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**The Structure of Metaphysical Science
in the *Ilāhiyyāt* (*Divine Science*)
of Avicenna's *Kitāb al-Šifā'* (*Book of the Cure*)***

In the prologue of the *Kitāb al-Šifā'* (*Book of the Cure*, henceforth :*Šifā'*), his most important philosophical *summa*, Avicenna (Ibn Sīnā, before 980-1037 C.E.) compares his work with the canonical texts dealing with the disciplines he takes into account (i.e. logic, natural philosophy, mathematics and metaphysics) and representing, therefore, his sources. He says :

[a] There is nothing of account to be found in the books of the ancients which we did not include in this book of ours ; *if it is not found in the place where it is customary to record it, then it will be found in another place which I thought more appropriate for it.* [b] To this I added some of the things which I perceived through my own reflection and whose validity I determined through my own theoretical analysis, especially in the science of nature (*'ilm al-ṭabī'a*) and [the science] of what comes after nature (*mā ba'dahā*) — and even in logic, if you will. [c] It is customary to prolong [the discussion on] the principles of logic with material that does not belong to logic but only to the discipline of wisdom (*al-ṣinā'a al-ḥikmiyya*) [i.e. metaphysics] — I mean the first philosophy (*al-falsafa al-ūlā*); therefore *I avoided mentioning any of that [in logic] and wasting thereby time, and deferred it to its [proper] place* (emphasis mine)¹.

* I wish to thank sincerely Prof. D. Gutas (Yale University) for having read and discussed with me a first draft of this article. His insightful comments have greatly improved both the content and the style of the present work. I am, of course, solely responsible for its remaining flaws. This article constitutes the revised English version of a chapter of my doctoral dissertation (*Avicenna ed Averroè come fonti del Commento di Alberto Magno alla Metafisica di Aristotele : la dottrina dei trascendentali nei commentatori arabi di Aristotele e nel tredicesimo secolo latino*, Università degli Studi di Firenze, 1998, pp. 65-107 : 'La dottrina dei trascendentali in Avicenna'). The same topic has been the object of a lecture I presented in the Philosophy Department of the University of Pisa in December 1999. My gratitude goes to Prof. C. D'Ancona, who kindly invited me to give this lecture.

¹ IBN SĪNĀ, *Al-Shifā', al-Mantiq. 1. Al-Madḥal*, ed. M. EL-KHODEIRI, A. F. EL-EHWANI and G. C. ANAWATI, Cairo 1952 (henceforth :*Madḥal*), pp. 9, 17-10, 7; English translation (slightly modified) in D. GUTAS, *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works*, Brill, Leiden-New York-København-Köln 1988, p. 51 (cf. also the remarks at pp. 110-112).

What Avicenna states in this text is relevant, in different respects, for the structure that metaphysics receives in the *Šifā'*. Even though [c] could be regarded as an example of [a], I prefer to take [a] and [c] as stating two distinct facts. In [a] Avicenna stresses that the topics traditionally belonging to each one of the disciplines dealt with in the *Šifā'* (metaphysics included) are rearranged according to an innovative pattern. In [b] he underscores his personal contribution to some of the disciplines of the *Šifā'*, *in primis* natural philosophy ('science of nature') and metaphysics ('science of what comes after nature'), but also logic. In [c], finally, he shows that other structural changes are due to the transferral of some topics *from one discipline to another*: for instance, the discussion of the 'principles of logic'² is moved from logic itself to metaphysics — this latter being named now 'discipline of wisdom' (*al-šīnā'a al-ḥikmiyya*) and 'first philosophy' (*al-falsafa al-ūlā*)³.

In the present article, I will show that the structure of metaphysics in the *Šifā'* is original with respect to the traditional format of this discipline ([a]). How this structural originality interacts with doctrinal innovations ([b]) and a precise conception of metaphysics as *regina scientiarum* ([c]) is a topic worthy to be investigated, but only incidentally touched upon here.

The section of the *Šifā'* devoted to metaphysics is the *Ilāhiyyāt* [*Science of*] *Divine Things*)⁴. In the case of the *Ilāhiyyāt*, the 'books of the ancients' are

² GUTAS, *Avicenna* cit. p. 51 n. 3, pp. 265-267, regards some aspects of the doctrine of categories as the 'principles of logic' whose discussion is transferred from the section of the *Šifā'* dealing with logic to that dealing with metaphysics. The same applies also to some aspects of the doctrine of universals (cf. below, n. 100).

³ GUTAS, *Avicenna* cit., p. 51, n. 3, p. 253, regards these two expressions as referring to a single part of metaphysics (what he calls 'the Universal Science Part of Metaphysics') in opposition to the other parts of this discipline; I prefer to take them as generic expressions for metaphysics in its entirety in opposition to logic. For my interpretation of the textual evidence Gutas relies on (p. 253, n. 34), cf. below, n. 21. For the names of metaphysics and of its parts in the *Ilāhiyyāt*, cf. below, pp. 6-9.

⁴ IBN SĪNĀ, *Al-Shifā' Al-Ilāhiyyāt (1)*, edd. G. C. ANAWATI - S. ZAYED, Cairo 1960 (list of corrections in AVICENNE, *La Métaphysique du Shifā'*. Livres I à V. Traduction, introduction, notes et commentaires par G. C. ANAWATI, Vrin, Paris 1978, pp. 22-24); IBN SĪNĀ, *Al-Shifā' Al-Ilāhiyyāt (2)* edd. M. Y. MOUSSA - S. DUNYA - S. ZAYED, Cairo 1960. Unless otherwise noted, all the quotations from Avicenna are taken from the *Ilāhiyyāt*, according to pages and lines of this edition. I have checked the text of the *Ilāhiyyāt* established by the Cairo editors (= c) against ms. Oxford, Pococke 110 (= P110), ms. Oxford, Pococke 117 (= P117), ms. Oxford, Pococke 125 (= P125) and the Tehran lithograph (= t). P110 P117 and P125 are not taken into account in c, whereas t is incompletely reported in the apparatus (I wish to thank Prof. J. L. Janssens for having kindly put at my disposal a photostatic reproduction of t). I have recorded only the major variants. An important witness to the Arabic text is the Latin Medieval translation (= Latin translation), recently edited in the Avicenna Latinus series (AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina, I-IV*, ed.

essentially Aristotle's *Metaphysics*. The *Šifā'* in general, according to the prologue, is a work stemming from the Peripatetic tradition⁵; the *Ilāhiyyāt* in particular is portrayed as containing 'the science related to [Aristotle's] *Metaphysics*'⁶, of which it is a reworking, even though not a literal commentary.

The present study has three main aims. The first is descriptive: to give an account of the structure of metaphysics, as it is first outlined, then elucidated and finally concretely accomplished by Avicenna in the *Ilāhiyyāt*. The second aim is comparative: to show similarities and variations between the structure

S. VAN RIET, Peeters-Brill, Louvain-Leiden 1977; AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina, V-X*, ed. S. VAN RIET, Peeters-Brill, Louvain-Leiden, 1980; AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina, I-X. Lexiques*, cur. S. VAN RIET, Peeters-Brill, Louvain-la-Neuve-Leiden 1983). Useful in this respect is also M. Horten's German translation (= Horten), in so far as it is based on a manuscript tradition that is different from that on which c relies (*Die Metaphysik Avicennas enthaltend die Metaphysik, Theologie, Kosmologie und Ethik*, transl. M. HORTEN, Leipzig 1907, repr. Frankfurt a. M. 1960). An integral French translation of c is available in AVICENNE, *La Métaphysique du Šifā'. Livres I à V* cit.; AVICENNE, *La Métaphysique du Šifā'. Livres de VI à X*. Traduction, introduction, notes et commentaires par G. C. ANAWATI, Vrin, Paris 1985 (= Anawati). The first volume of Anawati contains a very provisional list of corrections of c. The *Ilāhiyyāt* is the fourth section of the *Šifā'*, after logic, natural philosophy and mathematics. For the recent bibliography on Avicenna, cf. J. L. JANSSENS, *An Annotated Bibliography on Ibn Sīnā (1970-1989)*, Leuven University Press, Leuven 1991; J. L. JANSSENS, *An Annotated Bibliography on Ibn Sīnā: First Supplement (1990-1994)*, Fédération Internationale des Instituts d'études médiévales, Louvain-la-Neuve 1999; TH.-A. DRUART, *Medieval Islamic Philosophy and Theology Bibliographical Guide (1994-1996)*, « Bulletin de Philosophie Médiévale », 39, 1997, pp. 187-189; H. DAIBER, *Bibliography of Islamic Philosophy*, Brill, Leiden-Boston-Köln 1999.

⁵ Avicenna states that it is 'more accommodating to my Peripatetic colleagues' than his *Al-Ḥikma al-Mašriqiyya (Eastern Philosophy)* or *Al-Mašriqiyyūn (The Easterners)*; cf. *Madḥal*, p. 10, 14, English translation in GUTAS, *Avicenna* cit., p. 52.

⁶ *al-ʿilm al-mansūb ilā mā baʿda l-ṭabīʿa (Madḥal*, p. 11, 11). D. Gutas (*Avicenna* cit., p. 54 and n. 9, p. 253) translates this expression as 'the science that belongs to metaphysics', and regards it as referring to the theological part of this discipline. On account of the context where this expression occurs, which is a description of the single parts of the *Kitāb al-Šifā'* in relation to the normative texts on which they are based, I am more inclined to take this expression as referring to metaphysics in general, with respect to its canonical text, i.e. Aristotle's *Metaphysics*. For other instances of *mā baʿda l-ṭabīʿa* as the title of Aristotle's *Metaphysics*, cf. IBN SĪNĀ, *Al-Taʿlīqāt ʿalā ḥawāšī Kitāb al-nafs (Marginal Notes on the De anima)*, in *Arisṭū ʿinda l-ʿArab*, ed. ʿA. BADAWĪ, Cairo 1948, p. 75, 11; IBN SĪNĀ, *Lettre au vizir Abū Saʿd. Editio princeps* d'après le manuscrit de Bursa, traduction de l'arabe, introduction, notes et lexique par Y. MICHOT, Al-Bouraq, Beirut 2000, p. 45, 12; p. 47, 8-9; p. 49, 1. Aristotle's *Metaphysics* is called *Kitāb mā baʿda l-ṭabīʿa* in Avicenna's autobiography (*The Life of Ibn Sina. A Critical edition and Annotated Translation* by W. E. GOHLMAN, State University of New York Press, Albany [New York] 1974, p. 32, 1), in IBN SĪNĀ, *Al-Mabdaʿ wa al-Maʿād*, ed. A. NŪRĀNĪ, Tehran 1984, p. 34, 5, in IBN SĪNĀ, *Risāla fi aqsām al-ʿulūm al-ʿaqliyya*, in *Tisʿ rasāʾil fi l-ḥikma wa-l-ṭabīʿiyyāt*, ed. Ḥ. ʿAṢĪ, Damascus 1986, p. 91, 1, and in IBN SĪNĀ, *Lettre au vizir Abū Saʿd* cit., p. 46, 5.

of metaphysics in the *Ilāhiyyāt*, which is surely Avicenna's masterpiece on metaphysics, and in the other Avicennian works dealing with this discipline. The third aim is historical: to show how the way of conceiving the structure of metaphysics evolved from Aristotle to Avicenna⁷.

I divide the exposition into six sections (§§1-6). In §1, §3 and §4 I describe the structure of metaphysics in the *Ilāhiyyāt*, taking into account each of the available pieces of evidence, namely: the outline of the structure of metaphysics in chapter I, 2 (§1) ; the programmatic description of the work itself in chapter I, 4 (§3); the very structure of the *Ilāhiyyāt* (§4). These three types of evidence do not completely overlap and are complementary to each other. §2 and §5 are devoted to comparing, as thoroughly as possible, the outline and the concrete structure of metaphysics in the *Ilāhiyyāt* with similar pieces of evidence in other Avicennian works. In the final section (§6) I focus on Avicenna's sources in this respect, and on his originality in the use of them.

§1. OUTLINE OF THE STRUCTURE OF METAPHYSICS: THEOLOGY, UNIVERSAL SCIENCE OF THE PROPERTIES OF 'EXISTENT', FIRST PHILOSOPHY

Already in the prologue of the *Šifā'* we are told that the *Ilāhiyyāt* consists of some 'divisions' or 'parts' (*aqsām*)⁸. We get a clue about the

⁷ The best treatment of this topic in recent scholarship is available in GUTAS, *Avicenna* cit., pp. 238-254. Gutas sees a common pattern in Avicenna's metaphysical *œuvre* (p. 253), which he applies to some of the single works (cf. pp. 18-19, 90, 253-254). This pattern is given by a main division of metaphysics in two parts (which he calls 'Universal science' and 'Theology' respectively, adopting Avicenna's terminology in the *Mašriqiyyūn*), each of which is further subdivided into two sub-sections. Thus Universal science consists of the study of the properties of 'existent' (a part which Gutas calls 'Being as such'), and the study of the principles of the other sciences, or 'First Philosophy', whereas Theology encompasses 'Natural Theology' and the so-called 'Metaphysics of the Rational Soul' (destiny of human souls after death and prophecy). My investigation differs from Gutas's in three respects. First, I take Universal Science as consisting not only of the doctrine of the properties of 'existent' and of First Philosophy (cf. §§1-2), but also of the investigation of the properties and species of 'one' and 'many' (cf. §§3-4). Second, I regard Theology as a single unit encompassing six sub-divisions (cf. §4). Third, I show how the structure of metaphysics takes up different configurations in Avicenna's single metaphysical works (cf. §5). C. HEIN, *Definition und Einteilung der Philosophie. Von der spätantiken Einleitungsliterature zur arabischen Enzyklopädie*, Peter Lang, Frankfurt a. M.-Bern-New York 1985, in the section of her work devoted to the divisions of the *Metaphysics* (pp. 306-313), takes into account Avicenna only incidentally (p. 312; pp. 315-316).

⁸ *Madḥal*, p. 11, 12; English translation in GUTAS, *Avicenna* cit., p. 54: 'Finally, I concluded the book with the science related to the *Metaphysics* in accordance with its parts (*aqsām*) and aspects' (slightly modified).

identity of these parts from a text occurring towards the end of chapter I, 2 of the *Ilāhiyyāt* (= Text 1), following the discussion of ‘existent’ (*mawǧūd*) as the subject-matter of metaphysics.

Text 1 : It is requisite for this discipline to be necessarily divided into some parts. [1* Theology] One of them is that [part] investigating [1.1*] the ultimate causes (*al-asbāb al-quṣwā*), since they are the causes of every caused existent with regard to its existence, and [1.2*] the First Cause (*al-sabab al-awwal*) from which emanates every caused existent *qua* caused existent — not *qua* existent in motion only or possessed of quantity only.

[2* Universal SciencePE] Another is that [part] investigating the accidents (*‘awāriḍ*) of ‘existent’.

[3* First Philosophy/Universal ScienceSE] Another is that [part] investigating the principles of the particular sciences. Since the principles of each science [that is] more specific are questions [discussed] in the science [that is] more general, as the principles of medicine in natural [science] and [the principles] of geodesy⁹ in geometry, it occurs therefore to this science that the principles of the particular sciences which investigate the states of the particular [aspects] of ‘existent’ become clear in it. Thus this science investigates the states (*aḥwāl*) of ‘existent’ and the things that are like its divisions (*aqsām*) and species (*anwā’*) until it reaches [a stage] specifying [such divisions and species] at which the subject-matter (*mawḍū’*) of natural science comes about — then [this science] delivers it [i.e. the subject-matter] to it [i.e. to natural science] — and [a stage] specifying [such divisions and species] at which the subject-matter (*mawḍū’*) of mathematics comes about — then [this science] delivers it [i.e. the subject-matter] to it [i.e. to mathematics] — and similarly in the other cases. Of what precedes that specification and is as its principle, on the contrary, [this science] investigates and determines the state (*ḥāl*).

Therefore [some] questions (*masā’il*) of this science regard the causes of ‘caused existent *qua* caused existent’ [= Theology], some other the accidents of ‘existent’ [= Universal SciencePE], some other the principles of the particular sciences [= First Philosophy/Universal ScienceSE]¹⁰.

⁹ Ar. *misāḥi*; cf. Latin translation, p. 15, 76: ‘mensurationis’; Horten, p. 23: ‘Planimetrie’; Anawati, p. 94: ‘mensuration’.

¹⁰ I, 2, pp. 14, 14-15, 8: wa-yalzamu ḥādā l-‘ilma an yanqasima ḍarūratan ilā aǧzā’in minhā mā yabḥaṭu ‘ani l-asbābi l-quṣwā fa-innahā l-asbābu li-kulli mawǧūdin ma’lūlin min ġihati wuǧūdiḥi wa-yabḥaṭu ‘ani l-sababi l-awwali llaḍi yafiḍu ‘anhū kullu mawǧūdin ma’lūlin bi-mā huwa mawǧūdun ma’lūlun lā bi-mā huwa mawǧūdun mutaḥarrikun faqaṭṭ aw mutakammimun faqaṭṭ wa-minhā mā yabḥaṭu ‘ani l-‘awāriḍi li-l-mawǧūdi wa-minhā mā yabḥaṭu ‘an mabādi’i l-‘ulūmi l-ǧuz’iyyati wa-li-anna mabādi’a kulli ‘ilmin aḥaṣṣa hiya masā’ilu fi l-‘ilmi l-a’ammi [P117 P125 t Latin translation Horten : l-a’lā c] miṭla mabādi’i l-ṭibbi fi l-ṭabī’iyyi wa-l-misāḥiyyi fi l-handasati fa-ya’riḍu iḍan fi ḥādā l-‘ilmi an yattaḍiḥa fiḥi mabādi’u l-‘ulūmi l-ǧuz’iyyati llati tabḥaṭu ‘an aḥwāli ǧuz’iyyati l-mawǧūdi [P117 P125 :

In Text 1 Avicenna envisages a three-fold division of metaphysics ('this discipline'), in connection with the status of 'existent' as its subject-matter. He assigns the causes of 'caused existent' to the first part of it (1*)¹¹, the 'accidents' ('*awāriq*') of 'existent' to the second part (2*), and the principles of the particular sciences to the third part (3*). Among the causes of 'caused existent', the 'ultimate causes' (*al-asbāb al-quṣwā*, 1.1*) and the 'First Cause' (*al-sabab al-awwal*, 1.2*) are mentioned. The connection of the third part of metaphysics with 'existent' is less obvious than in the other two parts. Both at the beginning of 3* and in the recapitulation, Avicenna portrays the third part of metaphysics as an investigation of the principles of the particular sciences. But in the course of 3* it becomes clear that the principles of the particular sciences are nothing else than their subject-matters. These latter, in their turn, are the result of the particularization of the 'states' (*aḥwāl*), 'divisions' (*aqsām*) and 'species' (*anwā'*) of 'existent', in a sort of Porphyrian tree going from the more universal to the more particular.

Immediately after Text 1, Avicenna deals with the three names Aristotle gives metaphysics in the homonymous work, namely 'First Philosophy' (πρώτη φιλοσοφία, *falsafa ūlā*), 'Wisdom' (σοφία, *ḥikma*) and 'Divine [Science]' (θεολογική [φιλοσοφία], *ilm ilāhī*)¹². Avicenna, along Aristotelian lines, clarifies the reasons why metaphysics has received these denominations. The three aforementioned names, in this passage as elsewhere in the

l-ḡuz'iyyāti l-mawḡūdi t : l-ḡuz'iyyāti l-mawḡūdati c] fa-hādā l-'ilmu yabḥaṭu 'an aḥwālī l-mawḡūdi wa-l-umūri llatī hiya laḥū ka-l-aqsāmi wa-l-anwā'i ḥattā yabluḡu ilā taḥṣīṣin yaḥduṭu ma'ahū mawḡū'u l-'ilmi l-ṭabī'iyyi fa-yusallimuhū ilayhī wa-taḥṣīṣin yaḥduṭu ma'ahū mawḡū'u l-'ilmi l-riyāḍiyyi fa-yusallimuhū ilayhī wa-ka-ḍālika fī ḡayri ḍālika wa-mā qabla ḍālika al-taḥṣīṣi wa-ka-l-mabda'i laḥū [P117 P125 Latin translation Horten : fa-ka-l-mabda'i t : ka-l-mabda'i c] fa-yabḥaṭu [P117 P125 Horten : nabḥaṭu c t Latin translation] 'anhū wa-yuqarriru [P117 P125 Horten : nuqarriru c t Latin translation] ḥālahū fa-takūnu iḍan masā'ilu hādā l-'ilmi ba'ḍuhā [ba'ḍuhā P117 P125 Latin translation Horten t : om. c] fī asbābi l-mawḡūdi l-ma'lūli bi-mā huwa mawḡūdun ma'lūlun wa-ba'ḍuhā fī 'awāriḍi l-mawḡūdi wa-ba'ḍuhā fī mabādi'i l-'ulūmi l-ḡuz'iyyati.

¹¹ 'Existent' in this case is specified as 'caused' in order to avoid the objection that, if 'existent' is the subject-matter of metaphysics, metaphysics itself cannot take into account the causes of 'existent', since no discipline takes into account the causes of its own subject-matter. Avicenna faces this objection in I, 2, p. 14, 1-13, immediately before Text 1.

¹² I, 2, p. 15, 9-17. Aristotle calls metaphysics πρώτη φιλοσοφία in *Metaph.* E, 1, 1026 a 24, 30 (cf. 1026 a 15-16), φιλοσοφία in Γ, 2, 1004 a 3, 1004 b 21-22, 1004 b 23, 1004 b 26, and mentions 'the philosopher' (ὁ φιλόσοφος) in Γ, 2, 1003 b 19, 1004 a 6, 1004 a 34, 1004 b 1, 1004 b 18; Γ, 3, 1005 a 20, 1005 b 6, 1005 b 11; he calls it σοφία in A, 1-2 *passim*, B, 2, 996 b 9, K, 1, 1059 a 18-34, K, 2, 1060 a 16, K, 4, 1061 b 33, Λ, 10, 1075 b 20 (cf. σοφία in B, 1, 995 b 12, σοφία πρώτη in Γ, 3, 1005 b 1-2); θεολογική in E, 1, 1026 a 19.

Ilāhiyyāt, refer to metaphysics in its entirety¹³. However, they do so on account of the parts of metaphysics Avicenna has described in Text 1. Thus, 'First Philosophy' has a special link to part [3*]. This is clear from a passage of chapter I, 1, where Avicenna assigns to first philosophy the function of verifying the principles of the other sciences¹⁴. 'Wisdom' and 'Divine Science', on the other hand, have a close connection with part [1*]. As to 'Wisdom', in the passage of I, 2 following Text 1 Avicenna mentions just God and the 'ultimate causes' (*al-asbāb al-quṣwā*) as its concern¹⁵. This is a reflex of Aristotle's description of 'Wisdom' as the science of the ultimate causes and principles in *Metaphysics* A, 1-2¹⁶. As to 'Divine Science', finally, in a passage

¹³ This is especially clear in the case of the name 'First Philosophy': metaphysics is named so, according to Avicenna, because it deals with the first thing in the order of existence – the First Cause – and the first things in the order of universality – existence and unity (I, 2, p. 15, 9-11). The name 'First Philosophy', therefore, originates from a consideration of metaphysics in its entirety, and is not restricted to only one of its parts. Metaphysics in its entirety is called 'first philosophy' also in I, 1, p. 3, 7; p. 5, 11; p. 5, 13; I, 3, p. 20, 6; cf. I, 2, p. 16, 16. The same is true for the name 'Divine Science', which – by Avicenna's own admission – is due to the fact that metaphysics is a science investigating immaterial things: now, among the immaterial things studied by metaphysics Avicenna places not only the 'principles' (*mabādi*) of 'existent', but also 'existent *qua* existent' itself and its accidents (I, 2, p. 15, 13-16). Metaphysics in its entirety is called 'divine science' (*'ilm ilāhī*) in I, 1, p. 4, 15; p. 5, 2; cf. I, 1, p. 4, 8; p. 4, 14, and VII, 2, p. 310, 13. Metaphysics is named 'divine science', among other places, in IBN SĪNĀ, *Al-Ta'liqāt 'alā ḥawāṣī Kitāb al-nafs* cit., p. 75, 9. As to 'Wisdom', Avicenna treats the expression 'Discipline of Wisdom' (*al-ṣinā'a al-ḥikmiyya*) as equivalent to 'First Philosophy' in the prologue of the *Šifā'* (cf. above, p. 1), where both expressions refer to metaphysics *tout court*. In the same vein has to be regarded the expression 'discipline of wisdom' occurring elsewhere in the *Šifā'*, as in the *Kitāb al-Nafs (Avicenna's De Anima [Arabic Text], being the psychological part of the Kitāb al-Shifā')*, ed. F. RAHMAN, Oxford University Press, London-New York-Toronto 1959; repr. 1970, p. 238, 6; cf. p. 207, 3; p. 237, 6; cf. GUTAS, *Avicenna* cit., p. 258 n. 40).

¹⁴ I, 1, p. 5, 5-10; cf. GUTAS, *Avicenna* cit., pp. 252-253.

¹⁵ I, 2, p. 15, 11-13. In VI, 5, p. 300, 7-8 – paraphrasing Aristotle's *Metaphysics* B, 2, 996 b 10-12 – Avicenna claims that, if (*law*) the sciences of the four causes were independent disciplines, then (*la*) the science of the final cause would be the most excellent and could be called 'wisdom' (*ḥikma*). Then, in the following sentence (p. 300, 8-9) he goes on to say: «As it is, however [i.e. even without there being separate disciplines for the four causes], that [i.e. the science of the final cause] still is the most excellent part (*afḍal aḡzā*) of this science». In the aforementioned passage of I, 2 and in I, 1, p. 5, 7-10, Avicenna qualifies wisdom both as 'science' (*'ilm*) and as 'knowledge' (*ma'rifa*). F. Rosenthal (*Knowledge Triumphant. The Concept of Knowledge in Medieval Islam*, Brill, Leiden 1970) states that, in the context of man's knowledge of God, «*'ilm* and *ma'rifah* came to be employed with little tangible distinction» (p. 134), and that «the two terms tended to blend» (p. 129). In the case of Avicenna this equivalence is witnessed by the opening sentence of the *Kitāb al-Naḡāt (Book of the Salvation*, ed. M. KURDĪ, Cairo 1938, p. 3, 8; cf. ed. M. FAḤRĪ, Beirut 1985, p. 43, 2).

¹⁶ A, 1, 981 b 27-29; A, 2, 982 b 9-10. On Avicenna's knowledge of book A of the *Metaphysics*, cf. below, p. 50.

of I, 3 Avicenna — albeit making clear that ‘Divine Science’ is a name of ‘this science’ (*hāqā l-‘ilm*), i.e. metaphysics, in its entirety — connects this name with the knowledge of God, or of what is absolutely separated from nature¹⁷. This again reflects what Aristotle says about ‘Divine Science’ in *Metaphysics* E, 1¹⁸. Part [2*] of metaphysics, on the contrary, does not receive any particular name.

In works other than the *Ilāhiyyāt*, the three parts of metaphysics, as outlined in Text 1, receive additional names. In the introduction of the *Kitāb al-Mabda’ wa-l-Ma’ād* (*Book of the Provenance and Destination*), Avicenna calls ‘Theology’ (*uṭūlūğiyā*) part [1*] of metaphysics. In this passage he says that the ‘section’ (*qism*) of metaphysics dealing with ‘[God’s] sovereignty’ (*rubūbiyya*), the ‘First Principle’ (*al-mabda’ al-awwal*) and the production of the universe is said to be known as ‘Theology’¹⁹. At the beginning of *Al-Ḥikma al-Mašriqiyya* (*Eastern Philosophy*), or *Al-Mašriqiyyūn* (*The Easterners*, henceforth : *Mašriqiyyūn*), on the other hand, he calls ‘Universal Science’ (*al-‘ilm al-kullī*) parts [2*]-[3*] of metaphysics, in connection with, and as a consequence of, calling ‘Divine science’ (*al-‘ilm al-ilāhī*) part [1*]²⁰. Therefore, even though Avicenna uses the expression ‘Universal Science’ in other works

¹⁷ I, 3, p. 23, 3-8. Analogously, in a passage of the *‘Uyūn al-Ḥikma* (*Elements of Philosophy*) metaphysics in its entirety is called ‘Primary Philosophy’ (*falsafa awwaliyya*), and the ‘part’ (*ğuz*) of it dealing with ‘[God’s] sovereignty’ (*rubūbiyya*) is named ‘Divine Philosophy’ (*falsafa ilāhiyya*). Cf. IBN SİNĀ, *‘Uyūn al-Ḥikma*, ed. ‘A. BADAWĪ, Cairo 1954, 2nd ed. Beyrouth 1980, p. 17, 5-6. Also in the Persian work *Dānešnāme-ye ‘Alā’ī* (*Philosophy for ‘Alā’-al-Dawla*) Avicenna calls ‘Divine Science’ and ‘Science of the Sovereignty’ the part of metaphysics investigating the unity of God. Cf. IBN SİNĀ, *Dānešnāme-ye ‘Alā’ī*, ed. M. MO‘EN, Tehran 1952; cf. the English translation by P. MOREWEDGE, *The Metaphysica of Avicenna*, Routledge and Kegan Paul, London 1973, p. 14.

¹⁸ E, 1, 1026 a 10-23.

¹⁹ IBN SİNĀ, *Al-Mabda’ wa al-Ma’ād* cit., p. 1, 8-9; English translation in GUTAS, *Avicenna* cit., p. 31; French translation in AVICENNE, *Kitāb al-mabda’ wa-l-ma’ād, Livre de la genèse et du retour*. Traduction française intégrale par J. R. MICHOT, version exploratoire, Bruxelles 1994, p. 5 (I wish to thank Professor Michot for having kindly put at my disposal a copy of his still unpublished translation). The terms ‘theology’ in this passage of *Al-Mabda’ wa-l-Ma’ād*, and the term ‘sovereignty’ in *‘Uyūn al-Ḥikma* and *Dānešnāme-ye ‘Alā’ī* (cf. above, n. 17), call to mind the title of the pseudo-Aristotelian *Theologia Aristotelis*, and reveal a Plotinian influence in Avicenna’s doctrine of the primary causes.

