

il sapere egemone per lui non è la medicina, ma la filosofia teoretica. Per questo, la logica è uno strumento non delle arti e delle scienze che ne fanno uso, ma della *filosofia*. Sono gli oggetti della filosofia a essere provati attraverso la dimostrazione ed essi sono del massimo valore (*In An. Pr.*, 4, 33). Ma quali sono gli oggetti di cui la filosofia si occupa? Anche su questo punto la risposta di Alessandro non lascia spazio a dubbi: non tutta la conoscenza è degna della filosofia, ma solo la conoscenza delle realtà «divine e degne di onore» (*In An. Pr.*, 3, 19). Alessandro propone addirittura un'interessante etimologia del verbo *theôrein*, il quale è fatto derivare da *horan* e *theia* (*In An. Pr.*, 3, 21). Non è qui evidentemente possibile prendere in esame la posizione di Alessandro, le sue fonti e il suo significato filosofico<sup>49</sup>. Basterà aver attirato l'attenzione sulla differenza profonda che divide Galeno e Alessandro di Afrodizia sulla questione dell'«utilità» della logica.

*Amos Bertolacci*

“NECESSARY” AS PRIMARY CONCEPT  
IN AVICENNA’S METAPHYSICS

“Necessary”, together with “existent”, “thing” and “one”, is among the four concepts that Avicenna (Ibn Sīnā, d. 1037) expressly posits as primary in the *Ilāhiyyāt* (“[Science of] Divine Things”) of the *Kitāb al-Šifā’* (“Book of the Cure”), his metaphysical masterpiece<sup>1</sup>. In both a doctrinal and a historical perspective, Avicenna’s theory of these primary concepts can be regarded as the Arabic *pendant* of the Medieval doctrine of transcendentals.

The doctrine of the primary concepts or (*ante litteram*) transcendentals is the most fundamental theory of the *Ilāhiyyāt*. Its importance is evident in many respects. The relationship between three concepts of this kind (“existent”, “necessary” and “one”), for example, governs the structure of the work: in it, a first ontological axis – divided into a part dealing with “existent *qua* existent”, its species and properties (treatises I-VII), and a part devoted to the Necessary Existent, namely God (treatises VIII-X) – runs parallel to a second axis that takes into account “one”, “many”, their

<sup>1</sup> IBN SĪNĀ, *Al-Šifā’, al-Ilāhiyyāt (1)*, ed. Ğ.Š. Qanawātī, S. Zāyid, al-Hay’a al-‘amma li-šū’ūn al-maṭābī, al-amīriyya, Cairo 1960; *Al-Šifā’, al-Ilāhiyyāt (2)*, ed. M.Y. MŪSĀ, S. DUNYĀ, S. ZĀYID, al-Hay’a al-‘amma li-šū’ūn al-maṭābī, al-amīriyya, Cairo 1960. All the quotations of Avicenna in the present article regard this work: in them, the number of treatise and chapter is followed by the indication of the pages and lines of the aforementioned edition and, between square brackets, the number of the pages and lines of the Latin Medieval translation (AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina, I-IV*. Édition critique par S. VAN RIET. Introduction par G. Verbeke, Peeters-Brill, Louvain-Leiden 1977; *Liber de Philosophia prima sive Scientia divina, V-X*. Édition critique par S. VAN RIET. Introduction par G. Verbeke, Peeters-Brill, Louvain-Leiden 1980). The English translations of Avicenna’s texts reported in the present article are my own, and are based on the thorough revision of the Arabic text of the *Ilāhiyyāt* documented in A. BERTOLACCI, *The Reception of Aristotle’s Metaphysics in Avicenna’s Kitāb al-Šifā’: A Milestone of Western Metaphysical Thought*, Brill, Leiden 2006, pp. 483-558; AVICENNA (IBN SĪNĀ), *Libro della guarigione. Le cose divine*, a cura di A. BERTOLACCI, Unione Tipografico-Editrice Torinese, Torino 2007, pp. 111-130.

<sup>49</sup> Per tutto questo, rinvio senz’altro agli studi di Marwan Rashed: cfr. M. RASHED, *Alexandre d’Aphrodise lecteur du Protreptique*, in J. HAMESSE (a cura di), *Les prologues médiévaux*, Brepols, Turnhout 2000, pp. 1-37, dove si trova un’illuminante analisi del prologo al commento degli *Analitici Primi* (spec. *ivi*, p. 9, sulla sezione qui richiamata), e, soprattutto, *Essentialisme. Alexandre d’Aphrodise entre logique, physique et cosmologie*, De Gruyter, Berlin-New York 2007, dove la posizione di Alessandro sulla conoscenza e il suo oggetto viene più volte confrontata con quella di Galeno.

species and properties<sup>2</sup>. Furthermore, Avicenna's account of "existent" and another transcendental ("thing") encompasses the metaphysical theory *par excellence* of the *Ilāhiyyāt*, namely the distinction of essence and existence. Finally, whereas other doctrines of the *Ilāhiyyāt* are "localized", so-to-say, in particular sections or treatises (like the subject-matter of metaphysics in I, 1-2; substance in treatise II; accidents in treatise III, universals in treatise V; causality in treatise VI, etc.), the doctrine of transcendentals permeates the entire work and represents somehow its theoretical framework.

