PROCLUS ON ARISTOTLE ON PLATO

A CASE STUDY ON MOTION

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DECLARATION

This thesis is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the preface and specified in the text.

It is not substantially the same as any work that has already been submitted before for any degree or other qualification except as declared in the preface and specified in the text.

It does not exceed the prescribed word limit for the Faculty of Classics Degree Committee.

ABSTRACT: RAREȘ ILIE MARINESCU, PROCLUS ON ARISTOTLE ON PLATO. A CASE STUDY ON MOTION.

My PhD thesis focuses on Proclus (412–485 AD) and his engagement with Aristotle's theory of motion with a specific focus on Aristotle's criticism of Plato. There are two main goals. (i) I refute the widespread view that Proclus – in line with other Neoplatonists – adheres to the idea of an essential harmony between Plato and Aristotle. (ii) I illuminate Proclus' views on motion, which is a central concept in his thought, by examining his Aristotelian background. The thesis is divided in four chapters.

The first chapter deals with Proclus' little studied treatise *Elements of Physics* where he sums up in an axiomatic manner Aristotle's theory of motion from *Physics* VI, VIII and *De Caelo* I. I demonstrate that Proclus' project is embedded in an exegetical tradition and show how he omits certain parts of Aristotle's works which might conflict with his Neoplatonist views. Additionally, I provide evidence for the view that Aristotle's *Posterior Analytics* proved to be influential for the axiomatic structure of Proclus' treatise.

The second chapter concerns the origin of motion in the universe. While Plato assumes a self-moving soul as origin, Aristotle posits an unmoved intellect. Proclus brings these two views together by regarding the unmoved intellect as ultimate source of motion and the self-moving soul as an intermediate entity. I demonstrate that his harmonisation effort goes beyond previous Platonist attempts due to the philosophical reasoning he provides. I also defend Proclus' assumption of both unmoved intellect and self-moving soul as sources of motion against concerns brought up in scholarship.

In the third chapter, I focus on the concept of self-motion which is tied to the definition of soul in Plato. Aristotle famously criticises this view in *De Anima* I.3, showing that the soul is unmoved. I offer the first lengthy discussion of Proclus' repudiation of Aristotle's criticism which differs from other Neoplatonist responses. Most importantly, I demonstrate how Proclus develops his own views on self-motion by using Platonic and Aristotelian insights.

The fourth chapter examines the problem of the causality of the unmoved intellect. This issue is central in scholarship on Aristotle and goes back to late antiquity. I argue that here Proclus' non-harmonist stance towards Aristotle emerges most strongly: not

only did Aristotle fail to make the intellect an efficient cause of the cosmos' being but his metaphysics generally is deficient since he did not recognise the Platonic One as highest principle. I contrast Proclus' view with the position of Ammonius and Simplicius who see a complete agreement between Plato and Aristotle.

PARENTIBUS

S.

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I dedicate this thesis to my parents, George and Cristina, who by their own example taught me that φιλομάθεια is only complete with φιλοπονία.

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ABBREVIATIONS

Alcinous
Didask. = *The Handbook of Platonism*, ed. Whittaker (1990)

Alexander of Aphrodisias
Aporia = *Problems and Solutions*, ed. Bruns (1892)
In Met. = *Commentary on Aristotle's Metaphysics*, ed. Hayduck (1891)
In Phys. = *Commentary on Aristotle's Physics IV–VIII*, ed. Rashed (2011)
In Top. = *Commentary on Aristotle's Topics*, ed. Wallies (1891)

Ammonius
In Cat. = *Commentary on Aristotle's Categories*, ed. Busse (1895)
In DI = *Commentary on Aristotle's On Interpretation*, ed. Busse (1897)

Anonymous
Prol. Plat. = *Anonymous Prolegomena to Platonic Philosophy*, ed. Westerink (1962)

Apuleius
De Plat. = *On Plato and his Doctrine*, ed. Beaujeu (1973)

Asclepius
In Met. = *Commentary on Aristotle's Metaphysics, books I–VII,* ed. Hayduck (1888)

Atticus
Fr. = *Fragments*, ed. Des Places (1977)

Damascius
In Phd. = *Commentary on Plato's Phaedo*, ed. Westerink (1977)
In Phileb. = *Commentary on Plato's Philebus*, ed. Westerink (1959)
De Princ. = *Difficulties and Solutions of First Principles*, edd. Westerink/Combès (1986)

David/Elias
In Cat. = *Commentary on Aristotle's Categories*, ed. Busse (1900)

Hermias
In Phdr. = *Commentary on Plato's Phaedrus*, edd. Lucarini/Moreschini (2012)

Iamblichus
DA = *On the Soul*, ed. Finamore/Dillon (2002)

Marinus
VP = *Life of Proclus or On Happiness*, edd. Saffrey/Segonds (2001)

Numenius
Fr. = *Fragments*, ed. Des Places (1973)

Olympiodorus
In Alc. = *Commentary on Plato's First Alicibiades*, Westerink (1956)
In Gorg. = *Commentary on Plato's Gorgias*, ed. Westerink (1970)
In Meteor. = *Commentary on Aristotle's Meteorology*, ed. Stuve (1900)

In Phd. = *Commentary on Plato's Phaedo*, ed. Westerink (1977)

John Philoponus
De aet. = *Against Proclus On the Eternity of the World*, ed. Rabe (1899)
In APo = *Commentary on Aristotle's Posterior Analytics*, ed. Wallies (1909)
In DA = *Commentary on Aristotle's On the Soul*, ed. Hayduck (1897)
In GC = *Commentary on Aristotle's Generation and Corruption*, ed. Vitelli (1897)
In Phys. = *Commentary on Aristotle's Physics*, ed. Vitelli (1887–8)

Photius
Bibl. = *Library*, ed. Henry (1959–1977)

Plotinus
Enn. = *Enneads*, edd. Henry/Schwyzer (1964–83)

Plutarch
De An. Proc. = *On the Generation of the Soul in the Timaeus*, ed. Cherniss (1976)
De Is. = *On Isis and Osiris*, ed. Babbitt (1936)
Plat. Quaest. = *Platonic Questions*, ed. Cherniss (1976)

Porphyry
Sent. = *Starting-points Leading to the Intelligibles*, ed. Brisson (2005)

Proclus
De Prov. = *On Providence*, ed. Boese (1960)
Dub. = Ten Problems concerning Providence, ed. Boese (1960)
Mal. *Subst*. = On the Existence of Evils, ed. Boese (1960)
ET = *Elements of Theology*, ed. Dodds (1963)
EP = *Elements of Physics*, ed. Ritzenfeld (1912)
In Alc. = *Commentary on Plato's First Alcibiades*, ed. Segonds (1985–6)
In Crat. = *Commentary on Plato's Cratylus*, ed. Pasquali (1908)
In Eucl. = *Commentary on the First Book of Euclid's Elements*, ed. Friedlein (1873)
In Parm. = *Commentary on Plato's Parmenides*, ed. Steel (2007–8)
In Remp. = *Commentary on Plato's Republi*c, ed. Kroll (1899–1901)
In Tim. = *Commentary on Plato's Timaeus*, ed. Diehl (1903–6)
PT = *Platonic Theology*, edd. Saffrey/Westerink (1968–97)

Ps.-Simplicius
In DA = *Commentary on Aristotle's On the Soul*, ed. Hayduck (1882)

Simplicius
In Cat. = *Commentary on Aristotle's Categories*, ed. Kalbfleisch (1907)
In DC = *Commentary on Aristotle's On the Heavens*, ed. Heiberg (1894)
In Phys. = *Commentary on Aristotle's Physics*, ed. Diels (1882–95)

Syrianus
In Met. = *Commentary on Aristotle's Metaphysics*, ed. Kroll (1902)

Themistius
In DA = *Paraphrase of Aristotle's On the Soul*, ed. Heinze (1899)
In Met. = *Commentary on Aristotle's Metaphysics*, ed. Meyrav (2019)

MAJOR PHILOSOPHERS OF LATE ANTIQUITY

Rome

Plotinus (205–270), 'founder' of Neoplatonism

Porphyry (234–305), pupil of Plotinus and editor of his works

Syria

Iamblichus (242–325), systematiser and innovator of Plotinian metaphysics

Athens & Alexandria

Plutarch of Athens (d. 432), founder and head of Athenian school

Syrianus (d. 437), pupil of Plutarch, head of Athenian school

Proclus (412–485), pupil of Plutarch and Syrianus, head of Athenian school

Hierocles of Alexandria (5th c.), pupil of Plutarch, mainly active in Alexandria

Marinus of Neapolis (440–500?), pupil of Proclus, head of Athenian school

Hermias of Alexandria (5th c.), pupil of Syrianus, father of Ammonius

Ammonius son of Hermias (435/445–517/526), pupil of Proclus, head of Alexandrian school

Damascius (460–after 538), pupil of Marinus in Athens and of Ammonius in Alexandria, last head of the Athenian school

Simplicius (480–560), pupil of Ammonius in Alexandria and of Damascius in Athens

Philoponus (490–570), pupil and 'secretary' of Ammonius

Olympiodorus of Alexandria (495/505–after 565), pupil of Ammonius

INTRODUCTION

1. Proclus' Ambiguous Relationship with Aristotle

Proclus was an avid student of Aristotle. As is also the case for the earlier Neoplatonists, Aristotle is a constitutive element for the development of Proclus' thought, shaping his views, for instance, in logic, natural philosophy but also metaphysics. Unlike his predecessor Syrianus, Proclus wrote little on Aristotle's works themselves, commenting only on the *Organon* which was first among the works of Aristotle to be read by the students in the Neoplatonist schools.[1] Although these commentaries do not survive, he shows a remarkable use of Aristotle in various other treatises which are helpful in understanding his reception of Aristotle. Indeed, his move as a student from Alexandria to Athens seems already to have been motivated by finding a better environment to study Aristotle (Marinus *VP* §10 1–8). There, he studied Aristotle's works extensively first under Plutarch of Athens – the founder of the Athenian school of Neoplatonism[2] – and then under Syrianus. He completed the Aristotelian curriculum which was regarded as preparatory for the study of Plato in less than two years.[3] The result is a fascinating mixture of appreciation and rejection of Aristotelian ideas; in fact, Proclus appears to be the most ardent Neoplatonist critic of Aristotle after Plotinus. Yet unlike Plotinus,[4] Proclus' engagement with Aristotle has been little and only deficiently studied.

The aim of this thesis is to close this gap by offering an extensive discussion of Proclus' use of Aristotle, especially his criticism of Plato. This is achieved by elucidating a concept which is central to Proclus *and* shows his far-reaching engagement with Aristotle: κίνησις, which I render henceforth as motion. This term is used to refer to change generally by the Neoplatonists and differs significantly from our own understanding, as I outline below. Motion is of crucial importance for Proclus as he not

[1] Cf. ch. I for Proclus' views on *APo*. An overview of his works on Aristotle is provided by Luna/Segonds (2012a), 1555–1563. On Syrianus' works, cf. Goulet/Luna (2016), 682–707.
[2] On Plutarch of Athens and his historical context, cf. Di Branco (2006), 115–179; Watts (2006), 79–110; Luna/Segonds (2012b).
[3] Cf. Marinus *VP* §12 295f., §13 318–326. Proclus was already acquainted with the *Organon* from his time in Alexandria according to Marinus *VP* §9 33–36. On Proclus' studies, cf. Helmig (2019). On the Aristotelian curriculum, cf. Hadot (1992); Reis (2007); Golitsis (2008), 10–14; Perkams (2015); Griffin (2016), 396ff. Proclus studied (and, presumably, taught) Aristotle's works in the following order: logic (Porphyry's *Isagoge*, *Cat.*, *DI*, *APr.*, *APo.*), ethics (*NE*, *EE*), politics (*Pol.*), physics (*Physics*, *DC*, *GC*, *Meteor.*), psychology (*DA*) and theology (*Met.*).
[4] See especially Chiaradonna (2002) and (2005); Magrin (2016).

only dedicated a separate treatise to it (*EP*) but also elaborates on it throughout his oeuvre. Also, in this area Proclus' approach to Aristotle and his harmonisation of Aristotle with Plato – or lack thereof – becomes most tangible. Thus, I do not aim to offer a full picture of places where Proclus engages with Aristotle since such a work would be of little philosophical value. Rather, my intention is to analyse Proclus' reception of Aristotle in the broader system of his philosophy by focusing on this one specific issue. In this way it will become clearer how Proclus proceeds and to what degree he believes Aristotle agrees and disagrees with Plato. In presenting Proclus' views on motion, I will not only elucidate his exegetical method but also his underlying philosophical views. As will emerge, many of the current discussions in scholarship on issues such as the nature of self-motion, the causality of the unmoved mover etc. were just as lively in antiquity as today. Because Proclus does not engage in the potentially straightjacketing harmonisation-project of his Neoplatonist contemporaries, he offers individual and philosophically worthwhile interpretations of Aristotle which have not been sufficiently studied.

There is ample reason for this undertaking. First, Proclus' systematic outlook on philosophy and the richness of his oeuvre, which deals with a wide range of topics, from ethical to metaphysical questions, allows us to trace back the impact of Aristotle's thought. Secondly, his critical appreciation of the Stagirite offers us the opportunity to look for the reasons behind this stance and to compare it with other Neoplatonists of his time. On many occasions in his work he makes explicit or implicit references to Aristotle and relates Aristotle's views to Plato's. Foremost among these is the introductory *EP* which aims to prove *more geometrico* the existence of an unmoved mover through a meticulous analysis of motion in the physical world. His systematic *ET* contains also a plethora of Aristotelian notions and terminology. Also significant is Proclus' refutation of various Aristotelian criticisms targeting Plato's *Tim.* which can be found in *In Tim.* and were summarised in a lost work entitled *Investigation of Aristotle's Objections Against the* Timaeus.[5] A similar work which forms an appendix to Proclus' commentary on the *Republic* is his *Investigation of Aristotle's Objections Against the* Republic.[6] A major concern for him was also his rejection of Aristotle's criticism of Plato's theory of forms.[7] Additionally, one can reconstruct various objections to Aristotle's theory of concept

[5] On the latter, cf. ch. III 4.1.
[6] Cf. Stalley (1995); Baltzly et al. (2018), 25f.
[7] Cf. Steel (1996); d'Hoine (2008).

formation,[8] nature (see below 3.2), causality (ch. IV 3.2), time,[9] psychology,[10] intellect (ch. IV 3), elemental constitution of the heaven (ch. I 2.3.1), methodology[11] etc.

Methodologically, my thesis is guided by five concerns. (a) I believe extensive groundwork in Plato and Aristotle is crucial for understanding Proclus' thought and his approach to Aristotle's criticism of Plato. By focusing on these classical authors, ancient debates on motion are more clearly illuminated. I thus study Proclus both as an interpreter and as a philosopher in his own right. (b) This accounts for at times quite detailed discussions of Platonic and Aristotelian scholarship which shed light on the very similar concerns shared by Proclus and place his views in relation to modern scholarship. (c) In order to bring out more clearly Proclus' individual views on Aristotle I make copious use of other late antique commentators, especially Syrianus and Simplicius. This allows me to contrast Proclus' approach with those common at his time. (d) In my selection of texts, I focus on a wide range of passages which clearly demonstrate Proclus' engagement with Aristotle. Primarily, these come from *In Tim*., *In Parm*., *ET* and *EP*, but I also make extensive use of *PT* and *In Eucl*. (e) Proximity to the text with an eye to the peculiarities of the Greek are central for my undertaking. On numerous occasions I offer for the first time close readings of the texts which yield innovative results and/or modify established interpretations.

2. Status Quaestionis

As historical disciplines have increasingly turned towards the study of late antiquity in the last fifty years or so, the last few decades have also led in philosophy to a renaissance of Neoplatonist studies. While Plotinus was initially the primary focus, Proclus has recently garnered significant interest, as numerous translations, e.g. of *In Tim*. and *In Remp.*, and major publications providing overviews of his philosophy demonstrate.[12] Of great interest remain Proclus' metaphysics, particularly his interpretation of Plato's

[8] Cf. Helmig (2010) and (2012) ch. V.
[9] Cf. *In Tim*. III 9.23–25.
[10] Cf. Hadot (2015), 150f.
[11] Cf. Butorac (2020).
[12] A pivotal role for the emerging interest in Proclus have played Dodds (1963) and Beierwaltes (1965). For overviews of Proclus' thought, cf. Trouillard (1982); Siorvanes (1996); Gersh (2014); d'Hoine/Martijn (2017); Layne/Butorac (2017). The most exhaustive bibliographical resource for publications on Proclus since 1990 is provided online by the University of Leuven: https://hiw.kuleuven.be/dwmc/ancientphilosophy/proclus/proclusbiblio.html.

Parmenides and his systematic treatise *ET*,[13] as well as disciplines that are close to it, such as psychology[14] and religion.[15] Recently, scholars of Proclus have also focused on non-metaphysical topics such as natural philosophy, e.g. Martijn (2010a) and Horn/Wilberding (2012), and ethics, e.g. Coope (2020). Yet, certain issues have not been discussed sufficiently. Among these ranks also Proclus' relation to Aristotle, of whom he makes extensive use throughout his oeuvre, and, more specifically, his view on Aristotle's criticisms of Plato.

The most significant publications on the Neoplatonist harmonisation of Plato and Aristotle are the monographs by Gerson (2005), Karamanolis (2006), and Hadot (2015).[16] Of these three, Karamanolis (2006) is not relevant for my concerns, as he deals only with the development of the harmony thesis up to Porphyry. The remaining two monographs have some severe flaws in their treatment of Proclus which I am going to address briefly. Of significance for Proclus' views on Aristotle are the contributions by Steel (1987a), (2003), (2016), Opsomer (2009), and d'Hoine (2016) which are central for my project.[17]

The first major publication on the Neoplatonist doctrine of harmony of Plato and Aristotle was Gerson's *Aristotle and other Platonists* in 2005. In this work Gerson prefers Neoplatonists with strong harmonist tendencies – an exception is Plotinus –, simultaneously downplaying the more critical stances of Syrianus and Proclus.[18] This is mainly due to Gerson's lack of a distinction between views of specific philosophers and, more generally, between Athenian and Alexandrian positions on Aristotle. Gerson's procedure is particularly prominent in his chapter on psychology, where he maintains that for the Neoplatonists 'Aristotle plainly makes large epistemological and psychological claims in *De Anima* that are in harmony with Platonism' (132). In order to prove this view he makes, I maintain, two mistakes. First, Gerson primarily relies on the strongly harmonistic interpretation of *DA* by Ps.-Simplicius, disregarding Hermias' more balanced

[13] Cf. the articles in Turner/Corrigan (2010) and the recent French translation of *In Parm*. with comments by Luna/Segonds (2007–21).
[14] Cf. Menn (2012a); Steel (2016b); Finamore/Kutash (2017); Baltzly (2020).
[15] Cf. Tanaseanu-Döbler (2013); van den Berg (2017).
[16] For more general discussions of the Neoplatonist use of the term 'harmony', cf. Gerson (2006); Barney (2009); Golitsis (2018).
[17] Useful are also Menn (2012a) and Greig (2021) who emphasises the Aristotelian background of Proclus' concept of causality.
[18] Cf. also the criticism directed at Gerson in Helmig (2009), 348f.

position in *In Phdr.* and Proclus' outright critique of Aristotle's views in e.g. *In Tim*.[19] Hermias is not mentioned at all, while Proclus is cited only where it suits Gerson's general interpretation. Secondly, Gerson fails to take Aristotle's critique of self-motion in *DA* 1.3 seriously – unlike the late antique commentators. He dedicates only a paragraph to it, suggesting that it is not worthy of discussion, since for the Neoplatonists the 'question is […] the harmonization of two accounts of how immortal intellect is related to embodied soul'. In this dissertation, I show that the case of Proclus goes against a unitary view of the dogma of harmony which is supposedly shared by all Neoplatonists.[20] Moreover, I argue that Aristotle's criticism of Plato is constitutive for the development of certain psychological views in Proclus, and thus needs to be taken seriously (see ch. II).

Hadot (2015) aims at continuing and expanding on Karamanolis' work, while simultaneously building on her earlier influential studies on Alexandrian Neoplatonism.[21] Her book discusses the different Neoplatonist approaches to Aristotle and the harmony thesis from Porphyry to Simplicius by looking at the Athenian and Alexandrian schools. My objections to her work focus on two aspects: (1) the idea that exegetical practices between Athens and Alexandria differ only in degree; (2) the lack of a serious discussion of Proclus. Regarding the latter, it is noteworthy that, although Hadot's aim is to discuss the harmonising strategies of all Neoplatonists after Porphyry, her chapter on the most important late antique Platonist, Proclus, is exceedingly short, comprising only five pages, and fails to offer a satisfying overview of his stance on Aristotle. Her claim that Proclus 'set[s] the most narrow limits to the tendency to harmonize the philosophies of Plato and Aristotle' (125), is thus not sufficiently backed up and needs further discussion since it is questionable whether Proclus maintained that their philosophies are in fundamental agreement at all. The chapter's flaws are both in regard to the lack of primary texts mentioned as well as of secondary literature. She fails to point out the fundamental articles by Steel who greatly contributed to our understanding of Proclus' relationship with Aristotle.[22] Unmentioned remains also Opsomer (2009) on Proclus' *EP* and its

[19] Cf. also *In Crat*. 26.26f.; *In Eucl*. 16.8ff.; *In Alc*. 277.20ff., 280.25–281.16. This stance can be contrasted with Iamblichus' harmonist position *ap*. Philoponus *In DA* 533.23–35.
[20] Cf. Gerson (2005), 16: '[T]here is in my view a baseline agreement among the Neoplatonists as to the lineaments of harmony. Disagreement about details does not change this.'
[21] Particularly important are Hadot (1978) and (1991). For a critical discussion of this book, cf. D'Ancona (2015).
[22] Steel (1987a), (1996) and (2003), for instance, remain unmentioned.

appropriation of Aristotle's theory of motion. These shortcomings in the discussion of Proclus have consequences for my first objection, as Hadot is unable to assess accurately the differences between the Alexandrian and Athenian approaches to Aristotle without an extensive treatment of Proclus. Consequently, she holds on to the idea of a harmony-doctrine among all Neoplatonists after Plotinus which I will show to be fallacious.[23]

Chiaradonna (2019a) emphasises that there were different expressions of the harmony thesis (385). Nevertheless, he seems to assume – like Gerson and Hadot – that it was universally accepted, as even Proclus is said to have 'set the narrowest limit to the tendency to harmonise the philosophies of Plato and Aristotle' (386).

While Gerson, Hadot, Chiaradonna and Sorabji[24] emphasise the pro-harmonist tendencies among all Neoplatonists, recently, a number of scholars such as Helmig (2009), 438f. and (2012), 205–212, D'Ancona (2015), 382ff., and Golitsis (2018), 69 have started questioning precisely this universality, as Syrianus and Proclus do not seem to adhere to it in their criticisms of Aristotle. Instead, Golitsis (2018), for instance, distinguishes between an Alexandrian 'concordist' position and an Athenian 'complementarist' approach. In their entry on Proclus in the *Stanford Encyclopedia of Philosophy* Helmig and Steel claim that Proclus 'is certainly not an advocate of the "harmony of Plato and Aristotle", which became the leading principle of the Alexandrian commentaries (of Ammonius and Simplicius)'. These approaches are much more sensible and seem to capture Proclus' position on Aristotle more accurately but require a more thorough foundation in Proclus' texts.

The work of the last group of scholars can be linked to Steel's fundamental research that focuses on Proclus' deviation from the general conciliatory tone of other Neoplatonists. Steel has discussed Proclus' negative attitude mainly in four papers about Proclus' critique of efficient causality in Aristotle (1987a), his rejection of Aristotle's criticism of Plato's theory of forms (1996), his characterisation of Aristotelian philosophy as dependent and inferior to Plato's (2003), and, most recently, his refutation of various Aristotelian criticisms against *Tim.* (2016a). Building on these works, d'Hoine (2016) recently concluded in an overview of Syrianus' and Proclus' positions on Aristotle that

[23] In an earlier article she referred to their differences in this respect as mere 'nuances': 'Toutefois, cette tendance générale à l'harmonisation connaît quelques nuances' (1992: 421)

[24] Cf. Sorabji (1990b), 3: 'The harmony of Plato and Aristotle was accepted to a larger or smaller extent by all commentators in the Neoplatonist tradition, and the great bulk of the ancient commentators, Christians included, are in that tradition.'

'their attitude is no longer characterised by benign appraisal and tacit adaptation, but rather by critical appreciation' (374).

My goal is to integrate these specific discussions into a broader and more inclusive framework, in order to offer a fuller examination of Proclus' negative as well as positive references to Aristotle which so far is not available. This study contributes to Neoplatonist studies in a way which makes it much easier to classify Proclus' position beyond a simple binary opposition of 'harmonist' and 'non-harmonist'. As it emerges Proclus holds a wide range of beliefs about Aristotle while ultimately rejecting the idea that Aristotle is in fundamental agreement with Plato. Nevertheless, Aristotle is in complete agreement on some topics, even though he criticises Plato – mostly based on a misunderstanding of Plato's text according to Proclus, as will be seen. Additionally, Aristotle is sometimes in disagreement doctrinally but with a few changes can be made to agree with Plato.

3. The Harmony-Doctrine in Proclus

Roughly speaking, there are two types of harmony recognised among the Neoplatonists: 1) between Plato and certain theologians and 2) between Plato and Aristotle. This project of harmonisation was meant to counteract Christian hostilities and criticisms of pagan disunity.[25] Its formulation and expression depend on each Platonist, although we are able to draw more general distinctions between the schools in Athens and Alexandria, as I show.

3.1. The Harmony between Plato and the Theologians

Let us consider the first. Proclus believes in a common theological tradition shared by different thinkers which is in agreement with Plato who is portrayed as τῶν θεολόγων συμφωνότατος (*PT* V.16 133.14).[26] An example for this tendency can be found in Proclus' genealogical explanation of Plato's thought:

> It is necessary to show that every doctrine is in agreement (σύμφωνα) with Plato's principles (ταῖς Πλατωνικαῖς ἀρχαῖς) and the mystical tradition of the theologians. For the whole of Greek theology is the offspring of Orphic mystagogy since first Pythagoras was taught by Aglaophemus the rites concerning the gods, then secondly Plato received

[25] An implicit reference to this can be extracted from Simplicius *In Phys*. 28.31–29.5. Cf. Baltussen (2008), 62 and (2009); Barney (2009), 103; Blank (2010), 665; Helmig (2019), 299f.
[26] Cf. Baltussen (2008), 156. On Proclus' harmonisation of Orpheus, *Chaldaean Oracles* etc. cf. Saffrey (1992); Lewy (2011), 481–485; Brisson (2017), 209–214.

> the entire knowledge about these matters from Pythagorean and Orphic writings. (*PT* I.5 25.24–26.4; tr. mine)

Here Proclus maintains that the doctrines extracted from Plato's dialogues have to be in agreement with his principles and with the thought of the theologians Orpheus, Aglaophemus and Pythagoras. Plato's thought is presented as derived from the latter. According to Proclus, theology – in its Greek form – goes back entirely to Orpheus, who inspired Pythagoras through Aglaophemus and then Plato. Likewise, in *De Prov*. 1.12–17 he shows that Plato is in accordance with the theologians (i.e. Orpheus and Pythagoras) as well as the *Chaldaean Oracles* (see *In Tim*. I 407.21–408.27). Similarly, at *In Tim*. I 323.22–325.11 he emphasises the agreement between Plato and Orpheus.

This type of συμφωνία is also reminiscent of Syrianus' lost treatise 'The Harmony of Orpheus, Pythagoras and Plato with the *Chaldaean Oracles*' (Συμφωνία Ὀρφέως, Πυθαγόρου, Πλάτωνος πρὸς[27] τὰ λόγια) which consisted of ten books.[28] This work is attributed by the *Suda* both to Syrianus (Σ 1662 IV 479.1f.) and Proclus (Π 2473 IV 210.12f.). The misattribution to Proclus seems to be due to the notes Proclus added to Syrianus' work.[29] Regardless of this issue, it is crucial that Proclus holds Syrianus' book in great esteem (*PT* IV.23 69.8–15) and follows his lead in further systematising the supposed agreement.[30] This is also evidenced by Marinus who mentions Proclus' effort to harmonise Greek and 'Barbarian' theology (*VP* §22 538–542). Since Hierocles of Alexandria shares their commitment to the harmony of the theologians and Plato (*ap*. Photium *Bibl*. 214 173a13–18) it can be assumed that this tendency goes back to Plutarch of Athens who taught all three.[31]

3.2. The Harmony between Plato and Aristotle

While Proclus plainly maintains the agreement between Plato and the theologians, he nowhere refers to a general harmony between Plato and Aristotle – unlike many other

[27] I follow here the correction of Kroll (1894), 7 n. 1, endorsed by Saffrey (1992), 37 n. 11.
[28] For references to the harmony of Plato and Pythagoras, cf. Syrianus *In Met*. 43.23f., 83.12. Hermias' *In Phdr*. which is based on Syrianus' lectures also refers to the harmony of Plato and the theologians at 142.25 and 155.1.
[29] This is the view of Saffrey (1992), 37 and Brisson (2009), 471f. Praechter (1926) attributed the work only to Syrianus. On this question with further literature, cf. Goulet/Luna (2016), 683, 698f.
[30] Cf. Saffrey (1992), 47.
[31] Cf. Saffrey (1992), 38f. While the idea fundamentally goes back to Iamblichus, 'la recherche approfondie et systématique de l'Accord d'Orphée, Pythagore et Platon avec les Oracles Chaldaïques est une originalité de l'École néoplatonicienne d'Athènes' (Saffrey 1992, 48). Cf. also Brisson (2017), 211. On Hierocles cf. Hadot (2005), 695f.

post-Porphyrean Neoplatonists.[32] For instance, Hierocles reports us that Ammonius Saccas συνήγαγεν [Plato and Aristotle] εἰς ἕνα καὶ τὸν αὐτὸν νοῦν (*ap*. Photium *Bibl*. 251 461a36). No explicit evidence of such a position can be found in Proclus, although he had the opportunity to defend it. The possible objection that none of his commentaries on Aristotle survived and, thus, his statements on this issue cannot be accessed is incorrect and, in fact, deceptive. For Proclus often in the surviving works mentions the doctrinal differences between Plato and Aristotle and rejects Aristotle's criticism of Plato. Additionally, his critical position had been also noted by other Neoplatonists. These statements allow us to form a judgement on his views with some precision.

In his stance Proclus is similar to his teacher Syrianus.[33] However, Plutarch's[34] other famous pupil, Hierocles, was committed to this harmony.[35] For, after he demonstrates in books 4–5 of *On Providence* Plato's agreement with the theological tradition, he then shows in book 6 – in contrast to Syrianus and Proclus – the harmony of Plato and Aristotle (*ap*. Photium *Bibl*. 214 173a5–40, esp. 18–32).[36] I thus believe that there is a clear break in the generation succeeding Plutarch with Hierocles, on the one hand, maintaining the fundamental agreement between Plato and Aristotle, and Syrianus and Proclus, on the other hand, rejecting it or, at the very least, shying away from making it a programmatic goal of their exegesis. This break is rarely acknowledged or sometimes even outright denied in scholarship, although it accounts for the differing approaches in Athens and Alexandria.

In what way is Proclus more critical of Aristotle? (1) He assumes – unlike many later Neoplatonists but similar to Syrianus (e.g. *In Met*. 80.4–81) – that Aristotle *intends*

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[32] Some *loci classici* are Julian *Or*. V 162C; Simplicius *In Cat*. 7.23–32, *In DC* 159.2–9, 640.27–32, *In Phys*. 1249.12–17; Ps.-Simplicius *In DA* 28.12f.; Hierocles *ap*. Photium *Bibl.* 214, 171b33–172a2; 251, 461a24–39; Olympiodorus *In Gorg*. 214.13–25. For a list of references to συμφωνία in Simplicius, cf. Baltussen (2008), 218ff. On the Medieval reception of this idea, cf. Endress (1991); O'Meara (2019).

[33] Cf. Helmig (2009), 368f. For Syrianus' views on Aristotle, cf. Saffrey (1987); Cardullo (1993); Helmig (2009); d'Hoine (2016). In ch. IV I demonstrate that Proclus goes even further than Syrianus in his critique of Aristotle.

[34] Plutarch's own position on this issue remains obscure, although there are three reasons for assuming that he maintained a fundamental agreement between Plato and Aristotle. (i) Hierocles seems to claim that the harmony-doctrine was maintained also by his teacher (*ap*. Photium *Bibl*. §214 173a34–40). (ii) Philoponus criticises Plutarch's harmonist stance (*In DA* 518.19–520.12, esp. 519.37ff.: καὶ ὁ Πλούταρχος δὲ ἁμαρτάνει ἰδίαν ἁμαρτίαν, διότι τὰ Πλάτωνος Ἀριστοτέλει προσάπτει). (iii) Additionally, he taught simultaneously Aristotle's *DA* and Plato's *Phd.* to Proclus (*VP* §12 295f.),

[35] On Hierocles, cf. Schibli (2002) Part I; Hadot (2005).

[36] Cf. Westerink (1987), 106f. who discusses Hierocles' view of the history of philosophy and its differences from Proclus. In his conception of the history of philosophy Hierocles was either influenced by Porphyry or Iamblichus according to Hadot (2005), 697.

to criticise what Plato actually meant and not just what Aristotle believes to be a superficial reading of Plato that was brought forward by other interpreters.[37] Thus, Aristotle often misunderstands Plato. Most importantly (2), Aristotle deviates doctrinally from Plato. In this regard Aristotle is clearly in disagreement with his teacher. The evidence for (1) is discussed especially in ch. III where I show how Proclus' engagement with Aristotle's criticism of Plato's concept of self-motion deviates from Ps.-Simplicius' and Philoponus'. As proof for (2) I discuss in ch. IV how Proclus criticises Aristotle for eliminating the Platonic One and for reducing the intellect's causality to final causality. What is significant though, is that neither (1) nor (2) prevent a possible rapprochement between Plato and Aristotle. In regard to (1) I show in ch. III how Proclus in fact believes that Plato and Aristotle agree on the nature of self-motion, but Aristotle just misunderstood Plato. In regard to (2) I demonstrate in ch. IV that Proclus actually shows how Aristotle's premises force him to accept the intellect's efficient causality – although Aristotle actually did not draw this conclusion. However, this rapprochement is not possible in regard to Aristotle's ontological hierarchy.

Proclus provides a reason for some of Aristotle's mistakes and departures from Plato: he kept away from theology and focused too much on natural philosophy (*In Tim*. I 295.25f.: τῶν μὲν θεολογικῶν ἀρχῶν ἀφιστάμενος, τοῖς δὲ φυσικοῖς λόγοις πέρα τοῦ δέοντος ἐνδιατρίβων).[38] Due to his lack of insight – or interest – in theology his natural philosophy is also compromised, as Proclus makes clear in a well-known passage from his proem in *In Tim*. There, Proclus characterises Aristotle as an emulator of Plato, showing why Aristotle falls behind his master. Two aspects in this critique are relevant for my current purposes: (1) Aristotle's physical works are an imitation of Plato's; (2) Aristotle spent too much time studying the physical realm and focusing on matter. Proclus' interpretation of Aristotle contains representative elements of the Neoplatonist reception of Aristotle, although its tone is more critical.

Let us look at (1):

> It seems to me that the incredible (δαιμόνιος) Aristotle was also emulating (ζηλώσας) Plato's teaching to the best of his ability when he arranged his whole treatment of physics

[37] The latter tendency is for instance expressed in Asclepius *In Met*. 166.35f., Olympiodorus *In Meteor*. 144.8–11 and in the *Vita Aristotelis Marciana* which in its last version has to be regarded as a product of 6th c. Neoplatonism: [Ἀριστοτέλης] ἴσως δ' οὐδὲ πρὸς τὰ δοκοῦντα Πλάτωνι μάχεται, ἀλλὰ πρὸς τοὺς κακῶς αὐτὰ ἐκλαβόντας (§29 Düring). The later Philoponus criticises precisely this attitude; see below n. 50.

[38] Cf. ch. IV 3.1.

> like this. He saw there were common factors in all things that have come to exist by nature: form, substrate, the original source of motion, motion, time and place – things which Plato too has taught about here, [talking of] distance, time as image of eternity coexisting with the heavens, the various types of motion, and the auxiliary causes (συναίτια) of natural things – and that other things were peculiar to things divided in substance. (6.21–30; tr. Tarrant, modified)

It has to be noted that the Stagirite receives the epithet δαιμόνιος which marks his inferior status towards the 'divine' (θεῖος) Plato.[39] Aristotle is then portrayed as an imitator or rival (ζηλώσας) of Plato who tried to emulate his teacher as much as possible. This expression accentuates the condescending tone of the passage towards Aristotle and is not used as a neutral term here, as has been wrongly assumed.[40] According to Proclus, Aristotle is concerned in his *Physics* with the same matters as Plato in *Tim.* where we already find a complete exposition of the natural world. Proclus lists a number of topics which roughly correspond to the first four books of *Physics* (6.24–29). This strategy of backdating, whereby philosophical insights of a successor of Plato are attributed to him, is quite common among the Neoplatonists.

Proclus continues (2):

> The first of these were what belonged to the heaven (τὰ τῷ οὐρανῷ προσήκοντα) – in agreement (συμφώνως) with Plato insofar as he made the heaven ungenerated and composed of the fifth essence; for what is the difference between calling it a fifth element and calling it a fifth cosmos and a fifth shape as Plato did? The second were what was common to all the realm of coming to be, an area where one can admire Plato for the great detail in which he studied both their real natures and their properties, correctly preserving both their harmony and their polarities. As for what concerns coming to be, part belongs to things in the skies, whose principles Plato has accounted for, while Aristotle has extended their teaching beyond what was called for; but part extends to the study of animals, something which Plato has given a detailed explanation of with regard to all their causes (κατὰ πάσας τὰς αἰτίας διήρθρωται), including the final causes and the auxiliary causes, while in Aristotle's work they have only with difficulty and in a few cases (μόγις καὶ ἐν ὀλίγοις) been studied in relation to form (εἶδος).' (6.30–7.13)

[39] On the 'divine' Plato, cf. e.g. *PT* IV.26 78.2; *In Crat*. 92.2; *In Tim*. III 9.22, 34.3; *In Eucl*. 116.22. Proclus often (in total about 21 times) addresses Aristotle as δαιμόνιος (*In Alc*. 237.2; *In Tim*. I 6.22, 253.29, 268.17f., 294.13f., 295.28, II 194.26f., 258.28f., 296.3, III 54.33; *In Remp*. II 122.25, 349.13f., 360.4; *In Parm*. VII 1169.4; *In Eucl*. 64.8f., 76.8, 116.24, 284.23f.; *De Prov*. 11.16; *PT* I.9 35.24–36.1, III.16 55.20) – more so than he calls Plato θεῖος. He is not the only one to call Aristotle δαιμόνιος: Syrianus (who also seems to be the first to call Aristotle θαυμαστός at *In Met*. 165.16, 172.9), Olympiodorus, Simplicius (who also calls Aristotle θεῖος and ὁ γνησιώτατος τῶν Πλάτωνος ἀκροατῶν at *In DC* 378.20f. – a description which goes back to Diogenes Laertius V §1.8), and the *Prol. Plat*. employ the term as well. From these the expression is taken over by the Byzantines. Based on the extant texts, Syrianus was the first to refer to Aristotle as δαιμόνιος. On the latter, cf. Helmig (2009), 353 n. 12. On these epithets, cf. Baltussen (2009), 124.

[40] *Pace* Gerson (2005), 102 n. 3.

Proclus divides the study of the physical realm between the eternal celestial beings (6.30f.) and the sublunary realm (7.2f.). Regarding the former, he goes on to minimise the difference between Plato and Aristotle concerning the cosmos' eternity and the fifth element, which is simply identified by Proclus with Plato's fifth body (6.30–32). Proclus here omits mentioning that Aristotle takes *Tim*. 28b7 literally and criticises Plato in *DC* I.10–12 for his view that the cosmos is generated, although he is well aware of Aristotle's objection. This harmonising approach towards Aristotle is an exception in this otherwise disparaging text. Indeed, if we look at later passages which deal with the two issues more extensively Proclus' more critical views become manifest.[41] The passage does not, as Hadot (2015), 124 states, 'culminate' in this assimilation of Aristotle but rather in the criticism of his account of causality a few lines further down.

The sublunary realm again is divided in two parts. One concerns the skies (7.8) where Proclus, in reference to Aristotle's more specialist works like *Meteor.*, states that Aristotle 'has extended the teaching beyond what was called for' (7.9), a kind of 'pseudo-scientific pedantry'. The other part deals with zoology (7.10). Plato excels here as well by providing a complete causal explanation, including the final cause,[42] whereas Aristotle treats this topic deficiently and barely in reference to the formal cause (7.10–13). The reference here is to enmattered forms since εἶδος is used by Proclus in contrast to the separate παράδειγμα which Aristotle does not recognise.

Proclus concludes that 'in most cases [Aristotle] stops at the point of matter, and by pinning his explanations of physical things on this he demonstrates to us just how far he falls short of the teaching of his master' (7.13–16). Plato's metaphysical and theological outlook on nature is contrasted with Aristotle's method of doing natural philosophy. Plato seeks the divine and transcendent cause(s) of nature (efficient, paradigmatic and final), whereas Aristotle starts from the sensible things and focuses on the auxiliary causes of

[41] See my discussion in ch. I 2.3.1.

[42] This comment might strike as absurd to anyone who ever had a cursory glance at Aristotle's *PA*. However, we should remember that Proclus' notion of final causality is linked with the transcendent One/Good which cannot be found in Aristotle, as Proclus clarifies (cf. ch. IV).

matter and form.[43] In this way, however, Aristotle's natural philosophy remains deficient and requires a substantial reformation.[44]

Simplicius, who is primarily associated with Alexandria but studied also in Athens, seems to offer an implicit refutation of Proclus' views on natural philosophy in his introduction to *In Phys*. by portraying Aristotle's achievements quite differently (6.31–8.15).[45] This ultimately culminates in his claim that 'Aristotle surpassed (διήνεγκεν) both Plato and all those before Plato alike' (7.27f.; tr. Menn) in the study of natural philosophy. Simplicius thus clearly differs from Proclus' views on Aristotle's physics and generally attributes a much more positive role to him. Elsewhere Simplicius also acknowledge Aristotle's focus on physics but – crucially – without portraying it as a negative characteristic:

> [Aristotle] always refuses to deviate from nature; on the contrary, he considers even things which are above nature according to their relation to nature, just as, by contrast, the divine Plato, according to Pythagorean usage, examines even natural things insofar as they participate in the things above nature. (*In Cat*. 6.27–30; tr. Chase)

Simplicius here describes two different methodologies without making a value judgement as Proclus does. For him both are clearly compatible and even in agreement (see *In Phys*. 1359.5–8). Plato and Aristotle therefore differ only in approach and the language they use: the conflict is over words (ὀνόματα) not reality (πράγματα), as Simplicius often maintains.[46] Similarly, David/Elias claims that ἀεὶ ὁ Ἀριστοτέλης θεολογῶν φυσιολογεῖ, ὥσπερ ἀνάπαλιν ὁ Πλάτων ἀεὶ φυσιολογῶν θεολογεῖ, παντελῶς παρεγκυκλῶν τὸ δόγμα τῶν ἰδεῶν (*In Cat*. 124.21ff.).[47]

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[43] Proclus proposes a tripartite division of natural philosophy at *In Tim*. 2.1–9: 'For physical inquiry, to put it briefly, is divided into three, one part busying itself with matter and material causes, the next including investigation of the form too and revealing that this is more properly a cause, and the third part demonstrating that these do not even have the role of causes (rather they play the role of auxiliary causes), postulating that the 'causes' in the strict sense of natural occurrences are different: the productive, the paradigmatic, and the final' (tr. Tarrant). Aristotle would then be only concerned with the first two parts.

[44] In my opinion Gerson (2005) is again too optimistic in claiming that Proclus 'incidentally provides the rationale for the harmony between the two. So long as an Aristotelian realizes that physical science cannot be explanatorily exhaustive, its ambit is secure' (111). An Aristotelian would need to recognise first of all the misguided conception of causality which is intrinsic to Aristotle's natural philosophy.

[45] Cf. Golitsis (2017), 227f.; Griffin/Sorabji (2022), 28, and, especially, Menn (2022b), 51: Simplicius 'wants to explicate and defend Aristotelian scientific physics, against Philoponus' Christian 'extreme Platonism', but also against Proclus' claim that Aristotelian physics is not a real science and does not grasp real causes'. On Simplicius' harmonisation efforts, cf. Baltussen (2008), (2009); Barney (2009).

[46] Cf. *In Phys*. 781.29f., 1249.12–17, *In DC* 69.11–15, *In Cat*. 7.29–32. See also ch. IV 4.1. pp. 150ff. Cf. Hermias *In Phdr*. 188.28–32; Ps-Simplicius *In DA* 40.20–24.

[47] Cf. ibid. 120.30–121.4, 122.25–123.11; Philoponus *In Phys*. 5.21–25, 300.28–301.6. Cf. Kremer (1961), 189–195.

Proclus thus differs from other Neoplatonists in his reading of Aristotle, as he maintains there is a disagreement over πράγματα and not just ὀνόματα.[48] In fact, Proclus' tendency is already remarked upon by Simplicius and also by Philoponus who was also active in Alexandria. The former states that

> Alexander of Aphrodisias does not understand Plato's doctrines as Aristotle understood them, nor does he accept that their views are in agreement, but having from the outset, so it seems, treated Plato's views as suspect (ὑπόπτως), just as shortly before our time some people (ὀλίγον πρὸ ἡμῶν τινες) [did with] Aristotle's. (*In DC* 297.1–5; tr. Hankinson)

I take the reference ὀλίγον πρὸ ἡμῶν τινες to imply Proclus, as Steel (2016), 329 has conclusively shown. In another passage from the same commentary (640.21–32), Simplicius alludes to Proclus' refutation of Aristotle's objections to *Tim.*, before referring again to his own harmonistic views. Clearly, this adjacent exposition of the harmony-doctrine is meant to contrast with Proclus' approach to Aristotle. In general, Proclus and Simplicius have different approaches to Aristotle and the wider 'wisdom tradition'.[49] In consequence, Simplicius often wants to correct Proclus' view on this issues. This emerges clearly when he states

> But since the Lycian philosopher, [Proclus], says that this opinion about motion is the one and only disagreement between Aristotle and Plato, the former stating that there is no change beyond things and refuting the view that motion is a genus, the latter that motion is a single genus of being as are existence and identity and otherness, it would be more seemly to demonstrate agreement in the apparent disagreement (τὴν ἐν τῇ δοκούσῃ διαφωνίᾳ συμφωνίαν) if at all possible. (*In Phys*. 404.16–22; tr. Urmson)

Likewise, Proclus' attitude did not escape Philoponus:

> Thus even Proclus himself has explicitly conceded the disagreement (διαφωνίαν) between the [two] philosophers, or rather, demonstrated it from Aristotle's own [writings]. This being so, one might well be amazed at the gross effrontery of those who have tried to show that Aristotle and Plato are in agreement even on this point [i.e. theory of forms]. (*De aet*. 32.8–13; tr. Share)

In consequence, Proclus is not included in the group of exegetes which Philoponus describes here and elsewhere as being too harmonistic in their approach to Aristotle.[50] Philoponus probably targets his teacher Ammonius son of Hermias and his other pupils

[48] I make this especially clear in ch. IV.
[49] Cf. Helmig (2020) under 'harmony'.
[50] Cf. *De aet*. 29.3–8: 'Aristotle's refutations of Plato are not directed at people who have misunderstood the words of Plato, as some of the recent authors imagine out of embarrassment at the disagreement between the philosophers, but they contradict the views of Plato himself (τὰς Πλάτωνος αὐτοῦ ὑπονοίας)'. The term ὑπονοία signifies here the real, deeper meaning of Plato's texts. On this cf. Golitsis (2018), 73.

where we encounter the tendency described by him.[51] It is noteworthy that Philoponus himself had changed his stance on the harmony between Plato and Aristotle.[52]

Since Proclus' anti-harmonist stance clearly differed from Ammonius' and Simplicius' views certain trends can be distinguished between the Athenian (Syrianus, Proclus) and Alexandrian schools (Hierocles, Ammonius, Simplicius, early Philoponus).[53] Although this has been questioned by Hadot (2015), there remain strong reasons for following this traditional interpretation which was first brought forward by Praechter (1909; 1910) and is nowadays supported by D'Ancona (2015) and Steel (2016).[54] This last group of scholars maintains that there is a fundamental difference in the approach to and appreciation of Aristotle between the schools of Athens and Alexandria. Most probably this difference is rooted in divergent philosophical convictions. After Ammonius, the school in Alexandria abandoned the study of *Parm*. as a theological text and simplified its metaphysical system (which presumably culminated in the intellect and not the One, as was usual among their Athenian contemporaries as well as earlier Neoplatonists).[55] Connected to this is a stronger focus on Aristotle. This accounts for the difference between Proclus on the one hand and other Neoplatonists associated with or inspired by the Alexandrian school.

