



Revue des Sciences Humaines

جامعة القاضي عياض  
UNIVERSITÉ CADI AYYAD  
كلية الآداب والعلوم الإنسانية  
Faculté des Lettres et des Sciences Humaines

# RIVAGES

Revue scientifique à comité de lecture



N° 6 - 2021

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N° 6-2021

Revue semestrielle, scientifique à comité de lecture, éditée par la Faculté des Lettres et des Sciences Humaines, Université Cadi Ayyad – Marrakech - Maroc

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Dépôt Légal : 2018PE0010

ISSN : 2605-6410

**Le tableau en couverture est de l'artiste peintre Mahi Binebine.**

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Revue des Sciences Humaines

# **RIVAGES**

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*Publication de la Faculté des Lettres et des Sciences Humaines*

*Université Cadi Ayyad*

*Marrakech*

*Maroc*

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## Prologue

La philosophie arabe en terre d'islam a fait l'objet d'importantes études et de recherches au sein des universités et des cercles académiques. Cette préoccupation augmente encore de jour en jour, et ce pour plusieurs raisons : tout d'abord les chercheurs ne cessent d'approfondir les études, de jeter de la lumière sur certains points négligés ou ignorés et chercher à répondre à quelques questions suspendues ou tout simplement ébaucher de nouvelles perspectives...

La majorité des recherches publiées jusqu'à maintenant se sont focalisées sur la philosophie arabo-islamique de l'Orient. Certes ceci s'explique par la richesse de cet héritage de l'orient ainsi que l'importance des sages et les philosophes de cette région. De nos jours, nombreux sont les chercheurs qui essayent de continuer cette exploration et d'améliorer ce que les pionniers (orientalistes et arabisants) ont réalisé dans l'histoire de la philosophie en Occident islamique. Le Laboratoire de philosophie de la Faculté des lettres et des sciences humaines de Marrakech s'est engagé sur cette voie. C'est ainsi que les articles publiés dans ce présent numéro de la revue *Difāf* (Rivages) ainsi que dans les numéros qui seront publiés ultérieurement reprennent les actes du colloque international organisé par le laboratoire LPSS et *Aquinas and Arab International Work Group (AAIWG)*.

Les articles du présent numéro ont été collectés, revu par Jamal RACHAK en sa qualité de Directeur du LPSS et coordonnateur du projet *Néoplatonisme en occident islamique*, ainsi que :

Terence Kleven (*Central College, Pella, Iowa, USA*),

Janis Esots (*The Institute of Ismaili Studies, London, UK*)

Pour *The Aquinas and the Arabs International Working Group (AAIWG)*

Malheureusement, lors de la préparation de ce numéro, nous avons reçue une triste nouvelle, nous étions attristés tous par la perte de l'habile chercheur Janis Esots, qui avait l'habitude de sceller sa correspondance par cette phrase :

«ونرجو منكم الدعاء، الحقيق يانيس»

Tout mon souhait est de prier pour ce méprisable Janis. Nous prions pour que son âme repose dans la paix et la tranquillité et mes sincères condoléances en ce moment de deuil.

Jamal Rachak  
Directeur du LPSS  
*Laboratoire Philosophie et Société du Savoir*

# The coherence of the prime mover as efficient cause in Aristotle (with Alexander and Averroes)

David Twetten

Marquette University, USA

## ملخص

يعد هذا المقال مراجعة للاعتقادات السائدة، والتي تبدو متضاربة، بخصوص مسألة "المحرك الأول" عند أرسطو. إن هذه المسألة لم يحسم فيها بعد حتى اليوم. وبالتالي يتغى هذا البحث النظر في الأبحاث المتخصصة، والتي تقول بأن المحرك الأول عند أرسطو هو علة غائية فقط، وسيخلص نظري إلى الدفاع عن تأويل جديد لهذه القضية والقول بأنه علة فاعلة.

سأستند في قلوي على شارحين عظيمين لأرسطو: الإسكندر الأفروديسي وابن رشد. وسيتم تقسيم هذا العمل إلى ثلاثة أجزاء: الجزء الأول، يتعلق بتحديد معنى "النظرية الملائمة" وسيبرز المشاكل التي تنبع من النظريات السائدة بخصوص هذا الموضوع. والجزء الثاني، سأقدم فيه بعض الحلول التي يمكن من خلالها حل تعارض بعض النصوص التي يظهر أنها كذلك. أما الجزء الثالث فسندقم فيه قراءة جديدة للنص الإشكالي وهو مقالة اللام في ميتافيزيقا أرسطو والتي تقترح القول بـ "علة غائية فقط".

الكلمات المفتاحية: أرسطو، الميتافيزيقا، المحرك الأول، مقالة اللام، العلة الغائية، العلة الفاعلة.

## Résumé

Dans cet article je réexamine les doctrines apparemment contradictoires d'Aristote à propos du premier moteur. Je soutiens que, jusqu'à ce jour, la littérature sur ce problème n'a pas encore éliminé ni même pris en considération les meilleures raisons pour une « théorie cohérente » des textes difficiles. Mes recherches m'amènent à remettre en question la vue prédominante parmi les experts selon laquelle le premier moteur d'Aristote est une cause exclusivement finale et à défendre d'une manière nouvelle l'interprétation selon laquelle le premier moteur est une cause efficiente. J'utilise à cette fin les plus grands commentateurs d'Aristote, Alexandre d'Aphrodise et Averroès. Avant de me lancer dans ce projet dans la deuxième partie de l'article, je définis d'abord ce que j'entends par « théorie cohérente » et j'examine les problèmes grevant les théories courantes sur le sujet. Dans la première partie, donc, un argument se dessine pour la façon de procéder, ainsi qu'une base pour élaborer une autre position. Au cœur de la deuxième partie, j'introduis la clé pour résoudre les incohérences textuelles apparentes : le moteur absolument premier d'Aristote se doit d'être pensé comme étant d'abord, non pas « efficient », mais une « cause source » à partir d'où le mouvement commence, puisqu'il se meut non pas comme un artiste mais comme l'art dans l'intellect du premier artiste. La troisième partie propose en conséquence une nouvelle lecture du « texte problématique » de *Métaphysique* Λ.7 qui suggère une « cause exclusivement finale ».



## Abstract

I reexamine in this paper Aristotle's apparently contradictory doctrines regarding the causality of the prime mover. In the scholarship to date on the problem, I argue, the best grounds for a "coherence theory" of the relevant difficult texts have not yet been eliminated or even considered. My findings lead me to call into question the received scholarly opinion that Aristotle's prime mover is an exclusively final cause and to defend in a new way the efficient causal interpretation, using the greatest commentators on Aristotle, Alexander of Aphrodisias and Averroes. Before embarking on this project in Part 2, I first identify what I mean by a "coherence theory," and I locate the problems with theories that are current. In Part 1, then, there emerges an argument for how to proceed, as well as a foundation for an alternative position. At the center of Part 2, I introduce the key to dissolving the apparent textual incoherences: Aristotle's absolutely first mover should be thought of first, not as an "efficient," but as a "source cause" whence motion begins, since it moves, not as an artist, but as the art in the first artist's mind. Part 3 proposes, as a result, a new reading of the "Problem Text" of *Metaphysics* Λ.7 that suggests an "exclusively final cause."

## 1. Cataloguing Positions on the Prime Mover since Zeller and Jaeger: The Problem for Available "Coherence Theories"

### 1.1 Coherence vs. Incoherence Theories

The problem of the prime mover has long dominated the scholarly study of Aristotle's philosophy. In the nineteenth century, German scholars addressed the problem in their endeavor to recover the doctrine of the historical Aristotle. As they saw, Aristotle's prime mover deserves a place of its own in history and should not be anachronistically identified with the God of Scripture, especially as understood by the scholastic "Aristotelians." Their scholarship provoked the great controversy which pitted the historian Zeller against the philosopher Brentano.<sup>1</sup> The two major questions they

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<sup>1</sup> For the controversy between Zeller and Brentano, see Eduard Zeller, *Die Philosophie der Griechen*, 3rd ed. (Leipzig, 1879), vol. 2.2, pp. 365-379; "Über die Lehre des Aristoteles von der Ewigkeit des Geistes," in *Kleine Schriften*, ed. O. Leuze (Berlin, 1910), vol. 1, pp. 263-290; Franz Brentano, *Die Psychologie des Aristoteles insbesondere seine Lehre vom NOUS POIETIKOS* (Mainz, 1867), pp. 234-250; "Über den Creationismus des Aristoteles," *Sitzungsberichte der Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse* 101.10 (1882) 95-126; *Aristoteles' Lehre vom Ursprung des menschlichen Geistes* (Leipzig, 1911), pp. 26-33. Zeller's position that the prime movers are final causes immediately moving an inanimate, corporeal heavens in the mode of an exemplar was identified as "Platonic" by Brentano and traced to Schwegler by Enrico Berti, "Da chi è amato il Motore immobile su Aristotele, *Metaph.* XII 6-7," *Méthexis* 10 (1997) 59-82 at pp. 69-70. See also the excellent discussion in Stephen Menn, "Zeller and the Debates about Aristotle's *Metaphysics*," in *Eduard Zeller: Philosophie- und Wissenschaftsgeschichte im 19. Jahrhundert*, ed. Gerald Hartung (Berlin: Walter de Gruyter, 2009), pp. 93-121.

posed continue to frame the discussion of much subsequent literature. First, does Aristotle's prime mover create the world,<sup>1</sup> or is it merely the final cause of a world it will never know?<sup>2</sup> And second, is Aristotle a monotheist, or does he affirm, in fact, a plurality of prime movers, as many as there are everlasting motions to explain?<sup>3</sup> The triumph of Zeller's answer is evident in

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<sup>1</sup> Brentano's ascription of monotheistic creation to Aristotle is defended by Anton Bullinger, *Des Aristoteles Erhabenheit über allen Dualismus* (Munich, 1878), pp. 19-21; *Aristoteles und Professor Zeller in Berlin* (Munich, 1880), pp. 42-58; and by Eugen Rolfes in *Die Philosophie des Aristoteles: als Naturklärung und Weltanschauung* (Leipzig, 1923), pp. 372-373. For Rolfes on Aristotle, cf. *Die aristotelische Auffassung vom Verhältnisse Gottes zur Welt und zum Menschen* (Berlin, 1892). See also his controversy with A. Stöckl, in Stöckl's "Die Ideenlehre und Schöpfungstheorie bei Plato, Aristoteles und dem hl. Thomas," *Katholik* 64 (1884) 113-134, and "Die Ideenlehre und Schöpfungstheorie bei Aristoteles noch einmal," *Ibid.*, pp. 592-609; Rolfes, "Ein Beitrag zur Würdigung der Aristotelischen Gotteslehre," *Ibid.*, pp. 449-464. For other discussions, see Jacques Chevalier, "Aristote et s. Thomas d'Aquin, ou l'idée de création," *Les Lettres* 14 (1927) 427-447; Régis Jolivet, "Aristote et la notion de création," *Revue des sciences philosophiques et théologiques* 19 (1930) 5-50, 209-235 (reprinted in *Essai sur les rapports entre la pensée grecque et la pensée chrétienne* [Paris, 1931], pp. 1-84); Francis Xavier Meehan, *Efficient Causality in Aristotle and St. Thomas* (Washington, DC, 1940), pp. 52-57.

<sup>2</sup> Important recent proponents of Zeller's position that the prime mover is solely a final cause include Jean-Baptiste Gourinat, "Le premier moteur selon *Physique* VIII et *Métaphysique* Λ: physique et philosophie première," *Physique et métaphysique chez Aristote*, ed. M. Bonelli (Paris, 2012), pp. 175-206; and Alberto Ross, *Dios, eternidad y movimiento en Aristoteles* (Pamplona, 2007), with an excellent review of recent literature. Among important past proponents, see Clodius Piat, *Aristote* (Paris, 1903), pp. 107-123; Walter David Ross, in his review of F. Brentano's *Aristoteles' Lehre vom Ursprung des menschlichen Geistes*, in *Mind* 23 (1914) 289-291; *Id.*, *Aristotle's Metaphysics* (Oxford, 1924), vol. 1, pp. cxxxvi- cxxxvii; Jacques Chevalier, *La Notion du nécessaire chez Aristote et chez ses prédécesseurs, particulièrement chez Platon* (Paris, 1915), pp. 137-187; and, Augustin Mansion, "L'Action du Dieu moteur d'Aristote sur le monde," *Library of the 10th International Congress of Philosophy* (Amsterdam, 1949), vol. 1, pp. 1091-1093.

<sup>3</sup> For subsequent defenses of a kind of monotheism, see Walther Bröcker, *Aristoteles* (Frankfurt am Main, 1935), p. 224; M. Bousset, "Sur la théologie d'Aristote: Monothéisme ou polythéisme?" *Revue thomiste* 44 (1938) 798-805; Donald James Allan, *The Philosophy of Aristotle* (London, 1952), pp. 120-121; David Stewart, "Aristotle's Doctrine of the Unmoved Mover," *The Thomist* 37 (1973) 522-547; Michael Frede, "Monotheism and Pagan Philosophy in Later Antiquity," in *Pagan Monotheism in Late Antiquity*, ed. by Polymnia Athanassiadi and Michael Frede (Oxford: Clarendon, 1999), 41-67 at pp. 48-50, 55-57. For the opposed view, see especially Philip Merlan, "Aristotle's Unmoved Movers," *Traditio* 4 (1946) 1-30.

the almost universal acceptance it still wins today. Two tenets are everywhere acknowledged as typifying Aristotelian “theology”: that the first cause moves only as an end, and that there are many first incorporeal substances or prime movers.

