

ADAM TAKAHASHI

## Albert the Great as a Reader of Averroes: A Study of His Notion of the Celestial Soul in *De Caelo et Mundo* and *Metaphysica*

### INTRODUCTION

Albert the Great (c. 1200-1280), one of the earliest Latin authors to produce detailed commentaries on Aristotle's entire corpus, is generally acknowledged as a pivotal scholar of the Aristotelian tradition<sup>1</sup>. However, there are still very few in-depth studies of Albert's method of interpreting Aristotle's works, more specifically his use of previous commentators. One may wonder why we should consider how Albert understood and read Aristotle's texts. It must be noted that his philosophy cannot be separated from the method he adopted in producing his paraphrases of Aristotle's works<sup>2</sup>. Indeed, his intellectual activity had a 'bookish' character, as he pursued theoretical truth within the vast bulk of Aristotle's writings<sup>3</sup>. He could only reach this goal through commentaries and explanations of the original texts. Thus, to understand the nature of his

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<sup>1</sup> On Albert's philosophy in general, see among others J. A. WEISHEIPL ed., *Albertus Magnus and the Sciences: Commemorative Essays 1980*, Pontifical Institute of Mediaeval Studies, Toronto 1980; H. ANZULEWICZ, *De forma resultante in speculo: Die theologische Relevanz des Bildbegriffs und des Spiegelbildmodells in den Frühwerken des Albertus Magnus*, 2 vols., Aschendorff, Münster 1999; A. DE LIBERA, *Métaphysique et noétique: Albert le Grand*, Vrin, Paris 2005; I. M. RESNICK ed., *A Companion to Albert the Great: Theology, Philosophy and the Sciences*, Brill, Leiden 2013.

<sup>2</sup> On medieval (natural) philosophy as a practice of commenting on Aristotle's works, see E. D. SYLLA, *Walter Burley's Physics Commentaries and the Mathematics of Alteration*, « Early Science and Medicine », 6, 2001, pp. 149-184; EAD., *Walter Burley's Practice as a Commentator on Aristotle's Physics*, « Medioevo », 27, 2002, pp. 301-372. See also O. WEIJERS, *The Literary Forms of the Reception of Aristotle: Between Exposition and Philosophical Treatise*, in L. HONNEFELDER ET AL. eds., *Albertus Magnus und die Anfänge der Aristoteles-Rezeption im lateinischen Mittelalter*, Aschendorff, Münster 2005, pp. 555-584.

<sup>3</sup> On the 'bookish' character of the pre-modern scholarship in philosophy and science, see among others A. GRAFTON, *Defenders of the Text: The Traditions of Scholarship in an Age of Science, 1450-1800*, Harvard University Press, Cambridge 1991. See also M. EDWARDS, *The Fate of Commentary in the Philosophy of the Schools, c. 1550-1640*, « Intellectual History Review », 22, 2012, pp. 519-536.

philosophy, we need to assess where and to what extent Albert deviated from Aristotle's initial arguments.

After considering Albert's interpretative method, I will take up some key Arabic Aristotelian thinkers who guided him in his readings of the Greek philosopher's texts<sup>4</sup>. Past studies have argued that the Arabic philosopher Avicenna or Ibn Sina (c. 980-1037) was a major influence on Albert, as the former's name is constantly mentioned in the latter's works<sup>5</sup>. Recently, however, historians have started to reappraise the role of another key Arabic thinker: Averroes or Ibn Rushd (1126-1198)<sup>6</sup>. Since Averroes' name hardly appears in Albert's texts, many scholars have underestimated his impact on Albert. Yet an attentive reading of their texts shows that Albert carefully read Averroes' commentaries on Aristotle, and that the influence of the Commentator's interpretation is much deeper than previously acknowledged<sup>7</sup>. While most of the recent research on the two authors' relation has centered on the realms of epistemology and metaphysics, I will study their relation with regard to cosmological issues.

<sup>4</sup> For a general overview of Albert's reception of Arabic Aristotelianism, see G. ENDRESS, *Der arabische Aristoteles und sein Leser: Physik und Theologie im Weltbild Alberts des Großen*, Aschendorff, Münster 2004; A. BERTOLACCI, *Albert's Use of Avicenna and Islamic Philosophy*, in RESNICK ed., *A Companion to Albert the Great* cit., pp. 601-611; É.-H. WÉBER, *Les emprunts majeurs à Averroès chez Albert le Grand et dans son école*, in F. NIEWÖHNER, L. STURLESE eds., *Averroismus im Mittelalter und in der Renaissance*, Spur, Zürich 1994, pp. 149-179.

<sup>5</sup> On Avicenna's influence on Albert, see among others D. N. HASSE, *Avicenna's De Anima in the Latin West*, Warburg Institute, London 2000, esp. pp. 60-69; BERTOLACCI, *Albert's Use of Avicenna and Islamic Philosophy* cit.; ID., *The Reception of Avicenna's Philosophia Prima in Albert the Great's Commentary on the Metaphysics: the Case of the Doctrine of Unity*, in W. SENNER ET AL. eds., *Albertus Magnus: Zum Gedenken nach 800 Jahren: Neue Zugänge, Aspekte und Perspektiven*, Akademie Verlag, Berlin 2001, pp. 67-78.

<sup>6</sup> On Averroes' philosophy, especially aspects of his natural philosophy and cosmology relevant to the present study, see among others G. ENDRESS, J. A. AERTSEN eds., *Averroes and the Aristotelian Tradition*, Brill, Leiden 1999; G. FREUDENTHAL, *The Medieval Astrologization of Aristotle's Biology: Averroes of the Role of the Celestial Bodies in the Generation of Animate Beings*, « Arabic Sciences and Philosophy », 12, 2002, pp. 111-137; R. GLASNER, *Averroes' Physics: A Turning Point in Medieval Natural Philosophy*, Oxford University Press, Oxford 2009. On the reception of Averroes' philosophy and science in the Latin West, see J. -B. BRENÉDÉ, *Averroès et les Averroïsmes juif et latin: actes du colloque international (Paris, 16-18 juin 2005)*, Brepols, Turnhout 2007; A. AKASOY, G. GIGLIONI eds., *Averroism and Its Aftermath*, Springer, Dordrecht 2013; P. BAKKER ed., *Averroes' Natural Philosophy and Its Reception in the Latin West*, Leuven University Press, Leuven 2015. See also C. MARTIN, *Rethinking Renaissance Averroism*, « Intellectual History Review », 17, 2007, pp. 3-19.

<sup>7</sup> D. N. HASSE, *The Early Albertus Magnus and His Arabic Sources on the Theory of Soul*, « Vivarium », 46, 2008, pp. 232-252; A. BERTOLACCI, *Albert the Great, Metaphysica IV, 1, 5: From the refutatio to the excusatio of Avicenna's Theory of Unity*, in J. A. AERTSEN, A. SPEER eds., *Was ist Philosophie im Mittelalter?*, De Gruyter, Berlin 1998 (Miscellanea Mediaevalia 26), pp. 881-887; ID., *A New Phase of the Reception of Aristotle in the Latin West: Albertus Magnus and His Use of Arabic Sources in the Commentaries on Aristotle*, in L. HONNEFELDER ed., *Albertus Magnus und der Ursprung der Universitätsidee: Die Begegnung der Wissenschaftskulturen im 13. Jahrhundert und die Entdeckung des Konzepts der Bildung durch Wissenschaft*, Berlin University Press, Berlin 2011, pp. 259-277.

Before proceeding further, however, I must mention David Twetten's outstanding study of Averroes and Albert's cosmology, especially of their idea of the prime mover<sup>8</sup>. Twetten has scrutinized the two authors' writings related to this idea, and has offered a solid foundation for further research of it. While paying heed to his study, I will take a different approach from Twetten's, because my goal is not the same as his. The main aim of Twetten's study is to clarify Albert's 'personal' ideas of the prime mover, or *what* he thinks about it<sup>9</sup>. To this purpose, he scrutinizes all of Albert's philosophical and theological works, and tries to build a coherent picture of his idea of the prime mover. According to Twetten, Albert's *De causis*, a paraphrase of Ps. Aristotle's *Liber de causis*, in particular exhibits the Dominican theologian's final and personal idea of the prime mover. Since his *De causis* is the last work of his Aristotelian project, it seems reasonable to accord importance to this work. But we must not dismiss the fact that there are doctrinal divergences between this treatise and his other Aristotelian works, especially concerning the idea of the emanation of the universe from the prime cause or God<sup>10</sup>. Therefore, if we put too much emphasis on Albert's position in *De causis*, we will be obliged to solve the problem of reconciling his apparently divergent views, and even to devalue his other paraphrases of Aristotle's treatises as less personal works. By contrast, the main aim of the present study is to shed light on *how* Albert manipulated or adopted Averroes' commentaries in his Aristotelian project. Such a study is worth carrying out, because what we take as Albert's philosophical ideas are often just an outcome of his weaving together of the views of preceding Aristotelian commentators. Thus, instead of merely pursuing Albert's final position, I will analyze passages where he attempts to solve philosophical questions that arise from the treatises of Aristotle such as the *Physics*, *On the Heavens*, and *Metaphysics*, and where he betrays his debt to Averroes' arguments.

<sup>8</sup> See D. Twetten's following works: *Averroes on the Prime Mover Proved in the Physics*, « Viator », 26 1995, pp. 107-134; *Albert the Great on Whether Natural Philosophy Proves God's Existence*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 64, 1997, pp. 7-58; *Albert the Great's Early Conflations of Philosophy and Theology on the Issue of Universal Causality*, in R. E. HOUSER ed., *Medieval Masters: Essays in Memory of Msgr. E.A. Synan*, University of St. Thomas, Houston 1999, pp. 25-62; *Albert the Great, Double Truth, and Celestial Causality*, « Documenti e studi sulla tradizione filosofica medievale », 12, 2001, pp. 275-358; *Averroes' Prime Mover Argument*, in BRENET ed., *Averroès et les Averroïsmes juif et latin cit.*, pp. 9-75; *The Prime Mover in Albert's Physics*, in RESNICK ed., *A Companion to Albert the Great cit.*, pp. 208-219; *Albert's Arguments for the Existence of God and the Primary Causes*, *ibid.*, pp. 658-687. See also L. STURLESE, *Il razionalismo filosofico e scientifico di Alberto il Grande*, « Documenti e studi sulla tradizione filosofica medievale », 1, 1990, pp. 373-426.

<sup>9</sup> Cf. TWETTEN, *Albert the Great, Double Truth, and Celestial Causality cit.*, esp. pp. 341-348.

<sup>10</sup> See I. MOULIN, D. TWETTEN, *Causality and Emanation in Albert*, in RESNICK ed., *A Companion to Albert the Great cit.*, pp. 694-721.

