 2.

[159] Cf. n. 101.

[160] Sedley (2007) denies that final causes – at least in an Aristotelian sense – can be found in *Tim.*: intelligence (as embodied primarily, but not exclusively, by the demiurge) is a 'goal-directed, *efficient* cause' (114, n. 47). Similarly also Johansen (2010: 184–5). Against these authors Mesch (2020) argues for the presence of final causes in *Tim.*

efficient causality is obvious, while evidence for his final causality is more difficult to produce. Due to the demiurge's centrality in cosmology and metaphysics Proclus dedicates long discussions to this metaphysical principle in his commentary on the *Timaeus*.[161] Since these have been the object of extensive studies by Opsomer, to which I refer the reader,[162] I will only focus here on the demiurge's causality and not, for example, on his identity or place in the metaphysical hierarchy.

Proclus emphasises the need for a single efficient cause of the universe at *In Tim*. 2.79.4–87.6 [1.258.12–264.3], when he discusses *Tim*. 28a4–5 (πᾶν δὲ αὖ τὸ γιγνόμενον ὑπ᾽ αἰτίου τινὸς ἐξ ἀνάγκης γίγνεσθαι: παντὶ γὰρ ἀδύνατον χωρὶς αἰτίου γένεσιν σχεῖν).[163] Proclus regards this as one of five 'fundamental principle[s]' (*In Tim*. 2.85.15 [1.262.29]: ἀξίωμα) in Plato's cosmology, showing that the whole realm of becoming derives its existence from a cause.[164] For Proclus this cause is efficient, as also evidenced by the preposition ὑπό, and, more specifically, demiurgic, as this is the term Plato uses for efficient causes 'in relation to becoming' (2.82.12–13 [1.260.25]). Thus, while all efficient causes bring something about, only demiurgic causes produce that which comes to be insofar as it comes to be. As Opsomer (2017: 144) explains: 'Hence the Good is the cause of being (cf. *Resp*. VI 509b6–10), also for the material world, but not its demiurgic cause. For it does not produce the world qua becoming. The same is true for the highest intelligible and the intelligible-intellective deities. They play a causal role, but not a demiurgic one'. Among the different demiurgic causes the universal demiurge, which Plato introduces as the 'maker and father of the universe' (*Tim*. 23c4–5), is the highest cause. The demiurgic

[161] The most important one is *In Tim*. 2.138.4–166.21 [1.299.13–319.21], esp. 2.153.3–166.21 [1.310.3–319.21], which is analysed in detail by Opsomer (2006b). Proclus also discusses the efficient and final causality of the demiurge at *In Parm*. 3.790.5–791.20, which is discussed by d'Hoine (2008).

[162] Cf. Opsomer (2000a), (2006b), (2017: 142–52). On the demiurge in Proclus' *PT* (esp. 5.13), cf. Dillon (2000).

[163] On this, cf. Martijn (2010a: 115–18).

[164] For Proclus the term 'becoming' seems to include the entire cosmos, as he takes the term to refer 'to the entire corporeal realm (τὸ σωματοειδὲς γιγνόμενον), inasmuch as it is unordered of itself, but is ordered by another, whether eternally or at a point in time' (*In Tim*. 2.41.13–15 [1.233.11–13]). Cf. also his discussion of the term's extension at 2.44.3–45.2 [1.235.1–26].

cause is responsible not just for producing (*In Tim*. 2.81.13 [1.260.3]: ποιοῦν) the cosmos but also for maintaining and preserving it (2.81.1–2 [1.259.22]: τὸ σῴζεσθαι καὶ τὸ συνέχεσθαι).[165] Moreover, while the paradigmatic cause brings about the immanent form of the beings, the demiurge is the cause of order (2.96.12–14 [1.270.24–6]: τάξεως γὰρ ὁ δημιουργὸς αἴτιος, εἴδους δὲ ἁπλῶς τὸ παράδειγμα αἴτιον τοῖς μετέχουσιν) by implementing these forms correctly in the universe and preventing a disordered participation in the forms (2.95.20–96.14 [1.270.8–26]).[166]

What about the demiurge's final causality? For Proclus the ultimate final cause of all reality, including the cosmos, is the transcendent One/Good (e.g., *In Tim*. 1.4.1–2 [1.3.6], 2.102.14–16 [1.274.28–30], 2.220.14–15 [1.356.13–15]) for whose sake the cosmos has been produced by the demiurge (2.221.8–11 [1.356.31–357.2]).[167] Proclus finds an allusion to this principle at least twice in *Tim.*, since he takes the 'reason why' (29d7: δι' ἥντινα αἰτίαν) the creator made the universe and the 'most important principle/reason' (29e4: ἀρχὴν κυριωτάτην) for the cosmos' generation as alluding to the Good.[168]

In this context Proclus' interpretation of *Tim*. 29e1–2 ('he was good, and one who is good can never become jealous of anything') at *In Tim*. 2.225.3–229.5 [1.359.20–362.16] is crucial, since he discusses there the relationship between the One/Good and demiurge. In regarding this passage as evidence for the demiurge's final causality, Proclus is in good company: Syrianus (*In Met*. 82.9–11), Ammonius (*ap*. Simpl. *In Phys*. 1360.31–3), Simplicius (*In Phys*.