²⁰ IBN SİNĀ, *Manṭiq al-Mašriqiyyīn*, edd. M. AL-ḤAṬĪB - ‘A. AL-QATLĀ, Cairo 1910, p. 7, 5-6, English translation in GUTAS, *Avicenna* cit., p. 254; cf. S. PINES, *La ‘Philosophie Orientale’ d’Avicenne et sa polémique contre les Bagdadiens*, «Archives d’Histoire Doctrinale et Littéraire du Moyen Age», 27, 1952, p. 27 and n. 2; D. GUTAS, *Avicenna’s Eastern (‘Oriental’) Philosophy. Nature, Contents, Transmission*, «Arabic Sciences and Philosophy», 10, 2000, pp. 159-180 (esp. p. 167).

to refer to metaphysics in its entirety²¹, we can reasonably suppose that he does so with particular reference to parts [1*]-[2*]²².

On account of all this evidence and for the sake of brevity, in what follows I call 'Theology' part [1*] of metaphysics in Text 1, and 'First Philosophy' part [3*]. Since the 'accidents' of 'existent' in part [2*] have to be understood as 'proper accidents' or properties, I label part [2*] 'Universal ScienceP(roperties)E(xistent)'. First Philosophy takes into account the 'states', 'divisions' and 'species' of 'existent'. Among these terms, 'species' is the salient one (cf. below, Table 1). Hence I designate part [3*] of metaphysics not only as 'First Philosophy', but also as 'Universal ScienceS(pecies)E(xistent)'.

The tripartition of metaphysics witnessed by Text 1 (Theology, Universal SciencePE, First Philosophy/Universal ScienceSE) does not reflect the order of human knowledge; it rather corresponds to the degree of importance of the things investigated in these three parts. Theology is surely the most important part of metaphysics in Avicenna's mind. He emphasizes its relevance in other passages of the *Ilāhiyyāt*, as in I, 1, where the ultimate causes are named 'perfection' (*kamāl*) of metaphysics²³, and in I, 3, where the knowledge of God

²¹ IBN SĪNĀ, *Ta'liqāt*, ed. 'A. BADAWĪ, Cairo 1973, p. 41, 3; p. 129, 5, 12; p. 168, 27; p. 169; p. 171 (cf. J. JANSENS, *Les Ta'liqāt d'Ibn Sīnā. Essai de structuration et de datation*, in *Langages et philosophie. Hommage à J. Jolivet*, edd. A. DE LIBERA - A. ELAMRANI-JAMAL - A. GALONNIER, Vrīn, Paris 1997, pp. 109-122 [pp. 119-120]). In *Al-Mabda' wa al-Ma'ād* cit., p. 34, 3-5, Aristotle's *Physics* and *Metaphysics* are referred to with the expression 'in his [i.e. Aristotle's] two universal books' (*fī kitābayhī al-kullīyyaynī*); cf. transl. GUTAS, *Avicenna* cit., p. 263 ('in his two books dealing with universals'), transl. Michot, p. 25 ('dans ses deux livres généraux'). Gutas (*Avicenna* cit., p. 253 and n. 34) regards the expressions 'universal science' (*al-'ilm al-kullī*) and 'first philosophy' (*al-falsafa al-ūlā*) in chapter 13 of *Hāl al-Nafs al-Insāniyya* (*The State of the Human Soul*) – in IBN SĪNĀ, *Aḥwāl al-Nafs*, ed. A. F. AL-AHWĀNĪ, Cairo 1952, p. 114, 5 – as referring to a part of metaphysics other than that referred to with the expression 'divine discipline' (*al-ṣinā'a al-ilāhiyya*) in the previous chapter of the work (p. 113, 11). I am more inclined to consider *al-'ilm al-kullī* and *al-falsafa al-ūlā* as referring to metaphysics in its entirety in opposition to the 'particular sciences' (*'ulūm ḡuz'iyya*) mentioned in the very same chapter (p. 114, 4). Cf. the French translation of the relevant passage in J. MICHOT, *Prophétie et divination selon Avicenne. Présentation, essai de traduction critique et index de l'« Épître de l'âme de la sphère »* «Revue Philosophique de Louvain», 83, 1985, pp. 507-535 (esp. p. 513).

²² In the same passage of *Al-Mašriqiyyūn* (ed. cit., p. 7, 6-7) Avicenna remarks that the distinction between 'Divine Science' and 'Universal Science' is not generally acknowledged. This distinction, in fact, as far as terminology is concerned, is taken from al-Fārābī's *Fī Aḡrāḍ al-Ḥakīm fī kull maqāla min al-kitāb al-mawsūm bi-l-ḥurūf* (*On the Purposes of the Sage [=Aristotle] in each treatise of the book named by means of letters [=the Metaphysics]*), in *Alfārābī's philosophische Abhandlungen*, ed. F. DIETERICI, Brill, Leiden 1890, p. 35, 8-19; cf. GUTAS, *Avicenna* cit., pp. 253-254. But in this work of al-Fārābī *al-'ilm al-ilāhī* is a part of *al-'ilm al-kullī*, whereas in this passage of Avicenna both are independent, although related, parts of metaphysics (cf. below, §6).

²³ I, 1, p. 9, 10.

is called 'end' (*ḡāya*), 'aim' (*maqṣūd*), 'perfection' (*kamāl*) and 'the noblest part' (*ašraf aḡzā*) of this discipline²⁴. To these, other denominations of Theology — such as 'completion' (*tamām*) in the opening lines of the *Kitāb al-Hidāya (Book of the Guidance)*²⁵, and 'fruit' (*ṭamara*) in the introduction of the *Kitāb al-Mabda' wa-l-Ma'ād*²⁶ — can be added.

The exact nature and identity of the items mentioned in Text 1 is clarified by what Avicenna says in chapter I, 1 and in three passages of chapter I, 2. For the sake of clarity, I compare Text 1 with all these texts in the following table.

Table 1

<i>Ilāhiyyāt</i> Text 1	<i>Ilāhiyyāt</i> I, 1	<i>Ilāhiyyāt</i> I, 2, pp. 10, 5-13, 9	<i>Ilāhiyyāt</i> I, 2, p. 13, 12-19	<i>Ilāhiyyāt</i> I, 2, p. 14, 1-13
[1* = Theology] ultimate causes first cause	four causes God		the things that are consequent to it (<i>al-umūr allatī talḥaḡuhū</i>) insofar as it existent without condition:	
[2* = Universal SciencePE] accidents of 'existent':		[ii] proper accidents or accidents of 'existent': one <i>qua</i> one and many <i>qua</i> many coincident and different contrary	[ii] proper accidents of 'existent': one and many	a c c i d e n t s , t h i n g s t h a t o c c u r o r p r o p e r a c c i d e n t s o f 'e x i s t e n t'

²⁴ I, 3, p. 23, 3-8.

²⁵ IBN SINĀ, *Kitāb al-Hidāya*, ed. M. 'ABDUH, Cairo 1974, p. 232, 5.

²⁶ *Al-Mabda' wa al-Ma'ād* cit., p. 1, 8-9.

		potentiality and actuality universal and particular possible and necessary	
			principle
[3*= First Philosophy/ Universal ScienceSE] principles of the particular sciences = subject- matters of natural philosophy, mathematics etc. states, divisions and species of 'existent'		subject-matters of natural philosophy, mathematics and logic [i] states and accidents of 'existent': substances, quantities and other categories	[i] species: substance, quantity and quality

Chapters I, 1-2 of the *Ilāhiyyāt* are mainly devoted to the question of what the 'subject-matter' (*mawḍū'*) of metaphysics is²⁷.

(I, 1) In chapter I, 1 Avicenna negatively proves that neither God nor the four Aristotelian causes are the subject-matter of metaphysics. The main reason is

²⁷ On this topic in Avicenna, see M. FAKHRY, *The Subject-Matter of Metaphysics : Aristotle and Ibn Sina (Avicenna)*, in *Islamic Theology and Philosophy: Studies in Honor of G. F. Hourani*, ed. M. E. MARMURA, State University of New York Press, Albany, N. Y. 1984, pp. 137-147; H. A. DAVIDSON, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy*, Oxford University Press, New York-Oxford 1987, pp. 284-288 (critical review by R. Taylor, «Speculum», 65, 1990); A. HASNAWI, *Aspects de la synthèse avicennienne*, in *Penser avec Aristote*, ed. M. A. SINACEUR, Erès, Toulouse 1991, pp. 227-244; G. ROCCARO, *Il soggetto della scienza prima. Ibn Sīnā, Aš-Šifā'. Al-ilāhiyyāt, I. 1-2*, «Giornale di Metafisica», 16, 1994, pp. 69-82; R. RAMÓN GUERRERO, *Sobre el objecto de la metafísica según Avicena*, «Cuadernos de Pensamiento», 10, 1996, pp. 59-75. A detailed description of chapters I, 1-2 is available in A. BERTOLACCI, *Le citazioni implicite testuali della Philosophia prima di Avicenna nel Commento alla Metafisica di Alberto Magno: analisi tipologica*, «Documenti e Studi sulla Tradizione Filosofica Medievale», 12, 2001, pp. 179-274 (esp. pp. 259-261; pp. 230-232).

that their existence is proved, not assumed, by metaphysics. In this context, God is also named 'First Cause' (*al-'illa al-ūlā*)²⁸, whereas the four causes are called 'ultimate causes' (*al-asbāb al-quṣwā*)²⁹. Theology in Text 1 is devoted to just these two topics. The ultimate causes and the First Cause mentioned in Text 1 [1*] are, therefore, respectively the four Aristotelian causes and God.

(I, 2, pp. 10, 6-13, 9) In chapter I, 2 Avicenna positively argues that the subject-matter of metaphysics is 'existent *qua* existent'. The first part of his argumentation is of particular interest here. Avicenna starts saying that the investigation (*baḥṭ*)³⁰ of the subject-matters of natural philosophy, mathematics and logic, in so far as these subject-matters are existents, belongs to metaphysics. Avicenna calls the subject-matters of these disciplines, considered in this perspective, 'states' (*ḥālāt*) and 'accidents' ('*awāriḍ*') of 'existent', and identifies them with the categories, among which he expressly mentions substance and quality³¹. Notwithstanding the presence of the term 'accidents', employed here in a loose meaning³², the mention of the 'states', and especially the reference to the subject-matters of the particular sciences, indicate that this investigation corresponds to part [3*] of Text 1. The 'states', 'divisions' and 'species' of 'existent' in Text 1 [3*] are therefore the categories.

In the same context, Avicenna also points out that there are some notions that are common to, but not investigated by, the other sciences, like 'one *qua* one', 'many *qua* many', 'coincident' (*muwāfiq*)³³, 'different' (*muḥālif*), 'contrary' (*ḍidd*) and so on. These notions are called 'proper accidents' ('*awāriḍ ḥāṣṣa*')³⁴, that is properties, or simply 'accidents' ('*awāriḍ*')³⁵ of 'existent *qua* existent'. They cannot but represent the 'accidents' mentioned in Text 1 [2*].

(I, 2, p. 13, 12-19) After having proved in detail that 'existent *qua* existent' is the subject-matter of metaphysics, Avicenna provides a sort of summary of

²⁸ I, 1, p. 5, 5-6. Cf. the denomination 'First Principle' (*al-mabda' al-awwal*), in I, 1, p. 7, 5.

²⁹ I, 1, p. 7, 8; p. 9, 6; p. 9, 9-10; cf. I, 2, p. 15, 13.

³⁰ I, 2, p. 11, 3, p. 11, 6.

³¹ I, 2, p. 12, 11-14.

³² The term 'accidents' means all the relevant attributes of a subject-matter in I, 2, p. 10, 15-16; I, 2, p. 15, 15. In I, 8, p. 54, 6-15, Avicenna explains that the subject-matters of the other disciplines, in so far as they are 'states occurring to 'existent'' (*aḥwāl ta'riḍu li-l-mawḡūd*) and 'divisions' (*aqsām*) of it, are 'accidents' ('*awāriḍ*') in metaphysics; thus, a specific substance that is subject-matter of another discipline is, at the same time, 'division' (*qism*) of the metaphysics' subject-matter and 'accident' ('*āriḍ*') 'in a certain way' (*bi-naḥwin mā*) of it.

³³ I, 2, p. 13, 1. The term *muwāfaqa* occurs also in al-Fārābī (cf. below, Text 12.3), and is translated as 'coincidence' by GUTAS, *Avicenna* cit., p. 242.

³⁴ I, 2, p. 13, 3. Also in I, 5, p. 35, 1, the 'accidents that are proper to it' (i.e. to 'existent') ('*awāriḍ taḥuṣṣuhū*) are distinguished from the categories.

³⁵ I, 2, p. 13, 7.

the proof. He says that substance, quantity and quality are 'as the species' (*ka-l-anwā*) of 'existent *qua* existent'³⁶ (where the presence of 'as' is due to the fact that 'existent' is not a genus, and hence the categories, properly speaking, are not its species). In this context, Avicenna uses four times the verb 'to be divided' (*inqasama*) to clarify the division of 'existent' into the categories, and the division of substance into 'man' and 'non-man'³⁷. This further confirms that the categories are the 'states', 'divisions' and 'species' of 'existent' mentioned in Text 1 [3*]. In the list of the 'proper accidents' of 'existent *qua* existent', besides 'one' and 'many', Avicenna includes now also 'potency', 'act', 'universal', 'particular', 'possible' and 'necessary'³⁸. Both the categories and these concepts are named 'things that are consequent to it (*talḥaḥū*) insofar as it is existent without condition'.

(I, 2, p. 14, 1-13) Finally, in the answer to an objection moved against 'existent' as subject-matter of metaphysics, Avicenna maintains that 'principle' (*mabda*) is one of the 'accidents' ('*awāriḍ*) of 'existent'³⁹, a 'thing that occurs' (*amr āriḍ*) to it⁴⁰, and one of the 'proper accidents' ('*awāriḍ ḥāṣṣa*) of 'existent'⁴¹. This corroborates the identity between 'accidents' and 'proper accidents' in Text 1 [2*], and allows to include 'principle' in the list of the properties of 'existent'.

The outcome of the inspection of these three passages of chapter I, 2 is two-fold. First, from the point of view of terminology, the 'accidents' of 'existent' in Text 1 [2*] are more precisely defined as 'proper accidents' or properties in the other passages. Similarly, the principles of the particular sciences, namely their subject-matters (*qua* existents), which are also called 'states' and 'divisions' of 'existent' in Text 1 [3*], are finally declared to be essentially the 'species' of 'existent'⁴². Second, from the point of view of doctrine, the properties of

³⁶ I, 2, p. 13, 14.

³⁷ I, 2, p. 12, 14-16.

³⁸ I, 2, p. 13, 16-18.

³⁹ I, 2, p. 14, 4.

⁴⁰ I, 2, p. 14, 5.

⁴¹ I, 2, p. 14, 5-6.

⁴² The other two terms are not consistently used by Avicenna. As to the 'states', in I, 1, p. 4, 12 they appear to include both the species and the properties investigated by a discipline. In chapter I, 3 of the *Naḡāt*'s metaphysical section (ed. KURDĪ, p. 199, 6-8), 'states' are other than the 'species': they are portrayed as the result of the division of something by means of its '(proper) accidents', whereas the 'species' as the result of the division of something by means of its 'specific differences' (*fuṣūl*). As to the 'divisions', the same chapter of the *Naḡāt* (p. 199, 10-14) clarifies that the process of 'division' (*inqisām*) of 'existent' into the categories (i.e. its 'species') by means of the specific differences is only one of the two types of division that Avicenna envisages: the other is the division of 'existent' into its 'accidental sections' (*fuṣūl 'aradiyya*) or 'types' (*aṣnāf*) by means of its '(proper) accidents'. For 'active' and 'passive' (two proper accidents) as 'divisions' of 'existent', cf. below, p. 24.

'existent' are identified with a series of concepts ('one', 'many', 'coincident', 'different', 'contrary', 'potency', 'act', 'universal', 'particular', 'possible' and 'necessary', 'principle'), and the 'species' of 'existent' are said to be the categories.

To sum up: In the course of chapters I, 1-2 Avicenna takes into account, from different perspectives, four topics: (i) God as the First Cause; (ii) the four Aristotelian causes as the ultimate causes; (iii) the categories as the species of 'existent'; (iv) a group of concepts as the properties of 'existent'. He calls all these topics 'objects of inquiry' (*maṭālib*) of metaphysics⁴³. If we take (i) and (ii) together, and we put (iii) after (iv), these four *maṭālib* are nothing else than the three questions (*masā'il*) Avicenna mentions in the closing sentence of Text 1. They constitute three parts of metaphysics, which can be designed as Theology, Universal SciencePE and First Philosophy/Universal ScienceSE.

§2. OUTLINES OF METAPHYSICS IN OTHER AVICENNIAN WORKS

Text 1 and its afferents, as described in Table 1, can be compared, outside the *Ilāhiyyāt*, with two other Avicennian texts having the same character of outlines of metaphysics. The first of these texts is the section on metaphysical knowledge in the eighth chapter of the *Maqāla fī l-Nafs 'alā sunnat al-iḥtiṣār* (*Compendium on the Soul*, henceforth: *Maqāla*), the earliest philosophical treatise by Avicenna⁴⁴. The second text is the section on the fundamental (as opposed to the derivative) divisions of metaphysics in the *Risāla fī Aqsām al-'Ulūm al-'Aqliyya* (*Treatise on the Division of the Intellectual Sciences*, henceforth: *Risāla*), a writing specifically devoted to the classification of the sciences⁴⁵.

⁴³ For God and the four causes as 'object of inquiry' (*maṭlūb*) cf. respectively I, 1, p. 5, 17, and I, 1, p. 9, 10. Cf. the use of *maṭlūb* and *ḡayr maṭlūb* as adjectives in I, 1, p. 6, 2-5; p. 6, 9-10. The species and properties of 'existent' are called 'objects of inquiry' (*maṭālib*) in I, 2, p. 13, 13.

⁴⁴ The Arabic text of this work is available in S. LANDAUER, *Die Psychologie des Ibn Sīnā*, «Zeitschrift der Deutschen Morgenländische Gesellschaft», 29, 1875, pp. 335-418 (with German translation), and IBN SĪNĀ, *Aḥwāl al-Nafs*, ed. AL-AHWĀNĪ, pp. 145-178. English translation and study of chapter 8 (Landauer, pp. 361-365, al-Ahwānī, pp. 168-171) in GUTAS, *Avicenna cit.*, pp. 16-19.

⁴⁵ IBN SĪNĀ, *Risāla fī aqsām al-'ulūm al-'aqliyya cit.*, pp. 89, 17 - 92, 6; critical translation of the sections on natural philosophy and metaphysics in J. MICHOT, *Les sciences physiques et métaphysiques selon la Risālah fī aqsām al-'ulūm d'Avicenne. Essai de traduction critique*, «Bulletin de Philosophie médiévale», 22, 1980, pp. 62-73. Overall French translation by G.C. ANAWATI, *Les divisions des sciences intellectuelles d'Avicenne*, «Mélanges de l'Institut dominicain d'Études orientales », 13, 1977, pp. 323-335. Cf. J. JOLIVET, *Classifications of the Sciences*, in *Encyclopedia of the History of Arabic Science*, edd. R. RASHED - R. MORELON, Routledge, London and New York 1996, vol. III, pp. 1008-1025 (pp. 1019-1021); M. ZONTA, *La divisio scientiarum*

Table 2

<i>Ilāhiyyāt</i> , Text 1 and afferents	<i>Maqāla</i> , chpt. 8, metaphysical knowledge	<i>Risāla</i> , fundamental divisions of metaphysics [1] concepts (<i>maʿānī</i>) that are common to all existents: [1.1] “existent” (<i>huwīyya</i>)
[1* = Theology] causes of “caused existent”	[1.1 = Theology] principles of absolute “existent <i>qua</i> existent”	
[2*-3* = Universal Science] the things that are consequent to it (<i>al-umūr allatī talḥaḥūhū</i> = <i>lawāḥīq</i>) insofar as it is existent without condition:	[1.2 = Ontology] its consequent attributes (<i>lawāḥīq</i>):	
[2* = Universal SciencePE] proper accidents of “existent”: one <i>qua</i> one and many <i>qua</i> many coincident (<i>muwāfiq</i>) and different (<i>muḥālīf</i>) contrary (<i>ḍidd</i>)	[Universal SciencePE]: [1.2.7] unity and multiplicity [1.2.6] coincidence (<i>ittifāq</i>) and difference (<i>iḥtilāf</i>) [1.2.5] contrariety (<i>muḍādda</i>) and homogeneity (<i>muḡānasa</i>)	[Universal SciencePE]: [1.2] unity and multiplicity [1.3] coincidence (<i>wifāq</i>) and difference (<i>ḥilāf</i>) [1.4] contrariety (<i>taḍādd</i>)
potentiality and actuality	[1.2.1] potentiality and actuality	[1.5] potentiality and actuality
universal and particular possible and necessary principle	[1.2.4] genus and species [1.2.2] principle and cause [1.2.3 = Universal ScienceSE] substance and accident	[1.6] cause and effect
[3* = First Philosophy/ Universal ScienceSE] principles of the particular sciences (natural philosophy, mathematics etc.) = species of “existent” (states,	[2 = First Philosophy] first principles of the theoretical sciences (mathematics, natural philosophy and logic)	[2.1 = First Philosophy/ Universal ScienceSE] fundamentals and principles of ⁴⁶ natural philosophy, mathematics and logic

presso al-Farabi: dalla 'introduzione alla filosofia' tardoantica all'enciclopedia medievale, in *La Divisione della Filosofia e le sue Ragioni. Lettura di testi medievali (VI-XIII secolo)* (Atti del Settimo Convegno della Società Italiana per lo Studio del Pensiero Medievale [S.I.S.P.M.], Assisi, 14-15 novembre 1997), ed. G. D'ONOFRIO, Avagliano Editore, Cava de' Tirreni (Salerno) 2001, pp. 65-78.

⁴⁶ I read *min* ('of') instead of *miṭl* ('as') which occur in the printed text (p. 21), in Anawati's

accidents, divisions):
 substance, quantity, quality,
 other categories

[3]-[4] Theology

[2.2] refutation of the false
 opinions held in these sciences
 [3]-[5] Theology

The *Maqāla* presents a fourfold division of metaphysics, whereas the division in the *Risāla* is fivefold. In both writings, Theology is the most extensive section of metaphysics and comes at the end. In the *Maqāla* it occupies the last two parts of metaphysics ([3]-[4]), in the *Risāla* the last three ([3]-[5]). In both writings the preceding two parts of metaphysics roughly correspond to Universal SciencePE and First Philosophy/Universal ScienceSE.

In general, the structure of metaphysics in the *Maqāla* and the *Risāla* is less rigorous than in Text 1 and afferents. As to the *Maqāla*, it splits Theology into two: Theology occurs not only at the end of metaphysics, but also at the beginning ([1.1]), where it is followed by Universal SciencePE.

Furthermore, the *Maqāla* blurs the distinction between Universal SciencePE and Universal ScienceSE. Universal ScienceSE (substance and accident, [1.2.3]) is mentioned outside First Philosophy [2]. It coexists with Universal SciencePE ([1.2.1-2, 1.2.4-7]) — which does not encompass ‘necessary’ and ‘possible’ — in part [1.2] of metaphysics. Thus, in [1.2] both the properties of ‘existent’ and its species (substance and accidents) are subsumed under the common heading of ‘consequent attributes’ (*lawāḥiq*) of ‘existent’. This expression probably is equivalent to ‘things which are consequent to it [i.e. to ‘existent’] insofar as it is existent without condition’ (*al-umūr allatī talḥaquhū bi-mā huwa mawǧūd min ġayr šarṭ*), that we find in one of the afferents of Text 1 (cf. above, Table 1)⁴⁷.

In the *Risāla* a further distinction fades: that between ‘existent’ itself and its properties. Thus, some of the items of Universal SciencePE — with the exclusion of ‘universal’ and ‘particular’, ‘necessary’ and ‘possible’ — are mentioned in the first part of metaphysics ([1.2-6]), together with ‘existent’ (*huwiyya*) itself [1.1]⁴⁸. All these notions are named ‘concepts that are

translation (p. 331: ‘comme la science des naturalistes’) and in Michot’s translation (p. 68: ‘comme la science des physiciens’).

⁴⁷ The term *lawāḥiq* occurs also, in a similar context, in I, 2, p. 14, 2-3.

⁴⁸ For a discussion of *huwiyya* as a term signifying ‘existent’ in the *Ilāhiyyāt* and in other Avicennian works, cf. A. BERTOLACCI, *Some Texts of Aristotle’s Metaphysics in the Ilāhiyyāt of*

common to all existents' (*al-ma'ānī al-āmma li-ḡamī' al-mawḡūdāt*).

To summarize: the originality of Text 1 and afferents, with respect to the *Maqāla* and the *Risāla*, lies essentially in the distinctions it introduces: that between Universal Science and Theology (less clear-cut in the *Maqāla*), that between Universal SciencePE and Universal ScienceSE (fluid in the *Maqāla*), that between subject-matter and objects of investigations of metaphysics (neglected in the *Risāla*).

§3. DESCRIPTION OF THE STRUCTURE OF METAPHYSICS: UNIVERSAL SCIENCE OF 'EXISTENT', UNIVERSAL SCIENCE OF 'ONE', THEOLOGY

A passage of chapter I, 4 (Text 2) provides further information about Avicenna's conception of the structure of metaphysics. The articulation of this discipline is still portrayed as three-fold, as in Text 1, but its elements are different.

Chapter I, 4 of the *Ilāhiyyāt* is entirely devoted to describing the contents of the work. In this respect, it constitutes a unique case in the Avicennian writings. Its existence is due to the influence on Avicenna of the Neoplatonic introductions to Aristotle's writings, as I will show in greater detail in §4. By being a description of the contents of the *Ilāhiyyāt*, chapter I, 4 is much more detailed than Text 1. On the other hand, it is not the mirror image of the work it describes, and this latter presents, with respect to it, several differences⁴⁹. Hence chapter I, 4 deserves to be considered independently.

In the relevant passage of I, 4, after mentioning the investigation of the categories, both substance and accidents⁵⁰, and of some among the properties of 'existent' according to Text 1, such as 'necessity' and 'possibility' (in the sense of contingency)⁵¹, 'potency' and 'act'⁵², 'universal' and 'particular'⁵³, and 'cause'⁵⁴, Avicenna says:

Text 2: [1** = Universal ScienceSPE] These [i.e. substance and accidents, necessity and possibility etc.] and similar things are consequent attributes

Avicenna's Kitāb al-Šifā', in *Before and After Avicenna* (Proceedings of the The First Graduate Student Conference on Ibn Sina, Yale University, March 17-18, 2001), forthcoming.

⁴⁹ For example, in chapter I, 4 the part of the *Ilāhiyyāt* corresponding to chapter I, 8 is mentioned after chapter II, 1 (p. 25, 6-7); chapters V, 7-9 are mentioned immediately after chapter II, 4 (p. 25, 12-13), chapters VII, 2-3 are omitted (cf. p. 27, 4-8), and so on. Cf. also below, n. 77.

⁵⁰ I, 4, pp. 25, 7 - 26, 2.

⁵¹ I, 4, p. 25, 5-6.

⁵² I, 4, p. 25, 6.

⁵³ I, 4, p. 26, 3-6.

⁵⁴ I, 4, p. 26, 6-11.

(*lawāḥiq*) of existence *qua* existence.

[2** = Universal ScienceOM] [2.1**] Since ‘one’ accompanies existence, it is incumbent upon us to investigate ‘one’ as well; and once we investigate ‘one’, we have to investigate ‘many’ and to make known the opposite correspondence between the two.

[2.2**] [2.2.1**] At this point it is necessary to investigate number: what its relation is to the existents, and what the relation of continuous quantity — which is somehow in opposite correspondence to it [i.e. to number] — to the existents. [2.2.2**] We will enumerate all the false opinions regarding it [i.e. number], and we will make known that nothing of that [i.e. number] is separate or a principle of the existents. [2.2.3**] We will prove the existence of the accidents that occur to numbers and to continuous quantities, such as figures and so on.

[2.3** = Universal SciencePOM] Among the things that follow (*tawābi*) ‘one’ are: ‘like’, ‘equal’, ‘coincident’ (*muwāfiq*), ‘homogeneous’ (*muḡānis*), ‘conformable’, ‘similar’ and ‘same’. It is necessary to speak of each one of them and of the things that are in opposite correspondence to them, and [to say] that they [i.e. these things] are related to multiplicity, as ‘unlike’, ‘unequal’, ‘non-homogeneous’, ‘non-conformable’, ‘other’ in general, ‘difference’ (*ḥilāf*), ‘opposition’ and their types, true ‘contrariety’ (*taḡādd*) and its quiddity.

[3** = Theology] Then, after that, we will pass to the principles of the existents⁵⁵.

If compared with Text 1, Text 2 shows three main differences. First, the treatment of the species and properties of ‘existent’ ([1**]) is reduced to a single unit. Universal ScienceS is not kept distinct from Universal ScienceP. As topic of the treatment of ‘existent’, Avicenna mentions the ‘consequent attributes’ (*lawāḥiq*) of ‘existence’. This term is here, in all likelihood, a common rubric for both properties and species (cf. above, Table1). From this point of view the tripartition of metaphysics in Text 1 (Theology, Universal

⁵⁵ I, 4, pp. 26, 17 - 27, 9: fa-ḥāḏihi wa-mā yaḡrī maḡrāhā lawāḥiqu l-wuḡūdi bi-mā huwa wuḡūdun wa-li-anna l-wāḥida musāwiqun li-l-wuḡūdi fa-yalzamunā an nanzura ayḡan fi l-wāḥidi wa-iḡā naḡarna fi l-wāḥidi waḡaba an nanzura fi l-kaḡiri wa-nu‘arrifa l-taḡābula baynahumā wa-hunāka yaḡibu an nanzura fi l-‘adadi wa-mā nisbatuhū ilā l-mawḡūdāti wa-mā nisbatu l-kammi l-muttaḡili llaḡi yuḡābiluhū bi-waḡhin mā ilā l-mawḡūdāti wa-na‘udda l-ārā‘a l-bāḡilata kullahā fihī wa-nu‘arrifa annahū laysa ḡay‘un min ḡālika mufāriqan wa-lā mabda‘an li-l-mawḡūdāti wa-nuḡbita l-‘awāriḡa llatī ta‘riḡu li-l-a‘ḡādi wa-l-kammiyyāti l-muttaḡilati miḡla l-aḡkāli wa-ḡayrihā wa-min tawābi‘i l-wāḥidi l-ḡābiḡu wa-l-musāwī wa-l-muwāfiqu wa-l-muḡānisu wa-l-muḡākilu wa-l-mumāḡilu wa-l-huwahuwa fa-yaḡibu an natakallama fi kulli wāḡidin min ḡāḡihi wa-muḡābilātihā wa-annahā munāsibatun li-l-kaḡrati miḡla al-ḡayri [sic P117 P125 t] l-ḡābiḡi wa-ḡayri l-musāwī wa-ḡayri l-muḡānisi wa-ḡayri l-muḡākili wa-l-ḡayri bi-l-ḡumlati wa-l-ḡilāfi wa-l-taḡābuli wa-aḡnāfiḡa wa-l-taḡāddi bi-l-ḡāḡiqati wa-māḡiyyatihī ḡumma ba‘ḡa ḡālika nantaqilu ilā mabāḡi‘i l-mawḡūdāti.