4. Motion in Proclus and the Structure of the Thesis

Proclus brings together – consciously or unconsciously – Platonic and Aristotelian views on motion. However, his account of motion differs significantly from Aristotle. In order to make sense of Proclus' position on motion, one needs to be aware of a fundamental distinction in the Neoplatonist and, particularly, Proclean concept of κίνησις. Unlike Aristotle who offers us a precise definition of motion as the 'actualisation of what is potentially, as such' (*Physics* III.1 201a11), Neoplatonists like Proclus do not have one

[51] Cf. e.g. Simplicius *In DC*. 352.27–28, 296.6–8 and 26–30, 377.20 ff. He adopts it also when faced with Plato's and Aristotle's criticism of the Presocratics; cf. *In Phys*. 36.25–31. According to Golitsis (2018), 94 these criticisms served a 'preventive' and 'pedagogical' function.
[52] Cf. Verrycken (1990), 225f.; Golitsis (2016).
[53] For the teaching of philosophy in these two late antique centres, cf. Wildberg (2005); di Branco (2006), 115–179; Watts (2006); Fowden (2014), 127–163.
[54] Cf. e.g. Steel (2016), 347: 'Simplicius does not follow Proclus anti-Aristotelian stance'. Cf. also Chiaradonna's more nuanced judgement on Praechter: 'Praechter's conclusions are outdated, but the Athenian and Alexandrian versions of Neoplatonism are perhaps not as close as come [sic!] recent accounts tend to suggest' (389).
[55] Cf. Demulder/Van Riel (2015), 274; Verrycken (1990), 231.

unifying definition of motion.[56] Instead, starting with Plotinus, one can fundamentally differentiate between (I) non-physical and (II) physical motion, i.e. motion related to the incorporeal and non-spatial intelligible realm and motion pertaining to physical objects bound by space and time.[57] In Plotinus 'motion does not have the same definition when it is related to the sensible world, to the soul, or to the Forms and intellect', as noted by Michalewski (2020), 55. This dichotomy is partly grounded in and achieved through an exegesis of Plato and Aristotle[58] whose agreement on the nature of motion remained a matter of debate in late antiquity.[59] It is ultimately guided by the Platonic motivation to trace back sensible qualities to their intelligible paradigm. In this way, all types of motion are ultimately grounded in intelligible motion.[60]

Non-physical motion is then divided – in Proclus at least – into intelligible (II.1), intellectual (II.2), and psychic motion (II.3). In each case motion refers either to the μέγιστον γένος (II.1), or to the atemporal contemplation of the intellect (II.2), or to soul's activity *per se*, living, and its other activities such as discursive thinking, willing etc. (II.3). These non-physical types of motions are based on an exegesis of certain passages in Plato, especially *Soph*. and *Laws* X.[61] Next to these three types, there is another, more fundamental type of metaphysical motion which refers to the process of causation and the relation between cause and effect (II.4). I call this causal motion. This type of motion seems to be, for the most part, an innovation of Neoplatonism.[62]

A note on the terminology. In the following, I render motion that does not pertain to the sensible realm as 'non-physical' and not 'spiritual', although the latter term is more common in scholarship (e.g. Opsomer 2009) which follows Gersh's seminal work on the

[56] Proclus mentions only broadly that ἡ μὲν γὰρ κίνησις μεταβολή τίς ἐστιν ἀφ' ἑτέρων εἰς ἕτερα (*ET* §198, 172.28f.). Simiplicius seems to provide us a minimal definition of motion in Plato: κίνησιν δὲ ὁ μὲν Πλάτων πᾶσαν τὴν ἀπὸ τοῦ ὄντος ἔκστασιν ὑποθέμενος (*In Phys*. 821.22f., repeated at 822.24; 824.15; 826.12; *In DC* 95.14; 96.20). However, this definition is inspired by Aristotle (e.g. *Physics* IV.12 221b3; IV.13 22b16; VI.5 235b9) and not Plato. As Longo (2020), 116, 139 shows Simplicius takes Aristotle's definition of motion as 'entelechy of the potential *qua* potential' to apply also to soul (cf. *In Phys*. 1250.22–25).
[57] Cf. Opsomer (2009), 190. For Plotinus as a crucial figure in this development, cf. Michalweski (2020), 59.
[58] Whether or not Plato accepts non-physical motion is debated. For an overview, cf. Perkams (2007). As I show in Marinescu (2021), Plato has at least in *Laws* X a non-physical understanding of motion.
[59] Cf. e.g. Simplicius *In Phys*. 821.20–823.4.
[60] Cf. Opsomer (2000a), 114.
[61] On Proclus' exegesis of *Soph*., cf. Gersh (1978), 67–81; Charles-Saget (1991); Steel (1992); Perl (2014). On the influence of *Laws* X, cf. ch. III 4.3. An early but now largely outdated discussion of κίνησις is Schrödter (1965).
[62] Cf. also Simplicius' fourfold distinction of motion (pre-cosmic, physical, psychic, and intellectual) in Plato at *In Phys*. 422.5–9.

subject, *Κίνησις Ἀκίνητος. A Study of Spiritual Motion in the Philosophy of Proclus* (1973). The term 'spiritual' is deceiving since it presupposes a 'spiritual realm' to which it refers.[63] But this sphere is usually rendered in (Neo-)Platonic scholarship as 'intelligible' which is a preferable translation of νοῦς, νοητός, and their derivates. However, since 'intelligible' and 'noetic' in Proclus characterise only a specific aspect of the intelligible realm, as Gersh (1973), 1 correctly remarks, and since the motion of soul should be also included, this term is best avoided. Therefore, I choose to use the broader term of 'non-physical motion'.

Thus, depending on the level of reality motion has a different meaning. In its true sense motion is intelligible since it is a paradigm for all the other types of motion – intellectual, psychic, or physical – which it causes. Physical motion is thus only an image of intelligible motion. Since the relationship of intelligible and sensible motion is thus one of paradigm and image as well as cause and effect motion is predicated of them homonymously, not synonymously.[64] They differ significantly, as is made clear by Syrianus: ἔστι γὰρ καὶ κίνησις ἐν ἀσωμάτοις καὶ σχῆμα καὶ μέγεθος, οὐ τοιαῦτα δὲ οἷα ἐν τοῖς αἰσθητοῖς (*In Met*. 95.26ff.).[65]

Physical motion is quite similar to the Aristotelian understanding. In contrast, non-physical motion differs drastically from the former, as it does not describe a dynamic process in space and time but rather the activities and the causal relationship of non-physical and intelligible entities. Thus, on the one hand it refers to the soul's and intellect's activities such as thinking, willing etc. as motions.[66] Most importantly, it denotes the act of soul's self-causation, as will become clear in ch. III. And on the other, intelligible motion also describes on a higher metaphysical level the causal relationship between the One, intellect and soul which the Neoplatonists outlined with the dynamic triad μονή – προόδος – ἐπιστροφή.[67] While this concept of non-physical motion might

[63] Since Gersh's account is dependent on Beierwaltes (1965), I assume Gersh tried to render the German 'Geist' or 'geistig' into English by translating as 'spiritual' which causes confusion due to the different terminological traditions in these languages.
[64] The relation of form and particular is regarded by later Neoplatonists as homonymous due to their essential differences such as forms being eternal and particulars perishable. They distinguish between different types of homonymy, one of them being the homonymy of paradigm and image, as can be seen in Syrianus *In Met*. 114.35–115.3. Cf. Opsomer (2004), 35–47 who discusses Syrianus' application of this view in order to defend Plato from Aristotle's criticism.
[65] In this respect, Aristotle also falls short of recognising non-physical motion according to Syrianus *In Met*. 24.31–33.
[66] As Plato does himself, cf. above.
[67] Cf. Beierwaltes (1965), 118–164; Gersh (1973) and (1978), 67–81; Opsomer (2009), 225–229.

strike the modern reader as odd – indeed, even in antiquity this seemed to be the case –[68], it proved to be very influential for the further history of philosophy, as it is particularly relevant for the discussion of motion in Proclus and then found its way into Medieval and Renaissance philosophy. The two different senses of motion create a paradoxical situation since from a physical perspective the intelligible realm is completely unmoved. Yet, in an intelligible sense, when referring to thinking or causation, non-physical entities can be described as being in motion.

From this condensed overview it is evident that concepts of motion differ drastically between Neoplatonists and Aristotle. While the former emphasise its autonomous existence as form-like genus, which manifests itself in the physical realm, the latter seems even to struggle to define motion as something real and actual.[69]

In this thesis I deal with different types of motion. Chapter I focuses on physical motion and Proclus' discussion in *EP*. Chapter II asks about the origin of motion in the cosmos (including physical motion) and shows how Proclus combines Plato's and Aristotle's account on this issue. Chapter III focuses on the motion of soul. Chapter IV deals with Proclus' critique of the causality of Aristotle's prime mover which he regards as an efficient cause and not just as a final one. The structure aims to show in an increasing order Proclus' distance from Aristotle: chapter I shows Proclus' proximity to the Stagirite, while chapter IV presents Proclus at his most critical. In the first chapter, I show how in *EP* Proclus largely endorses Aristotelian kinematics and leaves out more controversial issues. The second chapter focuses on Proclus' adoption of the intellect as prime unmoved mover which he portrays as Platonic. Nevertheless, Proclus makes significant use of Aristotelian vocabulary and arguments. In the third chapter I demonstrate how Proclus rejects Aristotle's criticism of Plato's concept of self-motion, while emphasising that Proclus makes productive use of Aristotle's objections. In the final chapter, I show that, according to Proclus, Plato and Aristotle are not in agreement in regard to the nature of the highest principle and the causality of the intellect.

[68] Cf. Simplicius' explanation on why Aristotle does not employ the term motion to describe non-physical activities at *In Phys*. 821.27–32.
[69] Cf. Broadie (1982), 110f.

CHAPTER I: THE CONTEXT AND THE PROJECT OF PROCLUS' *ELEMENTS OF PHYSICS*

1. Proclus' EP

While older scholarship has mostly focused on Neoplatonist metaphysics, leaving the impression that late antique Platonists were only interested in this and related areas, more recent publications have also shed light on their preoccupation with natural philosophy.[70] These publications have demonstrated that the Neoplatonists had a genuine interest in thinking about the physical world, while still emphasising its dependence on the intelligible realm.[71] Crucially, Proclus regarded the study of physics as an indispensable preparation for metaphysics (*PT* I.2 10.25–11.4). A good example for Proclus' interest in this area is – besides *In Tim.* – his work on kinematics, i.e. the study of physical motion,[72] *EP*. Although the latter has been little studied, it is here that Proclus' engagement with Aristotle's natural philosophy strongly manifests. It allows us to assess Proclus' views on the latter which elsewhere are quite critical and dismissive, such as in his infamous statements on Aristotle in the prologue of *In Tim*. (see Introduction).

EP is based on Aristotle's *Physics* VI and VIII as well as *DC* I and deals primarily with the question of motion and its ultimate origin.[73] Hence its alternative name *On Motion* which – judging by the content of the treatise – seems to be the more accurate title. Interestingly enough Proclus neither names nor discusses Aristotle's definition of motion from *Physics* III.1 in the treatise. To my knowledge, the definition is entirely absent from his extant oeuvre. Demonstrating that the eternal motion of the cosmos is caused by an unmoved mover is the culmination of the treatise – which smoothly connects physics with metaphysics. The goal is to sum up the fundamentals of Aristotelian kinematics, which it presents as a unitary and independent body of knowledge, and to make them accessible to beginners. Thus, *EP* was presumably related to the Aristotelian curriculum in the Neoplatonist school in Athens and was studied while reading Aristotle's

[70] Cf. especially the collection of articles in Chiaradonna/Trabattoni (2009) and Horn/Wilberding (2012). On Proclus specifically, cf. Martijn (2010a); Opsomer (2012b), (2017), (2020b).
[71] This point is emphasised in Proclus' prologue to *In Tim*. (I 1.1–14.3).
[72] Cf. White (1992), 32: 'Kinematics deals with motion of bodies without reference to either masses or the forces acting on them. That is, kinematics is the study of the geometrically or topologically possible motion of a body or system of bodies'.
[73] Proclus possibly produced a commentary on other parts of *Physics*, such as the discussion of place at IV.1–5, which is used by Simplicius. Cf. d'Hoine (2016), 378.

works on natural philosophy.[74] This does not entail that Proclus actually endorses everything he includes in this work. Additionally, the propaedeutic character of the work accounts for the lack of references to it in other Proclean works (just as in the case of *ET*). Due to this, a confusion about its dating has arisen. While earlier scholarship tended to regard *EP* as a youthful work, stemming from a 'pre-Platonic' phase of the philosopher when he was only versed in Aristotelian philosophy,[75] it is nowadays understood to be chronologically and not just stylistically/formally related to *ET* to which it is in a certain way complementary.[76] I take it that *EP* was written before *ET*, as it seems highly likely that Proclus used the axiomatic method for natural philosophy – for which Aristotle was in a restricted way an example – and then moved on to apply the method to metaphysics. Like *ET*, *EP* is designed as a textbook written in an axiomatic or geometrical manner (*more geometrico*) that is influenced by Aristotle and Euclid. That is, it posits certain principles and builds on these various theorems.

Due to its proximity to the Aristotelian original and perceived lack of originality, *EP* has received little attention in scholarship. The text has been established by Ritzenfeld (1912), although Boese (1958), 13f. has proven the latter's *stemma codicum* to be wrong and incomplete. The first article on this work by Nikulin (2003) provides a helpful overview but lacks clarity and intelligibility at some points. The most comprehensive discussions remain Opsomer (2009), 193–203 and, especially, (2020). While the former paper focuses specifically on Proclus' argument for the existence of the unmoved mover in *EP*, the latter concerns its method and formal characteristics. Most recently, Kiosoglou (2022) offered an analysis of Proclus' usage of theorems and analysed more closely *EP* I.1–2 and II.7.[77] While these articles have deepened our understanding of the treatise, a closer analysis of Proclus' exegetical background and method is still outstanding, as is also an English translation. Such an analysis clarifies Proclus' engagement with Aristotle's kinematics and its influence on his natural philosophy. It also offers us an excellent example of Proclus' use of the axiomatic method which he employs also in

[74] Cf. n. 3.
[75] Cf. Ritzenfeld (1912), VII: 'Proclum Institutionem physicam […] eo tempore quo una cum Syriano Aristotelis Physica legebat ab eo incitatum scripsisse' and VIII: 'cum auctor nondum in philosophia Platonica vigebat vel suam sententiam proferre audebat'. Falcon (2001), 22 endorses this view.
[76] Cf. Dodds (1963), xviif., 201; Nikulin (2003), 197f. Luna/Segonds (2012a), 1562 are more sceptical of this argument.
[77] For other brief discussions of *EP*, cf. O'Meara (1989) and the introductory essay by G. Reale in Farragiana di Sarzana (1999), XLV–LVIII.

ET.[78] From a more general perspective, a closer look at *EP* allows us to draw conclusions regarding the exegesis of *Physics* and *DC* before the significant commentaries of Simplicius and Philoponus and the relation of *EP* to these later works.

To this end, I focus on Proclus' use of Aristotle in *EP* to elucidate the presence of the Stagirite both in regard to the content as well as the presentation and the method of the treatise. Thus, I offer first an analysis of the content as well as of the exegetical and philosophical background of this treatise (2.). Here, I show how Proclus – far from a mindless compiler – was influenced by a specific exegetical tradition and certain philosophical convictions in restructuring and interpreting Aristotle's work. I also emphasise the importance of *DC* for Proclus' project, which has not been appreciated in scholarship so far. Moreover, I show how he circumvents more contentious issues which he chooses to discuss in an advanced work, such as *In Tim*. In the second part, I focus on Proclus' method and argumentative structure (3.). As I demonstrate, Proclus uses Aristotle's scientific ideal outlined in *APo* as a model for presenting non-mathematical material in an axiomatic manner. I then offer a close analysis of the principles and some of the theorems mentioned.

2. The Content and the Background of EP

In the following, I briefly outline the content of *EP* (2.1), before moving on to an analysis of its exegetical background (2.2) and its omissions from the Aristotelian original as well as its relation to other Proclean writings (2.3).

2.1. Summary of EP

In *EP* Proclus restructures in two books Aristotelian doctrine from *Physics* VI–VIII and *DC* I. Two main motivations guide Proclus: he arranges the arguments in an axiomatic manner in order (a) to provide an accessible overview of Aristotle's theory of motion and (b) to prove the necessary existence of the unmoved mover as cause of the cosmos' motion.[79] Each book starts with a series of definitions and hypotheses, followed by a number of theorems. In a theorem, a proposition precedes a short proof, mostly a *reductio*

[78] On the methodology and the structure of *ET*, cf. Opsomer (2022).
[79] I discuss the unmoved mover's relation to self-moving souls in ch. II and its causality in ch. IV.

ad absurdum/impossibile, whereby the logical impossibility of the contrary proposition is demonstrated. The result is then summarised in a conclusion.

The first book opens with six definitions which are regarded as self-evident and indemonstrable. The definitions are discussed in the then following thirty-one theorems or propositions which are – for the most part – deduced from them. Book I mainly summarises central insights from *Physics* VI, dealing with topics such as divisibility and continuum (§§1–7), velocity (§§8–10), time (§§11–18), and motion (§§19–31). Common Aristotelian doctrines such as the infinite divisibility of magnitude, motion and time (§11) or the indivisibility of the now (§16) are discussed. In treating these topics, Proclus preserves the order of *Physics* VI, whereby each proposition deals with a different chapter.[80] Proclus occasionally adds theorems that have no obvious counterpart in Aristotle in order to strengthen the axiomatic structure (e.g. §I.1; §I.3) just as he adduces new arguments to buttress the propositions (e.g. §I.14 14.24–26; §I.16 16.21–26). Yet, he also omits certain passages from *Physics* VI, such as the anti-Zenonian excursus. Book I concludes with the proposition that the indivisible is unmoved: 'Everything quantitatively without parts is in itself unmoved' (§I.31, 26.29f.: πᾶν τὸ ἀμερὲς ἐν ποσῷ ἀκίνητόν ἐστι καθ' ἑαυτό).[81] This already points towards the goal of *EP*, preparing the argument for the existence of the prime mover.

The second book consists of six hypotheses,[82] eight definitions, and twenty-one theorems. It focuses mainly on the properties of motion, particularly on the eternal circular motion of the cosmos or heaven (§§1–6) and shows *via* a lengthy discussion of infinite power (§§7–8; §§11–15) that the first mover of this motion cannot be a body. Rather, the cause must be an eternal (§18) and indivisible (§21), i.e. non-physical, substance, possessing infinite power (§21) in order to cause the cosmos' eternal motion. In doing so it remains itself unmoved (§19).[83] The work thus concludes with the fundamental proposition: 'The prime mover of the circular motion is indivisible' (§21, 58.11f.: τὸ πρῶτον κινοῦν τὴν κύκλῳ κίνησιν ἀμερές ἐστιν). Since what is indivisible is unmoved (§I.31) it follows that the prime mover is unmoved. Proclus thereby reaches his goal.

[80] For the references, see Ritzenfeld (1912).
[81] Translations of *EP* are mine.
[82] Traditionally these are counted as definitions which I show to be false on pp. 47ff.
[83] For an analysis of §19 where the causal priority of the unmoved mover is established, cf. ch. II 5.1.

Book II adheres less strictly to its Aristotelian source by mixing content from *DC* I.2–7 and *Physics* VIII as well as rearranging the order of the arguments of these books. For instance, Proclus demonstrates first that circular motion has no opposite (§4) and then that the thing in circular motion is ungenerated and indestructible (§5), whereas Aristotle proceeds the other way around. Yet, Proclus proves here to be an attentive reader, as Aristotle actually presupposes in his argument for the indestructibility of the heaven the claim that circular motion has no opposite (*DC* I.3 270a19f.). Proclus also intervenes in the Aristotelian material by omitting more narrative passages (e.g. Aristotle's insistence on the importance of a discussion of the infinite at I.5 271b1–17) and certain arguments (e.g. in proving that something moving in a circle is finite Proclus uses only two of the six arguments Aristotle provides in *DC* I.5). Some of these differences can be explained by Proclus' exegetical and philosophical background, as I make clear in the next section (2.2).

From this summary it emerges that *EP* is primarily a physical work where the role of the unmoved mover is essential but only dealt with at the outset. This is because the unmoved mover belongs to the metaphysical realm and should be properly discussed in a metaphysical work, as in fact Proclus does elsewhere.[84] This σκόπος is also useful for bringing Aristotle and Plato together, given that Proclus elsewhere makes extensive usage of Aristotle's doctrine of the unmoved mover.[85] By focusing less on the nature of the prime mover, Proclus remains true to his Aristotelian model, *Physics* VIII, where the prime mover receives a mostly negative description – unlike the more positive account in *Met*. Λ – and primarily serves to explain the origin of eternal motion.[86] Thus, although the scope of the work is to prove the existence of the unmoved mover, the argumentation shows a genuine interest in physical issues, especially related to kinematics, and is not just a means to an end. It is thus misguided to try to explain the form and content of *EP* by focusing solely on the unmoved mover, as Nikulin (2003), 187 seems to suggest:

> Only if justification of the existence of the prime mover, in which Proclus closely follows Aristotle, is the ultimate purpose of the whole treatise, can it be explained why the treatise has the form that it has […].

[84] Cf. also Simplicius *In Phys*. 1117.5–12,1359.5–9.
[85] This is especially the case in *ET* §14 and §20; cf. ch. II.
[86] Cf. ch. IV 2.

Clearly, the reader is supposed to grasp basic doctrines of Aristotle's theory of motion. In this way, the proof of the unmoved mover's existence as well as the accessible and comprehensive presentation of Aristotelian kinematics are Proclus' twin concerns in *EP*.

2.2. Exegetical Background

Proclus' *EP* did not arose out of thin air. Rather, the treatise is the product of an – overwhelmingly, but not exclusively, Platonist – exegetical tradition on Aristotle's *Physics* and *DC*. To some extent, Proclus follows in the footsteps of his master Syrianus who wrote commentaries on both works.[87] The main studies on *EP* are mostly silent on its exegetical context. While Nikulin (2003) says almost nothing about the exegetical background of the work, already Ritzenfeld (1912) in his commentary had pointed to some overlaps with Simplicius. Unfortunately, the latter did not further develop these findings. Most recently, Opsomer (2020b) has taken up Ritzenfeld's lead, emphasising the similarity between Proclus and Simplicius:

> [S]everal close parallels with Simplicius' *Commentary on the Physics* can only be explained by the fact that both works belong to the same tradition of commentary and exegesis (it cannot be excluded that Simplicius read Proclus' text, but that is impossible to prove). (84)[88]

While Opsomer is content in his article to point out a few similarities between Proclus and Simplicius with regard to specific passages, I attempt in the following to go beyond this by explaining how a common exegetical tradition shaped the content and form of *EP*. This rather general background which transcends more specific parallels should not be underestimated, as it allows us to situate *EP* in a certain context and to shed light on some of its striking features, such as the combination of *Physics* and *DC*. Let us briefly consider the exegesis of Aristotle's *Physics* and *DC* in Neoplatonism.

In regard to the *Physics*, it is only with Neoplatonism that it achieves its status among Platonists as one of Aristotle's most significant works.[89] Plotinus makes copious references to the work and engages with it critically, adopting some of its basic concepts, while simultaneously putting emphasis on the physical world's dependence on metaphysical principles. The latter claim is seen to be – to certain degrees at least – at

[87] For a collection of fragments, cf. Cardullo (2000).
[88] Cf. also ibid., 95.
[89] As Chiaradonna (2021), 164 remarks: 'Before Plotinus, Aristotle's *Physics* shines, so to speak, for its absence in Platonist debates'. For the rich exegetical background of Simplicius' *In Phys*., cf. Golitsis (2008), 65–79; Menn (2022b).

odds with Aristotle.[90] His successor Porphyry was the first Neoplatonist to engage in proper Aristotelian exegesis, as evidenced by his commentary on the first four books which were known in antiquity as Περὶ ἀρχῶν.[91] After Alexander, he is the most important source in Simplicius' *In Phys*.[92] Most importantly, however, it seems that Porphyry also wrote a summary (σύνοψις) of the last four book known as Περὶ κινήσεως.[93] This summary[94] was, I believe, in a certain regard a precursor of Proclus' *EP* since we find already there the idea of summarising the theory of kinematics of the last books of the *Physics* (although Proclus focused only on books VI and VIII).[95] Porphyry's 'agenda' in the summary thus proved influential. But since no fragments survive it is impossible to establish the exact relationship between these works. Given that Proclus arranges his treatise as a στοιχείωσις I assume that the presentation and formal structure of the two works differed significantly but not, however, the fundamental idea of presenting the content in a succinct and accessible manner.

Moving on to *DC*, it can be established that, while it never acquired the prominent role of *Physics* among the Neoplatonists, it garnered significant attention. Again, Plotinus seems to have played a key role in popularising *DC* by making extensive use of some of its central doctrines, especially in II.1–2.[96] At any rate, he influenced Proclus who cites Plotinus' interpretation of *DC* (e.g. *In Tim*. 237.22–27). Moreover, Proclus was

[90] Cf. Chiaradonna (2021), 170f. See my discussion of Proclus' *In Tim*. I 6.21–7.16 in the Introduction.
[91] Besides Porphyry (*ap*. Simplicium *In Phys*. 802.7–13), this division of *Physics* is adopted by Simplicius (*In DC* 226, 19f.), Philoponus (*In Phys*. 2.15–17; 3.7–10), and Olympiodorus (*In Meteor*. 7.12ff.). Nevertheless, at *In Phys*. 4.11–16, 6.4–10, 801.13–16, and 923.7f. Simplicius claims that only books VI–VIII are one continuous treatise Περὶ κινήσεως, while I–V form Περὶ ἀρχῶν. According to him, this division was upheld by Andronicus and Theophrastus (*In Phys*. 923.8–10), although the latter merely states that book V belonged to *Physics*. At any rate, this confusion between a 4+4 or 5+3 division probably arose from the later addition of book VII – which was initially an independent treatise – to *Physics*. Thus, originally, the three books V, VI, and VIII formed Περὶ κινήσεως. Given that *In Phys*. is usually dated after *In DC* (cf. Golitsis 2008, 18 n. 38), it seems that Simplicius has changed his mind at some point after *In DC* and adopted the 5+3 division of the books of *Physics*. Generally, on this contentious issue, cf. Ross (1936), 1–7.
[92] Cf. Menn (2022b), 28ff.
[93] For references cf. Themistius *In DA* 16.19–31 (who himself produced extant paraphrases of *Physics* and *DC*) and Simplicius *In Phys*. 802.7–13. On Porphyry's exegetical work on *Physics*, cf. Karamanolis (2006), 270–287.
[94] To what does such a σύνοψις amount? Moraux (1985), 232 explains: 'L'auteur se bornait à indiquer sommairement la marche des idées, à rappeler les thèses essentielles et à résumer en quelques mots les arguments présentés en leur faveur. Sans doute un pareil 'aperçu' était-il plus bref encore qu'une 'paraphrase' […]'. Cf. also Chiaradonna (2021), 176.
[95] Presumably, Proclus does not use book VII because he thinks it is not conducive to the argument he sets up due to its overlaps with book VIII. Hence, he prefers to jump from book VI to VIII – a reading that is quite natural given that the end of VI fits to the beginning of VIII.
[96] On the Aristotelian background of Plotinus' cosmology, cf. Wilberding (2006), Introduction.

acquainted with the Peripatetic works on *DC*, as his knowledge of e.g. Xenarchus shows (*In Tim*. I 425.22). While he himself never wrote a commentary, it is clear from the numerous references in Simplicius' *In DC* – the only fully extant commentary on the work – that he commented on some passages in detail, probably insofar as they were in tension with Platonic doctrine (especially *DC* III.7–8).[97] These seem to have been part of Proclus' early *Investigation of Aristotle's Objections to the* Timaeus (see ch. II).

This exegetical tradition accounts for some of Proclus' choices in respect to the form and content of *EP*. Most importantly, Proclus regards the prime mover in *Physics* VIII as being consistent with the elemental theory of the cosmos' circular motion in *DC* – a claim which has been contested in more recent scholarship. This agreement of both works is not a Proclean innovation. In fact, according to Simplicius (*In DC* 3.9f., 5.35–38), all ancient exegetes agreed that *DC* followed *Physics* – based on Aristotle's own claims at *Meteor*. I.1 – and complemented its account.[98] Thus, both treatises essentially expressed the same doctrine which is in line with the Neoplatonists' systematic understanding of Aristotle.[99]

From a modern perspective, this position is shaky at best, as many scholars not only tend to assume a development between *DC* and *Physics* but also an irreconcilable difference between the two.[100] This developmental interpretation is so widespread that it is simply called 'the traditional view' by Judson (1994), 155. According to this reading, the unmoved mover is absent in *DC*.[101] Instead, the circular motion of the heaven in *DC* I–II is self-caused and, hence, a type of self-motion. As such the heaven's motion requires no further explanation and is causally responsible for all other manifestations of motion in the cosmos. This position would be then rejected in *Physics* VIII where Aristotle asserts that self-motion *stricto sensu* is impossible and that the motion of the heaven must be ultimately caused by an external, separate unmoved mover. In a next stage the theory of

[97] Cf. also Rashed (2007), 255–262 on scholia on *DC* which refer to Proclus' critique.
[98] This is due to the – at times – obvious dependency of *DC* to *Physics*, as apparent in the discussion of continuity in *DC* I.1 which is clearly connected to *Physics* VI. Moreover, Aristotle often explicitly refers back to *Physics* in *DC*; cf. Guthrie (1939), xxviii.
[99] Cf. David/Elias *In Cat*. 123.7–9: δεῖ αὐτὸν πάντα εἰδέναι τὰ Ἀριστοτέλους, ἵνα σύμφωνον δείξας τὸν Ἀριστοτέλην ἑαυτῷ τὰ Ἀριστοτέλους διὰ τῶν Ἀριστοτέλους ἐξηγήσηται.
[100] Classic accounts of this stance are found in Ross (1936), 94–102 and Guthrie (1939), xv–xxvi (who nevertheless emphasises that *DC* can be reconciled with the doctrine of an unmoved mover). Building on these authors, Judson (1994) defends a developmentalist view.
[101] Accordingly, apparent references to the unmoved mover can be interpreted otherwise, while actual ones are simply later additions which bear no significance for the main doctrine of *DC*. Cf. Guthrie (1939), xxi–xxv.

the unmoved mover is further elaborated in *Met*. Λ 6–10, especially in regard to the unmoved mover's causality.[102]

The Neoplatonists were neither oblivious to discrepancies in or between Aristotle's works – arguably this is the main reason for writing commentaries – nor were they completely immune to developmentalism. Simplicius, for instance, is happy to admit that *Physics* VII likely represents an earlier stage in Aristotle's writing of *Physics* (see below).[103] Yet, at the same time their systematic fervour is strong and they maintain that Aristotle has a consistent stance and a uniform doctrine. That the unmoved mover of *Physics* VIII is ultimately responsible for the circular motion of the heaven as outlined in *DC* I seems obvious to Proclus in *EP*, where he combines doctrines from both works and stresses that there needs to be an unmoved principle as cause of the heaven's motion (§II.19).[104] The same goes also for Simplicius who claims that the unmoved mover is referred to in *DC* (*In DC* 271.5–21) and, thus, part of Aristotle's doctrine there. The interest in systematicity is especially pronounced in Proclus' *EP* since the main motivation was to offer a succinct summary of Aristotle's theory of motion for beginners. Thus, the form and goal of the treatise do not permit elaborate or subtle discussions of the relationship between *Physics* VI and VIII as well as between *Physics* VIII and *DC* I.

Although *DC* I is a constitutive element of *EP* II, where almost all principles (i.e. 12 of 14) and two-thirds (i.e. 14) of the theorems are based on it, it remains unclear why it is used so extensively there.[105] Focusing just on *Physics* VIII seems to be the more natural option, given that one purpose of *EP* is to prove the existence of the unmoved mover. This is evidenced also by Simplicius who in commenting on *Physics* VIII makes a few passing references to *DC* without dwelling on its arguments. I suggest that Proclus integrates the *DC* material for two main reasons. On the one hand, the form and the issues of *DC* I coincide significantly with those of *Physics* VI and VIII. Formally, *DC* I includes many arguments written in a mathematical style just like *Physics* VI and, to a lesser degree, *Physics* VIII.[106] In regard to content, there are also important overlaps. For instance, Proclus takes Aristotle's proof from *DC* I.6 that infinite bodies (would) have

[102] For an interesting but on the whole less convincing critique of this interpretation, cf. Kosman (1994).
[103] *Pace* Guthrie (1939), xxi who claims that Simplicius is 'innocent of development-theories'.
[104] While this explains the relationship between *DC* I and *Physics* VIII, the position of *Met*. Λ in regard to these two still requires clarification. For a discussion, cf. ch. IV.
[105] For a more detailed answer to this question, cf. Marinescu (forthcoming).
[106] On the similar argumentative structures in these works, cf. section 3 of this chapter.

infinite powers in *EP* §II.7 and then adds as a following proposition 'finite bodies have finite powers' based on *Physics* VIII.10. More generally, while *DC* establishes the circular motion of the cosmos, *Physics* VIII tackles the problem of the eternity of that motion as well as its origin. On the other hand, I want to emphasise that Proclus' apparent intention was to give his audience a suitable overview of Aristotelian kinematics. This pedagogical element of comprehensiveness and accessibility guides Proclus. Given the significance of theories of simple motion, the cosmos' circular motion, and the cosmos' finitude in antiquity, it is less surprising that Proclus turned to *DC* I where these issues are extensively dealt with. Due to the assumed doctrinal coherence between the two works it seemed quite natural to Proclus to combine material from *DC* I with *Physics* VI/VIII.

Thus, starting from the very idea of writing a summary of Aristotle's kinematics to the combination of the material, Proclus' *EP* has been shown to be significantly dependent on a long commentary tradition. This impression will then be substantiated by the content of the treatise in section 3. In the following, I analyse more closely how Proclus' own views shaped what he *excluded* from *EP*.

2.3. Proclus' Editorial Choices

While remaining relatively close to the original, Proclus also leaves out crucial discussions from the two Aristotelian treatises. More contentious issues such as self-motion (see chapter II) or the precise nature of the fifth substance/element are not part of *EP*, although they are, in fact, extensively treated by Aristotle in *Physics* VIII and *DC* I. Since Proclus stops including material from *DC* I.8 onwards, he makes mention neither of Aristotle's arguments for the uniqueness of the cosmos at *DC* I.8–9 nor of his lengthy elaboration at *DC* I.10–12 on the terms '(un)generatedness' and '(in)destructibility' which was clearly directed at Plato. Notably, these issues are dealt with elsewhere, especially in his now lost *Investigation of Aristotle's Objections to the* Timaeus and in *In Tim*. which preserves some of Proclus' objections.

Since scholarship has mostly overlooked these omissions in *EP* and the discussion of these issues elsewhere, the relationship between *EP* and other Proclean works appears somewhat obscure. Although Nikulin (2003), 190 and Opsomer (2009), 195f. n. 32 discuss the case of self-motion, they otherwise offer no analysis of why Proclus omits other topics and what this, in turn, tells us about *EP* and its connection to other writings.

This is the first attempt at offering a more comprehensive discussion of this relationship. How is *EP* connected to other Proclean treatises and what relevance does it have for them? Is the doctrine of *EP* really an 'integral part of [Proclus'] physics' (Opsomer 2009, 193)? As I demonstrate in this section, Proclus presents to the student in the introductory *EP* those parts of Aristotle's kinematics that can be embraced by a Platonist, while simultaneously leaving out more controversial and complex passages. However, in more advanced works such as *In Tim.*, he points out the limitations of some of the doctrines in *Physics* VIII and *DC* I, and even the tension between them and the correct Platonist teachings. This will be shown by evaluating the evidence on the nature of the heaven (2.3.1) and its ungeneratedness and indestructibility (2.3.2) in *EP* and *In Tim*.

Before I consider the examples, it is worth bearing in mind that this procedure of subordinating Aristotle to Plato fits Proclus' more general views on their relation. As I have shown in my discussion of the prologue of *In Tim*. (I 6.21–7.16), Proclus explains that Aristotle's natural philosophy is inferior to Plato's since the former imitated the latter in his physical works but focused too much on material explanations. Proclus mentions Aristotle's discussion of motion and its origin favourably which explains why he summarised it in *EP* (6.25f.). Most importantly for my current purposes, Proclus states here that Aristotle agrees with Plato on the heaven's ungeneratedness and the fifth substance (6.31f.). The impression we get from this passage is one of agreement on some central issues but negligence in studying them properly due to Aristotle's non-metaphysical approach to them.

2.3.1. The Fifth Element

Let us first consider Proclus' treatment of Aristotle's claim that the heaven is constituted of a distinct fifth element (e.g. *DC* I.2 269a13–18). Surprisingly enough, Proclus makes no reference to this in *EP*. Instead, he employs the intentionally vague expression τὰ κύκλῳ κινούμενα when referring to the heaven (e.g. §§II.1–2, §II.5.). At no point does he identify τὰ κύκλῳ κινούμενα with a distinct, fifth element, aether, as Aristotle does in *DC* I.3, although he offers an extensive list of characteristics such as bodily simplicity (*EP* §II.1), difference from bodies moving with rectilinear motion (§II.2), or lack of weight and lightness (§II.3). Why does Proclus leave out its elemental constitution which plays an important role in *DC*? While one reason for choosing this expression is certainly the

kinematic context of *EP*, I argue that the main motivation for this omission is made manifest in Proclus' *In Tim*. As Proclus demonstrates there, he disagrees with Aristotle on the heaven's constitution – just as numerous Peripatetics and Platonists did before and after him.[107] In this way, the conciliatory attitude of *EP* where less controversial features of the heaven are listed can be contrasted with some passages in *In Tim*. where Proclus strikes a different tone in reference to Aristotle's elemental theory. Proclus explicitly criticises the Stagirite's concept of a fifth element:

> [Objection] But perhaps the marvellous (θαυμαστός) Aristotle will contest our account by positing that not all visible things are so through participation in fire (πᾶν τὸ ὁρατὸν πυρὸς μετουσίᾳ), for the chorus of stars and the mighty sun itself are not [in his view] things composed of fire even though they are visible.
> [Response] But one might respond to him by saying that enmattered (ἔνυλον) fire is one thing but immaterial (ἄυλον) fire is another – that is, it is immaterial because compared to the matter of the things in the sublunary sphere it is immaterial – and the one kind is destructible (φθαρτόν) while the other is indestructible (ἄφθαρτον). While one kind is mixed (συμμιγές) with air, the other is pure (καθαρόν). And generally speaking, because fire has many forms (πολλὰ εἴδη), perhaps Aristotle will concede to this account and listen to the theologians (*Or. Chald*. 60) who call the sun 'fire, channel of fire' and 'dispenser of fire' and all other such names. (II 9.7–18; tr. Baltzly)

Proclus here turns to Aristotle's claim that the visibility of the stars and heaven is not due to their composition of fire, but, we are to add, due to being composed of aether – the fifth element.[108] This view is wrong according to Proclus. In fact, Proclus responds, the element of fire differs in the sublunary sphere from the fire in the heaven, since there are different forms of fire (πολλὰ εἴδη πυρός). That is, the element of fire has different gradations, depending on whether it is part of the sublunary sphere or of the heaven. Not only is the fire of the heaven indestructible (ἄφθαρτον) and in a certain sense immaterial (ἄυλον),[109] but it is also pure (καθαρόν). Hence, the stars and the heaven are in part made up of this pure and superior form of fire. Proclus then recommends to Aristotle – in an almost comical way – to consider the sayings of the 'theologians', i.e. the *Chaldeaen*

[107] Cf. Proclus' criticism of Aristotle's theory of aether at *In Tim*. II 9.7–27, his doxography at II 42.9–44.24, and the summary of his own position at II 49.12–50.32. Proclus accepts that the cosmos has a simple motion at *In Tim*. II 43.20 which clearly connects it to *EP*. For a comprehensive discussion of Proclus' objections, cf. Baltzly (2002). It is noteworthy that Philoponus produced a scathing attack on the theory of aether; cf. Wildberg (1988). For the critical views of Aristotle's successors, Theophrastus and Strato, as well as of the first-century BC Peripatetic Xenarchus, cf. Falcon (2001) ch. III and also Baltzly (2002), 267–271. While Theophrastus' position is difficult to reconstruct, Strato definitely rejected the concept of a fifth element (fr. 85 Wehrli). On the Neoplatonists, cf. Cardullo (2009), 99–114. Atticus also polemicised against Aristotle on this issue; cf. fr.s 5–6.
[108] Aristotle claims this at *DC* II.7. Important is also *Meteor*. I.3 where he generally rejects the view that the heaven is made up of fire.
[109] Cf. *In Tim*. II 10.3–7.

Oracles, who back up Proclus' and Plato's view of the elemental constitution of the heaven.

Objections like these amount later in the commentary to an explicit rejection of the fifth element, based on Proclus' exegesis of *Tim.* and more general reflections.[110] For instance, Proclus points out the problem of explaining the diversity of appearances when positing only one element as constitutive of the heaven: some parts of the heaven are transparent, others solid or luminous etc. (*In Tim*. II 43.20–44.18). Aether could not account for these different phenomena. According to Proclus, the heaven, including the stars and planets, is made up of a purer or higher form of the four sublunary elements with fire predominating (II 49.2). He thus rejects Aristotle's assertion of a distinct and unmixed fifth element.

However, this does not mean that Aristotle was completely wrong in Proclus' eyes since he correctly pointed out that the heaven's substance does differ significantly from the four sublunary elements. In this way, even Proclus accepts talk of a fifth substance, insofar as the term refers to the purity and specific combination of the four elements in the heaven:

> Therefore, the heavens are a fifth substance (οὐσία) besides these four elements, since it is a combination from the simple elements. For in the heavens the elements are not the same [as they are here] but are rather the highest forms of them and the four elements of all things are unmixed and are bounded in relation to one another by their appropriate forms (*In Tim*. II 49.25–29 tr. Baltzly)[111]

It is in this specific sense that Plato and Aristotle are in agreement according to Proclus, as he states at *In Tim.* I 6.31f.: [Aristotle] τῷ Πλάτωνι συμφώνως, καθόσον ἀγένητον τίθεται τὸν οὐρανὸν καὶ πέμπτης οὐσίας.

From this presentation of Proclus' complicated discussion in *In Tim*. it emerges why Proclus decided to stick to the superficial term τὰ κύκλῳ κινούμενα in *EP* instead of outlining his own elemental theory and complex views on what Aristotle precisely gets right or wrong. While the latter discussion goes beyond the limited purpose of *EP*, it is necessarily complementary to it as it shows us how the characteristics of the heaven

[110] Cf. *In Tim*. II 43.9ff.: ἀλλ' εἰ μὲν ἄλλο τὸ στοιχεῖον ἐκεῖνο παρὰ τὰ τέσσαρα, πῶς φησιν ὁ Πλάτων ἐκ τῶν τεττάρων εἶναι τὸν ὅλον κόσμον; As Baltzly (2002) points out, this argument from authority is buttressed by more general reflections.

[111] Simplicius maintains that this purer combination can be regarded as a 'fifth element' and thus sees Plato and Aristotle, as usual, in harmony. Cf. *In DC* 12.28ff., 16.20f., 66.33–67.5, 85.7–15, 130.31–131.1 *et passim*.

established in *EP* are further elaborated in a more advanced work on Plato. In this sense, one can establish a continuity between these two works.

2.3.2. Ungeneratedness and Indestructibility

Besides Aristotle's treatment of the elemental nature of the heaven, Proclus also leaves out in *EP* the discussion of *DC* I.10–12 about the notions of '(un)generatednes' and '(in)destructibility'. This is in spite of his adoption of Aristotle's insight that τὰ κύκλῳ κινούμενα are ungenerated and indestructible (§II.5).[112] Aristotle's discussion was in part directed at Plato's *Tim.*, as he makes explicit (*DC* I.10 280a27–32). The Stagirite understands *Tim.* as proposing simultaneously a temporal generation *and* indestructibility of the cosmos.[113] This is absurd, Aristotle maintains, as every generated being has the potentiality to be destroyed or to perish and it is impossible for this potentiality not to be realised in an infinite stretch of time. Again in *In Tim*., Proclus shows us what he really thought about Aristotle's analysis by objecting to it in at least two passages (I 252.11–254.18; 295.27–296.12).[114] I briefly discuss the second one which is part of a larger section (294.28–296.12).