Although Zeller’s answer has gained acceptance, there remain embarrassing passages in which Aristotle speaks as if there were only one prime mover, or as if the prime mover were an efficient cause.<sup>1</sup> Such inconsistencies have given rise, in this century, to a number of reinterpretations of Aristotle’s doctrine on the prime mover. These novel interpretations fall generally into two classes, into what I call “theories of coherence” and “theories of incoherence.” A theory of coherence proposes to resolve a contradiction in doctrine, whereas a theory of incoherence admits a doctrinal contradiction and proposes to account for it in some way. The most common theories of incoherence are the genetic theories for reinterpreting Aristotle, which all take their inspiration from the great German philologist, Werner Jaeger.<sup>2</sup> According to these, contradictions between treatises, or between passages within a given treatise, can be ascribed to a development in Aristotle’s views as his thought matured. Linger problems with the prime mover, then, were, until not long ago most typically resolved through some such theory of incoherence.<sup>3</sup> Accordingly, Aristotle’s apparent

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<sup>1</sup> In order to avoid confusion with the ‘moving cause’ which is an end, I use in Part 1 the conventional term ‘efficient cause’ for one of Aristotle’s four causes:  $\Theta\epsilon\nu \equiv \alpha\rho\chi\epsilon\tau\acute{\alpha}\varsigma\ \kappa\iota\nu\eta\sigma\epsilon\omega\varsigma$ ; *Aristotelis Metaphysica*, ed. W. Jaeger (Oxford, 1957) A.3 983a30;  $\Delta.2$  1013a29-32; *Aristotelis Physica*, ed. W. D. Ross (Oxford, 1950) 2.3 194a29-32.

<sup>2</sup> Werner Jaeger, *Aristoteles: Grundlegung einer Geschichte seiner Entwicklung* (Berlin, 1923). Jaeger does not himself address the contradiction between the first efficient mover of the *Physics* and the first final mover of the *Metaphysics*, focusing instead on the problem regarding the number of unmoved movers.

<sup>3</sup> For some theories of incoherence, see Marcel de Corte, “La Causalité du premier moteur dans la philosophie aristotélicienne,” *Revue d’histoire de la philosophie* 5 (1931) 105-146 (reprinted with revisions in Corte’s *Aristote et Plotin* [Paris, 1935], pp. 107-175); Hans von Arnim, *Die Entstehung der Gotteslehre des Aristoteles* (Vienna, 1931); W. K. C. Guthrie, “The Development of Aristotle’s Theology,” *Classical Quarterly* 27 (1933) 162-171, and vol. 28 (1934) 90-98; Emilio Oggioni, *La ‘filosofia prima’ di Aristotele: Saggio di ricostruzione e di interpretazione* (Milan, 1939), pp. 332-333; Geneviève Rodis-Lewis, “Hypothèses sur l’évolution de la théologie d’Aristote,” in *La Philosophie et ses problèmes: Recueil d’études de doctrine et d’histoire offert à Monseigneur R. Jolivet* (Paris, 1960), pp. 45-68; H. J. Easterling, “The Unmoved Mover in Early Aristotle,” *Phronesis* 6 (1961) 252-265; J. M. Laso Gonzáles, “Dos concepciones del motor inmóvil incompatibles entre sí: El libro VIII de los *Physica* y el libro XII de los *Metaphysica* de Aristoteles,” *Revista de filosofía* 25 (1966) 379-414; Simon

references to a prime mover which is both unique and efficient are often ascribed to Aristotle's more platonic period. Whether such statements stem from his untainted youth or from his senility depends on the scholar, but what is agreed upon is that they are "unaristotelian."

Now, for all the merits of such theories of incoherence, unless they can appeal to extrinsic evidence, their conclusiveness depends wholly on their establishing that a contradiction exists in Aristotle's *corpus*. Thus, the very defense of a theory of incoherence requires that all theories of coherence be shown to fail. In other words, sound methodology demands, I argue, that every theory of coherence be exhausted before resorting to a theory of incoherence.

## **1.2 The Problem of the Coherence of the *Physics* and *Metaphysics* on the Causality of the Prime Mover**

For the reasons mentioned, I do not find present coherence theories adequate (although I regard the return to efficient causal interpretations to be promising sign). Before turning to these inadequacies, it is necessary to have clearly in mind the apparent inconsistencies in Aristotle which have prompted the proliferation of theories.<sup>1</sup> The problem, in a nutshell, is that Aristotle's two main discussions of the prime mover appear to contradict each other, namely, that of *Physics* 7 and 8 and that of *Metaphysics* Λ. There is no doubt that *Metaphysics* Λ.7 presents the prime mover as a final cause. As a separate substance that is completely simple and in actuality, it stands outside the cosmos and moves it as something loved.<sup>2</sup> But there is also no doubt that the *Physics* arrives at a prime mover which moves through efficient causality.<sup>3</sup> The prime mover there is said to be "in the circumference" of the celestial sphere,<sup>4</sup> and acts through contact with it.<sup>5</sup> It apparently follows that the prime mover of one treatise, precisely as first and

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Decloux, *Temps, Dieu, liberté dans les commentaires aristotéliens de saint Thomas d'Aquin* (Brussels, 1967), pp. 99-106; Leo Elders, *Aristotle's Theology: A Commentary on Book Lambda of the Metaphysics* (Assen, 1972), pp. 13-14. For discussion of genetic theories, see Alberto Ross, *Dios, eternidad y movimiento en Aristóteles* pp. 192-99.

<sup>1</sup> Cf. esp. Corte, *Aristote et Plotin*, pp. 153-155, 170-172. For discussion, see Bernd Manuwald, *Studien zum Unbewegten Beweger in der Naturphilosophie des Aristoteles* (Mainz, 1989), pp. 9-19.

<sup>2</sup> *Metaph.* Λ.7 1072a25-b8.

<sup>3</sup> See the express words of *Phys.* 7.2 243a32-33, insisting that the movers in the series there are 'moving' rather than final causes.

<sup>4</sup> *Phys.* 8.10 267b7.

<sup>5</sup> Cf. *Phys.* 8.5 258a18-b5.

unmoved, can do without the prime mover of the other treatise. In fact, the two prime movers appear to be irreducibly opposed to each other. Furthermore, are not the two accounts of the prime mover themselves mutually exclusive? In the *Physics*, motion proceeds from the prime mover to the world, whereas in the *Metaphysics*, motion comes from the world and proceeds towards the end of its desire. On the *Physics*' account, the prime mover serves as the beginning of motion. It directly acts upon or pushes the heavenly spheres and thereby extends its moving causality to each of the elements in motion below it. On the *Metaphysics*' account, the prime mover seems to be only the end and object of desire toward which all things are moved. It itself directly begins no change and actually does nothing. Instead, it apparently presupposes a self-moving heaven which begins motion by contemplating and loving the end—assuming that “desire” is not a metaphor for the non-cognizant natural motion of the outermost sphere. This fact explains why the prime mover of the *Metaphysics*, which Aristotle identifies as “god” in Book Λ.7 alone, need not know the world. A prime mover that is an efficient cause would presumably know the effect which it brings about, whereas a mere final cause need not know, but instead is *known by*, what strives for it. In fact, the *Metaphysics* argues that god cannot know things less than god but must be merely a self-thinking thought. Thus, the unmoved efficient cause which is absolutely first in the *Physics* is either irrelevant or is a distant second and even a moved mover in the eyes of Aristotle's *Metaphysics*.

### 1.3 The Available Coherence Theories

Aristotle's own text, then, appears to call for a theory of incoherence. At the same time, theories of coherence of seemingly every sort have been developed to resolve the apparent contradictions. These theories are reducible to three main types, to what I call “theories of dual identity, reduction, or subordination.” According to each of the first two, unlike a theory of subordination, the prime mover in the *Physics* is the same as that in the *Metaphysics*. For a “theory of dual identity,” the same prime mover possesses two forms of causality, both efficient and final, but only one form is established in each treatise.<sup>1</sup> To many, such a theory today has seemed

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<sup>1</sup> Such theories often solve the problem, in effect, by rejecting it as a false dilemma. See, for example, Vincent E. Smith, “The Prime Mover: Physical and Metaphysical Considerations,” *Proceedings of the American Catholic Philosophical Association* 28 (1954) 78-94, at pp. 84-88; Benedict M. Ashley, *Aristotle's Sluggish Earth: The Problematics of the De Caelo* (River Forest, Ill., 1958), p. 46 n. 17; Michael J. Buckley, *Motion and Motion's God* (Princeton, 1971), pp. 7, 84-85.

archaic, but it has recently been vigorously defended by those who take Aristotle's prime mover to be the immediate efficient mover of the heavenly spheres,<sup>1</sup> perhaps even identical to a celestial soul.<sup>2</sup> For a "theory of reduction," however, the prime mover possesses only one form of causality, so that the causality established in one treatise is reduced to, transformed into or is reinterpreted exclusively in light of the causality of the other.<sup>3</sup> Theories of reduction come in several varieties. According to recent views, the prime mover is in reality nothing but an efficient cause,<sup>4</sup> or nothing but a formal cause.<sup>5</sup> The most common view, of course, is that the prime mover turns out to be nothing but a final cause. On the standard version, the

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<sup>1</sup> David Bradshaw, *Aristotle East and West: Metaphysics and the Division of Christendom* (Cambridge, 2004), pp. 39-43, for whom, if there is an ensouled outermost sphere or stars, these souls have nothing to do with the causality of motion (44 n. 32). For previous defenses of first efficient causality, see Jacques Maritain, "Controverses aristotéliennes," in *La Philosophie bergsonienne: Études critiques*, 3rd ed. (Paris, 1948), pp. 340-361; Jolivet, *Essai sur les rapports entre la pensée grecque et la pensée chrétienne*, pp. 34-38; Meehan, *Efficient Causality in Aristotle and St. Thomas*, pp. 85-97; Paul Siwek, "Comment le Premier Moteur meut l'univers," *Divinitas* 11 (1967) 388-392; Venant Cauchy, "La Causalité divine chez Aristote," in *Mélanges à la mémoire de Charles De Koninck* (Quebec, 1968), pp. 103-114; Carlo Giacon, *La causalità del motore immobile* (Padua, 1969), pp. 87-97; Michael J. Buckley, *Motion and Motion's God* (Princeton, 1971), pp. 7, 84-85.

<sup>2</sup> Sarah Broadie, "Que fait le premier moteur d'Aristote? (Sur la théologie du livre Lambda de la 'Métaphysique')", *Revue Philosophique de la France et de l'Étranger* 183 (1993) 375-411, at pp. 409-11; Aryeh Kosman, "Aristotle's Prime Mover," in *Self-Motion: From Aristotle to Newton*, eds. M. L. Gill and J. Lennox (Princeton, 1994), pp. 135-153. A "theory of dual identity," as Kosman indicates (144), must hold that the efficient and final causality are (only) conceptually distinct; cf. Broadie, *Ibid.* pp. 397-98.

<sup>3</sup> Sometimes the idea of a transformation in causality between the two works is made more or less explicit, as in the well-known and influential discussion of W. D. Ross, *Aristotle's Physics* (Oxford, 1936), pp. 99-100, and in *Id.*, *Aristotle*, 6th ed., J. Ackrill (ed.) (London, 1995), pp. 96, 101-102, and 187; in the latter Ross gives the well-known formula: for Aristotle, "God is the efficient cause by being the final cause, but in no other way."

<sup>4</sup> Berti's first revised view, inspired by Broadie, is followed thus far by Bradshaw: the prime mover is a transcendent efficient cause, which is a final cause only of itself, not of the heavens (whose motion ensoulment cannot explain; 62); Berti, "Da chi è amato il Motore immobile?" pp. 76-79. Subsequently, Berti follows Annick Stevens, "La causalité de l'intellect dans la *Métaphysique* et le traité *De l'Âme*," in *La causalité chez Aristote*, eds. L. Couloubaritsis and S. Delcomminette (Paris, 2011), pp. 125-138, in denying that the prime mover is a final cause at all; Enrico Berti, "Ancora sulla causalità del motore immobile," *Méthexis* 20 (2007) 7-28. See the criticism of Berti by Jean-Baptiste Gourinat, "L'intellect divin d'Aristote est-il cause efficiente?" *Bolletino filosofico, Università della Calabria* 20 (2004) 54-81.

<sup>5</sup> Stevens, "La causalité de l'intellect dans la *Métaphysique*."



*Physics*' prime mover is reinterpreted in light of the *Metaphysics*' to be a transcendent final cause only.<sup>1</sup> On another version, the *Metaphysics*' prime mover is reinterpreted in light of the *Physics*' discussion to be an immanent soul of the first sphere which moves as final cause alone.<sup>2</sup> By contrast, a "theory of subordination" distinguishes the prime mover proved in the

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<sup>1</sup> See Gourinat, "Le premier moteur selon *Physique* VIII et *Métaphysique* Λ," pp. 203-204. See also Felix Ravaisson, *Essai sur la métaphysique d'Aristote* (Paris, 1837), vol. 1, pp. 568-577; Konrad Elser, *Die Lehre des Aristoteles über das Wirken Gottes* (Münster, 1893), pp. 92-96; Jolivet, *Essai sur les rapports entre la pensée grecque et la pensée chrétienne*, pp. ix, 22-23, 35-36; Gerard Verbeke, "La Physique d'Aristote est-elle une ontologie?" *Pensamiento* 35 (1979) 171-194, at 183-187; Helen (Schutzberger) Lang, "Aristotle and the Supreme Mover of the *Physics*," Ph.D. diss. (Toronto, 1977), p. 142, and *Id.* "Aristotle's First Movers and the Relation of Physics to Theology," *The New Scholasticism* 52 (1988) 500-517; William Lane Craig, *The Cosmological Argument from Plato to Leibniz* (London, 1980), p. 35; Joan Franks, "The Relation of the Sublunary Substances to God in Aristotle," *Proceedings of the American Catholic Philosophical Association* 66 (1992) 175-180, at p. 178. W. D. Ross, in agreeing with Elser, is critical of Zeller's position that the prime movers are final causes immediately moving inanimate, corporeal heavens (Ross, *Aristotle's Metaphysics*, pp. cxxxvi-cxxxvii). An interpretation of Aristotle agreeing with Zeller's has been maintained by Pierre Duhem in *Le Système du monde: Histoire de doctrines cosmologiques de Platon à Copernic* (Paris, 1913-1956), vol. 1, p. 175; for Duhem, the view that the heavens have souls in addition to separate final causes stems not from Aristotle but from Pseudo-Alexander and the Arab neoplatonists (*Ibid.*, vol. 5, p. 441). Cf. also Paul Siwek, "Comment le Premier Moteur meut l'univers," *Divinitas* 11 (1967) 388-392, at pp. 391-392; Friedrich Solmsen, *Aristotle's System of the Physical World: A Comparison with his Predecessors* (Ithaca, 1960), pp. 230-234; Augustin Mansion, "Le Dieu d'Aristote et le Dieu des Chrétiens," in *La Philosophie et ses problèmes: Recueil d'études de doctrine et d'histoire offert à Monseigneur R. Jolivet* (Paris: 1960) 22-44, at p. 43; Franks, "The Relation of the Sublunary Substances to God in Aristotle," p. 178. The position held by Solmsen and by G. A. Seeck, in "'Nachträge im achten Buch der 'Physik' des Aristoteles," *Abhandlungen der Geistes- und Sozialwissenschaftlichen Klasse* (Darmstadt, 1965), p. 151, that *Physics* 8 rejects altogether the hypothesis of a self-mover, has been aptly criticized by David Furley, in "Self-Movers," in *Essays on Aristotle's Ethics*, ed. A. Rorty (Berkeley, 1980), pp. 55-67, at pp. 57-59 (reprinted from *Aristotle on Mind and the Senses*, ed. G. E. R. Lloyd and G. E. L. Owen [Cambridge, 1978], pp. 165-179).