SciencePE, First Philosophy/Universal ScienceSE) is reduced in Text 2 to a bipartition (Universal ScienceSPE, Theology). It is evident that Avicenna's discourse in Text 2 does not focus on the treatment of 'existent'.

Second, and most important, Universal Science SPE does not deal with 'one' and 'many'. Rather, the treatment of 'one', 'many' and a group of related topics ([2**]) acquires structural independence. Whereas in Text 1 and related passages 'one' and 'many' are simply one of the properties of 'existent', and represent therefore an element of Universal Science PE, in Text 2 they constitute a part of metaphysics on their own⁵⁶. 'One' is still subordinated to 'existent' from the epistemological point of view (it 'accompanies' the 'existent')⁵⁷. From the structural point of view, however, together with 'many', 'number' etc., it represents an additional part of metaphysics, coming after Universal ScienceSPE ([1**]) and before Theology ([3**]). On account of the status of 'one' as universal concept⁵⁸, I call part [2**] of Text 2 'Universal ScienceO(ne)M(any)'.

Third, in Text 2 Theology ([3**]) follows, instead of preceding, Universal Science. In this respect the order of the parts of metaphysics in Text 2 is the opposite of that established in Text 1.

Two aspects of Universal ScienceOM in Text 2 — corresponding to [2.2**] and [2.3**] — are noteworthy. First, in [2.2**] Universal ScienceOM encompasses the treatment of quantity, both discrete (i.e. number) and continuous. Because of this connection with a category (quantity), in the actual structure of the *Ilāhiyyāt* the doctrine of 'existent' and that of 'one' and 'many' partially overlap (cf. §4).

Second, Universal ScienceOM has an inner structure. 'One' and 'many' in [2.3**] are said to have some 'things that follow' (*tawābī*) them. Some of the

⁵⁶ In Text 1, within the discussion of the subject-matter of metaphysics, every topic dealt with by metaphysics is related to 'existent' (the implicit assumption is that a discipline cannot have more than one subject-matter). This applies both to 'one' and 'many', and to 'coincident', 'homogeneity', 'difference', and 'contrariety', all of which are presented in Text 1 and afferents as properties of 'existent' (cf. above, Table 1 and Table 2).

⁵⁷ It is possible that *musāwiq* ('accompanies') in [2.1**] is the result of a corruption from *musāwin* ('equivalent'), a term occurring, in a similar context, in al-Fārābī's *Fī Aḡrād* (cf. below, Text 12.3).

⁵⁸ We have already seen that Avicenna regards 'existent' and 'one' as equally universal when in I, 2 he explains the reason why metaphysics is called 'first philosophy' (cf. above, p. 7, n. 13). Similar statements, witnessing the equivalence of 'existent' and 'one', are frequent in the *Ilāhiyyāt*: cf. I, 5, p. 30, 3-4; III, 1, p. 95, 16-17; III, 2, p. 103, 7-9; V, 8, p. 243, 5-6; VII, 1, p. 303, 6-12; VII, 2, p. 313, 6-7. However, only 'existent' is the subject-matter of metaphysics, according to Avicenna. The expression 'first subject-matter' (*mawḍū' awwal*) attributed to 'existent' in I, 1, p. 9, 7-8; I, 2, p. 13, 12, does not imply the existence of a second subject-matter (namely 'one'); cf. below, Texts 5.4 and 12.3.

items of Universal SciencePE in Text 1 and related passages (cf. Table 1) — namely ‘coincident’ (*muwāfiq*), ‘homogeneity’ (*muḡānasa*), ‘difference’ (*ḥilāf*), and ‘contrariety’ (*taḡādd*) — are presented in Text 2 as belonging to Universal ScienceOM: they are ‘things that follow’ either ‘one’ — as in the case of ‘coincident’ and ‘homogeneous’ (*muḡānis*) — or ‘many’ — as in the case of ‘difference’ and ‘contrariety’⁵⁹. These concepts are portrayed in Text 1 and related passages as properties of ‘existent’. From Text 2 we learn that they are so indirectly, in so far as they are properties of ‘one’ and ‘many’, which, in their turn, depend on ‘existent’. Subdivision [2.3**] of Universal ScienceO can be rightly called, therefore, ‘Universal ScienceP(roperties)O(ne)M(any)’.

The emergence of Universal ScienceO among the parts of metaphysics, as witnessed by Text 2, enriches of a new element the three-fold structure of this discipline displayed in Text 1. The presence of a treatment of ‘one’, besides the treatment of ‘existent’, within metaphysics as witnessed by Text 2 is very significant. Its importance, with regard to the Aristotelian tradition, will appear in §6.

§4. THE CONCRETE STRUCTURE: U NIVERSAL SCIENCE OF THE SPECIES OF ‘EXISTENT’ AND ‘ONE’, UNIVERSAL SCIENCE OF THE PROPERTIES OF ‘EXISTENT’ AND ‘ONE’, THEOLOGY.

The arrangement of the *Ilāhiyyāt* itself is, of course, our main evidence about Avicenna’s view of the structure of metaphysics. The articulation of this writing is, however, quite complex. It is somehow the sum of Text 1 and Text 2, plus many additional elements. Before analyzing it in detail, I sketch the *Ilāhiyyāt*’s structure, for the sake of clarity, in the following table. I number the parts of metaphysics having an equivalent in Texts 1-2.

Table 3

Prolegomena (I, 1-4):

I, 1-2: goal and subject-matter of metaphysics

I, 3: utility, rank and name of metaphysics

I, 4: topics dealt with in metaphysics

Introduction (I, 5-8):

I, 5: primary concepts: ‘existent’ (‘non-existent’), ‘thing’, ‘necessary’ (‘possible’, ‘impossible’)

I, 6-7: Necessary Existent, possible existent

I, 8: ontological and logical truth; the principle of non-contradiction

⁵⁹ For the reason why these concepts appear as properties of ‘existent’ in Text 1, whereas they are properties of ‘one’ and ‘many’ in Text 2, cf. above, n. 56.

[1] Universal ScienceSEOM (II-III)

First Philosophy/Universal ScienceSE: II-III,
1; III, 3-5; III, 7-10

II: substance

III: accidents

III, 1: introduction

III, 3-5: quantity

III, 3: accidentality of number

III, 4: accidentality of continuous quantity

III, 7-8: quality

III, 9: qualities which are in quantities

III, 10: relation

Universal ScienceSOM: III, 2-6; III, 9

III, 2 species of "one"

III, 3-5: quantity

III, 3: accidentality of number

III, 4: accidentality of continuous quantity

III, 5: nature, species and principles of number

III, 5 (end): species of 'many'

III, 6: opposition 'one'-'many'

III, 9: qualities which are in quantities

[2] Universal SciencePEOM (IV-VII)

[2.1] Universal SciencePE (IV-VI)

IV: anterior and posterior, potency and act,
perfect and imperfect, whole and part

V: universal and particular

VI: cause and effect

[2.2] Universal SciencePOM (VII, 1-3)

VII, 1: properties of "one" (sameness),
properties of "many" (otherness, alterity,
difference, privation and contrariety)

VII, 2: exposition of the views of Pythagoreans
and Platonists

VII, 3: criticism

[3] Theology (VIII, 1-X, 3)

VIII, 1-3: the First Principle's existence

VIII, 4-7: the First Principle's nature

IX, 1-5: Cosmology

IX, 6: Theodicy

IX, 7: Eschatology

X, 1-3: Prophetology

Appendix: practical philosophy (X, 4-5):

X, 4: politics, economics (= household management)

X, 5: politics, ethics

The first four chapters (I, 1-4) of the *Ilāhiyyāt* have the character of a preface. On account of their Greek source(s), I call them 'Prolegomena'. In these chapters Avicenna deals with some preliminary questions, which, to a large extent, correspond to the six or seven points discussed by the Neoplatonic interpreters of Aristotle at the beginning of their commentaries on the single Aristotelian works⁶⁰. These points are the explanation of the 'goal' (σκοπός) of the book (or its author's aim), of its 'utility' (χρήσιμον), 'authorship' (γνήσιον), 'place in the order of learning' (τάξις τῆς ἀναγνώσεως), 'title' (ἐπιγραφή) and 'division into chapters' (εἰς τὰ κεφάλαια διαίρεσις). Some commentators add a seventh point, the question 'to which part of philosophy the book belongs' (εἰς ποῖον μέρος τῆς φιλοσοφίας ἀνάγεται). Avicenna himself in I, 3 contends that chapters I, 1-4 have a traditional and introductory character⁶¹. Among the preliminary questions, he deals with the 'goal' (*ğarađ*) of metaphysics in I, 1-2⁶²; its 'utility' (*manfa'a*), 'rank' (*martaba*)

⁶⁰ In the Neoplatonic commentaries, six or seven questions serve as an introduction to the exegesis of each work of Aristotle, and are repeatedly discussed at the beginning of the single commentaries. The number and *raison d'être* of these questions are preliminarily discussed also at the end of the general introduction to Aristotle's philosophy, which consisted of ten questions and preceded the commentary on the first work of the Aristotelian *corpus* (the *Categories*). For the Greek sources of this introductory scheme, cf. SIMPLICIUS, *Commentaire sur les Catégories*. Traduction commentée sous la direction de I. HADOT, Fascicule I, Brill, Leiden 1990, pp. 21-47; pp. 138-160, and J. MANSFELD, *Prolegomena. Questions to be settled before the study of an author, or a text*, Brill, Leiden 1994, pp. 10-21; for its Arabic reception, cf. AL-FĀRĀBĪ, *Mā yanbağī an yuqaddama qabla ta'allum falsafat Ariṣṭū* (*Prolegomena to the Study of Aristotle's Philosophy*), in *Alfārābī's Philosophische Abhandlungen* cit., pp. 49-55, and Abū-l-Farağ ibn-al-Ṭayyib's Commentary on Aristotle's *Categories*, preserved in the ms. Cairo, Dār al-Kutub, Ḥikma 1M, as translated by F. ROSENTHAL, *The Classical Heritage in Islam*, Routledge, London-New York 1975, pp. 70-72; D. GUTAS, *Paul the Persian on the Classification of the Parts of Aristotle's Philosophy: A Milestone Between Alexandria and Baghdad*, «Der Islam», 60, 1983, pp. 231-267; Id., *Avicenna* cit., p. 227.

⁶¹ I, 3, p. 17, 9-10: «But when, at the beginnings of books, the utility of sciences is investigated ... ».

⁶² In the *Ilāhiyyāt* Avicenna contends that the investigation of the goal of metaphysics is intimately connected with that of its subject-matter; cf. I, 1, p. 5, 5-6 (where the goal of metaphysics is called *murād*); I, 2, p. 10, 4-5. For other denominations of the 'goal' of metaphysics, and its identification with the knowledge of God, cf. I, 3, p. 18, 14-17; p. 19, 5-6, p. 21, 1-4. In the introduction of the *Ilāhiyyāt* the analysis of the subject-matter of metaphysics (and consequently of its 'goal') starts in I, 1, p. 5, 1; it ends in I, 2, p. 16, 11-12: 'It has appeared and become evident what is the goal of this science'. Cf. VII, 1, p. 303, 5 (below, Text 3 [g]). The 'goal' (*ğarađ*) mentioned in I, 5, p. 29, 4 (cf. below, n. 72) has a different meaning. Aristotle mentions the goal of metaphysics in *Metaph.* A, 2, 983 a 21-23.

and 'name' (*ism*) in I, 3⁶³; its contents in I, 4. Avicenna does not face the question of authorship. It is not clear whether the brief classification of sciences which precedes the investigation of the goal of metaphysics in I, 1⁶⁴ has to be considered the equivalent of the seventh question.

The remaining chapters of the first treatise (I, 5-8) deal with the primary concepts (I, 5-7) and the primary principles (I, 8)⁶⁵. In this respect chapters I, 5-8 are a sort of complement to the Prolegomena; I call them 'Introduction'. Thus, the first treatise of the work in its entirety (Prolegomena and Introduction) has a propaedeutic character. In the Prolegomena three issues are raised: first, that 'existent' is a primary concept, whose quiddity and existence do not need to be proved⁶⁶; second, that a 'pointer' (*išāra*) is available, attesting to the fact that metaphysics can prove the existence of the First Principle without using (particular) sensible data, and relying rather on universal intellectual premises⁶⁷; third, that the metaphysical investigation of the principles of the existents is, as a matter of fact, an analysis of one of the properties of the concept of 'existent'⁶⁸. Now, in chapters I, 5-8 Avicenna appears to resume these three points. In I, 5 he deals with 'existent' and the other primary concepts *qua* primary concepts⁶⁹. In I, 6-7 he provides an

⁶³ As names of metaphysics (I, 3, pp. 21, 12 - 24, 9) Avicenna gives 'what is after nature' (*mā ba'da l-ṭabī'a*), Arabic calque of the Greek title of Aristotle's *Metaphysics*, and 'divine science' (*'ilm ilāhī*). By means of the former expression Avicenna usually refers to the *Metaphysics* itself: cf. his Autobiography (*The Life of Ibn Sina. A Critical edition and Annotated Translation* by W. E. GOHLMAN, Albany, New York 1974, p. 32, 1: *kitāb mā ba'da l-ṭabī'a*), *Al-Mabda' wa al-Ma'ād* (ed. NŪRĀNĪ, p. 34, 5: *kitāb mā ba'da l-ṭabī'a*), the *Letter to the vizir Abū Sa'd* (IBN SĪNĀ, *Lettre au vizir Abū Sa'd* cit., p. 45, 12: *mā ba'da l-ṭabī'a*, p. 46, 5: *kitāb mā ba'da l-ṭabī'a*, p. 47, 8-9: *mā ba'da l-ṭabī'a*, p. 49, 1: *mā ba'da l-ṭabī'a*) and the *Risāla fī aqsām al-'ulūm al-'aqliyya* (ed. 'Aṣī, p. 91, 1: *kitāb māṭāfūsīqā ay mā ba'da l-ṭabī'a*, according to Michot's correction [*Les sciences physiques et métaphysiques* cit., p. 69 and nn. 84-85] of *māṭāfātānūsīqā ilā mā ba'da l-ṭabī'a*).

⁶⁴ I, 1, pp. 3, 11 - 5, 1.

⁶⁵ Primary concepts and primary principles are mentioned together at the beginning of I, 5 (p. 29, 7-16) and the end of I, 8 (p. 54, 16-17).

⁶⁶ I, 2, p. 13, 9-12. This is one of the arguments proving that 'existent' is the subject-matter of metaphysics.

⁶⁷ I, 3, p. 21, 2-8. English translation in M. E. MARMURA, *Avicenna's Proof from Contingency in the Metaphysics of his al-Shifā'*, «*Mediaeval Studies*», 42, 1980, pp. 337-352 (p. 339).

⁶⁸ I, 2, p. 14, 1-14. This is Avicenna's reply to the objection that, since metaphysics has 'existent' as its subject-matter, it cannot deal with the principles of 'existent', for no science deals with the principles of its subject-matter (cf. above, n. 11).

⁶⁹ Chapter I, 5 is one of the most extensively studied of all the *Ilāhiyyāt*. Both an English and a French translation of it are available: M. MARMURA, *Avicenna on Primary Concepts in the Metaphysics of his al-Shifā'*, in *Logos Islamikos. Studia Islamica in Honorem G. M. Wickens*, edd. R. M. SAVORY - D. A. AGIUS, Pontifical Institute of Mediaeval Studies, Toronto 1984, pp. 219-239; M. GEOFFROY in A. DE LIBERA, *L'arts des généralités. Théories de l'abstraction*, Aubier, Paris 1999,

investigation of the Necessary Existent exclusively based on the analysis of concepts, thus showing the possibility for metaphysics to prove the existence of the Necessary Existent, or First Principle, by means of a procedure that does not take into account sensible data⁷⁰. In I, 8, finally, he discusses the 'principle' of non-contradiction, qualifying it as a 'property' (*ḥāṣṣa*) and one of the 'accidents' (*'awāriḍ*) — in the sense of 'proper accidents' — of 'existent'⁷¹.

Chapters I, 5-8 have a miscellaneous character. They are loosely connected, in different respects, with Universal ScienceSE, Universal SciencePE and Theology, but belong to none of them. In the title of chapter I, 5, some 'divisions' of 'existent' are mentioned⁷², but this expression does not refer to the categories, whose treatment within the chapter is very brief, but to the division of 'existent' in active and passive⁷³. The bulk of this chapter is rather an analysis of the primary concepts — namely 'existent' (together with 'non-existent', *ma'dūm*), 'thing' and 'necessary' (together with 'possible' — in the

pp. 645-653. Among recent studies: J. JOLIVET, *Aux origines de l'ontologie d'Ibn Sīnā*, in *Études sur Avicenne*, dirigées par J. JOLIVET et R. RASHED, Les Belles Lettres, Paris 1984, pp. 11-28; DE LIBERA, *L'arts des généralités* cit., pp. 577-590; R. WISNOVSKY, *Notes on Avicenna's Concept of Thingness (Šay'iyya)*, «Arabic Sciences and Philosophy», 10, 2000, pp. 181-221; TH.-A. DRUART, *'Shay' or 'res' as Concomitant of 'Being' in Avicenna*, «Documenti e Studi sulla Tradizione Filosofica Medievale», 12, 2001, pp. 125-142.

⁷⁰ Marmura (*Avicenna's Proof from Contingency* cit.) has first pointed out the connection between I, 6-7 and the aforementioned passage of I, 3. I agree, however, with DAVIDSON, *Proofs for Eternity* cit., p. 289 — pace G. HOURANI, *Ibn Sīnā on Necessary and Possible Existence*, «Philosophical Forum», 4, 1972, pp. 74-86, Marmura himself in the aforementioned article, and, more recently, U. RUDOLPH, *La preuve de l'existence de Dieu chez Avicenne et dans la théologie musulmane*, in *Langages et philosophie* cit., pp. 339-346 (especially pp. 340-344) — that the analysis of the concept of 'being necessarily existent by virtue of itself' in *Ilāhiyyāt* I, 6-7 is a description of the nature of God, not a proof of His existence. As far as I can see, by describing the nature of God in these chapters, Avicenna merely aims at providing a 'pointer' (*išāra*) to the possibility of a 'metaphysical' proof of His existence — as he says in I, 3 — not the proof itself.

⁷¹ I, 8, p. 48, 16-18 (the axiom of non-contradiction is called 'principle' at p. 53, 16-17). On chapter I, 8, cf. R. E. HOUSER, *The Place of the First Principle of Demonstration in Avicennian Metaphysics*, «Proceedings of the Patristic, Medieval and Renaissance Conference», 6, 1981, pp. 117-134; Id., *Let Them Suffer into the Truth: Avicenna's Remedy for Those Denying the Axioms of Thought*, «American Catholic Philosophical Quarterly», 73, 1999, pp. 107-133.

⁷² I, 5, p. 29, 3-4: «Chapter on indicating 'existent', 'thing' and their first divisions (*aqsām*), by means of what contains a reminder of the [speaker's] goal» (*faṣḥun fi l-dalālati 'alā l-mawḡūdi wa-l-šay'i wa-aqsāmihimā l-uwalī bi-mā yakūnu fihī tanbihun 'alā l-ḡaraḍi*). English translation in MARMURA, *Avicenna on Primary Concepts* cit., p. 222 (modified).

⁷³ I, 5, p. 30, 6-7. The categories are briefly mentioned at p. 34, 16-17. The passage of I, 4, where the content of I, 5 is summarized as «the state of the relation of 'thing' and 'existent' with the categories (*maqūlāt*), and the state of non-existence» (p. 25, 4-5), has possibly to be emended and read as 'the state of the relation of 'thing' and 'existent' with the intelligibles (*ma'qūlāt*)', as in t.

sense of 'contingent' — and 'impossible') — in themselves⁷⁴. Chapter I, 6 starts with the 'division' (*inqisām*) of 'existent' in 'Necessary Existent' (later identified with God) and 'possible existent' (in the sense of 'contingent existent')⁷⁵, but only later in the *Ilāhiyyāt* the connection between 'possible existent' and categories becomes clear⁷⁶. On the other hand, 'necessary' and 'possible' appear among the properties of 'existent' in Text 1 and its afferents (cf. above, Table 1)⁷⁷. The theological relevance of chapters I, 6-7 is emphasized by Avicenna himself, who recalls and summarizes their content within Theology (VIII, 4-5)⁷⁸. Chapter I, 8 can be linked to Universal SciencePE, since the principle of non-contradiction is one of the properties of 'existent'.

The real treatment of metaphysics in the *Ilāhiyyāt* starts after the Prolegomena and the Introduction, namely in chapter II, 1. It ends with chapter X, 3, since the last two chapters of the work (X, 4-5) are an appendix dealing with practical philosophy, as Avicenna himself declares in the prologue of the *Šifā'*⁷⁹.

⁷⁴ Among the primary concepts, also 'one' is mentioned (p. 30, 4), but it is not dealt with. For the historical background of 'thing' as primary concept, cf. PORPHYRE, *Isagoge*, transl. A. DE LIBERA - A. P. SEGONDS, Vrin, Paris 1999, p. xiii, n. 22.

⁷⁵ I, 6, p. 37, 7-10: «We say: Things which enter into existence can be theoretically divided (*taḥtamīlu fī l-'aqli l-inqisāma*) in two divisions (*qismayni*). One of these is that which, when it is considered in itself, its existence is not necessary [i.e. the possible being]. ... The other of these is that which, when it is considered in itself, its existence is necessary [i.e. the Necessary Existent]» (fa-naqūlu inna l-umūra llatī tadḥulu fī l-wuḡūdi taḥtamīlu fī l-'aqli l-inqisāma ilā qismayni fa-yakūnu minhā mā idā 'tubira bi-dātihī lam yaḡib wuḡūduhū ... wa-yakūnu minhā mā idā 'tubira bi-dātihī waḡaba wuḡūduhū). Cf. A. HYMAN, *The Healing, Metaphysics. First Treatise, Chapter 6. Sixth Treatise, Chapter 1, Chapter 2*, in *Philosophy in the Middle Ages. The Christian, Islamic and Jewish Traditions*, edd. by A. HYMAN - J. WALSH, Hackett, Indianapolis 1970, pp. 240-254; p. 240; HOURANI, *Ibn Sīnā on Necessary and Possible Existence* cit., p. 82.

⁷⁶ In II, 1, p. 60, 5-8, Avicenna states that the types of substance he has dealt with in the same chapter (matter, form and compound) are possible existents; in VIII, 4, pp. 348, 6-349, 6 he establishes that the First Existent (i.e. the Necessary Existent) is not a substance.

⁷⁷ The division of 'existent' in 'Necessary Existent' and 'possible existent' can therefore be regarded as an instance of the second kind of division envisaged in the *Naḡāt*, the one deriving from the properties of a subject-matter (cf. below, n. 146). The distinctions of 'true' and 'false' at the beginning of I, 8 (I, 8, p. 48, 5-11), and of 'existent by essence' and 'existent by accident' at the beginning of II, 1 (II, 1, p. 57, 4-5), can perhaps be considered, in the same vein, two further non-categorical divisions of 'existent'. In I, 4, p. 25, 6, another pair of properties of 'existent', namely 'potency' and 'act', are mentioned in connection with 'necessity' and 'possibility' (as a matter of fact, they are taken into account in IV, 2). It has to be recalled that 'being' by accident and — among 'being' *per se* — categorical 'being', 'being' as true and 'being' in potency and in act are the four main meanings of 'being' according to Aristotle (*Metaphysics* Δ, 7; E, 2, 1026 a 33-b 2).

⁷⁸ Cf. VIII, 4, p. 343, 10-11; VIII, 5, p. 349, 8-10.

⁷⁹ *Madḡal*, p. 11, 12-13; English translation in GUTAS, *Avicenna* cit., p. 54. Cf. the introduction of the *Kitāb al-Nafs* (Book on the Soul) belonging to the *Šifā'* (ed. RAHMAN, p. 3, 12-13).

Section II-X, 3 can be divided into three main parts ([1], [2], [3]). Part [1] contains the treatment of the species of 'existent' and of 'one' and 'many' and related topics. In other words, it encompasses, both First Philosophy/Universal ScienceSE and what can be called 'Universal ScienceS(pecies)O(ne)M(any). Universal ScienceSE and Universal ScienceSOM are intermingled in part [1], and, as far as structure is concerned, are two aspects of the same unit.

Part [2] represents the second section of Universal Science. It is articulated into Universal SciencePE ([2.1]) and Universal SciencePOM ([2.2]), the former being distinct from the latter not only formally, but also materially.

Part [3], finally represents Theology.

The structure of metaphysics is, thus, fourfold ([1], [2.1], [2.2], [3]). This fourfold scheme is the result of the interaction of the treatment of 'existent' with that of 'one' within Universal Science. Whereas the doctrine of 'one' simply follows that of 'being' in Text 2, in the concrete structure of the *Ilāhiyyāt* the former runs parallel to the latter as a sort of second axis of Universal Science.

The division of metaphysics in these four parts is underscored by Avicenna himself, in a series of scattered statements connecting the parts of metaphysics among themselves. In what follows, I take into account what he says, first, about Universal ScienceSE, Universal SciencePE and Theology ([1], [2.1], [3]), then about Universal ScienceSOM and Universal SciencePOM ([1], [2.2]). I collect these two groups of statements, respectively, in Text 3 and Text 4. After analyzing Text 3 and Text 4, I compare them with their 'models', namely Text 1 and Text 2.

Universal ScienceSE, Universal SciencePE and Theology are mentioned in the opening sentences of treatises III-VII, and in the titles of treatises VIII-IX.

Text 3

[1 = First Philosophy/Universal ScienceSE] [a] (III, 1, p. 93, 5-10) We say: We have already shown the quiddity of substance [...]. Therefore it is suitable that we pass now to certifying [the essence of] the accidents and establishing their [existence]⁸⁰.

[b] (IV, 1, p. 163, 4) Since we have spoken of the things occurring to 'existent' and unity as species (*anwā'*) ...⁸¹.

[2.1 = Universal SciencePE] [c] (IV, 1, p. 163, 4-6) ... it is suitable that we speak of the things occurring to them [i.e. 'existent' and unity] as properties

⁸⁰ fa-naqūlu qad bayyannā māhiyyata l-ğawhari ... fa-bi-l-ğariyyi an nantaqila l-āna ilā taḥqīqi l-a'rādi wa-iṭbātihā.

⁸¹ lammā takallamnā 'alā l-umūri llati taqa'u mina l-wuğūdi wa-l-waḥdati mawqi'a l-anwā'i ...

(*ḥawāṣṣ*) and concomitant accidents (*‘awāriḍ lāzima*). We will start first with those belonging to ‘existent’, and, among them, with anteriority and posteriority⁸².

[d] (IV, 1, p. 169, 16-17) ... seeing that potency and actuality themselves are among the accidents (*‘awāriḍ*) of ‘existent’, its consequent attributes (*lawāḥiq*) and the things that have to be known when the states (*aḥwāl*) of absolute ‘existent’ are known⁸³.

[e] (V, 1, p. 195, 4-5) It is suitable that we speak now of ‘universal’ and ‘particular’, since it [i.e. this topic] is related also to what we have just finished with, and is one of the proper accidents (*a‘rāḍ ḥāṣṣa*) of ‘existent’⁸⁴.

[f] (VI, 1, p. 257, 5-6) It is suitable that we speak now of ‘cause’ and ‘caused thing’, since they are also among the attributes (*lawāḥiq*) which are consequent (*talḥaqu*) upon ‘existent *qua* existent’⁸⁵.

[g] (VII, 1, p. 303, 5-6) It seems that we have exhaustively discussed, with respect to this goal of ours, the things that are proper (*al-umūr allatī taḥtaṣṣu*) to ‘existent *qua* existent’ (*huwiyya min ḥaytu hiya huwiyya*) or are consequent to it (*talḥaquhā*)⁸⁶.

[3 = Theology] [h] (title of VIII, p. 325, 1-2) Eighth treatise on [3.1] knowing the First Principle (*al-mabda‘ al-awwal*) of all existence and [3.2] knowing His attributes (*ṣifāt*)⁸⁷.

[j] (title of IX, p. 371, 1-2) Ninth treatise on [3.3] the progression of things from the first ordering and [3.4] the[ir] return to it⁸⁸.

Part [1] encompasses the ‘species’ (*anwā‘*) of ‘existent’ (cf. [b]), and represents therefore Universal ScienceSE. From [b] we also learn that Universal ScienceSE arrives until the end of the third treatise (III, 10). It thus ranges from

⁸² ... fa-bi-l-ḥariyyi an natakallama fi l-aṣyā‘i llatī taqa‘u minhumā mawqi‘a l-ḥawāṣṣi wa-l-‘awāriḍi l-lāzimati wa-nabda‘u awwalan bi-llatī takūnu li-l-wuḡūdi wa-minhā bi-l-taqaddumi wa-l-ta‘aḥḥuri.

⁸³ ... wa-‘alā anna l-quwwata wa-l-fi‘la nafsahū min ‘awāriḍi al-mawḡūdi [P117 P125 t Horten ; l-wuḡūdi c Latin translation] wa-lawāḥiqihī wa-l-aṣyā‘i llatī yaḡibu an tu‘lama ḥaytu tu‘lamu aḥwālu l-mawḡūdi l-muṭlaqi.