In this substantial section, Proclus contrasts Plato and Aristotle and points out their differences, while simultaneously showing that they do not conflict with each other at least in this respect: καὶ ταύτῃ γε οἱ ἄνδρες **οὐ μάχονται**, **διαφέρουσι** δ' ὅμως […] (294.28f.).[115] He goes on to say:

> Since the splendid (δαιμόνιος) Aristotle copiously prattles all over the place (ἄνω καὶ κάτω θρυλῶν) about the reciprocations of the generated and the destructible and of the ungenerated and the indestructible, we should remind him that much earlier Plato too agrees with these fundamental propositions (τοῖς ἀξιώμασιν) when he writes in the *Republic* on the one hand that 'for everything that has come into being destruction follows', and in the *Phaedrus* on the other that what is ungenerated is also immortal.[116] How, then, is it possible that he [Plato] would ascribe generation to the universe and not introduce destruction [for it] as well, or that he would ascribe destruction to that which is moving in a disharmonious and disorderly manner without also giving it generation

[112] In §II.5 Proclus takes over Aristotle's claim (*DC* I.3 270a14–22) that generation and destruction imply changing from one opposite to another – which is impossible for the heaven since it has no opposite due to its circular motion.
[113] On this most controversial question of ancient Platonism, cf. Baltes (1976–8) I and II who collects and discusses the relevant passages from the Old Academy to Proclus. For the latter, cf. Roth (2006). An excellent summary of this debate in Middle Platonism with a helpful bibliography is provided by Boys-Stones (2018), 184–211.
[114] Cf. Baltes (1978) II, 3–7, 66–73.
[115] Likewise, Proclus maintained earlier: δοκεῖ δέ μοι **διαφερόντως** ἐν τούτοις ὁ Ἀριστοτέλης τὸν δεύτερον **αἰτιάσασθαι** λόγον […] (252.11f.). On the latter, cf. Baltes (1978) II, 3–7.
[116] This claim is repeated at II 9.26ff.

> before its destruction? But in actual fact he has devised for the universe [a form of] generation which was different and has adapted [a form of] everlastingness [for it] which was appropriate for the manner of its generation. (*In Tim*. I 295.27–296.12; tr. Runia)

Proclus' strategy in defending Plato against Aristotle is as simple as it is common: Aristotle was not an attentive reader of Plato. The latter already pointed out in earlier works, namely in *Resp.* and *Phdr.*, that generation implies destruction just as ungeneratedness implies indestructibility.[117] Since the cosmos is corporeal and generated – albeit not in time like sublunary beings but rather in the sense of having an external cause[118] – it is essentially destructible. However, as Proclus clarified earlier (294.9–28), through the demiurge's providence the cosmos acquires its eternal existence. Thus, Proclus claims that in one sense the cosmos is generated and destructible, i.e. by being dependent on a cause and corporeal, while in another it is not, i.e. by not being generated in time and by being kept in eternal existence by the demiurge.

The tone of the passage is rather condescending towards Aristotle, as particularly the expression ἄνω καὶ κάτω θρυλῶν and the reminder ὑπομνηστέον of Plato's works prove. I thus disagree with Baltes (1978) who calls this dispute 'sehr höflich' (70). Proclus' use of δαιμόνιος in addressing Aristotle – as above θαυμαστός (II 9.7) – has also an ironical tinge.[119] Proclus seems to be interested here to show that Aristotle and Plato are actually in agreement on the reciprocal implication of ungeneratedness and indestructibility, as he makes clear here with the expression συγχωρεῖ, in *In Tim*. I 6.31f., and in endorsing Aristotle's view on this issue in *EP* §II.5. Nevertheless, he does not shy away from maintaining that Aristotle *misunderstood* Plato. This is made clear by the tone of the passage and, especially, by the rhetorical question asked at 296.5ff.

Proclus' attitude can be contrasted with Simplicius' who in his comments on *DC* I.10–12 is at pains to point out that Aristotle did not, in fact, misunderstand and criticise Plato, as Proclus and Alexander suggested, but objected only to a superficial and fallacious reading of *Tim.*:[120]

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[117] Hermias makes the same point and emphasises that Aristotle demonstrated this too at *In Phdr*. 122.30–123.10.

[118] On the two types of generation, cf. *In Tim*. I 253.16–22, 287.18–23. It seems that the basic meaning of being generated is having a cause: πᾶν τὸ γενητὸν ἀπ' αἰτίας γίγνεται. τὸ μὴ ἀπ' αἰτίας ὑφεστὸς οὐκ ἐστι γενητόν (*In Tim*. I 236.23f.). Proclus regards this as one of five basic principles of Plato's natural philosophy.

[119] Cf. n. 38.

[120] Cf. also Simplicius *In Phys*. 1359.38–1360.17, esp. 1359.38ff.: 'But this wonderful man [Aristotle] seems to me clearly to refuse to apply the term 'generation' to eternal things, because the imagination easily suggests a temporal origin for the things that are said to be generated' (tr. McKirahan). Simplicius maintains

> Aristotle's objections affect neither the theologians nor Plato, but rather those who interpreted the doctrines of the ancients in such a way as to suppose that, while the world was generated at a particular time, it was none the less indestructible. This is really absurd and well refuted by Aristotle. (*In DC* 296.26–30; tr. Hankinson)

Although Proclus and Simplicius both effectively endorse and were influenced by Aristotle's teaching on this issue – albeit with certain qualifications – they disagree on whether or not Aristotle actually meant to criticise Plato. This is a significant difference between Proclus' and Simplicius' approaches to Aristotle which is encountered often in their reactions to Aristotle's criticisms of Plato.[121] Moreover, Proclus even points out that there is a certain danger emanating from Aristotle's discussion in *DC* I.10–12, as people might be misled into believing that Plato actually does not regard the cosmos as eternal.[122] This, again, makes clear why the discussion of the cosmos' (un)generatedness was kept to a bare minimum in *EP*.

Proclus' and Simplicius' view can be contrasted with earlier Platonists, such as Plutarch (*De An. Procr*. 1013D–1017C; *Plat. Quaest*. IV) and Atticus (fr. 4 7, 41f.), who were less influenced by Aristotle and had no qualms with holding the view that the cosmos is temporally generated *and* indestructible.[123] A view that Proclus and Simplicius reject based on their Aristotelianised reading of *Tim*. Proclus subjects both to criticism in *In Tim.* (esp. I 276.31–277.7, 381.16–382.12) for their doctrine of the cosmos' temporal generation (I 277.1: κατὰ χρόνον τὴν γένεσιν). I discuss similar examples, such as the relationship of the unmoved mover and self-mover and the nature of self-motion in the next chapters. There too it emerges that the Middle Platonists were less knowledgeable of Aristotle's doctrines and his objections to certain Platonic views. This clearly shifts with the Neoplatonists who not only integrate Aristotle's teaching much more consistently into the Platonist system than before, but also take Aristotle's criticisms

like Proclus that the cosmos was generated outside of time. For a discussion, cf. Golitsis (2017), 219. On Simplicius' harmonisation of *DC* with *Tim*., cf. Guldentops (2005); Hoffmann (2012); Gavray (2018).

[121] For a more comprehensive analysis, cf. ch. III 4.2.

[122] Cf. *In Tim*. I 286.20f.: 'It is therefore not the case that Plato destroys the everlasting nature of the universe, as some think who have followed the basic principles of Aristotelianism (Ἀριστοτελικαῖς ὑποθέσεσιν)'. At *In Met*. 80.21ff. Syrianus makes the more general point that unsophisticated students might be led astray by Aristotle's criticisms of Plato

[123] Cf. Baltes (1976) I, 38–69. Besides these two, Boys-Stones (2018), 187f. (following Baltes 1976 I) also mentions Harpocration and Philo as endorsing the view that the cosmos is temporally generated.

against Plato more seriously.[124] How they deal with these criticisms differs however, as seen in the case of Proclus and Simplicius.

2.3.3. Conclusion

What do these two passages from *In Tim*. tell us about Proclus' use of *DC* in *EP*? Above all, they exemplify how Proclus in *EP* makes a conscious choice as to what is – and what is not – worth summarising in an introduction to Aristotelian kinematics. In his adoption of the Aristotelian material, Proclus leaves out certain issues which he either rejects (e.g. the fifth element as an unmixed distinct element) or cannot properly address (e.g. the precise meanings of the terms 'ungeneratedness' and 'indestructibility') in a work such as *EP*.[125] It would be less useful and even counterproductive to include in *EP* doctrines which Proclus views critically and which require further qualification from a Platonist view. This emphasises the introductory character of *EP* which is not suited for more subtle discussions and, hence, limited in its explanatory power. But, on a more fundamental level, it also points towards the limitations of Aristotle's own works, as Proclus believes that his natural philosophy is in important regards inferior to Plato's (*In Tim*. I 6.21–7.16). Instead, *EP* offers the student a foundation from which she can later progress to intricate issues which are treated in their proper context (e.g. in the commentaries on Plato).

For instance, in *EP* Proclus establishes that τὰ κύκλῳ κινούμενα κατὰ φύσιν, i.e. the cosmos, is ungenerated and indestructible (§II.5), based on an argument from *DC* I.3 270a12–24. While Proclus embraces this insight, it clearly needs to be qualified, as the cosmos is in an important sense generated and destructible as well, as seen. Such an explanation, however, falls outside the limited scope of *EP* and is presented in his commentary on *Tim.* which was the penultimate dialogue in the Platonic part of the Neoplatonist curriculum. Another example is the eighth proposition from book II 'Powers of bodies which are finite in magnitude are not infinite' (i.e. finite bodies have finite

[124] Already Atticus claims that 'Aristotle seems to have influenced them [i.e. other Platonists] to shift their position as well: they could not meet his criticism of Plato's doctrine, and didn't want to impute to Plato a doctrine shown to be wrong' (fr. 4 6, 32–35; tr. Boys-Stones).

[125] In the latter camp falls also Aristotle's arguments for the uniqueness of the cosmos (*DC* I.8–9). While Proclus leaves them out in *EP*, he references a part of the argumentation at *In Tim*. I 455.15–29. But there Aristotle's discussion is just a corollary and an addition to Plato's superior argument for the cosmos' uniqueness based on the paradigm (455.29–456.5).

power).[126] Again, in *EP* Proclus makes use only of the Aristotelian arguments, but in the advanced *In Tim*. he further backs it up with Platonic doctrine (e.g. I 267.12ff, 279.7ff, 295.3ff., II 123.2ff., 124.12f).[127] This procedure of deepening or qualifying certain basic doctrines resembles the relationship of his other στοιχείωσις, *ET*, with *In Parm.* and *PT*.[128] In the latter two, teachings from *ET* can appear quite differently and much more elaborate. Just as in the case of *EP*, the reason is, of course, the introductory character of *ET* and the more advanced nature of the other treatises.

3. Form and Method of EP

The selection of the content clearly illuminated Proclus' exegetical background and own views. But what about the form and the method of *EP*? Proclus chose three models in devising these: (a) Euclid's *Elements*, (b) Aristotle's *APo*, and (c) *Physics* and *DC*. Proclus consciously followed these in order to achieve a high degree of systematicity and accessibility in presenting the material. While the impact of (a) and (c) has been well-established,[129] the influence of (b) has not been properly investigated. Opsomer (2021), 138 already made clear that Aristotle played an important role: 'Contrairement à ce que l'on suppose d'habitude, Proclus a eu au moins *deux* sources d'inspiration' [i.e Euclid and Aristotle]. My aim in this section is to further develop this insight by considering the Aristotelian background – with emphasis on *APo* –, of Proclus' axiomatic method in *EP*.[130] Although Proclus already encountered in *Physics* VI – to a certain degree at least – an application of this method, he followed Euclid's example as well as the general scientific theory of *APo* to further axiomatise the text. Establishing the precise origin of Proclus' axiomatics helps us understand the history of this method, as Proclus was the first to write completely axiomatised works on physics and theology, i.e. metaphysics.[131]

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[126] In his use of δύναμις Proclus distinguishes between power and potentiality (*ET* §78–79); cf. p. 109. While the cosmos *qua* finite magnitude has a finite power, it has at the same time an infinite potentiality to come to be: 'everything that always comes to be has an infinite potentiality of coming to be' (§85). This is necessary for it in order to exist for an infinite time and to receive the infinite power from the intellect.

[127] Proclus praises Aristotle for demonstrating 'in a clear and noble fashion (σαφῶς καὶ γενναίως), [that] no body that is limited has unlimited power' (*In Tim*. I 253.9ff.; tr. Runia). Cf. ch. IV 3.3.3.

[128] As Opsomer (2021) shows, *PT* III.2 builds clearly on *ET*.

[129] Cf. Martijn (2014), 146; Opsomer (2020b).

[130] On Proclus' method in *EP* more generally, cf. also O'Meara (1989), Nikulin (2003), 193f. and Netz (2017), 386ff.

[131] Cf. Opsomer (2020b), 85, 96. For the specific background of *ET*, cf. Opsomer (2021). Although unmentioned by Opsomer, already Alexander in his commentary on *Met*. B and Γ conceived metaphysics (i.e. the science of being *qua* being) as a demonstrative science based on axioms. On this, cf. Bonelli (2010).

Crucially, he was later to be followed in these two domains by Newton and Spinoza. Before I discuss the Aristotelian influence, it is necessary to mention briefly the Euclidean background.

3.1. Euclidean Influence

In naming his work στοιχείωσις, Proclus already provides us significant cues about his intentions. In one sense, Proclus uses in his title the term στοιχείωσις in the more general meaning of 'introductory handbook' or 'summary' of a certain philosophical subject.[132] Works like these included a systematisation of elementary doctrines – just like Proclus' *EP* and *ET*.[133] More importantly, however, Proclus specifically alludes to the Στοιχεῖα of the mathematician Euclid whose geometrical-axiomatic method he formally adopts in his presentation.[134] Euclid's work is part of a genre of mathematical literature with strict formal and methodological characteristics.[135] Proclus associates himself consciously with this genre and adopts its conventions. His acquaintance with Euclid's works is exemplified by his commentary on Euclid's *Elements I* (*In Eucl.*) which supplemented his teaching activity in mathematics.[136]

To put it simply, a mathematical στοιχείωσις or στοιχεῖα – there is no clear terminological distinction[137] – contains besides certain preliminary principles, which will be discussed below, several elements (στοιχεῖα).[138] These στοιχεῖα are most basic theorems, from which further theorems or propositions are deduced. The different propositions form discrete (i.e. linguistically not directly connected) entities and are presented in a standardised and impersonal language. As pointed out by Asper (2007), 114–134 these three characteristics of discreteness, standardisation, and impersonality are the main stylistic features of the genre and are found in *EP* (as well as *ET*).

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[132] The Greek ending -ωσις indicates an activity or process for which I am unable to find a suitable English equivalent. Latin *elementatio* and German *Grundlegung* come close to it.
[133] For references to such philosophical works, stretching back to Epicurus, cf. Hatzimichali (2011), 73–75; Opsomer (2020b), 85f.
[134] On the Euclidean influence on *EP*, cf. Martijn (2014) and Opsomer (2020b).
[135] On the characteristics of 'Elementarliteratur' and its origins in the fifth century BC in Greece, cf. the authoritative work of Asper (2007), esp. 94–212.
[136] On *In Eucl*., cf. Hartmann (1909); Heath (1956), 29ff.; Morrow (1970). O'Meara (1989), 156–209 stresses Proclus' dependence on Iamblichus in his commentary. Proclus also discusses the geometrical method briefly in *PT* I.10, 45.20–46.2.
[137] This is evidenced by Proclus' reference to Euclid's *Elements* as στοιχείωσις (*In Eucl*. 74.11).
[138] For Proclus every science is divided into two parts, one being concerned with the principles, the other with what arises from these principles (*In Eucl*. 200.22–201.3).

As Proclus emphasises at *In Eucl*. 71.13–17, the theorems of a στοιχείωσις must be ordered according to their *simplicity*, *fundamentality*, and *proximity* to the first principles. These most basic theorems are foundational for the development of further theorems in the work. It should be made clear that not all theorems in a στοιχείωσις are στοιχεῖα but only the most fundamental ones which are being 'implicated in them [i.e. theorems] all and providing demonstrations for many conjunctions of qualities' (72.11ff.; tr. Morrow). The other theorems are only στοιχειώδη (elementary) and not relevant for the whole domain of a science.[139] In *EP* it is hard to distinguish between these kinds of theorems, as they are not explicitly marked as such. Presumably, one way of distinguishing them would be to separate theorems that are involved in other theorems from those that are otherwise not used and merely corollaries.

The purpose of a στοιχείωσις, according to Proclus (70.19–71.21), is to offer a systematic presentation of a certain science as well as to present it in an accessible manner to the student.[140] Proclus adopts the features described above to a significant degree in his own στοιχειώσεις, *ET* and *EP*, which – unsurprisingly – share argumentative and terminological similarities.[141]

3.2. Aristotle's Axiomatic Method and Proclus' In Eucl.

There are aspects about Proclus' application of the axiomatic method in *EP* which are absent in Euclid. While Euclid uses the method for mathematics, Proclus employs it in different domains and believes it can be universally used for any science. Moreover, Proclus actively reflects on the nature of the method – a self-consciousness which is missing in Euclid. One can legitimately ask whether these elements are derived from Aristotle. As I argue, Proclus' grounding in Aristotle's *APo* accounts for the universal applicability of the axiomatic method in Proclus by devising a general understanding of what science is and how it should be presented. Its influence on *EP* was decisive – just as Euclid's *Elements* and Aristotle's *Physics* VI–VIII and *DC* I.

[139] There is a third type which fits neither designation and is even less important than the elementary theorems. On this distinction, cf. Kiosoglou (2022), 157.
[140] Opsomer (2020b), 89f. argues convincingly that the latter aspect is more important.
[141] Cf. Kiosoglou (2022), esp. 158.

Proclus' engagement with Aristotle's theory of science in *APo* has been neglected and not properly investigated in scholarship on *EP*.[142] *APo* was generally important for the Neoplatonists, being regarded as τέλος τῆς λογικῆς πραγματείας (Philoponus *In APo*. 1.5), i.e. Aristotle's *Organon*, which in turn was considered preparatory for Platonic dialectic.[143] Proclus' knowledge of the *Organon* is well attested both by his biographer Marinus (*VP* 9.34–36) and his extant works. As often, Proclus' reading of *APo* was possibly shaped by Syrianus with whom he read Aristotle's works.[144] We know that Proclus had written a commentary on *APo* which accounts for his use of it in his surviving works.[145] Most important among these is again *In Eucl*. where Proclus uses Aristotle to clarify the principles of science.[146]

While Euclid uses a purely mathematical method, Aristotle bases his axiomatics on his syllogistic logic which has consequences for the structure of a science and its principles.[147] The fundamental idea, however, remains in both the same: a science x should be based on certain indemonstrable principles from which the (whole) domain of x can be deductively disclosed. It is in this sense that I use axiomatic and axiomatisation in the following. The requirement for indemonstrable principles is supposed to prevent an infinite regress which would occur if a given science had to demonstrate everything (*APo* I.2–3; *Met*. Γ 3). As Proclus puts it:

> [N]o science demonstrates its own first principles (τὰς ἑαυτῆς ἀρχὰς ἀποδείκνυσιν) or presents a reason for them; rather each holds them as self-evident (αὐτοπίστως), that is, as more evident than their consequences. The science knows them through themselves, and the later propositions through them. This is the way the natural scientist proceeds, positing the existence (ὑποθέμενος εἶναι) of motion and producing his ideas from a definite first principle. (*In Eucl*. 75.14–20; tr. Morrow)

As Proclus' example of the φυσιολόγος makes clear, he is here not just referring to the specific case of mathematics and therefore is not describing Euclid's procedure in the *Elements*. Rather, his *general* reflections on the principles of science as being

[142] Cf. Netz (2017), 387; 391 n. 36; Opsomer (2020b). On the influence of Aristotle's theory of science on Proclus' *In Tim*, cf. Martijn (2010b).
[143] Cf. d'Hoine (2016), 379. On the Neoplatonist use of *APo*, cf. Haas et al. (2010). On Proclus specifically, cf. Helmig (2010) and Martijn (2010b).
[144] In his commentary on *Met*. B–Γ Syrianus discusses scientific principles (especially axioms) at great length and in reference to *APo* (e.g. *In Met*. 19.25). Cf. Longo (2005) and (2010).
[145] On this commentary, cf. Luna/Segonds (2012a), 1559–1562. In the three surviving testimonies Proclus reacts to Alexander's exegesis, demonstrating his acquaintance with the latter's commentary.
[146] For a discussion of Aristotle's presence in *In Eucl*. cf. Giardina (2010), Romano (2010). MacIsaac (2014) criticises the focus on Aristotle by the latter two publications and, in contrast, emphasises the role of Plato in Proclus' theory of principles.
[147] This is pointed out clearly by Hintikka (1981), 137–139, 143.

indemonstrable presuppose Aristotle's theory in *APo* and *Met*. B 2 with which they agree. For instance, at *De Prov*. 6 Proclus cites Aristotle approvingly for claiming that one must proceed from common notions to the theorems to be demonstrated.[148] It should be noted that Proclus does not refer here to an *absolute* indemonstrability of principles (i.e. it is *generally* impossible to demonstrate scientific principles) but rather to a *relative* indemonstrability (i.e. a *specific* science does not demonstrate its own principles).[149] Moreover, his proximity to Aristotle is also evidenced by the claim that the natural scientists posits the existence (ὑποθέμενος εἶναι) of an object in his field of study which fits Aristotle's understanding of a hypothesis as making an existence claim (*APo* I.2 72a18–24).

What then are these principles from which a science proceed? Both Aristotle and Euclid are commonly assumed to accept a similar threefold division of principles:[150]

Euclid (*Elements* I)		Aristotle (*APo* I.2 72a14–24[151])
(1) definitions (ὅροι)	:	(1) definitions (ὁρισμοί)
(2) common notions (κοιναὶ ἔννοιαι)	:	(2) axioms (ἀξιώματα)
(3) postulates (αἰτήματα)[152]	:	(3) hypotheses (ὑποθέσεις)

In both Euclid and Aristotle, (2) common notions/axioms are general (e.g. law of non-contradiction or law of equals from equals), while (1) definitions and (3) postulates/hypotheses are science-specific.[153] While the notions of axioms and definitions are quite straightforward and overlap, hypotheses and postulates differ. According to Aristotle, hypotheses are existence claims that posit the existence of something e.g. points (*APo* I.2 72a23f.; I.10 76b3ff.). This is not the case with Euclid's postulates. For instance, Euclid's first postulate in *Elements* I ἠιτήσθω ἀπὸ παντὸς σημείου ἐπὶ πᾶν σημεῖον

[148] Cf. also the references to Aristotle's axiomatic method in *De Prov*. 28; *In Alc*. 274.32-275.7.
[149] Cf. *In Eucl*. 182.14–20: 'But Aristotle, as we have said earlier, maintains that a postulate is demonstrable […], whereas the axiom is as such indemonstrable and everyone would be disposed to accept it, even though some might dispute it for the sake of argument'. This is a common distinction, found in Alexander as well as in Syrianus (*In Met*. 65.17ff.). Cf. Longo (2005), 160f.
[150] This, at least, is the view of H. D. P. Lee (1935) and McKirahan (1992), 134f. For the latter, the reason is that 'Aristotle's classification of principles is based on the mathematics he knew and […] Euclid's principles in *Elements* I are organized with Aristotle's classification in mind' (133). In contrast, Hintikka (1981) and Mueller (1991) propose other types of principles for Aristotle and hence a different relation to Euclid's principles. Barnes (1993), 143 claims that Aristotle has different classifications which are not completely in accordance with each other.
[151] On this passage cf. McKirahan (1991), 41ff.; Barnes (1993), 99–101; Detel (1993), 40f.
[152] This refers only to Euclid's first three postulates, since P4–5 differ in character.
[153] The dichotomy between common and specific principles is emphasised at *APo* I.32 88b27–19. Cf. Mueller (1991).

εὐθεῖαν γραμμὴν ἀγαγεῖν clearly presupposes the existence of points as well as lines, and does not assert their existence. However, the similarity of Euclidean postulates and Aristotelian hypotheses lies in their function as both 'introduce things into the realm of discourse of a science' (McKirahan 1992, 139).

Regardless of the relationship of these classifications, more relevant for my current purpose is what Proclus thought about their relation. Crucially, he seems to allude to a congruence between the two (*In Eucl*. 76.4–77.2) by using his own terminology for the tripartite division:

(1) axioms (ἀξιώματα)

(2) hypotheses (ὑποθέσεις)

(3) postulates (αἰτήματα)

Proclus' unusual terminology in referring to the principles matches neither directly Aristotle's nor Euclid's use. This, in turn, has led to an extensive debate in scholarship.[154] Crucially, Proclus appeals to Aristotle as an authority for distinguishing these three principles (e.g. *In Eucl*. 182.14–20), having clearly the discussion of *APo* in mind. But how well can Proclus have understood Aristotle who plainly states that definitions are *not* hypotheses, since definitions point out what something is, but do not make existence claims (*APo* I.2 72a23f.; I.10 76b35–77a4)? *Prima facie*, it seems that Proclus mistakenly takes Aristotelian definitions to be 'hypotheses'.[155] Connected to this, is then Proclus' choice of calling Aristotelian hypotheses 'postulates'. Has Proclus simply misunderstood Aristotle's teaching on scientific principles or is his terminology a result of a specific philosophical background?

I take it that the latter is the case. Proclus presents us in this and related passages a Platonising interpretation of Aristotle and not an objective summary of Aristotle's theory in *APo*, as some scholars have assumed.[156] The names of the principles are indicative of this, as Proclus simply uses his own terminology and imposes it on Aristotle.[157] This Platonic background explains Proclus' peculiar terminology in the

[154] For his distinction of these principles in dependence on Aristotle, cf. also *In Eucl*. 178.3–184.10; 188.3–9; 194.4-9. On the terminology, cf. Morrow (1970), 140 n. 1; Martijn (2010a), 92–95; Romano (2010); MacIsaac (2014).
[155] As maintained by Heath (1956), 122.
[156] This has been correctly emphasised by MacIsaac (2014), 50 against e.g. Giardina (2010) or Romano (2010).
[157] *Pace* Hartmann (1909), 54 who claims that Proclus uses Euclid's and Aristotle's terminology.

passage above. Proclus' aim is to find support in Aristotle for his tripartition of principles. As he shows numerous times in his commentary, the ancients struggled to distinguish between different principles which is reflected in differing usage of the terms axiom, definition etc.[158] Hence, this terminological instability and lack of clarity in Proclus is also due to the conflicting evidence of his authorities. This is made clear by the apparent hypothesis – definition mix up.

Proclus regards definitions – like other principles – in the specific sciences as necessarily hypothetical, i.e. provisional.[159] For Proclus almost all sciences, including their principles, are hypothetical: μία γὰρ ἡ ἀνυπόθετος, αἱ δὲ ἄλλαι παρ' ἐκείνης ὑποδέχονται τὰς ἀρχάς (75.9f.).[160] This unhypothetical science is – based on Plato's *Resp.* (e.g. VI 510b–511d; VII 533b–d) – dialectic which Proclus treats in *ET* and whose role lies in furnishing the principles of lower sciences (*In Eucl*. 9–10). Unlike other sciences which are characterised by discursive thinking, dialectic is only accessible through νοῦς and νόησις (*In Eucl*. 11). To a certain degree this accounts for why Proclus often – but not exclusively –[161] employs the term 'hypothesis' for 'definition' (ὅρος, ὁρισμός) in *In Eucl*. All definitions are hypothetical and can be thus called 'hypotheses', but not all hypotheses are definitions, since the term hypotheses can also refer to other principles. This explains why Proclus sometimes uses hypotheses for all three types of principles and not only for definitions.[162]

Let us briefly conclude. Proclus shows in the preface to his commentary on Euclid's *Elements* an awareness not just of Euclid's but also of Aristotle's axiomatic procedure in *APo*. Proclus' engagement with the latter is seen in four areas where Proclus' practice in *EP* differs from Euclid and/or is directly based on Aristotle. (1) Proclus takes over the idea from *APo* of applying axiomatics to non-mathematical sciences. This ultimately culminates in his axiomatisation of theology in *ET*. (2) Moreover, Proclus

[158] Besides his comments on Aristotle, he mentions e.g. Archimedes (181.16–20), Geminus (181.24–182.6), and the Stoics (194.4–9).
[159] For the startling problem of how axioms can be simultaneously hypothetical and self-evident, cf. MacIsaac (2014).
[160] Cf. also *In Eucl*. 31.11–22, especially 19–22: 'In this sense, then, he says, because mathematics uses hypotheses, it falls below the unhypothetical and perfect science'.
[161] Proclus uses also the term 'definition' (ὅρος, ὁρισμός, λόγος), cf. 81.26, 93.20, 178.7f., 418.18. On his use, cf. MacIsaac (2014), 58–67, esp. 62: 'His principal use within mathematics of *horos* and its cognates in the sense of boundary is to speak generally about boundaries giving determinate existence to what would otherwise be boundless or indeterminate.'
[162] E.g. *In Eucl*. 9.25–10.1 seems to refer to all principles. Cf. also ibid. 11.22–25.

engages with Aristotle's theory of principles and also takes over his understanding of hypotheses as existence claims (*In Eucl*. 75.14–20) – even though he sometimes calls them postulates. In the next discussion two more points will emerge clearly. (3) Following Aristotle's advice that axioms can be sometimes left out, Proclus does not mention them – unlike Euclid. (4) In his reflections on the nature of *reductiones* – which he uses throughout *EP* and even adds if they were not included in the original – Proclus is inspired by the account of *APo*. These characteristics offer evidence for my thesis that Aristotle's *APo* had a lasting and productive impact on Proclus' axiomatic project and should be considered in treatments on the origin of the axiomatic method in Proclus.

3.3. Aristotle's Mathematical Style and Proclus' EP

Besides his acquaintance with Aristotle's model of science – particularly with his theory of scientific principles and model of scientific discourse from *APo* – Proclus also encountered in *Physics* VI, VIII and *DC* I texts which already contained mathematical style arguments and evidenced a certain level of axiomatisation.[163] This 'mathematisation' is especially pronounced in *Physics* VI, on which Proclus mostly bases *EP* I, and to a lesser degree in *Physics* VIII[164] and *DC* I, which Proclus uses in *EP* II. The reason why Aristotle adopted this style there is not entirely transparent. For instance, Owen (1986), 164 explains the mathematical and axiomatic character of *DC* and *Physics* – partly – with Aristotle's proximity to the Academy and thus regards these works as early. Yet, the most attractive explanation for the presence of these features is proposed by Jope (1972) who sees in *Physics* VI an example of the axiomatic-deductive system envisaged in *APo* I. He focuses on the fact that Aristotle explains in *Physics* VI motion and time in reference to continuity which is a mathematical characteristic. But, Jope argues, insofar as Aristotle studies motion and time *qua* continua and, thus, physical things in relation to a mathematical property, his approach is that of a subordinate, and

[163] With the exception of *Meteor*., these types of arguments are absent from Aristotle's works. On the mathematical character of *Physics* VI–VIII, cf. Le Blond (1939), 196f. Vitrac (2002), 248–255 points out that *Physics* VI 'est véritablement le plus "mathématique" des Livres de la *Physique* d'Aristote' (250) since it contains 20 arguments (from a total of 38) designed in the mathematical style. According to Vitrac, *Physics* VIII has only three such arguments, while *DC* I contains five. I believe Vitrac has too restricted and anachronistic a notion of a 'mathematical style argument' since he takes Euclid as an example. On the types of arguments in *DC*, cf. Elders (1966), 53–58.

[164] Importantly, Aristotle claims at the beginning of book VIII (251a8–16) that it is necessary to restate definitions (τὰ διωρισμένα) from earlier parts of *Physics* and then mentions the definition of motion. This is a clear indication that book VIII builds on earlier principles which it presupposes.

not ordinary, science. Subordinate sciences, such as harmonics or optics, study the physical *qua* mathematical, and are only able, according to Aristotle, to provide demonstrations τοῦ ὅτι but not τοῦ διότι. That is, they describe *that* something is the case, but are unable to point out *why* that is. The latter is only reserved to mathematics itself who studies the mathematical *qua* mathematical.[165] That Aristotle offers primarily demonstrations τοῦ ὅτι, not τοῦ διότι, will be important below.

It is apparent that Proclus was aware of the theory of an axiomatic science as well as of the axiomatic structure of the Aristotelian original. Proclus only had to accentuate already present features and add logical rigour to the arguments. He then structured the text into discrete entities, i.e. propositions, as in Euclid. In many cases, Proclus' restructuring of the original text did not require great interventions. He thus axiomatised even less structured parts of the Aristotelian text – which does not mean that we have a flawlessly axiomatic work, as will become clear.

In the following I show how in *EP* Proclus puts this axiomatic model of science into practice by comparing some examples from *EP* with their Aristotelian original. I first discuss some peculiarities of the principles which have not been sufficiently discussed in scholarship (3.3.1.) and then turn to the theorems (3.3.2.).

3.3.1. Principles

In *EP*, Proclus posits in total twenty principles: six definitions in the first book, six hypotheses and eight definitions in the second. Almost all are taken directly from the Aristotelian original, the precise references being provided by Ritzenfeld (1912). In my analysis I focus on those aspects which are either relevant for Proclus' axiomatisation of Aristotle' kinematics or constitute significant departures from the original source. The six definitions of the first book are:

(Def. I.1)	Συνεχῆ ἐστιν, ὧν τὰ πέρατα ἕν. Continuous are those things whose limits are one.
(I.2)	Ἁπτόμενά ἐστιν, ὧν τὰ πέρατα ἅμα. Contiguous are those things whose limits are together.
(I.3)	Ἐφεξῆς ἐστιν, ὧν μηδὲν μεταξὺ ὁμογενές. Next-in-succession are those things which have nothing of the same kind in between them.
(I.4)	Πρῶτός ἐστι χρόνος κινήσεως ὁ μήτε πλείων μήτε ἐλάττων τῆς κινήσεως.

[165] On this difference, cf. *APo* I.13 78b35–79a3.

	The primary time of a motion is the time which is neither more nor less than the motion.
(I.5)	Πρῶτός ἐστι τόπος ὁ μήτε μείζων τοῦ περιεχομένου σώματος μήτε ἐλάττων. The primary place is the place which is neither more nor less than the encompassed body.
(I.6)	Ἠρεμοῦν ἐστι τὸ πρότερον καὶ ὕστερον ἐν τῷ αὐτῷ τόπῳ ὂν καὶ αὐτὸ καὶ τὰ μέρη. Resting is that which itself and its parts is before and after in the same place.

First, it should be remarked that the first three definitions are not formulated in accordance with the subject matter, i.e. the γένος of the specific science, as demanded by Aristotle himself (*APo* I.7, I.28). That is, since the subject matter is physical science it requires appropriate principles (in this case definitions) that do not stem from another science.[166] But def.s 1–3 are actually definitions used in mathematics and lack the specific, physical character that one would expect. Since they are close to the Aristotelian original (*Physics* V.3 and VI.1) – Proclus directly takes them over – this problem can be traced back to Aristotle who himself refers to def.s 1–3 explicitly as definitions (*Physics* VI.1 231a22). However, this does not mean that Proclus is not conscious of the requirement for science-specific definitions. In his discussion of whether or not Euclid's definition of a point is adequate, he claims that 'the scientist in a special area […] has the responsibility of examining and expounding only that indivisible nature which is appropriate to his first principles' (93.11–15). For instance, the geometrician studies the point, whereas the arithmetician the monad. Proclus presumably takes I.1–3 over in this form because these broader definitions allow him to insert the relevant physical term, i.e. '(a) magnitude/time/motion is continuous when its limits are one'. Additionally, these first three definitions also situate Proclus safely in the Neoplatonist exegetical tradition since the wording of def.s I.1–3 is, in fact, closer to Simplicius than Aristotle.[167] For instance, the expression ὁμογενές in def. I.3 is found in Eudemus, Alexander, and Simplicius, but is absent in Aristotle who uses the term συγγενές (which Simplicius also correctly cites).[168]

[166] Proclus shows at *In Eucl*. 33.2–10 that he is clearly aware of Aristotle's prohibition of kind-crossing (*APo* I.7).
[167] As Opsomer (2020b), 84 n. 3 noted, the formulations are very close to Simplicius *In Phys*. 597.25f., 890.29, 926.3.
[168] Simplicius employs the term at *In Phys*. 928.14 *et passim* and cites Eudemus at *In Phys*. 928.29 and Alexander at 929.10, 15 where the same term occurs.

Def.s 4–6 concern time, place, and rest, and have their own peculiarities. Unlike the earlier definitions, they are clearly subject-specific and less general. While def. 6 is straightforward, a few remarks on the other two are necessary. Def. 5 on primary place is a combination of two principles established by Aristotle at the beginning of his discussion of place: the first expresses the idea that place is the 'first thing surrounding that of which it is place', while the second claims that 'primary place is neither less nor more than' than the thing it surrounds. Def. 4 on primary time is not found explicitly in Aristotle's text and has been modelled after def. 5. I take it that Proclus, following Aristotle, uses the expression πρῶτος χρόνος/τόπος in these two definitions to indicate that he talks about the time or place which includes neither more nor less than the object or process to which it belongs. That is, a time which stretches more or less than the duration of a process, such as walking from a to c instead of a to b, is only secondary. Analogously, the same applies to place where e.g. a dog can be primarily located in a seat and secondarily in car etc.

It is noteworthy that def.s 4 and 5 are not taken from *Physics* VI but from book IV.[169] This is peculiar, since Proclus primary concern in *EP* I is to offer an axiomatisation of book VI. He adds, I submit, these definitions, because he believes the three definitions listed by Aristotle at the beginning of *Physics* VI are insufficient for deriving all doctrines of the book. This shows us how Proclus takes over the already axiomatic structure of the Aristotelian original and further perfects it. Although *EP* deals primarily with motion it does not contain a definition of motion (or of place). Likewise, while time is defined in def. II.7 ('Time is a number of the motion of the heavenly bodies'), its definition remains dependent on the concept of motion which we lack. In this way, the concepts and definitions motion and place are already presupposed since they are included in the def.s I.4–6 and II.7.

I now turn to the principles of book II which are more numerous.

(Hyp. II.1)	Πᾶν σῶμα φυσικὸν κινητόν ἐστι κατὰ τόπον.[170] Every physical body is moveable in place.
(II.2)	Πᾶσα κίνησις τοπικὴ ἢ κύκλῳ ἐστὶν ἢ ἐπ' εὐθείας ἢ μικτὴ ἐκ τούτων.

[169] Def. 4: IV.11 219a13f.; Def. 5: IV.4 210b34f. and 211a1f. Def. 6 is taken from book VI (3 234b5ff.; 8 239a14ff.; 239a26ff.).

[170] Hyp. II.1 differs importantly in its formulation from *DC*: πάντα γὰρ τὰ φυσικὰ σώματα καὶ μεγέθη καθ' αὑτὰ κινητὰ λέγομεν εἶναι κατὰ τόπον (I.2 268b14). Proclus leaves out καθ' αὑτὰ and thus presents the bodies and magnitudes no longer as self-moving. This is an interesting change and fits generally to Proclus' omission of self-motion in *EP*. On the latter, cf. ch. II 5.1.

Every locomotion is either circular or linear or a combination of both.

(II.3) Πᾶν σῶμα φυσικὸν μίαν ἐκ τούτων κίνησιν κινεῖται.
Every physical body moves with one of these motions.

(II.4) Πᾶν σῶμα φυσικὸν ἢ ἁπλοῦν ἐστιν ἢ σύνθετον.
Every physical body is simple or composite.

(II.5) Πᾶσα κίνησις ἁπλῆ ἁπλοῦ σώματός ἐστιν.
Every simple motion is of a simple body.

(II.6) Πᾶν σῶμα ἁπλοῦν μίαν κατὰ φύσιν κινεῖται κίνησιν.
Every simple body moves according to its nature with one motion.

(Def. II.1) Λόγον ἔχειν πρὸς ἄλληλα τὰ τάχη λέγεται, ὃν τὰ διαστήματα ἔχει, δι' ὧν τὰ κινούμενα κινεῖται.
The relation of the velocities to each other is the relation of the distances through which the moving things move.

(II.2) Βαρύ ἐστι τὸ ἐπὶ τὸ μέσον κινούμενον.
Heavy is that which moves towards the middle.

(II.3) Κοῦφόν ἐστι τὸ ἀπὸ τοῦ μέσου κινούμενον.
Light is that which moves away from the middle.

(II.4) Κύκλῳ κινεῖσθαι λέγεται τὸ ἀπὸ τοῦ αὐτοῦ πρὸς τὸ αὐτὸ φερόμενον συνεχῶς.
Circular motion means moving continually away from the same point towards the same point.

(II.5) Ἐναντίαι κινήσεις εἰσὶν αἱ ἀπὸ τῶν ἐναντίων εἰς τὰ ἐναντία.
Contrary motions are from the contrary to the contrary.

(II.6) Ἓν ἑνὶ ἐναντίον.
One thing is (only) contrary to one other.

(II.7) Χρόνος ἐστὶν ἀριθμὸς κινήσεως οὐρανίων σωμάτων.[171]
Time is a number of the motion of the heavenly bodies.

(II.8) Μία κίνησίς ἐστιν ἡ κατ' εἶδος ἀδιάφορος καὶ ἑνὸς ὑποκειμένου καὶ ἐν συνεχεῖ χρόνῳ γινομένη.
A single motion is a motion which is unchanged in its form, directed at one object and takes place in a continuous time.

According to the standard edition by Ritzenfeld and the opinion of most scholars,[172] Proclus mentions in *EP* only definitions – six in the first book and fourteen in the second. He thus leaves out the other two principles – axioms and postulates/hypotheses – which he clearly recognised, as seen above. But, as I argue here, this impression is wrong. Based on their content, the manuscript tradition of *EP*, and other remarks in Proclus' and other

[171] The addition οὐρανίων σωμάτων is un-Aristotelian. It is presumably a Platonising influence echoing *Tim*. 39d1 where time is the motion of the planets.
[172] Cf. Ritzenfeld (1912), I 3.5 and resp. II 30.5; O'Meara (1989), 177; Nikulin (2003), 185; Opsomer (2020b), 90. In a private discussion, Opsomer made clear that his view on the nature of the first six principles of book II has changed.

Neoplatonists' oeuvre, it can be safely established that Proclus conceived the first six principles in fact as hypotheses.

If we look at the content of the first six principles, it becomes quite obvious that these are not definitions, as they do not define *what* something is – unlike the other principles.[173] Rather, they seem to have the character of hypotheses by making certain assumptions, i.e. they posit *that* something is or, more precisely, that every being of a certain class is in a certain way. The quantifiers πᾶν/πᾶσα clearly separate them linguistically from the other principles and provide the impression that they are structured like premises for (Barbara-type) syllogisms. For instance, hyp. II.1 claims that every physical body is moveable in space without offering a definition of a physical body by answering the question 'What is x?'. However, the proper definitions of *EP* II do exactly that. For instance, 'What is heavy?' – 'Heavy is a thing which moves towards the middle' (def. II.2).[174]

Evidence from the manuscript tradition also suggests that the first six principles should be termed 'hypotheses'. Ritzenfeld (1912) remarks on the definitions of book II: 'editiones praebent ὑποθέσεις vel ὑπόθεσις pro ὅροι, hoc verbum ante def. VII ponunt' (70). He refers here primarily to the *editio princeps* by Simon Grynaeus (1531), called b in his critical apparatus. Grynaeus' edition is based on codex (Z) and attests on page 28 ὑποθέσεις instead of ὅροι for the first six definitions. It is thus possible that (Z), which Ritzenfeld does not seem to have consulted (presumably because it was no longer extant),[175] offered this version as well. Unfortunately, since Ritzenfeld's *stemma codicum* is incomplete – he has consulted only eleven of the over thirty codices known to him –, as well as faulty, as demonstrated by Boese (1958), 13f.,[176] it is impossible to determine here the consequences for a reconstruction of the original text.

[173] Def. II.6 clearly does not have the character of a definition. At *In Tim*. 237.23, 29 Proclus calls it rightly a hypothesis as does also Simplicius at *In DC* 12.10.
[174] Although def. II.1 stands out linguistically through its usage of λέγεται, it still is a definition, as it describes what the relation between different velocities is (i.e. the relation between the different distances traversed by different moving things).
[175] Nevertheless, Ritzenfeld (1912), conjectures that (Z) was 'simillimus' to the extant N (Monacensis 502). Regardless of the accuracy of this claim, it should be noted that N includes no separate headings for the principles.
[176] *Via* his reconstruction of William of Moerbeke's Latin translation Boese shows that the Greek original of this translation shares variants with both main families reconstructed by Ritzenfeld and therefore does not fit his *stemma*.

The strongest argument, however, for calling these six propositions hypotheses instead of definitions which has been – to my knowledge – ignored so far stems from Proclus himself. In *In Tim.* he claims that Aristotle demonstrates the indestructibility of the cosmos based on certain hypotheses (I 237.23: ὑποθέσεις) and cites Plotinus approvingly who also employs the term hypotheses for these principles.[177] Proclus mentions five hypotheses (237.27–238.1) of which the first three correspond to the principles II.5, II.6, and II.2. Simplicius adopts this usage of the term as well in his commentary, counting six hypotheses which Aristotle uses to determine the heaven's eternity. Some of these match Proclus'.[178]

There is thus a unanimous awareness in Plotinus, Proclus, and Simplicius of the fact that Aristotle builds his demonstrations in *DC* I (in part) on hypotheses and not just on definitions. This Neoplatonist interpretation is based on Aristotle's own usage of the term, as he refers to some of the propositions appearing as definitions in *EP* II repeatedly as hypotheses (e.g. at *DC* I.3 270b3, and I.7 274a34 and b11: τὰς πρώτας ὑποθέσεις). While Aristotle uses the term ὑποθέσθαι and its variants in a more general sense of statements that have to be assumed without being demonstrated, it becomes clear that the Neoplatonists were inspired by his terminology. Together with an analysis of their content as well as the manuscript tradition, it seems highly probable that the first six principles of *EP* II should be considered as hypotheses and not definitions, as commonly assumed.

It is, however, beyond doubt that Proclus leaves out axioms in *EP*. Why? Presumably, Proclus found axioms too obvious to be stated explicitly, just as Euclid does not list e.g. the law of excluded middle as a common notion. Aristotle himself claims that not all principles have to be necessary stated, mentioning specifically the case of axioms which can be left out due to their familiarity (*APo* I.10 76b16–21). Moreover, while *some* principles are necessary for Proclus, it does not mean that the threefold division of them must be respected in each science. In this way, Proclus sticks rather to Aristotle's precepts in *APo* than to Euclid's *Elements* where some axioms occur.

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[177] Proclus cites (imprecisely) *Enn*. II.1 2.12f.: Ἀριστοτέλει μὲν οὖν οὐδὲν πρᾶγμα, εἴ τις αὐτοῦ τὰς περὶ τοῦ πέμπτου σώματος **ὑποθέσεις** παραδέξαιτο (*In Tim*. 237.25ff.). Plotinus does not explicitly mention these hypotheses (cf. Wilberding 2006, 122–126), hence the reconstructions by Proclus and Simplicius (who cites the same passage at *In DC* 12.6–16, 115.30–116.2).

[178] Cf. *In DC* 12.6–11. He later (115.30–116.2) adds two more, positing eight in total. Cf. also *In DC* 228.8ff. Hankinson (2009) discusses the fourth and fifth hypothesis in detail and id. (unpublished) offers a more general discussion of term hypothesis employed in *DC*. Leggatt (1995), 14 n. 26 counts as many as 14 hypotheses in *DC* I.