As a good clue to assessing Albert's debt to Averroes' writings, this paper will address their discussion of the idea of the celestial soul, or whether celestial bodies — orbs, stars, and planets — have souls<sup>11</sup>. Albert regarded the notion of the celestial soul, developed in his paraphrases of Aristotle, as the key principle which determines the course and order of nature<sup>12</sup>. Although he constantly mentions this idea in paraphrasing Aristotle's works, Aristotle did not discuss it at all, except in a few ambiguous passages such as where he says that «the heaven is animate (ἐμψυχος)» (*On the Heavens*, II, 2, 285a29-30)<sup>13</sup>.

The main question in this article is why Albert appealed to the idea of the celestial soul, going beyond Aristotle's original arguments. As I already mentioned, instead of examining the inner logic of his arguments, I will attempt to answer this question by focusing on his use of Averroes' commentaries. The assumption that Albert could find this concept in various philosophical sources available to him should be challenged by a close analysis of his consistent use of Averroes' commentaries, though this may seem surprising, as the idea of the celestial soul can also be found in the writings of other Arabic and Latin scholars. After analyzing Albert's handling of Averroes' commentaries, I will inquire into the reason why Albert, as well as Averroes, put much theoretical importance on the celestial soul. I will suggest that Albert inherited via Averroes an Aristotelian idea of divine providence that originated in Alexander of Aphrodisias (fl. c. AD 200)<sup>14</sup>. As we will see below, what is remarkable is that Alexander linked the

<sup>11</sup> On the idea of the celestial soul in ancient and medieval philosophy, see among others H. A. WOLFSON, *The Problem of the Souls of the Spheres from the Byzantine Commentaries on Aristotle through the Arabs and St. Thomas to Kepler*, in his *Studies in the History of Philosophy and Religion*, 2 vols., Harvard University Press, Cambridge 1973, vol. I, pp. 22-59; E. GRANT, *Planets, Stars and Orbs: The Medieval Cosmos, 1200-1687*, Cambridge University Press, Cambridge 1994, pp. 469-487. See also G. GALLE, *Peter of Auvergne's Discussion concerning the Animation of the Heavens*, in M. C. PACHECO, J. F. MEIRINHOS eds., *Intellect et imagination dans la philosophie médiévale*, 4 vols., Brepols, Turnhout 2006, vol. III, pp. 1463-1475.

<sup>12</sup> In addition to the Aristotelian tradition discussed in this study, the Platonic tradition also offered a philosophical conception of the celestial soul or animation of the heavens, for in his *Timaeus* Plato advanced the idea of the world-soul. Albert certainly had access to the Latin commentary tradition on the *Timaeus*, but he did not elaborate on the Platonic idea of the world soul. On the elaboration of the idea of the world soul in the Latin Platonic tradition, see T. GREGORY, *Anima mundi: la filosofia di Guglielmo di Conches e la scuola di Chartres*, Sansoni, Florence 1955. See also H. ANZULEWICZ, *Die platonische Tradition bei Albertus Magnus. Eine Hinführung*, in S. GERSH, M. J. F. M. HOENEN eds., *The Platonic Tradition in the Middle Ages: A Doxographic Approach*, De Gruyter, Berlin 2002, pp. 207-277.

<sup>13</sup> The translations of Aristotle's works used in this study are taken from *The Complete Works of Aristotle: Revised Oxford Translation*, ed. J. BARNES, 2 vols., Princeton University Press, Princeton 1984.

<sup>14</sup> On Alexander of Aphrodisias, see among others R. W. SHARPLES, *Alexander of Aphrodisias: Scholasticism and Innovation*, «Aufstieg und Niedergang der römischen Welt», 36/2, 1987, pp. 1176-1243; ID., *Peripatetics*, in L. P. GERSON ed., *The Cambridge History of Philosophy in Late Antiquity*, 2 vols., Cambridge University Press, Cambridge 2010, vol. I, pp. 140-160. On the significance of

notion of the celestial soul to the idea of divine providence. Although the standard Scholastic notion of divine providence amounts to God's concern over and control of the order of the universe, Alexander conceived the celestial bodies to be the agents that exert providential concern over this world.

This article is divided into four sections, the first of which briefly examines the idea of the prime mover in Albert and Averroes' commentaries on the *Physics*, for this idea serves as an important premise for them in developing their notion of the celestial soul in their later treatises. The second discusses Albert's idea of the celestial soul in his paraphrases of Aristotle's *On the Heavens* and *Metaphysics*. The third section clarifies how Albert used Averroes' commentaries on the two treaties. Finally, the fourth section will deal with Alexander's influence on Albert via Averroes<sup>15</sup>.

## I. THE PRIME MOVER IN ALBERT'S *PHYSICA* AND HIS USE OF AVERROES' COMMENTARY

### I.1. *Albert's Interpretation of Aristotle's Prime Mover*

I will briefly examine Albert's idea of the prime mover in his paraphrase of the *Physics* VIII (section I.1), and then its relation to Averroes' relevant commentary (section I.2). The prime mover is an important Aristotelian notion for explaining the principle and origin of all the movements in this world. Twetten has previously securitized this notion, which Albert and Averroes developed in their commentaries on the *Physics*<sup>16</sup>. Therefore, I will simply summarize the parts of their discussion relevant to our analysis of Albert's idea of the celestial soul in his later Aristotelian works.

Alexander in Aristotelian cosmology, I learned a lot from G. Freudenthal's magnificent works. See G. FREUDENTHAL, *The Medieval Astrologization of the Aristotelian Cosmos: From Alexander of Aphrodisias to Averroes*, « Mélanges de l'Université Saint-Joseph », 59, 2006, pp. 29-68; ID., *The Astrologization of the Aristotelian Cosmos: Celestial Influence on the Sublunary World in Aristotle, Alexander of Aphrodisias, and Averroes*, in A. C. BOWEN, C. WILDBERG eds., *New Perspectives on Aristotle's De Caelo*, Brill, Leiden 2009, pp. 239-281.

<sup>15</sup> The editions of Albert and Averroes' texts I used are as follows. Albertus Magnus, *Physica libri V-VIII*, ed. P. HOSSFELD, *Opera omnia* IV/2, Aschendorff, Münster 1993; *De caelo et mundo*, ed. P. HOSSFELD, *Opera omnia* V/1, Aschendorff, Münster 1971; *Metaphysica, libri VI-XIII*, ed. B. GEYER, *Opera omnia* XVI/2, Aschendorff, Münster 1964. AVERROES, *Long Commentary on Physics: Aristotelis opera cum Averrois commentariis*, Giunta, Venice 1562-1574; repr. Minerva, Frankfurt 1962, III; *Long Commentary on On the Heavens: Averrois Cordubensis commentum magnum super libro De celo et mundo Aristotelis*, eds. F. J. CARMODY, R. ARNZEN, 2 vols. Peeters, Leuven 2003; *Long Commentary on the Metaphysics: Aristotelis opera cum Averrois commentariis*, Giunta, Venice 1562-1574; repr. Minerva, Frankfurt 1962, VIII. Other primary texts cited in this article will be mentioned in the footnotes.

<sup>16</sup> See note 8.

Let us start by looking at key passages of Aristotle's prime mover argument in *Physics* VIII<sup>17</sup>. In the preceding books of this treatise, he had discussed the principles and causes of natural things. Book VIII then opens with the question of whether motion exists eternally. After answering this question in the affirmative, Aristotle discusses the existence of a prime mover. His proof of the existence of a prime mover has been considered to consist of two arguments:

- (1) « All things that are in motion must be moved by something » (*Physics*, VIII, 4, 256a2-3).
- (2) There cannot be an infinite regress of things moved by something else (*Physics*, VIII, 5)<sup>18</sup>.

Once the two arguments are combined, the conclusion seems to follow that there must be an ultimate mover that is itself unmoved<sup>19</sup>. One may identify this unmoved mover with God, as Thomas Aquinas did in his proof of the existence of God<sup>20</sup>. However, something that is not put in motion by something else need not be identified immediately with God. Indeed, as I will show just below, Albert goes another way.

Now let us turn to Albert's paraphrase of Aristotle's *Physics*, VIII, where he presents his interpretation of the prime mover<sup>21</sup>. In his paraphrases of Aristotle's works, he basically agrees with Aristotle's conception of the universe without paying much attention to the theoretical differences between Aristotle and Ptolemy<sup>22</sup>. He also believes in the separation of the celestial and terrestrial

<sup>17</sup> On Aristotle's notion of the prime mover in the *Physics*, see J. OWENS, *The Reality of the Aristotelian Separate Movers*, «Review of Metaphysics», 3, 1949-1950, pp. 319-337; F. SOLMSEN, *Aristotle's System of the Physical World*, Cornell University Press, Ithaca 1960, pp. 222-249; C. H. KAHN, *The Place of the Prime Mover in Aristotle's Theology*, in A. GOTTHELF ed., *Aristotle on Nature and Living Things: Philosophical and Historical Studies*, Mathesis Publications, Pittsburgh 1985, pp. 183-205; A. KOSMAN, *Aristotle's Prime Mover*, in M. L. GILL, J. G. LENNOX eds., *Self-Motion: From Aristotle to Newton*, Princeton University Press, Princeton 1994, pp. 135-153; L. JUDSON, *Heavenly Motion and the Unmoved Mover*, in GILL, LENNOX eds., *Self-Motion* cit., pp. 155-171.

<sup>18</sup> ARISTOTLE, *Physics*, VIII, 5, 256a28-9: « If, then, anything is a mover while being itself moved, the series must stop somewhere and not be infinite ».

<sup>19</sup> Cf. ARISTOTLE, *Physics*, VIII, 5, 256a19-21: « If then everything that is in motion is moved by something, and the first mover is moved but not by anything else, it must be moved by itself ».

<sup>20</sup> Cf. THOMAS AQUINAS, *Summa theologiae*, Ia, q. 2, art. 3.

<sup>21</sup> On Albert's interpretation of Aristotle's idea of the prime mover in his paraphrase of the *Physics*, see TWETTEN, *Albert the Great on Whether Natural Philosophy Proves God's Existence* cit.; ID., *Albert the Great, Double Truth, and Celestial Causality* cit.; ID., *The Prime Mover in Albert's Physics* cit.

<sup>22</sup> With regard to the structure of the universe, Albert also consults Ptolemy's astronomical works. He often mentions the name of Ptolemy and other Arabic astronomers inspired by him, such as Thabit ibn Qurra (826-901) and Al-Bitruji (died c. 1204), but he does not replace Aristotle's cosmology with Ptolemy's. He does not find any fundamental doctrinal contradiction between

regions and the existence of a special celestial element different from the four elements. Like other Scholastic Aristotelians, he holds that each of the seven planets and the fixed stars has its own orb; and furthermore, in discussing the notion of the prime mover, Albert has in his mind not only the mover of the outermost orb of the fixed stars, but also that of each orb<sup>23</sup>.