<sup>2</sup> René Mugnier, *La Théorie du premier moteur et l'évolution de la pensée aristotélicienne* (Paris, 1930). For him efficiency is ascribed to this soul in a metaphorical sense (p. 111) and to move as a final cause alone is proper to souls (115-118). In *ibid.* pp. 56-59, Mugnier dissents from the "immanentist" theory of Charles Werner, in *Aristote et l'idéalisme platonicien* (Paris, 1910), according to which Aristotle's prime mover is a soul of the entire world and not merely of a celestial sphere.

*Physics* from that proved in the *Metaphysics*, and it regards the former as ordered to and moved by the latter. On this theory, the *Physics*' prime mover is an immanent soul of the heavens, which is in turn moved by the transcendent final cause of the *Metaphysics*.<sup>1</sup>

The least satisfying of these theories, to my mind, is the reduction theory, ironically the most common theory of coherence. It succeeds only by disregarding the clear meaning of Aristotle's text: that the *Physics* affirms an efficient prime mover (or, as recently in Berti, that *Metaphysics* Λ.7 affirms a first final cause) and, indeed, that *Physics* 7-8 only first arrives at such a being through efficient causality. Nevertheless, the other theories raise difficulties of their own. The "dual identity" theory also appears to disregard the clear meaning of *Metaphysics* Λ.7 where the prime mover is only affirmed to be a prime mover as a final cause. Also, why is it necessary that such a mover also *move* as final cause what it already moves as efficient, especially if this is a non-cognizant celestial sphere? Although the subordination theory appears more promising than these, it raises similar difficulties. It disregards the fact that there is no mention of celestial souls in the *Physics*. And, in any case, would they not be accidentally moved along with their bodies, a property expressly denied of the *Physics*' prime mover? Finally, no argument in the *Metaphysics* infers from a celestial soul to a prior final cause. This failure, then, of even the most promising theory of coherence appears to confirm that Aristotle's prime mover is intelligible only through some theory of incoherence.

## **2. A Two-Stage Subordination Theory of Coherence in "Clever Aristotle" and His Commentators**

In what follows, I identify the textual grounds in Aristotle for an alternative coherence theory, using also texts of the greatest commentators. In general, I propose that there are two prior efficient causes to account for the rotation of each celestial sphere, as was held by Alexander and Averroes: a celestial soul and a prior separate intellect. How is that possible? The paper

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<sup>1</sup> Jean Paulus, "La Théorie du premier moteur chez Aristote," *Revue de philosophie* 33 (1933) 259-294, 394-424; Joseph Owens, *The Doctrine of Being in the Aristotelian Metaphysics*, 3rd ed. (Toronto, 1978), pp. 438-439 n. 10; "The Conclusion of the *Prima Via*," in *St. Thomas Aquinas on the Existence of God: Collected Papers of Joseph Owens, C.Ss.R.*, ed. John R. Catan (Albany, 1980), pp. 142-168, at pp. 145-153 (reprinted from *The Modern Schoolman* 30 [1952-1953] 33-53, 109-121, 203-215); "Aquinas and the Proof from the 'Physics'," *Mediaeval Studies* 28 (1966) 122-127; Fernand Van Steenberghen, *Le Problème de l'existence de Dieu dans les écrits de s. Thomas d'Aquin* (Louvain-la-Neuve, 1980), pp. 251-252, 261, 313.



operates under the assumption that the *corpus Aristotelicum* is, in the main, written by an author who could resolve most of the apparent problems left in the text without dismissing any passages as we have them (or many: some are undoubtedly “early”). I call him “clever Aristotle,” adopting a familiar trope.<sup>1</sup> In other words, “clever Aristotle” offers grounds for a theory of coherence (and, if called upon, could fill in any inevitable gaps). In what follows, “clever Aristotle” is a heuristic device for the author whose thought is reached by what is often called a “charitable reading” of the text. We know of Aristotle that he is an historical figure, not of “clever Aristotle.” Yet, the classical commentators, with rare exceptions, identified the two, and therefore they are of particular interest in the investigation of coherence theories. As I argue in stages in what follows, the textual evidence points to the fact that (section 2.1) the prime mover proved by *Physics* 8.6, the first stage of the “Prime Mover Argument” of “clever Aristotle,” is a celestial soul that efficiently moves the heavenly body on the model of any other soul’s causality. The acceptance of celestial souls is easy to establish for the greatest commentators on “clever Aristotle,” Alexander and Averroes, together with their view that the celestial soul is not even accidentally moved with its body, as according to *Physics* 8.6. In sections 2.2 and 2.4, I give evidence that for Alexander and Averroes, the absolutely first prime mover, a separate intellect or Intelligence, is also an efficient cause. If so, there must be a second stage in the argument where “clever Aristotle” arrives at an efficient cause beyond a celestial soul. There are three, not mutually exclusive possibilities. In section 2.3, I propose that we have missed these possibilities because we have had too narrow a view of what an efficient cause is, for Aristotle. What emerges is an alternative coherence theory, and, in particular, a “subordination theory” in a specific sense. I suggest that “clever Aristotle” offers a “subordination of arguments,” such that, whether in *Physics* 8.10 (with Averroes and John of Jandun) or in *Metaphysics* Λ.6, or in both, a “second ontological stage” in the “Prime Mover Argument” affirms a separate intellect prior to the celestial soul proved by *Physics* 8.6. Thus, the discussions of *Physics* 7-8 and *Metaphysics* Λ, as well as the prime mover’s causalities each discussion defends, can be harmonized. The highest mover, for “clever Aristotle,” is both an efficient and a final cause, as for “dual identity theory,” when “efficient cause” is understood in the unaccustomed sense of the art in the mind of the artist. Aristotle’s prime mover moves “efficiently” as the art in the intellect of the cosmic artist, the

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<sup>1</sup> See David Charles, “Some Comments on Prof. Enrico Berti’s Paper ‘Being and Essence in Contemporary Interpretations of Aristotle’,” in *Individuals, Essence and Identity: Themes of Analytic Metaphysics*, eds A. Bottani, M. Carrara, and P. Giaretta (Dordrecht: Springer, 2011), pp. 109-126.

celestial soul. Thus, as for “subordination theory,” there is a subordination of the so-called “prime mover” of *Physics* 8.6, the celestial soul, to the prior prime mover of *Metaphysics* Λ.6, and perhaps *Physics* 8.10.

## 2.1 Aristotle’s Arrival at a Celestial Soul as Prime Mover by *Physics* 8.6 and Alexander’s Celestial Soul

What is the major reason for our scholarly disagreements over the prime mover? We often do not take seriously enough that the foundations for the prime mover are in the *Physics* of “clever Aristotle,” not in the *Metaphysics*.<sup>1</sup> We like to jump to the end of the story, found in five chapters of Aristotle’s culminating “science.” But *Metaphysics* Lambda itself summarizes reasoning found only in *Physics* 8, and Lambda’s conclusions fall apart without such reasoning. *Physics* seeks the explanation of change, establishing that everything in motion is moved by something distinct from itself as moved. This “Mover Causality Principle” sets up an infinite regress argument in both Books 7 and 8. Observe, first, Aristotle’s examples as he establishes the “Mover Causality Principle” and sets up the regress in *Physics* 8.4-6: a person causing motion with a stick, the wind dislodging a stone, one thing heating or carrying another, a teacher teaching, a doctor healing, the soul moving the body, a self-moving animal. None of these can be reduced to an exclusively final cause. In *Physics* 7.2, Aristotle even contrasts a “first mover” as efficient vs. as final cause in order to exclude consideration of the first final cause. For, his argument there fails if the regress envisions merely a first final cause. Where is the argument that a first final cause must be other than what it effects, or that the first thing moved, the heavens, cannot be moved for its own sake? Hence, Aristotle writes:

<p><b>T1</b> The prime mover, not as “that on account of which,” but [as] “whence is the beginning of motion,” is together with that which is moved.</p>	<p>Τὸ δὲ πρῶτον κινεῖν, μὴ ὡς τὸ οὗ ἔνεκεν, ἀλλ’ ὅθεν ἡ ἀρχὴ τῆς κινήσεως, ἅμα τῷ κινουμένῳ ἐστί. Aristotle, <i>Physica</i> 7.2 243a3-5 (ed. Ross 1950).</p>
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<sup>1</sup> On this point the outstanding scholarship of a Sarah Broadie, a Richard Sorabji, a Jean Paulus or a W. D. Ross concurs with the classical commentators; see Sarah (Waterlow) Broadie, *Nature, Change, and Agency in Aristotle’s Physics: A Philosophical Study* (Chicago: University of Chicago, 1982); Richard Sorabji, *Matter, Space and Motion: Theories in Antiquity and Their Sequel* (Ithaca: Cornell University, 1988); *The Philosophy of the Commentators, 200-600 AD: A Sourcebook*, vol. 2: Physics, ed. Richard Sorabji (London: Duckworth, 2004); Jean Paulus, “La Théorie du premier moteur chez Aristote;” and W. D. Ross, *Aristotle’s Physics*.

Notice that we can generalize this point: every motion requires a prior efficient cause, so that if the motion of the heavens has a cause that is exclusively final, as many interpreters hold in the wake of Zeller, then the heavens violate the “Mover Causality Principle.” Only “careless Aristotle” destroys his own “Prime Mover Argument,” not “clever Aristotle.”

Accordingly, *On Generation and Destruction* describes the *Physics*’ treatment as regarding the efficient cause, while reserving for *Metaphysics* the final determination regarding this efficient cause:

<p><b>T2</b> One cause is “whence is the beginning of motion,” another is “the matter”. . . About the former, we said previously in the treatises on motion that, on the one hand, there is what is immobile for all time, on the other, what is always moved. And, concerning the first of these [two], it is the task of a prior philosophy to make a determination.</p>	<p>Οὔσης δ’ αἰτίας μιᾶς μὲν ὅθεν τὴν ἀρχὴν εἶναι φαμεν τῆς κινήσεως, μιᾶς δὲ τῆς ὕλης, τὴν τοιαύτην αἰτίαν λεκτέον. Περὶ μὲν γὰρ ἐκείνης εἴρηται πρότερον ἐν τοῖς περὶ κινήσεως λόγοις, ὅτι ἐστὶ τὸ μὲν ἀκίνητον τὸν ἅπαντα χρόνον, τὸ δὲ κινούμενον ἀεί. Τούτων περὶ μὲν τῆς ἐτέρας ἀρχῆς προτέρας διελεῖν ἐστὶ φιλοσοφίας ἔργον· Aristotle, <i>De generatione et corruptione</i> 1.3 318a1-5 (ed. Rashed).</p>
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The fact that Aristotle’s *Physics* 8 contains evidence for celestial ensoulment is frequently denied in the scholarly literature. Berti and Bradshaw, for example, as we have seen, either deny celestial ensoulment (except as a heuristic device) or accept the ensoulment of outermost sphere and/or the stars in a way that plays no role in causing motion: the immediate efficient mover of the heavens is the prime mover of Lambda 6 and 7.<sup>1</sup> They believe that *De caelo* 2.2 is not the work of “clever Aristotle.” We might remind ourselves of that text, indicated in bold:

<p><b>T3</b> Since we have previously determined that in things having the principle of motion [within them], such powers [as the right and left] are present in them, and [since] <b>the heaven is ensouled and has the principle of motion [within it]</b>, it is clear that it also has “up,” “down,” “right,” and “left.”</p>	<p>Ἡμῖν δ’ ἐπεὶ διώρισται πρότερον ὅτι ἐν τοῖς ἔχουσιν ἀρχὴν κινήσεως αἰ τοιαῦται δυνάμεις ἐνυπάρχουσιν, <b>ὁ δ’ οὐρανὸς ἔμψυχος καὶ ἔχει κινήσεως ἀρχήν</b>, δῆλον ὅτι ἔχει καὶ τὸ ἄνω καὶ τὸ κάτω καὶ τὸ δεξιὸν καὶ τὸ ἀριστερόν; Aristotle, <i>De caelo</i> 2.2 285a27-31 (ed. Moraux).</p>
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<sup>1</sup> See, in addition to two notes above citing Bradshaw and Berti (revised view), Enrico Berti, “La causalità del Motore immobile secondo Aristotele,” *Gregorianum* 83 (2002) 637-654 at pp. 646-47 and 652.

Jean Paulus' paper from 1933 still offers the best account of how the *Physics*' reasoning works. Aristotle, according to Paulus, presupposes throughout *Physics* 8 that the heavens are ensouled, and that the highest moved mover is a self-mover.<sup>1</sup> We can see this especially in Text 4, where Aristotle's conclusion is cleverly expressed in a disjunction:

<p><b>T4</b> . . . so that according to this argument, <u>either immediately</u> that which is moved is moved by <u>what moves itself</u>, <u>or at some time we arrive at such</u>.</p>	<p>. . . ὥστε καὶ κατὰ τοῦτον τὸν λόγον ἤτοι εὐθὺς τὸ κινούμενον ὑπὸ τοῦ αὐτοῦ κινούντος κινεῖται, ἢ ἔρχεται ποτε εἰς τὸ τοιοῦτον; Aristotle, <i>Physica</i> 8.5 256b1-3 (ed. Ross).</p>
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I add, however, that Aristotle even gives an argument for the existence of a first self-mover in *Physics* 8.5, an argument which is accepted even by Aquinas,<sup>2</sup> and Averroes devises a second argument, which is followed by Albert the Great.<sup>3</sup> However, Aristotle himself usually expresses his conclusion conditionally, with the result that his "cleverness" can be overlooked. In Texts 5 and 6, I list two instances of this conditional conclusion (putting in bold-face the conditional).