3.3.2. Theorems

Based on these definitions and hypotheses Proclus then constructs several theorems. The adherence to the axiomatic method is less strict than one might expect since most theorems include unstated premises which are neither based on the principles nor on the preceding theorems.[179] Interestingly, this lack of axiomatisation can be already traced back to Aristotle's original text. But as we have seen, Proclus has also added principles to make the presentation more axiomatic. In order to make this clear I discuss a few examples. As I show here, Proclus (a) further completes the formalisation already present in the Aristotelian original and, specifically, (b) adds *reductiones ad impossibile* (εἰς τὸ ἀδύνατον/διὰ τοῦ ἀδυνάτου ἀπαγωγαὶ) which serve to foster the axiomatic structure of the text.

Let us start with discussing a few formal features by looking at *EP* §I.19 which is based on *Physics* VI.4 234b10–20[180]:

> Πᾶν τὸ κινούμενον μεριστόν ἐστιν.
> Ἔστω γάρ τι κινούμενον ἐκ τοῦ A εἰς τὸ B. ἢ οὖν ἐν τῷ A μόνον ἐστὶν ἢ ἐν τῷ B ἢ ἐν ἀμφοτέροις ἢ ἐν οὐδετέρῳ ἢ τὸ μὲν αὐτοῦ ἐν τῷ A, τὸ δὲ ἐν τῷ B. ἀλλ' εἰ μὲν ἐν τῷ A, οὔπω κινεῖται· εἰ δὲ ἐν τῷ B, οὐκέτι κινεῖται· εἰ δ' ἐν ἀμφοτέροις, καὶ οὔπω κινεῖται καὶ οὐκέτι κινεῖται· εἰ δ' ἐν οὐδετέρῳ, οὐκ ἔσται ἐκ τοῦ A εἰς τὸ B ἡ κίνησις. [οὐδὲ μεταξὺ αὐτῶν] ἀνάγκη ἄρα τὸ μὲν αὐτοῦ ἐν τῷ A εἶναι, τὸ δὲ ἐν τῷ B· διαιρετὸν ἄρα τὸ κινούμενόν ἐστιν.
> Every moving thing is divisible.
> For let something be moving from A to B. Then either is it in A alone or in B or in both or in neither or one part is in A and another in B. But if it is in A, it is no yet in motion. If it is in B, it is no longer in motion. If it is in both, it is both not yet and no longer in motion. But if in neither, there will be no motion from A to B. Therefore, the moving thing is divisible. (§I.19 18.6–15)

Based on his Aristotelian source, Proclus wants to establish here that every entity in motion must be physically divisible.[181] Two things strike the reader at first sight. First (a) is the repetition of the proposition at the end of the passage which is a common to mathematical works and also present in Aristotle. Proclus, thus, imitates here Aristotle

[179] Opsomer (2020b), 97–100 provides examples for this.
[180] 'Also, everything that is changeable must be divisible. For since every change is from something to something, and when a thing is in what it has changed to it is no longer changing, and when both it itself and all its parts are in what it changes from it is not changing (for what keeps in the same state, both itself and its parts, is not changing), it is necessary that part of what is changing must be in what it is changing from and part in what it is changing to (for it cannot be in both or in neither of the two). By "what it is changing to" I mean the first one with respect to the change—for example, grey not black, if it is changing from white. For it is not necessary for what is changing to be at either of the extremes. It is evident, then, that everything that is changing will be divisible.' (tr. Reeve)
[181] Cf. Simplicius *In Phys*. 962.24ff.

directly and only accentuates a tendency already encountered in the latter.[182] Another conspicuous difference is (b) the shift from μεταβάλλον in Aristotle to κινούμενον in *EP* which can be explained by Proclus' preference for terms derived from κινέω and not from μεταβάλλω.[183] Since there does not seem to be a conceptual difference between the terms in *EP*, it seems that Proclus simply tries to make the terminology more unitary. It should be also mentioned that Proclus adds a diagram at (§I.19 18.8f.) which is missing in Aristotle. It is a matter of debate whether there were diagrams in the original manuscripts of *Physics*.[184] Aristotle's use of lettered variables certainly suggests a visual model in form of a diagram. It comes thus to no surprise that Proclus makes great use of diagrams in *EP* which are transmitted to us.

Not only diagrams but also variables seem absent in the Aristotelian original. Yet this is not generally the case in *Physics* (or in *DC*), as Proclus only completes the formalisation that is otherwise present in Aristotle. This is evidenced by the sentence following the *Physics* passage quoted above where he states that 'if the whole AC is in movement, its parts AB and BC will also be in movement' (234b23f.). And then Aristotle himself uses the third person imperative which is a typical feature of the mathematical works to prove his point: 'accordingly, let the movement of the parts be M1–2 of AB and M2–3 of BC' (234b24f.).

Thus, two of the three central characteristics of a στοιχείωσις (s. above) – standardisation and impersonality – occur already in the Aristotelian original. Proclus only had to accentuate these formal characteristics and add logical rigour to the arguments. In many cases, Proclus' restructuring of the original text did not require great interventions. This resemblance is also reflected in the types of arguments employed. In *EP* Proclus uses in his proofs primarily *reductiones.* So far this strong reliance on *reductiones* in *EP* – even in the passages and arguments added by Proclus – and their purpose in this work have not been sufficiently explained. Although Opsomer (2020b), 93–96 discusses this important aspect, he focuses in his explanation exclusively on evidence from Aristotle's *APr* I.23 41a21–37; I.44 50a29–38.[185] While this is

[182] As emphasised by Netz (2017), 387 and Opsomer (2020b).
[183] His usage of μεταβάλλω is almost confined to five theorems: I.21–24 and I.27.
[184] Cf. Netz (1999), 15 and (2017), 377. Diagrams are also well attested for other Aristotelian works such as *MA*, where they have been (re-)introduced by Primavesi in his new edition. Cf. Primavesi/Corcilius (2018).
[185] Cf. also the brief remarks in Nikulin (2003), 185.

undoubtedly right, in the following, I argue that the background of *APo* played a more significant role – as witnessed also above in the case of principles.

The first example of a *reductio* is encountered in §I.2. Proclus had established in §I.1 that two points are not contiguous since contiguity requires the ends of two (or more) things to be together.[186] This, however, is not possible in the case of points since they have no parts and thus no ends which could be together. Now, in §I.2 Proclus wants to establish that two points can also not be continuous:

> Δύο ἀμερῆ συνεχὲς οὐδὲν ποιήσει.
> Εἰ γὰρ δυνατόν, ἔστω δύο ἀμερῆ τὰ AB καὶ ποιείτω συνεχὲς τὸ ἐξ ἀμφοῖν. ἀλλὰ πάντα τὰ συνεχῆ ἅπτεται πρότερον· τὰ ἄρα AB ἅπτεται ἀλλήλων ἀμερῆ ὄντα, ὅπερ ἀδύνατον.
> Two partless things will not form something continuous.
> For if it were possible, let A and B be two partless things and let them form something continuous from each other. But all continuous things touch each other earlier; then, A and B touch each other, although they are partless, which is impossible.

The argument is simple. Proclus first assumes the positive hypothesis that the two points A and B are continuous. However, this cannot be the case, since continuity requires contiguity, i.e. A needs to be contiguous with B in order to be continuous. But, as §I.1 has shown, it is impossible for two points to be contiguous. Therefore, they are also not continuous.

This argumentative style is again influenced by the Aristotelian original – here *Physics* VI.1 231a24 – as well as Euclid's *Elements*, since both use *reductiones* extensively.[187] Yet, the use of demonstrations by *reductiones* is puzzling, since both Aristotle and Proclus deny their explanatory power. As is well known, Aristotle claims in *APo* that knowledge is attained by demonstrations in the form of deductions. (In)famously, the premises of these demonstrations have to meet certain criteria among which are 'prior to and explanatory of the conclusion' (*APo* I.2 71b22). Neither criterion, however, is met by *reductiones*, as is shown in a condensed argument in *APo* I.26,[188] where Aristotle argues that direct negative demonstrations are superior in their explanatory power over indirect negative demonstrations, i.e. *reductiones*. Direct negative demonstrations proceed from premises prior to the conclusion, while

[186] Interestingly, Proclus himself constructs I.1 as it is not found in *Physics* VI. This exemplifies how he makes the argumentation more axiomatic and accessible to the student. Cf. Kiosoglou (2022), 154–158.
[187] The Aristotelian background has been emphasised by Opsomer (2020b), 95. Proclus offers his own views on this type of argument at *In Eucl*. 254.21–256.8. According to Proclus *In Eucl*. 73.21f., some writers of *Elements* made more, others less, use of *reductiones*. On the Neoplatonist reception of this type of argument, cf. Ierodiakonou (2016).
[188] An erudite analysis of *APo* I.26 is offered by Malink (2021) to whom this discussion is indebted.

reductiones proceed from premises posterior to the conclusion. The sense of priority is priority in nature (87a17). But if the premises of a *reductio* are not prior to the conclusion, it does not meet the necessary requirements of a scientific demonstration laid out in *APo* I.2.[189] Still, a *reductio* can be considered a demonstration in a more general sense. For, in *APo* I.13 Aristotle points out that besides the genuine form of demonstration which provides an explanation of the reason why (τοῦ διότι), i.e. Why does A hold of B?, there is another type of demonstration which reveals a property or fact (τοῦ ὅτι), i.e. Does A hold of B? While the former is to be preferred, the latter plays an indispensable role in acquiring knowledge and is often presupposed by the demonstration of the explanation, as he makes clear in *APo* II.1 89b27–31.[190] Consequently, Aristotle holds that knowledge of facts is temporally prior to knowledge of causes.[191] Thus while *reductiones* are not demonstrations *stricto sensu*, since they do not provide explanations, they are demonstrations in a more general sense, since they produce knowledge (i.e. provide proof) of the fact.[192]

A *reductio ad impossibile* does not provide the cause of a conclusion and is thus not explanatory. That was and still is the common understanding of Aristotle's views.[193] Proclus shares this view, displaying again his knowledge of *APo*:

> When geometers reason through the impossible, they are content merely to discover the property (τὸ σύμπτωμα μόνον) [of a given subject]. But when their reasoning proceeds through a principal demonstration, then, if the demonstrations are partial, the cause is not yet clear, whereas if it is universal and applies to all like things, the 'why' at once becomes evident. (*In Eucl*. I 202.19–25; tr. Heath, modified)

Why then adopt an argumentative style where *reductiones* are virtually omnipresent? Partly, Proclus' motivation is based on emulating the Aristotelian original[194] and Euclid's *Elements*. Moreover, as mentioned, knowledge of the fact is a requirement for knowledge of the cause – a doctrine with which Proclus was evidently acquainted.[195] In this sense,

[189] Cf. Malink (2021), 94.
[190] Cf. also II.2 89b38–90a1; II.8 93a17ff.
[191] This is particularly the case for Aristotle's biology; cf. *HA* I.6 491a10ff.; *PA* I.1 639b6–11, 640a13–16, I.5 645a36–b3. In *HA* the focus lies on acquisition of facts. Yet, Aristotle does not remain on this level: in *IA*, for instance, he intends to provide causal explanations based on the facts collected in *HA* (1 704b7–10). On this division, cf. Lennox (1987).
[192] Cf. Detel (1993), 545 on the use of both demonstrations in Aristotle's sciences.
[193] For the pervasiveness of this interpretation, cf. the examples provided by Malink (2021), 94–98.
[194] According to Jope (1972), 288 'because of this dual subject [i.e. mathematics and physics], most of the book's [*Physics* VI] demonstrations are demonstrations τοῦ ὅτι'.
[195] Philoponus relates a part of Proclus' comments on *APo* I.13 where this distinction is discussed (*In APo* 181.19–182.7).

the style fits quite well to the propaedeutic character of *EP*: it establishes first the facts of kinematics before providing a reason.[196] Moreover, through the *reductiones* it becomes clear that earlier propositions were correct. For instance, in the example discussed above, §I.2, the reason *why* the hypothesis is impossible can be found in the preceding proposition, §I.1.

This example proves why *reductiones* are so useful for Proclus in a work such as *EP*. They point backwards to earlier propositions and fortify the axiomatic structure of the treatise. In this way, the role of the *reductiones* is to buttress the arguments of earlier propositions as well as to hint at the reason behind the *reductio*. Additionally, I would like to emphasise that Proclus chooses consciously to adopt this argumentative method, as the argument of §I.2, for instance, is not found in the form of a *reductio* in Aristotle. He thus adds further *reductiones* to the text. The scientific theory of *APo* accounts for the presence of this argumentative feature in the Aristotelian text and, hence, in *EP*. Considering Aristotle's understanding of *reductiones* in *APo* illuminates not just his practice in *Physics* and *DC* but also Proclus' familiarity with them and use in *EP*.

4. Conclusion

In this chapter I offered a comprehensive discussion of the content and structure of Proclus' little-known treatise *EP*. This provides us an insight into the reception and the place of Aristotelian kinematics in Proclus. In the first part, I situated *EP* in a larger exegetical tradition of Aristotle's *Physics* and *DC* which has been little explored so far, although it explains some of the work's peculiarities. In designing *EP*, Proclus is dependent on this tradition. I also emphasised how, due to its argumentative and conceptual similarity to *Physics* VI, VIII as well as its importance for kinematics, Proclus believes it is necessary to include material from *DC* I. Moreover, I demonstrated how Proclus excludes certain topics from *EP*. This is mainly due to its introductory nature, but it is also in line with the axiomatic structure of the treatise. These more controversial topics are then discussed in advanced works such as *In Tim*. which further develop the issues treated in *EP* by providing a stronger metaphysical fundament. This emphasises the connection of *EP* to other Proclean works.

[196] Aristotle himself corrects a demonstration τοῦ ὅτι from *Physics* VI.2 233a21–31 by providing a proper explanation τοῦ διότι at VIII.8 263a11–b9.

The second part focused on the form and method of *EP*. By analysing the principles of *EP* I demonstrated that Proclus also includes hypotheses in *EP* and not just definitions. An analysis of the theorems showed how Proclus took over the Aristotelian text and further axiomatised it. More generally, I argued for attributing a more important role to Aristotle's *APo* – besides Euclid's *Elements* and Aristotle's *Physics* and *DC* – in Proclus' development of the axiomatic method in *EP*. This claim was supported by certain features which are absent in Euclid but can be explained by referring to *APo* and also by Proclus' frequent discussions of *APo* in *In Eucl*. Proclus' use of the axiomatic method in *EP* is thus not only based on the Aristotelian original but also on his own theoretical reflections on its features, such as the nature of principles, the derivation of theorems from principles, use of *reductiones* etc. Most importantly, there is an awareness that the method can be applied to different non-mathematical sciences, which later paved the way for the use of axiomatics not just in natural philosophy but also in theology.

CHAPTER II: THE RELATIONSHIP OF UNMOVED MOVER AND SELF-MOVER

1. What is the Origin of Motion?

An analysis of *EP* in the previous chapter has shown how Proclus engages creatively with Aristotle's *Physics* and *DC*. Yet, the conclusion of *EP* reached in §II.21 seems anti-Platonic: How can an unmoved mover be the origin of motion? Plato plainly states in *Phdr.* and *Laws* X that the principle of motion is a self-moving soul. In contrast, Aristotle attacks Plato's concept of self-motion and posits an unmoved intellect, ontologically superior to souls, as ultimate origin of motion. Aristotle criticises Plato's view chiefly in *Physics* VIII.5 and *DA* I.3, maintaining that the soul remains essentially unmoved. His main critique, to put it roughly, focuses on two aspects of essentially the same issue: (i) the origin of motion and (ii) the nature of self-motion. Not only is Plato's concept of self-motion flawed, Aristotle argues, but soul cannot be regarded as the prime mover. As will be seen, this debate has far-reaching consequences for physics, metaphysics, and psychology.

Both points of contention are discussed by later Platonists who make explicit references to the texts named above, since they pose a serious threat to the supposed agreement between Plato and Aristotle.[197] While I deal with the nature of self-motion in chapter III, here I focus on the first aspect of the debate: what is the ultimate origin of motion in the cosmos? I answer this question by tracing the legacy of this debate in antiquity. In the Imperial Age both Platonic and Aristotelian accounts of motion are brought together, leading the Middle Platonist Alcinous to talk of intellect *and* soul as origin of motion. First, I show that this Middle Platonist appropriation is problematic, as it creates a tension between intellect and soul which is left undiscussed. Secondly, I argue that a solution of this problem is offered by Proclus who develops a clear triadic system – different from the binary systems of Plato and Aristotle – of unmoved mover, self-mover, and other-moved. This reconciliation shows us how Proclus makes use of Aristotle and sheds light on our understanding of the relationship envisaged by him between Plato and Aristotle.

[197] The problem is brought up by e.g. Hermias *In Phdr*. 107.26–115.8 and Simplicius *In Phys*. 1247.27 – 1250.31. Cf. also Alexander *Aporia* 46.22–47.27; Macrobius *Commentary on the Dream of Scipio* II.15-16 Willis. The otherwise excellent collection of articles on self-motion by Gill/Lennox (1994) altogether leaves out any Platonist engagement with this problem.

After a discussion of the Platonic (2.) and Aristotelian (3.) views on the origin of motion, I present the contradictory claims made by Alcinous on this topic (4.) and Proclus' reception and solution of the problem (5.).

2. The Platonic Background: Self-Mover and Other-Moved

Plato argues in *Phdr.* and *Laws* X for a binary system of movers, consisting of internally and externally moved entities, i.e. self-mover and other-moved, whereby the active self-mover is causally superior to the passive other-moved. [198] The self-mover, i.e. an entity causing its own motion, is the ἀρχή/αἰτία of a chain of moving things in the cosmos. Plato reaches this conclusion in a famous argument from *Phdr.* (245c1–246e2) concerning the immortality of the soul.[199] The main structure of his argument is the following:

(P1) Soul is that which is its own source of motion.

(P2) That which is its own source of motion is immortal.

(C) Soul is immortal.

This argument, as Bett (1986) has convincingly shown, is in fact dependent on two sub-arguments for (P2). [200] The first – and arguably the more important – of these is found at the beginning of the proof:

> Ψυχὴ πᾶσα ἀθάνατος. τὸ γὰρ ἀεικίνητον ἀθάνατον· τὸ δ' ἄλλο κινοῦν καὶ ὑπ' ἄλλου κινούμενον, παῦλαν ἔχον κινήσεως, παῦλαν ἔχει ζωῆς. μόνον δὴ τὸ αὐτὸ κινοῦν, ἅτε οὐκ ἀπολεῖπον ἑαυτό, οὔποτε λήγει κινούμενον, ἀλλὰ καὶ τοῖς ἄλλοις ὅσα κινεῖται τοῦτο πηγὴ καὶ ἀρχὴ κινήσεως.
> All soul is immortal. This is because whatever is always in motion is immortal, while what moves something and is moved by something, stops living when it stops moving. So it is only what moves itself that never desists from motion, since it does not leave off being itself. In fact, this self-mover is also the spring and principle of motion in everything else that moves. (245c5–d1; tr. Nehamas/Woodruff modified)

The sub-argument in this passage is:[201]

(P1) Soul is self-moved.

(P2) Whatever is self-moved is always in motion.

(P3) Whatever is always in motion is immortal.

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[198] On Plato's theory of motion in general, cf. Skemp (1967) and Karfík (2004), 149–241.

[199] For an analysis of this passage in its wider context, cf. Griswold (1986), 78–87.

[200] For different reconstructions, cf. also Blyth (1997) and Karfík (2004), 221–226 who also emphasises the motive aspect in the proof.

[201] A similar view had been endorsed by Hermias in *In Phdr.* 109.21–29; 113.23ff. Hermias, like Bett, believes that the first sub-argument proves soul's immortality, while the second sub-argument demonstrates its ungeneratedness and imperishability. On Hermias' reconstruction, cf. Longo (2009); Gertz (2020); Aerts (2021).

(C) Soul is immortal.

Soul is characterised as a self-mover since it does not depend on any external cause for its own motion but rather causes it itself (P1). Causing this motion is identical to the soul's essence, as Plato later clarifies (245e2ff.): *qua* its essence it moves itself and others. If the soul would stop moving, it would desist being itself (c7f.: ἅτε οὐκ ἀπολεῖπον ἑαυτό). Thus, soul is defined as something being moved by itself.[202] As source of motion it moves the bodies in which it inheres: 'for every bodily object that is moved from outside has no soul, while a body whose motion comes from within, from itself, does have a soul, that being the nature of a soul' (245e4ff.). Plato thus contrasts the self-motion of soul with the other-motion of bodies – an opposition which is also encountered in *Tim.* and *Laws* (see below). As something self-moved, Plato maintains that soul is always in motion (P2). Furthermore, he closely links motion with life: as long as something moves, it is alive. Thus, that which always moves (ἀεικίνητον) is always alive, i.e. immortal (P3), and is for bodies not just a principle of motion but also a principle of life.

That Plato refers here not just to individual souls but also to the soul of the cosmos, the world-soul, he clarifies in the following way: for if the soul were not immortal and would cease to exist as cause of motion 'all heaven and that which comes to be (γένεσιν)[203] would collapse, come to a stop, and never have cause to start moving again' (245d8ff.).[204] Through its unceasing self-motion the world-soul sustains the eternal motion and, thus, existence of the cosmos – an idea that resurfaces in *Laws* X (895a5–b7). As will be seen below, this makes Plato's account very similar to the role of Aristotle's unmoved mover in *Physics* VIII.

Plato also states in *Phdr.* that soul is not just a proximate cause of motion, deriving its causative power from a higher source, but the ultimate principle of motion:

> ἀρχὴ δὲ ἀγένητον. ἐξ ἀρχῆς γὰρ ἀνάγκη πᾶν τὸ γιγνόμενον γίγνεσθαι, αὐτὴν δὲ μηδ' ἐξ ἑνός· εἰ γὰρ ἔκ του ἀρχὴ γίγνοιτο, οὐκ ἂν ἐξ ἀρχῆς[205] γίγνοιτο.
> A principle is ungenerated. Necessarily everything that comes to be comes to be from a principle, but the principle itself does not. For if a principle would come to be from

[202] A very similar definition is found at *Laws* X 896a1f.: τὴν δυναμένην αὐτὴν αὑτὴν κινεῖν κίνησιν. Here, however, soul is *self-motion*, not a *self-mover*; cf. Marinescu (2021), 100.
[203] Following Hermias (*In Phdr*. 122.28), Syrianus (*In Met*. 118.6f.), Robin (1933), Bett (1987), 8, and Karfík (2004), 222 I read here γένεσιν instead of Burnet's γῆν εἰς ἓν.
[204] This passage clearly suggests to me that the world-soul is *at least* one kind of soul alluded to by ψυχὴ πᾶσα (c1) in this argument. *Pace* Bett (1987), 11f. Cf. Broadie (2012), 179f.; Opsomer (2012a), 263.
[205] I here follow Robin's (1933), Rowe's (1986), 176, and Yunis' (2011), 137 emendation ἐξ ἀρχῆς instead of Burnet's ἔτι ἀρχὴ.

> something, then all that comes to be would[206] not come to be from a principle. (245d1–3; tr. mine)

Plato claims that if a principle comes to be from something else, it is not a principle. Being a principle entails not being generated by something else and, hence, not being dependent on something else in its existence. This has consequences for soul, conceived as a principle of motion. For if soul were generated by another cause, it would not be a principle in the strict sense. In that case, the ultimate cause of motion – which here includes generation[207] – would be the cause of soul's coming to be. Soul would be only a proximate cause of motion in the bodies which it inhabits. But clearly, Plato wants to prevent this view here: since soul is not generated and thus has no superior cause, it is, in *Phdr.*, the ultimate principle of motion and, hence, of generation.

Since Plato's proof as well as its psychology and cosmology are for various reasons problematic and partly in tension with remarks from other dialogues, I would like to emphasise that Plato's seemingly superficial discussion in *Phdr.* is due to the context of the proof, which is primarily practical and not theoretical.[208] The proof is part of Socrates' palinode where the main objective is to describe the impact of erotic madness on the soul. In order to assess this properly, a discussion of soul's nature is necessary which in turn includes a treatment of its immortality (245b7–c4). Unlike in theoretical treatises on cosmology, such as *Tim.*, or on theology, such as *Laws* X, Plato does not have the possibility to offer here a more extensive discussion of the issues.

This brings us to Plato's late work *Laws* X where a similar picture emerges.[209] His objective is to show that the 'origin of all motion is […] the self-moving motion' (895b3–5). First, he offers a dihairesis of ten types of motions where self-motion plays a prominent role (893b5–895b8). The ninth kind of motion, other-motion, is in fact a genus of which the first eight non-self-motions are different species. These eight types of other-motion are grouped as pairs of opposites. Thus, Plato ultimately distinguishes here, as in *Phdr.* 245c–d, between self-motion and other-motion and therefore between self-movers and other-moved entities.[210] The former is portrayed as source of motion to itself and to

[206] With Yunis (2011), 137 I take the subject of γίγνοιτο in the apodosis to be πᾶν τὸ γιγνόμενον which is mentioned at the start of the clause.
[207] On generation as a species of motion, cf. *Laws* X 894b11 and the discussion in Bett (1987), 9ff
[208] Cf. Griswold (1986), 80ff.
[209] For an extensive discussion, cf. Marinescu (2021).
[210] On these cf. Skemp (1967), 96–107, 157–162; Mayhew (2008), 106–119; Schöpsdau (2011), 399–406.

others; a potentially infinite chain of moved movers is brought to a halt by the introduction of a self-mover (894e4–895a3). As such, self-motion is 'most powerful (ἐρρωμενεστάτην) and radically effective (πρακτικὴν διαφερόντως)' (894c10f.) and has ontological priority over other kinds of motion.[211] What self-motion precisely consists in, is discussed in the next chapter. Most importantly, self-motion is associated with soul who is the 'first cause of generation and destruction of all things' (891e5f: πρῶτον γενέσεως καὶ φθορᾶς αἴτιον ἁπάντων; cf. 896d8; 899c7), while other-motion is secondary, as it depends on self-motion, and is identified with bodies. Thus, soul is moved internally (by itself), while bodies are moved externally (by soul).

As in *Phdr.*, this dichotomy leads to a subordination of corporeal motion, i.e. other-motion, to psychic motion, i.e. self-motion, which Plato expresses by calling the former secondary-work (δευτερουργοί) motion and the latter primary-work (πρωτουργοί) (897a4f.). Both terms are *hapax legomena* and apparently coined by Plato. πρωτουργοί and δευτερουργοί can be, thus, paralleled with Plato's distinction between αἰτία and συναιτία in *Phd.* and *Tim*. This distinction emphasises that the primary causal force lies in the soul who initiates motion, not in the body, as Plato claims that ψυχὴν μὲν προτέραν γεγονέναι σώματος […], σῶμα δὲ δεύτερόν τε καὶ ὕστερον, ψυχῆς ἀρχούσης, ἀρχόμενον κατὰ φύσιν (896c1ff.). Plato stresses the causal priority of soul over body in accordance with the general purpose of his discussion of motion in *Laws* X which intends to prove that 'soul [i.e. world-soul] drives all things in the heavens and on earth and in the sea through its own motions' (896e6ff.). It is clear that the account of motion in *Laws* X is very similar to and compatible with the theory found in *Phdr*.

Although the picture is more complicated in *Tim.*, there is compelling evidence – contrary to what Bett (1987), 23–26 and, recently, Corcilius (2018), 62 claim – for a distinction between self-movers and other-moved objects there as well.[212] Soul is described as self-moved (37a6f.: κινουμένη διὰ πάσης ἑαυτῆς; b3: τῷ κινουμένῳ ὑφ' αὑτοῦ) and bodies as other-moved (46e1: ὅσαι δὲ ὑπ' ἄλλων μὲν κινουμένων). The two types of motion are contrasted at 89a1–3. Soul's motion is also unceasing: αὐτὴ ἐν αὑτῇ στρεφομένη, θείαν ἀρχὴν ἤρξατο ἀπαύστου καὶ ἔμφρονος βίου πρὸς τὸν σύμπαντα

[211] Cf. *Laws* X 904a6f.: ἐμψύχους οὔσας τὰς πράξεις ἁπάσας; 905c6f.: μεταβάλλει μὲν τοίνυν πάνθ' ὅσα μέτοχά ἐστιν ψυχῆς, ἐν ἑαυτοῖς κεκτημένα τὴν τῆς μεταβολῆς αἰτίαν.
[212] Besides the Neoplatonists (e.g. Proclus' *In Tim*. II 124.24f.) this has been correctly seen by Vlastos (1965), 415f. and Brisson (1994), 333–340.

χρόνον (36e3ff.). This minimises the difference in this respect between the psychology of *Tim.*, on the one hand, and *Phdr.* and *Laws X*, on the other.

In conclusion, Plato is committed to the view that the origin of motion can only be something that is itself in motion. This, I submit, is not so much based on ignorance, i.e. Plato simply not considering the possibility of an unmoved mover – as is sometimes suggested.[213] Instead, Plato bases his view on (either of) two fundamental pre-supposition(s) of his theory of causation:

(a) x can only cause the property F in y, if x itself is F.

Ex.: fire can only cause hotness in the pot, if fire itself is hot.

Or

(b) x can only cause the property F in y, if x is not un–F.

Ex.: fire can only cause hotness in the pot, if fire is not un-hot, i.e. cold.

While (a), dubbed 'transmission theory of causation', has been shown to lead to some obvious problems (e.g. must the cause of death be dead?) and is perhaps not always applied by Plato, the weaker claim (b) seems to be generally accepted as one of Plato's laws of causation.[214] In regard to his theory of motion, I take it that Plato upholds (a), while (b) would at any rate provide a further reason for assuming that the principle of motion is not unmoved. Just like ugliness cannot cause beauty, the unmoved cannot cause the moved. It is thus because of these underlying philosophical commitments, I believe, that Plato posits a self-moving entity as ultimate cause of motion. Since these two presuppositions offer a straightforward explanation for Plato's choice for the principle of motion, I see little reason for assuming, as Menn (2012a), 57 proposes, the less economical solution that Plato had in mind an argument

> later used by Sextus Empiricus, 'what moves [something] is acting, what acts is in motion, therefore what moves [something] is in motion […]' (*Against the Physicists* 2.76), or, contrapositively, what is not in motion is not acting or doing anything, and therefore cannot move something else, since moving something is an activity.

[213] Cf. Menn (2012a), 57: '[…] Plato either has never considered the possibility that something that is itself unmoved could set something else in motion, or else regards it as not needing refutation'. This view is apparently endorsed by Aerts (2021), 181 n. 7. In fact, it has been argued by Brown (1998), 199f. and Crubellier (2017), 20–24 that the origins of the concept of an unmoved mover can be found in Plato. This view is based on their specific reading of *Soph*. 248d–249b, where the forms act by not being affected. Indeed, as I would like to add, this view can be also found in Socrates' palinode, where the goal of the souls' procession is the vision of the forms (246d6–248c2). Here the forms seem to act as an unmoved mover for the souls which desire them as 'appropriate nourishment for their best [i.e. rational] part' (248b7). Yet, *how* this position can be harmonised with the notion of the self-moving soul remains obscure.

[214] On the problems with (a), cf. Sedley (1998), 123f. who discusses also (b). For further literature on the transmission theory of causation, cf. Gill (2012), 24 n. 17.

3. Aristotle's Response: Unmoved Mover and Other-Moved

Like Plato, Aristotle also presents us a binary classification of movers but one quite different from his teacher's, as it consists of an entity lacking motion and one externally moved, i.e. an unmoved mover and an other-moved. Interestingly enough, he preserves the autoreferential aspect of the prime mover, insofar as it is self-thinking according to *Met*. Λ 7.[215] Unlike Plato, Aristotle does not trace back the origin of motion to another motion but to something that, while itself lacking motion, can impart it to others. Self-movers in a strict, i.e. Platonic, sense do not exist, since they are actually constituted of an unmoved mover (soul) and an other-moved part (body). The view that soulless bodies are other-moved is clearly taken over from Plato.[216] Aristotle thus claims that Plato's concept of self-motion is flawed, as is his understanding of the origin of motion. I focus here on Aristotle's critique of Plato's position in *Physics* VIII,[217] since it is more relevant on the origin of motion, whereas *DA* I.3 criticises the concept of self-motion itself, which is discussed in the next chapter.[218]

In *Physics* VIII, Aristotle proves that all physical motion ultimately stems from an unmoved mover.[219] After concluding in the first part of his investigation (VIII.1) that motion must have always existed in the universe, Aristotle reaches another stage at which he goes on to identify the origin of this motion. First, he makes the fundamental claim that everything in motion needs to be moved by something (VIII.4). Since this line of argumentation runs the risk of an infinite regress, as also shown by Plato in *Laws* X (894e4–895a4), i.e. the motion of a moved mover could be traced to another moved mover and then to another and so on, Aristotle concludes that the motion in the world needs to originate either in an entity itself in motion, i.e. a self-mover, or in a being that is not in motion, i.e. an unmoved mover.

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[215] Cf. Crubellier (2017), 25 who offers a helpful comparison of Plato, particularly his views in *Laws* X, and Aristotle's *Met*. Λ.

[216] Cf., for instance, the similarity between *MA* 4 700a16: πάντα γὰρ ὕπ' ἄλλου κινεῖται τὰ ἄψυχα and *Phdr.* 245e4f.: πᾶν γὰρ σῶμα, ᾧ μὲν ἔξωθεν τὸ κινεῖσθαι, ἄψυχον.

[217] Although Plato is not named, since antiquity he is regarded as the object of Aristotle's critique, as the attempts of harmonisation underline. For modern views, cf. Solmsen (1971), 171; Coope (2015), 246.

[218] Insofar as *Met*. Λ presupposes the account of *Physics* VIII, I will not focus on it here. For a discussion of the unmoved mover's causality in these two works, see ch. IV.

[219] For a succinct interpretation of the argument of *Physics* VIII, cf. Falcon (2015); Ferro (2022).

Aristotle infers that it must be the latter *via* an analysis of self-motion (VIII.5) which – due to its crucial role in his argumentation – he discusses at great length:[220]

> But surely, if it should be necessary to examine whether the self-mover (τὸ αὐτὸ αὑτὸ κινοῦν) or the thing moved by another (τὸ ὑπ' ἄλλου κινούμενον) were the cause (αἴτιον) and principle (ἀρχὴ) of motion, everyone would say the former. For what is a cause in its own right is always prior to what is itself a cause through another. So we must examine this question by making another beginning: if something moves itself, how and in what way does it cause motion? (VIII.5 257a27–33; tr. Graham)

In VIII.5 Aristotle argues that self-motion cannot be conceived as something moving itself as a whole. Rather, self-motion can be reduced to an unmoved mover in the self-mover, i.e. animate being: 'Of the whole [i.e. self-mover], therefore, one part will cause motion while remaining unmoved, and one part will be moved' (258a1f). Thus, a self-mover consists of an agent (mover) and a patient (moved) part and these two need to be distinct: in an animal the soul is the mover and the body the moved. Only in this derivative sense can we say that an animal is a self-mover.

Aristotle essentially presents two connected arguments for this view. 1) The same thing cannot be simultaneously both agent and patient of the same motion: 'For [the self-mover] would be transported as a whole, and it would transport with the same motion, being one and indivisible in form, and it would be altered and alter' (257b3f.). 2) He also excludes that something is potential and actual in regard to the same aspect, i.e. motion: When an entity capable of motion is actualised and moves, it must be actualised by something already possessing this quality, i.e. a mover: '[The moveable] is in motion through potentiality (δυνάμει), not through actuality (ἐντελεχείᾳ), and the potential is in process to realisation (ἐντελέχειαν), and motion is the incomplete realisation (ἐντελέχεια) of the moveable. But the mover is already actual (ἤδη ἐνεργείᾳ)' (257b6–9).

After having thus established that a self-mover is in fact made up of two parts, he asks whether a self-mover thus understood could be the ultimate origin of motion in the cosmos. Since the unmoved part is accidentally set in motion when the self-mover moves, he rules out the possibility that the prime mover is a self-mover: 'if something belongs to the class of things that are unmoved but move themselves accidentally, it is unable to cause continuous motion' (VIII.6 259b20–22). One reason is that self-movers are dependent on external stimuli in order to cause motion (259b1–19). But it had been

[220] For a broader discussion of self-motion in Aristotle, I refer to the papers of Furley and Gill in Gill/Lennox (1994), Morison (2004) and, particularly, to Coope (2015) whose analysis I mostly follow here.

already established that there needs to be an eternal and continuous motion in the cosmos, on which the generation of animals depends (258b16–259a6). If then the prime mover cannot be a something accidentally moved, it needs to be *absolutely* unmoved, possessing only the capacity to cause motion, without being part of a self-mover (259b22–31). This, I think, poses a strong argument against associating the prime mover with the soul (or something analogous) of the cosmos, as some ancient and modern interpreters of Aristotle do.[221]

Regarding the nature of the prime unmoved mover, Aristotle maintains in the last chapter, VIII.10, that it is 'without parts and without magnitude', i.e. indivisible[222] and (spatially) unextended. He shows this by a number of arguments, e.g. that a magnitude cannot have an infinite power which would be needed to cause the eternal motion.[223] This again, is an implicit critique of Plato, as Aristotle has a physical understanding of the Platonic world-soul as spatially extended which would thus be unable – so Aristotle – to cause the cosmos' motion. Generally, it seems that Aristotle regards Plato's world-soul as prime mover and disregards the causal function of the demiurge, seeing the latter as merely mythical (like Plato's successors Speusippus and Xenocrates).[224]

In the two preceding sections I have argued that for Plato an entity itself in motion such as the world-soul is the prime mover. In contrast, for Aristotle the cosmos' eternal motion can only be caused by something that is absolutely unmoved such as the divine intellect. Aristotle does not dismiss the world-soul as a possible prime mover solely on the ground that he rejects the – supposedly! – Platonic concept of a spatially extended world-soul. Rather, Aristotle would regard the world-soul together with the cosmos as a composite, whereby the unmoved world-soul would be set in motion accidentally by the cosmos' motion. Regardless of whether Aristotle's criticism is correct, it is clear that a combination of both positions is problematic, as they seem to be exclusive alternatives: the principle of a chain of motion must be *either* self-moving *or* motionless.

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[221] This is the view of Broadie (1993) and Kosman (1994) who take it that the prime unmoved mover is the soul of the outermost heavenly sphere. Besides the argument above from *Physics*, Aristotle also explicitly rejects the idea that a soul causes the eternal motion of the heaven in *DC* II.1 284a27–35 and *Met*. Λ 6 1072a2. Moreover, in *MA* 6 he states: τῶν γὰρ ἄλλων παρὰ τὴν τοῦ ὅλου κίνησιν τὰ ἔμψυχα αἴτια τῆς κινήσεως (700b11f.). A fuller explanation for why soul cannot be the prime mover is given by Solmsen (1971), 178; Judson (1994), 161–164 and (2019), 180f.; Coope (2015), 252ff., 257. For further literature on Broadie's et al. position, cf. Twetten (2019), 346 n. 2.

[222] Being without parts equals to being indivisible which means that it cannot change (cf. *Physics* VI.4).

[223] For a more detailed discussion of this argument, cf. ch. IV 2.3.

[224] Cf. Cherniss (1944), 609 (on Aristotle) and Dillon (2020), 155, 158 (on Speusippus and Xenocrates).

4. The Middle Platonists: Intellect as Unmoved Mover and Soul as Self-Mover

In the Imperial Age, some Platonists start to make heavy use of Aristotelian theories.[225] Motion is no exception, as references to an unmoved intellect as principle of motion suggest. Yet, this area of harmonisation has so far not been studied in its own right in Middle Platonist scholarship despite its interesting philosophical character and its importance for later Neoplatonsts.[226] It is in Middle Platonism, I maintain, that a change occurs from a binary system of movers, as seen in Plato and Aristotle, to a triadic one, where both intellect and soul are regarded as sources of motion and bodies as externally moved. I discuss here Alcinous as a fitting example of such an appropriation in order to show that some Middle Platonists followed Aristotle in accepting an intellect as origin of motion. As will be seen, this clashes with the Platonic view of soul as ultimate cause of motion, leading to an inconsistency which is not adequately dealt with. Only later in Proclus, as I argue, we find a more satisfying solution.

Platonists of this period, who focus primarily on *Tim.*, generally associate the demiurge with a transcendent νοῦς.[227] Their system is usually characterised by three principles: god (as νοῦς), forms, and matter.[228] The forms are often identified with the thoughts of god which has led Sharples (1995) to the observation that the Middle Platonists have actually two and a half principles.[229] Moreover, god is sometimes characterised as unmoved mover. The motivation of the Middle Platonists to associate νοῦς with the origin of motion is not just influenced by Aristotle, but, more importantly, grounded in their reading of *Tim.* (mediated through certain interpretations by the Old Academy). While the self-motion of soul seems to be maintained in *Tim.*, the world-soul is shown to be causally dependent on the demiurge who fashioned and connected it with the body of the cosmos (34b–c). Crucially, the whole cosmos, including the world-soul, is set in motion (37c6: κινηθέν) by the demiurge. This presumably is part of the

[225] Cf. Karamanolis (2006); Chiaradonna (2015); Michalewski (2016) who offers an overview of the different approaches.
[226] Both positions were already contrasted by Alexander, cf. Rashed (2011), 115f.
[227] For the reception of *Tim.*, cf. Ferrari (2012). On their views on the demiurge, cf. Proclus, *In Tim*. I 303.24–310.4; O'Meara (1993), 34; Dillon (1996), 7; Halfwassen (2000); Opsomer (2005); Ferrari (2014); O'Brien (2015); Boys-Stones (2018), 147–183.
[228] Cf. Alcinous *Didask*. 8–10; Apuleius *De Plat*. I.5–6 190ff.; Ps.-Plutarch *De Plac. Phil*. 1.3 (878B); Varro *Antiquitates rer. div.* fr. 206 Cardauns.
[229] Cf. Alcinous *Didask*. 2, 9, 10, 14; Atticus fr. 9; Seneca *Ep*. 65 §7. On the dispute among the Middle Platonists about the relationship of god and paradigm, cf. Boys-Stones (2018), 150–159.

explanation why some Middle Platonists saw the doctrine of an unmoved intellect as genuinely Platonic.[230]

Clear evidence of the Platonist adoption of the intellect as prime mover is provided by Alcinous who – among the Middle Platonists – was exceptionally well versed in Aristotle's philosophy.[231] In a theological passage of *Didask.* he discusses the nature of the highest god:

> Since (1) intellect (νοῦς) is superior to (2) soul, and superior to (1c) potential (ἐν δυνάμει) intellect there is (1b) actualised (κατ' ἐνέργειαν) intellect, which cognises everything simultaneously and eternally, and finer than this again is the cause of this and whatever it is that has an existence still prior to these, the (1a) primal God (ὁ πρῶτος θεός), being the cause of the eternal activity (ἀεὶ ἐνεργεῖν) of the intellect of the whole heaven. It acts on this while remaining itself unmoved (ἐνεργεῖ δὲ ἀκίνητος), as does the sun to vision, when this is directed towards it, and as the object of desire moves desire (ὸ ὀρεκτὸν κινεῖ τὴν ὄρεξιν), while remaining unmoved (ἀκίνητον) itself. In just this way will this (1a) intellect move (κινήσει) the (1b) intellect of the whole heaven. (*Didask.* 10.2 164.18–27)[232]

In this complex passage Alcinous presents us an ascending ontological hierarchy, made up of (2) soul, (1c) potential intellect (i.e. of a human being), (1b) active intellect (i.e. of the cosmos) and a (1a) first god. Thus, there is a threefold distinction of human, cosmic and divine Intellect. It is generally agreed upon that the active or cosmic intellect is the intellect of the world-soul.[233] Most importantly, the first god is also an intellect – as is stated towards the end of the passage (l.26) – which, unlike the human and cosmic intellect, is not immanent in a substrate but rather transcendent like the Aristotelian intellect or – on some reading at least – the Platonic demiurge.

The divine intellect is described not only with a reference to the Platonic sun simile from *Resp.* VI 508a–b (which is repeated at 164.39f. and 165.21f.) but also in Aristotelian terms borrowed from *Met.* Λ 7: the divine intellect causes motion *qua* being the object of desire, while remaining itself unmoved, but engaged in ἐνέργεια. It is noteworthy that other contemporary Platonists describe god in similar terms but,

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[230] Cf. n. 267 and n. 268.

[231] On Alcinous generally, cf. Whittaker (1990), VII–XXXI; Dillon (1993), IX–XL. On the diverse reception of *Met*. Λ among the Middle Platonists, cf. Ferrari (2013), and, especially, Chiaradonna (2017) who also stresses Alcinous' acquaintance with Aristotle.

[232] Translations of *Didask*. are Dillon's (1993) with modifications.

[233] For the metaphysical intricacies discussed here, cf. Festugière (1954), 95–102; Donini (2011); Boys-Stones (2018), 164 who offers an excellent bibliography. In my interpretation of the hierarchy I follow Dillon (1993), 100–103. For a different view, cf. Opsomer (2005), 79ff., who takes (1a) active and (1b) potential Intellect to be aspects of one, cosmic Intellect which he associates with the world-soul. The concept of an active intellect could be an Aristotelian borrowing, as Caston (1999), 201 n. 2 suggests.

crucially, leave out the aspect of motive causality.[234] 'Unmoved' is understood in relation to place, i.e. locomotion, as well as qualitative change, as Alcinous clarifies: ἀκίνητος ἂν εἴη κατὰ τόπον καὶ ἀλλοίωσιν (10.7 165.38).[235]

A later passage explains more precisely how the first intellect moves:

> He is Father because he is the cause of all things and bestows order on the heavenly intellect and cosmic soul in accordance with himself and his own thoughts. By his own will he has filled everything with himself, rousing up the cosmic soul and turning it towards himself (ἐπεγείρας καὶ εἰς ἑαυτὸν ἐπιστρέψας), being the cause of its intellect. It is this latter that, set in order (κοσμηθεὶς) by the Father, itself imposes order (διακοσμεῖ) on all of nature in this world. (10.3 164.40–165.3)

As is evident, the first intellect does not directly cause physical motion, like the Aristotelian intellect, but instead causes the activity (164.22) and order (165.3) of the cosmic intellect of the world-soul who in turn arranges the cosmos. This ordering of the world-soul by the divine intellect is, of course, quite close to the activity of the *Timaean* demiurge.

This picture, however, gets more complicated in a later passage of *Didask*. For at 25.4 he identifies the origin of motion with a self-moved mover using language and concepts from *Phdr.* and *Laws* X:[236]

> Furthermore, that which is self-moving primordially (αὐτοκίνητον ἀρχικῶς) is eternally moving (ἀεικίνητον), and such a thing is immortal; but the soul is self-moving. Again, that which is self-moving is the first principle of all motion and generation (ἀρχὴ πάσης κινήσεως καὶ γενέσεως); and a first is ungenerated (ἀγένητον) and indestructible (ἀνώλεθρον); so both the soul of the universe and the soul of man would be such, since both partake in the same mixture. Plato says that the soul is self-moving, because it has life as something innate in it, eternally active in itself. (178.15–23)

Alcinous characterises soul as principle of *all* motion and generation, remaining faithful to Plato. This is a very strong statement. As in Plato, the self-motion of soul can be contrasted with the other-motion of bodies which Alcinous maintains in 11.2 by describing bodies as purely passive, while only the incorporeal is active. Unlike what has been claimed by Dillon (1996), 316, γενέσεως (178.18) is neither a 'significant addition' nor 'development' to Plato's definition of soul as ἀρχὴ κινήσεως in *Phdr*. As I have shown above (p. 59), Plato characterises generation as a kind of motion caused by soul.