⁸⁴ wa-bi-l-ḥariyyi an natakallama l-āna fi l-kulliyi wa-l-ḡuz‘iyyi fa-innahū munāsibun aḡḍan li-mā faraḡnā minhu wa-huwa mina l-a‘rāḍi l-ḥāṣṣati bi-l-wuḡūdi.

⁸⁵ fa-bi-l-ḥariyyi an natakallama al-āna fi l-‘illati wa-l-ma‘lūli fa-innahumā aḡḍan mina l-lawāḥiqi llatī talḥaqu l-mawḡūda bi-mā huwa mawḡūdu.

⁸⁶ yuṣbihu an yakūna qadi stawfaynā l-kalāma bi-ḥasabi ḡaraḍinā ḥāḍā fi l-umūri llatī taḥtaṣṣu bi-l-huwiyyati min ḥaytu hiya huwiyyatun aw talḥaquhā. For the use of *huwiyya* in the meaning of ‘existent’, cf. BERTOLACCI, *Some Texts* cit.

⁸⁷ al-maqālatu l-tāminatu fi ma‘rifati l-mabda‘i l-awwali li-l-wuḡūdi kullihī wa-ma‘rifati ṣifātihī [Horten: fi ... ṣifātihī *om.* P125, *titulum primi capituli octavi tractati* Latin translation: li-l-wuḡūdi ... ṣifātihī *om.* t: wa-ma‘rifati ṣifātihī *post titulum primi capituli octavi tractati scr.* P110].

⁸⁸ al-maqālatu l-tāsi‘atu fi ṣuḍūri l-aṣyā‘i ‘ani l-tadbīri l-awwali [al-mabda‘i al-awwali t] wa-l-ma‘ādi ilayhī [al-maqālatu ... ilayhī *om.* Latin translation].

II, 1 until III, 10. Since in these two treatises Avicenna deals with the categories (cf. [a]), the 'species' of 'existent' of Universal Science^{SE} are the categories⁸⁹. As a matter of fact, not all the categories are taken into account in this section of the *Ilāhiyyāt*. The second treatise is entirely devoted to substance. The third treatise, after the introduction (III, 1), deals only with some of the accidental categories, namely quantity (III, 3-5), quality (III, 7-9) and relation (III, 10). The treatment of quantity belongs, at the same time, to Universal Science^{SE} and to Universal Science^{SOM}. The remaining chapters of the third treatise (III, 2 and III, 6), on the other hand, serving as prologue and complement to the discussion of quantity, are proper to Universal Science^{SOM} (cf. below).

Part [2.1] deals with the 'properties' (*ḥawāṣṣ*) of 'existent' (cf. [c]), and is therefore Universal Science^{PE}. The properties of 'existent' are also called 'concomitant accidents' ('*awāriḍ lāzima*) in [c], and 'proper accidents' (*a'rāḍ ḥāṣṣa*) in [e]; to these, the expression 'things that are proper' (*al-umūr allatī taḥtaṣṣu*) in [g] can be joined. The names 'accidents' ('*awāriḍ*'), 'consequent attributes' (*lawāḥiq*) and 'states' (*aḥwāl*) are used in [d] and [f] to refer to the properties of 'existent'⁹⁰, even though elsewhere they have a different, usually broader, meaning⁹¹. From [c] and [g] we learn that the treatment of the properties of 'existent' is provided in treatises IV-VI. In the fourth treatise, Avicenna takes into account 'anteriority' and 'posteriority' in IV, 1 (cf. [c]), 'potency' and 'act' in IV, 2 (cf. [d]), 'perfect' and 'imperfect', 'all' (together with 'entire') and 'part' in IV, 3. The fifth treatise is devoted to 'universal' and 'particular' in V, 1-2 (cf. [e]), with special attention to the three universals belonging to essence ('genus' in V, 3-4, 'species' in V, 5, 'differentia' in V, 6), and to 'definition' in V, 7-9. 'Cause' and 'caused thing' are the topic of the sixth treatise (cf. [g]).

Part ([3]) takes into account God as the First Principle of 'existent' ([h]), and represents Theology. Avicenna introduces Theology as the last part of the *Ilāhiyyāt*⁹². It therefore embraces the last three treatises of the work (VIII-X, 3).

⁸⁹ Proposition [b] refers in all likelihood to the content of treatises II-III, which are devoted to the analysis of the categories, as it is clear in [a].

⁹⁰ For the term 'accidents' used in this sense, cf. above Text 1 [2*]; for 'consequent attributes', cf. *Nağāt*, ed. KURDĪ, p. 199, 15; p. 199, 16; p. 200, 1 (al-Fārābī as well uses this term to signify the properties of 'existent'; cf. below, Texts 12.1 and 12.3); for 'states', cf. *Nağāt*, ed. KURDĪ, p. 199, 7.

⁹¹ For 'accidents' meaning the species, cf. above, n. 32; for 'consequent attributes' meaning both species and properties, cf. *Nağāt*, ed. KURDĪ, p. 198, 5-6; for 'states' meaning both species and properties, cf. I, 1, p. 4, 12.

⁹² VIII, 1, p. 327, 4: «Since we have reached this point of our book, it is suitable that we conclude it with the knowledge of the First Principle (*al-mabda' al-awwal*) of all existence» (wa-iḍ qad balāğnā ḥāḍā l-mablağa min kitābinā [ḥāḍā add. P110] fa-bi-l-ḥariyyi an naḥtimahū bi-ma'rifati l-mabda'i l-awwali li-l-wuğūdi kullihī).

Theology encompasses six subdivisions, corresponding to the six main topics it deals with. The main topics of treatises VIII-IX are (cf. [h] and [j]): [3.1] knowing the First Principle, namely the proof of His existence (VIII, 1-3)⁹³; [3.2] knowing His attributes, namely His nature (VIII, 4-7); [3.3] the emanation of the universe from Him (IX, 1-6)⁹⁴; [3.4] the return to Him of some of the things emanating from Him, namely of the human souls after the death of the body (IX, 7)⁹⁵. Subdivision [3.3] includes a theodicy (IX, 6)⁹⁶. In the tenth treatise (X, 1-3) Avicenna deals with a further group of topics, that can be gathered around the theme of prophecy; I regard this section as a sixth subdivision of Theology ([3.5])⁹⁷. For the sake of brevity, I call subdivisions [3.3-6], respectively, 'Cosmology', 'Theodicy', 'Eschatology' and 'Prophetology'⁹⁸.

⁹³ On this topic, cf. DAVIDSON, *Proofs for Eternity* cit. Three passages of the eighth treatise are noteworthy: VIII, 1, p. 327, 4-5: «Since we have reached this point of our book, it is suitable that we conclude it with the knowledge of the First Principle of all existence: *whether He exists (hal huwa mawğūdun)...*» (italics mine); VIII, 3, p. 340, 10-11: «Chapter on showing the finitude of the final and formal causes, *on establishing [the existence of] (iṭbāt) the First Principle in an absolute manner ...*» (italics mine; cf. MARMURA, *Avicenna's Proof* cit., p. 338 and n. 6); VIII, 4, p. 343, 10: « *It has been established to you now [the existence of] (fa-qad ṭubita la-ka [la-ka om. P110] al-āna) something that is a Necessary Existent*» (italics mine). Cf. also I, 4, p. 27, 9. According to these passages, chapters VIII, 1-3 are the only section of the *Ilāhiyyāt* where Avicenna provides the proof of God's existence.

⁹⁴ As a matter of fact, chapter IX, 1 deals — according to its title (p. 373, 2-3) — with another 'attribute' (*ṣifa*) of the First Principle, namely His 'active attribute' (*ṣifa fā'iliyya*). On Avicenna's doctrine of emanation, cf. A. HASNAWI, *Fayḍ (épanchement, émanation)*, in *Encyclopédie philosophique universelle*, ed. A. JACOB, Paris, 1990, vol. II, pp. 966-972; J. JANSSENS, *Creation and Emanation in Ibn Sīnā*, «Documenti e Studi sulla Tradizione Filosofica Medievale», 8, 1997, pp. 455-477.

⁹⁵ On this topic, cf. GUTAS, *Avicenna* cit., pp. 254-261, and J. R. MICHOT, *La destinée de l'homme selon Avicenne. Le retour à Dieu (ma'ād) et l'imagination*, Peeters, Leuven 1986.

⁹⁶ The English translation of IX, 6 is available in S. C. INATI, Al-Shifā', The Healing: *On Theodicy and Providence*, in *An Anthology of Philosophy in Persia*, edd. by S. H. NASR - M. AMINRAZAVI, Oxford University Press, New York-Oxford 1999, vol. I, pp. 226-237. Among the studies, S. C. INATI, *An Examination of Ibn Sīnā's Theodicy: Dissolving the Problem of Evil*, «The New Scholasticism», 58, 1984, pp. 170-186; A. L. IVRY, *Destiny Revisited. Avicenna's Concept of Determinism*, in *Islamic Theology and Philosophy* cit., pp. 160-171.

⁹⁷ 'Prophecy' (*nubuwwa*) is mentioned in the title of X, 1 (p. 435, 5) and is the main subject of X, 2-3. It also constitutes the link between Theology and the Appendix, as the closing words of chapter X, 5 (p. 455, 15) witness. I provide an analysis of Avicenna's doctrine of prophecy, with particular attention to the *Ilāhiyyāt*, in A. BERTOLACCI, *The Doctrine of Prophecy in the Ilāhiyyāt (Divine Science) of Avicenna's Kitāb al-Šifā' (Book of the Cure)*, forthcoming. Prophecy and the destiny of human souls are two distinct derivative divisions of metaphysics in the *Ris-āla* (ed. 'Aṣī, pp. 91-92; MICHOT, *Les sciences physiques* cit., pp. 70-71).

⁹⁸ GUTAS, *Avicenna* cit., pp. 252-253, 254-261, gathers the first three sub-divisions of Theology in what he calls 'Natural Theology', and links Eschatology and Prophetology under the common heading of 'Metaphysics of the Rational Soul'.

The internal structure of Theology in the *Ilāhiyyāt* shows remarkable similarities with the summaries and compendia of Medieval Islamic theology (*kalām*)⁹⁹.

If we compare Text 3 with Text 1, we notice both similarities and differences. Among the similarities is the fact that the three elements of the structural scheme in these two texts are the same: both Text 1 and Text 3 envisage a structure of metaphysics given by First Philosophy/Universal Science_{SE}, Universal Science_{PE} and Theology. As to First Philosophy/Universal Science_{SE}, this part of metaphysics proves the existence and describes the nature of the subject-matters of natural philosophy and mathematics, namely corporeal substance (II, 2-3) and discrete and continuous quantity (III, 3-5). In doing so, it lays the foundations of these two disciplines, as Text 1 [3*] envisages¹⁰⁰. Furthermore, the species of 'existent' in Text 3 are the categories, as in Text 1 [3*] and afferents. As to Universal Science_{PE}, the properties of 'existent' are — with one remarkable exception to be considered soon — the same as those indicated in the texts related to Text 1. As to Theology, finally, its first subdivision is based on proving the finitude of the four causal chains (VIII, 1-3), something that possibly corresponds to the mention of the 'ultimate causes' in Text 1 [1.1*].

As to the differences, the order of succession of the parts of metaphysics in Text 3 is exactly the reverse of that envisaged in Text 1: First Philosophy/Universal Science_{SE} is the first part in Text 3, the last in Text 1, whereas Theology is the last part in Text 3, the first in Text 1. In both texts, Universal Science_{PE} occupies the middle position. We have already noticed in Text 2 the inversion of the parts of metaphysics as arranged in Text 1. Another aspect of difference is noteworthy: 'one' and 'many', which in Text 1 are a property of 'existent', do not appear in Text 3 either among the properties or among the species of 'existent'. They are discussed on their own.

This point brings us to Avicenna's statements regarding 'one' and 'many'. They occur within the third treatise and in the opening sentences of treatises IV and VII.

⁹⁹ Cf. R. FRANK, *The Science of Kalām*, «Arabic Science and Philosophy», 2, 1992, pp. 7-37, especially pp. 12-15.

¹⁰⁰ Allusions to the foundation of natural philosophy occur in II, 3, p. 78, 14; cf. III, 7, p. 139, 13, and VI, 5, p. 294, 4-5. On the other hand, the foundation of logic occurs partly outside Universal Science_{SE}, as in the discussion of universals in treatise V (belonging to Universal Science_{PE}). In V, 1-2 Avicenna deals with some doctrines that he had mentioned, but delayed to metaphysics, in his commentary on Porphyry's *Isagoge* (*Madḥal*). This might be the reason why Avicenna in Text 1 does not mention logic among the disciplines of which metaphysics certifies the principles (something he does in the parallel passages of both the *Maqāla* and the *Risāla*; cf. above, Table 1).

Text 4

[1 = Universal ScienceSOM] [a] (III, 2, p. 103, 1-2) It is easy for you at this point to know that we have ascertained the divisions (*aqsām*) of 'one'¹⁰¹.

[b] (III, 5, p. 124, 14) By 'multiplicity', two things (*ma'nayānī*) are understood¹⁰².

[c] (IV, 1, p. 163, 4) Since we have spoken of the things occurring to 'existent' and unity as species (*anwā'*) ...¹⁰³.

[2.2 = Universal SciencePOM] [d] (IV, 1, p. 163, 4-6) ... it is suitable that we speak of the things occurring to them ['existent' and unity] as properties (*ḥawāṣṣ*) and concomitant accidents ('*awāriḍ lāzima*). We will start first with those belonging to 'existent', and, among them, with anteriority and posteriority¹⁰⁴.

[e] (VII, 1, p. 303, 13-14) Therefore it is suitable for us to speak also of the things that are proper (*al-umūr allatī taḥtaṣṣu*) to unity and to what is in opposite correspondence to it — i.e. multiplicity — as sameness (*huwahuwiyya*), homogeneity, coincidence (*muwāfaqa*), equality, likeness and the things that are in opposite correspondence to them¹⁰⁵.

Part [1] takes into account, besides those of 'existent', also the 'species' (*anwā'*) of 'one' (cf. [c]) and 'many'. It represents therefore, at the same time, Universal ScienceSE (cf. Text 3) and Universal ScienceSOM. The species of 'one' are also called 'divisions' (*aqsām*) in [a]. As it appears from [a], their analysis is given in III, 2. They are primarily the 'one' by accident and the 'one' by essence; under this latter heading, the 'one' by genus, the 'one' by species (which is presented as equivalent to the 'one' by differentia), the 'one' by relation, the 'one' by subject and the 'one' by number are enlisted. Avicenna deals with the meanings, or species, of 'many' in the final part of chapter III, 5 (cf. [b])¹⁰⁶. They are the absolute and relative multiplicity: the former is the opposite of unity, the latter of paucity¹⁰⁷. The study of the opposition between

¹⁰¹ fa-yakūnu saḥlan 'alayka min ḥāḍā l-mawḍi' i an ta'rifa annā qad ḥaḥḥaqqānā aqsāma l-wāḥidi.

¹⁰² wa-l-kaḥṭratu yufhamu minhā ma'nayānī.

¹⁰³ lammā takallamnā 'alā l-umūri llatī taqa'u mina l-wuḡūdi wa-l-waḥḍati mawqi'a l-anwā'i ...

¹⁰⁴ fa-bi-l-ḥariyyi an natakallama fi l-aṣyā'i llatī taqa'u minhumā mawqi'a l-ḥawāṣṣi wa-l-'awāriḍi l-lāzimati wa-nabda'u awwalan bi-llatī takūnu li-l-wuḡūdi wa-minhā bi-l-taqaddumi wa-l-ta'aḥḥuri.

¹⁰⁵ fa-ḥariyyun binā an natakallama ayḍan fi l-umūri llatī taḥtaṣṣu bi-l-waḥḍati wa-bi-muqābilatihā [P110 P125 : wa-muqābilatihā t c] ayi l-kaḥṭratī miṭla l-huwahuwiyyati [P110 P125 t Horten: l-huwiyyati c] wa-l-muḡānasati wa-l-muwāfaqati wa-l-musāwāti wa-l-muṣābahati wa-muqābilatihā. On the suggested emendations, cf. BERTOLACCI, *Some Texts* cit.

¹⁰⁶ III, 5, pp. 124, 14 - 125, 4.

¹⁰⁷ In the *Naḡāt* we are told that the divisions of 'many' are opposite to the divisions of 'one' (ed. KURDĪ, p. 200, 1). This would exclude the two meanings of multiplicity in *Ilāhiyyāt* III, 5 from the status of divisions of 'many', since they are not opposite to the divisions of 'one'. On the other hand, the concrete analysis of the 'species' of 'many' in the *Naḡāt* (p. 224, 10-13) deals with the same two meanings of multiplicity as in *Ilāhiyyāt* III, 5.

‘one’ and ‘many’ in chapter III, 6 is, thus, a complement of the final part of III, 5¹⁰⁸. Chapters III, 3-5, dealing with quantity, belong to Universal ScienceSOM, in so far as unity is the principle of quantity. To the discussion of quantity is related also chapter III, 9 (the qualities affecting quantities). All in all, therefore, Universal ScienceSOM consists of chapters III, 2-6 and III, 9.

Part [2.2] investigates the ‘properties’ (*ḥawāṣṣ*) of ‘one’ and ‘many’ (cf. [d]) and constitutes Universal SciencePOM. These properties are called ‘concomitant accidents’ (*‘awāriḍ lāzima*) in [d], ‘things that are proper’ (*al-umūr allatī taḥtaṣṣu*) in [e]. The properties of ‘one’ and ‘many’ are dealt with in chapter VII, 1. In this chapter Avicenna takes into account — among the properties of ‘one’ — ‘same’, ‘like’, ‘equal’, ‘correlative’ (*munāsib*), ‘homogeneous’, ‘similar’ and ‘conformable’. Among the properties of ‘many’, he deals with ‘other’, ‘different’ and ‘opposition’ (with special attention to ‘privation’ and ‘contrariety’).

In the following two chapters (VII, 2-3), Avicenna expounds and refutes the doctrine of those philosophers who regard quantity (both arithmetical and geometrical) as substance and principle of substance. He had announced this theme, not only in Text 2, but also in chapter III, 1¹⁰⁹, as a sort of complement to the proof of the accidentality of quantity (given in chapters III, 3-5). Chapters VII, 2-3, therefore, can be regarded as a sort of *pars destruens* of the treatment of ‘one’ and ‘many’.

The differences of Text 4 from Text 2 are mainly three. First and most important, whereas in Text 2 ‘one’ and ‘many’ have only ‘things that follow’ (*tawābi‘*) them, corresponding to their properties, in Text 4 they have both species and properties. In other words, the treatment of ‘one’ and ‘many’ in Text 4 shows the same inner structure the treatment of ‘existent’ has in Text 1 and Text 3. Like the latter, also the former is divided in a section dealing with species (Universal ScienceSOM) and a section dealing with properties (Universal SciencePOM). Only Universal SciencePOM was mentioned in Text 2.

Second, in Text 2 the doctrine of ‘one’ and ‘many’ in its entirety appears as an independent unit, which is disconnected from the discussion of ‘existent’, and comes after it. In Text 4, on the other hand, as a consequence of the first difference, ‘existent’, on the one hand, and ‘one’ and ‘many’, on the other, are dealt with in parallel stages: first we have Universal ScienceSE together with Universal ScienceSOM; then Universal SciencePE followed by Universal SciencePOM. Universal ScienceSE and Universal ScienceSOM are

¹⁰⁸ For an Italian translation of this chapter, cf. A. BERTOLACCI, *Metafisica A*, 5, 986 a 22-26 nell’*Ilāhiyyāt del Kitāb al-Šifā’ di Ibn Sīnā*, «Documenti e Studi sulla Tradizione Filosofica Medievale», 10, 1999, pp. 205-231; pp. 224-231.

¹⁰⁹ III, 1, p. 95, 13-14.

intermingled, and do not constitute two independent subdivisions¹¹⁰. Thus, in [c] (cf. Text 3 [b]), Avicenna declares jointly concluded the treatment of both. Universal SciencePE and Universal SciencePOM, on the contrary, are distinct from each other (cf. [e]), even though both are subdivisions of the same part of metaphysics (cf. [d])¹¹¹. This peculiar side-by-side treatment of 'existent' and 'one' is perhaps due to the overlapping of Universal ScienceSE and Universal ScienceSOM, something which entails a link (for the sake of symmetry) also between Universal SciencePE and Universal SciencePOM.

Third, the order of topics envisaged by Text 2 within the doctrine of 'one', 'many' and related matters is not the same as that resulting from Universal ScienceSOM and Universal SciencePOM in Text 4. Moreover, the properties of 'one' and 'many' in Text 4 includes only some of the 'things that follow' them in Text 2¹¹².

To sum up: the concrete structure of the *Ilāhiyyāt*, as witnessed by Text 3 and Text 4, is the result of the coexistence and interaction of two axes. The main axis concerns 'existent', and is represented by First Philosophy/Universal ScienceSE ([1]), Universal SciencePE ([2.1]) and Theology ([3]). The second axis regards 'one' and 'many' and is given by Universal ScienceSOM ([1]) and

¹¹⁰ Universal ScienceSE (II, 1-III, 10) encompasses Universal ScienceSOM (III, 2-6; III, 9). Universal ScienceSE starts before Universal ScienceSOM in the second treatise (substance in II, 1-4), and follows after it in the third treatise (quality and relation in III, 7-10). Universal ScienceSOM, in its turn, embraces a part of Universal ScienceSE (quantity in III, 3-5), of which it constitutes, so to say, the framework. As Avicenna himself contends at the end of III, 1 (pp. 95, 15-96, 4), the reason of the insertion of chapter III, 2 (the starting-point of Universal ScienceSOM) at this point of the *Ilāhiyyāt* is that 'one' is a principle of quantity. As a matter of fact, the proof of the accidentality of number in III, 3 is heavily dependent on the proof of the accidentality of 'one' (cf. A. BERTOLACCI, *The Reception of Avicenna's 'Philosophia Prima' in Albert the Great's Commentary on the 'Metaphysics': The Case of the Doctrine of Unity*, in *Albertus Magnus 1200-2000. Zum Gedenken nach 800 Jahren : neue Zugänge, Aspekte und Perspektiven* edd. W. SENNER et al., Akademie Verlag, Berlin 2001, pp. 67-78). Probably because of the overlapping of Universal ScienceSE and Universal ScienceSOM, the third treatise is the longest of the *Ilāhiyyāt* (ten chapters).

¹¹¹ Avicenna deals first with Universal SciencePE (IV-VI) in its entirety, then with Universal SciencePOM (VII, 1-3). Even though this latter comes immediately after Universal SciencePE, it belongs to a distinct, independent treatise.

¹¹² The differences between Text 2 and the concrete treatment of Universal SciencePOM (VII, 1-3) are even greater. Many properties of 'one' in Text 2 are subsumed under 'same' in Universal SciencePOM: 'like', 'equal' and 'correlative' (*munāsib*) are presented as instances of sameness concerning accidents (quality, quantity, relation); 'homogeneous' and 'similar' as instances of sameness concerning the constituents of essence (genus and species); 'conformable' as an instance of sameness concerning properties. In this list, 'correlative' takes the place of 'coincident' (*muwāfiq*). Among the properties of 'many', 'unlike', 'unequal', 'non-homogeneous', 'non-conformable' are omitted.

Universal Science POM ([2.2]). Within Universal Science, the two axes either intersect one another (in [1]), or run parallel to one another (in [2.1] and [2.2]). If we consider how much attention Avicenna devotes to the question of the unicity and unity of the Necessary Existent, both within the Introduction (I, 7) and within Theology (VIII, 4-5), we realize that the second axis of metaphysics does not affect only Universal Science, but pervades all the *Ilāhiyyāt*, and is therefore as fundamental as the main one.

The main axis of metaphysics was already provided, albeit in the reverse order, by Text 1 (Theology, Universal SciencePE, First Philosophy/Universal ScienceSE). The second axis, on the other hand, was introduced, but only partially displayed by Text 2. In this text, the treatment of 'one', 'many' and related topics appeared more as a part of metaphysics than as a second fundamental dimension of this discipline. The fact that the *Ilāhiyyāt* is construed as a doctrine of 'existent' (the main axis), but encompasses also a theory of 'one' and 'many' (the second axis), is one of the salient features of this work.

§5. THE STRUCTURE OF METAPHYSICS IN THE OTHER AVICENNIAN *SUMMAE*

Besides the *Šifā'*, Avicenna wrote other philosophical *summae* (both in Arabic and in Persian), which, albeit less extensive than his masterpiece, are nonetheless interesting for our purposes. They present a structure of metaphysics that is different from, and less comprehensive than, that of the *Ilāhiyyāt*. From this point of view, the *Ilāhiyyāt* is an *unicum* in Avicenna's literary output not only from the point of view of doctrine, but also from the perspective of structure.

In the present article I take into account the following works: the *Kitāb al-Išārāt wa-l-Tanbīhāt* (*Book of Pointers and Reminders*, henceforth: *Išārāt*)¹¹³; the already mentioned '*Uyūn al-Ḥikma* (henceforth: '*Uyūn*)¹¹⁴, *Dānešnāme-*

¹¹³ This work consists of two parts, one dealing with logic, the other with natural philosophy (II, 1-3) and metaphysics (II, 4-10). IBN SĪNĀ, *Al-Išārāt wa-l-Tanbīhāt*, ed. J. FORGET, Brill, Leiden 1892; IBN SĪNĀ, *Al-Išārāt wa-l-tanbīhāt*, ed. S. DUNYA, 3 voll., Cairo 1960; overall French translation in: IBN SĪNĀ (AVICENNE), *Livre des Directives et Remarques (Kitāb al-Išārāt wa l-tanbīhāt)*, traduction avec introduction et notes par A.-M. GOICHON, Commission Internationale pour la Traduction des Chefs-d'oeuvre, Beirouth, Vrin, Paris 1951, repr. 1999; French translation of II, 8 in J. MICHOT, *De la joie et du bonheur. Essai de traduction critique de la section II, 8 des Ishārāt d'Avicenne*, «Bulletin de Philosophie Médiévale», 26, 1983, pp. 49-60 [based on Forget's edition]; English translation of II, 8-10 in: S. INATI, *Ibn Sinā and Mysticism*, Keagan Paul International, London-New York 1996; English translation of the prologues to the two parts and of the epilogue in GUTAS, *Avicenna* cit., pp. 54-56; pp. 140-141. Among the recent studies, see T. MAYER, *Ibn Sinā's 'Burhān al-Siddiqīn'*, «Journal of Islamic Studies», 12, 2001, pp. 18-39.

¹¹⁴ This work consists of three 'sections' (*aqsām*), dealing with logic, natural philosophy and metaphysics (ed. BADAŪI, p. 1, 5).

ye ‘*Alā’ī* (in Persian)¹¹⁵, and *Kitāb al-Hidāya* (henceforth: *Hidāya*)¹¹⁶; and the *Kitāb al-Nağāt* (*Book of Salvation*, henceforth: *Nağāt*)¹¹⁷. I disregard, on the contrary, two other *summae*, namely *Al-Mağmū’* (The Compilation) or *Al-īkma al-‘Arūḍīya* (Philosophy for ‘Arūḍī), and the *Mašriqiyyūn*. The former is preserved in an incomplete manuscript, having some folios of the metaphysical section out of place¹¹⁸, whereas in the latter the metaphysical section is not extant¹¹⁹.

I do not engage in the question of the relative chronology of the writings I take into account. I study these works from a theoretical, rather than historical, point of view, in order to elucidate the different typologies of the structure of metaphysics which emerge from them. The order according to which I take them into account corresponds to a line of increasing structural complexity and proximity to the *Ilāhiyyāt*. This line culminates in the *Nağāt*,

¹¹⁵ This work consists of three original parts: logic, metaphysics and natural philosophy (the part on mathematics was added by Avicenna’s disciple and secretary al-Ġūzġānī). Besides the English translation of the metaphysical section (MOREWEDGE, *The Metaphysica of Avicenna* cit.), an integral French translation is available (AVICENNE, *Le Livre de science*, tr. M. ACHENA - H. MASSÉ, Les Belles Lettres, Paris 1955-1958; repr. 1986). In what follows, I adopt the numeration of chapters that Morewedge proposes.

¹¹⁶ This work consists of three parts (logic, natural philosophy and metaphysics). French translation of chapter 6 of the metaphysical section in J. R. MICHOT, *L’eschatologie dans le «Livre de la guidance» d’Avicenne. Présentation, traduction et index de la dernière section du Kitāb al-Hidāya*, «Bulletin de Philosophie Médiévale», 30, 1988, pp. 138-152; integral Italian translation in O. LIZZINI, *La metafisica del Libro della Guida. Presentazione e traduzione della terza parte (bāb) del Kitāb al-Hidāya di Avicenna*, «Le Muséon», 108, 1995, pp. 367-424.

¹¹⁷ This work consists of three original parts: logic, natural philosophy and metaphysics (mathematics was added by al-Ġūzġānī). The numbers of treatises and chapters I report in what follows refer to the metaphysical section. This has been translated in modern Latin (AVICENNAE *Metaphysices Compendium*, ex arabo latinum reddidit et adnotationibus adornavit N. CARAME, Pontificium Institutum Orientalium Studiorum, Romae 1926). Among the English translations of particular chapters, the following deserve to be mentioned: a fragment of chapter I, 11 in WISNOVSKY, *Notes* cit., p. 202; chapter I, 12 in M. E. MARMURA, *Avicenna and the Kalām*, «Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften», 7, 1991-1992, pp. 172-206 pp. 178-180; chapters II, 1-3 and II, 12 in HOURANI, *Ibn Sīnā on Necessary and Possible Existence* cit., pp. 78-82; chapter II, 12 in MARMURA, *Avicenna’s Proof from Contingency* cit., p. 350; chapter II, 37 in M. FAKHRY, *Ethical Theories in Islam*, Brill, Leiden 1991, second expanded edition 1994, Appendix B’, pp. 219-226; chapters II, 38 and II, 40 in A. ARBERRY, *Avicenna on Theology*, Murray, London 1951, repr. Hyperion Press, Westport (Conn.) 1979, pp. 42-49; 64-76.

¹¹⁸ Ms. Uppsala 364; cf. GUTAS, *Avicenna* cit., pp. 87-93; WISNOVSKY, *Notes* cit., p. 202 n. 38.