Three main contexts of the treatment of the transcendentals in the *Ilāhiyyāt* can be distinguished. For the sake of brevity, they can be called, respectively, "epistemological", "ontological" and "theological". In the epistemological context, roughly corresponding to the first treatise of the work, the role of the transcendentals in the science of metaphysics, and their mutual relationship in the scientific organization of this discipline, is considered. The ontological context (treatises II-VII) conveys a treatment of the single transcendentals in application to specific metaphysical topics, even though remarks on their relationship surface also here. In the theological context (treatises VIII-X), finally, the way according to which the transcendentals can be predicated to God, both in positive terms (God is existent, necessary and one) and in negative terms (God does not have an essence distinct from existence and is not a "thing"), is taken into account.

Although depending on the *Metaphysics* and other Aristotelian works, the doctrine of the transcendentals has in the *Ilāhiyyāt* a much more enhanced, systematic and pervasive role than in Aristotle. Whereas the main differences in comparison with Aristotle's account in the epistemological and in the ontological contexts (the transcendentals include also "thing" and "necessary"; "one" and "many", "necessary" and "possible", are properties of "existent"; existence and unity are extrinsic to the essence of the thing that is existent and one) can be regarded as interpretations and developments of Aristotle's position, the treatment of the transcendentals in the theological context is markedly original: contrary to Aristotle, who offers only some succinct remarks on the

unity (i.e. simplicity) and necessity of the Unmoved Mover<sup>3</sup>, Avicenna provides a lengthy and articulated exposition of these topics: necessity and existence are elements of God's name ("Necessary Existent", lit. "The Necessary with regard to existence", *wāg'ib al-wuġūd*)<sup>4</sup> and are extensively taken into account in the analysis of the divine nature, together with God's unity, meant both as simplicity (VIII, 4) and as unicity (VIII, 5; cp. I, 6-7).

The path connecting Aristotle's with Avicenna's account of the transcendentals passes through the Arabic reception of the Aristotelian and Neoplatonic speculations on the issue, and the original contributions of the preceding Arab philosophers and theologians. Even though other sources – both philosophical (the encyclopedia of the Iḥwān al-'Safā' or Brethren of Purity, for example)<sup>5</sup> and non-philosophical (the Islamic theological literature concerning, for instance, the profession of God's unicity or *tawḥīd*) – cannot be excluded, Avicenna's doctrine of transcendentals depends mainly on his two greatest predecessors in Arabic philosophy, al-Kindī and al-Fārābī.

The metaphysical writings of al-Kindī (d. ca. 870), especially his *Falsafa U'lā* (*First Philosophy*), reflect the still fluid situation that can be found in the Arabic reworkings of Plotinus' *Enneads* and Proclus' *Elementatio Theologica* (the *Theologia Aristotelis* and the *Liber de Causis* respectively), in which the originally Plotinian and Proclean idea of the superiority of "one" with respect to "existent" is replaced by the typically Porphyrian or pseudo-Dionysian idea of the equality between "existent" and "one"<sup>6</sup>. Thus, on the one hand, al-Kindī's treatment of the transcendentals regards primarily unity<sup>7</sup>, his speculation on this concept displays Plotinian

<sup>3</sup> *Metaph.* A, 7, 1072a32-34; 1072b10.

<sup>4</sup> See the *Ilāhiyyāt passim* (cp. AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina*, I-X. Lexiques par S. Van Riet, Peeters-Brill, Louvain-la-Neuve-Leiden 1983, p. 138).

<sup>5</sup> Remarks on the convertibility of "real one" and "thing" as the most universal concepts occur in Iḥwān al-'Safā', *Rasā'il*, ed. M. G'ālib, Dār al-'Sādīr, Beirut 1957, vol. III, p. 53 (see M. FAKHRI, *A History of Islamic Philosophy*, Columbia University Press, New York and London 1970, pp. 190-191).

<sup>6</sup> C. D'ANCONA, *La casa della sapienza. La trasmissione della metafisica greca e la formazione della filosofia araba*, Guerini e associati, Milano 1996, pp. 78 and n. 131, 88, 108, 114.

<sup>7</sup> According to P. ADAMSON, "Al-Kindī and the reception of Greek philoso-

<sup>2</sup> See BERTOLACCI, *The Reception* cit., p. 149-211.

and Procleian motives<sup>8</sup>, and he tends to subordinate “existent” to the other transcendentals (directly to “true”, indirectly to “one”)<sup>9</sup>; on the other hand, he states explicitly that unity is (at least extensionally) equal to existence<sup>10</sup>. Although the analysis of some transcendentals, like “thing” and “one”, is occasionally performed for its own sake, as a preliminary step to the following discussion<sup>11</sup>, al-Kindi’s perspective on the transcendentals is mainly theological, in so far as the investigation of two transcendental features of created things, namely truth and unity, is meant to show the necessity of a “First True” (*ḥaqq auwal*) and a “True (or: truly) One” (*wāḥid ḥaqq, wāḥid bi-l-ḥaqq*), that, having truth and unity *per se*, is the ultimate cause of truth and unity in all the other things<sup>12</sup>.