<p><b>T5</b> ... [<u><i>If</i></u> . . . the first mover is moved, and [<u><i>if it is moved but</i></u>] not by another, it is necessary that it be moved by itself.</p>	<p>. . . εἰ οὖν ἅπαν μὲν τὸ κινούμενον ὑπὸ τινος κινεῖται, τὸ δὲ πρῶτον κινεῶν κινεῖται μὲν, οὐχ ὑπ' ἄλλου δέ, ἀνάγκη αὐτὸ <b>ὑφ' αὐτοῦ κινεῖσθαι</b>; Aristotle, <i>Physica</i> 8.5 256a20-22 (ed. Ross).</p>
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<sup>1</sup> See Paulus, "La Théorie du premier moteur chez Aristote," 267-277, 293 and 421. But why would an immanent mover not be accidentally self-moved? See the discussion of Joseph Owens, "The Reality of the Aristotelian Separate Movers," *Review of Metaphysics* 3 (1949-50) 319-337.

<sup>2</sup> See Twetten, "Clearing a 'Way' for Aquinas: How the Proof from Motion Concludes to God," *Proceedings of the American Catholic Philosophical Association* 70 (1996) 259-78 at p. 262 at n. 38.

<sup>3</sup> See Twetten, "Averroes on the Prime Mover Proved in the *Physics*," *Viator: Medieval and Renaissance Studies* 26 (1995) 107-134 at 116-17; *Id.* "Albert the Great on Whether Natural Philosophy Proves God's Existence," *Archives d'histoire doctrinale et littéraire du moyen âge* 64 (1997) 7-58, at pp. 16-18.

<p><b>T6</b> <i>If</i> this [first mover] is moved, and [<i>if</i>] there is not another moving it, it is necessary that it <i>move itself</i>.</p>	<p>εἰ οὖν κινεῖται μὲν τοῦτο, μὴ ἄλλο δὲ τὸ κινεῖν αὐτό, ἀνάγκη <b>αὐτὸ αὐτὸ κινεῖν</b>; Aristotle, <i>Physica</i> 8.5 256a33-b1 (ed. Ross).</p>
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Text 7, in fact, shows that *Physics* 8.5 concludes both to a first self-mover and to a first unmoved mover:

<p><b>T7</b> After having established that everything moved is moved by something [else], and that this [mover] is either unmoved or moved – and always moved either by itself or by another, we have arrived at the affirmation that <b>among things moved</b>, the principle of the things moved is, on the one hand, <b>what moves itself</b>; /259b/ on the other hand, among all things, [the principle is what is] unmoved.</p>	<p>. . . προϊόντες δ' ἐπὶ τοῦτο καὶ θέντες ἅπαν τὸ κινούμενον ὑπὸ τινος κινεῖσθαι, καὶ τοῦτ' εἶναι ἢ ἀκίνητον ἢ κινούμενον, καὶ κινούμενον ἢ ὑφ' αὐτοῦ ἢ ὑπ' ἄλλου ἀεὶ, προήλθομεν ἐπὶ τὸ λαβεῖν ὅτι τῶν κινουμένων ἐστὶν ἀρχὴ κινουμένων μὲν ὃ αὐτὸ ἑαυτὸ /259b/ κινεῖ, πάντων δὲ τὸ ἀκίνητον; Aristotle, <i>Physica</i> 8.5 259a30-b2 (ed. Ross).</p>
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But how is this dual conclusion possible? The commentators have no problem here: clever Aristotle believes the heavens are self-moved (and therefore animated; although *Physics* 8 always presents its conclusions very abstractly, never mentioning a celestial soul, and very rarely the heavens, one should not conclude that the ensouled heavens are not envisioned by Aristotle in *Physics* 8). But the prime mover within the first self-mover is itself unmoved. That is very clever.

As experts like Sorabji steeped in Aristotle's *Physics*, know, the key text is the denial that the unmoved mover that belongs to the self-moving whole is even moved by itself per accidens, in the way that a terrestrial soul would be moved as carried by its body. Now, that text creates a difficulty: how can there be a celestial soul that is not per accidens moved and carried along with its body? The answer involves a paper in its own right, but I will summarize. Averroes gives a strong answer: the celestial soul is not hylomorphic but is, in fact, Platonic: a sailor in a ship, which is therefore not

carried along by the motion of its body.<sup>1</sup> Perhaps his answer is inspired by words of Alexander's *On the Principles of the Universe* (extant now only in Syriac and Arabic):<sup>2</sup>

**T8** [T]he souls of the divine bodies are not specifically the same as any of the souls that exist in material things... [They] do not share in any of the less perfect faculties... [I]t is insofar as they perceive by their intellect that they desire the thing perceived...; Alexander, *De principiis* §9-13, pp. 48.3-50.11 (trans. Genequand).

And, Alexander later concludes:

**T9** "Therefore this soul is not the form of a body...;" *De principiis* §19-20, pp. 52.15-54.3 (trans. Genequand).

Alexander's own answer, reported by Simplicius, as to why celestial souls are not accidentally moved is simple, though problematic: the sphere rotates in the same place, so the celestial soul, although within the sphere, does not change its place as a whole.<sup>3</sup>

In sum, *Physics* 8 arrives at an unmoved mover that, on close analysis, is presumed and reasoned to be, for Aristotle, part of self-moving whole. *De motu animalium* 1 provides decisive external, retrospective evidence:<sup>4</sup>

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<sup>1</sup> See Twetten, "Averroes on the Prime Mover Proved in the *Physics*," pp. 118-23.

<sup>2</sup> Alexander of Aphrodisias, *On the Principles of the Universe* (*De principiis*), in Alexander of Aphrodisias, *On the Cosmos*, ed. and trans. Charles Genequand (Leiden: Brill, 2001) (I quote Genequand's translation throughout).

<sup>3</sup> Simplicius, *In Aristotelis Physicorum libros quattuor posteriores commentaria*, ed. H. Diels, *Commentaria in Aristotelem Graeca* 10 (Berlin, 1895) 8.6 (259b20-31), pp. 1260.17-35 and 1261.30-1262.12. See also Richard Sorabji, *Matter, Space and Motion*, pp. 194-96; *The Philosophy of the Commentators*, vol. 2: *Physics*, pp. 340-43. Philoponus, using Ptolemy, has an easy time explaining why immanent celestial souls, which rotate in the same place, are not moved per accidens by themselves, but only by another: some of their orbs are epicyclic sub-orbs, and so are carried around by the orbs whose dimensions encompass the earth; see *Ibid.* p. 343.

<sup>4</sup> For discussion, see Silvia Fazzo, "Le *De motu animalium* et la théorie du moteur immobile, in *Aristote et le mouvement des animaux: Dix études sur le De motu animalium*, eds A. Laks and M. Rashed (Villeneuve d'Ascq: Presses Universitaires du Septentrion, 2004), pp. 203-229.

<p><b>T10</b> When [we treated] everlasting motion (whether or not it exists, and if it exists, what it is), we previously determined that what moves itself is the principle of the other motions, on the one hand, whereas the principle of this, on the other, is unmoved; and that it is necessary that the first mover be unmoved.</p>	<p>ὅτι μὲν οὖν ἀρχὴ τῶν ἄλλων κινήσεων τὸ αὐτὸ ἑαυτὸ κινεῖν, τούτου δὲ τὸ ἀκίνητον, καὶ ὅτι τὸ πρῶτον κινεῖν ἀναγκαῖον ἀκίνητον εἶναι, διώριστα πρότερον, ὅτεπερ καὶ περὶ κινήσεως αἰδίου, πότερον ἔστιν ἢ οὐκ ἔστι, καὶ εἰ ἔστι, τίς ἔστιν; Aristotle, <i>De motu animalium</i> 1, 698a7-11 (ed. Nussbaum).</p>
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Notice that clever Aristotle agrees across two treatises to the twofold conclusion regarding the first self-mover in *Physics* 8.5. Furthermore, *De motu animalium* acknowledges the distinct, prior treatment of *Metaphysics* Lambda, and that it concerns *how* the prime mover moves (as if *Physics* has not yet determined *how*):

<p><b>T11</b> Now, on the one hand, whether the soul is moved or not, and, if it is moved, how it is moved, was previously discussed in our determinations on the soul. On the other hand, since (I) all lifeless things are moved by another, and (II) since <b>in the [treatises] on first philosophy, it has been previously determined in what way the first and everlastingly moved thing is moved, and how the first mover causes motion</b>, it remains to understand (III) how the soul moves the body, and what is the principle of the motion of an animal. For, leaving aside (II) the motion of the whole [universe], (III) ensouled things are causal of the motion of everything else, [namely,] as many things as are not (I) moved by each other because they hit against each other.</p>	<p>Περὶ μὲν οὖν ψυχῆς, εἴτε κινεῖται εἴτε μὴ, καὶ εἰ κινεῖται, πῶς κινεῖται, πρότερον εἴρηται ἐν τοῖς διωρισμένοις περὶ αὐτῆς. ἐπεὶ δὲ τὰ ἄψυχα πάντα κινεῖται ὑφ' ἐτέρου, περὶ δὲ τοῦ πρώτου κινουμένου καὶ ἀεὶ κινουμένου, τίνα τρόπον κινεῖται, καὶ πῶς κινεῖ τὸ πρῶτον κινεῖν, διώριστα πρότερον ἐν τοῖς περὶ τῆς πρώτης φιλοσοφίας, λοιπὸν ἔστι θεωρῆσαι πῶς ἡ ψυχὴ κινεῖ τὸ σῶμα, καὶ τίς ἀρχὴ τῆς τοῦ ζώου κινήσεως. τῶν γὰρ ἄλλων παρὰ τὴν τοῦ ὅλου κίνησιν τὰ ἔμψυχα αἰτία τῆς κινήσεως, ὅσα μὴ κινεῖται ὑπ' ἀλλήλων διὰ τὸ προσκόπτειν ἀλλήλοις. διὸ καὶ πέρας ἔχουσιν αὐτῶν πᾶσαι αἰ κινήσεις· <i>De motu animalium</i> 6, 700b4-1 (ed. Nussbaum).</p>
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But why, we might ask, have we not already explained, in effect, how the prime mover moves given that we have concluded to it as part of a self-moving whole, and therefore as a soul, in some sense, of the celestial body? Aristotle provides us much information in *De motu* itself and in *De anima* 3, etc., on how the soul causes motion. What more of an account does *Metaphysics* Lambda provide?

## 2.2 New Texts on Efficient Cause in Alexander

I would like to use some texts of Alexander recently unearthed to initiate an answer to this question. After all, he is acknowledged by all to be the greatest and most authentically Aristotelian of the commentators. There can be even less doubt than before that, for Alexander, a separate Intelligence is in some way an *efficient* cause of the celestial soul's intellect and desire. First, consider the fragment of Alexander's lost *Physics* commentary, quoted by Simplicius and by a Byzantine scholiast (I translate only the latter).<sup>1</sup> Alexander comments on the famous passage in *Physics* 8.10 on the *location* of the prime mover (found after Aristotle's argument there that it has infinite power):

<p><b>T12</b> [O]ne should understand the “in something” here [in the phrase “in the center or in the circumference”], not as “in a place,” but [also] not as [the “in”] of a form that is in [something]; for, [the prime mover] is shown to have <i>no parts</i>. For, in this way it would be a soul and actuality of the potency of the first body. Instead, [one should understand it] as [the “in”] of an <i>ousia</i> that is per se incorporeal, [which is] <i>in</i> [another] <i>ousia</i>, but not as [its] form. For, if the heaven is ensouled and is moved in accord with the soul in it—which [soul] is its form—in addition to being</p>	<p>οὐχ ὥς ἐν τόπῳ δεῖ νῦν τὸ ἐν τινι ἀκούειν (&lt;ἀ&gt;μερὲς γὰρ &lt;ἐ&gt;δείχθη), ἀλλ’ οὐδ’ ὥς &lt;εἰ&gt;δους ὄντος τοῦ ἐν ᾧ ἐστίν—οὕτως γὰρ ἂν ψυχὴ εἴη καὶ ἐντελέχεια τῆς δυνάμεως τοῦ πρώτου σώματος—, ἀλλ’ ὥς οὐσίας ἐν οὐσίᾳ ἀσωμάτου αὐτῆς καθ’ αὐτὴν ἀλλ’ οὐχ ὥς εἶδος. καὶ γὰρ εἰ ἔμψυχον ὁ οὐρανὸς καὶ κινεῖται κατὰ τὴν ἐν αὐτῷ ψυχὴν, ὃ εἶδός ἐστι αὐτοῦ, ἀλλὰ πρὸς γε τῷ κατὰ τὴν ἐν αὐτῷ ψυχὴν κινεῖσθαι <u>ἄλλου τινὸς δεῖται τοῦ τὴν ἀρχὴν αὐτῷ τῆς κινήσεως παρέχοντος</u>. ἐπὶ πάντων γὰρ τῶν ἐμψύχων ἔξωθέν τι ὄν αἴτιον αὐτοῖς καὶ ἀρχὴ γίνεται τῆς κατὰ τὴν ψυχὴν &lt;τοπ&gt;ικῆς</p>
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<sup>1</sup> The scholiast's quotations have recently been edited by Marwan Rashed, *Alexandre d'Aphrodise, Commentaire perdu à la Physique d'Aristote (livres IV-VIII): Les scholies Byzantines - édition, traduction et commentaire* (Berlin: De Gruyter, 2011).