¹¹⁹ The introduction, the division of the sciences and the surviving part on logic have been printed in *Manṭiq al-Mašriqiyyīn* cit.; English translation (with textual remarks) of the introduction (pp. 2-4) and of a fragment of the division of the sciences (p. 7, 5-7) in GUTAS, *Avicenna* cit., pp. 43-49, p. 254. For a detailed overview, cf. GUTAS, *Avicenna* cit., pp. 115-130; Id., *Avicenna’s Eastern (‘Oriental’) Philosophy* cit..

which provides the most complete example of structural arrangement of metaphysics. However, as the *Nağāt* is not a summary of the *Ilāhiyyāt* from the point of view of content (something that has already been pointed out in recent scholarship)¹²⁰, in the same way, it is not a mere duplicate of it from the point of view of structure. My investigation aims at providing the starting-point of an analysis which future research will hopefully bring to completion. Unless otherwise noted, the titles of the aforementioned *summae* refer to their metaphysical sections.

Before describing the structure of metaphysics in each of the aforementioned works, I summarize their contents in the following table. To make the comparison easier, I report in the left column the structure of metaphysics in the *Ilāhiyyāt* (cf. above, Table 3).

Table 4

<i>Ilāhiyyāt</i>	<i>Išārāt</i>	<i>‘Uyūn</i>	<i>Dānešnāme-ye ‘Alā’ī</i>	<i>Hidāya</i>	<i>Nağāt</i>
Prolegomena					
Introduction					
[1] Universal ScienceSE+SOM		Universal ScienceSE+PE	Universal ScienceSE	Universal ScienceSE	Universal ScienceSE
[2.1] Universal SciencePE	Universal SciencePE		Universal SciencePE (including Universal ScienceSPO+SPM)	Universal SciencePE	Universal SciencePE
				Universal ScienceSO	Universal ScienceSOM+POM
[2.2] Universal SciencePOM					
[3] Theology	Theology	Theology	Theology	Theology	Theology
Appendix					

¹²⁰ Only chapters II, 7-9 and II, 16-40 of Theology in the *Nağāt* are (almost) *verbatim* the same as chapters VIII, 5 - X, 3 of Theology in the *Ilāhiyyāt* (cf. A.-M. GOICHON, *La distinction de l'essence et de l'existence d'après Ibn Sina*, de Brouwer, Paris 1937, pp. 501-503); both works depend, in this respect, on *al-Mabda' wa-l-Ma'ād* (cf. GUTAS, *Avicenna cit.*, pp. 112-114; Y. MAHDAVI, *Columns of Comparison of Metaphysical and Psychological Chapters of the Works: Nağāt, Al-mabda' wa-l-ma'ād, Šifā'*, *Risālat al-nafs*, « Farhang-e Irān Zamīn », 27, 1366 H., pp. 1-8).

In the *Iṣārāt*, metaphysics¹²¹ covers the last seven 'chapters' (*anmāt*) of the second part of the work (II, 4-10). The previous chapters of the second part (II, 1-3) deal with natural philosophy. Thus metaphysics is not structurally independent within the overall work. The internal structure of metaphysics is not stated anywhere, also because the investigation starts *in medias res*. Due to the particular style of the work, which consists in « providing hints and guidelines to the student, rather than ready-made arguments»¹²², it is also difficult to extract the structure of metaphysics from its concrete treatment.

Broadly speaking, it can be maintained that metaphysics in the *Iṣārāt* consists of a very succinct Universal Science, placed at the beginning of chapter 4¹²³, and a much more extensive Theology, covering the rest of II, 4 and the remaining six chapters. Universal Science is not clearly separated from Theology; the latter starts in the same chapter where the former is placed (II, 4). Universal Science is not given for its own sake, but is propaedeutic to, and almost a part of, Theology¹²⁴. In it, only the doctrine of causality is taken into account. It can be regarded, therefore, as a very brief form of Universal ScienceSE. It does encompass neither Universal ScienceSE nor Universal ScienceO. As to Theology, it contains, in a slightly different order, the six sub-divisions of the Theology of the *Ilāhiyyāt*¹²⁵. Apart from the fact

¹²¹ Metaphysics is called 'what comes after it (i.e. natural philosophy)' (*mā ba'dahū*, i.e. '*ilm al-ṭabī'a*') in the Prologue to the first part, ed. Forget p. 2, 8; the variant readings 'what comes before it' (*mā qablahū*), witnessed by mss. D and F in Forget's edition, is retained in Dunyā's edition (p. 166, 1) and in Gutas's translation (*Avicenna* cit., p. 55 and n. 4).

¹²² GUTAS, *Avicenna* cit., p. 141.

¹²³ Ed. FORGET, pp. 138, 2 - 140, 11. I take ch. 4, p. 140, 12, as the beginning of Theology. I regard the title of the fourth chapter ('On existence and its causes', p. 138, 1) as applying to the sole Universal SciencePE, which consists of a section dealing with 'existent' (pp. 138, 2-139, 13) and another dealing with the causes (pp. 139, 14-140, 11). DAVIDSON, *Proofs for Eternity* cit., p. 239 and n. 44, regards pp. 140ff. as the place of the *Iṣārāt* where the proof of God's existence is provided.

¹²⁴ As the conclusion of chapter 4 (pp. 146, 13 - 147, 2) makes clear, the doctrine of this chapter is essentially theological: in it, the analysis of 'existent' is nothing else than the starting-point of the proof of God's existence and the elucidation of His features. On account of this, the original distinction between 'existent' and 'sensible', placed at the very beginning of chapter 4 (pp. 138, 2-139, 10) has to be read in the light of what Avicenna says at the end of the same chapter, namely that the investigation of God he proposes 'does not need to take into account His creation and His action' (p. 146, 14-15). In chapter 4 the initial distinction between 'existent' and 'sensible' is followed by the distinction between essence and existence (p. 139, 11-13), which corresponds to a passage of I, 5 in the *Ilāhiyyāt* (pp. 31, 2 - 32, 5).

¹²⁵ Chapter 4 encompasses, after Universal SciencePE, both a proof of the Necessary Existent's existence (p. 140, 12-142, 9; cf. MARMURA, *Avicenna's Proof from Contingency* cit., pp. 339-341; DAVIDSON, *Proofs for Eternity* cit., p. 289, n. 44; MAYER, *Ibn Sīnā's 'Burhān al-Siddiqīn'* cit.), and a description of His nature (p. 142, 10-147, 2). Chapters 5-6 are devoted to Cosmology.

that one of God's attributes (His knowledge) is dealt with after, and not before, the production of the universe, the Theology of the *Iṣārāt* is structurally the same as that of the *Ilāhiyyāt*.

The *ʿUyūn* is a work portrayed by both Medieval Arab commentators and modern editors as 'scattered and lacking architecture'¹²⁶. Despite the presence of some introductory lines resembling in content chapter I, 2 of the *Ilāhiyyāt*¹²⁷, the only clues about the structure of metaphysics are given by the actual content of the work. As a matter of fact, it consists of a single unit, which can be divided tentatively into Universal Science¹²⁸ and Theology¹²⁹. Universal Science encompasses both Universal SciencePE and Universal ScienceSE. The structural distinction between these two, however, is not preserved¹³⁰. Any doctrine of 'one' and 'many', on the contrary, is

The seventh chapter is a sort of miscellaneous unit, whose core is noetics: in so doing, it deals, retrospectively, with another attribute of the Necessary Existent, namely Its knowledge of Itself and of the universe (i.e. Its providence, which entails a theodicy), and provides a first account of Eschatology. Chapter 8 takes into account *ex professo* Eschatology (cf. MICHOT, *De la joie et du bonheur* cit., p. 50: «... le texte des *Ishārāt* dont nous venons d'évoquer le contenu nous est paru d'un grand intérêt car ce que le philosophe propose dans ses deux premières parties, c'est en fait un réexamen des principaux thèmes qu'il étudie ailleurs, par exemple à la fin de la *Métaphysique* du *Shifā'*, dans les exposés qu'il consacre explicitement au *ma'ād*, au retour, c'est-à-dire à la vie future»). To it the following chapter (9) is linked, since this as well is a reworking, according to an original pattern and by means of some sufi terminology, of many doctrines that Avicenna expounds in *Ilāhiyyāt* IX, 7 (I have provided an analysis of chapter 9 in the still unpublished article *Sufism in the ninth namaṭ of Avicenna's Al-Iṣārāt wa-l-Tanbīhāt : a Discussion* [Fall 1999]; cf. GUTAS, *Avicenna's Eastern ('Oriental') Philosophy* cit., pp. 163-165 and n. 14). Finally, chapter 10 deals with Prophetology (cf. *Livre des Directives et Remarques* cit., p. 514, n. 2: «Dans cet ouvrage, Ibn Sinā suit donc la même progression de pensée que dans le *Šifā'* et la *Naḡāt*, qui s'achèvent pour ainsi dire, sur l'étude de la prophétie»).

¹²⁶ Cf. 'A. Badawī's *Preface*, in his edition of the work, p. vii.

¹²⁷ In the opening lines (p. 47, 4-15), 'existent' is declared to be the subject-matter of metaphysics, whereas the objects of investigation of this discipline are subsumed under a sole rubric, that of the 'essential accidents' (*'awāriḍ dātiyya*) of 'existent'. As examples of these latter Avicenna provides 'one' and 'many', 'universal' and 'particular', 'act' and 'potency' and causality. Even though these concepts represent properties of 'existent', and in the opening lines no mention is made of its species, The doctrine of 'existent' in the rest of the work consists not only of Universal SciencePE, but also of Universal ScienceSE.

¹²⁸ Ed. BADAWĪ, pp. 47, 15 - 57, 6.

¹²⁹ Pp. 57, 7 - 60, 10. It is remarkable that, in quantitative terms, the extent of Universal Science is the double of that of Theology.

¹³⁰ A first treatment of the species of 'existent' (essentially the category of substance, pp. 47, 15 - 49, 15) is followed by the analysis of some its properties (potency and cause, pp. 49, 17 - 53, 2), by a second treatment of its species (substance and accidents, pp. 53, 4 - 55, 2), and by the analysis of some other among its properties (necessary and possible as applied to 'existent' — cf. *Ilāhiyyāt* I, 6-7 — and universal, pp. 55, 2 - 57, 6).

absent¹³¹. Theology treats only three topics: a brief proof of the Necessary Existent's existence¹³², the description of Its main features¹³³, and the pleasure and future happiness of the human rational soul¹³⁴. No treatment of the procession of the universe, of theodicy and of prophecy, on the contrary, is offered.

In the *Dānešnāme-ye 'Alā'ī*, a bipartition of metaphysics into Universal Science and Theology is clearly stated in one of the first chapters of the section devoted to this discipline (ch. 2)¹³⁵, though it is not immediately visible in the concrete structure of the work, where Theology (chapters 19-57) follows Universal Science (chapters 3-18) without any break of continuity¹³⁶. In the actual development of the work, Universal Science is *de facto* divided into Universal ScienceSE (chapters 3-11)¹³⁷ and Universal SciencePE (chapters 12-18)¹³⁸, without, however, any previous mention of this division and any explicit distinction between species and properties. The doctrine of 'one' and

¹³¹ Avicenna refers, *en passant*, to unity and multiplicity in the section of the work devoted to the analysis of 'universal' (pp. 56, 5 - 57, 6).

¹³² P. 57, 7-11.

¹³³ Pp. 57, 12 - 59, 13.

¹³⁴ Pp. 59, 13 - 60, 10; cf. GUTAS, *Avicenna* cit., pp. 258-259 and n. 41.

¹³⁵ In chapter 2 the 'states' of 'existent' investigated by metaphysics are sharply distinguished from its causes (cf. MOREWEDGE, *The Metaphysica of Avicenna* cit., p. 14). In the *Dānešnāme-ye 'Alā'ī* metaphysics is the first theoretical discipline to be expounded, after logic and before natural philosophy and mathematics; the section devoted to metaphysics contains, therefore, a first chapter which can be considered an introduction to theoretical philosophy in general and deals with the division of the sciences (chapter 1). In so doing, it resembles the first part of chapter I, 1 in the *Ilāhiyyāt* (pp. 3, 11 - 5, 1). Chapter 2 takes into account two other themes of the Prolegomena of the *Ilāhiyyāt*, namely the subject-matter and the objects of investigation of metaphysics (cf. I, 2), and the rank of this discipline with respect to natural philosophy and mathematics (cf. I, 3, pp. 19, 1 - 21, 11). The beginning of chapter 3 deals with 'existent' as primary concept — a theme Avicenna faces in I, 5 — whereas the rest of this chapter is the starting-point of Universal ScienceSE.

¹³⁶ In a certain respect, the last chapter of Universal Science (ch. 18) can be regarded as the beginning of Theology, whereas the second chapter of Theology (ch. 20) still belongs to Universal Science (cf. below, nn. 138, 140).

¹³⁷ The second part of chapter 3 and the following chapters (4-11) are devoted to Universal ScienceSE: the species of 'existent' taken into account are substance (chs. 3-8) and accidents (ch. 9), with particular attention to quantity and quality (ch. 10). The last chapter of Universal ScienceSE (ch. 11) deals with the way in which 'existent' is predicated of the categories, and has a parallel in a passage of *Ilāhiyyāt* I, 5, pp. 34, 15-35, 2.

¹³⁸ The analysis of 'necessary' and 'possible' as applied to 'existent' (ch. 18) — which in the *Ilāhiyyāt* occurs in the Introduction (I, 6-7) — is part of Universal SciencePE — together with 'universal' and 'particular' (ch. 12), 'one' and 'many' (ch. 13), 'prior' and 'posterior' (ch. 14 and 16), 'cause' and 'effect' (chs. 15-16), 'potency' and 'act' (ch. 17) — and constitutes the transition to Theology.

'many' is possibly alluded to in chapter 2¹³⁹, and actually occurs in chapter 13, but has no structural relevance. The treatment of, first, the species and properties of 'one' (Universal ScienceSPO) and, second, the species and properties of 'many' (Universal ScienceSPM) is only an element of Universal SciencePE. Theology encompasses, differently ordered, three of the six topics of the *Ilāhiyyāt's* Theology (except the Necessary Existent's existence, Theodicy and Prophetology)¹⁴⁰.

In the *Hidāya* both the bipartition in Universal Science and Theology, and the doctrinal relevance of Theology over Universal Science, are alluded to in the introductory section¹⁴¹. In the actual structure of the work, in addition, Universal ScienceSE is separated from Universal SciencePE, and both are followed by an independent treatment of the species of 'one' (Universal ScienceSO)¹⁴². The eminence of Theology over Universal Science is confirmed by the fact that only one chapter (*faṣl*) of the work is devoted to the latter, whereas the remaining five deal with the former. Of the five theological chapters, one deals with the distinction of Necessary Existent and possible existent and with the attributes of the Necessary Existent (chapter 2); two with Cosmology (chapters 3-4); one with Prophetology (chapter 5) and the last with Eschatology (chapter 6). Within Theology, what is noteworthy is the absence of a proof of the Necessary Existent's existence, and the precedence of Prophetology over Eschatology¹⁴³.

¹³⁹ In this chapter 'one' and 'many', 'to be in agreement' and 'to be in disagreement' are mentioned apart from the other states of 'existent'; cf. MOREWEDGE, *The Metaphysica of Avicenna* cit., p. 14.

¹⁴⁰ Within Theology (chs. 19-57), chapters 19-37 deal with the Necessary Existent's nature, chapter 37 takes into account Eschatology as well, and chapters 38-57 deal with Cosmology. Eschatology (ch. 37), thus, is placed before Cosmology (chs. 38-57). As a matter of fact, chapter 20 breaks the continuity of Theology, and would fit better in an ontological context: in its title the 'possible existent' is mentioned (this connects chapter 20 with chapter 18), and its content is mainly a discussion of the causal relationship between the cause of existence and its effect (this connects chapter 20 with chapters 15-16). Cf. MOREWEDGE, *The Metaphysica of Avicenna* cit., p. 206.

¹⁴¹ Ed. 'ABDUH, ch. 1, p. 232, 4-7. In it, 'what occurs' (*mā ya'riḍu*) to 'existent *qua* existent' is presented as the object of investigation of metaphysics, whereas the study of the first principles is called its 'perfection' (*tamām*). Metaphysics in this passage is named 'first philosophy' (*falsafa ūlā*).

¹⁴² After a few lines elucidating the mode of predication of 'existent' (ch. 1, p. 232, 9-12), and corresponding to a passage of *Ilāhiyyāt* I, 5 (pp. 34, 15 - 35, 2), in the first chapter of the work we encounter Universal ScienceSE (substance, ch. 1, pp. 232, 12 - 238, 7), Universal SciencePE (anterior and posterior, cause, universal, ch. 1, pp. 239, 2 - 255, 3) and Universal ScienceSO (species of 'one', ch. 1, p. 255, 6 - 259, 6).

¹⁴³ Cf. GUTAS, *Avicenna* cit., pp. 258-259.

In the *Nağāt*, the structure of metaphysics is clearly formulated in the opening four chapters (I, 1-4)¹⁴⁴, and consistently accomplished in the rest of the work. Chapter I, 1 is a sort of general introduction; in it Avicenna establishes the bipartition of metaphysics into Universal Science and Theology¹⁴⁵. Chapters I, 2-4, on the other hand, are an introduction to Universal Science in particular. After distinguishing in I, 2 the doctrine of 'existent' from that of 'one' and 'many', and providing the equivalent of the distinction between species and properties of a subject-matter in I, 3¹⁴⁶, in the first part of I, 4 Avicenna describes Universal ScienceSE, Universal SciencePE, and the doctrine of 'one' and 'many'¹⁴⁷.

As to the concrete structure, the metaphysical part of the *Nağāt* consists of two treatises, the former including Universal Science, the latter devoted to Theology. The first treatise can be further subdivided into two consecutive parts, devoted respectively to 'existent' (Universal ScienceSE plus Universal SciencePE) and 'one' and 'many'¹⁴⁸. The doctrine of 'one' and 'many', according

¹⁴⁴ Chapters I, 1-3 and the first half of chapter I, 4 in the *Nağāt* roughly correspond to chapter I, 2 of the *Ilāhiyyāt's* Prolegomena. Three lines of chapter I, 4 of the *Nağāt*, where Avicenna reminds the status of 'existent' as primary concept (p. 200, 3-6), have a more extensive parallel in a passage of chapter I, 5 of the *Ilāhiyyāt's* Introduction (pp. 29, 5 - 30, 11).

¹⁴⁵ In I, 1 (p. 198, 5-6; line 6 is omitted in Faḥrī's edition) Avicenna envisages what appears to be a three-fold vertical axis of metaphysics: he mentions the 'states' (*aḥwāl*), the 'consequent attributes' (*lawāḥiq*) and the 'principles' (*mabādi*) of 'existent'. However, the term 'states' is apparently used in a non-technical sense in this passage: 'state' (*ḥāl*) occurs on its own immediately before (p. 198, 4), and 'status' (*amr*) is employed as its synonym immediately after (p. 198, 6). The vertical division is, therefore, a bipartition.

¹⁴⁶ In I, 3 Avicenna divides the consequent attributes into essential and non-essential, and the essential ones into 'specific differences' (*fuṣūl*) and '(proper) accidents' (*'awāriḍ*); they produce, respectively, the division into 'species' (*anwā*) and 'states' (*ḥālāt*). In the next chapter (I, 4, p. 199, 13 - 16; p. 200, 1), the 'states' are called 'accidental sections' (*fuṣūl 'araḍiyya*), 'types' (*aṣnāf*) and — surprisingly — 'consequent attributes' (*lawāḥiq*). Since the 'consequent attributes' producing the 'states' are the 'proper accidents', we are allowed calling the 'states' 'proper accidents' as well. Also in the *Nağāt*, therefore, the main distinction can be reduced to 'species' and 'proper accidents'.

¹⁴⁷ Pp. 199, 10 - 200, 3. Universal ScienceSE is said to focus on the categories, Universal SciencePE on 'potency' and 'act', 'one' and 'many', 'anterior' and 'posterior', 'perfect' and 'imperfect', 'cause' and 'caused'. The part of Universal Science devoted to 'one' and 'many' is described as dealing first with 'one' — its species are 'one' by genus, by species, by accident, by analogy and by number; its properties are equality, likeness, 'correspondence' (*muṭābaqa*), homogeneity, conformability and 'same' (Universal ScienceSPO) — then with 'many' — its species are said to be opposite to those of 'one'; its properties are otherness, opposition, unlikeness, inequality, non-homogeneity and non-conformability (Universal ScienceSPM).

¹⁴⁸ The second half of chapter I, 4 and chapters I, 5-10 deal with Universal ScienceSE: particular attention is paid, among the categories, to substance, quantity and quality, whereas

to the program (I, 4), should be an instance of Universal ScienceSPO plus Universal ScienceSPM (the species and properties of 'one' should be taken into account before those of 'many'). In the concrete structure (I, 21), on the contrary, it is an instance of Universal ScienceSOM plus Universal SciencePOM (the species of 'one' and 'many' are taken into account before the properties of 'one' and 'many'). Universal ScienceSOM is not clearly separated from Universal SciencePOM¹⁴⁹.

The second treatise deals with Theology. Theology encompasses seven topics, one more than in the *Ilāhiyyāt*. The first three chapters (II, 1-3) take into account the Necessary Existent and the possible existent in themselves¹⁵⁰. The elucidation of the Necessary Existent's nature both precedes (II, 4-11) and follows (II, 16-20) the proof of His existence (II, 12-15). Cosmology (II, 21-36), Theodicy (II, 37), Eschatology (II, 38) and Prophetology (II, 39-41)¹⁵¹ follow.

To summarize: in the works I have described, the structure of metaphysics is increasingly complex. In the first stage of the process (*Išārāt*), almost no structural pattern is discernible (Universal Science is a very brief propaedeutic to Theology). In the second stage (*Uyūn*) the main bipartition (Universal Science and Theology) is present — as in all the following stages — but the internal structure of Universal Science is fluid (Universal ScienceSE is mixed with Universal SciencePE); the treatment of 'one' and 'many' is still missing. In the third stage (*Dānešnāme-ye 'Alā'ī*) Universal ScienceSE is distinct from Universal SciencePE — as in all the following stages — and the doctrine of 'one' and 'many' makes its first appearance; this latter is complete in itself (species and properties of both 'one' and 'many' = Universal

relation is not discussed. Universal SciencePE covers chapters I, 11-21: 'eternal', 'coming-into-existence' and 'universal' are added to the properties of 'existent' mentioned in I, 4. The transition from the doctrine of 'existent' to that of 'one' and 'many' is marked by the title of chapter I, 21, p. 223, 20: 'Chapter on the species of 'one' and 'many''. In this chapter Avicenna deals first with the species both of 'one' and 'many' (Universal ScienceSOM): the former are those enlisted in I, 4, with the addition of 'one' by subject and 'one' by universality (for example, the Sun); the latter are absolute and relative multiplicity, as in *Ilāhiyyāt* III, 5. Then he faces the properties of both 'one' and 'many' (Universal SciencePOM): the former are those mentioned in I, 4 plus 'parallelism' (*muwāzāt*); among the latter, only opposition is recalled, and difference and contrariety are added.

¹⁴⁹ Universal ScienceSOM and Universal SciencePOM are treated in the same chapter (I, 21), whose title mentions only the 'species' (*anwā*) of 'one' and 'many' (p. 223, 20).

¹⁵⁰ Chapters II, 1-4 and II, 11 resemble chapters I, 6-7 of the *Ilāhiyyāt*: as these, they deal with the Necessary Existent and His unicity and with the possible existent. This confirms the theological purport of chapters I, 6-7 within the *Ilāhiyyāt*'s Introduction (cf. above, §4, p. 25).

¹⁵¹ 'Prophecy' is not mentioned in the title of chapter II, 39 of the *Nağāt* as it is in the title of the corresponding chapter in the *Ilāhiyyāt* (X, 1).

Science SPO and Universal ScienceSPM), but appears as a single unit belonging to Universal SciencePE. In the fourth stage (*Hidāya*), the treatment of 'one' and 'many' becomes independent, but is limited in its scope: it focuses only on 'one', of which it describes only the species (Universal ScienceSO). In the final stage (*Nağāt*), the doctrine of 'one' and 'many' is detached from that of 'existent' and displays, albeit not rigidly, a division in Universal ScienceSOM and Universal SciencePOM.

If the structure of metaphysics in the *Ilāhiyyāt* is compared with that of the other works taken into account, three considerations seem in order. First, in the other works, the main axis of metaphysics amounts to a bipartition: whereas in the *Ilāhiyyāt* Universal ScienceSE (with Universal ScienceSOM) and Universal SciencePE are two distinct parts of metaphysics before Theology, in the other works all the portion of metaphysics preceding Theology is merged into a single unit. This is an attestation, on the structural level, to the importance of Theology within metaphysics, something Avicenna occasionally states¹⁵². In some of the other works, Theology is even more comprehensive and articulated than in the *Ilāhiyyāt*. This happens, significantly, both in the first stage of the sequence (*Išārāt*)¹⁵³, and in the last (*Nağāt*)¹⁵⁴.

Second, in the works in which it occurs (*Dānešnāme-ye 'Alā'ī*, *Hidāya* and *Nağāt*), the treatment of 'one' and 'many' does not constitute, as in the *Ilāhiyyāt*, a second axis of metaphysics. In these works, within Universal Science the discussion of 'one' and 'many' in its entirety follows that of 'existent'. It does not run parallel to it. In this respect, the aforementioned works resemble the structure of metaphysics emerging from Text 2.

Third, in the other works all the additional elements of metaphysics that we find in the *Ilāhiyyāt* are missing. Either nothing corresponds to the Prolegomena and the Introduction, or there are only partial correspondences. When they exist, the parallel passages do not always occur at the beginning of the work; they never constitute, in any case, an independent unit. Nothing is equivalent to the Appendix.

From the point of view of structure, hence, the *Ilāhiyyāt's* originality is twofold: it lies essentially in the articulation of Universal Science with regard to Theology, and in the emphasis put on the doctrine of 'one' and 'many' as one

¹⁵² Cf. above, pp. 9-10.

¹⁵³ The additional elements are chapter 7 on noetics, and the double treatment of the destiny of human souls in chapters 8-9.

¹⁵⁴ The additional element is the analysis of the Necessary Existent and the possible existent in themselves (II, 1-3).

of the two fundamental dimensions of metaphysics¹⁵⁵.

§6. AVICENNA'S ANTECEDENTS: *POSTERIOR ANALYTICS*, *METAPHYSICS* Γ-E, ALEXANDER OF APHRODISIAS AND AL-FĀRĀBĪ

We have seen so far that the structure of metaphysics in the *Ilāhiyyāt* is the result of the interaction between two main axes, the first given by Universal Science_{SE}, Universal Science_{PE} and Theology, the second represented by Universal Science_{SOM} and Universal Science_{POM}. The last section of this article is devoted to the investigation of Avicenna's sources in this respect. Briefly put, the first axis of metaphysics has its origin in Aristotle's *Posterior Analytics*. It is fully displayed, however, together with the second axis, in books Γ and E of the *Metaphysics*. The application to metaphysics of the epistemology of the *Posterior Analytics* is more marked in Alexander of Aphrodisias than in Aristotle. Finally, a first recasting of this discipline according to the aforementioned two axes is provided by al-Fārābī. In what follows I will take into account each of these four antecedents.

As we have seen (§1), the main axis of metaphysics in the *Ilāhiyyāt* concerns the 'objects of investigation' of metaphysics, as distinct from its 'subject-matter': the latter is 'existent *qua* existent', the former are the species, the properties and the (metaphysical) causes of 'existent'. Among species, properties and causes of 'existent', the fundamental elements are the species and the properties: the causes of 'existent', as Avicenna acknowledges, are in reality causes of 'caused existent', and thus represent one of the properties of 'existent *qua* existent'¹⁵⁶.

The distinction between subject-matter and object of investigation of a scientific discipline, and the further distinction between species and properties of the subject-matter, come ultimately from Avicenna's understanding of Aristotle's *Posterior Analytics*. In the *Posterior Analytics* the aforementioned epistemological concepts are considered in themselves, without any special application to metaphysics¹⁵⁷.

Avicenna himself reveals his dependence on the *Posterior Analytics* in this respect by referring, in *Ilāhiyyāt* I, 1, to a previous writing belonging to the *Šifā'*, namely the *Kitāb al-Burhān* (*Book of Demonstration*, henceforth:

¹⁵⁵ Universal Science in the *Ilāhiyyāt* covers six treatises (II-VII) against the two treatises and half of Theology (VIII-X, 3). The proportion in the *Nağāt*, for example, is the reverse: the first treatise (Universal Science) contains 21 chapters, the second (Theology) encompasses almost the double amount of chapters (40).

¹⁵⁶ Cf. above, p. 6, n. 11.

¹⁵⁷ These concepts are applied to metaphysics, for example, in *Metaph.* B, 2, 997 a 6-9.

Burhān), which is his own reworking of the *Posterior Analytics*¹⁵⁸. In this self-reference Avicenna recalls the distinction between subject-matter, objects of investigation and (logical) principles of demonstration, or axioms. The place of the *Burhān* Avicenna is quoting (II, 6, p. 155, 4-12)¹⁵⁹ is a sort of paraphrase of *An. Post. I, 10, 76b11-22* (cf. *An. Post. I, 7*)¹⁶⁰.

I report first Avicenna's quotation of the *Burhān* in *Ilāhiyyāt I, 1* (Text 5.1), then the place of the *Burhān* he is quoting (Text 5.2), finally the Arabic translation of the passage of the *Posterior Analytics* Avicenna paraphrases in the *Burhān* (Text 5.3).

Text 5.1

(Avicenna, *Ilāhiyyāt I, 1, p. 5, 1-4*): It has not been clear from that [i.e. from the previous books] what the subject-matter of the divine science really is, apart from a pointer occurring in the *Book of Demonstration* in logic, if you remember it; namely that in the other sciences you would have [i] something that is subject-matter, [ii] some things that are objects of investigation, and [iii] some given principles from which demonstrative proofs are composed¹⁶¹.