[165] At *In Tim*. 2.130.9–131.11 [1.294.1–28] Proclus explains why the cosmos requires a sustaining cause from which it receives infinite power to exist.

[166] Proclus distinguishes the contributions of One, paradigm and demiurge at *In Tim*. 2.265.21–266.7 [1.387.23–388.1]. There is a clear hierarchy between them: κύριον μὲν οὖν καὶ τὸ ποιητικὸν αἴτιον, κυριώτερον δὲ τὸ παραδειγματικόν, κυριώτατον δὲ τὸ τελικόν· αὐτὸ γάρ ἐστιν οὗ ἕνεκα πάντα καὶ εἰς ὃ τὰ ἄλλα ἀνήρτηται καὶ τὸ ὄντως τέλος τῆς δημιουργίας (2.238.7–11 [1.368.25–9]).

[167] On the final cause in Proclus' *Timaeus* interpretation, cf. Steel (2003: 186–7).

[168] Cf. Proclus' comments on the former at *In Tim*. 2.219.18–221.20 [1.355.28–357.12] and on the latter at *In Tim*. 2.237.17–240.7 [1.368.15–370.10]. Proclus also offers an explanation for why Plato does not dwell on this cause: 'this, it seems to me, is why Plato does not even ask at the outset whether there is a final cause of the framing of the cosmos, but, on the ground that this is accepted by everyone, [merely] asks what [this] final cause is' (*In Tim*. 2.221.3–6 [1.356.26–9]). Cf. *In Tim*. 2.118.13–17 [1.285.29–286.3] (with reference to *Tim*. 29e4 which is discussed at some length from 2.237.17 [1.368.15] onwards).

464.3–6) and Asclepius (*In Met.* 21.20–1) also mention it. In his interpretation, Proclus states that the 'final cause is this: goodness, both absolute goodness and demiurgic goodness' (2.226.9–10 [1.360.16–17]) and he continues 'one goodness is absolute (ἁπλῶς) and the other is that in the demiurgic intellect, and the former is the source of all goods, intelligible and intellective, hypercosmic and encosmic, and the latter, being a particular good, is the cause and source of some things, but has been allotted to a lower order than others' (2.226.15–19 [1.360.22–6]).[169] Thus, for Proclus the demiurge is a final cause insofar as it participates in the One. Through their goodness both the One and the demiurge are final causes; however, the latter clearly only insofar as it derives its goodness from the One.[170]

The problem is that being good does not necessarily imply being a final cause. Only if something causes *qua* good *simpliciter* (ἁπλῶς) and not accidentally (κατὰ συμβεβηκός) can it be considered a final cause – at least according to Aristotle in *Met.* 1.7.988b6–16.[171] Proclus seems to accept this condition as well, as reversion to a final cause requires first of all a desire for the cause. While the latter aspect is not found explicitly in *Tim.*, Proclus simply seems to assume it, since, as we have seen before, he regards the intellect as an object of desire to all beings.[172] This characterisation satisfies the condition of being a final cause, since the intellect's goodness is the reason for its (almost) universal desirability – just as in the case of the absolute Good.[173] However, the exegetical background for assuming this type of causality remains weak and rather unpersuasive.

It is possible to assume that Proclus' main influence in this respect was Aristotle, since he himself sometimes emphasises

[169] This distinction between absolute and demiurgic goodness is highly reminiscent of Numenius: ὁ μὲν πρῶτος θεὸς αὐτοάγαθον· ὁ δὲ τούτου μιμητὴς δημιουργὸς ἀγαθός (fr. 16.14–15).

[170] Cf. *In Tim.* 2.285.20–2 [1.401.18–20].

[171] Cf. Aristotle's criticism of Anaxagoras at *Met.* 12.10.1075b8–10: the intellect does not cause *qua* good but rather for the sake of the good; this makes the intellect distinct from the good.

[172] When he discusses the demiurge's causality at *In Parm.* 3.790.5–791.20 he states again that the demiurge is an object of desire in his essence (791.1).