Here I will highlight two basic features which Albert ascribes to the notion of the prime mover: (1) the prime mover is the prime self-mover, and (2) the immobile principle within the prime mover is a separate substance. In paraphrasing *Physics*, VIII, he presents his idea of the prime mover in accordance with Aristotle's principles mentioned above: first, everything moved is moved by something else, and second, there must not be an infinite series of moved movers. From these two principles, he asserts the existence of a prime mover.

To clarify what Albert has in mind when he speaks of the prime mover, we shall examine his paraphrases of *Physics*, VIII, 1 and 5. Paraphrasing *Physics*, VIII, 1, where Aristotle discusses the eternal existence of motion, Albert addresses not eternal motion in general but that of celestial bodies, because he links eternal motion to the nature of the celestial region<sup>24</sup>. In dealing with Aristotle's idea of the prime mover in *Physics*, VIII, 1-6, he thus focuses on the principle of celestial motion, or the prime mover of the heavens.

Albert further deals with the nature of the prime mover in his paraphrase of *Physics*, VIII, 5. Instead of identifying the prime mover immediately with God, Albert defines it as the prime self-mover:

« All things moved are led back to a certain one primary motion, and this is the motion of something that is moved by itself by a mover intrinsic to itself, just as animals are moved by their soul »<sup>25</sup>.

Ptolemy and Aristotle, as he does not pay serious attention to Ptolemy's theories, such as his astronomical devices of eccentrics and epicycles. Cf. *De caelo et mundo*, 1.3.6, p. 67: « His omnibus igitur abiectis cum principe Alboali (= ibn Qurra) et cum Ptolemaeo, quibus non contrariatur Aristoteles, dicimus quod nullum corpus movetur ab alio corpore ... »; *De caelo*, 2.3.6, p. 153: « Sed quod hoc nullo modo sit verum, probant egregii viri in philosophia, sicut diximus, Aristoteles et Avicenna et Ptolemaeus et suus commentator et Meseellach in Libro de sphaera mota ».

<sup>23</sup> On Albert's basic conception of the celestial orbs and their numbers, see TWETTEN, *The Prime Mover in Albert's Physics* cit. See also GRANT, *Planets, Stars and Orbs* cit., pp. 271-323.

<sup>24</sup> TWETTEN, *The Prime Mover in Albert's Physics* cit., esp. p. 212.

<sup>25</sup> ALBERT, *Physica*, 7.2.5, p. 596, lin. 43-46: « omnia mota reducuntur ad aliquem motum unum et primum, et ille est motus alicuius, quod movetur a se motore intrinseco sibi, sicut animalia moventur ab anima ». Cf. TWETTEN, *Albert the Great on Whether Natural Philosophy Proves God's Existence* cit., p. 14.

In this passage, Albert conceives Aristotle's prime mover to be a self-mover, that is, a mover moved by itself or by a principle intrinsic to it, but not by another external mover. What is remarkable is that he also likens this prime mover to an animal. Although Aristotle does not mention animal souls in the *Physics*, Albert suggests that the prime mover is similar to terrestrial animals that are moved by their intrinsic motive principles, or souls.

Then Albert specifies the nature of the principle of celestial motion. In his view, the principle should be identified not with God but with the soul, in particular the intellect. This is why he argues that the prime self-mover, or prime celestial orb, consists of two principles, namely the immobile intellect and the moved body as follows:

« It is therefore necessary to say that what is moved by an immobile prime mover is a self-mover, just as an animal moves itself; and that the immobile mover is not extrinsic to it, just as the intellect moves a human being, although it is nonetheless immobile by itself and mobile accidentally. But the prime mover differs in this from the [human] intellect: it is mobile neither by itself nor by accident »<sup>26</sup>.

In this passage Albert discusses the nature of the celestial intellect by comparing it with the human intellect. In his view the two intellects differ from each other. While the human intellect is immobile in itself but accidentally mobile, the celestial intellect is not mobile in any respect. The difference between the two intellects is due to the fact that the human intellect cannot exist without its subject body, while the celestial intellect can exist in its own right. For Albert, although the celestial intellect moves celestial bodies, the former does not essentially depend on the latter. Thus, he describes this intellect as 'separated' from any corporeal substance:

« For, if we examine the primary self-mover, there will be only two components intrinsic to it: namely, the immobile mover, which is a separate and unmixed intellect; and what is only moved, which is the celestial body, whether it be the orb or star »<sup>27</sup>.

<sup>26</sup> ALBERT, *Physica*, 7.2.7, p. 602, lin. 41-47: « oportet ergo dicere, quod illud quod movetur a motore primo immobili, sit se ipsum movens, sicut animal movet se ipsum, et motor immobilis non sit extrinsecus ei, sicut intellectus movet hominem, cum tamen sit per se immobilis et per accidens mobilis. Sed motor primus in hoc differt ab intellectu, quod nec per se nec per accidens est mobilis ». Cf. TWETTEN, *The Prime Mover in Albert's Physics* cit., p. 212.

<sup>27</sup> ALBERT, *Physica*, 7.2.9, p. 608, lin. 8-14: « Si enim nos considerationem ponamus in primo movente se ipsum, non erunt sibi intrinseca componentia nisi duo, scilicet movens immobile, quod est intellectus separatus et immixtus, et id quod movetur tantum, quod est corpus caeleste,

Explaining Aristotle's notion of the prime mover, Albert argues that the prime mover should be understood as the prime self-mover. In his view, the prime self-mover consists of two principles: a separate intellect and a moved body. Although the relation of this intellect with the moved body can be likened to that of the human intellect with the human body, the celestial intellect has a status different from that of the human intellect, because the former does not need any subject body for its existence.

### I.2. Averroes' Prime Mover Argument Revisited

Now we should ask why Albert went beyond Aristotle's original arguments and advanced the view of the prime mover we saw above. To answer this question, I will focus on how Averroes' related arguments affected Albert's reading of *Physics*, VIII<sup>28</sup>.

The basic part of Averroes' view of the prime mover can also be found in his reading of Aristotle's *Physics*, VIII, 1 and 5. Commenting on *Physics*, VIII, Averroes also addresses the eternal movement of the heavens and the cause of it<sup>29</sup>. For him, Aristotle's idea of the eternity of motion was equivalent to the eternal movement of the celestial orbs. He then reflects on the principle of celestial motion. Interestingly, Averroes here explains the nature of the prime mover by referring to animals moved by their souls<sup>30</sup>. Indeed, before Albert, it was Averroes who discussed the prime mover by drawing a comparison between the celestial region and animals.

Why does Averroes compare the prime mover with an animal? Once we examine his commentary on *Physics*, VIII, 5, it will be evident that it is because, as we saw in the case of Albert, Averroes thinks that the prime mover is a prime self-mover, just like an animal moved by its intrinsic principle or soul. It should

sive illud sit orbis sive stella ». Cf. TWETTEN, *The Prime Mover in Albert's Physics* cit., p. 213. Cf. ALBERT, *Physica*, 7.2.9, p. 609, lin. 28-33: « The [prime] mover is not intermixed with the celestial body, as the powers of the soul are intermixed with the animated body, but rather [exists] as a separate intellect, which is not the activity of a body, even if it is the mover of a body in the manner mentioned above. [The mover] uses the body as an instrument and is not in it as in a subject » (*Motor corpori caelesti non est immixtus, sicut miscentur vires animae corpori animato, sed potius sicut separatus intellectus, qui nullius corporis est actus, licet per modum superius dictum sit motor corporis, qui corpore utitur sicut instrumento et non est in eo sicut in subiecto*).

<sup>28</sup> On Averroes' idea of the prime mover, see TWETTEN, *Averroes on the Prime Mover Proved in the Physics* cit.; ID., *Averroes' Prime Mover Argument* cit.

<sup>29</sup> AVERROES, *Long Commentary on Physics VIII*, comm. 5, Giunta, IV, f. 342A: « Et dixit hoc, quia declaratum est in principio Septimi, impossibile esse corpus movere corpus in infinitum, et ideo necesse est mundum habere primum motum, aut prima mota ... ».

<sup>30</sup> AVERROES, *Long Commentary on Physics VIII*, comm. 1, Giunta, IV, f. 338HI: « Principium enim motus de omnibus mobilibus est sicut anima de rebus vivis ».

be noted, as Twetten has already demonstrated, that the idea of the prime mover as a prime self-mover originates in Aristotle's *Physics*: « if then everything that is in motion is moved by something, and the first mover is moved but not by anything else, it must be moved by itself » (*Physics*, VIII, 5, 256a20-21)<sup>31</sup>. Following Aristotle, Averroes identifies the prime mover with the prime self-mover in order to escape from the infinite regress of movers as follows:

«I begin to declare that this prime moved [thing] should be moved by itself ... Since we supposed that ... the prime mover must be moved when it moves locally, for it is a body, it is necessary that it should be moved by itself, that is, by a principle existing in it»<sup>32</sup>.

In this passage Averroes clearly argues that the prime mover should be understood as a prime self-mover in which there is an intrinsic principle of its movement. But in explaining this idea in *Physics*, VIII, Aristotle does not refer to animals or their souls. In contrast, as we saw above, even in the beginning of his commentary on the *Physics*, VIII, 1, Averroes relates the principle of celestial motion to animal souls.

By laying emphasis on the prime mover as the prime self-mover, Averroes advances the view that the prime mover should be likened to an animal body moved by its psychic faculty. In his commentary on *Physics*, VIII, 5, he further describes the nature of the motive principle of the prime mover. He characterizes the immobile mover as « separated from the moved thing entirely » (*separatus a moto omnino*)<sup>33</sup>. For him, the unmoved principle of celestial motion is not a material form that needs a subject body, but is separated from the moved body. In the rest of his commentary on *Physics*, VIII, Averroes thus emphasizes that the unmoved part of the prime self-mover is neither corporeal nor a corporeal principle<sup>34</sup>. Yet, as Twetten has already noted, despite mentioning the separation of the mover from the moved body, Averroes in his *Long Commentary of the Physics* refrains from identifying the mover with the intellect<sup>35</sup>.

<sup>31</sup> Cf. TWETTEN, *Averroes' Prime Mover Argument* cit., esp. pp. 18-22.

<sup>32</sup> AVERROES, *Long Commentary on Physics VIII*, comm. 34, Giunta, IV, f. 373E: « ... incoepit declarare quod istud motum primum debet esse motum ex se ... Cum posuerimus quod ... primus motor necesse est ut moveatur, quando movet in loco, quia est corpus, necesse est ut moveatur ex se, id est, per principium existens in eo ». Cf. TWETTEN, *Averroes on the Prime Mover Proved in the Physics* cit., p. 114.

<sup>33</sup> AVERROES, *Long Commentary on Physics VIII*, comm. 37, Giunta, IV, f. 376L. Cf. TWETTEN, *Averroes' Prime Mover Argument* cit., p. 25.