Text 5.2

(Avicenna, *Burhān II, 6, p. 155, 4-12*) We say that every discipline — especially the theoretical one — has [i] principles (*mabādī*), [ii] subject-matters (*mawḍū'āt*) and [iii] questions (*masā'il*). [i] Principles are the premises from which that discipline demonstrates, without them being demonstrated in that discipline, either because they are evident, or because they are of too high a rank to be demonstrated in it, and are demonstrated only in a superior science, or because they are of too low a rank to be demonstrated in that science, but rather [they are demonstrated] in an inferior science (even though this is rare). [ii] Subject-matters are the things of which the discipline investigates only the states (*aḥwāl*) related to them, and the essential accidents

¹⁵⁸ This is not the only reference to the *Burhān* in the first treatise. Another quotation occurs — without a clear mention of the work referred to — in the same chapter (pp. 5, 18 - 6, 1), about the impossibility for every science to prove the existence of its own subject-matter (cf. *An. Post. I, 10, 76 b 3-13*). Other — this time explicit — quotations of the *Burhān* in I, 3, p. 19, 14, and I, 8, p. 48, 15-16.

¹⁵⁹ According to M. Horten (*Die Metaphysik Avicennas* cit., p. 5, n. 6) the reference is to *Burhān I, 1-2*; S. Van Riet (*AVICENNA LATINUS, Liber de Philosophia prima sive Scientia divina, I-IV* cit., p. 3, n. 37) indicates *Burhān II, 7* as the place referred to. There is no indication in G. C. Anawati's French translation.

¹⁶⁰ The remainder of *An. Post. I, 10* is paraphrased in *Burhān II, 10*.

¹⁶¹ wa-lam yatabayyan la-ka min ḍālika anna l-mawḍū'a li-l-'ilmi l-ilāhiyyi mā huwa bi-l-ḥaqīqati illā iṣāratur ḡarat fī kitābi l-burhāni mina l-manṭiqi in taḍakkartahā wa-ḍālika anna fī sā'iri l-'ulūmi qad kāna yakūnu la-ka ṣay'un huwa mawḍū'un wa-aṣyā'u hiya l-maṭlūbatu wa-mabādī'u musallamatun minhā tu'allafu l-barāhīnu.

(*al-‘awāriḍ al-dātiyya*) belonging to them. [iii] Questions are the propositions whose predicates are the essential accidents (*‘awāriḍ dātiyya*) of this subject-matter, or of its species (*anwā’*), or of its accidents (*‘awāriḍ*); doubts arise about them, and hence their state is clarified in that science.

Principles are the things from which the demonstrative proof is, objects of research are the things of which the demonstrative proof is, subject-matters are the things about which the demonstrative proof is. It is as if the purpose of that about which the demonstrative proof is were the essential accidents, [the purpose of] that for the sake of which that [i.e. the demonstrative proof] is were the subject-matter, and [the purpose of that] from which [the demonstrative proof is] were the principles¹⁶².

Text 5.3

(Arabic translation of Aristotle, *An. Post.* I, 10, 76b11-22) For every demonstrative science is three things: [i] one are the things that we posit as existent, namely that [particular] genus [*dālīka l-ḡins*, τὸ γένος], of which it considers the affections belonging to it in themselves [*al-ta’ṭirāt al-mawḡūda laḥū bi-dātihā*, τῶν καθ’ αὑτὰ παθημάτων]); and [ii] the well-known knowledges called ‘common’, namely the first [things] from which (*al-awā’il allatī minhā*, ἐξ ὧν πρώτων) they first clarify [the other things]; and third [iii] the affections (*al-ta’ṭirāt*, τὰ πάθη), namely those of which they assume what each of them signifies. [...] In the same way, nonetheless, there is the existence of these three things in the clarification of nature, I mean that about which [the science] demonstrates, the things that it demonstrates and the things from which it [demonstrates]¹⁶³.

¹⁶² IBN SĪNĀ, *Al-Shifā’. Al-Mantiq. 5. Al-Burhān (La logique. V. La Démonstration)*, II, 6, ed. A. ‘AFĪFĪ, Cairo 1956, p. 155, 4-12: naqūlu inna li-kulli wāḥidin mina l-ṣinā‘āti, wa-ḥuṣūṣan al-naẓariyyati, mabādi’a wa-mawḍū‘ātin wa-masā’ila wa-l-mabādi’u hiya l-muqaddimātu llatī minhā tubarhinu tilka l-ṣinā‘atu wa-lā tubarhanu hiya fī tilka l-ṣinā‘ati immā li-wuḍūḥihā wa-immā li-ḡalālāti ṣa’nihā ‘an an tubarhana fihā wa-innamā tubarhanu fī ‘ilmin fawqahā wa-immā li-dunuwwi ṣa’nihā ‘an an tubarhana fī dālīka l-‘ilmi bal fī ‘ilmin dūnahū wa-hāḍā qalilun wa-l-mawḍū‘ātu hiya l-aṣyā’u llatī innamā tabḥaṭu l-ṣinā‘atu ‘ani l-aḥwāli l-mansūbati ilayhā wa-l-‘awāriḍi l-dātiyyati laḥā wa-l-masā’ilu hiya l-qaḍāyā llatī maḥmūlatuhā ‘awāriḍu dātiyyatun li-hāḍā l-mawḍū‘i aw li-anwā’ihī aw ‘awāriḍihī wa-hiya maškūkun fihā fa-yustabra’u ḥāluḥā fī dālīka l-‘ilmi fa-l-mabādi’u minhā l-burhānu wa-l-masā’ilu laḥā l-burhānu wa-l-mawḍū‘ātu ‘alayhā l-burhānu wa-ka-anna l-ḡaraḍa fimā ‘alayhi l-burhānu l-a‘raḍu l-dātiyyatu wa-llaḍī li-aḡliḥi dālīka huwa l-mawḍū‘u wa-llaḍī minhu huwa l-mabādi’u.

¹⁶³ wa-dālīka anna kulla ‘ilmin burhāniyyin fa-ṭalātātun aḥaduhumā l-aṣyā’u llatī naḍa‘u annahā mawḡūdun wa-hiya dālīka l-ḡinsu llaḍī huwa naẓarahū fī l-ta’ṭirāti l-mawḡūdati laḥū bi-dātihā wa-l-‘ulūmu l-muta‘ārafatu llatī tuḡālu laḥā ‘ammiyyatan fa-hāḍihī hiya l-awā’ilu llatī minhā awwalan yubayyinūna wa-l-ṭāliḡu l-ta’ṭirātu wa-hiya tilka llatī ya’ḥuḍūna aḥḍan ‘alā māḍā yadullu kullu wāḥidin minhā [...] ka-dālīka wuḡūdu hāḍihī l-ṭalātati fī tabayyuni l-ṭab‘i bi-l-dūni dālīka a’nī mā fihī yubarhinu wa-l-aṣyā’u llatī ‘alayhā yubarhinu wa-l-aṣyā’u llatī minhā

In Text 5.3 three elements are singled out: i) the things representing 'the genus' (*al-ġins*, τὸ γένος), ii) 'the first things' (*al-awā'il*, τὰ πρῶτα) from which scientific clarification proceeds, namely the axioms, and iii) the 'affections' (*al-ta'tīrāt*, τὰ πάθη) of the genus, previously qualified as 'per se affections' (*al-ta'tīrāt bi-dātihā*, τὰ καθ' αὐτὰ παθήματα). In Text 5.2, partly summarized in Text 5.1, Avicenna calls 'subject-matter' (*mawḏū'*, [ii]) the genus¹⁶⁴, 'principles' (*mabādi'*, [i]) the axioms, and introduces a new rubric, that of the 'questions' (*masā'il*, [iii]), corresponding to the affections.

A detailed comparative analysis of these texts cannot be provided here. The Avicennian Text 5.2 differ from the Aristotelian Text 5.3 not only in terminology and arrangement, but also in doctrine. What is salient for our purposes are parts [ii] and [iii] of Text 5.2. In part [ii] Avicenna mentions, besides the 'essential accidents' ('*awāriḏ dātiyya*), also the 'states' (*aḥwāl*) of a discipline's subject-matter. In part [iii] the subject-matter is said to have

(Arabic text in *Al-Naṣṣ al-kāmil li-manṭiq Aristū*, ed F. JABR, Dār al-fikr al-lubnāni, Beirut 1999, vol. I, pp. 463, 13 - 464, 4; p. 464, 10-11; cf. *Manṭiq Aristū*, ed. 'A. BADAWI, Cairo 1948-1952, vol. II, pp. 339, 12 - 340, 7). Greek text in *Aristotle's Prior and Posterior Analytics. A Revised Text with Introduction and Commentary*, ed. W. D. ROSS, Clarendon Press, Oxford 1949, repr. 1965: πᾶσα γὰρ ἀποδεικτικὴ ἐπιστήμη περὶ τρία ἐστίν, ὅσα τε εἶναι τίθεται (ταῦτα δ' ἐστὶ τὸ γένος, οὗ τῶν καθ' αὐτὰ παθημάτων ἐστὶ θεωρητικὴ), καὶ τὰ κοινὰ λεγόμενα ἀξιώματα, ἐξ ὧν πρῶτων ἀποδείκνυσι, καὶ τρίτον τὰ πάθη, ὧν τί σημαίνει ἕκαστον λαμβάνει. ἐνίας μέντοι ἐπιστήμας οὐδὲν κωλύει εἶνα τούτων παρορᾶν, οἷον τὸ γένος μὴ ὑποτίθεσθαι εἶναι, ἂν ἢ φανερόν ὅτι ἔστιν (οὐ γὰρ ὁμοίως δῆλον ὅτι ἀριθμὸς ἔστι καὶ ὅτι ψυχρὸν καὶ θερμόν), καὶ τὰ πάθη μὴ λαμβάνειν τί σημαίνει, ἂν ἢ δῆλα ὥσπερ οὐδὲ τὰ κοινὰ οὐ λαμβάνει τί σημαίνει τὸ ἴσα ἀπὸ ἴσων ἀφελεῖν, ὅτι γνώριμον. ἀλλ' οὐδὲν ἦπτον τῆ γε φύσει τρία ταῦτά ἐστι, περὶ ὅ τε δείκνυσι καὶ ἄδεικνυσι καὶ ἐξ ὧν. English translation in *The Complete Works of Aristotle. The Revised Oxford Translation*, ed. J. BARNES, Princeton University Press, Princeton 1984, vol. I, p. 124: «For every demonstrative science has to do with three things: [i] what it posits to be (these form the genus [τὸ γένος], of what it considers the attributes that belong to it in itself [τῶν καθ' αὐτὰ παθημάτων]); and [ii] what are called the common axioms, the primitives from which (ἐξ ὧν πρῶτων) it demonstrates; and thirdly [iii] the attributes (τὰ πάθη), of which it assumes what each signifies. Nothing, however, prevents some sciences from overlooking some of these — e.g. from not supposing that its genus is, if it is evident that it is (for it is not equally clear that number is and that hot and cold are), and from not assuming what the attributes signify, if they are clear — just as in the case of the common items it does not assume what to take equals from equals signifies, because it is familiar. But none the less there are by nature these three things, that about which the science proves, what it proves and the things from which it proves».

¹⁶⁴ Avicenna calls 'subject-matter' (*mawḏū*) in Texts 5.1-2 what Aristotle calls 'genus' (τὸ γένος, ar. *al-ġins*) in Texts 5.3 probably on account of a previous passage of the *Posterior Analytics* (*An. Post.* I, 7, 75 a 39-b 2), where Aristotle qualifies the genus as 'underlying genus' (τὸ γένος τὸ ὑποκείμενον); this expression is rendered as *al-ġins al-mawḏū'* in the Arabic translation of the *Posterior Analytics* (*Al-Naṣṣ al-kāmil li-manṭiq Aristū* cit., vol. I, p. 455, 8 ; cf. *Manṭiq Aristū*, vol. II, p. 333, 1-4).

‘essential accidents’ (*‘awāriḍ ḍātiyya*), ‘species’ (*anwā’*) and ‘accidents’ (*‘awāriḍ*). Whereas the ‘species’ appear to be the correlative of the ‘states’ mentioned in part [ii], the difference, if any, between ‘essential accidents’ and ‘accidents’ remains obscure¹⁶⁵. The main point of Text 5.2 lies in the distinction between species (or states) and essential accidents (or accidents) of a scientific subject-matter.

This distinction is taken, in all likelihood, from another passage of the *Posterior Analytics* (*An. Post. I, 28, 87 a 38-39*), where Aristotle appears to distinguish between ‘parts’ and ‘consequent attributes’ of a scientific subject-matter. I report first Avicenna’s paraphrase of this Aristotelian passage in the *Burhān* (Text 5.4), and then the Arabic translation of the passage itself (Text 5.5).

Text 5.4

(Avicenna, *Burhān* III, 8, p. 247, 3-5). [Different] investigations belong to a single science only [a] when they share the first subject-matter and concern nothing else than the essential accidents (*al-‘awāriḍ al-ḍātiyya*) occurring to it, or to its parts (*aḡzā’*), or to its species (*anwā’*), and [b] when they share the first principles from which those essential accidents are demonstrated as belonging to the first subject-matter, or to its parts (*aḡzā’*), or to its species (*anwā’*)¹⁶⁶.

Text 5.5

(Arabic translation of *An. Post. I, 28, 87 a 38-39*) As to the science [that is] one, it is that which clarifies, with regard to one genus (*ḡins wāḥid*, ἐνὸς γένους), all the things that are composed from first principles (*mabādi’ uwal*, ἐκ τῶν πρώτων) and are parts (*aḡzā’*, μέρη) of these, or the things that are consequent [attributes] of these in themselves (*al-ašyā’ al-lāzima lahā bi-ḍātihā*, πάθη τούτων καθ’ αὐτά)¹⁶⁷.

¹⁶⁵ The matter is made even more complicated by the fact that the ‘accidents’ and the ‘species’ of the subject-matter are described in [iii] as having, in their turn, ‘essential accidents’. This aspect of Text 5.2 needs to be further investigated.

¹⁶⁶ Al-mabāḥiṭu innamā takūnu min ‘ilmin wāḥidin iḍā štarakat fī l-mawḍū‘i l-awwali wa-kāna l-baḥiṭu fihā innamā huwa ‘ani l-‘awāriḍi l-ḍātiyyati llatī ta‘riḍu lahū aw li-aḡzā’ihī aw li-anwā’ihī wa-štarakat fī l-mabādi’i l-ūlā llatī minhā yutabarhanu anna tilka l-‘awāriḍa l-ḍātiyyata mawḡḍatun li-l-mawḍū‘i l-awwali aw li-aḡzā’ihī aw li-anwā’ihī.

¹⁶⁷ wa-ammā l-‘ilmu l-wāḥidu fa-huwa llaḍi yubayyinu fī ḡinsi wāḥidin ḡamī‘a l-ašyā’i l-murakkabi min mabādi’ a uwalin wa-hiya aḡzā’ un li-hāḍihi aw al-ašyā’ a l-lāzima lahā bi-ḍātihā (Arabic text in *Al-Naṣṣ al-kāmil li-manṭiq Aristū* cit., vol. I, p. 533, 3-4; cf. *Manṭiq Aristū*, vol. II, p. 395, 13-14). Greek text in *Aristotle’s Prior and Posterior Analytics* cit.: μία δ’ ἐπιστήμη ἐστὶν ἢ ἐνὸς γένους, ὅσα ἐκ τῶν πρώτων σύγκειται καὶ μέρη ἐστὶν ἢ πάθη τούτων καθ’ αὐτά. English translation in *The Complete Works of Aristotle* cit., p. 143: «A science is one if it is of [i] one genus (ἐνὸς γένους) – of whatever things are composed from [ii] the primitives (ἐκ τῶν πρώτων) and are [iv] parts (μέρη) or [iii] attributes of these [i.e. of the things composed from the primitives] in themselves (πάθη τούτων καθ’ αὐτά)» (slightly modified).

Text 5.5 is not completely clear: it is difficult to understand whether the ‘parts’ (*ağzā*, μέρη) and the ‘things that are consequent [attributes] in themselves’ (*al-ašyā’ al-lāzima bi-dātihā*, πάθη καθ’ αὑτά) are meant to belong to the genus (i.e. to the subject-matter) or to the first principles¹⁶⁸. Avicenna’s interpretation goes openly in the former direction. But even the Avicennian Text 5.4 is not without difficulties¹⁶⁹. What is important for our purposes is that in it Avicenna associates the ‘parts’ of the subject-matter to its ‘species’, probably taking the latter as synonym of the former.

If now we go back to Text 5.2, we see that the terms Avicenna uses in it are exactly those he employs in Text 1 and afferents (cf. above, Table1): ‘subject-matter’ and ‘questions’, ‘states’ and ‘species’, ‘essential accidents’ (= ‘proper accidents’)¹⁷⁰ and ‘accidents’. In other words, the passages of the *Posterior Analytics* that Avicenna paraphrases in Text 5.2 and Text 5.4 are the place of origin of the distinction between species and properties of a subject-matter which, when applied to ‘existent’ as subject-matter of metaphysics, produces the first two elements of the main axis of this discipline (Universal ScienceSE, Universal SciencePE). Thus, the ‘core’ of the main axis of metaphysics according to Avicenna, namely the distinction between species and properties of its subject-matter, ultimately derives from his understanding of Aristotle’s *Posterior Analytics*.

The structure of Aristotle’s *Metaphysics* is an intricate and controversial issue. This work, in the ‘edition’ of it by Andronicus of Rhodes, appears as a collection of books, whose connection is far from being ordered. As a consequence, Aristotelian scholars have proposed different sketches of the structure of the *Metaphysics*¹⁷¹. In three places of this work, however, Aristotle

¹⁶⁸ In *Aristotle’s Posterior Analytics*. Translated with a Commentary by J. BARNES. Second Edition, Clarendon Press, Oxford 1993, p. 190, both possibilities are left open.

¹⁶⁹ In Text 5.4, as in Text 5.2 (cf. above, n. 165), the parts and species of the subject-matter have essential accidents, as the subject-matter itself.

¹⁷⁰ In the Introduction of the *‘Uyūn al-Ḥikma* (ed. BADAWĪ, p. 47, 11-14) the items mentioned as a *‘rāq dātiyya* of ‘existent’ correspond to its properties. The expression ‘essential accidents’ (*‘awāriḍ bi-l-dāt*, *‘awāriḍ dātiyya*) is sometimes used by Avicenna to signify, *large loquendo*, all the relevant attributes of a subject-matter; cf. I, 1, p. 4, 10; *Nağāt*, I, 3, p. 198, 17.

¹⁷¹ On this topic, among others studies, cf. A. MANSION, *Philosophie première, philosophie seconde et métaphysique chez Aristote*, «Revue Philosophique de Louvain», 56, 1958, pp. 165-221; G. PATZIG, *Theologie und Ontologie in der Metaphysik des Aristoteles*, «Kant-Studien», 52, 1960-1961, pp. 185-205 (Engl. transl.: *Theology and Ontology in Aristotle’s Metaphysics*, in *Articles on Aristotle*, edd J. BARNES - M. SCHOFIELD - R. SORABJI, Duckworth, London 1979, vol. III, pp. 33-49); W. LESZL, *Aristotle’s Conception of Ontology*, Antenore, Padova 1975; C. H. KAHN, *On the Intended Interpretation of Aristotle’s Metaphysics*, in *Aristoteles. Werk und Wirkung. Paul Moraux gewidmet*, vol. I: *Aristoteles und seine Schule*, ed. J. WIESNER, De Gruyter, Berlin-New York 1985, pp. 311-338; M. FREDE, *The Unity of General and Special Metaphysics: Aristotle’s Conception*

himself effects the first application to metaphysics of notions coming from the *Posterior Analytics*. These places are the fourth aporia of book B, chapters 1-2 of book Γ and chapter 1 of book E. Since chapters 1-2 of Γ are an answer to the fourth aporia of B¹⁷², Γ , 1-2 and E, 1 have a key-function.

In Γ , 1-2 and E, 1 Aristotle applies to 'being *qua* being', as subject-matter of metaphysics, the distinction between species and properties. Furthermore, he provides not only the first and the second, but also the third element of the main axis of metaphysics (that is the investigation of the causes of 'being', i.e. Theology). Finally, he establishes the foundation of what, in Avicenna, is the second axis of this discipline.

Metaphysics Γ and E have a fundamental importance in the *Ilāhiyyāt*: they are somehow the 'first' two books of the *Metaphysics* in Avicenna's perspective¹⁷³. It is difficult to say whether Avicenna knew book Λ only indirectly or also directly¹⁷⁴. What is sure is that he quotes doctrines resembling Λ , 5-6 and 8-9 only in the seventh treatise of the *Ilāhiyyāt* (VII, 2-3). As to book α , in Avicenna's early way of reading Aristotle's *Metaphysics* it functions, as I have shown elsewhere, as a sort of introduction to book Λ . Avicenna kept on regarding α as connected to Λ even later, and in the *Ilāhiyyāt* it is taken into account at the beginning of the eighth treatise (VIII, 1-3)¹⁷⁵. As to the next book (B), Avicenna does not regard it as an independent unit; in the *Ilāhiyyāt*

of Metaphysics, in Id., *Essays in Ancient Philosophy*, Oxford University Press, Oxford 1987, pp. 81-95; R. BOLTON, *Aristotle's Conception of Metaphysics as a Science*, in *Unity, Identity and Explanation in Aristotle's Metaphysics*, edd. T. SCALTSAS - D. CHARLES - M. L. GILL, Oxford University Press, Oxford 1994, pp. 321-354; E. BERTI, *La Metafisica di Aristotele: «onto-teologia» o «filosofia prima»?*, in *Aristotele. Perché la metafisica. Studi su alcuni concetti-chiave della «filosofia prima» aristotelica e sulla storia dei loro influssi*, edd. A. BAUSOLA - G. REALE, Vita e Pensiero, Milano 1994, pp. 117-144.

¹⁷² Γ , 2, 1004 a 31-34.

¹⁷³ I deal in detail with the primacy of book Γ within the *Ilāhiyyāt* in A. BERTOLACCI, *La ricezione del libro Γ della Metafisica nell'Ilāhiyyāt del Kitāb al-Šifā' di Avicenna*, forthcoming in the proceedings of the Congress 'Aristotele e i suoi esegiti neoplatonici. Logica e ontologia nelle interpretazioni greche e arabe', C. N. R., Rome 19-20 October 2001.

¹⁷⁴ For an example of indirect knowledge of a passage of this book, cf. BERTOLACCI, *Metafisica A*, 5, 986 a 22-26 cit. On the reception of *Metaphysics A* in the Arab world, cf. R. WALZER, *On the Arabic Versions of Books A, α and Λ of Aristotle's Metaphysics*, in Id., *Greek into Arabic: Essays on Islamic Philosophy*, Oxford, 1962, pp. 114-128; A. NEUWIRTH, *Neue Materialien zur arabischen Tradition der beiden ersten Metaphysik-Bücher*, «Die Welt des Islam», 18, 1977-78, pp. 84-100; C. MARTINI, *La tradizione araba della Metafisica di Aristotele. Libri α e Λ* , in *La ricezione araba ed ebraica della filosofia e della scienza greche*, forthcoming; EAD., *The Arabic version of the Book Alpha Meizon of Aristotle's Metaphysics and the testimony of the MS. Bibl. Apostolica Vaticana, Ott. Lat. 2048*, forthcoming.

¹⁷⁵ A. BERTOLACCI, *From al-Kindī to al-Fārābī: Avicenna's Progressive Knowledge of Aristotle's Metaphysics according to his Autobiography*, «Arabic Sciences and Philosophy», 11, 2001, pp. 257-295.

he rather deals with some of the aporias of B in different places of the work, in contexts where their solution is provided¹⁷⁶. The same treatment is reserved to the different entries of book Δ. Thus, due to what can be called the ‘transposition’ of A and α and the ‘dispersion’ of B and Δ, books Γ and E are the opening, and hence the fundamental, books of the *Metaphysics* in Avicenna’s mode of conceiving this work¹⁷⁷. Avicenna is surely influenced by the doctrine of Γ and E when he conceives the two axes of metaphysics in the first treatise of the *Ilāhiyyāt*, and accomplishes them in the rest of the work.

The only extant Arabic translation of these two books is that by Uṣṭāt (IX c.), a translation that Avicenna surely knew¹⁷⁸. All the following quotations of the *Metaphysics* are taken from this translation. As far as book Γ is concerned, however, there are signs that Avicenna used also another Arabic version, which apparently provided a better rendering of the Greek text¹⁷⁹.

In the Arabic translation of Γ, 1-2 and E, 1, Aristotle describes metaphysics as the science of ‘being qua being’, literally of ‘being with regard to its nature’ (*al-huwiyya* ‘*alā kunhihā*, τὸ ὄν ἡ ὄν) or related expressions. He assigns to this discipline the investigation of the properties of ‘being’. These are called ‘the things that belong to being in virtue of its essence’ (*al-ašyā’ allatī hiya li-l-huwiyya bi-ḡātihā*, τὰ τοῦτω ὑπάρχοντα καθ’ αὐτό) in Text 6.1 (cf. the equivalent expressions in Texts 6.3-4), and ‘proper affections’ (*ālām ḥāṣṣa*, ἰδία) in Text 6.2¹⁸⁰:

¹⁷⁶ Averroes ascribes this ‘scattering’ use of B to Nicolaus Damascenus. Cf. *Nicolaus Damascenus on the philosophy of Aristotle*. Fragments from the first five books translated from the Syriac with an introduction and commentary by H.J. DROSSAART LULOF, Brill, Leiden 1965; repr. 1969, pp. 11-12.

¹⁷⁷ The first treatise of the *Ilāhiyyāt* is heavily dependent on Γ. This is attested by two implicit quotations of Γ, 2 in *Ilāhiyyāt* I, 2 and I, 5, and the paraphrase of Γ, 3-8 in *Ilāhiyyāt* I, 8. *Metaphysics* Γ is therefore somehow encompassed and summarized in the first treatise of the *Ilāhiyyāt*. In *Ilāhiyyāt* I Avicenna reaches an harmonization between the doctrines of Γ and those of E. This is especially clear in Avicenna’s synthesis between the conception of metaphysics as science of ‘being qua being’ in Γ, 1, and the description of this discipline as dealing with what is eternal and immovable in E, 1. Cf. BERTOLACCI, *Le citazioni implicite testuali* cit., p. 232; A. BERTOLACCI, *La divisione della filosofia nel primo capitolo del Commento di Alberto Magno alla Fisica: le fonti avicenniane*, in *La Divisione della Filosofia e le sue Ragioni. Lettura di testi medievali (VI-XIII secolo)* (Atti del Settimo Convegno della Società Italiana per lo Studio del Pensiero Medievale [S.I.S.P.M.], Assisi, 14-15 novembre 1997), ed. G. D’ONOFRIO, Avagliano Editore, Cava de’ Tirreni (Salerno) 2001, pp. 137-155.

¹⁷⁸ Cf. IBN SINA, *Lettre au vizir* cit., p. 45 n. 3, p. 46 nn. 1-2, p. 47 n. 2, p. 49 nn. 1-2; BERTOLACCI, *Some Texts* cit..

¹⁷⁹ Cf. BERTOLACCI, *La ricezione* cit.

¹⁸⁰ On the difference between attributes of ‘being qua being’ and properties, and between attributes of ‘being’ per se (καθ’ αὐτό) and attributes per se (καθ’ αὐτά) of ‘being’, cf. LESZL, *Aristotle’s Conception* cit., pp. 313-315.

Text 6.1

(Arabic translation of *Metaph.* Γ, 1, 1003 a 20-21) Aristotle says that to one science belongs the theoretical study of 'being' with regard to its nature (*al-huwiyya 'alā kunhihā*, τὸ ὄν ἢ ὄν) and the theoretical study of the things that belong to 'being' in virtue of its [or: their] essence (*al-ašyā' allatī hiya li-l-huwiyya bi-dātihā*, τὰ τούτῳ ὑπάρχοντα καθ' αὐτό)¹⁸¹.

Text 6.2

(Arabic translation of *Metaph.* Γ, 2, 1004 b 15-17) In the same way, also 'being' in virtue of its nature (*al-huwiyya bi-kunhihā*, τὸ ὄν ἢ ὄν) has proper affections (*ālām hāšša*, ἴδια), and these affections are those which the philosopher has to examine¹⁸².

Text 6.3

(Arabic translation of *Metaph.* Γ, 2, 1005 a 13-14) It is known then that to one science belongs the theoretical study of 'being' with regard to its nature and of the things related to 'being' according to its nature (*al-ašyā'u llatī tansibu ilā l-huwiyyati 'alā kunhihā*, τὰ ὑπάρχοντα αὐτῷ ἢ ὄν)¹⁸³.

Text 6.4

(Arabic translation of *Metaph.* E, 1, 1026 a 31-32) Since it belongs to it the theoretical study of 'being' in so far as it is 'being' (*al-huwiyya bi-annahā huwiyya*, τὸ ὄν ἢ ὄν), of what it is, and of what belongs to it in so far as it is ['being'] ... (*mā lahā bi-annahā [huwiyya]*, τὰ ὑπάρχοντα ἢ ὄν)¹⁸⁴.

¹⁸¹ qāla Aristū inna li-'ilmin wāḥidin mina l-'ulūmi l-naẓaru fī l-huwiyyati 'alā kunhihā wa-l-naẓaru fī l-ašyā'i llatī hiya li-l-huwiyyati bi-dātihā (Arabic text in AVERROËS, *Tafsir ma ba'd at-Tabi'at*, ed. M. BOUYGES, Imprimerie Catholique, Beirut 1938-1952, vol. I, p. 296, 6-7). Greek text as in *Aristotle's Metaphysics. A Revised Text with Introduction and Commentary*, ed. W. D. Ross, Clarendon Press, Oxford 1924: ἔστιν ἐπιστήμη τις ἣ θεωρεῖ τὸ ὄν ἢ ὄν καὶ τὰ τούτῳ ὑπάρχοντα καθ' αὐτό. English translation in *The Complete Works of Aristotle* cit., p. 1584: «There is a science which investigates being as being and the attributes which belong to this in virtue of its own nature (τὰ τούτῳ ὑπάρχοντα καθ' αὐτό)».

¹⁸² ka-dālika ayḍan li-l-huwiyyati bi-kunhihā ālāmun hāššatun wa-hāḍihi l-ālāmu llatī yanbaḡi li-l-faylasūfi an yafḥaša 'anhā (AVERROËS, *Tafsir*, vol. I, p. 325, 5-6) οὕτω καὶ τῷ ὄντι ἢ ὄν ἔστι τινα ἴδια, καὶ ταῦτ' ἐστὶ περὶ ὧν τοῦ φιλοσόφου ἐπισκέψασθαι τὸ ἀληθές. *The Complete Works of Aristotle* cit., p. 1586: «So too being as such has certain properties (ἴδια), and it is about these that the philosopher has to investigate the truth» (slightly modified).