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[234] Cf. n. 235 and Witt (1937), 125ff.; Festugière (1954), 97.

[235] These two forms of motion, locomotion and alteration, under which other types can be subsumed, are mentioned by Plato in *Tht*. 181d5f. and *Parm*. 138b7–c1.

[236] Already at 5.5 157.27–36, when Alcinous reformulates the immortality-argument from *Phdr.* 245c5–246a2, soul is characterised as self-moved and ungenerated principle of motion. On the reception of *Phdr*. in Middle Platonism, cf. Moreschini (2020).

Furthermore, generation is explicitly named as one of the types of motion in *Laws* X 894b11 of which soul is the origin.

Alcinous' remarks on the nature of soul contradict his earlier statements in 10.2 regarding the function of God, as we now have an unmoved intellect and a self-moving soul as origins of motion. If the world-soul is the self-moving principle of all motion, how can the divine intellect be described as setting the cosmic intellect of the world-soul in motion (164.26f.: ὁ νοῦς **κινήσει** τὸν νοῦν τοῦ σύμπαντος οὐρανοῦ)? Alcinous unfortunately nowhere answers this question. Thus, his 'reconciliation' of Plato and Aristotle occurs without dealing with the different philosophical premises behind their claims, as is realised – to differing degrees – by latter Platonists such as Proclus, Hermias, and Simplicius. Neither Whittaker (1990) nor Dillon (1993) seem to be aware of this conflict in their commentaries on this passage, although it is amply discussed by Aristotle and later Platonists; Dillon arguably even aggravates the problem by mistakenly translating ἀρχή at 178.18 as 'first principle' instead of just 'principle' or 'origin'. It should be clear that the self-moving soul is somehow dependent on the higher unmoved intellect which can rightly be called a 'first principle'.

The cause of this inconsistency lies in the general trend among Middle Platonists to integrate into their essentially Platonist system certain doctrines from different philosophical strains such as Aristotelianism and Stoicism. This combination is not always successful but can indeed create considerable tensions.[237] Until Proclus, Neoplatonists do not seem to offer a solution for this tension – at least based on our extant evidence. This is also because only with Proclus and other late Neoplatonists we get a systematic theory of unmoved, self-moved and other-moved beings.

5. Proclus: Unmoved Mover, Self-Mover, and Other-Moved

Like earlier Platonists, Proclus tries to combine the accounts of Plato and Aristotle in explaining the origin of motion.[238] His main contribution lies in offering a more systematic view of this issue than previous Platonists like Plotinus and Iamblichus which is in constant interaction with the Platonic and Aristotelian sources. *Prima facie* he does

[237] While Plutarch likewise differentiates between intellect and soul as metaphysical principles, he only states that intellect is unmoved (*De An. Procr*. 1024d1) and directs all things (*De Is*. 382a12f.), while soul is self-moving and a principle of motion (*De An. Procr*. 1013c8). Thus, he stops short of calling intellect a principle of motion as well.

[238] On this issue in Neoplatonism, cf. especially Opsomer (2009); Gertz (2010); Longo (2020).

not seem to follow Plato as closely in his theory of motion as one would expect, since for Proclus self-movers are ultimately dependent on an unmoved mover which is ontologically prior: 'the unmoved is superior to those that are moving and moved' (*EP* II.19).[239] The unmoved mover is identified with intellect and the self-mover with soul. Crucially, motion is transmitted to the physical realm *via* self-movers, i.e. souls. As intermediaries these guarantee the connection between the metaphysical and the physical sphere, and, thus, play a central role in Proclus' theory of motion. The triadic structure of movers which Alcinous has only foreshadowed is here made manifest: 'everything is unmoved, self-moved, or other-moved' (*ET* §14; cf. *In Tim*. II 128.20ff.). When Proclus follows Aristotle regarding the question of the origin of motion, he implicitly accepts Aristotle's criticism of Plato. However this impression is to some degree deceiving. For Proclus, as for all Neoplatonists and some modern scholars such as Hackforth (1965), Menn (1994) and Karfík (2004), a transcendent intellect is part of Plato's metaphysics. Aristotle's theory of the unmoved mover only spells out what already is in Plato – so Proclus. Proclus would thus consider the idea of an unmoved intellect as prime mover as genuinely Platonic and not Aristotelian.[240]

Proclus primarily argues for the necessary existence of the unmoved mover in *EP* which offers us remarkable evidence for the adoption of Aristotelian philosophy and its reconciliation with Plato. While I discussed *EP* at length in ch. I, I focus here on the unmoved mover and self-mover which seems absent in *EP*. This is surprising given its significance not only for Aristotle who reaches his conclusion that an unmoved mover is the origin of motion *via* an analysis of self-motion but also for Proclus who in his other systematic treatise, *ET*, discusses the self-moving soul and its relationship with the unmoved intellect extensively (§§14–20). My discussion of the relationship of the unmoved mover and the self-mover is twofold, split between *EP* and *ET*. I show that his arguments for the existence of both are problematic in these works. Yet by looking at Proclus' larger system I maintain against Opsomer (2009) that these inconsistencies can be solved.

[239] The unmoved mover as first cause of motion is also found in Proclus other works, e.g. *PT* I.14 65.18; *In Tim*. I 413.20–27; III 3.7–13.
[240] As I explained on p. 65f., this seemed to have been already the case for Alcinous.

5.1. Primacy of Unmoved Mover in EP

Does Proclus include self-movers in his discussion of the origin of motion in *EP*? Or, is his account of motion so thoroughly Aristotelian that he accepts a binary system of unmoved and moved movers? While Ritzenfeld (1912), VIII noted the difference between the accounts of motion in *EP* and *ET,* i.e. consisting of the former's lack of self-movers, Dodds (1963), 201 argues that both discussions are actually compatible and that self-motion is implied in the general treatment of *EP*. The discussion focuses particularly on §II.19: 'the unmoved is prior to the things that are moving and moved' (τῶν κινούντων καὶ κινουμένων ἡγεῖται τὸ ἀκίνητον) and the correct understanding of the terms κινούντων and κινουμένων. My argument is a *via media* between Ritzenfeld and Dodds: while explicit references to self-movers are indeed missing, the account of *EP* is still compatible with *ET*. First, we need to look more closely at the proposition.

In II.19, which is based on *Physics* VIII.5, Proclus establishes the priority of the unmoved mover as origin of the universe's eternal motion. In doing so he excludes the possibility either (i) that this eternal motion is caused by a finite series of things in motion moving each other in a circle, i.e. A moving B moving C moving again A etc., or (ii) that eternal motion is due to an infinite series of moving things. Option (ii) is rejected, since an infinite number of magnitudes (or an infinitely large magnitude) is irreconcilable with the idea of a finite cosmos, as Proclus had demonstrated earlier in II.15 that an infinite magnitude cannot exist. Regarding (i), Proclus answers that

> if the motion is in a circle, one of the things which are sometimes moved (τῶν ποτὲ κινουμένων) will be the cause of the eternal motion, if all move and are moved by each other in a circle. But this is impossible; for that which produces eternal motion is eternal (τὸ γὰρ τὴν ἀίδιον κίνησιν κινοῦν ἀίδιόν ἐστιν) (II.19 56.23–26).

Proclus excludes the possibility that the cause of the eternal motion are things causing motion only intermittingly. Thus, Proclus has shown that the eternal motion of the universe can be caused neither by an infinite series of movers nor by a finite series of movers moving each other. Rather, he concludes, a single mover must always be causing it. This had also been demonstrated in the previous proposition II.18: 'That which produces an eternal motion is eternal'.

Yet, it is puzzling why Proclus leaves out another option (iii): a self-mover accounting for the eternal motion, i.e. a self-moved world-soul setting the universe in motion. For this would be the obvious solution for a Platonist following Plato's account in *Phdr.* and, particularly, *Laws* X where Plato clarifies that a self-mover as prime mover

averts an infinite regress (see p. 59f.).[241] Proclus thus effectively refutes Plato's argument in *Laws* X.

Having said this, it first needs to be clarified what Proclus means by τῶν κινούντων καὶ κινουμένων in §II.19 and whether these terms imply a self-mover. The most accurate translation, preferred by Ritzenfeld (1912), 57 and Opsomer (2009), 195f., takes both terms together as 'moved movers' or literally 'the things that are moving and moved'. This expression is vague: while it clearly implies other-moved entities, self-movers could be referred to as well since they move other things and are moved internally. Nevertheless, it is not an explicit reference to self-movers.

However, there has been another term for self-movers proposed by Dodds which Proclus uses towards the end of the proposition:

> From this becomes clear that […] not everything is sometimes at rest and sometimes moved (for there is also something moved eternally as well as something always unmoved). (II.19 56.28–58.5)

Proclus distinguishes between 'something eternally moved' (τὸ ἀιδίως κινούμενον) and 'something always unmoved' (τὸ ἀεὶ ἀκίνητον). While the latter is clearly to be identified with the prime mover, Dodds (1963), 201 argues that the former expression relates to a self-mover. Dodds presumably has in mind the world-soul which is always in motion (ἀεικίνητος) according to *Phdr.* and causes the eternal motion of the heaven. While this might be correct, given the Aristotelian background of *EP* it could much rather be a reference to the eternal motion of the cosmos as being externally caused by the unmoved mover. I thus conclude that Proclus does not explicitly engage with the concept of self-motion in II.19 and generally in *EP*.

How could this absence of self-movers in *EP* be understood, given that it is so significant in *Physics* VIII as well as in other Proclean works? It should be pointed out that although Proclus leaves out this crucial step in Aristotle's argument, he still retains the same conclusion, i.e. that an unmoved mover (and not a self-mover) is the origin of motion. Two reasons, I argue, explain his omission: (1) Proclus regards the inclusion of self-movers as an unnecessary complication of his argument, since – in line with the Aristotelian doctrine expounded in *EP* – he takes it for granted that self-movers depend on an unmoved mover (*ET* §20). In order to accomplish his goal in *EP* to demonstrate the existence of the unmoved mover he does not require a detour *via* an analysis of self-

[241] Proclus had indeed extensive knowledge of both texts; cf. ch. III 4.3.

movers. Nevertheless, his account of self-movers is compatible with *EP* as his discussion in *ET* will show. (2) More importantly, the proper context of discussing self-movers is, for Proclus, metaphysical and not physical as in *EP*, since self-movers are souls and transcend the strictly physical realm. Since *EP* was probably designed as a textbook for students mastering Aristotle's natural philosophy, it is not surprising that the more metaphysical background is left out, as students were not yet introduced to it. Similarly, it is a common feature of Neoplatonist commentaries to adapt to the presupposed knowledge of the students, as they were designed in the context of the school's curriculum. This explains why some commentaries on Aristotle are lighter on intricate metaphysical questions and why Proclus defers his discussion of self-movers to *ET* where non-physical motion plays a crucial role.

5.2. Unmoved Mover and Self-Mover in ET

In *ET* we find a detailed account of the relationship and hierarchy of the other-moved (ἑτεροκίνητον), self-moved (αὐτοκίνητον), and unmoved (ἀκίνητον), as exemplified by §14:[242]

> Every being is either unmoved (ἀκίνητον) or moved (κινούμενον) and if moved, either by itself or by another; and if by itself, self-moved (αὐτοκίνητον); if by another, other-moved (ἑτεροκίνητον). Thus, everything is either unmoved, or self-moved, or other-moved.[243]

Later, in §20 Proclus identifies ἀκίνητον with intellect, αὐτοκίνητον with soul and ἑτεροκίνητον with body.[244] As I emphasise below, intellect, soul, and body are here collective terms which denote classes of beings and not specific entities. Moreover, it is important to note that the context here differs from *EP*. In *ET* motion serves to describe the relationship of different metaphysical entities, primarily soul(s) and intellect(s), and their activity, e.g. in the case of soul discursive thinking, willing, opining etc. Bodies play only a marginal role: as other-moved they have no motive and, generally, no causative

[242] This triad also occurs at e.g. *In Tim*. I 373.13–18; *In Alc*. 116.9–15; *In Parm*. V 979.19–21.
[243] Translations of *ET* are based on Dodds (1963).
[244] At *PT* I.14 61.22–62.12 Proclus has a fourfold distinction, since he further divides other-moved entities into beings exclusively moved, i.e. bodies, and moved movers, i.e. forms and qualities. Cf. Opsomer (2009), 210–214.

force on their own but rather derive this from a higher, non-physical source, i.e. soul and, ultimately, intellect.[245]

A few remarks on the terminology are required. Plato already differentiated in e.g. *Laws* X 894b8–c1 between things moved by others and things moved by themselves, which here forms the background for Proclus' own distinction between αὐτοκίνητον and ἑτεροκίνητον. Earlier evidence for hierarchies of movers, quite similar to our example, are also found in other Neoplatonist sources, too.[246] Among these, it is only in Proclus' teacher Syrianus that the same terminology and triadic structure of ἀκίνητον, αὐτοκίνητον, and ἑτεροκίνητον occurs, albeit not all three in the same context.[247] His students Proclus and Hermias (who uses the same terminology frequently in *In Phdr*., e.g. 110.23, 120.22f., 126.28) took over the terminology and triadic structure of movers and transmitted it to later Neoplatonists such as Damascius, Simplicius and Philoponus. Syrianus seems to be the first Neoplatonist to use ἑτεροκίνητον for bodies – a term which cannot be found in his authorities Plato and Aristotle. However, the idea that bodies are moved externally is well grounded in Plato as well as Aristotle and is a commonplace among Platonists.[248] Unlike what has been claimed by Longo (2020), 124, Syrianus is not the first philosopher to use this term. Rather, we find it in Alexander as part of the triad ἀκίνητον, αὐτοκίνητον, and ἑτεροκίνητον (*In Phys*. VIII.5 599, 9f.). Plato makes no mention of αὐτοκίνητον, but it does occur once in Aristotle (*Physics* VIII.5 258a2). Its singular appearance in Aristotle recently has led Rashed (2011), 556 to claim that the sentence including the term was originally a gloss from Alexander who often employs it, as by the Imperial Age αὐτοκίνητον is established as a technical term.[249]

To what entity does Proclus actually refer here when he states that νοῦς is the prime mover? Unlike Aristotle who refers to the intellect of the outermost sphere, Proclus in fact uses the term collectively and circumscribes a class of beings – which is rarely emphasised enough in scholarship. This is made clear by the formulation of prop. 14 quoted above which claims that 'everything' can be exhaustively divided into unmoved,

[245] Cf. *In Parm*. III 786.3f.: ὅλως δὲ πᾶσα σωματικὴ κίνησις παθήματι μᾶλλον ἔοικεν and *PT* I.14 61.23–26. This fits the more general views that bodies are passive, as outlined in the programmatic remarks of *ET* §80.
[246] Cf. Dodds (1963), 201; Longo (2020), 123f.
[247] Cf. *In Met*. 13.31; 14.4 (ἀκίνητον); 45.26, 142.17 (αὐτοκίνητον); 23.21 (ἑτεροκίνητον).
[248] Cf. e.g. Plotinus III.6 6, 50ff.; VI.1 19, 9; VI.3 23.
[249] Cf. Opsomer (2012a), 261; Longo (2020), 124.

self-moved, and other-moved beings. Clearly anything higher than soul cannot be described as self-moved or other-moved, which leaves as the only possible description of these beings the unmoved. It follows that in §14 and §20 the whole intelligible realm – including forms, demiurge, and other gods – is described by the term νοῦς and 'prime mover'. Proclus makes thus a very general claim about the origin of motion and does not specify the precise beings involved or the details of the process. The same goes for his use of soul and body in these propositions. To a certain degree this is similar to Plato's discussion at *Phdr*. 245c5 where the term 'soul' is also used collectively.

While this collective usage of the term might be less troublesome given the introductory nature of these propositions, the identification of νοῦς with the intelligible realm causes more difficulties in Proclus. This has historical reasons. Unlike Plotinus, who had a clearcut division between the different layers One – intellect – soul, Proclus takes over this structure and analyses it into distinct aspects. What for Plotinus represented the intellect – the intelligible realm – is split by Proclus into three aspects which form a triad and a hierarchical structure: being, life, and *intellect*.[250] These three are both simultaneous aspects of a single reality as well as successive stages in the procession from the One. In accordance with this division, intellect is thus – strictly speaking – no longer identical with the whole intelligible realm, like in Plotinus, but rather only with one of its layers. Thus, at *ET* §101 Proclus clearly distinguishes intellect as one aspect of the triad: πάντα ἐν πᾶσιν, οἰκείως δὲ ἐν ἑκάστῳ· καὶ γὰρ ἐν τῷ ὄντι καὶ ἡ ζωὴ καὶ ὁ νοῦς, καὶ ἐν τῇ ζωῇ τὸ εἶναι καὶ τὸ νοεῖν, καὶ ἐν τῷ νῷ τὸ εἶναι καὶ τὸ ζῆν, ἀλλ' ὅπου μὲν νοερῶς, ὅπου δὲ ζωτικῶς, ὅπου δὲ ὄντως ὄντα πάντα.[251] I believe this apparent inconsistency can be explained by the character of *ET* as a στοιχείωσις. In the early propositions Proclus offers a fundament and basic structure of reality which he then further develops. Applied to our problem this means that in some way one can consider

[250] Cf. *ET* §§101–103 with Dodds' commentary *ad loc*. For an overview of this triad with a focus of the theory of forms therein, cf. d'Hoine (2017); specifically for its historical background, cf. Dillon (2021). Van Riel (2017), 87 offers a helpful scheme with a commentary. On the demiurge and his place within this triad, cf. Opsomer (2000a), (2000b), and (2006b); d'Hoine (2008).

[251] Compare this with the seemingly exhaustive hierarchy of reality in §20: πάντων σωμάτων ἐπέκεινά ἐστιν ἡ ψυχῆς οὐσία, καὶ πασῶν ψυχῶν ἐπέκεινα ἡ νοερὰ φύσις, καὶ πασῶν τῶν νοερῶν ὑποστάσεων ἐπέκεινα τὸ ἕν. A possible objection that §20 talks about νοερὰ φύσις while §101 of νοῦς is not helpful, as Proclus mentions in the argument of §20 also the latter term (e.g. 22.23f.: πρὸ τῶν ψυχῶν ἄρα ὁ νοῦς. ἀλλὰ μὴν καὶ πρὸ τοῦ νοῦ τὸ ἕν).

the whole intelligible as νοῦς, but in a more precise and strict way the νοῦς is only one of its aspects.

What is the role of αὐτοκίνητον? According to Proclus, a self-mover is the proximate cause of other-moved beings[252] and acts as a kind of 'middle' (*ET* §14 16, 25: μέσον) term between an unmoved mover and an other-moved, mediating the motion between these two, since it has both their active and passive aspects.[253] This does not mean that a self-mover in Proclus is made up of two distinct parts, unmoved and moved, like in Aristotle. Instead of having two locally distinct parts (as one could assume for Aristotle), the soul *qua* self-mover can be analysed into two conceptual parts or aspects.[254] Faced with the possible dichotomy between an unmoved mover and an other-moved, Proclus states that there must be an intermediate being between these two: 'For since there are things other-moved it is necessary that there is also something unmoved, and an intermediate being which is self-moved' (*ET* §14 16, 13f.). What its self-motion precisely consists in, is discussed in the next chapter.

Why is the existence of a self-mover 'necessary' (ἀνάγκη)? Before Proclus explains this, he discusses the origin of motion, i.e. the unmoved mover:

> For if every other-moved is moved by something set in motion externally, then we either (i) have a circuit of communicated motion or (ii) an infinite regress. But neither of these is possible, inasmuch as all beings are limited by a principle (ὥρισται τῇ ἀρχῇ τὰ ὄντα πάντα) and the mover is superior to the moved (τὸ κινοῦν τοῦ κινουμένου κρεῖττον). There must, then, be something unmoved which is the first mover. (§14 16, 15–19)

Both consequences (i) and (ii) are identical to the options set out in *EP* II.19 and thus ultimately derived from Aristotle's *Physics* VIII.5. So too is his conclusion, i.e. that the first mover must be unmoved. But his explanations, as I show, are quite different from the ones found in *EP*, since they must be based on earlier propositions. This is due to *ET*'s axiomatic structure where each proposition is – or should be theoretically at least – deducible from an earlier one, just as in *EP* (see ch. I 3.). Proclus thus provides here Platonist and not Aristotelian explanations. This is similar to the phenomenon treated in chapter I: when discussing material or conclusions from *Physics* or *DC* in other treatises than *EP* Proclus offers Platonist arguments which tend to be more in-depth and based on

[252] Cf. *PT* I.15 70.26f.: τὰ δὲ ἑτεροκίνητα πάντα τῶν αὐτοκινήτων ἔκγονα.
[253] Cf. Proclus' so-called *Law of the Middle Term* (*LMT*) in *ET* §28. Proclus applies this law specifically to the soul as intermediary between intellect and bodies. Cf. also *In Tim*. I 402.15–403.31, esp. 402.15–19.
[254] Proclus makes this clear in *In Parm*. VII 1147.29ff.; *ET* §17 (see p. 76f.). Already Iamblichus envisaged self-movers in the same way in *De Mysteriis* I.4 12.6–10; cf. Coope (2020), 121f.

a specific understanding of Plato. In *ET* §14 his two claims that are supposed to refute both alternatives are the following: (a) 'all beings are limited by a principle' (16, 17) and (b) 'the mover is superior to the moved' (16, 17f.).

(b) rests on a fundamental Neoplatonist concept, expressed in §7: 'Every productive cause is superior to the nature of its product', i.e. the cause is greater than its effect.[255] Thus, an efficient cause cannot bring about an effect that is either equal or superior in nature to it. Since Proclus discusses motion in terms of efficient causality, he applies this earlier proposition to his argument in §14. It clearly clashes with (i), i.e. the idea of a circular structure of things moving and being moved by others simultaneously: Seen as efficient causes, mover A would produce a lesser effect (motion) B which in turn acting as a cause would generate an even lesser effect C etc. The obvious problem encountered in such a finite circle of entities being simultaneously cause and effect or mover and moved is that at some point a lesser effect would need to cause the motion of a higher cause which is impossible, since it lacks the causative power to do so, i.e. the causally weak C would need at some point to cause the motion of the causally potent A.

The danger of an infinite regress of movers (ii) can be refuted by a recourse to (a) which is based on §11: 'all beings proceed from a single, first cause'. Proclus uses an epistemological argument, borrowed from Aristotle (*Met*. α 2 994a1ff.), to argue against an infinite regress of motive causes (12, 25–28): In case of an infinite chain of causes 'all things will be unknowable. For nothing infinite can be apprehended; and the causes being unknown, there can be no knowledge of their effects'.

According to Proclus these two arguments show that the origin of motion has to be an unmoved mover. But this is fallacious, since the motion could also be generated by a self-mover: his counterarguments (a) and (b) show only that the first mover does not have to be set in motion externally. Yet, they do not exclude the possibility that this principle sets itself in motion. Proclus' conclusion is deficient, unless we grant that he takes Aristotle's analysis of self-motion as a given, whereby an absolute self-mover in the Platonic sense does not exist but rather is made up of unmoved and moved aspects. I do not suppose this is the case in *ET*, since he explicitly distinguishes here between three kinds of movers and claims that 'if the mover be one part and the moved another, in itself

[255] Cf. §§56–57 and §75. Its Platonic origin is *Phileb*. 27a5f.: ἡγεῖται μὲν τὸ ποιοῦν ἀεὶ κατὰ φύσιν, τὸ δὲ ποιούμενον ἐπακολουθεῖ.

the whole will not be self-moved, since it will be composed of parts which are not self-moved: it will have the appearance of a self-mover, but will not be such in essence' (§17, 18, 25–28). This plainly goes against the Aristotelian conception of self-movers.

After having thus established the necessity of an unmoved mover, Proclus turns towards the self-mover:

> But if so, there must also be something self-moved. For imagine all things to be at rest: what will be the first thing set in motion (κινούμενον)? Not the unmoved, by the law of its nature. And not the other-moved, since it is moved from without (ὑπ' ἄλλου). It remains, then, that the first thing moved is the self-moved, which is in fact the link (συνάπτον) between the unmoved and the other-moved things. At once mover and moved, the self-moved is a kind of mean term (μέσον πως) between that which merely moves [i.e. unmoved mover) and that which is merely moved [i.e. other-moved]. Every being, therefore, is either unmoved, or self-moved, or other-moved. (16, 20–27)

In a hypothetical state of absolute rest, highly reminiscent of *Phdr.* 245d8f. and *Laws* X 895a6, neither the unmoved nor the other-moved would be first set in motion but rather the self-moved.[256] The elimination of the unmoved is obvious, but why is the other-moved excluded as first thing moved? Proclus' only explanation seems to be that it is moved externally (16, 22: ὑπ' ἄλλου γὰρ κινεῖται) and as such cannot be the first thing set in motion. From this we must conclude that the primary moved has to be something not moved externally but moved by itself, i.e. a self-mover. Proclus maintains that the self-mover connects the unmoved with the other-moved by mediating the motion. Thus, it seems that the unmoved mover cannot move the other-moved directly and instead requires the mediation *via* the self-moved. How it does so is here not explained. I will try to give an answer below.

But first let us consider the background of the argument in 16, 20–27 which is *Laws* X. After determining that self-motion has priority over other kinds of motion and is indeed the origin of all motion (894e7–895a3), Plato provides another argument for these claims:

> If somehow everything were to come to a standstill (σταίη), just as most of those men venture to say, which motion of the ones we spoke of [i.e. the ten motions] would necessarily be the first to come to be among them? Surely one that moves itself (ἑαυτὴν […] κινοῦσαν). For it would never be changed by another that is prior (ἔμπροσθεν), since there is among them no prior change. (895a6–b3; tr. Mayhew)

Plato's argument here is quite different from Proclus'. Plato talks about the first *motion* (πρώτην κίνησιν) to arise (γενέσθαι) in this hypothetical state of rest and, unlike Proclus,

[256] The same argument from standstill appears in *PT* I.14 61.9-11. The necessity of the self-mover is also emphasised at *In Parm*. V 998.15–27.

not about the first thing *moved*. According to Plato, self-motion is primary precisely because it is not brought about by something else, as there is no unmoved mover for Plato which could produce this change. This idea is reflected in Proclus' exclusion of the other-moved as first thing set in motion since it is moved externally. Yet, unlike Proclus, Plato wants to establish by this argument that the self-mover is the prime mover.

As noted by Opsomer (2009), 204ff., two problems arise here which deal with the simultaneous existence of an unmoved mover and a self-mover. (1) The first concerns the necessary existence of the self-mover which has not been sufficiently proved in §14 and also cannot be inferred from an earlier proposition, despite the supposed 'geometric' make-up of Proclus' work. Why cannot an unmoved mover cause the motion of the other-moved directly?[257] (2) Secondly, if we accept Proclus' proof of the self-mover as an internally moved entity which in turn causes the motion of the other-moved, what role does the unmoved mover play? For one could then be content with accepting a self-mover as causing the motion of the cosmos. Hence, (1) and (2) question the triadic structure of movers in Proclus, since a binary system of *either* unmoved and other-moved *or* self-moved and other-moved seems sufficient. Both difficulties can be solved only by looking at Proclus' philosophical system.

5.3. Proclus' Solution in In Parm.

In the following, I propose to defend Proclus' triadic system of movers against these objections by considering a passage from *In Parm.* In short, Proclus provides there an explanation for the existence of self-movers in terms of producing something: something unmoved can only bring about something unmoved, while something moved only something moved.[258] This in fact is very close to Plato's view on causation, outlined on p. 61. A self-mover bridges the gap between the two, unmoved and moved, since its essence (οὐσία) is unmoved, its activity (ἐνέργεια) moved. But let us look more closely at Proclus' argument.

In a text from *In Parm.*, Proclus deals with the question why the ultimate source of motion must be an unmoved intellect and not a self-moved soul:

[257] Similarly also Opsomer (2009), 207.
[258] Cf. also *In Tim*. I 413.20–27. The view that soul is caused by intellect and hence a mediator has been proposed forcefully in modern Platonic scholarship by Menn (1995), 34–42, 47. See also n. 267.

> It is said that all things produced by an unmoved cause (ἀκινήτου αἰτίας) are unmoved (ἀκίνητα) and unchangeable (ἀμετάβλητα), but those that come about from a moved (κινουμένης) cause are, on the contrary, mobile (κινητά) and changeable (μεταβλητά), being sometimes in one state and sometimes in another. And if this is true, all things that are eternal in essence and unchangeable are produced by an unmoved cause. For if they come from a mobile cause, they will be changeable, which is impossible. All unmoved things, therefore, come from an unmoved cause, that is, if they come into being at all. (III 795.7–13)[259]

Proclus first presents a dichotomy of unmoved and moved things. To these correspond two kinds of causes which resemble their effects, i.e. unmoved and moved. In other words, an unmoved entity cannot be caused by a moved cause and *vice versa*.[260] This abstract division into unmoved and moved is then exemplified by certain entities:

> The genuinely unmoved beings, consequently, are those that are unchangeable both in their essence (κατ' οὐσίαν) and in their activity (κατ' ἐνέργειαν). Such are the intellective beings (νοερά); second come those that are unmoved in essence but mobile in activity, such as souls (ψυχικά); third are those that are invisible but inseparable from visible things, like the natural beings (φυσικά); and last are the visible forms (ἐμφανῆ) that exist distributively in sensible objects. (796.4–796.8)

The intellect is unmoved in essence and activity, while soul is only unmoved in essence but moved in activity which both together make up its self-motion.[261] This distinction between essence and activity in soul, which is elaborated in *ET* §191, helps Proclus in situating the two different characteristics. In this way, the make-up of soul accounts for an uninterrupted transition of the different ontological layers and also explains how soul is immortal and possesses a temporal existence at the same time.[262] It should be noted that Proclus means by soul here only the rational soul which is the true soul.[263] Only the rational soul is self-moved.[264] Soul's essence is eternal, while its activity temporal (*ET* §191). This does not mean that soul has two distinct parts, an unmoved essence and a moved activity; Proclus already rejected this in *ET* §17 (see above).[265] Instead, these are

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[259] Translations of *In Parm*. are taken from Morrow/Dillon (1987) with modifications.
[260] Cf. *ET* §28: 'All procession is accomplished through a likeness of the secondary to the primary', i.e. the effect resembles the cause. The issue with this law of causation is that at some point down the causal series something unmoved causes something moved. That is, the effect resembles then very little its cause and a radical difference sets in between cause and effect.
[261] Essence and activity form with power (which is intermediate between the two) a triad, discussed in ch. III 4.4.2.
[262] On the latter aspect, cf. Helmig (2014), 153f.
[263] The irrational parts of the soul are mere shadows **(**εἴδωλα) of soul, cf. *PT* III.6 23.18–25. On this cf. Opsomer (2006a).
[264] This also the position of Damascius *De princ*. I 29.23ff.
[265] With reference to the discussion at *ET* §17, Proclus claims in *In Parm*.: οὐ γὰρ ἄλλο μέν τι τὸ κινοῦν ἐν τοῖς αὐτοκινήτοις, ἄλλο δὲ τὸ κινούμενον, ἀλλ' **ὅλον ἅμα κινοῦν τέ ἐστι καὶ κινούμενον**, ὡς ἐν ἄλλοις ἡμῖν τοῦτο διὰ πολλῶν ἀποδέδεικται (VII 1147.29–32). At *In Parm*. VII 1147.5–1151.25 Proclus deals with the problem of how soul *qua* self-mover can act and be acted upon at the same time.

two different aspects of the same thing, both involved in the self-motion of soul. Due to its composition, soul can cause through its activity moved or mobile effects such as the motion of the cosmos. But since soul has an unmoved essence, there needs to be a superior unmoved cause. This, I maintain, is the explanation for the puzzle above concerning the reason for excluding the unmoved mover as a direct cause of the other-moved. It also provides an argument for regarding soul as a mediator between the unmoved and other-moved, which was not evident in *ET* §§14–20 and completely absent in *EP*. It should be noted that Proclus provides such a defence for his triadic structure of kinetic beings not only in *In Parm*. but also in *ET* §76 and *PT* I.14.[266] The idea that soul has a double nature and mediates between the immobile and mobile realm is clearly grounded in Proclus' reading of *Tim.* 35a1–b3, where soul is described as something intermediate. Proclus picks this up in *ET* §190: 'Every soul is intermediate between the indivisibles and those which are divided in association with bodies'.

6. Conclusion

The passage above explains why Proclus prefers a triadic over a binary system of movers, i.e. either (1) an unmoved mover and an other-moved or (2) a self-moved and an other-moved. Regarding the Aristotelian model (1), Proclus recurs to a common principle according to which like causes like, i.e. the unmoved causes the unmoved and the moved causes the moved. Since the other-moved belongs to the category of moved things, its cause needs to be likewise moved. This must thus be the self-moved in order to exclude an infinite regress. Regarding the Platonic model (2), Proclus maintains that, while soul is responsible for the cosmic motion, it is in turn dependent on a higher principle which is unmoved and the cause of its essence. This in fact is a very Platonic idea and can be reconciled with the description of the demiurge in *Tim.* who fashions the world-soul and the whole cosmos. In a certain way, Proclus prefigures here modern solutions on the compatibility of the demiurge's causation of soul and soul's self-motion such as Vlastos' and Brisson's.[267] 'Mover' needs to be understood differently in the case of the unmoved

[266] In the latter passage (esp. 61.15–17) Proclus discusses the necessity of both unmoved mover and self-mover by focusing on the causation of δύναμις to move by the unmoved mover to self-mover and other-moved and to be moved by self-mover to other-moved; cf. Opsomer (2009), 213f.

[267] According to Vlastos (1965), 411 the 'Craftsman creates souls and then leaves them alone to do their own self-moving for ever after'. Brisson (1994), 339 states that 'il y a différnce [sic!] entre être son propre principe de mouvement et être principe de l'être de son mouvement'. Cf. also Karfík (2004), 219.

mover and the self-mover respectively. While soul directly causes physical motion, intellect is a cause of motion only insofar as it causes the unmoved essence of soul and guarantees that the cosmos has an eternal principle of motion. Thus, only in a mediated way (*via* soul) does the unmoved mover move the cosmos. In providing such a reasoning, Proclus goes beyond earlier Platonists who lack a sufficient argument for assuming both intellect and soul as principles of motion, as exemplified by Alcinous.

Lastly, how Aristotelian is Proclus' account? While the adoption of the intellect as unmoved mover seems *prima facie* Aristotelian, Proclus' motivation as well as the philosophical context are indeed very Platonic. For Proclus it is a Platonic commonplace to regard the demiurge as an intellect, based on a long exegetical tradition reaching back to the Old Academy. Once the demiurge is understood in this way, it is only a small step for Proclus to call him unmoved mover, as the demiurge – according to the Neoplatonist interpretation at least – is lacking physical motion (=unmoved)[268] and is somehow causally efficacious towards the cosmos (=mover). Proclus superficially agrees with Aristotle's conclusion that the eternal motion of the cosmos is caused by an unmoved mover and even dedicates a treatise to this deeply Aristotelian question. But, in his more metaphysical and Platonic works it becomes clear that the picture is complicated by the mediating force of the self-moved soul. As Proclus clarifies, the cosmos would reach a standstill without the world-soul which thus plays a crucial role in causing its eternal motion. This can be contrasted with Aristotle where the prime mover is the *direct* cause of the cosmos' motion and the function of souls is limited to causing inner-cosmic motions.

[268] In a similar vein goes also Karfík's interpretation of the *Timaean* demiurge: 'Als dem Bereich des Intelligiblen angehörend, dieses erfassend und wie dieses unentstanden und unvergänglich (37al mit 52al-4) muß also auch der demiurgische νοῦς jenseits des Gegensatzes von Bewegung und Stillstand sein. In diesem Sinne ist er unbewegt.' (2004: 217)

CHAPTER III: SOUL'S SELF-MOTION AND IMMORTALITY

1. The Problem of Self-Motion

In the last chapter I tackled the puzzle why Proclus adopts both an unmoved intellect and a self-moving soul as principles of motion, when either of these seem *prima facie* to be sufficient explanations for the origin of motion. As it emerged, Proclus envisions the self-moving soul as necessary mediator between the unmoved intellect and other-moved bodies since the unmoved mover does not cause directly the motion and being of the other-moved bodies. Given the importance of self-movers, I now turn to a discussion of the nature of self-motion by considering Proclus' Platonic and Aristotelian background in developing this notion. What does self-motion consist in? Does it denote a single activity of soul or rather a plurality? And are we to understand it as a physical phenomenon, bound to space? The last question specifically has been heatedly discussed since antiquity and is the main focus of this chapter. By 'spatial motion' I mean in the following every type of change that requires and occurs in space.

According to Plato, self-motion is not just one characteristic among many of soul but rather its essence (οὐσία), as he emphasises in *Phdr.* 245e2ff. and *Laws* X 896a3f.[269] This definition of soul is very consequential, primarily because self-motion is the reason for soul's immortality in *Phdr.* – a central tenet of Plato's thought. Moreover, by originating its own motion and that of others, the world-soul is the prime mover in the cosmos. Also, through its self-motion soul maintains ethical independence, as it is able to originate its own actions. In spite of the doctrine's ontological, physical, and ethical significance, Plato tells us little about the nature and the workings of self-motion. The picture we get in *Phdr.*, *Tim.*, and *Laws* X, where Plato characterises the soul as self-moved and touches upon the question of self-motion, is complex. Let me briefly set out my own views on this issue which are laid out in greater detail in Marinescu (2021).

Phdr. is particularly quiet on this issue. In the immortality-proof at 245c1–246e2, which was discussed in the previous chapter, Plato does not further characterise the nature of self-motion. This lack of clarity has led to interpretations of self-motion as either

[269] Cf. also the spurious *Definitions*: Ψυχὴ τὸ αὑτὸ κινοῦν (411c7).

locomotion[270] or an incorporeal, non-spatial type of motion.[271] A possible motive for Plato's reticence in this dialogue. is provided by Griswold (1986), 80:

> The perception required to state the essence of human and divine soul would seem to transcend human powers; indeed, to try to state the essence of the divine seems hubristic. Perhaps this is why so little is said in the passage [i.e. 245c5–246a2] about the soul beyond the assertion that soul is immortal self-motion.

Given the poor and inconclusive textual basis in *Phdr.* for either a spatial or non-spatial reading, I believe that judgement needs to be suspended here.[272]

A clearer picture emerges in *Tim*. Here, Plato's heavy usage of spatial language to describe the (world-)soul has recently led to a wide consensus among scholars that the soul is spatially extended, either in two or three dimensions, and that its motion is circular locomotion.[273] This interpretation has supplanted the older view that we ought to take Plato's language as metaphorical and, thus, not regard the soul as actually extended in space and its circular motion only as a symbolism for rationality.[274] According to this recent consensus, a more literal interpretation should be preferred not only on exegetical grounds by taking seriously how precisely Plato describes the composition and working of the world-soul but also on philosophical grounds. For on such a reading one can avoid a strong dualism and better account for soul-body interaction. Fundamentally, the soul is capable of interacting with the body due to its ontological makeup (i. e. by being composed of a mixture of divisible and indivisible being, sameness and difference) and, more specifically, due to its extension in space – a property it shares with the body. Since the soul and the body are extended in space the soul can transmit its own locomotion to the body and *vice versa*.[275] This explains, for instance, how perceptions can affect the soul, as Plato describes in detail (*Tim*. 43b5–c7).

Unlike in *Tim.*, in *Laws* X Plato regards self-motion as non-spatial, as I have argued in Marinescu (2021). Through a discussion of Plato's classification of motion and

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[270] Cf. Theiler (1965), 70; Prince (2011), 158–178. Robinson (1995), 151 n. 32 argues against this view.
[271] Cf. Griswold (1986), 85 who explicitly excludes that it is locomotion.
[272] A number of authors leave this question also open, e.g. Bett (1986); Robinson (1995), 151 n. 32, Blyth (1997), 202f.; Long (2019), 50. The latter two at least exclude that self-motion entails generation since the soul is not generated.
[273] Cf. Gaiser (1968), 59f.; D. Frede (1996), 37; Sedley (1997), 329f.; von Perger (1997), 127–66, Burnyeat (2000), 57f.; Menn (2002), 85; Johansen (2004), 139–42; Karfík (2004), 190; Carone (2005), 236f. n. 31; Broadie (2012), 179 n. 18; Betegh (2018), 15; Corcilius (2018), 60f.
[274] Cf. Cornford (1937), 93f.; Cherniss (1944), 404–406; Ross (1961), 184; Skemp (1967), 84–86; Lee (1976), 85 n. 28; Brisson (1994), 339.
[275] Cf. Johansen (2004), 141. For a more detailed analysis of soul-body interaction in *Tim.*, cf. Johansen (2000); Betegh (2018).

its context, I reached the conclusion that self-motion cannot be identified with any type of spatial motion (since it is categorically distinct from corporeal types of motion) and that it cannot be regarded generally as requiring space. Most significantly, I demonstrated that there is positive evidence supporting my interpretation. For at 896c5–d5 Plato emphasises that the soul is prior to extension in space and lacks dimensionality. Additionally, Plato's analogy of rational motion with circular motion at 897d3–e2 only emphasises that soul's motion is to be understood metaphorically and not as actual spatial motion in a circle.

From this brief discussion of *Phdr.*, *Tim.*, and *Laws* X a varied picture of self-motion emerges, whereby the more extensive treatments in *Tim.* and *Laws* X yield contradictory results, as self-motion is presented as spatial in *Tim.* and non-spatial in *Laws* X. Generally, Plato provides us in *Laws* X a less materialist conception of soul and its activity than in *Tim*.[276] Unsurprisingly, this difference between the accounts of the *Timeaus* and *Laws* X has supplied later – ancient or modern – commentators with solid exegetical grounds for a spatial or non-spatial understanding of self-motion in Plato. In antiquity the former view is favoured by Aristotle and some Middle Platonists such as Atticus and Plutarch, while the latter is propounded by the Neoplatonists.

Aristotle's critique of spatial self-motion is a turning point in the study of this concept, as it provides the Neoplatonists with good reasons besides *Laws* X for dismissing a spatial interpretation of self-motion. Aristotle recognises the importance of self-motion and offers a significant critique of Platonic psychology by attacking Plato's concept of self-motion in *DA* 1.3 and by denying that soul in virtue of itself (καθ' αὐτό) can be seen as in motion. Despite this critique, the idea that the soul is self-moved is universally accepted by the Neoplatonists and taken up by Medieval philosophers.[277] Thus, for Proclus, self-motion is the essence of soul: τὸ αὐτοκίνητον οὐσία τῆς ψυχῆς (*In Tim*. II 242.20f.). In addition, self-motion is associated with key Neoplatonist concepts, such as self-reversion (ἐπιστροφὴ πρὸς/εἰς ἑαυτό) and being self-constituted (αὐθυπόστατον). It remains the defining characteristic of soul and the cause of its immortality, as Proclus argues especially in *In Tim.* and *ET*.

[276] I have suggested in Marinescu (2021), 117–120 that this inconsistency can be explained either by a development or – more favourably – by a different focus and perspective in both works
[277] On self-motion in Medieval philosophy, cf. ch.s 10–11 in Gill/Lennox (1994); Vucu (2018).

Yet, how is it possible to maintain the importance of self-motion in light of Aristotle's criticism which was well known among Neoplatonists? In order to answer this question, one needs to focus more on Proclus' Platonic and Aristotelian sources and his engagement with these. Against this background, Proclus' theory proves to be much more dependent on both than usually assumed. Thus, I will argue in this chapter that Proclus in his theory of soul as self-moved and immortal is not just indebted to Plato but also to Aristotle's critique of Plato's psychology. My discussion is split in four parts.

First (2.), I discuss Aristotle's *DA* I.3. Aristotle offers a more general critique of Plato's self-moving soul, as encountered in *Phdr.*, *Laws* X, and *Tim.*, before turning to a specific attack on the latter. Aristotle strongly objects to – what he regards as – Plato's spatial conception of soul and its motion. This critique is crucial, as it offers strong reasons against associating soul with a spatial motion. After a short discussion of Middle Platonist and early Neoplatonist views on this issue (3.), I turn to Proclus (4.). First (4.1.), I analyse his refutation of Aristotle' objection in *In Tim*. Proclus maintains that Aristotle's reading of Plato is wrong and that soul and its motion are actually non-spatial and, generally, non-physical in Plato. Yet, simultaneously I demonstrate that Proclus in fact agrees with Aristotle's own view on soul as non-spatial and immaterial. This causes a certain tension between rejecting Aristotle's reading of Plato and endorsing his understanding of soul. Then, I show that Proclus' approach to Aristotle is more critical than other Neoplatonists' (4.2) and emphasise the importance of *Laws* X among Neoplatonists and, specifically, Proclus for developing their view on self-motion as non-spatial, which has been overlooked in scholarship (4.3). In the last part, I engage with Proclus' own theory of self-motion (4.4). Based on a close reading of *ET* §§15–17 and §187 I elucidate how Proclus incorporates Aristotle's critique to argue for soul's motion as an essentially separate activity from body which guarantees the immortality of soul. Keeping in line with Plato, Proclus shows why this non-physical motion belongs to soul's essence and why it guarantees its immortality. For Proclus, self-motion is essential for soul, since soul constitutes itself by moving itself. Thus, soul is conceived as self-causing through its specific motion. Most importantly, soul retains a certain ontological and ethical independence from higher beings such as intellect and the One, since its own being and actions are grounded in itself.

2. Aristotle's Critique of Soul's Self-Motion in DA *I.3*

Aristotle not only criticises Plato's self-moved soul in *Physics* VIII where the emphasis lies on showing that there must be a higher principle of motion than soul but also in *DA* I.3–4 where he specifically attacks Plato's concept of soul in *Phdr.*, *Laws* X and *Tim.*, demonstrating that 'it is impossible that motion belongs to the soul' (I.3 406a2).[278] Insofar as soul can be said to be moved, this occurs only incidentally (καθ' ἕτερον) by being in a moving body but not *per se*, in virtue of itself (καθ' αὐτό). His main point of contention is that Plato and other philosophers who maintain that the soul is self-moved wrongly attribute motion to soul because they conceive the soul as body-like. For, according to Aristotle, Plato maintains that by being extended in space and moving like a body soul is able to impart its own locomotion to the body (I.3 406b26ff.). Aristotle objects to this conception of soul and to framing psychophysical interaction in dualist terms. Instead he proposes his own famous definition of soul as the first actualisation of an organic body whereby soul is 'neither a body nor without a body' (II.2 414a19f.).[279]

Aristotle's treatment of Plato is part of a larger doxographical overview in *DA* I. which in earlier scholarship had been rather overlooked and not regarded as philosophically challenging (e.g. Ross 1961, 19). Yet, more recent publications by Menn (2002), Carter (2017)/(2019) and Ferro (2022) have argued for the importance of *DA* I regarding the development of Aristotle's own psychology (as is suggested by I.2 403b20–25).[280] Menn (2002) specifically sees the psychology of *DA* as the 'result of […] an internal critique of Platonic approaches to the soul' (86). In this light, Aristotle's engagement with Plato's definition of soul is of particular significance for understanding his psychology.[281] Most importantly for my current undertaking, *DA* I.3 proved to be highly influential for later Platonists who reacted to Aristotle' critique in differing ways but generally agreed with its result, i.e. that soul and its activity cannot be extended in space.