<sup>34</sup> AVERROES, *Long Commentary on Physics VIII*, comm. 79, Giunta, IV, f. 427AB: « Ex hoc ergo patet corpus caeleste non componi ex materia et forma, et ipsum esse simplex, et quod forma ipsius non habet subsistere per ipsum, et quod ipsa est, quae movet ipsum, et quod in ipso non est forma materialis omnino ».

<sup>35</sup> TWETTEN, *Averroes on the Prime Mover Proved in the Physics* cit., pp. 132-133; *Id.*, *Averroes' Prime Mover Argument* cit., p. 26.

To sum up, interpreting Aristotle's prime mover argument, Averroes advanced the view that the prime mover should be identified with the prime self-mover, and that this self-mover consists of an immobile separate principle and moved body. This view was reiterated by Albert when he paraphrased Aristotle's *Physics*, VIII. Yet, going beyond Averroes' arguments in his *Long Commentary on the Physics*, Albert put forward the view that the separate substance should be the intellect — a view which, as we will see, was also held by Averroes in his commentaries on Aristotle's *On the Heavens* and *Metaphysics*. As David Twetten has rightly pointed out, at least with regard to the conception of the prime mover as prime self-mover and separated substance, «Albert's conclusions [about the notion of the prime mover] are entirely consonant with Averroes's»<sup>36</sup>. While Twetten's study of Albert's notion of the prime mover seems to end with this conclusion, our study will essentially start at this point. In what follows, I shall examine how, assuming this particular notion of the prime mover, Albert reproduced Averroes' arguments when he developed his idea of the celestial soul in his paraphrases of *On the Heavens* and *Metaphysics*.

## II. THE CELESTIAL SOUL IN ALBERT'S PARAPHRASES OF ARISTOTLE'S *ON THE HEAVENS* AND *METAPHYSICS*

Keeping in mind Albert and Averroes' idea of the prime mover, we shall next examine Albert's idea of the celestial soul in his paraphrases of Aristotle's *On the Heavens* and *Metaphysics*, where Aristotle did not explicitly explain the nature of the celestial soul. In this section, I will show how Albert developed this idea beyond what is implied in Aristotle's texts.

### II.1. *From the Animation of the Heavens to the Celestial Soul in Albert's De Caelo et Mundo*

In this section we will start with Albert's *De caelo et mundo*, his paraphrase of Aristotle's *On the Heavens* (hereinafter *DC*), where his most explicit reference to the concept of the celestial soul is to be found — specifically, his paraphrase of Aristotle's *DC*, II, 2 and II, 12. We will then examine Aristotle's arguments and conclude with Albert's interpretation.

In *DC*, Aristotle presents his basic vision of the universe, one which is divided into two different parts, the terrestrial realm and the celestial realm<sup>37</sup>. While

<sup>36</sup> TWETTEN, *The Prime Mover in Albert's Physics* cit., p. 218.

<sup>37</sup> On Aristotle's cosmology in *DC*, see F. SOLMSEN, *Aristotle's System of the Physical World*, Cornell University Press, Ithaca 1960, pp. 253-318; A. P. BOS, *On the Elements: Aristotle's Early Cosmology*, Van Gorcum, Assen 1973.

the former consists of the four elements (fire, air, water, and earth), the latter is made of a fifth element, *aether*. One may here raise a question: why does the celestial realm exhibit diverse movements of stars and various constellations, even though it is constituted by only one element? Aristotle realized the serious theoretical gap between his perception of the celestial realm and the apparent variety of the heavenly movements, and resolved this paradox in *DC*, II, 2 and II, 12 by appealing to the idea of the animation of the heavens.

Looking more closely at *DC*, II, 2, it is clear that Aristotle intended to answer one specific question: can spatial positions such as right, left, above, and below be applied to the heavens? (*DC*, II, 2, 284b6ff). This question relies on an important premise, stated at the very beginning of the treatise, namely that the study of nature concerns not only bodies and their magnitudes, properties, and movements but also their first principles (*DC*, I, 1, 268a2-3). Aristotle wondered whether these spatial positions could be counted among the first principles that are applicable to the heavens. In this context he argued that «these [spatial] principles have been analyzed in the discussion of the movements of animals, for the reason that they are proper to animal nature» (*DC*, II, 2, 284b13-14).

According to Aristotle, every non-living being, i.e. each of the four elements, has only one spatial principle within itself. For instance, fire and air display a natural but unique upward movement, while water and earth move only downward. The spatial principle that belongs to animals thus contrasts with those of the four elements, as they are naturally able to move in all directions (right, left, above, or below). Aristotle's earlier statement that the spatial principles could be applied to the heavens henceforth appeals to the idea of the animation of the heavens, as is illustrated by his claim that «the heaven is animate and possesses a principle of movement» (*DC*, II, 2, 285a29-30).

Let me turn to Albert's paraphrase of Aristotle's texts mentioned above. In his paraphrase of *DC*, II, 2, addressing the question of the application of the spatial principles to the heavens, Albert agrees with the Greek philosopher's claim<sup>38</sup>. Then, he goes on to elaborate on the concept of the celestial soul:

«When we say that the heaven has a soul and that a terrestrial animal has a soul, soul is taken equivocally, since what is called the soul in heaven is a separate substance, which is not the actuality of some body nor a part of a body»<sup>39</sup>.

<sup>38</sup> ALBERT, *De caelo et mundo*, 2.1.4, pp. 109-113.

<sup>39</sup> ALBERT, *De caelo et mundo*, 2.1.5, p. 114, lin. 4-9: «Cum autem dicimus caelum habere animam et animal terrestre habere animam, erit anima sumpta aequivoce, quia id quod vocatur anima in caelo, substantia est separata, quae non est actus alicuius corporis neque partis corporis ... ».

Since Albert unreservedly accepts Aristotle's claim that the heavens are animate or ensouled, he does not wonder whether the heavens have souls. Instead, he addresses a more particular question: are celestial souls of the same kind as those of terrestrial living beings? According to him, although the terminology is identical, celestial souls differ in essence from the terrestrial ones, and most importantly from the human soul. Following Aristotle's famous definition in *On the Soul*, Albert argues that the human soul amounts to « the actuality and perfection of an organic body having life in potentiality »<sup>40</sup>. In this sense, the human soul must be connected to a subject, or a body, and cannot exist without it. However, rather than repeating Aristotle's vague reference to the animation of the heavens, Albert interprets the Greek philosopher's notion as a specific doctrine about separate forms, and thus asserts that the celestial soul should be identified with a 'separate substance', which he will later identify with the intellect.

The nature of Albert's notion of the celestial soul becomes much more apparent in his paraphrase of Aristotle's *DC*, II, 12. In this chapter, Aristotle investigates, among other things, the question: why can each of the spheres other than the outermost sphere carry only one planet, while the outermost sphere carries many stars? In this context, he also deals with the variety in the movements of the planets. He then denies that celestial bodies are mere lifeless bodies, and argues that « we should rather conceive them as enjoying life and action » (*DC*, II, 12, 292a21-22). In other words, since stars and their orbs are living, they have a purpose in the variety of their motion, given their plural effects.

How does Albert elaborate on Aristotle's idea of celestial bodies as living entities? Paraphrasing the passage cited above, he argues as follows:

« [A1] We know from what has been written in the eighth book of the *Physics* that this mover is not a power residing in a body but is separated [from the body]. From what will be discussed in the third book of *On the Soul*, we know that every separate substance is a simple intellectual substance. From what has been discussed in the first book of the present study, we know that this [substance] causes the perpetual movement. Once these [points] are connected, we know that the heaven is moved by a living intellectual mover, and from these things we know that the heavens are in this way living with an intellectual life and have the action of the so-called soul, if it can still be called a soul »<sup>41</sup>.

<sup>40</sup> ALBERT, *De caelo et mundo*, 2.1.5, p. 114, lin. 15-16: « actus et perfectio corporis organici potentia vitam habentis ». Cf. ARISTOTLE, *On the Soul*, II, 1, 412a27-8: « The soul is an actuality of the first kind of a natural body having life potentially in it ».

<sup>41</sup> ALBERT, *De caelo et mundo*, 2.3.13, p. 172, lin. 31-42: « Scimus enim ex his quae in octavo *Physicorum* scripta sunt, hunc motorem non esse virtutem in corpore et esse separatum. Ex his autem quae in tertio *De anima* tradentur, sciemus omnem substantiam separatam esse intellectualem substantiam simplicem. Ex his autem quae in primo libro istius scientiae tradita

To explain how stars can enjoy life and action, Albert begins by referring to Aristotle's *Physics* and *On the Soul* and his interpretations of these texts. Assuming the preceding discussion in his *Physica*, he first defines the mover of celestial bodies as a 'separated' substance<sup>42</sup>. Next, he clarifies the nature of this substance by considering Aristotle's theory in *On the Soul*, III, and then argues that this mover should be an intellectual substance<sup>43</sup>. Finally, he concludes that the celestial orbs are moved by these separate intellects<sup>44</sup>. This quoted passage illuminates how Albert carries out his exegesis of Aristotle's works. In order to figure out the intention of the Greek Philosopher in ambiguous passages about the life of celestial bodies, Albert adopts relevant arguments taken from Aristotle's other works. For Albert, the notion of the intellect is not limited to psychology or the theory of the human intellect, but is also significant in his account of the nature of the celestial soul.

Before moving to Albert's paraphrase of *Metaphysics*, I shall address other important passages where he mentions the notion of the celestial soul in dealing with the effects or actions of stars and planets. Historians have tended to discuss the idea of the celestial soul with regard to the principle of celestial motion. The question to be solved in their studies was whether a celestial body is moved by an external mover (i.e. a transcendent unmoved mover) or by an internal motive principle (i.e. a celestial soul)<sup>45</sup>. The doctrine of the celestial soul has been reduced to the position that celestial bodies are moved by their internal principles.

Albert, however, applies the notion of the celestial soul even to his account of the structure of the universe. In this connection, I want to direct the reader's attention to a special digression: «the natural argument from the effects of the stars» (*ratio naturalis de effectibus stellarum*)<sup>46</sup>. Investigating the effects or influence of celestial bodies, Albert discusses the principal role of the sun. He introduces the opinion that «all the stars are illuminated by the sun» (*omnes stellae illuminantur a sole*), which he says is widely shared by both natural

sunt, scimus ipsum movere perpetuum motum, et ex his coniunctis scimus caelum esse motum a vivo motore intellectuali, et ex his scimus caelestia hoc modo esse viva vita intellectuali habentia operationem taliter dictae animae, si tamen anima dici potest».

<sup>42</sup> Cf. ALBERT, *Physica*, 8.4.7, pp. 650-651.