¹⁸³ fa-ma'lūmun anna li-'ilmin wāḥidin al-naẓara fī l-huwiyyati 'alā kunhihā wa fī l-ašyā'i llatī tansibu ilā l-huwiyyati 'alā kunhihā (AVERROËS, *Tafsir*, vol. I, p. 331, 10-12). ὅτι μὲν οὖν μιᾶς ἐπιστήμης τὸ ὄν ἢ ὄν θεωρῆσαι καὶ τὰ ὑπάρχοντα αὐτῷ ἢ ὄν, δῆλον. *The Complete Works of Aristotle* cit., p. 1586: «Obviously then it is the work of one science to examine being qua being, and the attributes which belong to it qua being (τὰ ὑπάρχοντα αὐτῷ ἢ ὄν)».

¹⁸⁴ wa-li-anna lahū l-naẓara fī l-huwiyyati bi-annahā huwiyyatun wa-mā hiya wa-mā lahā bi-annahā (AVERROËS, *Tafsir*, vol. II, p. 714, 15). καὶ περὶ τοῦ ὄντος ἢ ὄν ταύτης ἂν εἶη θεωρῆσαι, καὶ

Besides the properties, Aristotle in Γ , 2 mentions also some species, literally 'forms' (*ḡuwar*, εἶδη), of 'being *qua* being':

Text 7

(Arabic translation of *Metaph.* Γ , 2, 1003 b 21-22) Therefore we say that the theoretical study of all the forms (*ḡuwar*, εἶδη) of 'being' with regard to its nature belongs to a science [which is] one in virtue of the genus. As to the forms, they are forms of the forms (*fa-ammā l-ḡuwaru*, *fa-hiya ḡuwaru l-ḡuwarī*, τὰ τε εἶδη τῶν εἰδῶν)¹⁸⁵.

Even though the nature of the species of 'being' is not perfectly clear, Texts 6.1-4 and Text 7 are clearly enough the result of the application to metaphysics of the distinction between properties and species of a discipline's subject-matter, coming from the *Posterior Analytics*. What is new are the names that these items receive in the *Metaphysics*.

Both in Γ , 1 and in E, 1, among the things metaphysics has to investigate, besides the properties and the species of 'being *qua* being', also its 'causes' (*al-ḡilal*, τὰς πρώτας αἰτίας) and 'principles' (*awā'il*, αἰ ἀρχαὶ) are enlisted. These are the metaphysical causes of 'being', and have not to be confused with the logical axioms mentioned in the *Posterior Analytics*:

Text 8.1

(Arabic translation of *Metaph.* Γ , 1, 1003 a 31-32) Therefore we have to seek the causes (*al-ḡilal*, τὰς πρώτας αἰτίας) that affect 'being' with regard to its nature¹⁸⁶.

Text 8.2

(Arabic translation of *Metaph.* E, 1, 1025 b 1-2) Aristotle says that the principles

τί ἐστι καὶ τὰ ὑπάρχοντα ἢ ὄν. *The Complete Works of Aristotle* cit., p. 1620: «And it will belong to this to consider being *qua* being – both what it is and the attributes which belong to it *qua* being (τὰ ὑπάρχοντα ἢ ὄν)».

¹⁸⁵ wa-li-ḡālīka naqūlu inna l-naḡara fī ḡamī'i ḡuwarī l-huwiyyati 'alā kunhihā huwa li-ḡilmin wāḡidin bi-l-ḡinsi fa-ammā l-ḡuwaru, fa-hiya ḡuwaru l-ḡuwarī (AVERROËS, *Tafsir*, vol. I, p. 302, 5-7). διὸ καὶ τοῦ ὄντος ἢ ὄν ὅσα εἶδη θεωρῆσαι μιᾶς ἐστὶν ἐπιστήμης τῷ γένει, τὰ τε εἶδη τῶν εἰδῶν. *The Complete Works of Aristotle* cit., p. 1585: «Therefore to investigate all the species (ο[sa ei[dh] of being *qua* being, is a work of a science which is generically one, and to investigate the several species (τὰ τε εἶδη) is the work of the specific parts of the science (τῶν εἰδῶν)». This is a controversial passage, variously understood by modern interpreters of Aristotle.

¹⁸⁶ wa-li-ḡālīka yanbaḡī lanā an naḡluba l-ḡilala llatī fī l-huwiyyati 'alā kunhihā (AVERROËS, *Tafsir*, vol. I, p. 297, 4). διὸ καὶ ἡμῖν τοῦ ὄντος ἢ ὄν τὰς πρώτας αἰτίας ληπτέον. *The Complete Works of Aristotle* cit., p. 1584: «Therefore it is of being as being that we also must grasp the first causes (τὰς πρώτας αἰτίας)».

(*awā'il, aī āρχαί*) of beings and their causes (*'ilaluhā, τὰ αἴτια*) are sought with regard to the fact that they are beings¹⁸⁷.

Texts 8.1-2 introduce, thus, the third element of the main axis of metaphysics, namely the investigation of the causes of 'being *qua* being', or Theology.

In Γ, 2, albeit portraying metaphysics as the science of 'being', Aristotle underscores also the relevance of 'one' for the epistemological status of metaphysics. In the course of this chapter he tightly links 'one' with 'being': both are said in many ways¹⁸⁸ and are principles of contraries¹⁸⁹, both are not universal and separate entities¹⁹⁰. From the doctrine of the so-called 'convertibility' of 'being' and 'one', he concludes to the existence of some species, literally 'forms' (*ḡuwar, εἶδη*) of 'one':

Text 9

(Arabic translation of *Metaph.* Γ, 2, 1003 b 22-25, 33-35) As to 'one' and 'being', if they are one thing and have one nature, then they follow each other as principle and cause follow each other, not because a single definition signifies both of them. [...] Thus, it is known that the forms (*ḡuwar, εἶδη*) of 'one' are as many as the forms (*ḡuwar*) of 'being', and to one science belongs the absolute theoretical study of these forms and the knowledge of what they are¹⁹¹.

In the same way as 'being', 'one' as well has not only species, but also properties, named this time 'affections' concerning 'one' 'by their essence' (*bi-*

¹⁸⁷ qāla Aristū innahū bayyinun anna awā'ila l-huwiyyāti wa-'ilalahā maṭlūbatun 'alā kunhihā huwiyyātīn (AVERROËS, *Tafsir*, vol. II, p. 697, 6). αἰ ἀρχαί καὶ τὰ αἴτια ζητεῖται τῶν ὄντων, δὴ ἄλλο δὲ ὅτι ἡ ὄντα. *The Complete Works of Aristotle* cit., p. 1620: «We are seeking the principles (*αἰ ἀρχαί*) and the causes (*τὰ αἴτια*) of the things that are, and obviously of things *qua* being».

¹⁸⁸ Γ, 2, 1003 a 33-b 19; 1004 a 22-31.

¹⁸⁹ *Ibid.*, 1004 b 28.

¹⁹⁰ *Ibid.*, 1005 a 9.

¹⁹¹ wa-ammā l-wāḥidu wa-l-huwiyyatu idā kānā ṣay'an wāḥidan wa-kāna lahumā ṭibā'un wāḥidun fa-ttibā'u kulli wāḥidin minhumā li-ṣāḥibihī ka-ttibā'i l-awwali wa-l-'illati ba'ḡihā ba'ḡan wa-laysa li-anna ḡaddan wāḥidan yadullu 'alā kilayhimā [...] fa-ma'lūmun anna ḡuwarā l-wāḥidi 'alā 'adadi ḡuwari l-huwiyyati wa-li-'ilmin wāḥidin al-naḡaru l-muṭlaqu fī ḡāḡihī l-ḡuwari wa-ma'rifatu mā hiya (AVERROËS, *Tafsir*, vol. I, p. 310, 2-4, p. 311, 2). εἰ δὴ τὸ ὄν καὶ τὸ εἶν ταῦτόν καὶ μία φύσις τῶ ἀκολουθεῖν ἀλλήλοις ὡσπερ ἀρχὴ καὶ αἴτιον, ἀλλ' οὐχ ὡς ἐνὶ λόγῳ δηλούμενα ... ὡσθ' ὅσα περ τοῦ ἐνὸς εἶδη, τοσαῦτα καὶ τοῦ ὄντος· περὶ ὧν τὸ τί ἐστὶ τῆς αὐτῆς ἐπιστήμης τῶ γένει θεωρηῖται. *The Complete Works of Aristotle* cit., p. 1585: «If, now, being and unity are the same and are one thing in the sense that they are implied in one another as principles and causes are, not in the sense that they are explained by the same formula [...] — all this being so, there must be exactly as many species (*εἶδη*) of being as of unity. And to investigate the essence of these is the work of a science which is generically one».

dātihā ālām, καθ' αὐτά πάθη):

Text 10

(Arabic translation of *Metaph.* Γ, 2, 1004 b 5-8) Since, then, these things and their like are, by their essence, affections (*bi-dātihā ālām*, καθ' αὐτά πάθη) of 'one' alone and of 'being' in virtue of its nature, and are not affections of 'one' and 'being' in so far as they are a number, or a line, or a fire, then it is known that to the science that grasps 'one' and 'being' belongs knowing what is 'one', what is 'being', and what are the accidents occurring to them (*al-a'rādu llatī ta'riḍu lahumā*, τὰ συμβεβηκότ' αὐτοῖς)¹⁹².

As a consequence of its dealing with 'one', metaphysics is also engaged in the investigation of 'plurality' (*al-kaṭra*, πλήθος), as it is entailed, albeit not expressly stated, by Aristotle:

Text 11

(Arabic translation of *Metaph.* Γ, 2, 1004 a 9-10, 17-20) Since the theoretical study of opposites necessarily belongs to one science, and the opposite of unity is plurality (*al-kaṭra*, πλήθος) [...]¹⁹³.

In Γ, 1-2 and E, 1 we encounter, thus, the Aristotelian version of the main axis of metaphysics (Universal Science_{SE}, Universal Science_{PE}, Theology) and of its secondary axis (Universal Science_{SPO}, Universal Science_M). The doctrinal relevance and historical significance of these two aspects of metaphysics emerging from Γ, 1-2 and E, 1 are emphasized by

¹⁹² *fa-iḍ kānat hāḍihi l-ašyā'u wa-mā ašbahahā bi-dātihā ālāma l-wāḥidi waḥdihī wa-ālāma l-huwiyyati bi-kunhihā wa-laysa hiya ālāma l-wāḥidi wa-l-huwiyyati bi-annahā 'adadun aw ḥaṭṭun aw nārun fa-ma'lūmun anna li-l-'ilmi llaḍī ya'rifu l-wāḥida wa-l-huwiyyata an ya'lama mā l-wāḥidu wa-mā l-huwiyyatu wa-mā al-a'rādu llatī ta'riḍu lahumā* (AVERROËS, *Tafsīr*, vol. I, pp. 324, 8-12). ἐπεὶ οὖν τοῦ ἐνὸς ἢ ἐν καὶ τοῦ ὄντος ἢ ὄν ταῦτα καθ' αὐτά ἐστι πάθη, ἀλλ' οὐχ ἢ ἀριθμοὶ ἢ γραμμαὶ ἢ πῦρ, δῆλον ὡς ἐκείνης τῆς ἐπιστήμης καὶ τί ἐστι γνωρίσαι καὶ τὰ συμβεβηκότ' αὐτοῖς. *The Complete Works of Aristotle* cit., p. 1585: «Since, then, these are affections *per se* (καθ' αὐτά πάθη) of unity *qua* unity and of being *qua* being, not *qua* numbers or lines or fire, it is clear that it belongs to this science to investigate both the essence of these concepts and their accidents (τὰ συμβεβηκότ' αὐτοῖς)» (slightly modified). Cf. B. CASSIN - M. NARCY, *La décision du sens. Le livre Gamma de la Métaphysique d'Aristote*, introduction, texte, traduction et commentaire, Vrin, Paris 1989, p. 172; Ross (*Aristotle's Metaphysics* cit.) and C. Kirwan (*Aristotle's Metaphysics, Books Γ, Δ and E*. Translated with notes by C. KIRWAN, Clarendon Press, Oxford 1971) do not comment on this passage.

¹⁹³ *fa-iḍā waḡaba li-'ilmin wāḥidin al-naẓaru fi l-mawḍū'āti 'alā l-mu'adalati wa-'adīlu l-wāḥidi fi l-waḍ'i l-kaṭratu fa-ma'lūmun [...]* (AVERROËS, *Tafsīr*, vol. I, p. 316, 14-16). ἐπεὶ δὲ μιᾶς τάντικείμενα θεωρῆσαι, τῷ δὲ ἐνὶ ἀντίκειται πλήθος [...]. *The Complete Works of Aristotle* cit., p. 1585: «Now since it is the work of one science to investigate opposites, and plurality (πλήθος) is opposite to unity [...].»

modern interpreters of Aristotle¹⁹⁴. The distinctions that Aristotle proposes, however, present obscure and problematic aspects. Let us start with what is clear in Aristotle's statements, or what can be plainly inferred from them. The clear data are essentially two.

First, immediately after Text 9 Aristotle maintains that 'same' (*al-muttafiq*, τὰὐτό), 'similar' (*al-šabīh*, ὁμοιον) and 'the things resembling these' (*al-ašyā'* *allatī tušbihu hāḏihi*, τὰ ἄλλα τὰ τοιοῦτα) are species of 'one'¹⁹⁵. Later on (Text 11), he regards 'other' (*al-ġayr*, τὸ ἕτερον), 'dissimilar' (*allāḏī lā šabīh*, ἀνόμοιον) and 'unequal' (*allāḏī laysa musāwin*, ἄνισον) as opposite to 'same' and 'similar', the latter being referred to with the expression 'the concepts we named above'¹⁹⁶. From this we are allowed to infer that also 'equal', besides 'same' and 'similar', is a species of 'one', and that 'other', 'dissimilar', 'unequal' are species of plurality¹⁹⁷. Aristotle mentions in the same context, as connected with the species of plurality, also 'contrariety' (*ḏiddiyya*, ἐναντιότης) and 'difference' (om. Ar., διαφορά)¹⁹⁸.

Second, at the end of Γ, 2 Aristotle states that among the properties of 'being' — called properties of substance, for substance is the primary meaning of 'being' — are 'prior' and 'posterior', 'genus' and 'species', 'whole' and 'part'¹⁹⁹. To these concepts, also 'perfect', mentioned a few lines earlier, can be added²⁰⁰.

The difficulties in Aristotle's exposition are two as well. First of all, he does not say what the species of 'being' (Text 7) are. Modern interpreters have proposed different candidates for the status of species of 'being': someone says that they are the same as the species of 'one', namely 'same', 'similar' and 'equal'²⁰¹. Others have suggested the categories as species of 'being', keeping

¹⁹⁴ Cf. G. REALE, *Struttura paradigmatica e dimensione epocale della metafisica di Aristotele: «henologia» e «ontologia» a confronto*, in *Aristotele. Perché la metafisica* cit., pp. 37-58.

¹⁹⁵ AVERROËS, *Tafsir*, vol. I, p. 311, 3, corresponding to Γ, 2, 1003 b 35-36. Aristotele deals with 'same' and 'similar' in I, 3, after examining 'one' in I, 1-2.

¹⁹⁶ AVERROËS, *Tafsir*, vol. I, p. 317, 6, corresponding to Γ, 2, 1004 a 17-18.

¹⁹⁷ In a passage of *Metaphysics* I, 3 (1054 a 29-32; AVERROËS, *Tafsir*, vol. II, p. 1286, 2-3), Aristotle states that 'same' (*al-huwa huwa*, τὸ ταῦτό), 'similar' (*al-šabīh*, ὁμοιον), and 'equal' (*al-musāwī*, ἴσον) belong to 'one', whereas 'other', 'dissimilar' and 'unequal' belong to plurality.

¹⁹⁸ AVERROËS, *Tafsir*, vol. I, p. 317, 8, partially corresponding to Γ, 2, 1004 a 21-22.

¹⁹⁹ AVERROËS, *Tafsir*, vol. I, p. 331, 10-14, corresponding to Γ, 2, 1005 a 13-18. Leszl (*Aristotle's Conception* cit., p. 313) maintains that, in Aristotle's original plan, these concepts were the only properties of 'being', as distinct from the species of 'one' and 'many'.

²⁰⁰ AVERROËS, *Tafsir*, vol. I, p. 331, 10, corresponding to Γ, 2, 1005 a 12.

²⁰¹ This is the opinion, for example, of E. Berti (*La «riduzione dei contrari» in Aristotele*, in *Id., Studi Aristotelici*, Japadre, L'Aquila 1974, pp. 209-231; p. 216, n. 39), who mentions G. Colle (*Aristote. La Métaphysique, livre IV*, traduction et commentaire par G. COLLE, Institut Supérieur de Philosophie, Louvain 1931), A. Mansion (MANSION, *Philosophie première* cit.), and G. Reale as advocates of the same view. To these scholars, L. Robin (*La théorie platonicienne des idées et des nombres*, Alcan, Paris 1908) can be added (cf. LESZL, *Aristotle's Conception*, cit., p. 241, n. 26).

thus these latter distinct from the species of 'one'²⁰².

The second difficulty is that, in the course of Γ , 2, Aristotle confounds the species of 'one' and 'many' with the properties of 'one' and 'many', and also with the properties of 'being'. In Text 10 he regards the species of 'one' and 'many' in general — and 'same' and 'contrariety' in particular — as, at the same time, properties of 'one' and 'being'. At the end of Γ , 2, he does not even qualify them as properties of 'one'; he calls them 'the aforementioned things' (*al-ašyā' allatī qīlat*, τὰ εἰρημένα), and regards them as properties of 'being', on the same level as 'prior' and 'posterior', 'genus' and 'species', 'whole' and 'part'²⁰³.

In other words, the distinction between Universal Science_{SE}, Universal Science_{PE}, Universal Science_{SOM} and Universal Science_{POM} is somehow formulated, but remains fluid in Aristotle.

If compared with Aristotle's, Avicenna's conception of the structure of metaphysics is considerably different. As to the points expressly made by Aristotle, Avicenna regards as properties of 'one' and 'many' what Aristotle considers to be their species ('same', 'other', etc.), and proposes for the status of species of 'one' and 'many' a different group of concepts ('one' by accident etc.). Furthermore, the list of the properties of 'existent' in Avicenna is longer, including also 'potency' and 'act', 'universal' and 'particular', 'cause' and 'effect' (cf. Table 4)²⁰⁴. As to the difficulties of Aristotle's doctrine, Avicenna identifies the species of 'existent' with the categories; he also preserves the boundaries of Universal Science_{SE}, Universal Science_{PE}, Universal Science_{SOM}, Universal Science_{POM} much more rigidly than Aristotle does.

The differences between Aristotle and Avicenna, concerning the structure of metaphysics, continue, and are even greater, if we observe how the program of this discipline is brought about. The succession of books in Aristotle's *Metaphysics* — in the arrangement, which has become traditional, by Andronicus of Rhodes — is rather fragmented (especially books B, Δ and κ interrupt the continuity) and, even in its main trends, does not reflect the parameters established in Γ , 1-2. True, the *Metaphysics* ends with the treatment of 'one' and 'many' and their species, as Aristotle understands them (book I), and a group of three books (Λ -N) dealing with the causes and principles of 'being', both the true ones (the Unmoved Mover and its peers, in Λ) and the ones wrongly supposed by Plato and his followers (mathematical entities and Ideas,

²⁰² Cf. LESZL, *Aristotle's Conception* cit., pp. 236-244; pp. 276-282; pp. 312-313; at p. 241 Leszl recalls V. DECARIE, *L'objet de la métaphysique selon Aristote*, Vrin, Montreal-Paris 1961.

²⁰³ AVERROËS, *Tafsīr*, vol. I, p. 331, 10-14, corresponding to Γ , 2, 1005 a 14-18.

²⁰⁴ 'Potency' is one of the main four meanings of 'being' that Aristotle distinguishes in Δ , 7; E, 2 (1025 a 33-b 2); Θ , 1 (1045 b 32-35). Avicenna regards 'universal' and 'particular' as the common heading under which 'genus' and 'species' are subsumed.

in M-N). These two sections of the *Metaphysics* can be regarded, respectively, as Aristotle's Henology and Theology. But, in the hypothesis that the species of 'being' are the categories, Aristotle focuses on only one of them, namely substance (books Z-H, his so-called 'Ousiology'); within Z-H, he does not deal with the categories as species of 'being', nor does he mention the species of 'being' anywhere else in the *Metaphysics*. Furthermore, the only place where he takes into account the properties of 'being' that he expressly mentions at the end of Γ, 2 is book Δ; there, they are investigated together with many other concepts²⁰⁵. The structure of Avicenna's *Ilāhiyyāt*, on the contrary, is just the application to metaphysics of the vertical tripartition and horizontal bipartition.

Despite some common features, the distance separating Aristotle from Avicenna in conceiving and accomplishing the structure of metaphysics, as we have seen, is big. In what follows I will focus on the two main stages in the historical route going from Aristotle to Avicenna in this respect. They are the Greek commentators on the *Metaphysics*, and one of the most significant Arab interpreters of this work, al-Fārābī.

The four extant Greek commentaries on Aristotle's *Metaphysics*, like all the *Commentaria in Aristotelem Graeca*, are the object of an increasing scholarly interest²⁰⁶. They are Alexander of Aphrodisias' original commentary on *Metaphysics* A-Δ, Syrianus's commentary on books B-Γ and M-N, Ammonius's commentary on books A-Z (as reported by his disciple Asclepius), and pseudo-Alexander of Aphrodisias' (= Michael of Ephesus²⁰⁷) commentary on books E-

²⁰⁵ 'Prior' and 'posterior' are discussed in Δ, 11; 'genus' in Δ, 28; 'whole' in Δ, 26, 'part' in Δ, 25; 'perfect' in Δ, 16.

²⁰⁶ A milestone in this respect is the collection of articles *Aristotle Transformed: the ancient commentators and their influence*, ed. R. SORABJI, Duckworth, London 1990.

²⁰⁷ According to the traditional view of K. Praechter (K. PRAECHTER, *Review of the Commentaria in Aristotelem Graeca*, in *Aristotle Transformed* cit., pp. 31-54; p. 36; p. 51), recently adopted by S. Ebbesen (S. EBBESEN, *Commentators and Commentaries on Aristotle's Sophistici Elenchi*, Brill, Leiden 1981, p. 87) and defended by H. P. F. Mercken against L. Tarán (H. P. F. MERCKEN, *The Greek commentators on Aristotle's Ethics*, in *Aristotle Transformed* cit., pp. 407-443; pp. 433-434) the author would be the Byzantine commentator Michael of Ephesus (XII c.). On the other hand, L. Tarán regards pseudo-Alexander as a source of Syrianus (L. TARÁN, *Syrianus and Pseudo-Alexander's Commentary on Metaphysics E-N*, in *Aristoteles. Werk und Wirkung. Paul Moraux gewidmet*, vol. II: *Kommentierung, Überlieferung, Nachleben*, ed. J. WIESNER, de Gruyter, Berlin-New York 1987, pp. 215-232). P. Thillet (in ALEXANDRE D'APHRODISE, *Traité du destin*, Les Belles Lettres, Paris 1984, p. lvii) defends the traditional attribution and portrays pseudo-Alexander as an author using Syrianus' commentary (cf. R. SORABJI, *The Ancient Commentators on Aristotle*, in *Aristotle Transformed* cit., p. 22, n. 104). The final verdict on this issue, confirming the traditional view about Michael of Ephesus as Pseudo-Alexander, is expressed by C. LUNA, *Les commentaires de Syrianus et du Ps. Alexandre sur la Métaphysique. Essai de mise au point*, in EAD., *Trois études sur la tradition des commentaires anciens à la Métaphysique d'Aristote*, Brill, Leiden-Boston-Köln 2001, pp. 1-71.

N. All three commentators antedating Avicenna (Alexander, Syrianus and Ammonius/Asclepius) do comment on book Γ . The research on their exegesis of this book is still, however, at an initial stage. Deeper issues, such as the structure of metaphysics, remain mostly to be investigated.

Nonetheless, recent literature has pointed out that already the first of these commentators, relying on the epistemology of the *Posterior Analytics*, strives at conferring metaphysics a more rigorous scientific status than it has in Aristotle²⁰⁸. In his commentary on Γ , 2, for example, Alexander of Aphrodisias openly states that, and explains why, 'same', 'similar' and 'equal', 'other', 'dissimilar' and 'unequal' are, respectively, species of 'one' and 'plurality'. Even more significantly, in his exegesis of the fourth aporia of B, he explains the terminology Aristotle uses to signify the properties of a subject-matter, provides various types of properties, and indicates 'one' as a property of 'being'²⁰⁹. The importance of these passages cannot be overemphasized. In the latter, Alexander somehow prefigures Avicenna, who also sometimes regards 'one' and 'many' as properties of 'existent' (cf. above, Table 1).

Being already present in Alexander's commentary, and influencing in this way later commentaries²¹⁰, this tendency to give metaphysics a proper scientific basis did not cease afterwards²¹¹. As to the particular issue of structure, however, the data available in modern literature are scanty. As to Syrianus, books M-N of his commentary, rather than books B- Γ , which are the most important for our purposes, have attracted the interest of scholars²¹². The

²⁰⁸ Cf. M. BONELLI, *Alessandro di Afrodisia e la metafisica scientifica*, «Documenti e Studi sulla Tradizione Filosofica Medievale», 12, 2001, pp. 61-83, especially pp. 70-74.

²⁰⁹ Cf. *ibid.* Alexander's commentary on books B and Γ has been recently translated into English; cf. ALEXANDER OF APHRODISIAS, *On Aristotle Metaphysics 2 & 3*, transl. W. E. DOOLEY and A. MADIGAN, Duckworth, London 1992, and ALEXANDER OF APHRODISIAS, *On Aristotle Metaphysics 4*, transl. A. MADIGAN, Duckworth, London 1993.

²¹⁰ On Alexander of Aphrodisias as source of Syrianus, cf. the studies by C. Luna and C. D'Ancona quoted below, n. 212; on Alexander's influence on Ammonius/Asclepius, cf. also K. VERRYCKEN, *The metaphysics of Ammonius son of Hermias*, in *Aristotle Transformed* cit., pp. 199-231 (p. 204). The transmission of Alexander's exegetical model to the Arab world is studied by C. D'ANCONA in *Arabic Philosophy as a guideline for the reception of Aristotle in the Middle Ages*, forthcoming.

²¹¹ Within the Neoplatonic school, for example, it led ultimately, through Syrianus, to Proclus' *Elementatio Theologica*. The stages of this evolution are well described in D. J. O'MEARA, *Le problème de la métaphysique dans l'antiquité tardive*, «Freiburg Zeitschrift für Philosophie und Theologie», 33, 1986, pp. 3-22.

²¹² Cf. A. MADIGAN, *Syrianus and Asclepius on Forms and Intermediates in Plato and Aristotle*, «The Journal of the History of Philosophy», 24, 1986, pp. 149-171; H. D. SAFFREY, *Comment Syrianus, le maître de l'école néoplatonicienne d'Athènes, considérait-il Aristote*, in *Aristoteles. Werk und Wirkung. Paul Moraux gewidmet*, vol. II: *Kommentierung, Überlieferung, Nachleben*

studies devoted to Ammonius' commentary (*apud* Asclepius) do not focus on the issue of structure²¹³.

The extant Arabic translations of the Greek commentaries on the *Metaphysics* are two. Both focus on a different book (Λ) and are preserved in fragments. The commentaries of which they are the translation are not extant in Greek. They are what probably is Alexander's original commentary on Λ ²¹⁴, and Themistius' paraphrase of the same book²¹⁵. The preference

cit., pp. 205-214 (Engl. transl. in *Aristotle Transformed* cit., pp. 173-179); C. D'ANCONA, *La doctrine des principes: Syrianus comme source textuelle et doctrinale de Proclus. I: histoire du problème*, in *Proclus et la théologie platonicienne, Actes du Colloque International de Louvain (13-16 mai 1998), En l'honneur de H. D. Saffrey et L. G. Westerink †*, édités par A. PH. SEGONDS et C. STEEL, avec l'assistance de C. LUNA et A. F. METTRAUX, Leuven University Press-Les Belles Lettres, Leuven-Paris 2000, pp. 189-225; C. LUNA, *La doctrine des principes: Syrianus comme source textuelle et doctrinale de Proclus. II: analyse des textes*, in *Proclus et la théologie platonicienne* cit., pp. 227-278; A. LONGO, *Le sostanze intermedie e le dimostrazioni astronomiche nel prologo del commento di Siriano sui libri M e N della Metafisica di Aristotele*, «Documenti e Studi sulla Tradizione Filosofica Medievale», 12, 2001, pp. 85-124; LUNA, *Les commentaires de Syrianus et du Ps. Alexandre sur la Métaphysique* cit.; EAD., *Syrianus dans la tradition exégétique de la Métaphysique d'Aristote. I. Syrianus entre Alexandre d'Aphrodise et Asclépius*, in *Le commentaire entre tradition et innovation*, ed. M.-O. GOULET-CAZÉ, Vrin, Paris 2000, pp. 301-309; C. D'ANCONA, *Syrianus dans la tradition exégétique de la Métaphysique d'Aristote. II. Antécédents et postérité*, in *Le commentaire entre tradition et innovation* cit., pp. 311-327; C. LUNA, *Le commentaire d'Alexandre d'Aphrodise comme source du commentaire de Syrianus*, in EAD., *Trois études* cit., pp. 1-71.

²¹³ On Ammonius' commentary see K. KREMER, *Der Metaphysikbegriff in den Aristoteles-Kommentaren der Ammonius-Schule*, Aschendorff, Münster 1961; VERRYCKEN, *The metaphysics of Ammonius son of Hermias* cit.; C. LUNA, *Alexandre d'Aphrodise et Syrianus comme sources du commentaire d'Asclépius*, in EAD., *Trois études* cit., pp. 72-98.