Aristotle proceeds to criticise Plato's theory of a self-moving soul more generally (I.3 405b31–406b25), before attacking specifically the account of *Tim.* (406b25–407b11). I will leave out the latter[282] which is addressed in the section on Proclus. In his more

[278] Translations of *DA* are by Shields (2016).
[279] On this definition, cf. Menn (2002). It is rejected by Plotinus (IV 7.8) and Proclus (*In Tim*. III 300.2ff.).
[280] Specifically, on the positive outcome of *DA* I.3, cf. Shields (2016), 118.
[281] Cf. Carter (2019), 59f. and the conclusions Aristotle draws from *DA* I in C. Witt (1992), 182f.
[282] The most detailed reconstruction is by Carter (2017).

general attack on self-motion, Aristotle does not target Plato explicitly, but it clearly emerges from the details and language of his critique that his teacher is among the addressees:

> We ought first to inquire into motion. For it is presumably not merely false that soul's essence (οὐσίαν) is such as claimed by those who say that the soul is 'that which moves itself' (τὸ κινοῦν ἑαυτὸ), or is 'that which is able to move itself' (δυνάμενον κινεῖν), but it is, rather, impossible that motion belong to the soul. (405b31–406a2)

The two expressions concerning the essence of soul as self-moving are similar to *Phdr.* 245c7 (τὸ αὐτὸ κινοῦν) and *Laws* X 896a1f. (τὴν δυναμένην αὐτὴν αὐτὴν κινεῖν κίνησιν) and undoubtedly should be seen as references to these dialogues.[283] This is significant, as it shows that Aristotle is acquainted besides *Phdr.* 245c also with *Laws* X.[284] Most importantly, he takes Plato to have a unified theory of self-motion in these texts and interprets him accordingly.

Among the objections Aristotle presents here against Plato's theory of the self-moving soul, four turn out to be particularly relevant:

6.1.1. A thing causing motion does not need to be in motion itself (406a3f.). From this it follows that a self-moving soul does not need to be the principle of motion.

6.1.2. If soul moves itself, it must do so with at least one of the four types of motion: locomotion, alteration, growth, and decay (406a12–22). However, these cannot be attributed to soul due to its lack of extension.

6.1.3. If soul's essence is self-motion and every motion is a 'displacement' (ἔκστασις), then soul departs from its essence (406b11–15).

6.1.4. What Plato refers to as soul's motions – being pained, pleased etc. – in fact belong to the human being using a soul. (408b1–4)

Argument (1), already mentioned in *DA* I.2, refers to Aristotle's discussion in *Physics* VIII, particularly ch. 5. There, Aristotle argues against a self-moving soul as responsible for the eternal motion of the cosmos and, instead, presents his theory of the unmoved mover. The argument of *Physics* VIII has been discussed at some length in the

[283] Most commentators since antiquity agree, cf. Philoponus, *In DA* 96.10ff.; Cherniss (1944), 391 n. 311; Lee (1976), 98 n. 24; Menn (2002), 93; Carter (2019), 61. Together with *Tim.* and *Resp.*, the *Laws* are cited most often by Aristotle; cf. Bonitz (1870), 598a–599b.

[284] According to Diogenes Laertius (V §22.277) Aristotle even wrote a treatise on the *Laws*, τὰ ἐκ τῶν Νόμων Πλάτωνος α′ β′ γ′, whose nature, however, is almost impossible to establish.

previous chapter, where I argued that Proclus fundamentally accepts this Aristotelian insight by backing it up with Neoplatonist metaphysics.

According to (2), if soul moves itself, it has to do so with one (or more) of the types of physical motion.[285] This means essentially, that soul moves like a body having the same kind(s) of motion which also explains Aristotle's supposition that soul transmits its own motion to the body (406a30ff.). Since undergoing any kind of motion requires place according to Aristotle's theory of motion, soul would be then located in a place. Aristotle rejects this since soul has no magnitude and can therefore not be located somewhere. Also, soul would have a natural and an unnatural motion which Aristotle regards as equally absurd.[286] From this it becomes clear that Aristotle takes the motion of soul described by Plato in *Phdr.*, *Laws* X, and *Tim.* to be spatial which, as I have argued above, seems at least for *Laws* X not to be the case. In the latter's classification of motion, Plato counts the four types of motion mentioned by Aristotle as subtypes of corporeal other-motion which requires space and is in turn categorically distinct from psychic self-motion.[287] Aristotle here imputes his own concept of motion to Plato by listing only the types of motion he himself recognises.[288] Thus, although Aristotle is acquainted with *Laws* X, he wrongly characterises soul's motion as spatial.

Argument (3) takes its starting point from *Phdr.* 245c7f., again showing Aristotle's reliance on Plato in *DA* I.3.[289] There Plato states: 'it is only what moves itself that never desists from motion, since it does not leave off being itself (οὐκ ἀπολεῖπον ἑαυτό)'. Plato's argument is that, since soul's essence consists in moving itself (or, more precisely, being a self-mover) and it always moves itself, soul always acts according to its essence. In other words, soul *is* always itself. On the contrary, Aristotle maintains, if Plato's definition is taken at face value soul actually departs from its own essence due to its motion:

> Moreover, if in fact the soul moves itself, it would itself be moved as well. So, if every motion is a dislodging (ἔκστασις) of the moved in the respect in which it is moved, the soul too would be dislodged from its essence (ἐξίσταιτ' ἂν ἐκ τῆς οὐσίας), if, that is, it

[285] For a detailed discussion, cf. Ferro (2022), 94–100.
[286] On this, cf. C. Witt (1992), 174ff.
[287] Cf. Simplicius *In Phys*. 1249.1–5.
[288] Aristotle provides an argument for why there can be no other types of motion than the four he usually recognises (i.e. substantial, qualitative, quantitative, locomotion) based on his categorical understanding of being in *Physics* III.1 200b26–201a9.
[289] This has been recognised since antiquity, cf. Philoponus, *In DA* 114.19; Menn (2002), 97f.; Ferro (2022), 62 *et passim*. For an in-depth analysis, cf. Ferro (2022), 110–119.

> does not move itself co-incidentally, but motion belongs to its essence in virtue of itself. (406b11–15)

This objection is of crucial importance, as Plato's ever-moving soul is construed by Aristotle as continuously departing from its own essence. As a consequence, soul would be no longer soul.[290] The objection hinges of course on the Aristotelian premise that motion equals displacement of the moved in the respect in which it is moved.[291] Since motion on this view is an essential and not accidental characteristic of soul, states Aristotle, soul does not change accidentally but essentially – which fits Plato's description of soul in in both *Phdr.* and *Laws* X.

After his discussion of *Tim.* (406b25–407b11), Aristotle raises another possible objection (4) to his view that the soul is moved only incidentally as part of a body by attributing to it certain motions:

> [W]e say that the soul is pained and pleased, is confident and afraid (λυπεῖσθαι χαίρειν, θαρρεῖν φοβεῖσθαι), and further that it is angry and also that it perceives and thinks. But all of these seem to be motions. On this basis, one might suppose that the soul is in motion. (I.3 408b1–4)

Although missed by many ancient and modern commentators,[292] this passage is clearly a reference to *Laws* X. For the pairs λυπεῖσθαι χαίρειν, θαρρεῖν φοβεῖσθαι appear at 896a2f. as χαίρουσαν λυπουμένην, θαρροῦσαν φοβουμένην where they are regarded as 'primary-work' motions of soul. The objection claims that soul has certain mental attitudes which are motions and that therefore the soul is in motion. Aristotle quickly rejects this objection by maintaining that 'it is perhaps better not to say that the soul pities or learns or thinks, but that the human being does these things with the soul' (408b13ff.). While it is not entirely clear here whether the subject of the motion is the composite human being or the soul insofar as it is embodied, it is obvious that the soul in virtue of itself (καθ' αὐτό) does not undergo the motion but rather in virtue of another (καθ' ἕτερον).[293]

This is an interesting critique in its own right, as Aristotle rightly points out that the motions of which soul's self-motion consists in *Laws* X 896e–897a seem to arise from an embodied state of the soul and not from the soul directly, as would a purely cognitive activity like theoretical thinking (νόησις). But it also points towards a more important

[290] Cf. Carter (2019), 72.
[291] Cf. *Physics* IV.12 221b3, IV.13 22b16, and VI.5 235b9: τὸ γὰρ μεταβάλλον ἐξ οὗ μεταβάλλει ἐξίσταται ἢ ἀπολείπει αὐτό.
[292] E.g. Themistius, Philoponus, Ps-Simplicius, Shields (2016) *ad loc*. For a correct identification, cf. Menn (2002), 92 and Theiler (1959), 99.
[293] A good summary of the exegetical and interpretative issues is offered by Shields (2016), 143ff.

Aristotelian objection: if soul's self-motion consists of activities intrinsically linked with the body, how can it guarantee its separability from the body and, thus, immortality, as Plato emphasises in *Phdr.*? For in order to be separable, the soul requires a separate activity from the body, as Aristotle rightly points out in *DA* I.1 403a3–16. In section 4.4 I will show how Proclus deals with these concerns.

In conclusion, Aristotle attributes here to Plato a spatial understanding of soul and its motion. Based on my analysis of Plato's concept of self-motion, I submit that while his spatialist interpretation might fit *Tim.*,[294] he is wrong in imputing this view more generally to Plato, since we receive a different picture in *Laws* X (and, perhaps, in *Phdr.*). Plato offers us different perspectives on self-motion in these dialogues: in *Tim.* the perspective is physical, while in *Laws* X psychological and theological.[295] Aristotle proves to be quite a superficial reader of *Laws* X, although it is clearly Plato's most elaborate version of his theory of self-motion.[296] Thus, unlike Carter (2019), I am more reserved about the quality of his critique which partly is eristic in nature as well as based on assumptions about motion that Plato does not share.[297]

3. The Legacy of Aristotle's Critique in Middle Platonism and Neoplatonism

Platonists did not receive Aristotle's scathing and, at times, captious criticism well. Some early evidence for this tendency can be encountered in the second-century Platonist Atticus who often polemicises against Aristotle. Atticus refers to the significance of the doctrine of the soul's immortality for ethics, cosmology, and epistemology, concluding that 'absolutely all of Plato's doctrines are fixed to (ἐξηρτημένων) and dependent on (ἐκκρεμαμένων) the divinity and immortality of the soul – and anyone who does not agree with this overturns the whole of Plato's philosophy' (fr. 7, 5; tr. Boys-Stones). After these emphatic remarks, he rebukes Aristotle for rejecting the 'primary-work motions', i.e. 'deliberation, thought, anticipation, memory, calculation', and thus self-motion of soul

[294] Cf. Shields (2016), 126.
[295] On Plato's perspective in *Tim*., cf. Sedley (2019), 49f.
[296] On Aristotle as a reader of Plato, cf. the general remarks in Steel (2012).
[297] Carter (2019), 76 emphasises that the refutation is based on premises Aristotle establishes elsewhere. Ultimately, however, he does not believe that this affects the success of his refutation. For an overview of the different scholarly positions on the question whether Aristotle's refutation in *DA* I.3–4 is internal or based on his own premises, cf. Ferro (2022), 32.

(fr. 7, 6–12).[298] Rather, according to Atticus, Aristotle maintains that soul does not possess these motions and that the aforementioned activities can be attributed only to a human as whole, i.e. the soul-body compound (see argument (4) in the previous section). But in denying that they belong to soul directly, 'he would seem to have left us no evidence for its existence or purpose' (fr. 7, 12). Atticus concludes that in regard to soul's immortality and motion it is not worth consulting a philosopher who has 'slain' (ἀποκτιννύντος) the soul and denied any type of motion to it. Atticus rejects here Aristotle's criticism by making extensive use of *Tim.*, *Phdr.* and *Laws* X.

This example demonstrates that already in the Imperial Age Plato's and Aristotle's views on the soul's nature and activities were contrasted, especially by focusing on the soul's self-motion. However, as I argue, this does not result necessarily in a serious and intellectually honest engagement by the Middle Platonists with Aristotle's criticism in *DA* I.3 or with Aristotle's psychology as a whole, as the polemical character of the passage above makes plain. In spite of the Aristotelian objections, Atticus, as well as Plutarch, for instance, regard soul's motion as physical[299] and pay no attention to the problems this view causes which Aristotle set out in detail.

This is quite different from the Neoplatonists' more mature treatment of Aristotle. For in Neoplatonism Aristotle's insight that spatial motion cannot be attributed to soul is universally accepted.[300] Since self-motion needs to be preserved as an essential characteristic of the Platonic soul, it is consequently always taken to be non-spatial. While the 'founder' of Neoplatonism, Plotinus, is less focused on self-motion and its significance for soul's immortality,[301] the issue reappears at the centre of debates on psychology from Iamblichus onwards, as interest in Aristotle's *DA* increases.[302] Indeed,

[298] Cf. Ferrari (2016a) and (2016b); Michalewski (2020). The passage is not discussed in Karamanolis (2006).
[299] This is my understanding of Atticus fr. 7. For Plutarch, cf. *De An. Procr*. 1024c9–d4; 1024e10–1025a1 with Opsomer (2012a), 263.
[300] Cf. Proclus *In Tim*. II 108.25–32, 140.30f., 284.18–25, 285.15–19, 286.2–17; Hermias, *In Phdr*. 109.35–110.9; Simplicius, *In Phys*. 1248.21–1249.27; Philoponus, *In DA*. 95.9–35.
[301] Possible motives for this are provided by Michalewski (2020), esp. 43. Cf. also Chiaradonna (2014), 191ff.
[302] For Iamblichus' view on self-motion, cf. Opsomer (2012a) and on motion generally, cf. Taormina (1997). Besides the evidence in Proclus discussed below, there are significant discussions in Themistius', Ps.-Simplicius', and Philoponus' commentaries on *DA* I.3. Crucial are also Hermias' and Macrobius' analyses: on Macrobius, cf. Gertz (2010); Hadot (2015), 115–118; on Hermias, cf. Gertz (2010); Menn (2012a); Longo (2020); Aerts (2021). The latter shows how Hermias is more reluctant than Simplicius in the agreement he sees between Plato and Aristotle. Differences between Neoplatonist and Aristotelian psychology are succinctly presented by Helmig (2014), 152–157.

Iamblichus sees Aristotle as bringing the study of soul to completion (Ps.-Simplicius *In DA* 1.10f.). Proclus singles out Porphyry and Iamblichus as breaking up with earlier spatialist interpretations of Plato's soul (*In Tim*. II 104.17–108.14).[303] Many later Neoplatonists who are well-versed in Aristotelian psychology try to harmonise Aristotle with Plato on the issue of self-motion by claiming that Aristotle objected only to a superficial interpretation of Plato's words while being well aware that Plato used the term motion also in a non-physical manner. Proclus, however, stands out as more critical by attacking Aristotle explicitly in this respect and maintaining that Aristotle misunderstood Plato. It is important to note the diverse and nuanced reception of Aristotle's objections to Plato, as the Neoplatonist response is sometimes wrongly depicted as uniformly positive and harmonistic, ignoring general tendencies in the Alexandrian and Athenian schools as well as more specific differences between individual philosophers.[304]

In the following section, I demonstrate that (a) Proclus takes a non-harmonist stance on Aristotle by analysing his refutation of Aristotle's critique in *DA* I.3 and contrasting it with other Neoplatonist interpretations of the passage. Next, I argue that (b) Aristotle's criticism shapes the development of certain psychological views in Proclus and thus serves a positive function.

4. Proclus

4.1. Proclus' Refutation of Aristotle's Critique

Proclus studied psychology extensively.[305] According to his biographer Marinus (*VProcl*. §11), Proclus began his studies in Athens by reading Plato's *Phd.* and Aristotle's *DA* under the guidance of the scholarch Plutarch of Athens who wrote a now lost commentary on the latter. This proved fruitful since Proclus produced a commentary on *Phd.* as well as the treatise Περὶ τῶν τριῶν λόγων δι' ὧν παρὰ Πλάτωνι τὸ τῆς ψυχῆς ἀθάνατον ἀποδείκνυται, where he discusses Plato's proofs of immortality at *Phd*. 105b5–107a1,

[303] For Porphyry cf. *Sent*. 17: Ἡ ψυχὴ οὐσία ἀμεγέθης […].
[304] For a discussion of differing commitments to the thesis of harmony in Alexandria and Athens, cf. Introduction 3.2.
[305] Overviews of Proclus' psychology are found in Opsomer (2006a) and (2018); Finamore/Kutash (2017). On his critique of Aristotle's definition of soul, cf. Trouillard (1982), 207–215. The most useful discussions of Neoplatonist psychology are Steel (1978), Blumenthal (1996), Perkams/Piccione (2006), and Perkams (2008). On the Neoplatonist engagement with Aristotle's psychology, cf. Blumenthal (1990) and (1996); Gerson (2005), 131–172; Opsomer (2018), 131.

Resp. X 608c1–611a9, and *Phdr.* 245c5–246a2.[306] The last proof was particularly important for Proclus.[307] Through his study of *DA*, Proclus also became aware of Aristotle's criticism of Plato's psychology and, especially, self-motion. Moreover, Proclus had knowledge of Aristotle's rejection of the self-moving soul as origin of motion in *Physics* VIII which he studied intensively, as his work *EP* proves (see ch.s I and II).

Apparently, Proclus felt so provoked by Aristotle's objections to *Tim.* in *DA* I.3 that he dedicated a (now lost) treatise to refuting these. The treatise probably was entitled Ἐπίσκεψις τῶν πρὸς τὸν Τίμαιον ὑπὸ Ἀριστοτέλους ἀντειρημένων, i.e. *Investigation of Aristotle's Objections to the* Timaeus (*Investigation*) and dealt with Aristotle's criticisms in *Met*. Λ 8, *DA* I.3, and *DC* I.2–4, I.10, II.1 and III.7–8.[308] Since Proclus refers to it in his *In Tim*. – which he wrote at 27 according to Marinus – the treatise must be one of his earliest works. While Proclus engaged there with various claims made by Aristotle, one feature of Aristotle's critique was particularly striking for him (as it is also for some modern scholars): the idea that the Platonic soul is a spatial magnitude (μέγεθος).[309] Based on this literal, non-allegorical interpretation Aristotle objects to the world-soul's portrayal as extended and possessing physical motion.[310] This issue is crucial for comprehending the nature of self-motion. As has been shown earlier, the question whether or not Plato conceived the soul and its motions as spatially extended in *Tim.* (and elsewhere) has recently sparked a new interest among scholars with the majority sympathetic to a spatialist reading. In contrast, Proclus argues throughout *In Tim*. against this spatialist interpretation, and specifically against Aristotle's analysis. Even though Proclus refers here primarily to the world-soul (since this is the focus of the *psychogonia*), his conclusions about the non-spatiality of self-motion apply generally to all types of soul, as will be seen below.

In the two texts below – taken from *In Tim*. but referring directly or indirectly to his *Investigation* – he offers a few arguments against Aristotle's interpretation of *Tim.*

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[306] Both works are lost, cf. Luna/Segonds (2012a), 1569ff., 1590. The latter can be partly reconstructed through Latin (*ap*. Priscianum *Solutiones ad Chosroem* 42.19–21; 47–49) and Arabic sources, as Chemi (2014) demonstrated. Cf. also Perkams (2018), 1916, 1920. Proclus discusses the proof of *Resp*. X also at *In Remp*. II 89.5–91.18.

[307] See below n. 338.

[308] Some of its content has been reconstructed through excerpts from Proclus, Simplicius, and Philoponus, and discussed by Steel (2016). For a full list of the fragments, cf. Luna/Segonds (2012a), 1591–1596.

[309] See below and e.g. *In Tim*. II 245.29. On these passages, cf. Menn (2012a); Steel (2016), 330–332, 342f.

[310] This literal approach was an outlier within the Old Academy as Dillon (2003) demonstrates. *Pace* Carter (2017), 53f.

Text A:

> Therefore it is necessary to conceive of this life-engendering (ζῳογόνον) shape of the soul as shapeless (ἀσχημάτιστον) and lacking in extension (ἀδιάστατον), unless we intend to infect ourselves and the theory of Plato with many absurd consequences (πολλῆς ἀλογίας), such as those which Aristotle introduced. (i) He assumed that the soul is a magnitude according to Plato because of the circles, and then demonstrated that, as such, it is incapable of being intellectual (νοεράν), for intellect is indivisible and such as to cognise indivisible intelligible beings. (ii) In addition, if the soul is the sort of thing with magnitude, then it will only be divisible, and not in any way indivisible – much less will it be composed of Being that is indivisible in addition to being divisible. [A magnitude], whether it be a circle or a ring, has only a divisible nature and will be in no way indivisible. (*In Tim*. II 250.8–19; tr. Baltzly)[311]

In this passage Proclus presents certain 'absurdities' arising from Aristotle's reading of *Tim.* in *DA* I.3 406b26–407b11. As Proclus makes clear, Aristotle regards the *Timaean* soul as a magnitude 'because of the circles' (250.12), i.e. because Aristotle takes the circles of the same and the different in the world–soul (*Tim*. 36b–c) to be spatially extended. However, if soul is understood as a magnitude in *Tim.*, (i) it would be divisible and, thus, unable to know indivisible entities such as the forms (presumably because there must exist an ontological likeness between subject and object of thinking, as Proclus emphasises)[312] and, moreover, (ii) it would be exclusively divisible and not indivisible; but this explicitly disagrees with the *Timaean psychogonia* according to which soul is made of both divisible and indivisible being.[313] The very essence of the world-soul, according to Proclus, is an 'intermediary between the following extremes: the one cosmic intellect and the entirety of the divisible Being that has come to be in the realm of bodies' (*In Tim*. 141.13f.). Aristotle is thus portrayed here as a bad interpreter who attributes to Plato a spatialist understanding of soul that otherwise does not fit the overall psychology in *Tim*.

Let us consider the next passage.

Text B:

> And since I know what has been written in the Aristotelian objections (ἀντιρρήσεις) to the generation of the soul (ψυχογονίαν) and the alleged solutions (λύσεις) of Platonists in response to them, I don't think it is necessary to expend much effort [over them]. Otherwise, refutation (ἀντιλογίας) would bring us totally astray, for the soul is not a circle like a magnitude (μέγεθος). Neither is it necessary when this supposition has been refuted to think that one has thereby laid hold on Plato's doctrine (καθάπτεσθαι τῆς Πλατωνικῆς

[311] Cf. Baltzly (2016), 190.
[312] Cf. *In Tim*. 298.5ff. On this principle in *Tim.*, cf. Cornford (1937), 94; Johansen (2004), 139.
[313] Cf. Philoponus, *In DA* 124.5ff. On Proclus' interpretation of the composition of the world-soul, cf. Baltzly (2020), 294–299.

> θεωρίας).[314] For this reason, it seems to me that it is surely acceptable to pass over these matters, for I know that an investigation of them has been undertaken in the book I published specifically on this, *Investigations of Aristotle's Objections to the* Timaeus (τῶν πρὸς τὸν Τίμαιον Ἀριστοτέλους ἀντιρρήσεων ἐπισκέψεις). (*In Tim*. II 278.27–279.4; tr. Baltzly, modified)

At the start of text B Proclus emphasises that he does not want to spend too much time on Aristotle's objections to the *Timaean psychogonia*, as he and other Platonists have already dealt with these extensively. Who these other Platonists are, is open to debate. One could be inclined to count Atticus among them, as he criticised Aristotle objections from *DA* I.3 in fr. 7 (quoted above) and is cited by Proclus quite often in his commentary on the *psychogonia* (cf. e.g. II 115.1, 153.29, 306.1). However, as seen, Atticus (like Plutarch) has a spatialist view of soul with which Proclus disagrees. I believe it is more probable that Proclus is referring to Plotinus and Porphyry, as they also reacted negatively to *DA* I.3 and defended Plato.[315]

Proclus mentions then four related Aristotelian interpretations of *Tim.* with which he has dealt more extensively in his *Investigation*:

> In it I have dealt with these issues at length and shown that (i) magnitude is not correctly ascribed in the case of the soul according to the *Timaeus*. As a result of this, I also show that (ii) it is no more possible that the soul should cognise the indivisible intelligibles by means of divisible magnitude than that one should make the indivisible fit over the top of the divisible. In addition I show that (iii) the motions of the heaven are not identical to the motions of the soul, but rather, according to the teachings of the *Timaeus*, the former have been made to exist as a result of the latter. Neither (iv) is it impossible that the soul should often cognise the same object by means of the same thing, but it is even necessary in the case of discursive thought – if it is indeed the case both that the intelligibles have been limited and also that cognition takes place by means of a circle. So therefore it seems to me that these matters can be set aside at present because I have dealt with them at greater length in the book just mentioned. (279.4–279.16; tr. Baltzly, modified)

The four claims made by Aristotle in *DA* I.3 which Proclus aims to refute are:[316]

(i) Soul is a magnitude. (*DA* I.3 407a3ff.)

(ii) Soul cannot know intelligible entities. (407a10ff.)

(iii) Heaven's motions are identical with soul's motions. (407a1)[317]

[314] I here accept Steel's correction of Baltzly's translation. Cf. Steel (2016), 330 n. 14.
[315] Atticus', Plotinus', and Porphyry's disagreements with Aristotle's psychology and, particularly, *DA* I.3 can be found in Eusebius *Praep. Ev*. XV ch.s 4–13 Mras. For a discussion and further literature, cf. Michalewski (2020).
[316] Cf. Steel (2016), 330ff.
[317] Cf. Carter (2017), 55.

(iv) Soul cannot know the same object by means of the same thing. (407a21–32)[318]

In short, Proclus provides four responses:

(i) Soul is not a magnitude, since it is not a spatially extended circle.

(ii) Soul knows intelligible and sensible entities, since it is made of indivisible as well as divisible being which correspond to the intelligible and sensible realm.

(iii) Soul produces, and is thus different from, the heaven's motions.

(iv) Soul is able to think the same things, as intelligible entities are limited and thinking circular.

These responses show that, for Proclus, Aristotle's objections are based on a fallacious understanding of Plato's text, as also seen in Text A.

Proclus concurs with Aristotle that a spatialist understanding of the *Timaean* soul really leads to 'absurd consequences' (250.10). Yet, unlike Aristotle, Proclus maintains that this is not a correct interpretation of Plato's text but rather a misunderstanding of Plato's teaching based on an erroneous, literalist interpretation of *Tim*. In this way, Proclus' position is strikingly close to some modern assessments of *DA* I.3, such as of Cherniss (1944), 405f. and Nuyens (1973), 230 n. 34, who regard its interpretation as too literal and, thus, unfair towards Plato.[319] It is noteworthy that Aristotle himself seems to refer to this interpretative strategy, i.e. taking metaphors literally:

> It is possible also to argue captiously (συκοφαντεῖν) against the user of metaphorical expression, as though he had used it in its literal sense (ὡς κυρίως εἰρηκότα); for the definition stated will not apply, e.g. in the case of temperance [as a harmony]; for harmony is always found between notes. (*Top*. VI.2 139b35–38; tr. Pickard-Cambridge)

However, as I have argued in the discussion of text A and B, Aristotle has only refuted – according to Proclus – a superficial reading of Plato's text without reaching its proper meaning.[320] Proclus portrays Aristotle as directly attacking Plato's position and not just one possible reading of *Tim*. As I show in the next section, this differs from the reading of Ps.-Simplicius and Philoponus.

[318] For a discussion, cf. Carter (2017), 70–74.
[319] For a positive reevaluation of Aristotle's objections in *DA* I.3 and a critique of modern scholarship on it, cf. von Perger (1997), 171–174. In the same direction go also Carter (2017) and Ferro (2022).
[320] For a distinction between superficial and deeper meaning, cf. Steel (2013).

While Proclus refutes Aristotle's interpretation, his refutation nevertheless has a constructive function: Proclus – implicitly at least – concedes that Aristotle rightly shows the absurdity of the spatial reading and, consequently, correctly rejects it. Thus, Proclus actually endorses the result of Aristotle's critique, i.e. that neither soul nor its motions are spatial.[321] Proclus himself emphasises the ridiculousness of the literalist reading – thus, again, implicitly endorsing and backing up Aristotle's objections:

> Nor is there anything that requires us to accept what is said by those who take the soul's shape to be genuinely composed from two circles. For if circles are without breadth, how is it possible to split the one from the other without their having breadth? And if they are particular rings, how is the soul composed from them supposed to be interwoven 'from the middle all the way to the furthest reaches of heaven' (*Tim*. 36e2)? For in what manner can rings be stretched through the whole of a spherical body? (*In Tim*. II 249.31–250.3; tr. Baltzly)[322]

In this sense, Aristotle's criticism can be used to understand why a good Platonist should not entertain such a superficial reading but instead should look for a deeper meaning in Plato's text. Moreover, it points towards a more fundamental agreement between Proclus and Aristotle beyond the correct exegesis of Platonic texts.[323] While Aristotle misunderstood the meaning of Plato's text, he still held the correct belief about soul's nature.[324]

4.2. Comparison with Other Neoplatonist Exegeses of DA *I.3*

While Proclus explicitly attacks Aristotle for misunderstanding Plato's text, other Neoplatonists have a more conciliatory attitude, according to which Aristotle is aware that he refutes only an *apparent* meaning of *Tim*. The difference between them and Proclus lies in their view of Aristotle's interpretation. A comparison between the different Neoplatonist answers makes Proclus' diverging hermeneutical strategy stand out more clearly.

Neoplatonists mainly employ two hermeneutical strategies when encountering Aristotle's criticism. (i) Aristotle criticises a literal interpretation of a Platonic text,

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[321] For references, cf. n. 297.
[322] This passage is echoed in (and possibly inspired) Philoponus *In DA* 117.14–23.
[323] Their affinity has been recently emphasised by Opsomer (2018): 'It is therefore all the more remarkable that Proclus' own views on the soul are so heavily indebted to Aristotle. On closer inspection, there is a much greater continuity between Proclus and the commentators on Aristotle than is generally acknowledged' (131).
[324] In fact, Aristotle's and Proclus' rejection of physical motion as a property of soul – which had already been established by Plotinus (see section 3.) – must be contrasted with earlier Platonist views, such as those of Plutarch and Atticus who maintained that soul does have a circular motion. See Conclusion.

knowing well that Plato had a metaphorical sense in mind. Aristotle does this either (i.1) to refute incompetent interpreters of Aristotle who only take Plato literally, or (i.2), according to Menn (2012a), 49, 'maliciously […] to pretend that Plato had meant it literally'.[325] (ii) Aristotle did not recognise Plato's metaphorical language and criticised a literal meaning which he took to be Plato's opinion.[326] Strategy (i.1) is characteristic of the Alexandrian school under Ammonius and is found specifically in the works of his pupils, Simplicius and the early Philoponus, who thus show that Aristotle actually does not disagree with the true meaning of Plato's words, only with their misguided interpretation.[327] Golitsis (2018) who discusses this strategy at length calls it the 'preventive function of philosophical criticism', as it serves to hinder students of Plato to understand his texts in a certain way. Proclus follows (ii) as he believes that Aristotle directly criticises Plato on soul's nature and motion.[328] Since most commentators use strategy (i.1), Proclus stands out in his approach to Aristotle.

For instance, Philoponus makes it clear that Aristotle knew that he merely refuted a fallacious interpretation of Plato's text: 'But here, too, Aristotle, as he always does, refutes only what appears at face value, so that someone who is unable to perceive what is being conveyed through these riddles would stay at the level of the apparent. (*In DA* 116.26ff.; tr. van der Eijk). Thus, according to Philoponus, Aristotle did not disagree with the true meaning of Plato's text.[329] Of the same opinion is Ps-Simplicius in his respective commentary:[330]

> It is this alone [i.e. heaven's physical motion] that this philosopher [i.e. Aristotle] calls motion, and he contradicts Timaeus about his ascription of a divided extension and activity to the soul, lest we, following the customary use (τῇ συνήθει) of words, should so understand Plato, or think it to be a magnitude or motion in a bodily manner (40.20–24; tr. Urmson).[331]

The distinction here between Aristotle's 'customary usage of words' and Plato's more technical language is common among Neoplatonists.[332] According to this passage,

[325] It remains unclear to what Neoplatonist exegete(s) Menn is referring to here.
[326] These strategies are briefly discussed in Menn (2012a), 48f.; Steel (2016), 328.
[327] On this cf. Steel (2013). Cf. also n. 37.
[328] As expected, this leads to a conflict between Proclus and Simplicius, cf. Steel (2016), 329f., 345–352 and ch. IV.
[329] As is made clear also in *In DA* 124.22ff. Cf. Verrycken (1991), 215–218; Steel (2013), 482.
[330] For a discussion of Simplicius' authorship, cf. Hadot (2014), 187–218 who argues against e.g. Bossier and Steel for its attribution to Simplicius.
[331] Cf. also Themistius *In DA* 19.23f. and Simplicius *In DC* 378.32–379.17.
[332] See Introduction 3.2.

Aristotle's criticism is helpful as it prevents the reader from understanding *Tim.* wrongly. Philoponus' and Ps.-Simplicius' statements are part of their general harmonist agenda, derived from their teacher Ammonius which intends to show that Plato and Aristotle fundamentally agree in their philosophy.[333]

In summary, both Proclus, on the one hand, as well as Philoponus and Ps.–Simplicius, on the other, claim that Aristotle refutes only a superficial reading of *Tim*. However, the crucial difference between them lies in the intention they attribute to Aristotle. While Philoponus and Ps.-Simplicius maintain that Aristotle is aware that he is not refuting Plato's teaching but a misguided interpretation, Proclus thinks that Aristotle actually intended to criticise Plato.[334] He claims that Aristotle rejected what he took to be Plato's position and, thus, failed to grasp the true meaning of *Tim.* Given the enormous importance of this dialogue for all Platonists, this amounts to a significant failure on Aristotle's part. Therefore, Proclus has no qualms in presenting Aristotle as openly dissenting from Plato – something from which the other two would refrain. In this way, it is wrong to claim like Carter (2017) that the ancient commentators 'unanimously took Aristotle to have offered in *DA* I.3 a strong refutation of a literal interpretation of a mythological *Timaeus* (and not a refutation of what he took to be Plato's own views)' (52). Other prominent authors, such as Gerson (2005), Hadot (2015), and d'Hoine (2016), have also failed to mention this difference.

Yet, regardless of these exegetical differences, it is crucial for all Neoplatonists to conceive soul as self-moved in accordance with Plato's definition in *Phdr.* and *Laws* X. Instead of denying motion of soul altogether, like Aristotle, they actually maintain, as I show for Proclus, that self-motion is non-spatial and connected with a central Neoplatonist term – self-reversion. Regarding self-motion's non-spatiality, Aristotle had a formative influence, as seen. However, it is not just him but also a specific reading of Plato's dialogues that gives rise to this view.

[333] Cf. Verrycken (2015).
[334] It is important to point out that Philoponus later abandons the harmony-doctrine; see Introduction p. 15. Proclus' view that Aristotle meant to attack Plato is also shared by Middle Platonists like Plutarch (*Adv. Col*. 14, 1115A) and Atticus (fr. 7).

4.3. Why Did the Neoplatonists Conceive the Self-Motion as Non-Spatial?

The dialogues that lead to this position are *Phdr.*, *Tim.* and *Laws* X. As seen earlier, the majority of modern scholars prefer – just like Aristotle but contrary to Proclus – a literal understanding of *Tim.*'s spatial language. While *Tim.* strongly suggests this, *Phdr.* is free of any discussion of the nature of self-motion, except for establishing its priority. *Laws* X, however, insinuates quite clearly, as I demonstrated, that self-motion is non-spatial and, thus, radically different from corporeal other-motion.

Since the Neoplatonists have a systematic and unitarian understanding of Plato's philosophy which goes against the apparent inconsistency of Plato's views, they usually form their views by choosing one or two dialogues as authoritative on a certain issue and interpret others in accordance with them.[335] In the case of self-motion, the most important texts were *Phdr.* and *Laws* X, as ample evidence among Middle Platonists and Neoplatonists suggest.[336] This is not meant to downplay the role of the *psychogonia* of *Tim.* which was extremely influential for the development of Platonist psychology – especially in regard to the composition of soul – but less so for self-motion.[337] The influence of *Phdr.* among Platonists as a whole and the palinode and its immortality-proof in particular is unquestionable.[338] For instance, in a testimony from his lost commentary on the *Phdr.* Proclus emphasises the superiority of the immortality-proof of *Phdr.* to the proofs in *Phd.*, since it deals with the essence of soul, i.e. self-motion, and not just its activity (*ap*. Philoponum *De aet.* 253.17–254.3).

My choice of *Laws* X, however, needs to be defended, as the *Laws* were neither among the most important dialogues for the Middle Platonists nor later part of the

[335] As Sedley (1996) puts it, when discussing the Platonists' harmonisation of *Tht.* with other dialogues: 'Their method is very simple. First you decide which is the important Platonic dialogue on knowledge. Then you adapt your reading of the other dialogues to fit in with it' (86). This 'method' applies *mutatis mutandis* also to other areas of Plato's philosophy.

[336] Cf. the references in Longo (2020), 139.

[337] On the importance of *Tim*. for Plato's successors, cf. Opsomer (2020a).

[338] The significance of the immortality-proof is emphasised by its presence in the Proclean oeuvre (e.g. *In Parm*. VII 1155.30f.; *PT* I.14 62.22–25) and by his lost commentary on the palinode in *Phdr.* to which he refers at *In Parm*. 949.31f. and *In Remp*. II 339.15f. Philoponus renders Proclus' use of the argument for demonstrating the cosmos' eternity (*De aet*. 243.1–17); cf. Gleede (2009), 229–255. The proof plays also a prominent role in other Neoplatonists, cf. Porphyry *Sent*. 21 13.8–12; Hermias *In Phdr*. 107.26–115.8; Damascius *In Phd*. I.58; Asclepius *In Met*. 90.26f.; Olympiodorus *In Phd*. 3.3.9f. Although already very popular in the Imperial Age, as demonstrated by Moreschini (2020), *Phdr.* became central to the Platonists only after Iamblichus established it as part of the curriculum; cf. 'Introduction' in Baltzly/Share (2018). On its Neplatonist reception, cf. Moreschini (1992); Delcomminette (2020).

Neoplatonist curriculum.[339] In consequence, there are almost no scholarly assessments on the influence of *Laws* X on imperial and late antique Platonism. To my knowledge, there is so far no overview of the influence of *Laws* X on the Middle Platonists. There is a short article on the *Laws* in Neoplatonism by Dillon (2001) which, however, offers merely a cursory overview. Additionally, it fails to mention the significance of *Laws* X for the Neoplatonist doctrine of self-motion. Yet, references to *Laws* X are abundant among Platonists from the 1st c. AD onwards. Although the *Laws* were not part of the Neoplatonist curriculum (just as e.g. the *Republic*), they were still widely read.[340] Proclus' teacher Syrianus even wrote a no longer extant commentary on *Laws* X.[341] As a survey of the evidence indicates, for Middle Platonists the treatise is important particularly due to the theory of the evil soul[342] but for the Neoplatonists primarily because of the theory of (self-)motion and divine providence.[343] For instance, Simplicius cites *Phdr.* and *Laws* X in his discussion of self-motion (*In Phys*. 1247.26ff.) and then emphasises the role of the latter: 'And that he would have the soul be what is self-moved in the proper sense, he indicates by giving its definition in *Phdr.*, and even more clearly in the tenth book of the *Laws*' (1248.10ff.; tr. Share/Chase). Likewise, Hermias states that Plato clarified in *Laws* X that soul's self-motion is distinct from corporeal motions (*In Phdr*. 110.2–4).

In Proclus there are around 130 references to *Laws* X which are found in most of his major works.[344] No other Neoplatonist refers to this work so often. For instance, he cites *Laws* X (besides *Phdr.*) as source for the view that soul is the origin of motion by being self-moved (*In Crat*. 102.2f.). He emphasises the significance of *Laws* X for theology due to its treatment of providence (*PT* I.5) and other divine attributes.[345] In consequence, he discusses the work extensively in *PT* I.13–16. The three demonstrations

[339] That *Laws* X is crucial for the doctrine of self-motion has been recently proposed by Gertz (2020), 95 without, however, properly substantiating his claim.
[340] Cf. O'Meara (2003), 67.
[341] Cf. the references in Simplicius *In Phys*. 618.25–619.2 (on place) and Damascius *De princ*. I 30.12ff. (on soul's self-motion). Damascius also wrote a lost commentary on *Laws*.
[342] The passage on motion in *Laws* X is cited by Apuleius (*De Plat.* 1, 9, 199), Atticus (fr.s 6.56, 7.36–43, 23.4ff.), Numenius (fr. 52.65ff.) and Plutarch (*Plat. Quaest*. 4 1002 F, *De An. Procr*. 4 1013F, 7 1015E). Plutarch emphasises its significance, as Plato speaks only there clearly about the evil soul (*De Is.* 370 E–F.); cf. Dillon (1996), 202f.; 207; Ferrari (2010), 63.
[343] Although it is also cited in reference to the evil soul, cf. Proclus *PT* I.18 87.24; *Mal. Subst*. 25.2f.
[344] Cf. specifically on self-motion in *Laws* X (besides his extensive discussions in *PT* I.13–16 and *ET* §§14–20), e.g. *In Remp*. I 35.21ff., II 197.17–25; *In Parm*. IV 878.8f., V 998.23–25; *In Tim*. I 404.21ff., 413.20ff., II 114.17f., III 180.8ff.; *PT* IV.5 20.20ff., V.38 140.18f.; *In Alc*. 97.8f.
[345] Yet he clarifies that it remains secondary in importance to *Parm.* and *Tim*. as well as a number of other dialogues which are full of 'Plato's divinely inspired science' (I.5 24.17f.).

of *Laws* X concerning the existence of the gods, their providence, and their immutability are, according to Proclus, ἁπάντων […] τῶν ἐν θεολογίᾳ δογμάτων ἀρχοειδέστερα (*PT* I.13 59.21f.).[346] In *In Parm*. he offers a discussion of the dihairesis of motion and, particularly, of self-motion (VII 1155.12– 1158.26) which is based on the *Laws* X. More specifically, when he treats self-motion in *ET* he borrows arguments from *Laws* X, as I demonstrated in ch. II. This rich evidence points towards the crucial importance of this work for the theory of motion in Proclus as well as other late Neoplatonists and makes a separate study on this issue highly desirable.

4.4. Self-Motion in ET

After having discussed Proclus' refutation of Aristotle's objections to *Tim.*, I now turn to Proclus' own theory of self-motion. While Proclus does mention self-motion in *In Tim*. (e.g. II 239.1–4, III 335.10–23),[347] the clearer and philosophically more challenging discussion of self-motion is found in *ET* §§15–17 and §§186–189.[348] In the following, I not only discuss these propositions at greater detail than has been done by earlier scholars[349] but also show that they partly represent an implicit reaction to Aristotle's criticism of Plato's psychology, similar to the one found in *In Tim*. I focus here primarily on self-motion's significance for soul's immortality and how it is conceived by Proclus in reaction to Plato and Aristotle.

In *ET*, self-motion is part of a discussion of metaphysical and psychological doctrines which lie at the heart of late Neoplatonism. Following Plato, Proclus claims that self-motion is the essence of soul (*ET* §20, 22.8; *PT* V.18 64.21f.; *In Tim*. II 242.20f.).[350] In brief, he argues that self-motion implies self-reversion (ἐπιστροφὴ πρὸς/εἰς ἑαυτό), since by moving itself, soul reverts to itself (§17). Self-reversion, in turn, implies self-constitution, so that whatever reverts to itself constitutes itself (αὐθυπόστατον) (§§42–

[346] Proclus is especially interested in the arguments for divine providence; cf. *Dub*. 1.1ff.; *PT* I.15. For a discussion, cf. Saffrey/Westerink (1968), clxxixff., 145–150.
[347] Self-motion is also discussed in *In Alc*., especially, in regard to its ethical aspects, cf. 225.12–226.4, 279.21–280.8.
[348] Soul's motion is also discussed at §198–201, where soul is said to move 'in periods', i.e. in a circle, because perpetual motion cannot be linear and pass through infinite objects. This argument is clearly borrowed from Aristotle's *Physics* VIII but used for a non-physical context.
[349] Cf. Gerson (1997), 19f.; Opsomer (2009); Gertz (2011), 168–171; Menn (2012a); Coope (2020), 127–132.
[350] Cf. also *In Tim*. I 235.1–26 with quotes from relevant passages from *Phdr.* and *Laws*.

43).[351] Thus, ultimately soul causes itself through its self-motion. The term is thus of fundamental ontological importance.[352] But whatever constitutes itself is ungenerated, imperishable, and eternal (§§45–49). In this way Plato's definition of soul's essence as self-motion occupies a central role in Proclean psychology and is explained through Proclus' elaborate and innovative metaphysics. The two crucial terms that Proclus introduces here to account for soul's immortality are self-reversion and self-constitution. Self-reversion accounts for soul's (i) incorporeality (§15) and (ii) separability from body (§16), while self-constitution for its (iii) self-causation (§42). I will discuss these in the following by starting with §17 and a discussion of reversion generally, before moving on to §§15–16 and §42. The discussion is then summed up *via* §187.

In §17 Proclus identifies the self-mover as belonging to the class of entities that are self-reverting:

> Πᾶν τὸ ἑαυτὸ κινοῦν πρώτως πρὸς ἑαυτό ἐστιν ἐπιστρεπτικόν.
> εἰ γὰρ κινεῖ ἑαυτό, καὶ ἡ κινητικὴ ἐνέργεια αὐτοῦ πρὸς ἑαυτό ἐστι, καὶ ἓν ἅμα τὸ κινοῦν καὶ τὸ κινούμενον. […] εἰ δὲ ἓν καὶ ταὐτὸν κινεῖ καὶ κινεῖται, τὴν τοῦ κινεῖν ἐνέργειαν πρὸς ἑαυτὸ ἕξει, κινητικὸν ἑαυτοῦ ὄν. πρὸς ὃ δὲ ἐνεργεῖ, πρὸς τοῦτο ἐπέστραπται. πᾶν ἄρα τὸ ἑαυτὸ κινοῦν πρώτως πρὸς ἑαυτό ἐστιν ἐπιστρεπτικόν.
> Everything originally self-moving is capable of reversion upon itself.
> For if it moves itself, its motive activity is directed upon itself, and mover and moved exist simultaneously as one thing. […] And if one and the same thing moves and is moved, it will (as a self-mover) have its activity of motion directed upon itself. But to direct activity upon anything is to turn towards that thing. Everything, therefore, which is originally self-moving is capable of reversion upon itself. (18.21–20.2)

Proclus makes explicit by the expression 'originally self-moving' that the subject is soul and not the ensouled body or living being which is only in a secondary sense self-moving.[353] Moreover, he clarifies that a true self-mover moves and is moved in the same respect (ἓν ἅμα τὸ κινοῦν καὶ τὸ κινούμενον) and does not consist of distinct parts, whereby one moves and the other is moved.[354] The latter, of course, is Aristotle's understanding of self-motion in *Physics* VIII which Proclus rejects for non-bodily motion. Proclus then concludes that self-motion implies self-reversion, since aiming motion towards oneself means turning towards oneself. What is the relationship between

[351] One argument for why the cosmos is not self-constituted is that it does not move itself; cf. *In Parm*. III 785–786.
[352] For the concept's ethical implication in Proclus (e.g. *Dub*. 39.19; *In Alc*. 225.12–226.4), cf. Griffin (2015); Coope (2020), 201–221. Other Neoplatonists also focus on the ethical aspects of self-motion e.g. Olympiodorus *In Alc*. 226.17f. Gerson (1997) focuses on its connection to self-reflexivity and the epistemological dimension.
[353] Cf. *ET* §20, 22.6–8; *PT* I.14 63.3–14.
[354] Cf. *ET* §17, 18.23–31 and p. 76f.

self-motion and self-reversion? I take it that the latter is more fundamental and a condition of self-motion.[355] Everything self-moving is capable of self-reversion, as Proclus states, but not *vice versa*. Notably, intellect is capable of self-reversion but not self-moving. The class of self-reverting entities is therefore larger and includes self-moving beings as a sub-class.