<sup>43</sup> ALBERT, *De anima*, 3.2.18, ed. C. STROICK, *Opera omnia* VII/1, Aschendorff, Münster 1968, p. 204.

<sup>44</sup> Unlike in his *De causis*, Albert does not distinguish between separate intellects and celestial souls in his paraphrases of Aristotle's *Physics*, *On the Heavens*, and *Metaphysics*. On the distinction between the two principles, see TWETTEN, *Albert the Great, Double Truth, and Celestial Causality* cit. See also BERTOLACCI, *Albert's Use of Avicenna and Islamic Philosophy* cit., esp. p. 610.

<sup>45</sup> Cf. WOLFSON, *The Problem of the Souls of the Spheres* cit.; J. A. WEISHEIPL, *The Celestial Movers in Medieval Physics*, «The Thomist», 24, 1961, pp. 286-326.

<sup>46</sup> ALBERT, *De caelo et mundo*, 2.3.5, pp. 150-153.

philosophers and astronomers<sup>47</sup>. Albert himself sides with this position<sup>48</sup>. Interestingly, reflecting on the special place that the sun occupies in the universe, he appeals to the notion of the celestial orb as an animal:

«Heat and spirit are not only sent to the outer members, but they are also absorbed by them and are digested and informed inside them. And likewise the sun's light is directed to [the other] stars and absorbed inside them. And this causes philosophers to compare the whole orb to a single animal. In that [orb] the principal member, which occupies the place of the heart, would be the sun, because the orb of the sun is located in the middle of the orbs by nature, just as the heart [is located] in [the middle of] the animal»<sup>49</sup>.

In order to explain how light is transmitted from the sun to other places, Albert draws a comparison between the structure of the universe and that of the animal body. In his view, the sun occupies a place like that of the 'heart' and serves as the source of celestial light, just as the heart in animal bodies produces all the innate heat and spirit<sup>50</sup>. In this vein, Albert alludes to the comparison of «the whole [celestial] orb to a single animal» (*totum orbem ... uni animali*), and ascribes this opinion to 'philosophers' without identifying his source.

In another passage in the same digression, Albert more clearly explains the link between the effects of stars and planets and the celestial intellects. In his view, stars and planets have their own actions or effects, which are controlled by the celestial intellect in a way similar to how the innate heat in an animal body is controlled by its soul:

«For the stars possess within themselves the power of the moving intellects, which are formal operative intellects, as is [the case for] the formal intellect of a craftsman with respect to the work he produces. And the actions of the stars are informed by these [moving intellects], just as the heat of a [bodily] complexion is informed by the powers of the soul. Thus [the stars] introduce those forms

<sup>47</sup> ALBERT, *De caelo et mundo*, 2.3.5, p. 153, lin. 4.

<sup>48</sup> On Albert on the sun as the unique source of celestial light, see GRANT, *Planets, Stars and Orbs* cit., p. 395.

<sup>49</sup> ALBERT, *De caelo et mundo*, 2.3.5, p. 153, lin. 18-25: «Calor et spiritus non tantum diriguntur ad exterius membrorum, sed imbibuntur eis et digeruntur et informantur in ipsis. Et ita est de lumine solis directo ad stellas et imbibito in ipsis. Et haec est causa, quod totum orbem philosophi assimilaverunt uni animali, in quo principale membrum et locum cordis habens sit sol, propter quod etiam solis orbis in medio orbium positus est a natura, sicut cor in animal».

<sup>50</sup> On the analogy between the sun and the heart in late medieval philosophy and theology, see T. RICKLIN, *Le coeur, soleil du corps: une redécouverte symbolique du XII<sup>e</sup> siècle*, «Micrologus», 11, 2003, pp. 123-143.

through their motion, just as natural heat induces the form of flesh and blood into food and body when [this heat] is informed by the power of the soul»<sup>51</sup>.

Albert appeals to the notions of the celestial intellect and the living orb in order to explain the actions of stars and planets. In particular, we should pay attention to Albert's expression that the actions of celestial bodies are 'informed' (*informantur*) by their intellects. As I have shown in another article, Albert often appeals to the notion of 'formative power' (*virtus formativa*) in explaining the generation of sublunary things<sup>52</sup>. In his view, this power comes from the celestial region, and with the assistance of this power, sublunary things can be generated or formed from elements or their mixtures. As the passage quoted above indicates, this power can serve as a formative principle of natural things because it originates in celestial intellects. For him, the notion of the celestial intellect occupies a crucial place even for his account of the structure of the universe and of the influence of celestial bodies. In the last section of this article, I will return to this reference by Albert to the conception of the celestial orb as an animal, and will also examine whom he has in his mind when he mentioned 'philosophers'.

## II.2. *The Celestial Soul in Albert's Paraphrase of Aristotle's Metaphysics Book Lambda*

As we saw above, despite speaking of the 'animation' of the heavens and of the life of stars and planets, Aristotle in *DC* did not explicitly explain the nature of the celestial soul. This absence is resolved by Albert's paraphrase, in which he discusses the celestial soul and identifies it with the intellect. An elaboration of this idea can also be found in his paraphrase of the *Metaphysics* (especially Book Lambda), where Aristotle puts forward the notion of the unmoved mover.

Aristotle develops his theological ideas in Book Lambda, the book in which, according to David Ross, « we find his only systematic essay in theology »<sup>53</sup>. One of the central theological ideas discussed in this book is none other than the so-called 'unmoved mover', which Aristotle also calls 'god'<sup>54</sup>. While the topic of the

<sup>51</sup> ALBERT, *De caelo et mundo*, 2.3.5, p. 152, lin. 29-37: « Habent enim stellae virtutem in se intellectuum moventium, qui sunt intellectus operativi formales, sicut est intellectus artificis formalis ad opus, quod producit, et actiones stellarum informantur ex illis, quemadmodum informatur calor complexionalis a virtutibus animae. Et ideo influunt per motum suum illas formas, sicut calor naturalis in cibum et corpus inducit formam carnis et sanguinis, quando informatus est a virtute animae ».

<sup>52</sup> A. TAKAHASHI, *Nature, Formative Power and Intellect in the Natural Philosophy of Albert the Great*, « Early Science and Medicine », 13, 2008, pp. 451-481.

<sup>53</sup> W. D. ROSS, *Aristotle*, Routledge, London 1995<sup>6</sup>, p. 184.

<sup>54</sup> On Aristotle's notion of the unmoved mover in *Metaphysics* Book Lambda, see among others JUDSON, *Heavenly Motion and the Unmoved Mover* cit.; M. FREDE, D. CHARLES eds., *Aristotle's Metaphysics Lambda: Symposium Aristotelicum*, Clarendon Press, Oxford 2000, esp. pp. 181-243.

unmoved mover is presented in *Metaphysics*, XII, 7, it is introduced in an earlier inquiry. Indeed, in chapter 6, Aristotle begins discussing the related idea of an 'unmoved substance'<sup>55</sup>. There, he already claims that there are «three kinds of substance, two of them natural and one unmovable», and that «regarding the latter we must assert that it is necessary that there should be an eternal unmovable substance» (*Metaph.*, XII, 6, 1071b3-b5). After having distinguished three kinds of substance (terrestrial, celestial, and unmovable), his discussion in this chapter focuses on the unmovable kind. What is the nature of this unmoved and eternal substance? He denies that this substance is a transcendental Idea as Plato held, and concludes that the unmoved substance should be taken as the «cause of the eternal motion» of the first heaven (*Metaph.*, XII, 6, 1072a16).

In the following chapter, Aristotle directs his attention to the issue of how this unmoved substance moves the heavens without itself being moved<sup>56</sup>. Interestingly, he solves this problem by appealing to the operation of our minds. According to Aristotle, the relationship between the unmoved mover and the heavens can be compared to that between intelligible or desirable objects and our minds. Just as intelligible or desirable objects make our minds think or desire them without themselves being moved, so the unmoved substance produces a motion as «the object of desire and the object of thought» (*Metaph.*, XII, 7, 1072a26). In his view, the unmoved substance does not move the heavens by its own action; the heavens undergo motion by aiming to know or by desiring the unmoved mover. Hence Aristotle's claim that the unmoved substance produces the heavenly motion «as being loved»<sup>57</sup>. Nevertheless, it is important to reemphasize that, although Aristotle likens the relationship between the unmoved mover and the heavens to that between intelligible objects and our minds, he makes no reference to the souls of celestial spheres.

Now let me turn to Albert's *Metaphysica*, his paraphrase of the *Metaphysics*. Paraphrasing *Metaphysics*, XII, 7 and carefully following Aristotle's initial arguments, he first accepts the existence of the three kinds of substance in this universe — terrestrial, celestial, and unmoved — and then examines the nature

<sup>55</sup> On the interpretation of Aristotle's *Metaphysics*, XII, 6, see E. BERTI, *Unmoved Mover(s) as Efficient Cause(s) in Metaphysics Lambda 6*, in FREDE, CHARLES eds., *Aristotle's Metaphysics Lambda* cit., pp. 181-206.

<sup>56</sup> On Aristotle's *Metaphysics*, XII, 7, see A. LAKS, *Metaphysics Lambda 7*, in FREDE, CHARLES eds., *Aristotle's Metaphysics Lambda* cit., pp. 207-243.

<sup>57</sup> ARISTOTLE, *Metaphysics*, XII, 7, 1072b1-4: «That that for the sake of which is found among the unmovables is shown by making a distinction; for that for the sake of which is both that for which and towards which, and of these the one is unmovable and the other is not. Thus, it [the unmoved substance] produces motion by being loved, and it moves the other moving things».

of unmoved substances<sup>58</sup>. He postulates that the unmoved substance moves inferior entities without itself being affected. However, the Dominican theologian introduces new ideas in an attempt to explain how the heavens can understand and desire the unmoved mover<sup>59</sup>. In his view, when an unmoved mover serves as an intelligible and desirable object for a celestial body, this undoubtedly implies that the celestial body is endowed with some kind of soul. Otherwise, how could it understand and desire the unmoved mover? Here, although Aristotle never mentions celestial souls, Albert gives an explicit account of the nature of the psychic faculties of celestial bodies.

This unambiguous view is presented in a special digression, one that deals with « the opinions of Peripatetics regarding the souls of the heavens »<sup>60</sup>. In this interesting digression, Albert asserts that, although all Aristotelian philosophers unanimously agree on the existence of celestial souls, they eventually diverge with regard to the nature of those souls<sup>61</sup>.

In this digression, Albert examines several major opinions regarding the nature of celestial souls. He first criticizes an ‘ancient position’ (*positio antiqua*) that he ascribes to Avicenna<sup>62</sup>. What distinguishes Avicenna’s position from those of other philosophers is that, in Albert’s view, he defines the celestial intellect as the ‘Giver of Forms’ (*dator formarum*), which is something totally distinct from the soul of celestial bodies<sup>63</sup>. The idea of the Giver of Forms was introduced by Avicenna, who identified it with the active intellect, or the intellect of the orb of the moon, which serves to impose substantial forms on sublunary matter. Albert then takes a stand against Avicenna’s position, because as an Aristotelian he believes that forms cannot exist without a subject matter.