²¹⁴ J. FREUDENTHAL, *Die durch Averroes erhaltenen Fragmente Alexanders zur Metaphysik des Aristoteles untersucht und übersetzt. Mit Beiträgen zur Erläuterung des arabischen Textes von S. Fränkel*, Königliche Akademie der Wissenschaften, Berlin 1885 (German version of the Hebrew translation of Averroes' quotations). AVERROËS, *Tafsir* cit., vol. III, pp. 1406ff. *passim*; A. MARTIN, *Averroès. Grand Commentaire de la Métaphysique d'Aristote, livre lām-lambda traduit de l'arabe et annoté*, Les Belles Lettres, Paris 1984; C. GENEQUAND, *Ibn Rushd's Metaphysics. A Translation with Introduction of Ibn Rushd's Commentary on Aristotle's Metaphysics, Book Lam*, Brill, Leiden 1984.

²¹⁵ Arabic text in BADAWĪ, *Arisṭū* cit., pp. 12-21, 329-333 (to be read together with R. M. FRANK, *Some Textual Notes on the Oriental Versions of Themistius' Paraphrase of Book I* [sic, pro: XII] of the *Metaphysics*, «Cahiers de Byrsa», 8, 1958-1959, pp. 215-230). Averroes' quotations in AVERROËS, *Tafsir* cit., vol. III, pp. 1406ff. *passim*; THEMISTIUS, *Paraphrase de la Métaphysique d'Aristote (livre Lambda)*, traduit de l'hébreu et de l'arabe, introduction, notes et indices par R. BRAGUE, Vrin, Paris 1999. Among the studies on Themistius's paraphrase: S. PINES, *Les limites de la métaphysique selon Al-Fārābī, Ibn Bajja, et Maïmonide. Sources et antithèses de ces doctrines chez Alexandre d'Aphrodise et chez Themistius*, in *Miscellanea Medievalia* 13/1, 1981, pp. 211-225; repr. in *The Collected Works of Shlomo Pines*, vol. V: *Studies in the History of Jewish Thought*, Magnes Press, Jerusalem 1997, pp. 432-446, and in ID., *La Liberté de philosopher. De Maïmonide à Spinoza*, De Brouwer, Paris 1997, pp. 251-274, especially pp. 223-224; ID., *Some distinctive*

accorded to Λ in these translations witnesses the theological interest lying behind the Greek-into-Arabic translation movement, but makes these translations less relevant for our purposes. One of the Greek commentaries whose Arabic translation is attested, though not extant, is Syrianus' commentary on book B²¹⁶. If it ever existed, the Arabic translation of Syrianus' exegesis of this book of the *Metaphysics* had in any case a very limited circulation²¹⁷.

In the latest Greek commentators of Aristotle, belonging to the Alexandrian school, metaphysics as a discipline, and Aristotle's *Metaphysics* as the work expounding it, were increasingly identified with Theology. This is evident not only in Ammonius' commentary²¹⁸, but also in the introductions to philosophy in general, and Aristotle's philosophy in particular, with which the Alexandrian commentaries on Porphyry's *Isagoge* and Aristotle's *Categories*, respectively, started. In these introductions metaphysics is constantly named 'theology' and quite often described as the science of the immaterial²¹⁹. This possibly implies a simplification of the structure of metaphysics, as the initial Arabic reception of this Greek introductory literature witnesses.

Some evidence in this sense is provided by the first philosopher writing in Arabic, al-Kindī, in his introduction to Aristotle's philosophy, entitled *Fī Kammiyyat Kutub Aristāṭālīs* (*On the Number of Aristotle's Books*)²²⁰. When compared with Aristotle's text, al-Kindī's description of the *Metaphysics* reflects

metaphysical conceptions in Themistius' Commentary on Book Lambda and their place in the history of philosophy, in Aristoteles. Werk und Wirkung. Paul Moraux gewidmet, vol. II: Kommentierung, Überlieferung, Nachleben cit., pp. 177-204; repr. in The Collected Works of Shlomo Pines, vol. III: Studies in the History of Arabic Philosophy, Magnes Press, Jerusalem 1996, pp. 267-294 (contains the English translation of a part of the Arabic version of chapt. 7 — pp. 16, 18 - 18, 7 — and of the entire chapter 9).

²¹⁶ Cf. IBN AL-NADĪM, *Kitāb al-Fihrist*, ed. G. FLÜGEL - J. ROEDIGER - A. MUELLER, Leipzig 1871, vol. I, p. 251, 31.

²¹⁷ In the *Fī Aḡrāḍ Al-Fārābī* mentions only the commentaries by Alexander of Aphrodisias and Themistius among the commentaries on the *Metaphysics* that were available at his time (ed. DIETERICI, p. 34, 14-15). The same does Averroes in his *tafsīr* of the *Metaphysics* (AVERROES, *Tafsīr* cit., vol. III, p. 1393, 4-7).

²¹⁸ Cf. GUTAS, *Avicenna* cit., pp. 250-251 and nn. 28-29.

²¹⁹ L. G. WESTERINK, *The Alexandrian commentators and the introductions to their commentaries, in Aristotle Transformed* cit., pp. 325-348 (pp. 341-348).

²²⁰ M. GUIDI - R. WALZER, *Studi su al-Kindī I: Uno scritto introduttivo allo studio di Aristotele*, Memorie della R. Accademia Nazionale dei Lincei, Classe di Scienze Morali, Storiche e Filosofiche, ser. VI, vol. VI, fasc. V (Roma 1940); *Rasā'il al-Kindī al-falsafiyya*, ed. M. 'A. ABŪ-RĪDA, Cairo, 1950, vol. I, pp. 363-384. Cf. JOLIVET, *Classifications of the Sciences*, cit., pp. 1009-1011. Al-Kindī's work is dependent upon at least two Greek sources, whose exact identity has still to be ascertained.

only book Λ ²²¹. Considerations concerning the structure are missing. The same can be said of the first commentary on the *Metaphysics* extant in Arabic, namely Tābit b. Qurra's (d. 901) 'concise exposition' (*talḥīṣ*) of this work²²².

In al-Fārābī's works we find different degrees of attention to the structure of metaphysics. Three typologies of works are discernible in this respect. To begin with, in works of propaedeutic character al-Fārābī shares the 'traditional' one-sided emphasis on Theology within metaphysics and the *Metaphysics*, and the consequent disinterest in the structure of this discipline and of its canonical book. This happens, for example, in his introduction to Aristotle's philosophy (*Mā yanbaġī an yuqaddama qabla ta'allum falsafat Ariṣṭū, What should precede the learning of Aristotle's Philosophy*)²²³. Second, in works focusing on the classification of the sciences, such as the *Iḥṣā' al-'ulūm* (*Survey of the sciences*), al-Fārābī engages in consideration concerning the structure, providing, in so doing, a main axis of metaphysics which closely resembles the one contained in Avicenna's Text 1²²⁴. Finally, in a work

²²¹ Drawing upon one of these sources, in a first passage al-Kindī proposes the aforementioned theologizing conception of Aristotle's *Metaphysics* as a book dealing with immaterial things (ed. GUIDI-WALZER, p. 391.9; p. 405; p. 393.8-9; p. 418; ed. ABŪ-RĪDA, vol. I, p. 365.2; p. 368.16-17). According to a later passage, depending on a different source, the purpose of the *Metaphysics* is two-fold: first, the investigation of those immaterial things that exist without matter, but are associated with something material (probably the celestial intellects and souls); second, the elucidation of God's nature and activity (ed. GUIDI-WALZER, p. 403, 8-11; p. 418; ed. ABŪ-RĪDA, vol. I, p. 384, 7-10. English translation and commentary in GUTAS, *Avicenna* cit., pp. 243-249). As I have shown elsewhere (BERTOLACCI, *From al-Kindī to al-Fārābī* cit., pp. 289-293), in his most significant work on metaphysics — *Fī l-Falsafa al-ūlā* (*On First Philosophy*) — al-Kindī restricts his use (amounting not only to positive reception, but also to criticism) of Aristotle's *Metaphysics* to books α and Λ , the former being used as a sort of introduction to the latter.

²²² Forthcoming critical edition, translation and commentary by D. C. Reisman and A. Bertolacci.

²²³ Ed. DIETERICI, p. 50, 20-21. In this passage, the book dealing with the first branch of theoretical philosophy (= the *Metaphysics*) is described as '[the book] from which divine things are learned' (*mā yuta'allamu minhu umūr ilāhiyya*). Cf. the brief mention of the *Metaphysics* in al-Fārābī's *Falsafat Ariṣṭūṭālīs wa-aġzā' falsafatihi* (*Aristotle's Philosophy and Its Parts*): «Therefore Aristotle proceeded in a book that he called *Metaphysics* to inquire into, and to investigate, the beings in a manner different than natural philosophy» (*Al-Fārābī's Philosophy of Aristotle [Falsafat Ariṣṭūṭālīs]*, Arabic Text, Edited with an Introduction and Notes by M. MAHDI, Dār Majallat Shi'r, Beirut 1961, p. 132, 2-3; English translation in *Alfarabi's Philosophy of Plato and Aristotle*, translated with an introduction by M. MAHDI, The Free Press of Glencoe, New York 1962, p. 130).

²²⁴ AL-FĀRĀBĪ, *Catálogo de las ciencias*, ed. and transl. A. GONZÁLEZ PALENCIA, Maestre, Madrid-Granada 1932, 2nd ed. 1953, pp. 87-91 (Arabic); pp. 110-111, 163-166 (Latin translation); pp. 63-65 (Spanish translation). Al-Fārābī distinguishes a first part of metaphysics dealing with the existents and 'the things occurring to them' (*al-aṣyā' allatī ta'riḍu lahā*) qua existents; a second part taking into account the principles of the particular sciences (with no mention of 'divisions', 'states' or 'species' of 'existent'); and a third part focusing on immaterial existents (= Theology). Cf. JOLIVET, *Classifications of the Sciences* cit., pp. 1011-1017.

specifically devoted to the *Metaphysics*, he offers a full description of the structure of metaphysics. This is the well-known *Fī Aġrāḍ al-Ḥakīm fī kull maqāla min al-kitāb al-mawsūm bi-al-ḥurūf* (*On the Purposes of the Sage [= Aristotle] in each treatise of the book named by means of letters*; henceforth: *Fī Aġrāḍ*)²²⁵.

The relevance of this treatise in the history of the interpretation of Aristotle's *Metaphysics* can hardly be exaggerated. Avicenna himself is witness to the deep influence that al-Fārābī's *Fī Aġrāḍ* exerted on his own understanding of the *Metaphysics*²²⁶. The investigation of the late Greek and early Arabic sources of this treatise is still on the agenda. If al-Fārābī should prove to be other than a mere transmitter of previous material, he would rightfully deserve the title he actually received, that of 'second teacher' (*al-mu'allim al-tānī*), after Aristotle (the 'first teacher', *al-mu'allim al-awwal*), at least as far as the *Metaphysics* is concerned. In the *Fī Aġrāḍ*, al-Fārābī underscores the importance of the part of Aristotle's *Metaphysics* which is not Theology; in other words, he calls attention to the existence of books other than Λ and its afferents²²⁷. What is most important for the present investigation is that, in doing so, he proposes a highly structured profile of metaphysics. Book Γ has a keyrole in this respect.

Three passages of al-Fārābī's *Fī Aġrāḍ* are particularly salient in this respect.

Text 12.1

Universal science (*al-'ilm al-kullī*) studies [i] what is common to all existents (like existence and oneness), [ii] its species (*anwā*) and consequent attributes (*lawāḥiq*), [iii] the things which are not proper accidents (*lā ta'riḍ bi-l-taḥṣīs*) of each individual subject-matter studied by the particular sciences (like priority, posteriority, potentiality, actuality, perfection, imperfection, and similar things), and [iv] the common principle (*mabda'*) of all existents, which

²²⁵ *Fī aġrāḍ al-ḥakīm fī kull maqāla min al-Kitāb al-mawsūm bi-l-ḥurūf*, in *Alfārābī's Philosophische Abhandlungen*, ed. F. DIETERICI, Brill, Leiden 1890, pp. 34-38; *Maqāla fī aġrāḍ mā ba'da l-ṭabī'a*, anonymous edition, Hyderabad 1349 H. German translation in *Alfārābī's Philosophische Abhandlungen*, transl. F. DIETERICI, Brill, Leiden 1892, pp. 54-60; French translation (with textual remarks) in TH.-A. DRUART, *Le traité d'Alfārābī sur les buts de la Métaphysique d'Aristote*, «Bulletin de Philosophie Médiévale», 24, 1982, pp. 38-43; Spanish translation in R. RAMÓN GUERRERO, *Alfārābī y la «Metafísica» de Aristóteles*, «La Ciudad de Dios», 196, 1983, pp. 211-240; partial English translation in GUTAS, *Avicenna* cit., pp. 237-254. Among the studies, besides the aforementioned items, cf also the remarks by HEIN, *Definition und Einteilung der Philosophie* cit., pp. 310-312.

²²⁶ GUTAS, *Avicenna* cit., pp. 22-30; pp. 250-252; BERTOLACCI, *From al-Kindī to al-Fārābī* cit., pp. 265-269.

²²⁷ Cf. GUTAS, *Avicenna* cit., p. 242; p. 249; BERTOLACCI, *From al-Kindī to al-Fārābī* cit., pp. 293-294.

ought to be called by the name of God²²⁸.

Text 12.2

Theology (*al-‘ilm al-ilāhī*) ought to belong to this science [i.e. universal science], because God is a principle (*mabda*) of absolute ‘existent’, not of one existent to the exclusion of another. That part (*qism*) of it, then, which includes providing the principle of being ought to be itself Theology²²⁹.

Text 12.3

[i] The primary subject-matter (*al-mawḍū‘ al-awwal*) of this science is absolute existence and what is equivalent to it in universality, namely the one. But since the knowledge of contrary correlatives is one, theoretical inquiry into non-existence (*al-‘adam*) and multiplicity is also included in this science. [ii] Then, after examination of these subject-matters (*mawḍū‘āt*), it inquires into matters which are as species (*anwā*) to them, like the ten categories of ‘existent’, the species (*anwā*) of the one (like the individual one, the one by species, the one by genus, the one by analogy, and the divisions of each one of these), and similarly the species (*anwā*) of non-existence and multiplicity. [iii] Then [it inquires] into the consequent attributes (*lawāḥiq*) of ‘existent’ (like potency and act, perfection and imperfection, cause and effect), the consequent attributes (*lawāḥiq*) of unity (like sameness [*huwīyya*], similarity, equality, coincidence (*muwāfaqa*), parallelism, analogy etc.), and the consequent attributes (*lawāḥiq*) of non-existence and multiplicity. [iv] Then [it inquires] into the principles (*mabādi*) of each one of these. That [i.e. each one of these] is branched out and divided, until it [i.e. this science] arrives at the subject-matters of the particular sciences. Here this science ends. In it the principles (*mabādi*) of all the particular sciences and the definitions of their subject-matters are clarified²³⁰.

²²⁸ Ed. DIETERICI, p. 35, 8-12: wa-amma l-‘ilmu l-kulliyyu fa-huwa llaḍī yanẓuru fī l-šay‘i al-‘ammi li-ḡami‘i l-mawḡūdāti miṭla l-wuḡūdi wa-l-waḥdati wa-fī anwā‘ihī wa-lawāḥiqihī wa-fī l-ašyā‘i llati lā ta‘riḍu bi-l-taḥṣīši li-šay‘in šay‘in min mawḍū‘āti l-‘ulūmi l-ḡuz‘iyyati miṭla l-taqaddumi wa-l-ta‘aḥḥuri wa-l-quwwati wa-l-fi‘li wa-l-tāmmi wa-l-nāqīši wa-mā yaḡrī maḡrā hāḍihi wa-fī l-mabda‘i l-muštarakī li-ḡami‘i l-mawḡūdāti wa-huwa l-šay‘u llaḍī yanbaḡī an yusammā bi-smi llāhi ḡalla ḡalālūhū. English translation in GUTAS, *Avicenna* cit., p. 241 (slightly modified).

²²⁹ Ed. DIETERICI, p. 35, 16-19: fa-yanbaḡī an yakūna l-‘ilmu l-ilāhiyyu dāḥilan fī hāḍā l-‘ilmi li-anna llāha mabda‘un li-l-mawḡūdi l-muṭlaqi lā li-mawḡūdin dūna mawḡūdin fa-l-qismu llaḍī yaštamilu minhu ‘alā i‘ṭā‘i mabda‘i l-mawḡūdi yanbaḡī an yakūna huwa l-‘ilma l-ilāhiyya. English translation in GUTAS, *Avicenna* cit., p. 241 (slightly modified).

²³⁰ Ed. DIETERICI, p. 36, 9-19: wa-l-mawḍū‘u l-awwalu li-hāḍā l-‘ilmi huwa l-wuḡūdu l-muṭlaqu wa-mā yusāwihī fī l-‘umūmi wa-huwa l-wāḥidu wa-lākinnahū lammā kāna ‘ilmu l-mutaqābilāti wāḥidan fa-fī hāḍā l-‘ilmi ayḍan al-naẓaru fī l-‘adami wa-l-kaṭrati ṭumma ba‘da hāḍihi l-mawḍū‘āti wa-taḥṣiqihā yanẓuru fī l-ašyā‘i llati taqūmu minhā maqāma l-anwā‘i ka-l-

In the reported texts, al-Fārābī mentions, one after the other, four topics that metaphysics deals with. One of these is also called 'part' (*qism*) in Text 12.2. We may, therefore, assume that al-Fārābī envisages four units or parts of metaphysics. These units can be described as follows: 1) investigation of 'existence', 'non-existence' (*al-'adam*), 'one' and 'many' in themselves (Text 12.1 [i], Text 12.3 [i]); 2) investigation of their 'species' (Text 12.1 [ii], Text 12.3 [ii]); 3) investigation of their properties, named 'consequent attributes' (Text 12.1 [ii], Text 12.3 [iii]); 4) investigation of their principles (Text 12.1 [iv], Text 12.3 [iv])²³¹. The fourth part of metaphysics is called 'Theology', whereas the name 'Universal science' is reserved to metaphysics in its entirety (Text 12.2)²³².

Metaphysics is divided into two main axes. In Text 12.1 [i]-[ii] these two axes are marked only by existence and 'one', whereas in Text 12.3 [i]-[iii] they

maqūlāti l-'ašari li-l-mawğūdi wa-anwā'i l-wāḥidi ka-l-wāḥidi bi-l-šaḥši wa-l-wāḥidi bi-l-naw'i wa-l-wāḥidi bi-l-ğinsi wa-l-wāḥidi bi-l-munāsabati wa-aqsāmi kulli wāḥidin min ḥāḍihi wa-kaḍālika fi anwā'i l-'adami wa-l-kaḫrati ṭumma fi lawāḥiqi l-mawğūdi ka-l-quwwati wa-l-fi'li wa-l-tamāmi wa-l-nuqsāni wa-l-'illati wa-l-ma'lūli wa-lawāḥiqi l-waḥdati ka-l-huwiyyati wa-l-tašābuhi wa-l-tasāwī wa-l-muwāfaqati wa-l-muwāzāti wa-l-munāsabati wa-ğayri ḍālika wa-lawāḥiqi l-'adami wa-l-kaḫrati ṭumma fi mabādi'i kulli wāḥidin min ḥāḍihi wa-yataša "abu ḍālika wa-yanqasimu ilā an yabluğa mawḍū'āti l-'ulūmi l-ğuz'iyyati wa-yantahi ḥādā l-'ilmu watabayyanu fiḥi mabādi'u ġami'i l-'ulūmi l-ğuz'iyyati wa-ḥudūdu mawḍū'ātihā. English translation in GUTAS, *Avicenna* cit., p. 242 (slightly modified).

²³¹ One aspect of the main axis of metaphysics remains obscure. In Text 12.1 [iii] al-Fārābī mentions 'the things which are not proper accidents' (*al-ašyā' allatī lā ta'riḍ bi-l-taḥšiš*) of the particular sciences' subject-matters. Since they are not proper accidents of the particular sciences's subject-matters, they are in all likelihood proper accidents of the metaphysics' subject-matter, namely of existence. From this point of view it is reasonable to identify them with the consequent attributes (*lawāḥiq*) of 'existent' referred to in Text 12.1 [ii] and in Text 12.3 [iii]. But, by mentioning them separately, al-Fārābī appears to regard these 'proper accidents' as forming a class on their own. The examples al-Fārābī provides for the 'proper accidents' of 'existent' in Text 12.1 [iii] (priority, posteriority, potentiality, actuality, perfection, imperfection, and similar things) differ from those regarding its 'consequent attributes' in Text 12.3 [iii] (potency and act, perfection and imperfection, cause and effect). In the subsequent part of the work, on the other hand, al-Fārābī appears to use the expression 'proper accidents' as a common rubric for both 'species' and 'consequent attributes' (cf. below, n. 234).

²³² The Aristotelian sources of this distinction are essentially two: *Metaph.* Γ, 3, 1005 a 33-b 2: 'But since there is one kind of thinker who is even above the natural philosopher (for nature is only one particular genus of being), the discussion of these truths also will belong to him whose inquiry is universal and deals with primary substance. Natural science also is a kind of wisdom, but it is not the first kind' (*The Complete Works of Aristotle* cit., p. 1587); *Metaph.* E, 1, 1026 a 27-31: «We answer that if there is no substance other than those which are formed by nature, natural science will be the first science; but if there is an immovable substance, the science of this must be prior and must be first philosophy, and universal in this way, because it is first» (*The Complete Works of Aristotle* cit., p. 1587).

are extended to their opposites — non-existence and ‘many’ — as well.

As we can see, Avicenna’s conception of the structure of metaphysics is markedly dependent on al-Fārābī’s *Fī Aġrāḍ*. Though, it is original with respect to it in more than one way. First, according to al-Fārābī, metaphysics has more than one subject-matter: existence and ‘one’ are ‘the primary subject-matter’ (*al-mawḍū‘ al-awwal*) according to Text 12.3 [i]; the mention of the subject-matters (*mawḍū‘āt*) at the beginning of Text 12.3 refers to non-existence and ‘many’ as well²³³. The investigation of all these concepts constitutes one unit of metaphysics. In Avicenna, on the other hand, only ‘existent’ is the subject-matter of metaphysics. ‘Existent’ and non-existence in themselves are discussed within the Introduction (I, 5), whereas the treatment of ‘one’ and ‘many’ occurs within Universal ScienceSOM (III, 3, end of III, 5, III, 6).

Second, in al-Fārābī the first axis of metaphysics takes into account, besides ‘existent’, also non-existence. The structure of metaphysics, thus, is perfectly symmetrical: ‘existent’ and non-existence, on the one hand (first axis), ‘one’ and ‘many’, on the other (second axis). In Avicenna, on the other hand, ‘non-existent’ is dealt with only in the Introduction (I, 5), and is not investigated within Universal Science.

Third, in the *Fī Aġrāḍ*, after the aforementioned texts, al-Fārābī offers an account of the purposes of the single books of the *Metaphysics*. This account reveals another aspect — surely the most important — in which al-Fārābī’s and Avicenna’s conceptions of the structure of metaphysics differ.

Al-Fārābī mentions the distinction between the subject-matters studied by metaphysics, their species and their properties only in connection with books Γ and Δ ²³⁴. In the course of the description of book E, he goes back to the relationship between Theology and metaphysics²³⁵. In the very puzzling description of book K, he alludes to a distinction between principles and ‘accidents’ of metaphysics²³⁶. Since book K is a summary of *Metaphysics* B-E and some section of the *Physics*, all this means that al-Fārābī takes the

²³³ The ‘subject-matters’ (*mawḍū‘āt*) are referred to also at p. 37, 4.

²³⁴ Ed. DIETERICI, p. 37, 4-8. Al-Fārābī portrays book Δ as dealing with the ‘subject matters’ of this science, their ‘species’ and their ‘consequent attributes’. In the description of book Γ he mentions only ‘subject matters’ and ‘proper accidents’ (*al-a‘rāḍ al-ḥāṣṣa*), which may suggest that he regards this last expression as a common rubric for both species and consequent attributes.

²³⁵ Ed. DIETERICI, p. 37, 9-13. The relevant clause (p. 37, 10-11) is properly translated by Ramón Guerrero (p. 240) : « Determina el asunto de la Teología, esto es, que está incluida en esta ciencia, o mejor (*bal*), que es esta ciencia en cierto modo » (emphasis mine); cf. Druart’s translation, p. 42: « Ce livre détermine que la science divine fait partie de cette science, *mais n’est* cette science *que* sous un certain rapport » (emphasis mine).

²³⁶ Ed. DIETERICI, p. 38, 1.

structural framework of metaphysics mainly from books Γ , Δ and E. However, he does not mention this framework in the case of any other book of the *Metaphysics*. Nor does he arrange the other books according to the parameters he has established in Texts 12.1-3 and recalled in the description of books Γ , Δ , E (and K). In other words, we find in al-Fārābī a gap between what the structure of metaphysics should be (Texts 12.1-3), and what it really is in Aristotle's *Metaphysics* (account of the single books). This gap is not filled in his major metaphysical works.

Avicenna, on the other hand, not only expounds his view about the structure of metaphysics (Texts 1-2), but he also reworks Aristotle's *Metaphysics* according to this prefigured structure (Text 3). Thus, as I have already said, he transfers chapters 1-2 of book Λ to Theology, and connects them with chapters 6-10 of book Λ ; some of the aporias of book B are taken into account in different places of the *Ilāhiyyāt*; Γ and E, 1 constitute the basis of the Introduction. In the same way, Avicenna employs terminological distinctions coming from book Δ as linguistic preliminaries to the treatment of many concepts he discusses within Universal Science — something Albert the Great already perceived²³⁷; the doctrine of book Z is used partly in the treatment of substance within Universal ScienceSE, partly in the treatment of 'universal' within Universal SciencePE; a summary of book Θ is available in the analysis of potency and act within Universal SciencePE; book I is the main source of Universal SciencePOM. Whether Avicenna had access to the Arabic translation of only one among books M and N, or of both of them as a single unit, has still to be ascertained²³⁸; anyhow, the place of the *Ilāhiyyāt* where the doctrine of these two books is presented is Universal SciencePOM.

The reshaping of the books of the *Metaphysics* in Avicenna's *Ilāhiyyāt* deserves, of course, a separate and detailed analysis, which cannot be provided here. What is clear is that this recasting of the content of Aristotle's book according to the parameters established in Γ , 1-2 and E, 1, and first theorized by al-Fārābī in the *Fī Aḡrāḡ*, is Avicenna's major contribution to the history of the interpretation and transmission of the *Metaphysics*. Within this history, it is not far-fetched to compare Avicenna's *Ilāhiyyāt* with Andronicus of Rhodes' editorial work, and to regard it a sort of second 'edition' of the *Metaphysics*.

²³⁷ Cf. A. BERTOLACCI, «*Subtilius speculando*». *Le citazioni della Philosophia Prima di Avicenna nel Commento alla Metafisica di Alberto Magno*, «Documenti e Studi sulla Tradizione Filosofica Medievale», 9, 1998, pp. 261-339.

²³⁸ According to Druart (pp. 128-129) and Ramón Guerrero (p. 235) Books M and N are grouped together in al-Fārābī's account in the *Fī Aḡrāḡ*, whereas according to Gutas (AVICENNA, p. 242) book N is not included in al-Fārābī's summary. The translation of neither book is extant in Averroes' *tafsīr* of the *Metaphysics*.

CONCLUSION

The pieces of evidence discussed in the present article indicate that in Avicenna's *Ilāhiyyāt* metaphysics as a discipline is structured according to a clear, though not totally straightforward, pattern. After the Prolegomena deriving from the previous exegetical tradition, and the miscellaneous Introduction (excluding the Appendix, which does not deal with metaphysics), the core of metaphysics has a binary structure, given by two main axes.

The first axis (§§1-2) concerns 'existent' as the subject-matter of metaphysics. It rests on the distinction between the species and properties of 'existent' (Universal Science) and its causes (Theology). Accordingly, metaphysics contains a sequence of three parts: Universal ScienceS(pecies)E(xistent), Universal ScienceP(roperties)E(xistent) and Theology. Among these parts, Theology is the first in the order of importance. Its inner articulation is strikingly similar to that of Islamic theological literature.

The second axis (§3) concerns 'one', 'many' and related matters. Thus, metaphysics is not only a doctrine of 'being' or 'existent' (namely an Ontology), but also, at the same time a theory of 'one' and 'many' (i. e. a Henology).

The actual structure of metaphysics (§4) is the result of the interaction between these two axes. Such an interaction is most clearly visible within Universal Science, but is not exclusive to it. It affects also the Introduction and Theology. Besides and in parallel with Universal ScienceSE and Universal SciencePE, we encounter a treatment of the species of 'one' and 'many' (Universal ScienceSOM), and an analysis of their properties (Universal SciencePOM). Universal ScienceSOM is merged with Universal ScienceSE; Universal SciencePE and Universal SciencePOM, on the other hand, are distinct subdivisions of the same larger unit.

In comparison with the other major works by Avicenna dealing with metaphysics (§5), the *Ilāhiyyāt's* structure shows a common pattern (the emphasis on Theology), but is decidedly richer: in no other work the doctrine of 'one' and 'many' is so openly underscored.

As to its sources (§6), the structural pattern I have described derives from the adaptation to metaphysics of the epistemology of the *Posterior Analytics*. An effort in this direction, by Aristotle himself, is already visible in books Γ and E of the *Metaphysics*. The same trend is at work in at least some of the Greek commentators on the *Metaphysics* (*in primis* Alexander of Aphrodisias). Within the same Aristotelian tradition, taking inspiration especially from *Metaphysics* Γ (and perhaps from still unknown intermediate sources), al-Fārābī provides the fullest and most influential account of the structure of

metaphysics before Avicenna's time.

In a synchronic perspective, the structure of Avicenna's *Ilāhiyyāt* appears as the framework of an extremely comprehensive synthesis. This work is a philosophical treatise on metaphysics which encompasses, as one of its parts, what amounts to a theological compendium. Within this context, the Ontology proper of the Peripatetic metaphysics is linked with a Henology which can be taken as both the reflex of the coexistence of Aristotelianism and Neoplatonism within the Arabic philosophical *milieu*, and as a concession to the Islamic *tawḥīd Allāh*, the profession of God's unicity. In a diachronic perspective, the structure of metaphysics that Avicenna proposes has a main aspect of originality. It is the concrete application to Aristotle's *Metaphysics* of what, before Avicenna, was, at most, a bare conception (i. e. a 'theory') of the structure of this work and of the discipline it contains. In both these respects, Avicenna's *Ilāhiyyāt* represents an unparalleled peak in the history of the *Metaphysics*.