<p>moved, as is the case, in accord with the soul in it, it needs <b>something other providing to it the principle of motion</b>. For, in the case of all ensouled things, there is some cause that is from outside [such things] (<i>exōthen</i>), which becomes the principle of the local motion in accord with [their] soul, if, as is the case, impulse (<i>hormē</i>) and desire (<i>epheis</i>) for something accomplish the locomotion of ensouled things.</p>	<p>κινήσεως, εἴ γε ὁρμὴ &lt;καὶ&gt; ἔφεσις τινος τὴν κατὰ τόπον κίνησιν τῶν ἐμψύχων ἀποτελεῖ; <i>Commentaire perdu à la Physique</i> 818 (267b6–7), p. 639.</p>
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Notice the phrase in bold that corresponds to “whence is the beginning of motion,” the terminology typically used by Aristotle to refer to “efficient” causality versus final causality (or “that on account of which”). The last fragment quoted by the Byzantine scholiast from the *Commentary on the Physics* by Alexander leaves no room for doubt that for him efficient causality is intended:

<p><b>T13</b> How is what is moved, moved by something that is from the outside (<i>exōthen</i>)? For, even in the case of self-movers, it has been shown that the same thing is the case. For, even in these, “what endows” (<i>to endosimon</i>) motion is from the outside. Wherefore, even the <i>aithēr</i>, although it is ensouled, needs also some efficient cause (<i>aition poietikon</i>) from the outside.</p>	<p>τὸ πρῶτον κινεῖν ἡρώτηται αὕτη ἢ δεῖξις τοῦτο· πῶς τὸ κινούμενον ὑπὸ τ&lt;ινος&gt; κινεῖται ἔξωθεν ὄντος; καὶ γὰρ καὶ ἐπὶ τῶν αὐτ&lt;οκ&gt;ινήτων οὕτως ἔχον ἐδ&lt;ε&gt;ίχ&lt;θη&gt;. καὶ γὰρ τούτοις τὸ ἐνδό&lt;σι&gt;μον τῆς κινήσεως ἔξωθεν· διὸ καὶ ὁ αἰθήρ, καίτοι ἔμψυχος ὢν, δεῖται καὶ ἔξωθέν τινος αἰτίου ποιητικοῦ; <i>Commentaire perdu à la Physique</i> 826 (8.10, 267b17-18), p. 644.</p>
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One cannot overlook, then, in Texts 12 and 13, that the celestial soul is related to its prior cause by way of efficient causality. It is difficult to maintain Berti’s position, that Alexander is the first one to articulate fully the traditional view that Aristotle’s prime mover is an exclusively final cause.<sup>1</sup> Still, what argument in *Physics* 8.10 allows someone like Alexander to think

<sup>1</sup> Berti, “La causalità del Motore immobile secondo Aristotele,” p. 637.

that it arrives at a cause beyond the celestial soul, even another *efficient* cause? I present one answer to this question below. But first let's examine another text in which Simplicius emphasizes, beyond any doubt, that Alexander's prime mover is an efficient cause. Simplicius writes:

<p><b>T14 Some think that Aristotle does not affirm an efficient cause (<i>poietikon aition</i>) of the universe (<i>to pan</i>), but only a final [cause], and they believe that this [conclusion] satisfies also Alexander. So, it seems to me necessary that they listen to what is said at this point by Alexander, the most authoritative of the interpreters of Aristotle, which goes as follows. The first form would be a cause also as efficient. For, he [Aristotle] says in the <i>Metaphysics</i>: this thing that is moved by it—namely, the fifth body—moves the rest, namely, what is in generation and destruction. Now, on the one hand, it is in this way an efficient cause. On the other hand, to the extent that all things attain their proper perfection by desire for this—as was also stated a little earlier—and to the extent that, as [Aristotle] himself says in the <i>Metaphysics</i>, it moves as what is loved, it would be a cause as end and as “that on account of which.” For, what is desired is such a thing. See how he [Alexander] has set forth clearly his [Aristotle's] thesis, including in what respect the intellect is an efficient cause and in what respect it is a final cause.</b></p>	<p>ἐπειδὴ δέ τινες οἴονται ποιητικὸν αἴτιον τοῦ παντός μὴ λέγειν τὸν Ἀριστοτέλην, ἀλλὰ μόνον τελικὸν καὶ τοῦτο καὶ τὸν Ἀλέξανδρον ἀρέσκειν νομίζουσιν, ἀναγκαῖον δοκεῖ μοι τῶν ἐνταῦθα λεγομένων ὑπὸ Ἀλεξάνδρου τοῦ γνησιωτάτου τῶν Ἀριστοτέλους ἐξηγητῶν ἀκούειν αὐτοὺς ἐχόντων οὕτως· “τὸ δὲ πρῶτον εἶδος καὶ ὡς ποιητικὸν ἂν εἴη αἴτιον. λέγει γὰρ ἐν τοῖς Μετὰ τὰ φυσικά, ὅτι τοῦτο τὸ κινούμενον ὑπ’ αὐτοῦ, τοῦτο δὲ ἐστὶ τὸ πέμπτον σῶμα, τὰ ἄλλα κινεῖ τὰ ἐν γενέσει καὶ φθορᾷ. οὕτως μὲν οὖν ποιητικόν. καθόσον δὲ πάντα τῇ τούτου ἐφέσει τῆς οἰκείας τελειότητος τυγχάνει, ὡς καὶ μικρῷ πρόσθεν εἴρηται, καὶ καθόσον, ὡς αὐτὸς εἴρηκε πάλιν ἐν τοῖς Μετὰ τὰ φυσικά, „κινεῖ δὲ ὡς ἐρώμενον,, εἴη ἂν ὡς τὸ τέλος καὶ τὸ οὐ χάριν αἴτιον. τοιοῦτον γὰρ τὸ ὀρεκτόν.” ἰδοὺ σαφῶς καὶ κατὰ τι μὲν ὡς ποιητικὸν κατὰ τι δὲ ὡς τελικὸν αἴτιον ὑπέθετο τὸν νοῦν, αὐτὸς παρέστησεν; Simplicius, <i>In Phys.</i> 1.9 (192a34-b1), p. 258.14-25.</p>
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One could read this text as saying that the first form is efficient cause only insofar as it is the ultimate source of sublunar generation and destruction; otherwise it is a mere final cause. Nevertheless, as is well

known, Alexander identifies the agent (*poietikon*) intellect in human intellection with the First Cause. Alexander writes in his treatise *On the Soul*:

<p><b>T15 [I]n all things, “that which is” (<i>to on</i>) properly and maximally with respect to something is causal of the being (<i>to einai</i>) also for others [so that they are] of such a kind.</b> For... that which is primarily and maximally good is causal also for other good things of their being (<i>to einai</i>) such. For, the other good things are judged in association with this [maximal good]. <b>Therefore, it is quite fitting that what is maximally and by its own nature intelligible should be causal of the intellection of other things; and the agent (<i>poietikon</i>) intellect would be such a being (<i>toiouton on</i>).</b> For, were there not something intelligible by nature, then none of the other things would have become intelligible, as was said before. For, in all things in which one is “something” properly, and another secondarily, [that which is] secondarily has being (<i>to einai</i>) from [that which is] primarily. Further, if the first cause, which is the cause and principle of being for all other [beings], is the intellect of such a kind, it would be an agent insofar as it is causal of being (<i>to einai</i>) for all things <i>intellected</i> [so that they are such]. The intellect of such a kind is separable, impassible, and unmixed with another... And, since it is</p>	<p>ἐν πᾶσιν γὰρ τὸ μάλιστα καὶ κυρίως τι ὄν καὶ τοῖς ἄλλοις αἴτιον τοῦ εἶναι /89/ τοιούτοις. τό τε γὰρ μάλιστα ὁρατόν, τοιοῦτον δὲ τὸ φῶς, καὶ τοῖς ἄλλοις τοῖς ὁρατοῖς αἴτιον τοῦ εἶναι ὁρατοῖς, ἀλλὰ καὶ τὸ μάλιστα καὶ πρώτως ἀγαθὸν καὶ τοῖς ἄλλοις ἀγαθοῖς αἴτιον τοῦ εἶναι τοιούτοις· τὰ γὰρ ἄλλα ἀγαθὰ τῇ πρὸς τοῦτο συντελείᾳ κρίνεται. καὶ τὸ μάλιστα δὴ καὶ τῇ αὐτοῦ φύσει νοητὸν εὐλόγως αἴτιον καὶ τῆς τῶν ἄλλων νοήσεως. τοιοῦτον δὲ ὄν εἴη ἂν ὁ ποιητικὸς νοῦς. εἰ γὰρ μὴ ἦν τι νοητὸν φύσει, οὐδ’ ἂν τῶν ἄλλων τι νοητὸν ἐγίνετο, ὥς προεῖρηται. ἐν γὰρ πᾶσιν ἐν οἷς τὸ μὲν κυρίως τί ἐστίν, τὸ δὲ δευτέρως, τὸ δευτέρως παρὰ τοῦ κυρίως τὸ εἶναι ἔχει. ἔτι, εἰ ὁ τοιοῦτος νοῦς τὸ πρῶτον αἴτιον, ὃ αἰτία καὶ ἀρχὴ τοῦ εἶναι πᾶσι τοῖς ἄλλοις, εἴη ἂν καὶ ταύτῃ ποιητικὸς, ἧ αὐτὸς αἴτιος τοῦ εἶναι πᾶσι τοῖς νοουμένοις. καὶ ἔστιν ὁ τοιοῦτος νοῦς χωριστός τε καὶ ἀπαθὴς καὶ ἀμιγῆς ἄλλῳ... ἀπαθὴς δὲ ὢν καὶ μὴ μεμιγμένος ὕλῃ τινὶ καὶ ἄφθαρτός ἐστιν, ἐνέργεια ὢν καὶ εἶδος χωρὶς δυνάμεώς τε καὶ ὕλης. τοιοῦτον δὲ ὄν δέδεικται ὑπ’ Ἀριστοτέλους τὸ πρῶτον αἴτιον, ὃ καὶ κυρίως ἐστὶ νοῦς. τὸ γὰρ ἄνυλον εἶδος ὁ κυρίως νοῦς. διὸ καὶ τιμιώτερος οὗτος ὁ νοῦς τοῦ ἐν ἡμῖν τε καὶ ὑλικοῦ, ὅτι ἐν πᾶσιν τὸ ποιοῦν τοῦ πάσχοντος τιμιώτερον καὶ τὸ χωρὶς ὕλης τοῦ σὺν ὕλῃ. τοιοῦτον δὲ ὄν δέδεικται ὑπ’ Ἀριστοτέλους τὸ πρῶτον αἴτιον, ὃ καὶ κυρίως ἐστὶ νοῦς;</p>
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impassible and unmixed with any matter, it is also immortal, being actuality and form separate from potency and matter. The first cause, which is also intellect properly speaking, has been shown to be such a being by Aristotle.	Alexander, <i>De l'âme</i> , ed. M. Bergeron & R. Dufour (Paris 2008), pp. 88.26-89.18.
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It is tempting to think that we find here the reason why the First Intellect efficiently moves the celestial soul: it produces intelligibles in the intellect of the celestial soul. This may be true for Alexander. However, it does not explain by what argument *Physics* 8.10 arrives at a prior first mover (assuming this can be Alexander's reading), or how *Metaphysics* Lambda, not *De anima* 3.5, explains *how* the prime mover causes motion. Furthermore, recent Alexander scholarship is inclined to read the "agent Intellect" in Alexander as an exclusively final cause of our intellection—precisely because the received view is that for Aristotle and Alexander, the prime mover is an exclusively final cause.<sup>1</sup>

### 2.3 Aristotle's Prime Mover Moves as the Art Rather Than as the Artist

Many of our scholarly difficulties in reading Aristotle's prime mover result, I argue, from an excessively narrow understanding of what it means to be an efficient cause. I would like to make this point by introducing new research on Aristotle's preferred term for the third of four causes: "whence is the source of motion" (ὅθεν ἡ ἀρχὴ τῆς κινήσεως). Aristotle uses this phrase over forty times, in various formulations, full and abbreviated, to refer to the third kind of causality.<sup>2</sup> Accordingly, we do best to refer to this cause, not as "efficient" vs. "final," but as "source" vs. "end cause": "that whence begins

<sup>1</sup> See, for example, Gweltaz Guyomarc'h, *L'unité de la métaphysique selon Alexandre d'Aphrodise* (Paris: Vrin, 2015), p. 295; cf. 286-291; and *Id.* "Alexandre d'Aphrodise et le Premier Moteur comme Principe," in *Les principes cosmologiques du platonisme: Origines, influences et systématisation*, eds Alexandra Michalewski and Marc-Antoine Gavray (Turnhout: Brepols, 2017), 143-165, at pp. 159-160 and 165; and Miira Tuominen, "Aristotle and Alexander of Aphrodisias on the Active Intellect," in *Mind and Modality: Studies in the History of Philosophy in Honour of Simo Knuuttila*, eds Vesa Hirvonen, Toivo Holopainen and Miira Tuominen (Leiden: Brill, 2006), pp. 55-70 at 67.

<sup>2</sup> I lay out the research in Twetten, "Aristotle Less Transformed: Averroes and the Prime Mover not as Artist but as Art," *Documenti e studi sulla tradizione filosofica medievale* (forthcoming).

motion” versus “that on account of which.” Should we review these many passages in Aristotle on “source causality,” what do encounter?

On the one hand, there are grounds for taking “efficiency” or *poiēsis* as the model for the third cause. Aristotle gives as examples of what he calls a “maker” (*to poioun*), “changer” (*to metablētikon*), “generator” (*to gennētikon*), or “mover” (*to kinēsan*, *to kinoun*) the following: the father and mother, the doctor, the builder, the carpenter, the teacher, as well as fire, a torch, the soul, the appetitive part of an animal, the nutritive soul, and the heart. On the other hand, one discovers the following important passage, in which Aristotle describes, not a maker, mover, or changer, but a prior “source cause” as chief or foremost:

<p><b>T16</b> One must seek out the cause that is topmost (<i>to aition</i> [. . .] <i>to akrotaton</i>). [. . .] A human, for example, builds a house [not as human but] because he or she [is] a builder; and a builder [builds] in accord with the building art (<i>oikodomikē</i>). Therefore, this is the prior cause, and so [it is] <i>in the case of all things</i> (<i>pantōn</i>).</p>	<p>δεῖ δ’ αἰεὶ τὸ αἷτιον ἐκάστου τὸ ἀκρότατον ζητεῖν, ὥσπερ καὶ ἐπὶ τῶν ἄλλων (οἷον ἄνθρωπος οἰκοδομεῖ ὅτι οἰκοδόμος, ὁ δ’ οἰκοδόμος κατὰ τὴν οἰκοδομικὴν· τοῦτο τοῖνυν πρότερον τὸ αἷτιον, καὶ οὕτως ἐπὶ πάντων). Aristotle, <i>Phys.</i> 2.3, 195b23-6 (ed. Ross).</p>
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It turns out that in many passages in which Aristotle speaks of a “source-cause” whence begins motion, a key example is art, whether the art of art of building or of statuary or medicine. Similarly, Aristotle speaks of an adviser (*bouleusas*) as a source cause, as are chance and luck, the “right” and “left” of animals, etc. Such examples clearly cannot be confused with agents, makers, or artisans, such as the term “efficient” cause normally suggests. Still, each of these examples makes sense as an origin of motion or change, as, literally, “whence motion begins.” As Aristotle indicates, such a “source cause” has a certain priority over the artisan, builder, or doctor: the “source cause” is the form in the artist’s mind, the house plan foreseen by the builder, the medical knowledge in the doctor, etc.