Here, it should be emphasized that Albert’s critique of Avicenna’s position gives us an important insight into the relationship between the two thinkers. In the thirteenth century, the idea of the animation of the heavens was ascribed to Avicenna; for instance, in the *Errors of the Philosophers* (*Errores philosophorum*)

<sup>58</sup> ALBERT, *Metaphysica*, 11.2.5, p. 489, lin. 61-62: « Igitur prima substantia, quae est insensibilis, erit immobilis et movens tantum ».

<sup>59</sup> ALBERT, *Metaphysica*, 11.2.6, pp. 489-490.

<sup>60</sup> ALBERT, *Metaphysica*, 11.2.10, pp. 495-496: « opiniones Peripateticorum de animabus caelorum ».

<sup>61</sup> ALBERT, *Metaphysica*, 11.2.10, p. 495, lin. 3-5: « Secundum autem ea quae dicta sunt, procul dubio constat, quod omnes Peripatetici dixerunt orbes caelorum animas habere ... ».

<sup>62</sup> ALBERT, *Metaphysica*, 11.2.10, p. 495, esp. lin. 44-51.

<sup>63</sup> On Avicenna’s idea of the ‘Giver of Forms’ (*dator formarum*) and its rejection by Albert, see among others D. N. HASSE, *Avicenna’s ‘Giver of Forms’ in Latin Philosophy, Especially in the Works of Albertus Magnus*, in D. N. HASSE, A. BERTOLACCI eds., *The Arabic, Hebrew and Latin Reception of Avicenna’s Metaphysics*, De Gruyter, Berlin 2012, pp. 225-249. See also J. JANSSENS, *The Notions of Wahib al-Suwar (Giver of Forms) and Wahib al-Aql (Bestower of Intelligence) in Ibn Sînâ*, in PACHECO, MEIRINHOS eds., *Intellect et Imagination dans la philosophie médiévale cit.*, vol. I, pp. 531-562.

traditionally attributed to Giles of Rome, the author condemns Avicenna for erring «on the animation of the heavens. For, he held that the heavens were animated»<sup>64</sup>. Therefore, one may suppose that Albert found in Avicenna's works the idea of the celestial soul and then applied it to his paraphrase of Aristotle's works. But what he actually does is reject Avicenna's position by ascribing to him the view that the celestial intellect should be identified with the Giver of Forms. Thus, even if we find in Avicenna's works the notion of the animation of the heavens, it would be wrong to identify Avicenna as Albert's doctrinal source regarding this issue.

After rejecting Avicenna's position, Albert addresses another position, defended by al-Ghazali and Maimonides. According to Albert, the two philosophers attributed to the heavens not only souls but also separate intelligences, commonly called 'angels' that 'preside over' (*praesident*) the souls<sup>65</sup>. Albert rejects this position by denying that there are separate intelligences distinct from celestial souls. This rejection is also worth addressing, for Albert has been supposed to hold that celestial bodies have not only a celestial soul but also a separate intellect<sup>66</sup>. As we will see below, at least in his paraphrases of Aristotle's *Metaphysics*, Albert does not posit the celestial soul and separate intellect as two distinct principles.

Finally, Albert examines a third opinion, put forward by «certain prominent Aristotelians» (*quidam praecipui Peripateticorum*) who took a «middle way» (*via media*)<sup>67</sup>. These «prominent Aristotelians» remain anonymous. This third opinion accepts the premise that the heavens have souls but rejects al-Ghazali and Maimonides' proposal that they possess separate intelligences. These Aristotelians, Albert writes, identify the active intellect (*intellectus activus*) and desire as the sole faculties (*virtutes*) of celestial souls<sup>68</sup>. This middle way, to which

<sup>64</sup> GILES OF ROME, *Errores Philosophorum: Critical Text with Notes and Introduction*, ed. J. KOCH; trans. J. O. RIEDL, Marquette University Press, Milwaukee 1944, pp. 30-31.

<sup>65</sup> ALBERT, *Metaphysica*, 11.2.10, p. 495, lin. 52-56: «Alii autem de his qui posteriores fuerunt, dixerunt, quod caelestes quidem circuli habent animas, sed praeter animas sunt intelligentiae separatae operativae, praesidentes eis, et has intelligentias secundum vulgus angelos vocant». Although Albert ascribes this position to al-Ghazali and Maimonides, this position can be identified as Avicenna's. See D. JANOS, *Moving the Orbs: Astronomy, Physics, and Metaphysics, and the Problem of Celestial Motion according to Ibn Sina*, «Arabic Sciences and Philosophy», 21, 2011, pp. 165-214.

<sup>66</sup> Cf. TWETTEN, *Albert the Great, Double Truth, and Celestial Causality* cit., p. 339: «Now, according to the reasoning that Albert develops in his *De causis*, his celestial intelligence cannot be equated with the intellectual sphere-soul».

<sup>67</sup> ALBERT, *Metaphysica*, 11.2.10, p. 495, lin. 79ff.

<sup>68</sup> ALBERT, *Metaphysica*, 11.2.10, p. 495, lin. 74-79: «Quidam autem praecipui Peripateticorum media inter hos via inierunt et caelos quidem animas habere dixerunt et intelligentias ab ipsis animabus separatas non posuerunt, sed ipsas animas de virtutibus animae nihil habere nisi agentem universaliter intellectum et desiderium sive appetitum».

Albert adheres, thus regards the separate intellect as a faculty of the celestial souls without affirming two intellectual principles.

Albert's main concern when reading *Metaphysics* Book Lambda, where Aristotle discusses the unmoved substance, is not the substance itself but rather the nature of the celestial soul, an issue on which he digresses at great length. Given that Aristotle seems to assign psychic faculties to celestial bodies, arguing that the unmoved substance produces heavenly motion 'as being loved' by the celestial sphere, it seems only natural that Albert would advance the idea of the celestial soul. The conclusion that Albert's reading of Aristotle's texts naturally induced him to explicitly put forward the idea of the celestial soul is straightforward and reasonable. Nonetheless, as will be shown in the next section, a closer look at the sources that Albert had at his disposal will reveal the clear influence of Averroes' arguments.

### III. AVERROES' COMMENTARIES AS ALBERT'S DOCTRINAL SOURCE

Here the questions central to this article must be raised once again: why and how does Albert advance the idea of the celestial soul even though Aristotle never mentions it? Why and how does he interpret the notion of the unmoved mover in terms of the soul of celestial spheres? If we wish to answer these questions, we should avoid only addressing the transmission of philosophical ideas from preceding authors to Albert. For, although he presents his interpretation of Aristotle's ideas as his own, Albert often simply reproduces Averroes' Aristotelian teachings. In the following, I shall examine the impact of Averroes' commentaries on Albert.

First, I shall start by examining how Albert adopted Averroes' commentary on *DC*, II, 2 and II, 12. Before going into the texts of Averroes, however, I should mention a textual modification that occurred in the medieval Latin rendering of Aristotle's text that Albert used<sup>69</sup>. Although Aristotle in *DC*, II, 2 argues that heaven is 'animate' (ἔμψυχος), the medieval Latin version reads «heaven has a soul» (*caelum habere animam*)<sup>70</sup>. As Harry A. Wolfson has pointed out, this modification did not originate with the Latin translation, but goes back to the translation from Greek into Arabic<sup>71</sup>.

<sup>69</sup> On Averroes's *Long Commentary* on *DC*, in addition to Twetten's works mentioned above, see among others G. ENDRESS, *Averroes' De Caelo: Ibn Rushd's Cosmology in His Commentaries on Aristotle's On the Heavens*, «Arabic Science and Philosophy», 5, 1995, pp. 9-49.

<sup>70</sup> Cf. ALBERT, *De caelo et mundo*, 2.1.5, p. 114: «Caelum habet animam et est in eo principium motus». Albert used the so-called 'vetus translatio' of Aristotle's *DC*, which was translated from the Arabic by Gerard Cremona. See J. A. WEISHEIPL, *Albert's Works on Natural Science (libri naturales) in Probable Chronological Order*, in WEISHEIPL ed., *Albertus Magnus and the Sciences* cit., pp. 565-577.

<sup>71</sup> WOLFSON, *The Problem of the Souls of the Spheres* cit., p. 42. Cf. AVERROES, *Long Commentary* on *DC*, II, c. 13, ed. CARMODY, p. 287: «Celum habet animam et principium motus».

Prior to Averroes' exegeses, this (mis-)translation caused a shift in agenda for commentators, as Aristotle's interpreters no longer needed to clarify whether heaven was animate or not, but whether it had a soul or not. If they maintained that it did, they also had to explain what kind of soul Aristotle supposed heaven to have, and how the doctrine of the celestial soul would fit into Aristotle's philosophy in general. Indeed, before Albert, Averroes clearly argued that «if heaven has a soul and the principle of motion appears in it», then spatial principles such as right and left, above and below should be applied to the heavens<sup>72</sup>.

However, it would be wrong to think that Averroes gave close attention to the idea of the celestial soul due to this translation. Indeed, as I will demonstrate citing *DC*, II, 12, even if the mistranslation had not taken place, Averroes would have inquired into the nature of the heavenly souls. When Albert handled Aristotle's texts in the manner of quotation [A1], it seems as if he just read the Greek Philosopher's texts and then quoted several passages. And yet, what really happened in [A1] is that Albert reproduced Averroes' comments without mentioning his name. In his *Long Commentary* on *DC*, II, 12, Averroes writes as follows :

«Then the demonstration in this science is simply based on the propositions accepted from natural and theological science. For it has been explained in the *Physics* that the mover of the celestial bodies is not in matter, and it has been declared in *On the Soul* that what is of this kind is an intellect, and it has been declared in the first book [of *On the Heavens*] that the intelligible form is moved only by the desire that occurs through its intellect. Therefore, it is necessary that [the celestial body] has its own imagination, and that the celestial body has desire. And when [Aristotle] declared that [celestial bodies] necessarily have a soul, he said "because we understand them to be of such a disposition, etc.", namely, since we said that they are animate, it is necessary that the numerical diversity of their movement is not idle, as in the diversity of movement in the living beings that exist here »<sup>73</sup>.

<sup>72</sup> AVERROES, *Long Commentary* on *DC*, II, c. 13, ed. CARMODY, p. 287 : « Si caelum habet animam et apparet in eo principium motus ex parte propria, necesse est ut habeat dextrum et sinistrum ergo sursum et deorsum, ut declaratum est superius, et etiam habet ante et retro ».