[173] Cf. *PT* 1.22.101.27–8: πάντα γὰρ ἐφίεται τοῦ ἀγαθοῦ καὶ ἐπέστραπται πρὸς ἐκεῖνο, τὰ μὲν μᾶλλον, τὰ δὲ ἧττον.

the Aristotelian heritage: 'therefore the intellect is both an object of love (ἐραστόν) and of desire (ὀρεκτόν), as Aristotle says' (*In Alc*. 317.22–318.1; tr. mine).[174] Still, we have to be cautious here, as already the Middle Platonist Alcinous claimed that the intellect moves the cosmos as an object of desire (*Didask*. 10.164.24–31). There, it is clearly an Aristotelian borrowing. Yet, by the time of Proclus this view was already so dominant that the genuinely Aristotelian import was probably no longer visible to the Neoplatonists. Instead, Proclus saw Aristotle simply as rehashing Platonic ideas and even partly doing this incorrectly. It generally seems that when Proclus cites Aristotle explicitly, he intends to reveal Aristotle's Platonic heritage and not to introduce a foreign doctrine into his Platonist system. Nevertheless, Proclus shows a remarkable independence in dealing with Aristotle's arguments, as I have shown.

4.6 Conclusion

My reconstruction of one of the central debates on Aristotle's metaphysics in late antiquity revealed Proclus' and Ammonius' views on Aristotle's intellect and its relation to Plato. I have shown that the two Neoplatonists offer contrasting views of Aristotle's metaphysics as well as divergent strategies of approaching it. For Proclus, Aristotle's arguments force him to accept the efficient causality of the prime mover; yet Aristotle himself fails to acknowledge this. In contrast, Ammonius believes that Aristotle was actually committed to these arguments as well as their result. Crucially, Proclus and Ammonius share the infinite power argument but disagree on whether Aristotle himself drew the conclusion that the prime mover is the efficient cause of the cosmos' being. As I have emphasised, Proclus' interpretation is part of his more general conception of Aristotle's metaphysics, which he regards as flawed primarily due to Aristotle's elimination of the Platonic One and the ensuing misalignment of metaphysical principles. Whereas for Proclus Plato is an indispensable corrective to

[174] Cf. e.g., *In Tim*. 2.91.12–13 [1.267.8–9]; *In Parm*. 4.887.30–888.2, 964.20. Implicitly also at *In Tim*. 3.128.5 [2.92.14].

Aristotle, Ammonius (and, more clearly, Simplicius) does not share this view but rather regards Aristotle's metaphysics as essentially in agreement with Plato. Most significantly, this serves as further evidence that Proclus – unlike Ammonius and his pupils – is not committed to the harmony-doctrine. This makes Proclus' approach, as I have argued, more sensible and, indeed, closer to our modern understanding of Aristotle, since Aristotle's metaphysical system differs significantly from the Neoplatonist view of Plato's metaphysics. Methodologically, there is also a divergence between Proclus and Ammonius: the former is more argumentative, while the latter focuses more extensively on the actual text and its exegesis. In part these differences can be accounted for by the context – Platonic in Proclus and Aristotelian in Ammonius. But they also demonstrate different exegetical strategies.

Additionally, this division has an important historical dimension, as it presents us a dynamic intellectual environment with a variety of individual approaches. To show this I emphasised how Ammonius responded in his μονοβίβλιον partly to Proclus' interpretation and then went on to influence his pupils, Simplicius, Asclepius et al. and, ultimately, certain medieval philosophers. In producing a monograph on this issue, Ammonius played a crucial role in the interpretation of Aristotle's prime mover. Based on the scant evidence, Proclus' reading seems to be heavily inspired by Syrianus – just as his overall critical approach to Aristotle. These philosophers interact with each other's interpretations and demonstrate a heightened awareness for subtle differences in their readings.

While Proclus was certainly interested in Aristotle's views on the causality of the intellect, he also goes at length to set out his own reasoning behind adopting the final and efficient causality of the intellect. As I have shown, Proclus' arguments are philosophical as well as exegetical, whereby both aspects are interrelated and sometimes indistinguishable. In *ET*, he tries to remain faithful to the treatise's axiomatic character, which is presented as unaffected by authoritative views, by deducing the intellect's type of causality from general metaphysical presuppositions such as the triadic structure of reality as μονή – πρόοδος – ἐπιστροφή. Given his premises,

Proclus' solution appears quite economical and compelling. In his commentary on the *Timaeus* he provides textual reasons for his position: while he presents convincing evidence for regarding the demiurge as an efficient cause, the reasons for its final causality are less persuasive. In this way, his theoretical reflection on the intellect's causality is more successful and offers a stronger argumentative foundation than his exegesis of Plato.