On this point I agree with the “received” view as explained by W. D. Ross, among others: Aristotle’s prime mover is the final cause of the souls that immediately rotate celestial spheres as efficient causes. The prime mover moves them as their end. But as Alexander maintains, Aristotle’s prime mover is not mere final cause. Alternative coherence theories can arise

once one sees that by rejecting the theories of Zeller and Ross, one need not accept an efficient causal theory in the traditional sense, such as one finds, however refreshingly, in Broadie, Berti and Bradshaw. As for “dual identity” theorists, the prime mover can be both a final as well as a source cause: it is whence celestial motion begins by being the art in the mind of the celestial soul. Although the prime mover is in itself a separate *ousia*, in its causal role it is conceptualized as the blueprint by the cosmic “generators,” who produce all generable and corruptible substances by moving the spheres.<sup>1</sup> We will thereby be able to read famous texts of Aristotle, such as the following passage from *De anima* 3.5, in a new way—that is, in the way of Alexander and Averroes:

<p><b>T17 But since as in all nature, there is (1) something that is matter for each kind (and this is what is potentially all those things), and (2) there is another thing that is the cause and agent (ποιητικόν) by making (τῷ ποιεῖν) all things, just as art stands in relation to the matter,</b> it is necessary that these differences obtain also in the soul. One is such an intellect by becoming all things, another by making all things, as a sort of disposition, like light. For, in a way light also makes colors that are in potency into colors in actuality. <b>And this intellect is separate, impassible and unmixed, being in essence (<i>ousia</i>) actuality.</b></p>	<p>Ἐπεὶ δ' ὥσπερ ἐν ἀπάσῃ τῇ φύσει ἐστὶ τι τὸ μὲν ὕλῃ ἐκάστῳ γένει (τοῦτο δὲ ὁ πάντα δυνάμει ἐκεῖνα), ἕτερον δὲ τὸ αἷτιον καὶ ποιητικόν, τῷ ποιεῖν πάντα, οἷον ἡ τέχνη πρὸς τὴν ὕλην πέπονθεν, ἀνάγκη καὶ ἐν τῇ ψυχῇ ὑπάρχειν ταύτας τὰς διαφοράς· καὶ ἔστιν ὁ μὲν τοιοῦτος νοῦς τῷ πάντα γίνεσθαι, ὁ δὲ τῷ πάντα ποιεῖν, ὡς ἕξις τις, οἷον τὸ φῶς· τρόπον γάρ τινα καὶ τὸ φῶς ποιεῖ τὰ δυνάμει ὄντα χρώματα ἐνεργείᾳ χρώματα. καὶ οὗτος ὁ νοῦς χωριστὸς καὶ ἀπαθὴς καὶ ἀμιγής, τῇ οὐσίᾳ ὄν ἐνέργεια· Aristotle, <i>De anima</i> 3.5 (ed. Ross).</p>
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It is especially important to observe that, whereas I have contrasted “efficient” and “making” cause, in our sense, with art and “source cause,” Aristotle calls art a *poietikon* or agent cause.<sup>2</sup> We will see such language again below in *Metaphysics* Lambda 6 [Text 21.1].

<sup>1</sup> *De generatione et corruptione* 2.10 336a18-19; cf. 336b6-9. *Physics* 8.4 256a1-2 applies almost the same term, τὸ γεννήσαν, to the per se mover of the heavy and light.

<sup>2</sup> For an emphasis on the productive character of Aristotle’s definition of art or craft, see Patricio Fernandez and Jorge Mittelman, “ἡ κίνησις τῆς τέχνης: Crafts and Souls as Principles of Change,” *Phronesis* 62 (2017) 136-169, at p. 148.

Of course, if it is impossible that Aristotle's prime mover is an efficient cause, then Alexander, if he is at all clever, must understand by "agent intellect" an exclusively final cause, as for much recent scholarship. What is surprising is that, contrary to the received view, a good case can be made for Averroes also as a proponent of the prime mover's efficient causality. Let's begin with a famous, but obscure text from Aristotle's *Metaphysics* Λ.4:

<p><b>T18</b> Since the mover is (1) in the case of natural things, [for example,] a human for humans, and (2) in the case of what comes from thought, the form or its contrary, there will be, in a way, three causes. But in [another] way, four. For, the medical [art] is in a way health, and the building [art] is the form of the house, and a human begets a human. Further, besides these there is the way that the first of all things moves all.</p>	<p>ἐπεὶ δὲ τὸ κινεῖν, ἐν μὲν τοῖς φυσικοῖς, ἀνθρώποις ἄνθρωπος, ἐν δὲ τοῖς ἀπὸ διανοίας τὸ εἶδος ἢ τὸ ἐναντίον, τρόπον τινὰ τρία αἴτια ἂν εἴη. ὥδι δὲ τέτταρα. ὑγίεια γάρ πως ἢ ἰατρική, καὶ οἰκίας εἶδος ἢ οἰκοδομική, καὶ ἄνθρωπος ἄνθρωπον γεννᾷ· ἔτι παρὰ ταῦτα ὡς τὸ πρῶτον πάντων κινεῖν πάντα. Aristotle, <i>Metaph.</i> Λ.4, 1070b30-35 (ed. Fazzo).<sup>1</sup></p>
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In commenting on Λ.10, Averroes picks up on Aristotle's reference here in *Metaphysics* Λ.4 to the way the First moves: not as the doctor, but as the doctor's art in the first practitioner's mind:

**T19** [Anaxagoras' teaching is] unlike our teaching that the prime mover moves in the way of perfection and completion. In the same way we find that medicine "moves" towards itself – since it moves towards health, and medicine is the *form* of health. **If health were not in a subject, as is the case with the prime mover, medicine would move in both ways together, I mean insofar as it is the agent and end of motion;** *Long Commentary on the Metaphysics* Λ 10, t.c. 55 (1075b8-11), p. 1724.3-8.<sup>2</sup>

The image of a separate form of health or medicine fits exactly with Averroes' famous image of the baths to explicate the prime mover's causality:

<sup>1</sup> Silvia Fazzo, *Il libro Lambda della Metafisica di Aristotele* (Naples: Bibliopolis, 2012).

<sup>2</sup> Averroes, *Tafsīr mā ba'd al-ṭabī'at* («Grand Commentaire» de la *Métaphysique*), *texte arabe inédit établi par Maurice Bouyges, s. j.*, 2<sup>nd</sup> ed., vol. 3 (Beirut: Imprimerie Catholique, 1973).



**T20** If the form of the baths, for example, were not in matter, it would be *motive* in the way of *an agent* and in the way of an end without there following any multiplicity at all. And so, one must realize that in the movers of the [ensouled] *heavenly bodies*, it [form] is motive *in both ways* without being multiplied. Insofar as these intelligibles are *form for them* [the heavenly bodies], they are motive *in the way of the agent*, and insofar as these are ends for them, they [the heavenly bodies] are moved by them with respect to [their] desire; *Long Commentary on the Metaphysics* Λ 7, t.c. 36, pp. 1594.14-1595.2.

So far, then, this investigation into the causality of art in an artist's mind has given us a broader range of possible coherence theories for "clever Aristotle" than we have otherwise had. Let's return to the question as to what reasoning Aristotle uses to arrive at the prime mover as art or form.

## 2.4 Rereading Lambda 6 with Averroes

*Metaphysics* Lambda 6 begins by recalling the conclusions of *Physics* 8 regarding the eternally moved heavens. As is well known, however, Lambda 6 sets the *Physics*' conclusions within a new framework: the language of *ousia* as well as of act and potency. Lambda 6 opens with three kinds of *ousiai*:

<p><b>T21</b> [a] Since there are three <i>ousiai</i> [that have been established], two natural and one immobile, it should be said concerning this [latter] that [b] it is necessary that there be some everlasting, immobile <i>ousia</i>. [c] For, <i>ousiai</i> [are] the first of beings, and if they are all destructible, all things are destructible. [d] But it is impossible for motion to come to be or to be destroyed, for it has been forever; nor [can] time [come to be or be destroyed] . . . Motion, therefore, is continuous in this way, just as is time. . . [e] But motion is not continuous except that which is in place, and of such, [only] circular [locomotion].</p>	<p>[a] Ἐπεὶ δ' ἦσαν τρεῖς οὐσίαι, δύο μὲν αἱ φυσικαὶ μία δ' ἡ ἀκίνητος, περὶ ταύτης λεκτέον ὅτι [b] ἀνάγκη εἶναι αἰδιόν τινα οὐσίαν ἀκίνητον. [c] αἱ γὰρ οὐσίαι πρῶται τῶν ὄντων, καὶ εἰ πᾶσαι φθαρταί, πάντα φθαρτά· [d] ἀλλ' ἀδύνατον κίνησιν ἢ γενέσθαι, ἢ φθαρῆναι, αἰεὶ γὰρ ἦν, οὐδὲ χρόνον. οὐ γὰρ οἶόν τε τὸ πρότερον καὶ ὕστερον εἶναι μὴ ὄντος χρόνου· [e] καὶ ἡ κίνησις ἄρα οὕτω συνεχῆς ὥσπερ καὶ ὁ χρόνος, ἡ γὰρ τὸ αὐτὸ ἢ κινήσεώς τι πάθος. Aristotle, <i>Metaphysica</i> Λ.6, 1071b3-10 (ed. Fazzo).</p>
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How, we may ask, is Aristotle's inference in [b] justified, namely, that it is necessary that there be some everlasting, *immobile ousia*? As we know from *Physics* 8.1, as long as the heavenly spheres are the indestructible *ousiai* in which motion exists, motion will not be destroyed. Why, then, do those spheres not suffice by themselves, without our affirming, in addition, an immobile *ousia*? The answer is the obvious: even though there is a new argument in Lambda 6 not found in the *Physics*, it presupposes the proof in *Physics* 7 and 8 that everything moved is moved by something other than itself as moved. Since everything in motion requires a moving cause distinct from it, so does the everlasting motion of the heavens. And so, it appears that Aristotle here identifies the first moving cause of the heavens proved in *Physics* with the everlasting, immaterial *ousia* now proved to be necessary. If what moves the heavens is not an everlasting substance, argues Aristotle, in effect, then nothing will be everlasting, including the motion of the heavens. Segment [f] later in the same passage makes explicit this identification of the first *ousia* and the mover of the heavens:

**T21.1 [f] But certainly, if it [the *ousia*] is motive or active (*kinētikōn ē poiētikon*) but is not at all enacting (*energoun*), there will be no motion. [g] For, it is possible for that which has potency not to act (*energein*). [h] Therefore, it is of no use if we affirm everlasting *ousiai*, as those [affirming] the Forms [do], unless there is therein some principle that is capable of causing change (*dunamenē . . . metaballein*). Then, not even this is sufficient, nor [would] be another substance besides the Forms. For, unless it actualize, there will not be motion. [j] Furthermore, not even if it actualizes, and its *ousia* is a potency [will this be sufficient]. For, there will not be everlasting motion. [k] For, it is possible that what is in potency not be. [m] Therefore, **there must be such a principle, whose *ousia* is actuality.** Furthermore, such *ousiai* are **without matter.** For, they must be everlasting if, as is the case, anything else is everlasting. Therefore, [they are] in actuality.**

[f] Ἀλλὰ μὴν εἰ ἔστι κινητικὸν ἢ ποιητικόν, μὴ ἐνεργοῦν δέ τι, οὐκ ἔσται κίνησις· [g] ἐνδέχεται γὰρ τὸ δύναμιν ἔχον μὴ ἐνεργεῖν. [h] οὐθὲν ἄρα ὄφελος οὐδ' εἰάν οὐσίας ποιήσωμεν αἰδίους, ὥσπερ οἱ τὰ εἶδη, εἰ μὴ τις δυναμένη ἐνέσται ἀρχὴ μεταβάλλειν. οὐ τοίνυν οὐδ' αὕτη ἰκανή, οὐδ' ἄλλη οὐσία παρὰ τὰ εἶδη· εἰ γὰρ μὴ ἐνεργήσῃ, οὐκ ἔσται κίνησις. [j] ἔτι οὐδ' εἰ ἐνεργήσῃ, ἢ δ' οὐσία αὐτῆς δύναμις· οὐ γὰρ ἔσται κίνησις αἰδιος· [k] ἐνδέχεται γὰρ τὸ δυνάμει ὄν μὴ εἶναι. [m] δεῖ ἄρα εἶναι ἀρχὴν τοιαύτην ἧς ἡ οὐσία ἐνέργεια. ἔτι τοίνυν ταύτας δεῖ τὰς οὐσίας εἶναι ἄνευ ὕλης· αἰδίους γὰρ δεῖ, εἴπερ γε καὶ ἄλλο τι αἰδιον. ἐνέργεια ἄρα; Aristotle, *Metaphysica* Λ.6, 1071b12-23 (ed. Fazzo).

As Berti has very aptly emphasized starting in 1997, Aristotle affirms efficient causality in Lambda 6: κινητικὸν ἢ ποιητικόν (segment [f]). What is Aristotle’s argument? If the efficient mover that is behind celestial motion is in potentiality and is not actually acting, then, again, there will be no everlasting motion. Aristotle goes on to draw the famous conclusion in segment [m] to a “substance that is actuality.” If there is any potency in the *ousia*, the argument apparently runs, it would eventually go unactualized in an everlasting world, and the heavens would then not be everlastingly moved.