<sup>73</sup> AVERROES, *Long Commentary* on *DC*, II, c. 61, ed. CARMODY, pp. 391-392 : « Demonstratio autem simpliciter in hac scientia fundata est super propositiones acceptas ex Scientia Naturali et Divinali : declaratum est enim in *Phisicis* quod motor corporum celestium non est in materia, et declaratum est in libro de Anima quod illud quod est huiusmodi est intellectus, et declaratum est in tractatu primo quod forma intelligibilis non movetur nisi secundum desiderium quod fit a suo intellectu, quapropter necesse est ut habeat suum imaginatum, et est corpus celeste habens desiderium. Et cum declaravit quod necesse est ut habeant animam, dixit Cum enim intelligimus ea huiusmodi dispositionis etc., idest cum opinari fuerimus ea esse animata, tunc necesse est ut motus eorum diversitas in multitudine non sit otiosa, sicut in diversitate motus in animalibus que sunt hic ». See also ENDRESS, *Averroes' De Caelo* cit., p. 18.

Comparing this with [A1], it is clear that Albert simply repeated Averroes' comments on Aristotle's texts. Before Albert, it was Averroes who unfolded the meaning of Aristotle's texts by considering all the key texts from other relevant works. Clarifying Aristotle's ambiguous arguments, Averroes reconstructed what the Greek Philosopher had in his mind<sup>74</sup>. Citing *Physics*, VIII, he characterized the mover of celestial bodies as an immaterial principle. Then, relying on *On the Soul*, he argued that this immaterial principle should be identified with the intellect<sup>75</sup>. In commenting on *DC*, II, 12, he was not satisfied by just explaining the meaning of Aristotle's texts in front of him. Summarizing other relevant texts related to the celestial intellect, he explored what Aristotle had in mind when he said that stars and planets have their own lives and actions. In doing so, Averroes eventually went beyond Aristotle's initial arguments.

Next I shall turn to Averroes' interpretation of *Metaphysics* Book Lambda<sup>76</sup>. As Charles Genequand has pointed out, in explaining Aristotle's idea of the unmoved mover, Averroes combined the arguments found in *Physics*, VIII and *On the Soul*, III, and then argued that the prime mover is in itself an intellect<sup>77</sup>. It is still controversial whether for Averroes the unmoved mover served only as a final cause, as Aristotle argued, or as an efficient cause as well as final cause<sup>78</sup>. Here, instead of pursuing Averroes' final position, I shall only focus on his texts that were adopted by Albert.

As we have seen, in paraphrasing Aristotle's *Metaphysics* and advancing his position on the celestial soul, Albert declared that he relied on 'prominent Aristotelians', whose names unfortunately remained unmentioned. Nonetheless, if we compare Albert's passage with Averroes', it is obvious that his doctrinal source was none other than the Cordovan Commentator's commentary:

<sup>74</sup> For Averroes' method in his commentaries on Aristotle, see H. HUGONNARD-ROCHE, *Méthodes d'argumentation et philosophie naturelle chez Averroès*, in A. ZIMMERMANN, I. CRAEMER-RUEGENBERG eds., *Orientalische Kultur und europäisches Mittelalter*, De Gruyter, Berlin 1985, pp. 240-253.

<sup>75</sup> Cf. Averroes (*Ibn Rushd*) of Cordoba: *Long Commentary on the De anima*, trans. R. TAYLOR, Yale University Press, New Haven 2009, pp. 300-303.

<sup>76</sup> Averroes' *Long Commentary on the Metaphysics* Book Lambda still awaits a detailed study. On the cosmological issues discussed in this treatise, see among others C. Genequand's introduction to his *Ibn Rushd's Metaphysics: A Translation with Introduction of Ibn Rushd's Commentary on Aristotle's Metaphysics, Book Lambda*, Brill, Leiden 1986, pp. 1-58.

<sup>77</sup> GENEQUAND, *Ibn Rushd's Metaphysics* cit., pp. 33-53.

<sup>78</sup> Cf. D. TWETTEN, *How the Prime Mover is an Efficient Cause in Aristotle, Alexander and Averroes*, in J. RACHAK ed., *Human Knowing in the Medieval Arabic and Latin Traditions*, forthcoming.

<p>ALBERT, <i>Metaphysica</i>, 11.2.10</p> <p>The Peripatetics said that these souls have only the intellect and desire among the faculties of the soul<sup>a</sup>.</p> <p><sup>a</sup> ALBERT, <i>Metaphysica</i>, 11.2.10, p. 496, lin. 26-28 : « Peripatetici dicunt animas has non nisi intellectum et desiderium de viribus animae habere ».</p>	<p>AVERROES, <i>Long Commentary on the Metaphysics</i>, XII, comm. 36</p> <p>From this it is fully clear that these [celestial] bodies are animated, and that among the faculties of soul they have only the intellect and the faculty of desire<sup>b</sup>.</p> <p><sup>b</sup> AVERROES, <i>Long Commentary on the Metaphysics</i>, XII, comm. 36, Giunta, VIII, f. 318H : « Et ex hoc quidem apparet bene haec corpora esse animata, et quod non habent de virtutibus animae nisi intellectum et virtutem desiderativam quae movet in loco ».</p>
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This parallel between the two authors' texts is a typical instance of Albert's use of Averroes' commentaries. In conceiving the nature of celestial souls in terms of intellect and desire, Albert declared that he relied on 'Peripatetics'. But once Albert's paraphrase is compared with Averroes' commentary, it becomes clear that Albert's 'Peripatetics' ought to be identified with Averroes. Indeed, Albert is not delving into an independent analysis of the meaning and implications of Aristotle's phrases and arguments; instead he is content to paraphrase what Averroes reconstructed as Aristotle's ideas.

When Albert examines Aristotle's idea of the animation of the heavens in *DC* and of the unmoved mover in *Metaphysics* in relation to the doctrine of the celestial soul, what he does is rehash Averroes' writings. Indeed, it was Averroes who, in explaining the nature of the celestial soul, appealed to the theory of the intellect that Aristotle had expounded in *On the Soul*. Just as Aristotle's psychology culminates in a detailed examination of the human intellect, so Averroes' cosmology is centered on his account of the intellect of rational bodies in the celestial region. Richard Taylor has already argued that Averroes' theory of the intellect occupied an important place in his commentary on the *Metaphysics*<sup>79</sup>. However, we need to understand why Averroes cited his theory of the intellect in this commentary. The Commentator appealed to the theory because he needed to explain the nature of the souls of celestial bodies.

Our study of Albert's reception of Averroes' commentaries has made it clear that the former reiterated the latter's view of the celestial intellect, especially in his paraphrases of *DC* and *Metaphysics*. Nevertheless, one crucial question

<sup>79</sup> R. C. TAYLOR, *Averroes on Psychology and the Principles of Metaphysics*, « Journal of the History of Philosophy », 36, 1998, pp. 507-523. See also H. A. DAVIDSON, *Alfarabi, Avicenna, and Averroes, on Intellect*, Oxford University Press, Oxford 1992, pp. 245-257.

remains to be solved: why do Averroes and Albert elaborate on the notion of the celestial soul or intellect, going beyond Aristotle's original writings? Aristotle certainly led them to develop this notion, but he only mentioned the idea in passing, without discussing at all the nature of the celestial soul or its role in the universe. In order to show why the two Aristotelian authors broadened the scope of this notion, in what follows I shall point out the influence of Alexander of Aphrodisias' cosmological teachings on Averroes and, subsequently, on Albert.

#### IV. ALEXANDER OF APHRODISIAS' COSMOLOGY AND ITS INFLUENCE ON ALBERT VIA AVERROES

Alexander of Aphrodisias was a distinguished ancient commentator on Aristotle's works. He served as the commentator *par excellence* until this position was later taken over by Averroes<sup>80</sup>. Past studies have already shown that Alexander's philosophy had a profound influence on Averroes<sup>81</sup>. But much more research is necessary concerning the relation between the two authors, particularly with respect to cosmological issues, and Alexander's influence on medieval Latin authors. In what follows, I will suggest that Alexander's teaching of divine providence served as an important background behind Albert and Averroes' constant appeal to the notion of the celestial intellect<sup>82</sup>.

First I shall show that Averroes appeals to the notion of the animation of the heavens in his discussion of divine providence<sup>83</sup>. In paraphrasing *Metaphysics*, XII, 7, where Aristotle deals with the notion of the unmoved mover, Averroes elaborates on the nature of the celestial soul. There, he starts by supporting the existence of circular and eternal movement in the celestial region<sup>84</sup>. He also

<sup>80</sup> See note 14.

<sup>81</sup> FREUDENTHAL, *The Medieval Astrologization of the Aristotelian Cosmos* cit.; ID., *The Astrologization of the Aristotelian Cosmos* cit.; GLASNER, *Averroes' Physics* cit., passim. See also C. GENEQUAND, *Alexander of Aphrodisias and Arabic Aristotelianism*, in H. LAGERLUND ed., *Encyclopedia of Medieval Philosophy: Philosophy Between 500 and 1500*, Springer, Dordrecht 2011, pp. 60-62.

<sup>82</sup> On the idea of divine providence in Alexander's works, see *Alexandre d'Aphrodise: Traité de la providence*, ed. and trans. P. THILLET, Verdier, Lagrasse 2003. See also P. MORAUX, *La doctrine de la providence dans l'École d'Aristote*, in his *D'Aristote à Bessarion: trois exposés sur l'histoire et la transmission de l'Aristotélisme grec*, Les Presses de L'Université Laval, Québec 1970, pp. 41-65; R. W. SHARPLES, *Alexander of Aphrodisias on Divine Providence: Two Problems*, « *Classical Quarterly* », 32, 1982, pp. 198-211; ID., *Aristotelian Theology after Aristotle*, in D. FREDE, A. LAKS eds., *Traditions of Theology: Studies in Hellenistic Theology, Its Background and Aftermath*, Brill, Leiden 2002, pp. 1-40.

<sup>83</sup> On Averroes' idea of divine providence, see R. C. TAYLOR, *Providence in Averroes*, in P. D'HOINE, G. V. RIEL eds., *Fate, Providence and Moral Responsibility in Ancient, Medieval and Early Modern Thought: Studies in Honour of Carlos Steel*, Leuven University Press, Leuven 2014, pp. 455-472.

<sup>84</sup> AVERROES, *Averroes on Aristotle's Metaphysics: An Annotated Translation of the So-Called Epitome* (hereafter, *Epitome of the Metaphysics*), ed. R. ARNZEN, De Gruyter, Berlin 2010, p. 140: « Now, if it is plain that there is eternal motion, and [if] eternal motion cannot exist other than as circular locomotion ... it is clear that this necessarily implies that there is an eternal locomotion ».

claims that this celestial motion derives not from natural forces but from an eternal mover<sup>85</sup>. In this context, Averroes refers to the animation of the heavens and its relation to divine providence:

«This is shown by what Alexander [of Aphrodisias] taught, namely that it is impossible that the noblest among animated [bodies] is non-animated. That the [celestial body] indeed is the noblest among animated [bodies] is [shown] by [the fact] that it governs them and is prior to them in nature ... Apparently, it even conceives that which is here [in the sublunary world], for otherwise, how could it possibly have this providence for the things here [in this world]? For that reason the ancients glorified it and looked upon it as deity»<sup>86</sup>.