4.4.1. Excursus: (Self-)Reversion

In order to grasp Proclus' concept of self-reversion, we need first to understand what the term reversion (ἐπιστροφή) means generally. Proclus and likeminded Neoplatonists commonly describe the constitution of being through the triad μονή – πρόοδος – ἐπιστροφή.[356] This triadic structure is the backbone of Proclus' metaphysics, delineating the process of causation as a circular activity (*ET* §33, 36.11f.: κυκλικὴν … τὴν ἐνέργειαν) and accounting for the well-orderedness of reality. The triad is found fully expressed in Iamblichus and is to a certain extent present in Plotinus, but its precise historical roots beyond the latter are obscure. Fundamentally, it expresses the idea that an effect remains in its cause,[357] proceeds from it, and returns to it (§35: Πᾶν τὸ αἰτιατὸν καὶ μένει ἐν τῇ αὐτοῦ αἰτίᾳ καὶ πρόεισιν ἀπ' αὐτῆς καὶ ἐπιστρέφει πρὸς αὐτήν). An entity 'remains' in its cause, insofar as the effect is already potentially present in its cause and insofar as, when the effect is realised, it still maintains a similarity to its cause. Would the effect not remain in its cause, there would be no similarity between cause and effect, as Proclus argues (§30). While μονή describes the similarity or identity of the effect to its cause, πρόοδος denotes the dissimilarity or difference between the two. For if the effect would only remain in its cause there would be no causation. Thus, the effect needs to 'proceed' from its cause by differentiating itself from it. The third term ἐπιστροφή describes the return or reversion of the effect to its cause, as Proclus maintains that every being capable of it desires to return to its origin (§31).[358] This return, however, does not

[355] Cf. Dodds (1963), 202ff.; Gerson (1997), 19f.; Steel (2006), 241–243; Perkams (2008), 59ff.; Menn (2012a), 60f.; Onnasch/Schomakers (2015), 242f.
[356] An extended discussion of this triad can be found in *ET* §§25–39. The most useful scholarly treatments are Dodds (1963); Beierwaltes (1965), 118–164; Gersh (1973), 39–53 and (1978), 45–57; Steel (2006), 234–236 (with further bibliography).
[357] It needs to be mentioned that μονή can refer also to the cause, as Proclus conceives the cause as remaining steadfast, i.e. unchanged and undiminished, when producing its effect (§26). This idea can be traced back to *Tim*. 42e5f. and the Stoics, as Dodds (1963), 214 shows.
[358] On the term's different meanings, cf. Gerson (1997), 13, 18 n. 36.

negate the difference between cause and effect. Rather, the return stops a procession into infinity and, more importantly, it guarantees the goodness or 'well-being' of the effect, since Proclus takes (in this context at least) the final cause to be identical with the producing cause:

> 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. (§31, 34.34–36.2)[359]

Damascius, thus, fittingly calls the procession οὐσιοποιόν and the reversion τελειοποιόν (*De princ*. II 125.15f.). In order to return to its cause, the effect needs to revert through as many causes as it has proceeded through, as Proclus explains in *ET* §38. For instance, the soul needs to return to the One/Good *via* the intellect, since it is caused by the One only in mediation through the intellect. As Gerson (1997), 21 succinctly notes: 'ἐπιστροφή is the abstract term that refers to the process or event that consists in what the creature does to fulfil its desire for the good'.

4.4.2. Soul's Self-Reversion

From this more general notion of ἐπιστροφή, ἐπιστροφή πρὸς/εἰς ἑαυτό needs to be distinguished. The latter is a crucial term for Neoplatonism and heavily inspired by Hellenistic concepts of introspection as well as by certain Platonic (e.g. *Charm*. 167a1–7) and Aristotelian (e.g. *Met*. Λ.9) passages on self-reflexivity.[360] In certain higher beings, such as intellect and soul, this reversion occurs *via* a reversion to itself and then to their higher cause. This is because these beings are not just caused by a higher being but also by themselves. Thus, intellect is caused by the One as well as itself, while soul is caused by intellect (and thus indirectly by the One) as well as itself. Since they also cause themselves they must return to themselves according to the rule that every effect returns to its cause. Self-reversion is thus intimately connected to the notion of self-constitution or self-causation (§§40–51) which I discuss below.

What is the relevance of self-reversion for soul's immortality? In brief, entities capable of self-reversion meet two of three crucial requirements for immortality, as Proclus makes explicit later (§§186–187): they are (i) incorporeal (ἀσώματον) (or, more

[359] I discuss this identification of efficient and final causality at some length in ch. IV.
[360] For the historical background, cf. Aubin (1963); Gerson (1997). For its importance in Proclus, cf. Steel (2006); Coope (2020). The concept proves to be highly influential in the Middle Ages *via* Augustine, Ps.-Dionysius, and the *Liber de Causis*, cf. Gerson (1997), 26–32; Steel (2006), 238f.; Menn (2012a), 65ff.

generally, indivisible), and have (ii) a separable essence (χωριστὴ οὐσία) from body. The first claim about (i) incorporeality and indivisibility is made in §15:

> Πᾶν τὸ πρὸς ἑαυτὸ ἐπιστρεπτικὸν ἀσώματόν ἐστιν.
> οὐδὲν γὰρ τῶν σωμάτων πρὸς ἑαυτὸ πέφυκεν ἐπιστρέφειν. εἰ γὰρ τὸ ἐπιστρέφον πρός τι συνάπτεται ἐκείνῳ πρὸς ὃ ἐπιστρέφει, δῆλον δὴ ὅτι καὶ τὰ μέρη τοῦ σώματος πάντα πρὸς πάντα συνάψει τοῦ πρὸς ἑαυτὸ ἐπιστραφέντος· τοῦτο γὰρ ἦν τὸ πρὸς ἑαυτὸ ἐπιστρέψαι, ὅταν ἓν γένηται ἄμφω, τό τε ἐπιστραφὲν καὶ πρὸς ὃ ἐπεστράφη. ἀδύνατον δὲ ἐπὶ σώματος τοῦτο, καὶ ὅλως τῶν μεριστῶν πάντων· οὐ γὰρ ὅλον ὅλῳ συνάπτεται ἑαυτῷ τὸ μεριστὸν διὰ τὸν τῶν μερῶν χωρισμόν, ἄλλων ἀλλαχοῦ κειμένων. οὐδὲν ἄρα σῶμα πρὸς ἑαυτὸ πέφυκεν ἐπιστρέφειν, ὡς ὅλον ἐπεστράφθαι πρὸς ὅλον. εἴ τι ἄρα πρὸς ἑαυτὸ ἐπιστρεπτικόν ἐστιν, ἀσώματόν ἐστι καὶ ἀμερές.
> All that is capable of reverting upon itself is incorporeal.
> For it is not in the nature of any body to revert upon itself. That which reverts upon anything is conjoined with that upon which it reverts: hence it is evident that every part of a body reverted upon itself must be conjoined with every other part, since self-reversion is precisely the case in which the reverted subject and that upon which it has reverted become identical. But this is impossible for a body, and universally for any divisible thing: for the whole of a divisible thing cannot be conjoined with the whole of itself, because of the separation of its parts, which occupy different positions in space. It is not in the nature, then, of any body to revert upon itself so that the whole is reverted upon the whole. Thus if there is anything which is capable of reverting upon itself, it is incorporeal and without parts. (16.30–18.6)

Proclus here sets out to prove that no divisible magnitude, including bodies, can revert to itself. His reasoning is rather straightforward.[361] Self-reversion requires a complete conjunction (16.32 and 18.2: συνάπτεται) of subject and object which leads to them becoming one/identical (16.35). In the case of any divisible substance this is excluded since its parts occupy a separate place due to their extension in space and cannot each join each other.[362] Thus, if one divides a line in half and joins one half with the other, part A will be joined with its opposite A' and part B with B'. Yet, it is impossible for part A to be simultaneously in contact with A' as well as B and B'. Moreover, even the conjoined pairs A and A' as well as B and B' are not strictly speaking identical, as they do not occupy the same space but are rather on top of each other. In this way, a spatially extended magnitude cannot meet the essential requirement of complete conjunction which constitutes self-reversion. Proclus thus concludes that an entity reverting to itself must be incorporeal and spatially indivisible. It should be noted, however, that Proclus refers here to spatially extended parts; the soul is not partless in a general sense (it has e.g. different faculties) but only physically.

[361] For a detailed analysis of this argument, cf. Coope (2020), 127–132.
[362] As Kiosoglou (2022), 158–160 convincingly shows, the second demonstration of *EP* §I.2 anticipates this argument.

The reason for rejecting spatial extension for self-reverting beings is the impossibility of an identity between spatially extended subjects and objects in self-reversion. According to Coope (2020) 'Proclus's point here is that self-reversion explains both the unity of that which has reverted and the unity of that on which it has reverted' (129), i.e. in the process of self-reversion both subject and object of the reversion become one. This however can only occur if they are not spatially extended.

Why does Proclus stress in the title and the conclusion of the proposition that an entity capable of self-reversion must be incorporeal, if his argument actually makes the stronger claim that no divisible entity, i.e. neither lines, nor planes, nor bodies, can revert to itself? This needs to be emphasised in order to understand the argument fully. Arguably, Proclus focuses on bodies here due to the Stoic background of the notion of ἐπιστροφή.[363] The Stoics emphasise the importance of turning inwards in order to perfect one's character and attain happiness (Epictetus *Ench*. 10.1–6 Boter; Seneca *Epist*. 7.8 Reynolds). At the same time they adhere to a materialistic physics where the soul is conceived as corporeal in order to interact with the body (Cicero, *Acad.* I.39 Plasberg). It is the latter view that Proclus wants to refute here. According to Proclus, the ethical insight of the Stoics is correct, but it must be paired with a psychology which regards soul as spatially unextended and, hence, incorporeal.

However, scholars have ignored that Proclus argues here more generally against *any* spatialist conceptions of soul and intellect, since also a geometrically or physically extended soul (or intellect) could not revert to itself.[364] For instance, Coope (2020), 127 declares that §15 'attempts to establish that being a self-unifier (and hence, a self-maker) is incompatible with having bodily parts'.[365] Yet, Proclus talks here more generally of spatially divisible entities. This is significant, as such views in regard to soul were prevalent among Platonists before Plotinus. For instance, Severus, Plutarch, and Atticus regarded soul as spatially extended and should be counted among Proclus' targets here as well.[366] Moreover, this also includes a rejection of Aristotle's understanding of the

[363] Cf. Dodds (1963), 202f.; Gerson (1997), 12; Steel (2006), 242. A comparison of Neoplatonist and Stoic concepts of ἐπιστροφή can be found in Aubin (1963), 60–63; Steel (2006), 255.
[364] That soul is not just incorporeal but also not extended in space is shown at *ET* §176, 154.29–31.
[365] Cf. also Dodds *ad loc*.
[366] Proclus mentions their interpretations at *In Tim*. II 152.25–154.26. Severus claims that soul has a geometrical extension (possibly inspired by Aristotle *DA* I.2 404b18–27; cf. Deuse 1983, 103; Karamanolis 2006, 186–189), while Plutarch and Atticus argue for physical extension (cf. Opsomer 2020a, 179). It has been argued by Krämer (1964), 209 n. 48 (based on Iamblichus' doxography in *DA* 4) that already

Platonic soul and again emphasises how important it was for Proclus to refute Aristotle's interpretation.

In the next step (§16), Proclus demonstrates that whatever reverts to itself is not just spatially indivisible but also has (ii) an essence separate from body. This is a crucial step in his argument since one could accept the incorporeality/indivisibility argument (i) but still maintain that self-reverting entities such as soul and intellect are dependent on a body as a substrate and require it for their existence and activity. It should thus not be left out in the discussion of self-reversion, as e.g. Coope (2020) does. Proclus argues in the following way:

> Πᾶν τὸ πρὸς ἑαυτὸ ἐπιστρεπτικὸν χωριστὴν οὐσίαν ἔχει παντὸς σώματος.
> εἰ γὰρ ἀχώριστον εἴη σώματος οὑτινοσοῦν, οὐχ ἕξει τινὰ ἐνέργειαν σώματος χωριστήν. ἀδύνατον γάρ, ἀχωρίστου τῆς οὐσίας σωμάτων οὔσης, τὴν ἀπὸ τῆς οὐσίας ἐνέργειαν εἶναι χωριστήν· ἔσται γὰρ οὕτως ἡ ἐνέργεια τῆς οὐσίας κρείττων, εἴπερ ἡ μὲν ἐπιδεής ἐστι σωμάτων, ἡ δὲ αὐτάρκης, ἑαυτῆς οὖσα καὶ οὐ σωμάτων. εἰ οὖν τι κατ' οὐσίαν ἐστὶν ἀχώριστον, καὶ κατ' ἐνέργειαν ὁμοίως ἢ καὶ ἔτι μᾶλλον ἀχώριστον. εἰ δὲ τοῦτο, οὐκ ἐπιστρέφει πρὸς ἑαυτό. τὸ γὰρ πρὸς ἑαυτὸ ἐπιστρέφον, ἄλλο ὂν σώματος, ἐνέργειαν ἔχει χωριζομένην σώματος καὶ οὐ διὰ σώματος οὐδὲ μετὰ σώματος, εἴπερ ἥ τε ἐνέργεια καὶ τὸ πρὸς ὃ ἡ ἐνέργεια οὐδὲν δεῖται τοῦ σώματος. χωριστὸν ἄρα πάντῃ σωμάτων ἐστὶ τὸ πρὸς ἑαυτὸ ἐπιστρέφον.
> All that is capable of reverting upon itself has an essence separable from all body.
> For if there were any body whatsoever from which it was inseparable, it could have no activity separable from the body, since it is impossible that if the essence be inseparable from bodies the activity, which proceeds from the essence, should be separable: if so, the activity would be superior to the essence, in that the latter needed a body while the former was self-sufficient, being dependent not on bodies but on itself. Anything, therefore, which is inseparable in its essence is to the same or an even greater degree inseparable in its activity. But if so, it cannot revert upon itself: for that which reverts upon itself, being other than body, has an activity independent of the body and not conducted through it or with its co-operation, since neither the activity itself nor the end to which it is directed requires the body. Accordingly, that which reverts upon itself must be entirely separable from bodies. (18.7–20)

Proclus starts by maintaining that if anything capable of reversion is inseparable from body, then this entails that its essence[367] is inseparable from body since it belongs to the essence of that thing to be embodied. But if the latter is the case, then its activity must also be inseparable from body, since the activity arises from the essence (18.11: τὴν ἀπὸ τῆς οὐσίας ἐνέργειαν). Therefore, the activity of an essentially embodied thing is inseparable from body. Yet this, clearly, contradicts the result of the previous proposition

Speusippus professed a geometrical interpretation which in turn influenced Posidonius and Hellenistic concepts of soul.

[367] Although Dodds (1963), 19 and Gerson (1997), 20 translate οὐσία as 'existence', the term in this context refers to the essence of soul.

since self-reverting entities are incorporeal and have an activity separate from the body. Is Proclus' equation of inseparable essence with inseparable activity valid, i.e. is it the case that a thing with an embodied essence must have an embodied activity, as some commentators such as Steel (2006), 242 readily assume?

Proclus' claim that activity proceeds from essence can be understood by illuminating its Neoplatonist background. When talking about soul and intellect, Neoplatonists commonly use the triadic scheme οὐσία - δύναμις - ἐνέργεια to refer to their characteristics, whereby δύναμις is understood as active power or capacity (i.e. the Aristotelian δύναμις τοῦ ποιεῖν), not potentiality (i.e. δύναμις τοῦ πάσχειν),[368] and thus regarded as ontologically prior to activity.[369] Only by having a certain capacity, can, for instance, soul act in a certain way. Both capacities and activities of soul derive from its essence which is their ontological foundation.

With this in mind we can better understand Proclus' argument. Since a thing's activity depends ultimately on its essence, its activity must be closely related to its essence. Thus, if only the essence would be embodied but not the activity, absurd consequences would follow, as the 'activity would be superior (κρείττων) to the essence, in that the latter needed a body while the former was self-sufficient (αὐτάρκης), being dependent not on bodies but on itself'. However, Proclus continues, since it has been shown that whatever is capable of self-reversion is incorporeal, its activity must be incorporeal as well. And if it is incorporeal, it must be separable. This means that entities capable of self-reversion have an incorporeal and separable essence and activity which occurs neither through (διά) nor with (μέτα) a body and, generally, does not require (οὐδὲν δεῖται) a body.[370]

Because soul is one of the entities envisaged here by Proclus, demonstrating the separability of self-reverting things is relevant for proving the immortality of soul. This is also the case in Plato and Aristotle. Separability is a requirement for soul's immortality in Plato's *Phd.*, where death is defined as λύσις καὶ χωρισμὸς ψυχῆς ἀπὸ σώματος

[368] Cf. Aristotle *Met*. Θ.1 1045b35–1046a4. On these two kinds of δύναμις in Proclus, cf. *ET* §§78–79 and the discussion in Steel (1996).
[369] This scheme is also used in structuring works on psychology, such as Iamblichus *DA* and Proclus *In Tim*. II 147.19–317.15 (on the world–soul). Proclus alludes to it explicitly at *In Tim*. II 125.12–22. On its use in psychology, cf. Steel (1978), 59–61; Helmig (2014), 156; 161–164. The triad is also used for intellect; cf. *ET* §169.
[370] Later on (§44) Proclus claims that whatever reverts to itself in its activity also reverts to itself in its essence.

(67d4),[371] and also a central concern for Aristotle, who discusses separability prominently in the opening chapter of *DA*:

> There is also a puzzle about the affections of the soul, concerning whether all are common to what has the soul as well or whether there is something peculiar to the soul itself. […] If, then, some one of the functions or affections of the soul is peculiar to it, it would be possible for the soul to be separated; but if there is nothing peculiar to it, it would not be separable. (403a3–12)[372]

In short, Aristotle maintains here that if and only if soul has a peculiar characteristic (ἴδιον) which it does not share with body it could it be separable from body. It is important that Aristotle uses at 403a11 a potential optative ἐνδέχοιτ' ἄν which indicates that separability is still only a possibility and not a necessity. If soul lacks a specific characteristic and has every affection and function in common with body, it cannot be separated from body and is essentially connected to it.[373] This Aristotelian insight remains crucial for Proclus who refers to it explicitly in *De Prov*. §15.[374]

Proclus does not have just a definitional separation in mind (i.e. can anything self-reverting be defined separately of a body or is body necessarily part of the definition?), as often seems to be the case in Aristotle's *DA*, but rather uses the term in an ontological sense, similar to Plato. That is, Proclus wants to know if anything self-reverting depends for its existence on a body or if it can exist independently of it. He shows that the latter is the case and that self-reverting entities *qua* self-reverting are independent of the body. In comparison to Aristotle, who ultimately argues that only the *nous* is separable, Proclus focuses on the ontological make-up of soul (and intellect) by singling out the faculty of self-reversion.

4.4.3. Soul's Self-Constitution

Does Proclus' argument in §16 that soul has a separable essence and activity mean that it necessarily continues to exist after the demise of its body for an infinite period of time? This point should not be underestimated, since separation does not automatically yield the immortality of soul, as soul could stop existing once it is separated from body or only exist for a short period of time – as Cebes suggests at *Phd*. 70a2–6. That is, one could

[371] Cf. Pakaluk (2003); Johansen (2017). For the importance of this aspect in late antique commentaries on *Phd.*, cf. Gertz (2011), 130–135, 158–166, 169. Cf. also *Tht*. 185e.
[372] Cf. *DA* II.1 413a3–9.
[373] On the separability of soul in Aristotle cf. Miller (2012), 308–312 and Shields (2016), 80ff., 96ff.
[374] Cf. also Plotinus IV.4 18.1–4.

maintain that soul is indeed separable from body in essence and activity but that this does not guarantee it an everlasting existence. Separation is thus a necessary but not sufficient condition of soul's immortality.

Proclus has an interesting answer to this. In §§42–43 he connects self-reversion with the notion of self-constitution.[375] I take this to be the third requirement of soul's immortality, after (i) incorporeality and (ii) separability. The term αὐθυπόστατον, lit. that which hypostasises itself or, more commonly, the self-constituted, refers to something which causes itself without being its sole cause.[376] Self-causation – a perennially popular but divisive issue –[377] is adopted here in a restricted sense. It refers chiefly to intellect and soul, as these are beings which according to Proclus do not require a substrate in order to exist. They both ultimately derive from the One but also cause their own being. According to Proclus, self-reversion and self-constitution are coextensive. Thus, everything which reverts to itself, also constitutes itself and *vice versa*, as he sets out in §42. This is because the origin of the procession coincides with the goal of the reversion: something self-reverting only reverts to itself because it proceeds from itself. The argument here focuses on the teleological nature of the reversion, as outlined in §31. While procession guarantees a thing's being, its reversion realises its well-being:

> for every cause can bestow upon its product, along with the being which it gives, the well-being which belongs to that being: hence it can bestow the latter upon itself also, and this is the proper good of the self-constituted. (§42 44.16–19)

4.4.4. Soul's Immortality

Taking the three requirements of (i) incorporeality, (ii) separability, and (iii) self-constitution together, Proclus proves the immortality of soul at §187:

> Πᾶσα ψυχὴ ἀνώλεθρός ἐστι καὶ ἄφθαρτος.
> πᾶν γὰρ τὸ ὁπωσοῦν διαλύεσθαι καὶ ἀπόλλυσθαι δυνάμενον ἢ σωματικόν ἐστι καὶ σύνθετον ἢ ἐν ὑποκειμένῳ τὴν ὑπόστασιν ἔλαχε· καὶ τὸ μὲν διαλυόμενον, ὡς ἐκ πολλῶν ὑπάρχον, φθείρεται· τὸ δὲ ἐν ἑτέρῳ εἶναι πεφυκὸς τοῦ ὑποκειμένου χωριζόμενον ἀφανίζεται εἰς τὸ μὴ ὄν. ἀλλὰ μὴν ἡ ψυχὴ καὶ ἀσώματός ἐστι καὶ ἔξω παντὸς

[375] Cf. Coope (2020), ch. 7.
[376] Proclus discusses self-constitution also in other works, cf. e.g. *In Tim*. I 232.12f.; *In Parm*. 1004.17ff., 1149.33–1151.34. Helpful discussions are Steel (2006); Coope (2020), 110–114, 127–132.
[377] Proclus specifically states that he does 'not agree with those authorities who state that everything which is produced is produced by a cause other than itself' (*In Parm*. VII 1145.27–29). According to Steel (2006), 244 Aristotle is one of these authorities, but this has been rightly questioned by Luna/Segonds (2021) VII, 310f. n. 4 who suggest instead (exegetes from the circle of) Crantor. On the origin of the concept of self-causation, cf. Whittaker (1975), who traces the idea back to Stoicism but also finds (scant and rather unconvincing) traces in the classical period, and Beierwaltes (2001). For the concept's significance in the history of philosophy, cf. Coope (2020), 116.

> ὑποκειμένου, ἐν ἑαυτῇ οὖσα καὶ πρὸς ἑαυτὴν ἐπιστρέφουσα. ἀνώλεθρος ἄρα ἐστὶ καὶ ἄφθαρτος.
> Every soul is indestructible and imperishable
> For all that is capable of being in any way dissolved or destroyed either is corporeal and composite or has its being in a substrate: the former kind, being made up of a plurality of elements, perishes by dissolution, while the latter, being capable of existence only in something other than itself, vanishes into non-existence when severed from its substrate. But the soul is both incorporeal and independent of any substrate, existing in itself and reverting upon itself. It is therefore indestructible and imperishable. (162.24–31)

A preliminary note on the terminology: ἀνώλεθρος appears often in *Phd.*, where soul is said to be ἀνώλεθρος (indestructible), if it is ἀθάνατος (immortal) (106e2f.).[378] ἄφθαρτος is not attested for Plato and seems to be of Aristotelian origin here; but the compound ἀδιάφθαρτος is found in the immortality proof of *Phdr.* (245d3f.), where ungeneratedness (ἀγένητον) is said to imply necessarily imperishability (ἀδιάφθαρτος). For Aristotle ἀγένητον and ἄφθαρτος are coextensive, as he emphasises in a lengthy discussion in *DC* I.11–12. Proclus' maintains that the *DC*-passage is based on the aforementioned *Phdr.*-passage (*In Tim*. I 295.27–296.7). Proclus does not treat ἄφθαρτος and ἀνώλεθρος as synonyms: instead, ἄφθαρτος stands for the inability of being destroyed by dissolution, while ἀνώλεθρος indicates the inability of being destroyed by separation from the substrate. Together, however, ἀνώλεθρος and ἄφθαρτος indicate that soul is immortal.[379]

Proclus argues that something can only be destroyed if it is (a) corporeal and composite or (b) dependent on a substrate. (a) can be excluded, since soul has been shown to be (i) incorporeal. (b) can be rejected on grounds of soul's (ii) separability and (iii) self-constitution. While (i) and (ii) are implied by soul's self-reversion which is named here as a reason for soul's immortality (162.31),[380] (iii) seems *prima facie* to be absent in Proclus' argument, as self-constitution is not explicitly mentioned. Yet, the other reason for rejecting (a) and (b), next to self-reversion, is that soul exists in itself (162.30: ἐν ἑαυτῇ). This has to be opposed to existing in another, i.e. in a substrate (162.28: ἐν ἑτέρῳ). I take the former to be a specific reference to soul's self-constitution, as according to

[378] This inference in the Final Argument of *Phd.* from immortal to indestructible has come under close scrutiny since antiquity, as Gertz (2015) shows.
[379] Proclus had already earlier demonstrated that a self-constituted being is ἀγένητον (§45), ἄφθαρτος (§46), and generally ἀΐδιον (§49). In §46 Proclus uses an argument from *Phdr.*: because the self-constituted never deserts itself, i.e. is always bound to its cause, it cannot perish (cf. *PT* III.6 20.16ff.). Immortality is curiously absent in *ET*, except for a discussion in §105, where Proclus claims that everything immortal is perpetual (ἀΐδιον) but not *vice versa*. He discusses the different kinds of beings that are immortal at *PT* I.26 116.4–117.14.
[380] In the previous proposition Proclus had already drawn these two consequences: 'Every soul is an incorporeal being and separable from body' (§186).

Proclus 'all that exists in itself is self-constituted' (§41, 42.31: πᾶν δὲ τὸ ἐν ἑαυτῷ ὂν αὐθυπόστατόν ἐστι). Proclus thus infers not only from (i) and (ii) to the immortality of soul but also from (iii). Therefore, Menn (2012a), 58 is not right in claiming that 'Proclus infers from soul's self-motion to its incorporeality (Elem. Theol. §15) and to its separability from bodies (§16) and thus immortality'.

5. Conclusion

The goal of this chapter was to illuminate the Proclean concept of self-motion and its importance for the soul's immortality by looking at its Platonic and Aristotelian sources. This investigation closes a lacuna in scholarship since Neoplatonist conceptions of immortality are seldomly studied and often ignored even by more recent treatments of this topic in ancient philosophy such as Long (2019). First, I argued that *Laws* X lent later Platonists, including Proclus, support for a non-spatial, non-physical understanding of self-motion. In a second step, I demonstrated how crucial Aristotle's criticism of the concept of self-motion as a spatial phenomenon was in further strengthening the view of the Neoplatonists that self-motion is non-spatial. In this context I showed that Proclus criticises Aristotle's *DA* I.3 for misunderstanding Plato's characterisation of the world-soul in *Tim.* In this open attack on Aristotle Proclus differs from other Neoplatonists who, in a harmonising spirit, claim that Aristotle only intended to refute what he believed to be a superficial meaning of *Tim.* but not the true meaning of the text. Finally, in the last part of this chapter I illustrated how Proclus explains soul's self-motion as self-reversion and self-constitution/-causation which allows him to account for soul's immortality. In arguing for this, Proclus incorporates the results of his exegesis of Plato and Aristotle within his distinctively Neoplatonist framework. Of the three criteria for soul's immortality two go back to Plato and find their mature formulation in Aristotle: incorporeality/lack of spatial extension and separability. The third requirement of self-causation is Proclus' specific Neoplatonist contribution. In taking these three requirements together Proclus is able to offer a convincing proof of the soul's immortality.

CHAPTER IV: THE CAUSALITY OF THE UNMOVED MOVER

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

While chapters I and II have focused on Proclus' integration of the intellect as prime mover in his system of movers, the question still arises as to 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* VIII and *Met.* Λ 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 *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, i.e. 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 that assume the efficient causality of the prime mover only regard it as an efficient cause of motion and 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 (Simplicius *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* VIII and *Met.* Λ but also in *DC*.[381] 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, i.e. 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 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*. VII 1169.4–9)

Thus, for Proclus Aristotle's intellect is 'in no way productive' (*In Tim*. I 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 (see section 4.3.). 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.

[381] The interpretation is clearly inspired by Aristotle himself who makes clear in *Physics* VIII.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 *Physics* VIII and *Met*. Λ. Their unitary view can be contrasted with developmentalist accounts by, e.g., Guthrie (1939) and Judson (1994). See ch. II 2.2.

My objective in this chapter is threefold: (i) to set out Proclus' criticism of Aristotle's intellect through a detailed analysis of his objections; (ii) to compare it with Ammonius' and Simplicius' position by focusing on their different strategies in reading Aristotle; and (iii) 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 (2.), before I move on to Proclus' critique (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.), 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 actually 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, (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 *ET* but also by an exegesis of Plato's *Tim*. The former offers an attractive theoretical solution to why we should assume that the intellect is both a final and an efficient cause.

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* VIII when it comes to how exactly the unmoved mover brings it about.[382] 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* II to set out a nuanced theory of causality (which, however, applies primarily to natural substances).[383] 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 (see below). The picture differs in *Met.* Λ where the prime mover is described as an object of desire and thought as well as something for the sake of which (οὗ ἕνεκα)[384]: it moves as a beloved (Λ7 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* VIII?

There are strong reasons for assuming that both accounts of the unmoved mover in *Physics* VIII and *Met.* Λ are essentially in agreement and complement each other,

[382] 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. Simplicius *In Phys*. 1363.12–14; Ross (1936), 94; Manuwald (1989), 8f.

[383] As Graham (1999), 104f. correctly notes the four causes are already missing in the first half of book VIII 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.

[384] The same description is also found at *DC* II.12 292b5f. which I take to refer to the prime mover. Cf. Guthrie (1939), 208 n. a; Easterling (1961), 151.

although the contexts and approaches clearly differ.[385] The argument for the unmoved mover in *Met*. Λ is highly dependent on *Physics* VIII and, in fact, to a large degree unintelligible without the latter.[386] 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, *MA* (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.[387] 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* VIII (2.1.). As further proof, I examine the infinite-power argument of *Physics* VIII.10 which strongly suggests an efficient causality of the unmoved mover and is, most importantly, also encountered in *Met*. Λ (2.2.) where we find further evidence for this type of causality (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* I.7 324b13–15:[388]

> 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.[389] In contrast to these scholars, Sedley (2000), 345 and Judson (2019), 185f. maintain that the passage does not apply to the unmoved mover. This is either because *Met*. Λ simply goes beyond the doctrine of *GC*[390] or because Aristotle refers in the *GC*

[385] The different perspectives have been emphasised in antiquity and the middle ages, e.g. in Avicenna, cf. Adamson (2018), 199f. For more recent discussions, cf. Jaeger (1923), 383; Gourinat (2012), 179–185.
[386] Cf. Gourinat (2012), esp. 205f. 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.
[387] On *MA*'s references to the two works, cf. Manuwald (1989), 18, 71; Rapp (2020), 211–220.
[388] On this passage cf. Philoponus *In GC* 152.18–153.2; Wildberg (2004), 238–242; Buchheim (2010), 404; Tuozzo (2011), 459.
[389] Cf. also Rashed (2005), 136 n. 5; Berti (2007), 9.
[390] Cf. Sedley (2000), 345 n. 23: 'To have identified the world's productive cause with what is also *literally* a final cause is the special contribution of *Metaphysics* Λ'.

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, i.e. 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 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* I.6 322b22–24 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[391] 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* II.4 415b8–12). Additionally, in *GC* II.9 335a30ff. he admits that there is an efficient cause for eternal beings, i.e. the heaven and stars.

2.1. The Argument of Physics *VIII Requires an Efficient Cause*

The line of argumentation developed in *Physics* VIII 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.[392] Aristotle himself refers in *GC* (I.3 318a1–6) to the prime mover of *Physics* as an efficient cause. Internal confirmation from *Physics* VIII for this view can be found in chapter 4. There Aristotle proves that everything in motion is moved by something (256a2f.: ἅπαντα ἂν τὰ κινούμενα ὑπό τινος κινοῖτο) – a phrase clearly indicating that efficient causality is discussed here, i.e. the moving cause. More specifically, the preposition ὑπό with the genitive indicates agency in this context.[393] At no point in the argument of chapter 4 does

[391] On the different ways of understanding κατὰ μεταφοράν, cf. Caston (1999), 218.
[392] 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 408f.); Judson (1994), 167: 'The argument for the necessity of the unmoved mover in *Phys*. VIII is conducted entirely in terms of efficient causation'.
[393] Cf. Broadie (1993), 379 n. 4; Judson (2019), 185.

Aristotle distinguish between the causation of the unmoved mover and moved movers. Instead he talks about causes of motion in general. However, he elsewhere 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 VIII.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.[394] 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* VIII 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.[395] 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* 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* VII.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 true in the case of 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.[396] 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

[394] Cf. Graham (1999), 102 which includes a reference to *GC* I 6 323a25-32.
[395] Ibid., 194.
[396] Cf. Wardy (1990), 121.

between an unmoved mover and moved thing is only one-sided, i.e. 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.[397]

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.[398] This is due to a tendentious reading of *Physics* VII.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 causality. Consequently, this does not entail that the prime unmoved mover is not an efficient cause.[399] More generally, *Physics* VIII should not be read by automatically importing doctrines from book VII – whose standing in *Physics* is questionable anyway – as book VIII offers a new start in the discussion. Rather, one has to consider his numerous expressions throughout book VIII which indicate that efficient causality is under discussion. A good example for this is found in the next section.

*2.2. The Unmoved Mover Transmits Power (*Physics *VIII.10 and* Met*. Λ 7)*

The so-called infinite power argument in *Physics* VIII.10 implies that the prime mover transmits power (δύναμις) to the thing it moves and is thereby an efficient cause. This argument, which is taken up again in *Met*. Λ, has caused great puzzlement, especially among scholars who regard the unmoved mover exclusively as a final cause.[400] As one of the most (in)famous arguments for the causal efficiency of the unmoved mover it has

[397] Wardy (1990), 122 reaches a similar conclusion.
[398] 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.
[399] Simplicius reaches the same conclusion at *In Phys*. 1048.11–14.
[400] For a discussion of the argument, cf. Judson (1994), 167–171 and (2019), 235f.; Laks (2000), 241f.; Aubry (2002), 25 n. 41. Specifically for *Physics* VIII.10, cf. Ross (1936); Graham (1999).

proven to be immensely influential (but also controversial) in late antiquity and the middle ages.[401] 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 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; tr. Graham)

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 *Met.* Λ 7 whose discussion is doubtless referring back to *Physics* VIII.10:[402]

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[401] For references, cf. n. 456.

[402] With Laks (2000), 239 and against Ross (1936), 382, I take it that δέδεικται δέ (1073a5) alludes to *Physics* VIII.10.

> 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; 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)[403]

Here too Aristotle connects moving something for an infinite time with having an infinite power to do so. The argument is used like in *Physics* VIII 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* VIII.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), 165f. 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 e.g. a human wielding a stick.[404] 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 *Physics* and *Met.*, Laks only points out that the transmission of δύναμις must have a metaphorical sense here.[405] Both of these explanations are far from satisfying.[406] As I show below, the Neoplatonists offer an interesting solution to harmonising the infinite-power argument with the prime mover's final causality.

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[403] Tanslations of *Met.* are – with modifications – from Judson (2019).
[404] On the other hand, Tuozzo (2011) argues against Judson's et al. distinction between energetic and non-energetic efficient causes that all such causes in Aristotle are energetic and add force to the causal chain.
[405] Laks quotes for this de Corte (1935), 145, 153.
[406] For an emphasis on the importance of the infinite-power argument, cf. Bodnár (1997), esp. 117. On δύναμις as motive force, cf. Lefebvre (2018), 509–515.

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 how his interpretation relates to this argument.[407] 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), 341f. in their comments on *Met*. Λ 7.[408] Additionally, the issue is aggravated by the argument's presence in *Physics* VIII *and Met*. Λ 7 so that unlike, for instance, the much-disliked passage on the location of the unmoved mover – which only occurs in *Physics* VIII – this discussion cannot be simply explained away by assuming a development. In this way, both the overall structure of the argument in *Physics* VIII as well as the discussion of infinite power suggest that the unmoved mover is here conceived as an efficient cause. For *Met*. Λ, however, there is further proof that this type of causality should be attributed to the unmoved mover.

*2.3. The Unmoved Mover as κινητικόν and/or ποιητικόν (*Met*. Λ 6 and 10)*

A crucial passage from *Met*. Λ 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 ἀΐδιος· 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 (κινητικόν) or producing (ποιητικόν) 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

[407] Cf. especially Gourinat (2012), 198.
[408] 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 Λ 10. Elders (1972), 204f. seems to take the argument as only showing that the unmoved mover is indivisible.

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, i.e. 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 ἀΐδια 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. (1075b30–34)

Sedley (2000), 344–6 and Judson (2019), 361f. 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 alternative.[409] 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 *GC*: ἐν ἅπασιν εἰώθαμεν τοῦτο λέγειν τὸ ποιοῦν, ὁμοίως ἔν τε τοῖς φύσει καὶ ἐν τοῖς ἀπὸ τέχνης, ὃ ἂν ᾖ κινητικόν. (II.9 335b27f). Thus, both passages strongly suggest that the unmoved mover is an efficient, i.e. moving and producing, cause.

2.4. Conclusion

In conclusion, there is significant evidence in *Physics* VIII and *Met*. Λ 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* VIII 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)

[409] 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.

in *Met.* Λ. 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 (a) a final cause by being an efficient cause or (b) an efficient cause by being a final cause. Frede (2000), 43–47 and Menn (2012b), 447 opt for (a), while Judson (1994), 164–167 and (2019), 185f. goes for (b).[410] 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 precisely how we are to understand efficient causality in this context. In the next two sections I analyse two different reactions to this issue.

3. Proclus' Critique of Aristotle's Intellect

In a number of passages from *In Tim.* and *In Parm.* Proclus criticises Aristotle's intellect as being only a final cause and lacking efficient/productive causality.[411] 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*. IV 842.20ff). Consequently, Aristotle's prime mover is ἄγονος (842.26). The fundamentals of his critique are found in his teacher Syrianus (see below). However, it is in Proclus that we get the most extensive discussion.

In this section, I argue that

(a) Proclus' critique is part of a more fundamental disagreement with Aristotle's metaphysics.

[410] 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*. Λ) are Broadie (1993), 389; Kosman (1994); Berti (2000), 147f.
[411] Cf. *In Tim*. I 266.21–268.24, 294.28–296.12, 390.3–6, II 92.13–18; *In Parm*. III 788.8–19, IV 922.2–16, 973.3–12, V 983.12–14, VII 1167.27–1169.9. For a more general criticism of Aristotle's intellect, cf. *In Tim*. I 403.31–405.7.

(b) Consequently, Proclus maintains that Aristotle and Plato have a different understanding of efficient causality and that Aristotle's prime mover is not an efficient cause in the Platonic sense.

(c) 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.

(d) However, unlike Ammonius and Simplicius, Proclus does not believe that Aristotle actually drew these conclusions. Instead, 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.

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 Proclus' parsimonious remarks[412] 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.[413] Additionally, Steel suggests that for Proclus Aristotle's rejections of the forms has 'la conséquence la plus désastreuse' (225) of his inability to posit a higher principle than intellect. While this might be the case in the passage Steel focuses on (*In Parm*. IV 972.29–973.12; cf. *In Tim*. I 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,

[412] I was able to identify five passages which are treated below: *In Tim*. I 295.20–27, 305.20f.; *In Parm*. VII 1214.6–12; *PT* II.4 31.21f. *De Prov*. §31.1–6.

[413] 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: '[I]f Intellect is essentially a productive cause, then its self-knowledge must comprise a contemplation of the intelligible paradigms of all that it produces'.

Aristotle rejects the intellect's efficient causality.[414] 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.

Aristotle's repudiation of the One emerges more clearly from a passage in *In Tim*. where Proclus compares Aristotle with Plato and emphasises their differences:[415]

> (1) ὅσα γὰρ τῷ ἑνὶ Πλάτων, ταῦτα τῷ νῷ περιτίθησι, τὸ ἁπλήθυντον 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*. I 295.20–27; tr. Runia, modified)

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:

Attrib.	τὸ ἁπλήθυντον τὸ ἐφετὸν τὸ μηδὲν νοεῖν τῶν δευτέρων	ἡ δημιουργία ἡ πρόνοια	/[416]
Pl.	ἕν	δημιουργικὸς νοῦς	οὐσία τοῦ οὐρανοῦ
	↘	↘	↘
Ar.	νοῦς	οὐρανός/οὐράνιοι θεοί	κυκλοφορία τοῦ οὐρανοῦ

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

[414] D'Hoine (2016), 390f. 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.
[415] 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).
[416] It remains unclear what Aristotle supposedly attributes wrongly to the circular motion of the heaven.

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*. I 2.30–3.7, 204.8ff., 227.2f.).

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*. I 305.20f.).[417] This is again emphasised in a rarely cited passage from *In Parm*. 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). (VII 1214.6–12)

Elsewhere he calls Aristotle's view a Περιπατητικὴ καινοτομία (*PT* II.4 31.21f.), whereby the latter term negatively refers to a 'departure from established (i.e. Platonico-religious) tradition' or simply a 'modernism'.[418] In the eyes of Proclus, Aristotle thus commits a grave mistake, since the first principle is supposed to be the One/Good which transcends being and intellect altogether. The seriousness of this objection should not be downplayed, as for instance Baltes does.[419] Proclus' interpretation of Aristotle's highest principle mirrors Plotinus'[420] and Syrianus' position,[421] both of which probably

[417] Cf. *De Prov*. §31.1–6.

[418] See note in Saffrey/Westerink 1974, 94f. Proclus affirms there his allegiance to Plotinus and Porphyry as orthodox interpreters of Plato in this regard.

[419] Baltes (1978) II, 70 characterises 295.20–27 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), 224f. and d'Hoine (2016), 290f. rightly emphasise the importance of this criticism.

[420] Cf. V.1 9.7–12; V.6 3.22–25; VI.7 37.18–24. Cf. Gerson (2005), 205–208.

[421] Syrianus remarks drily that Aristotle τὸ γὰρ ἓν καὶ ἁπλήθυντον καὶ ὑπερούσιον ἀρνεῖται (118.21f.) and mentioned τὴν τοῦ νοῦ τῶν ὅλων ἐπικράτειαν (194.14f.) in Aristotle. Cf. also *In Met*. 55.20–25, 182.5–7, 185.23. Helmig (2009), 378f. seems to imply that this criticism was a Proclean innovation which is clearly not the case. *Pace* Hadot (2015), 28 n. 85 who cites Syrianus *In Met*. 11.3ff. 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. 28ff.: τούτων [sc. Περιπατητικῶν] γὰρ οἰομένων τὴν πάντων ἀρχὴν εἶναι τὸν νοῦν, ἔδειξεν [sc. Plato] ὡς πρὸ τοῦ νοῦ ἐστὶν τὸ ἓν καὶ πρὸ τῶν ἄλλων ἁπάντων. Cf. Olympiodorus *In Alc*. 122.12ff., 145.6f.

influenced him. At the same time his position must be contrasted with Ammonius' and Simplicius' view according to which Aristotle recognises the transcendent One.[422]

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 (a) non-multiplied, (b) desired, and (c) 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 (a) non-multiplied but possesses multiplicity since its thinking involves at a minimal level a subject that thinks and an object that is thought.[423] Instead (a) must be attributed to the One who is absolute unity.[424] Proclus' objection to (c) implies that Aristotle wrongly conceived the intellect's thinking as exclusively self-centred and unconcerned with essences (or any other characteristics) of other beings. This brings Proclus' reading close to many modern interpreters such as Ross (1924) I, cxli–cxliii, Guthrie (1981), 261f., and Brunschwig (2000).[425] Additionally, this objection fits well to Proclus' observation that Aristotle's intellect has no activity towards other beings (*In Parm*. VII 1169.4–9). Proclus believes (c) 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*. III 790.12–791.10 and IV 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 (b)? Proclus, of course, holds fast to the idea that the intellect is ἐφετόν – he even goes so far to say that it is desired by all beings (*ET* §34 38.3; discussed below). 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.* I 3.6, *ET* §8 8.31f. and *PT* II.9 59.13–16. Perhaps, this is why Proclus uses here the term with an article, i.e. τὸ ἐφετόν (just as in τὸ ἁπλήθυντον and τὸ μηδὲν νοεῖν τῶν δευτέρων): the

[422] Cf. below 4.3.
[423] Cf. *ET* §20 22.24f.: '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 V.1 9.8f., V.6 3.22–25.
[424] The term used here, ἁπλήθυντον, is unusual and first attested in Porphyry (*Sent*. 33.33–35, 36.4) and 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*. I 322.26ff.; *PT* II.1 11.23. Cf. Damascius *De princ*. I 234.3; Olympiodorus *In Phd*. 4.3.10f.
[425] For further literature on divine self-thinking, cf. Judson's (2019), 311ff. and 326ff. summary of the different interpretations. According to Judson's scheme, Proclus' reading would fit either DT2 or DT3.

intellect clearly is *an* ἐφετόν but not *the* ἐφετόν.[426] 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.[427] According to Proclus, Aristotle ascribes demiurgy and providence only to the heaven and not to the intellect, as he should have. 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.[428] Since in Aristotle generation occurs only in the sublunary realm and is, most importantly, dependent on the circular motion of the heaven,[429] 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*.[430] 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 and the eternity of species.[431] 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.