Observe, then, that this efficient cause has the same attributes as that described at the end of Lambda 7:

<p><b>T22</b> It is evident from the things said that there exists an <i>ousia</i> that is everlasting and immovable and separated from sensible things. It has also been shown that this <i>ousia</i> cannot have any magnitude, but it is without parts and indivisible. For, it causes motion for an infinite time; but no finite thing has infinite potency.</p>	<p>ὅτι μὲν οὖν ἔστιν οὐσία τις αἰδῖος καὶ ἀκίνητος καὶ κεχωρισμένη τῶν αἰσθητῶν, φανερόν ἐκ τῶν εἰρημένων· δέδεικται δὲ καὶ ὅτι μέγεθος οὐδὲν ἔχειν ἐνδέχεται ταύτην τὴν οὐσίαν ἀλλ’ ἀμερῆς καὶ ἀδιαίρετός ἐστιν. κινεῖ γὰρ τὸν ἄπειρον χρόνον, οὐδὲν δ’ ἔχει δύναμιν ἄπειρον πεπερασμένον· Aristotle, <i>Metaphysica</i> Λ.7 1073a4-8 (ed. Fazzo).</p>
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Again, the language of *ousia* is new (as is the language of “separation”), but otherwise, these are the properties of the first cause of everlasting motion at the end of *Physics* 8, chapter 10: the prime mover is there proved to be without magnitude, without parts, and to be indivisible. Only such a mover can cause an everlasting motion.

For Berti, however, this efficient prime mover would be inconsistent with a further mover that is a celestial soul. By now, I have suggested that “efficient cause” should be understood to be a broad term, whose primary instance for Aristotle (Text 16) is the art in the mind of an artist. So, not only does *Metaphysics* Lambda, chapter 6, rely on the argumentation of *Physics* 7-8 (otherwise, the first mover of Lambda 6 could be merely the celestial body, as we have seen), but it is entirely consistent with the conclusion, in *Physics* 8, chapter 6, to a celestial soul, and to what we may now suspect is the further conclusion, in *Physics* 8, chapter 10, to a prior mover, an *ousia*(as

it is called in the *Metaphysics*) that is entirely immaterial and separate. This is precisely the interpretation of Averroes:

**T23** [I]t has by now been shown that this [everlasting] motion must be put together (مؤلفة) through two movers: a mover that is finite with respect to causing motion (التحريك) – and this is the soul that is *in* it [the heavenly body]; and a mover that is infinite with respect to causing motion – and this is the *power* (القوة) that is *not* in matter. According as [the heavenly body] is moved by the finite power that is *in* it, it is moved in time. . . Through the difference in the proportion (النسبة) in the heavenly bodies – namely, between their bodies and their souls – there is a difference in [their] quickness and slowness. And, through their agreement in the fact that they are not moved except by a power that is in what is not material, there exists in them the permanence and continuity of their motion; Averroes, *Long Commentary on the Metaphysics* Λ 7, t.c. 41, p. 1630.2-5, 8-11.

The teaching of this passage is repeated and expanded upon in various places by Averroes: (1) each heavenly sphere possesses a speed and a direction unique to it, which must therefore be determined by a proximate efficient cause, the celestial soul, whose power is finite; (2) each sphere also is moved forever, an effect that would exceed the strength of any finite power (according to the “Infinite Power Argument” of *Physics* 8.10), and so must be moved (in some way) by a prior mover, a separate Intelligence of infinite power (in duration, not strength). If the proximate mover were not finite in power, reasons the Commentator on *Physics* 8.10, the heavenly spheres would be moved with an infinite velocity—which is impossible.<sup>1</sup> But were there no other causes than the proximate, finitely powerful celestial

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<sup>1</sup> Averroes, *Commentarium magnvm super Aristotelis librvvm VIII Physicorvm*, ed. Guy Guldentops, c. 10, t.c. 79 (ff. 426HI, 427BC), pp. 11.104-114, 13.156-162, in *Averroes Latinus. A New Edition* [Physica, VIII, Chs. 78-79 & 86], *Recherches de Théologie et Philosophie médiévales [Supplément]: Bibliotheca 4* (Leuven: Peeters, 2002). Averroes interprets the “Infinite Power Argument” as working, in one way, through the premise that an infinite power (that is, infinite in strength as opposed to duration) would cause an infinite velocity, so that the change would have to be completed in an instant. The premise is not found in *Physics* 8.10 of Aristotle, but it is perhaps based on *De caelo* 1.7 274b7-14. Notice that Aristotle himself acknowledges the diverse directions and velocities of the stars and spheres that need to be accounted for; *De caelo* 2.5 and 2.8. Alexander appears to be the ultimate source of the claim, developed by Avicenna and subsequent medieval commentators, that the celestial soul, as a finite power of a body, does not account for the infinite duration of celestial motion, a duration that requires a separate intellectual cause. See the fragment found in Simplicius: Alexander of Aphrodisias, *Commentario al de caelo di Aristotele: Frammenti del secondo, terzo e quarto libro a cura di Andrea Rescigno* (Amsterdam: Adolf M. Hakkert, 2008) 2.1, 129d.29-35 (380.13-19), p. 136; as well as the passage quoted above, Text 12: Alexander, *Commentaire perdu à la Physique* 818 (267b6-7), p. 639.

souls, each sphere would eventually cease to be moved. Sufficient indication of the reasoning can be found in treatise 2 of the collection which Averroes composed to fill in the gaps in Aristotle's writing on astrophysics— a collection aptly named *On the Substance of the Sphere*:

<p><b>T24</b> You should understand that that celestial body needs not only a power moving it in place but also a power imparting in itself and in its substance eternal permanence. For, even if the [celestial] body is simple, having no potency in itself for corruption, nevertheless <i>it is necessarily of finite action</i>, since it is finite, having dimensions determined by the surface containing it. And, it is necessary in the case of every such thing, though the intellect might have supposed it to be something existing per se and lacking another imparting to it permanence and eternity, that <i>there belong to it a finitude of its permanence just as a finitude of its action</i>. And for this reason, it is necessary that there be <i>an intellect as a power imparting</i> to it eternal permanence just as it imparts to it eternal motion. And, not only this, but it is necessary that there be a power that imparts to it a motion <i>proper to its action</i>... namely, circular locomotion, and a shape proper to this motion, namely, spherical, et cetera.</p>	<p>Et debes scire quod istud corpus celeste non indiget tantum uirtute mouente in loco sed etiam uirtute largiente in se et sua substantia permanenciam eternam. Quoniam etsi sit simplex, non habens in se potenciam ad corruptionem, tamen est finite accionis necessario quia est finitum dimensionum determinatarum a superficie continente ipsum. Et omne tale, cum intellectus posuerit id existens per se absque hoc quod aliud largiatur ei permanenciam et eternitatem, necesse est ut ita sit de finitate sue permanencie sicut est de finitate sue accionis. Et ideo necesse est esse hic intellectum potenciam largientem ipsi permaenciam eternam quemadmodum largitur ipsi motum eternum. Et non hoc tantum sed necesse est hic esse uirtutem que largiatur ei motum proprium sue accione que est eternitas inter ceteros motus, scilicet motum localem, qui est in circuitu et figuram sibi propriam isti motui, scilicet, spericam, et mensuram propriam uniuersique istorum corporum, et conuenienciam inter ea ad inuicem in ordine et quantitate. Ita quod ex omnibus perficitur unus actus, scilicet, totus mundus; Averroes, <i>De substantia orbis</i> 2, pp. 151.1-152.3, in Alvaro de Toledo, <i>Commentario al "De substantia orbis,"</i> ed. M. Alonso (cf. Hebrew, ed. Hyman 2.59-68).</p>
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I have laid out the details of Averroes' reasoning elsewhere.<sup>1</sup> What is important for our purposes is that Averroes denies, in opposition to Avicenna, that *Metaphysics* proves the existence of God, the absolutely prime mover.<sup>2</sup> Accordingly, since *Physics* 8.6, for Averroes, concludes to a celestial soul as first mover, it must be the "Infinite Power Argument" that concludes to the existence of God, the separate intellect that moves the outermost sphere. That argument appears in *Physics* 8.10.

For Averroes, then, "clever Aristotle" affirms two "ontological stages" in the "Prime Mover Argument": (1) the proof of the first unmoved proximate mover, the celestial soul, in *Physics* 8.6; and (2) the proof of a prior separate, absolutely immaterial, infinitely powerful prime mover, described in *Physics* 8.10 (and in *Metaphysics* Λ.7, Text 22). The result is a well-developed "theory of coherence" in which there are two "source causes" of the heavens' motion, one subordinate to the other (each grounded on its own set of reasoning, with one set in subordination to the other). The separate intellects, the first of which is God, for Averroes, are the *source* of the infinite duration of the heavens' rotation by being the art in the mind of the celestial souls. Insofar as it is the form for the intellect of a celestial soul subordinate to it, the prime mover is an efficient cause in a different sense from that belonging to the immediate, finite source of each heaven's unique velocity and direction. As the analogy of the baths teaches us (see Texts 19-20), the prime mover is both the efficient and final cause for the celestial soul, since in immaterial things the source and goal of desire are simultaneous (though conceptually distinct). In this way, Averroes' theory of coherence contains elements of both "subordination theory" and "dual identity theory." For Averroes, the prime mover or God is both "source cause" and end of a subordinate celestial soul, the soul of the outermost sphere.

### 3. Conclusion and a Rereading of the "Problem Text"

I have used the great commentators on Aristotle to suggest new possibilities for harmonizing the apparently contradictory accounts of the prime mover's causality in *Physics* 7-8 versus in *Metaphysics* Lambda. Whereas recent scholarship, especially thanks to Sarah Broadie and Enrico Berti, has correctly begun to take seriously again that Aristotle's prime mover may be an efficient cause, the resultant "theories of coherence" are

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<sup>1</sup> Twetten, "Averroes' Prime Mover Argument," in *Averroès et les averroïsmes juif et latin*, ed. J.-B. Brenet (Turnhout, 2007), pp. 9-75 at 28-36.

<sup>2</sup> See Amos Bertolacci, "Avicenna and Averroes on the Proof of God's Existence and the Subject-Matter of *Metaphysics*," *Medioevo* 32 (2007) 61-97, at pp. 84-96.

unsatisfactory on the standard view as to what is meant by “efficient cause.” As W. D. Ross saw well, a theory of coherence needs both celestial soul and separate Intelligence. But Ross saved this claim in a different way from that of Alexander and Averroes, for whom the mover that is prior to a celestial soul is in some sense an efficient cause. For Ross, the efficient causality proved for the prime mover in the *Physics* is reduced to, or even transformed into, an exclusively final causality purportedly affirmed in *Metaphysics* Λ.7. By contrast, I know of no follower of Aristotle prior to the age of Galileo (at which point Aristotelian cosmology becomes, not the best science, but largely an antiquarian’s curiosity) for whom Aristotle’s prime mover is an exclusively final cause. Pace Berti, I take, not Alexander, but Syrianus to have been the initiator of this reading of Aristotle—for whom it is certainly not clever, and certainly false.<sup>1</sup> That this reading has been restored through the best of nineteenth-century scholarship and regarded as the cleverest that Aristotle (or Alexander and Averroes) could be assigned surely contains some irony. Nevertheless, the key to an alternative reading, and to alternative coherence theories, appears to be identifying the primary sense of “efficient cause” with the causality, not of an artist or maker, but of the art or the form in the artist’s mind. I propose that this is the efficient causality of which Aristotle speaks in *Metaphysics* Λ.6, Text 21.1.

It would be another project to show that what Alexander and Averroes take “clever Aristotle” to maintain, namely, that the prime mover is an efficient cause, is the best reading of the *corpus Aristotelicum*. Here I have been content with presenting some neglected texts of Aristotle and with suggesting how they may be read in a new light with the help of the best classical commentators. I would like to conclude with the main passage that provokes our worries over the coherence of the prime mover’s causality in the first place: *Metaphysics* Λ.7’s affirmation of a first final cause. But first let me return to a previous line of thought in a new way, namely the rejection of “reduction theory” in Part 1.

I see no compelling reason to affirm with Averroes that, for Aristotle, only natural philosophy, not metaphysics, proves or can prove the existence of a first cause. So, I see no compelling reason to think that natural philosophy for Aristotle must make explicit its conclusion to an absolutely

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<sup>1</sup> See especially Syrianus, *In Metaphysica commentaria*, ed. Wilhelm Kroll, CAG 6.1 (Berlin: Georg Reimer, 1902), B.1, pp. 8.30–33; 10.20–11.9; and M.5, 117.16–20; and Twetten, “Aristotelian Cosmology and Causality in Classical Arabic Philosophy and its Greek Background,” in *Ideas in Motion in Baghdad and Beyond: Philosophical and Theological Exchanges between Christians and Muslims in the Third/Ninth and Fourth/Tenth Centuries*, ed. Damien Janos (Leiden: Brill, 2015), pp. 312–433 at 331–335.



first mover that is beyond the proximate mover of the spheres. My view is fortunate, since Aristotle does not make this conclusion explicit (and that *Physics* 8.10 concludes to a prime mover beyond a celestial soul is controversial even in Averroes scholarship: I arrived at this conclusion only with the help of John of Jandun). In short, it is not easy to find in *Physics* 8 a clear “second ontological stage” of the “Prime Mover Argument.” What is comparatively clear is that by *Metaphysics* Λ.7 and the “Problem Text” below, celestial souls are at work. W. D. Ross puts the matter simply: “Since He [God for Aristotle] moves by inspiring love and desire [in Λ.7], it seems to be implied that the ‘first heaven’ has soul. And this is confirmed by statements elsewhere.”<sup>1</sup> Section 2.1 above fills in this “confirmation.” Ross rightly rejects Zeller’s view that the exclusively final cause “moves” a purely material corporeal sphere,<sup>2</sup> thereby leaving a sphere in motion without an efficient cause—in violation of the “Mover Causality Principle.” For Ross, then, as for most scholars today—namely, for most reduction theorists of the “exclusively final cause” persuasion—the “Problem Text,” over the course of three sentences, constitutes the crucial “second ontological stage” of Aristotle’s entire “Prime Mover Argument.” For Ross, *Physics* 8 tells us nothing about how the prime mover causes. It belongs to *Metaphysics* to explain how an immaterial mover causes motion: namely, exclusively as a final cause. Here are Ross’ words:

Though [*Physics*] book viii offers an elaborate argument for the existence of the prime unmoved mover, it tells us nothing of how this operates, and *Met.* Λ carries the theory further by stating that it is . . . as final cause and as this alone, that God operates on the world.<sup>3</sup>

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<sup>1</sup> W. D. Ross, *Aristotle*, p. 187; cf. *Id.*, *Aristotle’s Metaphysics*, p. cxxxvi. Cf. also, for example, Joseph Owens, “The Relation of God to World in the *Metaphysics*,” in *Études sur la “Métaphysique” d’Aristote: actes du VIe Symposium aristotelicum*, ed. P. Aubenque (Paris: Vrin, 1979), pp. 207-228, at 217-218.