Averroes argues that the celestial body or orb is the noblest living being. For him, the notion of the animated orb or of the celestial soul was not only linked to celestial motion; this notion was also crucial for him in understanding how the motion of celestial bodies serves as a principle that creates order in this natural world. In his view, since the celestial body has a soul, it is able to exert providential concern over the sublunary world. Interestingly, Averroes refers to Alexander of Aphrodisias in linking the animation of the heavens to the issue of divine providence. Indeed, the strong link between the celestial soul and divine providence was established by Alexander.

As Robert Sharples rightly explained, Alexander developed an Aristotelian notion of divine providence<sup>87</sup>. In antiquity, those who stood against Aristotle ascribed to him the doctrine of 'limited' divine providence, which means that providence extends only to the celestial region and excludes this natural world<sup>88</sup>. For, if Aristotle's god is limited to the unmoved mover of the *Metaphysics*, then this god does not act to move celestial bodies and does not exercise care for anything other than itself, including the natural world<sup>89</sup>.

<sup>85</sup> AVERROES, *Epitome of the Metaphysics*, p. 141: «And if there is an eternal motion, there must be one eternal mover; for if there were many, the motion would not be one [and] continuous».

<sup>86</sup> AVERROES, *Epitome of the Metaphysics*, p. 142.

<sup>87</sup> See note 82.

<sup>88</sup> On the 'limited' divine providence ascribed to Aristotle, see MORAUX, *D'Aristote à Bessarion* cit., pp. 41-65; R. SORABJI ed., *The Philosophy of the Commentators, 200-600 AD: A Sourcebook (Vol. II. Physics)*, Duckworth, London 2004, pp. 69-89.

<sup>89</sup> Cf. PS.-PLUTARCH, *Placita*: «Aristotle did not consider the entire cosmos to be ensouled and endowed with perception, reason, and intelligence or governed by Providence. For (he held) that the celestial beings participated in all these matters, beings clothed in ensouled and life-possessing spheres, but earthy reality in none of these, and that it partakes of order not directly but only accidentally», cited from A. P. BOS, *The Soul and Its Instrumental Body: A Reinterpretation of Aristotle's Philosophy of Living Nature*, Brill, Leiden 2003, pp. 265-266.

Against this background, Alexander developed an Aristotelian theory of divine providence that covered the sublunary world. In his view, it is not the unmoved mover that exerts providence but rather celestial souls. Celestial souls maintain the order of the natural world by means of the complex motions of stars and planets. Thus, in *On Providence*, Alexander argues that «[the celestial body] is the cause of the action of providence in regard to the things of this world»<sup>90</sup>.

Once Alexander's teaching is taken into account, it becomes much easier to understand why Averroes refers to the notion of the celestial soul in his discussion of divine providence. Following Alexander, Averroes also supposes that insofar as celestial bodies are intellectual substances, they can exert providential concern over this world. Although Averroes believes in God as the prime cause of the universe, he assigned to the celestial intellects the role of maintaining the order of nature.

Having made clear the link between the celestial soul and divine providence in Alexander and Averroes, let us return to Averroes' conception of the celestial orb as the noblest animated being. He probably found this conception in Alexander's *On the Principles of the Universe*:

«The divine [celestial] body in its entirety is ensouled since the divine [celestial] body is the best of [animated] bodies and there is no body better than the best of bodies ... What shows that the spherical body is the best of all bodies is the fact that it does not perish and that it moves with the motion which precedes all motions, and also that it moves with it eternally and regularly»<sup>91</sup>.

This passage clearly shows that Alexander considered the celestial body to be best of living beings. Averroes then developed this idea of Alexander's in his *De substantia orbis*, arguing that «it would be impossible that the celestial body should be the most noble of the living beings without possessing a soul»<sup>92</sup>. After all, as a follower of Alexander, the Commentator also believed that the celestial body is the noblest animal possessing an intellect.

Now we have reached a position from which we can understand why Albert also appeals to the notion of the celestial soul or intellect. It is certain that he did not have in his hands Alexander's cosmological treatises. His reading

<sup>90</sup> *Alexandre d'Aphrodise: Traité de la providence* cit., p. 114.

<sup>91</sup> ALEXANDER OF APHRODISIAS, *Alexander of Aphrodisias On the Cosmos*, ed. and trans. C. GENEQUAND, Brill, Leiden 2001, p. 47. Cf. ALEXANDER OF APHRODISIAS, *Quaestiones 1.1-2.15*, trans. R. SHARPLES, Duckworth, London 1992, p. 17: «Animate body is better than that which is inanimate, and the body that moves in a circle is the best [of bodies], and accordingly is also animate; for the best of all bodies is animate, and the body that moves in a circle is like this».

<sup>92</sup> AVERROES, *De substantia orbis*, ed. and trans. A. HYMAN, Medieval Academy of America, Cambridge 1986, p. 130.

of Averroes, however, led him to address the nature and role of the celestial intellects. Although Albert also believed in the Christian God and regarded Him as the prime cause of the universe, he reiterated Averroes' position when discussing the role of celestial intellects in maintaining the order of the nature. This is why he frequently argues that «every work of nature is the work of intelligence» (*omne opus naturae est opus intelligentiae*)<sup>93</sup>.

I will close this section by addressing once again Albert's comparison of «the whole [celestial] orb to a single animal» (*totum orbem ... uni animali*). As we saw in the last part of Section II.1, in his discussion of the effects and actions of stars and planets, he cites the comparison between celestial orbs and animals by anonymous 'philosophers' (*philosophi*). This does not immediately imply that Albert adopted via Averroes Alexander's notion of the celestial orb as an animal, since the notion itself can also be found in other Arabic Aristotelian authors like Avicenna<sup>94</sup>. However, having inherited the intellectual tradition originating in Alexander, who likened the celestial orb to an animal that exerts providential concern over the world, Albert attempted to explain how the celestial intellects control the effects of stars and planets and thereby exert influence over sublunary phenomena.

#### CONCLUSION

In this paper I have tried to explain why Albert appealed to the notion of the celestial soul or intellect, going beyond Aristotle's original arguments. To this purpose, instead of pursuing the inner logic of his arguments, I examined how he used Averroes' commentaries without mentioning his sources. In the first section, I examined Albert's notion of the prime mover in his paraphrase of Aristotle's *Physics*. Although the prime mover is sometimes identified with God as in Thomas Aquinas' proof of the existence of God, Albert conceived it as the prime self-mover, which consists of an immobile separate substance and the moved body. In doing so, he basically followed Averroes' prime mover argument. But instead of merely reproducing Averroes' argument, Albert identified the separate substance with celestial intellect.

<sup>93</sup> See J. A. WEISHEIPL, *The Axiom 'Opus naturae est opus intelligentiae' and its Origins*, in G. MEYER, A. ZIMMERMANN eds., *Albertus Magnus, Doctor universalis: 1280/1980*, Matthias-Grünwald-Verlag, Mainz 1980, pp. 441-464; L. HÖDL, *'Opus naturae est opus intelligentiae': Ein neuplatonisches Axiom im aristotelischen Verstandnis des Albertus Magnus*, in NIEWÖHNER, STURLESE eds., *Averroismus* cit., pp. 132-148; TAKAHASHI, *Nature, Formative Power and Intellect* cit.

<sup>94</sup> Cf. JANOS, *Moving the Orbs* cit., esp. pp. 187-188.

In the second section, I discussed how Albert developed the idea of the celestial soul in his paraphrases of Aristotle's *DC* and *Metaphysics*. Although Aristotle in *DC*, II, 2 and 12 only vaguely mentions the animation of the heavens, Albert discusses the nature and identity of the celestial soul by using arguments taken from Aristotle's *Physics*, VIII and *On the Soul*. Then, in paraphrasing Aristotle's *Metaphysics* Book Lambda, Albert specifies the nature of the celestial intellect by rejecting Avicenna's view that the intellect is identical with the Giver of Forms. He adopts his own position from the Peripatetic or Aristotelian philosophers, but he does not mention any particular names as his sources.

In the third section, I clarified Albert's use of Averroes' commentaries on *DC* and *Metaphysics* by comparing the two authors' texts. Indeed, before Albert, it was Averroes who developed the notion of the celestial intellect, going beyond Aristotle's original arguments. But even after having made clear Albert's reliance on Averroes, there remained a significant question: why did Averroes and Albert pay so much attention to this notion?

To answer this question, in the final fourth section I discussed the intellectual tradition of Alexander of Aphrodisias' cosmology, especially his doctrine of divine providence. Alexander established an Aristotelian doctrine of divine providence, in which the celestial bodies serve as principles that exert concern over the natural world. For him, the celestial bodies are the noblest living creatures, and are thus supposed to control the ordinary course of nature. Directly adopting Alexander's cosmology, Averroes also argued that the celestial bodies maintained the order of nature, although he believed in God as the prime cause of the universe. He also found in Alexander the conception of the celestial orb as a noble animal. Once Averroes' reception of Alexander's cosmology became clear, it became much easier for us to understand why Albert addressed the notion of the celestial intellect, going beyond Aristotle's original texts. Although it is historically indubitable that, unlike Averroes, Albert did not have Alexander's treatises in his hands and that he believed in the Christian God, Alexander's cosmological doctrine as presented by Averroes led Albert to expand Aristotle's notion of the animation of the heavens and rely on the conception of the celestial orb as a noble animal, even in the context of explaining the influence of celestial bodies.

## ABSTRACT

*Albert the Great as a Reader of Averroes: A Study of His Notion of the Celestial Soul in De Caelo et Mundo and Metaphysica*

In this paper I will explain why Albert the Great appealed to the notion of the celestial soul or intellect, going beyond Aristotle's original arguments. To this purpose, instead of pursuing the inner logic of his arguments, I will examine how he used Averroes' commentaries, especially in the former's paraphrases of Aristotle's *On the Heavens* and *Metaphysics*. Furthermore, in order to explain why the notion of the celestial soul or intellect was crucial for both authors, I will highlight an intellectual tradition going back to Alexander of Aphrodisias, in which the notion of the celestial intellect was closely linked to divine providence. I will conclude that Alexander's cosmological doctrine as presented by Averroes led Albert to expand Aristotle's notion of the animation of the heavens in his account of celestial motion and the influence of celestial bodies.

ADAM TAKAHASHI, Faculty of Philosophy, Toyo University, Tokyo  
adam.takahashi@gmail.com