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[426] 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 (22b4f.). Proclus apparently regards the last expression as synonymous with τὸ ἐφετόν (cf. *PT* I.22 101.14ff.) and dedicates an extensive discussion to this term at *PT* I.22 101.21–102.26. Cf. Damascius *In Phileb.* 76.3.

[427] For a similar argument, cf. *In Parm*. IV 922.23–923.2 with comments in Steel (1987a), 218.

[428] 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*. I 260.23ff.). Cf. Opsomer (2000a), 115.

[429] Cf. *Met*. Λ 6 1072a9–18 with the comments by Judson (2019), 218ff. Simplicius also regarded 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.

[430] Interestingly enough, Bos (1989), 87 ascribes the view that only heaven but not intellect has providence to Aristotle's early dialogues. Atticus (fr. 3 66–71) likewise claims that the Aristotelian intellect has no providential care.

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

Proclus has made clear in the lines above 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. Unlike Baltes (1978) II, 69 who claims that this and the previous passage (294.28–295.19) 'zeichnen sich durch das Bemühen um Harmonisierung der Lehren der beiden Philosophen aus', I see almost no harmonisation effort on Proclus' behalf in 295.20–27. However, Proclus makes clear how Aristotle went wrong and implicitly offers a solution: if one 'upgrades' some of the attributes, e.g. by attributing non-multiplicity to the One etc., an agreement can be established.

He makes this explicit at *In Parm*. IV 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 (ἀπλήθυντον 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 often uses. 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*. IV 842.20ff.). 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.

3.2. Aristotelian vs 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 *In Tim.*:[432]

> (i) 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 any vigorous or strictly productive role (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.
> (ii) 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. (2.15–29; tr. Tarrant, modified)

Proclus puts forward two criticisms: (i) nature conceived only as origin of motion is not productive in the strict sense; (ii) 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*. A 6; *GC* II.9) – against Aristotle himself.[433] There is a certain irony in this move, as Proclus himself makes use of Aristotle's very own doxography of earlier natural philosophy (e.g. *In Tim*. 2.1–15).

(i) Regardless of the specific discussion of nature here, it is important to note the underlying assumptions Proclus makes about efficient causality which are quite different from Aristotle's.[434] What Proclus says here about nature's efficient causality, applies *a fortiori* to higher causes.[435] 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 *Phileb*.: ΣΩ.

[432] Proclus continues his criticism at 6.21–7.16, discussed in the Introduction. On these passages, cf. Steel (1987a) and (2003); d'Hoine (2016), 384f. and (2017), 104–107; Golitsis (2017), 223f. See also the discussion below in section 5.
[433] For a balanced defence of Aristotle's critique, cf. Vázquez (2022).
[434] For a comparison of both views, cf. Steel (2003), 177–183.
[435] 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 and below 4.2.

Οὐκοῦν ἡ τοῦ ποιοῦντος φύσις οὐδὲν πλὴν ὀνόματι τῆς αἰτίας διαφέρει, τὸ δὲ ποιοῦν καὶ τὸ αἴτιον ὀρθῶς ἂν εἴη λεγόμενον ἕν; – ΠΡΩ. Ὀρθῶς. (26e6–10).[436] 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.[437] This conceptual difference is partly in line with a development sketched by Frede in his seminal article 'The Original Notion of Cause'. Frede (1980), 61 rightly claims that among the Neoplatonists a terminological and conceptual change occurred from moving cause, i.e. explaining a thing's motion, to productive cause, i.e. explaining a thing's existence or being.[438] The latter conception seems to imply the former so that an efficient cause understood as productive cause also explains the origin of motion. Proclus here appears to be well aware that at least Aristotle' 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.[439]

(ii) In the second part of the passage, Proclus complains of the lack of a productive cause of physical reality.[440] 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, i.e. to the sublunary realm (2.24–29). Most significantly, he then accuses Aristotle of denying that eternal beings (τῶν ἀϊδίων), i.e. the celestial beings and the cosmos itself, have an efficient cause – a claim repeated later on in the commentary.[441] The reason, as becomes clear soon, is that Proclus takes Aristotle's intellect not 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.

[436] Aristotle, of course, calls the efficient cause also ποιητικόν (*Met*. Λ 6 1071b12) as well as ποιοῦν (*Physics* II.3 194b31) but does not have in mind the strong sense of efficient cause as cause of being like Proclus and other Neoplatonists.
[437] This is made explicit a few lines further down at *In Tim*. I 3.7–10.
[438] On Proclus' general views on causality, cf. Cürsgen (2007); De Rijk (1992); Greig (2021) ch. 2.
[439] For a critique of this position with further literature, cf. Natali (1997).
[440] Proclus was possibly inspired by Alexander's interpretation of Aristotle in this regard, as Golitsis (2017), 225 suggests.
[441] Cf. *In Tim*. I 295.16f.: Aristotle 'does not teach an efficient cause for any of the everlasting beings.' (tr. Runia)

3.3. The Critique of Aristotle's Intellect in In Tim. 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

(a) the intellect as cause of the cosmos' essential desire and

(b) the intellect as cause of infinite power

leads to the conclusion that

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

Aristotle's mistake lies in not endorsing (c) although it necessarily follows from either (a) and (b).

The passage examined here (*In Tim*. I 266.21–268.23) has received less attention in scholarship.[442] 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 (266.21–267.4), and then offers four objections (267.4–268.22). The first two are philosophically most interesting and discussed in detail below.[443]

*3.3.1. Doxography (*In Tim*. I 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·

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[442] Steel (1987) 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), 251f.: Opsomer (2009), 198–200; d'Hoine (2016), 384f., 390f.; Twetten (2016), 334f. In her chapter on Proclus, Hadot (2015), 121–125 fails to mention this criticism.

[443] The third objection (268.6–15) 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 (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 who both 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.

> 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*. I 266.21–267.4; tr. Runia, modified)

This doxographical account – which is in many regards representative of Proclus' views on the history of philosophy[444] – 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 *Tim.*, 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.[445] Specifically the last two characteristics which emphasise the productive activity of the demiurge towards the cosmos[446] 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 which 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). Unlike in *In Tim*. I 295.20f., 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*. I 295.20–27). 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'.

[444] Similar accounts are found at *In Tim*. I 2.10–19; 6.21–7.16.
[445] 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*. IV 790.16–791.5 with comments by d'Hoine (2008).
[446] 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*. IV 921.14–19 with Steel (1996).

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.[447] The latter, as has been seen, is the most serious error in the eyes of a Neoplatonist.

Here again, like in 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*. I 266.21–267.4) that Proclus proceeds with his specific criticisms. Proclus' goal in the first (267.4–12) and the second objection (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.

*3.3.2. First Objection (*In Tim*. I 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 ταύτην τὴν ἔφεσιν 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 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*. I 267.4–12; tr. Runia, modified)

This objection is loosely based on *Met*. Λ 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

[447] At *In Parm*. V 983.10–14 and *In Tim*. I 320.23–26 he claims that by rejecting the paradigm Aristotle takes away the efficient causality of intellect. On Aristotle's rejection of a paradigm, cf. also *In Tim*. I 456.10-13. Cf. Romano (1993), 186ff.

maintains, it also needs to be the efficient cause of the cosmos' being.[448] The argumentation proceeds in two steps. First (i), Proclus claims that the cosmos is not a first or principle (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), i.e. 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), 185f., 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[449] 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 desiring 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.[450]

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. 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

[448] Other versions of this objection in relation to the causality of intelligible entities are found in *In Parm*. III 788.8–19, IV 842.20–27, 922.2–16; cf. Steel (1987), 215f. and the notes in Luna/Segonds (2013) I, 132 and II, 418f. Asclepius makes the same argument but attributes it to Aristotle (*In Met*. 148.10–13).
[449] 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.
[450] As is also pointed out by Steel (1987a), 217.

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 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 ὕπαρξις means 'existence' in Proclus, as when he discusses the ὕπαρξις τῶν εἰδῶν at *In Parm*. 880.19.[451] Steel is indeed aware of this and, thus, when he cites Proclus' claim that πόθεν γὰρ τούτοις ἡ ὄρεξις ἢ ὅθεν καὶ ἡ ὕπαρξις καὶ τὸ εἶναι αὐτῶν (*In Parm*. IV 842.25f.), 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, but is a richer notion which includes the mode of existence as well as certain essential attributes, as the expression τὸ εἶναι αὐτοῦ πᾶν and τὸ εἶναι ὀρεκτικόν at 267.11f. seem to indicate. Parallel evidence from *ET* suggests the same (e.g. *ET* §28 32.29, §31 34.35, §34 36.24).[452] 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*.[453] The best translation therefore seems to be 'being', as it is able to render the term's ambiguity also in Proclus.

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), 164f. and

[451] Nevertheless, Proclus seems to use εἶναι often in the same sense. 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), 312: 'in all [occurrences in the Neoplatonism] ὕπαρξις is regarded as a very general notion that differs from οὐσία because οὐσία entails some further specification. So the relation between ὕπαρξις and οὐσία is not that between a second and a first-order predicate but that between a general notion of reality and a further specification of it that implies further connotations (see above). Indeed, ὕπαρξις and οὐσία are real or existing and so existence is connected to both of them.' See also P. Hadot (1973).

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

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

(2019), 185f. Yet, Proclus goes further than this by concluding from causing the cosmos' essential desire to causing the cosmos' being. If εἶναι meant here 'existence', the move would be in a certain way 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 and 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*. Insofar Proclus' argument is meant to be based on Aristotelian premises, this understanding of εἶναι makes Proclus' argument on the whole less convincing. The assumption is due to Proclus' own Neoplatonist conviction that lower entities derive their existence as well as essence from higher entities, since the latter already contain the lower ones in a superior way (*ET* §7).[454] A higher being is thus never *just* the cause of a lower being's existence but also of its properties.

*3.3.3. Second Objection (*In Tim*. I 267.12–24)*

While the last objection concluded from the intellect's causation of the cosmos' essential desire to the causation of the cosmos' being, the second objection reaches the same conclusion 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*[455] and elsewhere but also by using it against Aristotle.[456]

> [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.

[454] Cf. Lloyd (1976), 152–155; Greig (2021), 79–90.
[455] See below 5.1.
[456] Proclus employs the argument also in his interpretation of *Tim.* (*In Tim*. I 294.10–15) and Syrianus in an idiosyncratic interpretation of *Phdr.* 245d8f. (*In Met*. 118.6–9). It occurs also in e.g. Olympiodorus *In Phd*. 13.2.38f. and Alexander *In Phys*. VIII.10.818: 639. For a discussion, cf. Steel (1987b); Sorabji (1988), ch. 15; Lerner (1996) ch. 9; Twetten (2016), 334f. and (2019); Adamson (2018), 201–204 whose formulation of Ammonius' argument differs somewhat from Proclus'.

> 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*. I 267.12–24; tr. Runia, modified)

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 magnitude has a finite power.

(2) Moving for an infinite period of time requires an infinite power.

(3) The cosmos is a magnitude and moves for an infinite period of time.

(5) Infinite power is either intrinsic (in certain unextended entities) or extrinsic (in magnitudes).

(4) Since (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 cleverly equals moving for an infinite period of time (τὸ κινεῖσθαι ἐπ' ἄπειρον) with being for an infinite period of time (τὴν ἄπειρον […] ταύτην τοῦ εἶναι δύναμιν). This identification is absolutely crucial for Proclus, as it transforms the proof from an argument about motion to one about being.[457] 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*. I 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* VIII.10 and *Met*. Λ 7 1073a5–11 which refers back to *Physics*. As discussed above in section 2.3., in

[457] Again, this transformation goes back at least to Syrianus *In Met*. 117.28–118.6. It is taken up again – but with a different intention – by Ammonius *ap*. Simplicium *In Phys*. 1363.4–8, discussed in section 4.

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 mentioned explicitly by Aristotle, I believe Proclus' interpretation is correct and a majority of modern scholars, e.g. 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 (*Physics* VIII.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, i.e. 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.

3.3.4. Conclusion

In order to asses Proclus' approach, I have to first consider 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.[458] After all, Proclus himself claims after presenting his objections of

[458] See Introduction 3.2.

Aristotle's intellect: 'In relation to Aristotle, then, many refutations have been made by many people' (*In Tim*. I 268.23; tr. Runia).[459] As mentioned, Syrianus holds a very similar view of Aristotle's intellect (e.g. *In Met*. 10.33–11.5[460]; 175.21–23) and we find evidence for both of Proclus' objections, O1 and O2.[461] 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' (10.37: τοσοῦτον ἀπολείπεται τῆς πατρίου φιλοσοφίας).[462] 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' (27f.: 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.[463] 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.[464] Thus, in contrast to Proclus Syrianus emphasises the resulting agreement between Plato and Aristotle in this respect. At the same time, Syrianus makes clear that this agreement was not Aristotle's intention. Instead, Aristotle has to be forced (καταναγκάζεται) to accept it.

[459] 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 fr.s 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 (V1 9, 7–27); cf. Roux (2013) and n. 420.
[460] 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.
[461] 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 80.10f.
[462] Proclus uses a similar expression when characterising Aristotle's deficient natural philosophy: ὅσον ἀπολείπεται τῆς τοῦ καθηγεμόνος ὑφηγήσεως (*In Tim*. I 7.15f.).
[463] Cf. *In Met*. 11.11ff.: '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' (tr. Dillon/O'Meara).
[464] This seems to be confirmed by a reference to Syrianus in Asclepius *In Met*. 450.22–25.

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.[465] At *In Tim*. I 266.30f. and 295.20–27 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*. 118.21f.). 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 to modern versions of this interpretation. In both 2. (a) and (b)., Proclus reaches from unquestionably Aristotelian premises – the unmoved mover causes (a) the desire and (b) the eternal motion of the cosmos – the arguably Un-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*. I 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 commitments) who attribute a Platonic type of efficient cause to Aristotle's intellect. In 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 – however with a different intention.

[465] Saffrey (1987), 208f. and Helmig (2009), 378f. believe Proclus is more critical of Aristotle than Syrianus. Both contrast Syrianus' respect for Aristotelian physics with Proclus' criticism thereof (*In Tim*. I 6.21–7.13). d'Hoine (2016) claims that this cannot be established.

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' *In Phys*. 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 of Ammonius' pupils (4.1). Additionally, I set out Simplicius' reasons for Aristotle's reticence in regard to the intellect's causality which, again, possibly mirror Ammonius'. This analysis allows me to situate the treatise within Ammonius' intellectual climate (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 (4.3).

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.[466] Ammonius himself studied under Proclus in Athens 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 (Photius *Bibl*. §242 341b24: μᾶλλον δὲ τὰ Ἀριστοτέλους ἐξήσκητο), and counted among his pupils Simplicius, Philoponus, Olympidorus and Asclepius.[467] 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.[468] It is possible that Ammonius achieved this by simply returning to a position prevalent in the Athenian school under Plutarch of Athens

[466] On Ammonius and his school, cf. Verrycken (1990); Blank (2010); Griffin (2016). Specifically, on their harmonisation efforts, cf. Chiaradonna (2019a).
[467] For references, cf. Sorabji (1988), 279 n. 122.
[468] See Introduction 3.2.

until Syrianus became its head in 431/2 AD. While I focus in the following 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.[469] These philosophers too regard the Aristotelian god as a final cause and an efficient cause of being.[470]

The most extensive evidence for Ammonius' interpretation is preserved in a well-known passage at the end of Simplicius' *In Phys.* (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 referring to various passages (1360.31–1361.11). He then (iii) turns to Aristotle and demonstrates the efficient causality of 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 this passage has attracted a certain attention in scholarship,[471] 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

[469] While not a prolific writer himself, Ammonius gave extensive lectures on Aristotle which have been 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), 105f. 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), 507–513. For a discussion of Philoponus' editorial work of Ammonius' lectures, cf. Golitsis (2019).

[470] Cf. Simplicius *In DC* 271.13–21, *In Phys*. 1360.24–1363.24; Asclepius *In Met*. 28.20ff., 103.3f., 148.10–13, 225.15ff., 450.20–28; Philoponus *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.

[471] Cf. Verrycken (1990), 216ff.; Twetten (2016), 337f.; Golitsis (2017), 220; A. Ross (2020).

> instruction on this topic (τελειοτέραν περὶ τούτου διδασκαλίαν) can be found in that book. (1363.8–12; tr. McKirahan)

Simplicius refers here to the 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 ὅτι οὐ τελικὸν μόνον, ἀλλὰ καὶ ποιητικὸν αἴτιον οἶδε τοῦ κόσμου τὸν θεὸν ὁ Ἀριστοτέλης (*In DC* 271.19–21).[472] 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 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.[473] There is, however, a rich tradition among Neoplatonists of writing μονοβίβλια on specific topics, of which Ammonius himself published a few.[474] 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

[472] Cf. also *In DC* 154.7–10 where Ammonius is not explicitly mentioned.
[473] 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.
[474] Cf. Blank (2010), 662.

> both of the entire cosmos and of the heaven. (*In Phys*. 1360.24–31; tr. McKirahan, modified)

Casting aside for a moment the question of who Simplicius' addressees are, Simplicius intends – in his typical manner – to 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' (1360.31–34). Simplicius refers to various passages from this dialogue which he takes to be descriptions of the demiurge's goodness as well as productive activity.[475] He also mentions that the demiurge himself 'looks at the Good' (1360.36f.) which I take to mean that the final causality of the demiurge is ultimately dependent on the One/Good.[476] Moreover, he specifies that while the demiurge himself creates (ὑφίστησι) the heavenly gods, i.e. 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.[477] 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 (1361.11f.). 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):

(1) *Physics* II.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).

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[475] These are *Tim*. 29d7f., 30b4ff., 41a7, b7f., 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*. A 6 Asclepius mentions *Tim*. 28c3f. for the efficient causality of the demiurge and the *Second Epistle* 312e1ff. for the final causality of highest principle (52.21–28; cf. 55.25, 103.12, 158.20). Interestingly, *In Met*. 52.21–28 is taken almost *verbatim* from Alexander *In Met*. 59.28–60.2.

[476] 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 below).

[477] 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 (3)). Similarly, the unmoved mover is an origin of motion to the sublunary beings proximately *via* the heaven (*In Phys*. 1362.19f.)

(2) *DC* I.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.[478]

(3) *DC* I.9 279a27–30. Ammonius refers here to Aristotle's description of the αἰών (eternity/everlastingness) on which the other beings' existence and life depend (I.9 279a29f.: 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.[479] Regardless of the identification of αἰών with intellect, it is first of all problematic to construe αἰών as subject of ἐξήρτηται which is rather governed by οὐρανός.[480]

(4) *GC* I.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, i.e. *Physics* VIII, 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.[481] 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*. A 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.[482]

Except (3) and (4), these passages are not conclusive, as they can be understood as referring to the intellect as an efficient cause of *motion*, i.e. a motive/kinetic cause, but not of *being*, i.e. 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.[483]

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, 'The 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)

[478] 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.
[479] Simplicius shares the same interpretation at *In DC* 290.32–291.2.
[480] Cf. Guthrie (1939), xxi n. a. Proclus, however, also takes the subject to be αἰών (*In Tim*. III 10.1f.) in which he is followed by Cherniss (1944), 588. Leggatt (1995), 205f. and Bodnár (1997), 110 n. 50 remain agnostic.
[481] 1361.30f.: '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.
[482] The same view is expressed by Asclepius *In Met*. 28.20-22.
[483] E.g. Broadie (1993); Frede (2000), 43–47; Berti (2007), 26; Menn (2012b), 443, 447.

Simplicius clearly states that Alexander conceived the unmoved mover as final cause and efficient cause of motion.[484] 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):[485]

(6) *Physics* II.6, 198a2–13.[486] 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)' (198a11ff.; tr. Charlton, modified). Since Ammonius admits that Aristotle's argument could be purely hypothetical, i.e. '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 receive a higher-order characteristic, such as substance, from x as well.

(7) Infinite power argument (based on *Physics* VIII.10 266a10–b27, 267b17–26 and *Met.* Λ 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 simple figure of speech that god makes nothing in vain) to convincing arguments (e.g. the infinite-power argument).[487] It is surprising that *Met.* Λ does not occupy a more central role in the discussion, as in modern scholarship, although it could offer evidence for Ammonius' position.[488] 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

[484] On Alexander's view of the unmoved mover, cf. Bodnár (2014).
[485] 1362.16-20 is not a further argument, as Twetten (2016) 337f. claims, but rather a recapitulation of the claim that the unmoved mover is an efficient cause of the motion of the heaven
[486] 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).
[487] Arguments (2) and (7) appear also in *In DC* 271.13–21 which refers to Ammonius' book.
[488] See my discussion of *Met*. Λ 6 and 10 above in section 2.4.

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; tr. McKirahan)

Simplicius' explanation is based on Aristotle's use of the term ποιοῦν/ποιητικὸν.[489] Since in Aristotle the product of a ποιοῦν or ποιητικὸν αἴτιον is something generated (γινόμενον)[490] 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* I.11 280b14–20: (a) something which is at some time and is not at another; (b) something which is capable of generation; (c) 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.[491]

Additionally, Simplicius had earlier differentiated between Plato's and Aristotle's use of the terms γένεσις and κίνησις (1359.30–40).[492] 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

[489] 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.

[490] This is very similar to *Phileb.* 27a1f. where ποιούμενον and γιγνόμενον are said to differ in name only.

[491] Additionally, there is no evidence that Aristotle took 'generation' in his criticisms of earlier cosmogonies (*DC* I.10) as meaning anything else than the cosmos' coming to be at a certain point in time.

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

generally to all changing and moving beings, including all eternal, corporeal beings.[493] 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' (1359.39f.).[494] Simplicius further emphasises that in both philosophers the changeable (μεταβαλλόμενον) depends on the unchangeable (ἀμετάβλητον) (1360.17f.): just like in Plato γινόμενα are caused by ἀγένητα, i.e. the demiurge, so in Aristotle κινούμενα are brought about by ἀκίνητα, i.e. 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.[495] 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).[496]

4.2. The Context of Ammonius' and Simplicius' Discussion

Was Ammonius the originator of the interpretation of the Aristotelian unmoved mover sketched above 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 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

[493] 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 being moved. And he posits that every corporeal structure is subject to generation […]' (tr. McKirahan).
[494] 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' (1360.11ff.).
[495] 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).
[496] See Introduction 3.2. p. 13.

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.[497] 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.[498]

There have been, however, 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*. 5.20f.). 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.[499]

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 '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*. Photium *Bibl*. 214 171b35–38; tr. Schibli, modified)

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

A reference to god is here conspicuously absent, although one could argue that his intent to prove the agreement ἐν τοῖς ἐπικαίροις τε καὶ ἀναγκαιοτάτοις τῶν δογμάτων Πλάτωνός τε καὶ Ἀριστοτέλους (172a7f.) implies also god's nature.[500] Hadot's – self-admitted – speculation (e.g. p. 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.[501] I can only find evidence for Porphyry's view that god is an efficient and final cause[502] – 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 (1360.24–28; see p. 147f.), 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' (οἱ ἄλλοι τινὲς τῶν Περιπατητικῶν) must be among them, as he is mentioned later on (1362.11).[503] The reason for their rejection of the intellect as efficient cause of the cosmos' being is said to be 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.[504] Another reason for this misunderstanding is Aristotle's regular insistence on the unmoved mover's final

[500] For a discussion of these passages, cf. Schibli (2002), 26–30 and the comments on his translation; Hadot (2004), 10–14.
[501] 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.
[502] For references and a brief discussion, cf. Karamanolis (2006), 279f.
[503] Simplicius also mentions Alexander as a proponent of this interpretation at *In Phys*. 258.13–15, 1354.34f. 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).
[504] Cf. Simplicius *In DC* 301.4–7 which is part of a larger critique of Alexander (297.1–301.28) who did not regard the views of Aristotle and Plato on the (un)generatedness of the cosmos as being in agreement. On this, cf. Baltussen (2008), 129ff.

causality (1360.27f.)[505] 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.[506] 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).[507] This stance is evidenced by Simplicius' – implicit or explicit – rebukes of Proclus' objections to Aristotle.[508] I limit myself to the most prominent examples. (1) They have diverging views on the history of natural philosophy and Aristotle's place in it, which are found in their respective prologues to *In Tim*. (2.9–3.20; 6.21–7.16) and *In Phys* (6.31–8.15).[509] 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.[510] 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 *Tim.* (*In DC* 640.21–32) – a work which is noticeably critical in its attitude to Aristotle – before referring again to his own harmonistic views.[511] 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.

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[505] In fact, Aristotle states only once that the intellect moves as an object of love (*Met*. Λ 7 1072b3).
[506] 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), 335ff.; Adamson (2018), 201.
[507] On the latter text, cf. p. 13f.
[508] The relationship between Simplicius and Proclus has not been well researched. Useful comments are found in Steel (2016); Baltussen (2008), 155–157.
[509] For a discussion of these texts, cf. Introduction 3.2.
[510] Simplicius also defends Anaxagoras from Proclus' objections. Cf. Golitsis (2008), 89–93; 207–209.
[511] I discuss this treatise by Proclus and some of its content in ch. III 4.1.

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*. I 295.15ff.; tr. Runia). Yet, by making the right assumptions and positing correct premisses 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.[512]

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.[513] Simplicius claims at *In DC* 485.19–22: ὅτι γὰρ ἐννοεῖ τι καὶ ὑπὲρ τὸν νοῦν καὶ τὴν οὐσίαν ὁ Ἀριστοτέλης, δῆλός ἐστι πρὸς τοῖς πέρασι τοῦ Περὶ εὐχῆς βιβλίου σαφῶς εἰπών, ὅτι ὁ θεὸς ἢ νοῦς ἐστιν ἢ καὶ ἐπέκεινά τι τοῦ νοῦ (fr. 49 Rose).[514] Statements like that put Gerson's (2005) claim that 'Neoplatonists generally recognized that Aristotle's account of the first principle of all was defective' (10f. 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.[515] More specifically, as we have seen, Proclus claims that Aristotle unduly assimilated the intellect

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

[513] 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.

[514] 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), 16ff.

[515] Cf. p.129 with n. 421. Additionally, Proclus believes that Aristotle rejects the transcendent paradigm; Simplicius does not (*In DC* 86.34–87.11).

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 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.[516] 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.[517] 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; tr. McKirahan, modified).

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.[518] In contrast, Proclus' exposition is less text-based and exegetical but much more argumentative.[519] 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 exegesis. Additionally, one of the main reasons for this different approach is of course that Simplicius presents here in summary-form a

[516] The same difference is found in their interpretation of Aristotle' objection to Plato's self-moving soul, as shown in ch. III 4.2.
[517] Syrianus and Proclus, however, are harmonists in regard to Plato and certain theologians. Cf. Introduction 3.1.
[518] Ammonius himself emphasises the diligence required of the exegete at *In Cat*. 8.11–19.
[519] 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., 42–48.

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* 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 against 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.[520] Hence, they not only have to refute Platonists like Syrianus and Proclus who regard some of their doctrines as incompatible but also Peripatetics like Alexander.[521] Ammonius and Simplicius aim at creating an agreement in Greek philosophy by disagreeing with philosophers such as 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 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 was eagerly picked up by philosophers and theologians adhering to the creationist God of the

[520] A notable example 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, 188f.).

[521] A similar example is the question 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* I.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), 129ff.; Gavray (2018).

Abrahamic religions. In this way, Ammonius and his students have contributed to the success of Aristotelian theology in the Middle Ages.[522]

5. Proclus on the Causality of the Demiurge

In section 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 *In Tim.* and *In Parm*. In these works, he lays out general, metaphysical grounds as well as exegetical motivations for conceptualising the demiurge's causality in a specific way.[523] Before I analyse these texts, I would like to briefly consider the *EP*, as this treatise will naturally lead us to Proclus' own views.

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* VIII.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, also the power.[524] 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 (§II.15), and if there were one, it could not move the finite, as has been demonstrated (§II.12). But if the first mover is (a) finite (body), it would not have an infinite power. For finite

[522] Cf. Sorabji (1990c), D'Ancona (2015), 383f. 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.'
[523] 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 *PT*.
[524] Aristotle does not make this explicit in the text. It is certainly Neoplatonist doctrine; though it already can be found in *Met*. Λ 7.

> magnitudes have finite powers, as has been demonstrated (§II.8). Thus, the prime mover of the circular motion is not a body. It is then incorporeal and possesses infinite power, QED. (§II.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 3.2. In fact, he criticises Aristotle in *In Tim*. 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 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* VIII. Indeed, besides indivisibility and lack of motion, he barely specifies its characteristics. I argue 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 ch. I, 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 *In Tim*. These are discussed in the next two sections.

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 ch. III 4.4.1. Proclus argues at length in *ET* §§31–34 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 sets out that a being reverts 'according to its essence' (κατ' οὐσίαν) to that from which it proceeds, i.e. 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 (a) all things desire and hence turn towards the Good – here conceived as the metaphysical principle[525] – and (b) the Good is only

[525] Cf. *ET* §12 14.18–21. The axiom that 'everything desires the Good' is a commonplace among Platonists (e.g. Plotinus VI 7 20.18; Asclepius *In Met*. 103.10) and already ascribed to Plato by Alexander (*In Top*. 226.14f.). 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. *Nic*. *Eth*. I.1 1094a3). Asclepius (*In Met*. 15.8) and Ps.-Simplicius (*In DA* 299.2) seem to be conscious of the latter.

acquired by the effect 'through the mediation of its proximate cause' (διὰ τῆς προσεχοῦς αἰτίας). The impossibility is guaranteed by considering (a) and (b) in conjunction. On its own (a) 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 (b): 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, i.e. the Good.[526]

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 on 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 ἀρχή and final 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,[527] 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', i.e. a final cause is also an efficient cause.

> 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

[526] This is similar to Aristotle's formulation that 'the primary object of wish is that which is fine [i.e. good]' (*Met*. Λ7 1072a28: βουλητὸν δὲ πρῶτον τὸ ὂν καλόν). The main difference is that the primary object of desire for Proclus is the absolute Good.

[527] 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).

> 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.
>
> (a) For if it reverts by nature, it has essential desire of that upon which it reverts. (b) And if so, its being also is wholly dependent on the principle upon which it reverts essentially and (c) in its essence it resembles this latter: hence it is naturally sympathetic with this principle, since it is akin to it in essence. (d) 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. (e) 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: (a) 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 8.23f.: '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 (a), Proclus then establishes (b): if x has an essential desire of y, x's being is completely dependent on y (τὸ εἶναι αὐτοῦ πᾶν εἰς ἐκεῖνο ἀνήρτηται[528]). 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. (c) 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

[528] 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*. Λ 7 1072b13f.). Cf. also *MA* 4 700a5f. A similar usage of the verb 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*. 156a3ff.).

their type of relationship which in §31 has been presented as a causal one. (d) 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: (e) x proceeds from y, i.e. 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 for ever, yet is none the less 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)

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[529] and do not desire it.[530] 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 actual objections common at the time: the former stemming from certain Platonists and Christians, among whom also Philoponus, the latter from

[529] Cf. *ET* §115 100.34ff.: 'Again, if the first principle transcend 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* III.7 29.10–30.2. It is unclear whether the henads are a Proclean innovation, cf. Dodds (1963), 257–260; van Riel (2017), 89–93.

[530] In this more comprehensive sense Proclus states that the Good τῇ ἐφέσει σῴζει τὰ πάντα (*PT* I.22 102.24). Plotinus is more precise in this when claims that νοῦ μὲν οὐ πάντα, ἀγαθοῦ δὲ πάντα [sc. ἐφίεται] (VI 7 20.18).

Alexander.[531] Clearly, for Proclus, the world can be both eternal and caused, insofar as its causation, i.e. 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 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. 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.

5.3. Platonic Exegesis in In Tim.

Besides these systematic considerations, Proclus attributes efficient and final causality to the demiurge on exegetical grounds.[532] In this he resembles other Neoplatonists, including Ammonius and Simplicius.[533] For Proclus, the evidence for the demiurge's efficient causality is easy to produce, as Plato often refers in *Tim.* 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 *Tim.* Proclus also finds corroboration for the demiurge's final

[531] On the eternity of the world, cf. Proclus *In Tim. ad loc*. 27c5, 28a1–4, 28b6f., 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 18 arguments which can be reconstructed through Philoponus' polemical response and an Arabic translation. For an overview, cf. Luna/Segonds (2012a), 1622f. Baltes (1978) II, 134–163. Gleede (2009) offers a minute and up-to-date discussion of each argument. On Alexander see above n. 504.

[532] The identification of the Platonic demiurge with an intellect can be found in e.g. Alcinous *Didask.* 10 164.27–31 and Plotinus V1 8.5 Cf. ch. III.

[533] Cf. n. 475.

causality. The latter might seem surprising, as the very presence of final causes in *Tim.* has been questioned in recent scholarship.[534] Thus, when interpreting Plato's demiurge we have the reverse situation to Aristotle's intellect: the demiurge's 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 *In Tim*.[535] Since these have been the object of extensive studies by Opsomer, to which I refer the reader,[536] I will only focus here on the demiurge's causality and not e.g. on his identity or place in the metaphysical hierarchy.

Proclus emphasises the need for a single efficient cause of the universe at *In Tim*. I 258.12–264.3, when he discusses *Tim*. 28a4f.: πᾶν δὲ αὖ τὸ γιγνόμενον ὑπ᾽ αἰτίου τινὸς ἐξ ἀνάγκης γίγνεσθαι: παντὶ γὰρ ἀδύνατον χωρὶς αἰτίου γένεσιν σχεῖν.[537] Proclus regards this as one of five 'fundamental principle[s]' (*In Tim*. I 262.29: ἀξίωμα) in Plato's cosmology, showing that the whole realm of becoming derives its existence from a cause.[538] 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' (260.24f.). 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*. 23c4f.) is the highest cause. The demiurgic cause is responsible not just for producing (*In Tim*. I 260.3 ποιοῦν) the cosmos but also

[534] 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), 184f. Against these authors Mesch (2020) argues for the presence of final causes in *Tim*.

[535] The most important one is *In Tim*. I 299.13–319.21, esp. 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*. III 790.5–791.20 which is discussed by d'Hoine (2008).

[536] Cf. Opsomer (2000a), (2006b), (2017), 142–152. On the demiurge in Proclus' *PT* (esp. V.13), cf. Dillon (2000).

[537] On this, cf. Martijn (2010a), 115–118.

[538] 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*. I 233.11–13). Cf. also his discussion of the term's extension at I 235.1–13.

for maintaining (259.22: σῴζεσθαι) and preserving (συνέχεσθαι) it.[539] Moreover, while the paradigmatic cause brings about the immanent form of the beings, the demiurge is the cause of order (270.24ff.: 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 (270.8–26).[540]

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*. I 3.6, 274.28ff.; 356.13f.), for whose sake the cosmos has been produced by the demiurge (356.31–357.2).[541] Proclus finds an allusion to this principle at least twice in *Tim.*, since he takes δι' ἥντινα αἰτίαν in λέγωμεν δὴ δι' ἥντινα αἰτίαν γένεσιν καὶ τὸ πᾶν τόδε ὁ συνιστὰς συνέστησεν (*Tim*. 29d7f.; cf. *In Tim*. 355.28–357.12) and ταύτην ἀρχὴν κυριωτάτην in ταύτην δὴ γενέσεως καὶ κόσμου μάλιστ' ἄν τις ἀρχὴν κυριωτάτην παρ' ἀνδρῶν φρονίμων ἀποδεχόμενος ὀρθότατα ἀποδέχοιτ' ἄν (*Tim*. 29e4–30a2; cf. *In Tim*. I 368.15–370.10) as alluding to the Good.[542]

In this context Proclus' interpretation of *Tim*. 29e1f.: ἀγαθὸς ἦν, ἀγαθῷ δὲ οὐδεὶς περὶ οὐδενὸς οὐδέποτε ἐγγίγνεται φθόνος at *In Tim*. I 359.20–362.17 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*. 82.9ff.), Ammonius (*ap*. Simplicium *In Phys*. 1360.31ff.), Simplicius (*In Phys*. 464.3–6), and Asclepius (*In Met*. 21.20f.) also mention it. In his interpretation, Proclus states that the 'final cause is this: goodness, both absolute Goodness and demiurgic goodness' (360.16f.) 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,

[539] At *In Tim*. I 294.1–28 Proclus explains why the cosmos requires a sustaining cause from which it receives infinite power to exist.
[540] Proclus distinguishes the contributions of One, paradigm, and demiurge at *In Tim*. I 387.23–388.1. There is a clear hierarchy between them: κύριον ἐν 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. (368.25–29)
[541] On the final cause in Proclus' *Timaeus*-interpretation, cf. Steel (2003), 186f.
[542] Proclus also offers an explanation 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*. I 356.26–29; tr. Share). Cf. *In Tim*. I 285.29ff. (with reference to *Tim*. 29e4 which is discussed at some length at 368.15ff.).

> 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.[543]

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 (I 401.18ff.).

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*. A7 988b6–16.[544] 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.[545] 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.[546] 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 the Aristotelian heritage: διὸ καὶ ἐραστόν ἐστιν ὁ νοῦς καὶ ὀρεκτόν, ὥς φησιν Ἀριστοτέλης (*In Alc*. 317.22f.).[547] However, 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. However, 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.

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[543] 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 14f.).
[544] Cf. Aristotle's criticism of Anaxagoras at *Met*. Λ10 1075b8ff.: the intellect does not cause *qua* good but rather for the sake of the good; this makes the intellect distinct from the good.
[545] When he discusses the demiurge's causality at *In Parm*. III 790.5–791.20 he states again that the demiurge is an object of desire in his essence (791.1).
[546] Cf. *PT* I.22 101.27f.: πάντα γὰρ ἐφίεται τοῦ ἀγαθοῦ καὶ ἐπέστραπται πρὸς ἐκεῖνο, τὰ μὲν μᾶλλον, τὰ δὲ ἧττον.
[547] Cf. e.g. *In Tim*. I 267.9, *In Parm*. IV 887.30ff., 964.20. Implicitly also at *In Tim*. II 92.14.

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 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 – προοδος – ἐπιστροφή. Given his premises, Proclus' solution appears quite economical and compelling. In *In Tim*. 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.

CONCLUSION

The goal of this study was to offer a wide-ranging treatment of Proclus' engagement with Aristotle and his criticism of Plato by focusing on the concept of motion. Thematically, my results can be summed up in six areas.

(1) My main conclusion is that Proclus does not share the view of an essential agreement between Aristotle and Plato – contrary to what is often assumed in scholarship. This emerges most clearly in Proclus' discussion of Aristotle's metaphysical system and specifically Aristotle's rejection of the One and deficient understanding of the intellect's causality (ch. IV). Proclus regards Aristotle as a defective imitator and epigone of Plato.[548] Aristotelian and Platonic metaphysics do not agree on the types of principles they recognise. As I argued, Proclus' interpretation of Aristotelian metaphysics is more sensible than Ammonius' et al. who vainly strive to find the Aristotelian equivalent to the Platonic One. Crucially, this insight has implications for the historiography of late antique philosophy: not all post-Porphyrian Neoplatonists adhere to the harmony-doctrine. Proclus is able to see lucidly the differences between antiquity's greatest philosophers without resorting to some form of mental acrobatics to create an agreement, as e.g. Simplicius is sometimes fond of doing. The differences in the Neoplatonists' views on the relationship between Plato and Aristotle are of a fundamental character and thus should not be characterised as mere 'details' (Gerson 2005, 16) or 'nuances' (Hadot 1992, 421).[549]

(2) Nevertheless, Proclus still believes that in some areas there is an agreement between the two philosophers. In the case of *EP*, I have shown in ch. I that Proclus exhibits a detailed knowledge of Aristotle's natural philosophy which he seems to endorse to a certain degree. Concepts such as the existence of three simple natural motions and the finitude of bodies are endorsed just as the idea that bodies have only a finite power. He likewise accepts the notion of an unmoved mover as ultimate origin of motion. His

[548] Steel (1996) puts it succinctly: 'Malgré tous leurs efforts pour faire preuve d'originalité et d'innovation par rapport à Platon, tous ces penseurs [including Aristotle] ne sont que de piètres simplificateurs qui, par leurs modifications, on mutilé et corrumpu la doctrine véritable que Platon a exposée dans ses dialogues.' (241)

[549] Cf. Hadot (1992), 422 : 'Si la tendance à l'harmonisation de la pensée d'Aristote et de Platon était générale chez les néoplatoniciens, il pouvait y avoir dans cette tendance des nuances et des degrés, comme nous l'avons vu par l'exemple de Jamblique et de Proclus.'

explanations, however, differ: in *EP* he takes over Aristotle's arguments (ch. I 5.1), while in *ET* and other works he provides a different, Platonist reasoning (ch. I 5.2–3). Obviously, the latter account is in Proclus' mind more fundamental since it is grounded in general metaphysical laws. Interestingly, this does not imply that Proclus actually views the unmoved mover as genuinely Aristotelian, as I clarified in chapter II: rather he regards the philosophical parentage of this entity as Platonic. This is part of a common Platonist methodology of backdating Aristotelian and generally later philosophical insights to Plato. The same applies to the case of the prime mover's causality, as shown in chapter IV. While Proclus shows that Aristotle's premises ultimately force him to accept it as efficient cause of the cosmos' being, he also provides his own philosophical and exegetical reasons – based on Plato – to accept this view. In regard to soul's self-motion and extension, Proclus again seems to entertain the idea of an agreement between Plato and Aristotle since both deny that the soul is extended in space and has physical motion (see ch. III). Here, Aristotle's criticism of a literal understanding of the *psychogonia* serves a constructive function as it shows Proclus how absurd it is to understand the soul as extended and moving in space.

Since Proclus grounds (what to us modern interpreters appear to be) Aristotelian doctrines such as the intellect as prime mover and final cause or self-motion as non-spatial in his exegesis of Plato, he leaves the impression that already Plato held these views and belittles the influence Aristotle actually had on the development of such positions. Consequently, Proclus appears in our eyes to be more Aristotelian than he himself was aware of. All in all, the picture of Aristotle's agreement with Plato as entertained by Proclus is one marked by Aristotle's inferiority due to Plato's superior role in providing a stronger argumentative and exegetical background. Nevertheless, Proclus deems the study of Aristotle useful and, in fact, indispensable due to the details he provides in his investigation of e.g. natural philosophy. This fits well with the view of Aristotle's works as 'lesser mysteries' intended for preparing students to be initiated in the 'mystagogy' of Plato's dialogues.[550]

(3) In interpreting Aristotle, Proclus is part of a common exegetical tradition with which he engages – be that in some of the terminology he uses in *EP* which he shares

[550] Cf. Marinus *VP* §13 320ff.: 'Once [Proclus] had received sufficient direction in [Aristotle's works], as in certain preliminary and lesser mysteries, Syrianus directed him to the mystagogy of Plato […]' (tr. Edwards).

with Simplicius and earlier exegetes (ch. I 2.2 & 3.3.1) or in the way he construes Aristotle's argument for the prime mover's efficient causality which is inspired by Syrianus (ch. IV 3.3.4). However, he also deviates from it where he sees fit. As I demonstrated in chapter I, Proclus changes the common order of discussing Aristotle's *Physics* and *DC* by starting with *DC* I and then presenting the material from *Physics* VIII. Interestingly, he also excludes material from these books due to the possible conflict with Plato. In regard to his critique of Aristotle's metaphysics, I have tentatively argued that he goes further than Syrianus.

(4) Importantly, Proclus deals with Aristotle's criticism of Plato differently from other Neoplatonists such as Ammonius and his pupils, as I was able to show for the first time in a detailed discussion. Unlike these philosophers, Proclus believes that Aristotle's intention was to attack Plato directly and to refute his views, as became clear in my discussion of Proclus' rebuttal of Aristotle's objections to the *Timaean cosmogonia* (ch. I 2.3.2) and *psychogonia* (ch. III 4.2). At some point, Proclus even points out that Aristotle's criticism can be harmful if taken at face value as it distorts our understanding of Plato (see n. 120). Again, Proclus' position appears more persuasive than, for instance, Simplicius', considering that no serious scholar nowadays would doubt that Aristotle actually wanted to attack Plato in *DA* I.3, DC I.10–12 or *Met*. A 6. His interest in refuting Aristotle's objections is stronger than in other Neoplatonists, as is emphasised by the two monographs, *Investigation of Aristotle's Objections Against the* Timaeus and *Investigation of Aristotle's Objections Against the* Republic, he dedicated to them.

(5) I have also demonstrated that Proclus' engagement with Aristotle's objections to Plato also differs from the approaches of the Middle Platonists: Proclus engages in a productive way with these criticisms and takes them more seriously than the Middle Platonists. This is evidenced by three theses accepted by some Middle Platonists but rejected by Aristotle and the Neoplatonists:

(i) the cosmos is generated (in time) and indestructible (ch. I)

(ii) unmoved mover and self-mover are principles of motion (ch. II)

(iii)soul has a spatial/physical motion (ch. III)

i) and iii) are held by Plutarch and Atticus, ii) by Alcinous. I argue that the Neoplatonists' rejection of these three theses is to a significant degree influenced by their reading of Aristotle. This is evident from their citations or even exegeses of these Aristotelian

passages. This, in turn, is accounted for by the higher authority that the Neoplatonists ascribed to Aristotle: these philosophers interpret Plato by bearing Aristotle's criticisms in mind which then leads to making Plato immune to these objections. Thus, unlike certain Middle Platonists, they hold the view that according to Plato

(i) the cosmos is indestructible and not generated in time

(ii) the unmoved intellect is the ultimate origin of motion; soul is only an intermediary principle of motion

(iii) soul has a non-spatial/non-physical motion

These doctrinal differences emphasise the fecundity of Aristotle's objections for the development of Neoplatonism in general and Proclean thought more specifically as the engagement with Aristotelian and Middle Platonist views emerges most clearly in the latter.

(6) Lastly, I have illustrated how certain Aristotelian and Platonic texts had a formative influence for Proclus' views. In the case of *EP*, I argued that Aristotle's *APo* shaped Proclus' views on axiomatics more than previously assumed and how this helps us understand why Proclus structured *EP* in the way he did (ch. I 3.2–3). In arguing for the existence of the prime mover and its causality, he makes generous use of *DC*, *Met*. Λ and *Physics* VIII and partly transforms their arguments (ch. I; II; IV). Likewise, in his discussion of soul's self-motion and the conditions of its immortality, he takes over Aristotelian arguments from *DA*, such as soul's lack of spatial extension and separability from the body. In regard to Plato's dialogues, I demonstrated in ch. III (especially 4.3) the significance of *Laws* X for the Neoplatonist theory of motion, especially self-motion. For the future a more thorough examination of the dialogue's influence among these philosophers remains highly desirable.

In summary, I have shown that Proclus and other Neoplatonists engaged with serious problems in Plato and Aristotle that yet remain to be solved by modern scholarship. Our seemingly recent debates are prefigured by the Neoplatonist discussions. Proclus' interpretations help us better understand these disputes. In spite of what appears to be an arcane metaphysics, Proclus is able to systematise significant insights from Plato and Aristotle and to offer a unified philosophical worldview that is often sensitive to the concerns of these philosophers. My study allows for further research in the reception of Aristotle in Proclus by considering other pertinent topics such as causality or psychology

that have been discussed here only in regard to their relevance for his concept of motion. Crucially, it shows that studying the Platonist reception of Aristotle's criticism of Plato is indeed an integral part of understanding Proclus' thought.

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