<sup>2</sup> For this position in Zeller and Duhem, see above at the beginning and end of Part 1.

<sup>3</sup> W. D. Ross, *Aristotle’s Physics*, p. 100. The lacuna of *Physics* 8 is no surprise given Ross’ mechanist reading of physical causality: “the conclusion of the *Physics* leaves us with . . . unanswered problems. . . [H]ow can an incorporeal being impart movement? The two modes of imparting movement which Aristotle in the last resort recognises are pushing and pulling, and what is incorporeal cannot be credited with either of these. To these questions he attempts an answer in the *Metaphysics* [Λ.7]. The first mover is described as causing motion ‘as an object of desire’ or of love, i.e. as not a physical agent at all, and hence need no longer be viewed as having a local habitation. But this solution raises difficulties no less than those which it removes”; *Id.*, *Aristotle*, p. 96.

But, again, this solution raises the problems of incoherence that we have discussed in Part I. What alternative can be offered as to how a second stage arrives at an efficient cause beyond a celestial soul?

It should be admitted that Aristotle has left the reasoning behind the “second ontological stage” of his “Prime Mover Argument” obscure. I propose that we think of the entire argument as a continuum across the *Physics* and *Metaphysics* in which increasing clarity emerges as to what the prime mover is, all the while that celestial ensoulment is assumed (and even defended with argument). Thus, when Aristotle finally refers to the “heaven” in the “Problem Text” of Lambda 7 (actually to the “first heaven,” which is significant for the project of discussing “the First”), he picks up on the everlasting, circular motion of an indestructible, natural, movable *ousia* mentioned at the outset of Lambda 6; and thereby he picks up on the self-moving whole of *Physics* 8.5-6, and on the ensouled heaven of *De caelo* 2.2. Thus, Lambda 6 speaks of an efficient cause that is other than the entire ensouled heaven (I submit), which cause moves, as source-cause or as art, I have argued, the entire ensouled heaven. The same prime mover is said in Lambda 7 to move, as an object of understanding and desire, the entire *ensouled* heaven. In 1924, Ross makes the same point, namely, that Aristotle’s reference to the “heaven” should be taken as a reference to the *ensouled* heaven. Ross counters the position that ascribes to Aristotle, in the interest of “scheme-simplification,” only one causal level above the celestial body, perhaps identifying Intelligence and celestial soul, or final and efficient cause. Thus, Ross states:

It seems preferable to suppose that in [*Metaphysics*] Λ ‘desire’ and ‘love’ are used in no merely metaphorical sense, and therefore that life and soul are seriously ascribed to the spheres; these are living beings which aim at realizing in their own measure the perfect being enjoyed in full by God and the intelligences. . . The scheme is simplified in a more satisfactory way if we do not regard the first heaven and its soul, the planetary spheres and their souls, as separate entities, but each of the spheres as forming with its soul a single composite living being. . . The theory is that each of these unities of soul and body desires a life as like as possible to that of its moving principle.<sup>1</sup>

With this interpretive tool in mind, let us read the “Problem Text”:

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<sup>1</sup> W. D. Ross, *Aristotle’s Metaphysics*, p. cxxxvii.



<p><b>T25[A]nd, [a] there is [i] something that is always moved with an unceasing motion, and this [motion] is circular</b> (and this is evident not only by argument but also in fact), so that the <b>first</b> heaven is everlasting. <b>So, there is also [ii] something that moves [it]. And, since [that, namely (i)] is moving and is moved and is in the middle, there is therefore something [ii] that moves without being moved, [which] is [b] everlasting, an <i>ousia</i>, and actuality. And, [c] the desirable and intelligible move in this way: it moves without being moved.</b> And, of these, the first are the same. For, the apparent good is the craveable, but the real good is the first thing willed. And we desire because <i>x</i> appears rather than it appears because we desire. For, the principle is intellection. And intellect is moved by the intelligible . . . and in this [order], <b><i>ousia</i> is first, and in [<i>ousia</i>], that which is simple and is in actuality [is first].</b></p>	<p>καὶ ἔστι τι ἀεὶ κινούμενον κίνησιν ἄπαυστον, αὕτη δ' ἡ κύκλῳ, καὶ τοῦτο οὐ λόγῳ μόνον ἀλλ' ἔργῳ δηλόν, ὥστ' ἀίδιος ἂν εἴη ὁ πρῶτος οὐρανός. ἔστι τοίνυν τι καὶ ὁ κινεῖ. ἐπεὶ δὲ κινούμενον καὶ κινοῦν καὶ μέσον, τοίνυν ἔστι τι ὁ οὐ κινούμενον κινεῖ, αἶδιον καὶ οὐσία καὶ ἐνέργεια οὐσα. κινεῖ δὲ ὧδε τὸ ὀρεκτὸν καὶ τὸ νοητόν· κινεῖ οὐ κινούμενα. τούτων τὰ πρῶτα τὰ αὐτά. ἐπιθυμητὸν μὲν γὰρ τὸ φαινόμενον καλόν, βουλευτὸν δὲ πρῶτον τὸ ὄν καλόν· ὀρεγόμεθα δὲ διότι δοκεῖ μᾶλλον ἢ δοκεῖ διότι ὀρεγόμεθα· ἀρχὴ γὰρ ἡ νόησις. νοῦς δὲ ὑπὸ τοῦ νοητοῦ κινεῖται, νοητὴ δὲ ἡ ἑτέρα συστοιχία καθ' αὐτήν· καὶ ταύτης ἡ οὐσία πρώτη, καὶ ταύτης ἡ ἀπλὴ καὶ κατ' ἐνέργειαν; Aristotle, <i>Metaphysica</i> Λ.7 1072b21-32 (ed. Fazzo).</p>
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A possible reading of “clever Aristotle,” then, is that “(i)” in this text, as for Ross, refers to the ensouled heaven. It is said to be moved as by an intelligible object of desire. As nearly everyone agrees besides Berti, Aristotle appeals in [c] to the account of desire in *De anima* 3.10, on which account the object of desire is an unmoved mover of the soul as a moved mover (433a15-28, b10-18). Averroes finds the reference to philosophical psychology to be altogether natural. According to Texts 19-20 above, the prime mover is like the medicine in the mind of the doctor if that doctor achieved health merely by thinking of it. The prime mover or the hypothesized “separate” medicine thus moves as both agent and end, remarks Averroes. The prime mover is the art or form behind the celestial soul’s own notionally distinct desire and subsequent operational efficient causality. In this way the prime mover, on one rather minimalist reading of “clever Aristotle,” is not an exclusively final cause, but is the “source cause”

of the intellectual operation of the celestial soul, and is thereby the source of the coming to be of all generated substances. It is literally that whence is the *beginning* of motion in the celestial soul. If this prime mover had the potency not to be such a source, or not to exist, argues Aristotle in Lambda 6 (to which [b] alludes), then upon the actualization of that potency—inevitable given an everlasting world—no other motion and no other substances could come to be.

## Conclusion

The paper has brought out evidence for a novel coherence theory in the texts of Aristotle: according to the best commentary tradition, this is what “clever Aristotle” (our heuristic device) meant. As Averroes holds, there must be a “second ontological stage” in Aristotle’s “prime mover argument,” a stage that builds upon the first stage that had concluded to the first unmoved celestial soul in *Physics* 8.6. Whereas Averroes discovers this second stage in *Physics* 8.10 alone, it is best to see it developing, in three phases, across *Physics* 8.10 and Lambda 6-7. The arrival at a first mover beyond a celestial soul is most evident in Lambda 7 (Text 25 above), as W. D. Ross himself holds. But Lambda 7 is arguably best read as explaining how the prime mover (affirmed in Lambda 6) moves, just as the summary in the *De motu animalium* indicates (Text 10). The topmost cause, as according to *Physics* 2.3 (Text 16), moves as the art in the intellect of the first artist or celestial soul. The problem that this claim engenders is solved in Lambda 6, which text thereby provides the definitive argument for the second ontological stage. A celestial soul must move through a power of the soul that could, in theory, not act and not cause motion.<sup>1</sup> Hence, the first mover must be a substance that is separate and entirely in act if it is to be the origin of everlasting motion in an everlasting cosmos. In this way, Lambda 6 completes what had already been suggested at the end of *Physics* 8.10. The prime mover is a separate substance in actuality, which, as infinitely powerful, had already been said to be without magnitude or parts, and to be indivisible (see also Text 22).

An objection arises: “on your account, the prime mover ceases to be a cause of motion.” An initial response might be to say that Aristotle calls even the perfect actuality of intellection a “motion,” insofar as it is the

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<sup>1</sup>Averroes draws attention to this problem and solves it by denying genuine potency to the celestial soul and by appealing, instead, to Avicenna’s doctrine on what is “possible in itself but necessary through another”; see Twetten, “Averroes’ Prime Mover Argument,” pp. 47-60.

completion of a potency. Hence, the intellection of the celestial soul is the “first thing moved.” But a fully satisfactory response must insist that the prime mover fulfils literally Aristotle’s most frequent formula for the third cause: whence is the beginning of motion. The topmost cause, as the art that is the form for the first celestial soul’s intellect, is literally whence is the beginning of the motion caused by the celestial soul: the everlasting rotation of the first heaven and the everlasting generation and destruction of all sublunar things. Aristotle’s separate substance that is entirely in actuality serves as the source or pattern for everlasting change, as well as the goal desired, just as health or medicine is both the source and the goal in the intellect of the doctor. If health could exist separately on its own, it would resemble Aristotle’s unmoved mover in its causal role as both “agent” and end.<sup>1</sup>

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<sup>1</sup> The paper represents a work long in progress. Parts 1 and the first half of 2.4 were written in 1990 and delivered in Dallas, Milwaukee and South Bend. There I defended a first efficient prime mover, using Lambda 6 much as subsequently did Berti, yet together with celestial animation. At that stage, I used the disjunctive approach in *Physics* 8.5-6 to harmonize the argumentation of *Physics* 7-8 and *Metaphysics*  $\Lambda$  (with Aquinas). That approach was excluded after realizing in 2006 that *Physics* 8 always presupposes celestial self-motion (as for Paulus and Owens; see section 2.1). Audiences in Spain, Wisconsin and Morocco heard a revised interpretation, the most recent version of which was delivered in Lecce at the gracious invitation of Prof. Igor Agostini. I owe special gratitude also to Pol Vandavelde for translation help and to Ignacio de Ribera-Martin for his careful reading and for the final objection.

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مجلة العلوم الإنسانية

# ضفاف

مجلة علمية محكمة

العدد السادس - 2021

إصدار كلية الآداب والعلوم الإنسانية  
جامعة القاضي عياض - مراكش - المغرب

## شروط النشر

- مجلة ضفاف مجلة علمية محكمة تعنى بنشر الأبحاث والأعمال التي تدخل في مجال العلوم الإنسانية.
- مجلة فصلية.
- تنشر المجلة مقالات ودراسات وأبحاثاً أصيلة لم يسبق نشرها ولا تقديمها للنشر.
- تخضع الأعمال المقترحة للنشر لشروط البحث العلمي المتعارف عليها من حيث التوثيق وذكر المصادر والمراجع المعتمدة.
- تعبر الأبحاث المنشورة بالمجلة عن آراء أصحابها.
- تقدم الأبحاث في نسخة مطبوعة ونسخة إلكترونية.
- تلتزم المقالات بالمعايير التقنية للنشر بالمجلة، فتكتب المقالات العربية بخط 14 Sakkal majalla والمقالات بالحرف اللاتيني بخط 11 Times New Roman.
- تكتب الهوامش أسفل الصفحة بخط 10 Times New Roman.
- ينبغي ألا تزيد صفحات البحث عن 20 صفحة.
- يذكر الباحث اسمه واسم بنية البحث والجامعة-المؤسسة التي ينتمي إليها في الصفحة الأولى.
- يقدم الباحث ملخصاً لبحثه مستقلاً عن المقال.
- يكتب ملخصاً للبحث بلغة غير اللغة التي كتب بها.
- تخضع المقالات والبحوث المقدمة للمجلة للتحكيم، ويلتزم الباحث بإجراء التعديلات التي يقترحها المحكمون في أجل أقصاه 15 يوماً بعد توصله بها.
- تحتفظ المجلة بحقوقها في عدم نشر أي بحث لا يستجيب لشروطها.
- لا ترد الأبحاث إلى أصحابها نشرت أو لم تنشر.
- تحتفظ المجلة بحقوق التأليف وإعادة النشر الورقي أو الإلكتروني للمقالات المنشورة بها.
- المقالات المقدمة للنشر لا يجب أن تنتهك حقوق مؤلفين أو ملكية أطراف آخرين.

## شكر

تتقدم هيئة تحرير مجلة "ضفاف" للعلوم الإنسانية  
بها تشكراتها لكل من ساهم في إغناء هذا العدد،  
كما توجه شكرها الجزيل للأمانة الأجلة الذين لم  
يتروا في قراءة المقالات وتقييمها وتحكيمها.

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مجلة العلوم الإنسانية

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مجلة علمية محكمة

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مجلة علمية محكمة

العدد السادس - 2021

مجلة فصلية علمية ومحكمة تصدرها كلية الآداب والعلوم الإنسانية

بجامعة القاضي عياض - مراكش - المغرب

المدير : عميد كلية الآداب والعلوم الإنسانية

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الإيداع القانوني : 2018PE0010

ردمك : 2605-6410

لوحة الغلاف للفنان ماحي بنبين

تعبر المقالات عن آراء أصحابها فقط



جامعة القاضي عياض  
UNIVERSITÉ CADI AYYAD

كلية الآداب والعلوم الإنسانية  
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