Al-Fārābī (d. 950) enlarges al-Kindi’s theological perspective on transcendentals, by devoting specific essays to the semantic of

phy”, in *The Cambridge Companion to Arabic Philosophy*, ed. P. ADAMSON, R. TAYLOR, Cambridge University Press, Cambridge 2005, pp. 34-35, the second major element of *Falsafa U lā*, together with the rejection of Aristotle’s theory of the eternity of the world, is the discussion of unity.

<sup>8</sup> F. W. ZIMMERMANN, “Al-Kindi”, in *Religion, Learning and Science in the ‘Abbasid Period*, ed. M.J.L. Joung, J.D. Latham, R.B. Serjeant, Cambridge University Press, Cambridge-New York-Port Chester-Melbourne-Sydney 1990, pp. 366-367; ADAMSON, “Al-Kindi and the reception”, cit., p. 39.

<sup>9</sup> *Kitāb al-Kindī ilā l-Muṭaṣṣim bi-llāh fi l-falsafa al-ūlā*, in *Œuvres philosophiques et scientifiques d’Al-Kindī. Volume II. Métaphysique et Cosmologie*, ed. R. RASHED, J. JOLIVET, Brill, Leiden-Boston-Köln 1998, pp. 1-117 (henceforth: *Falsafa U lā*), p. 8, 12-13: “The cause of the existence and stability of everything is the true, since everything having that-ness (*anniyya*) has also truth. The true, therefore, necessarily exists, since the that-nesses exist” (reading *id al-anniyyāt mawḡūda*, instead of *idan li-al-anniyyāt mawḡūda*). The second clause of this passage (“since everything ... truth”) can be compared with *Metaph. α*, 1, 993b30-31.

<sup>10</sup> *Falsafa U lā*, p. 95, 1-2: “It is clear that being (*huwiyya*) is predicated of everything of which one is predicated; hence it is predicated of things that are as numerous as the species of one” (*wa-bayyinun anna l-huwiyyata tuḡālu ‘alā kulli mā ‘alayhi [‘il-latubū ed.] l-wāḥidu fa-l-huwiyyatu tuḡālu li-mā ta-uddubū anwā‘u l-wāḥidi*); p. 97, 2-3: “The unity [of the True One] is nothing else than Its being (*huwiyya*)”. The source of the first passage is *Metaph. Γ*, 2, 1003b22-34 (see BERTOLACCI, *The Reception* cit., p. 400, and n. 60). See also *Fi ibānat ‘an al-illa al-fā‘ila al-qariba li-l-kaun wa-l-fasād (On the Clarification of the Agent Cause that is Proximate to Generation and Corruption)*, in *Rasā‘il al-Kindī al-falsafiyya*, ed. M. A. ABŪ-RĪDA, 2 voll., Dār al-Fikr al-‘Arabī, Cairo 1950-1953, 1978<sup>2</sup>, vol. I, p. 215, 4: “[God] is the true being (reading *al-anniyya al-ḥaqqā*, instead of *al-anniyya al-ḥaqq*)” (see ADAMSON, “Al-Kindi and the reception” cit., p. 38).

<sup>11</sup> *Falsafa U lā*, pp. 41, 3-45, 15; pp. 45, 16-53, 5.

<sup>12</sup> *Falsafa U lā*, p. 9, 14; p. 53, 14; p. 70, 3; see the expression “First True One” (*wāḥid ḥaqq auwal*) at p. 95, 25.

these concepts and by taking the transcendentals into account within the discussion of the epistemological status of metaphysics. Thus, the description of the nature of God in the *Mabādi’ ārā’ Ahl al-Madīna al-Fāḍila (Principles of the Opinions of the Inhabitants of the Virtuous City)* contains – in al-Kindi’s vein – a long section devoted to God’s unity (both unicity and simplicity), in which relevant remarks on the relationship between unity, truth and existence can be found<sup>13</sup>. The *Kitāb al-Wāḥid wa-al-waḥda (Book of One and Unity)*, on the contrary, is an independent treatment of the transcendental “one”<sup>14</sup>. The role of the transcendentals in the profile of metaphysics as a science is alluded to in the *Kitāb al-Ḥurūf (Book of Particles)*<sup>15</sup>, and more fully articulated in *Fī Agrāḍ al-ḥakīm fi kull maqāla min al-Kitāb al-mawsūm bi-l-ḥurūf (On the Goals of the Sage [= Aristotle] in Each Treatise of the Book Named by means of Letters [= Metaphysics])*, where metaphysics is portrayed as a discipline fundamentally concerned with “existent” and “one”<sup>16</sup>.

Avicenna takes from both al-Kindi and al-Fārābī, in general terms, the idea of the paramount importance of the doctrine of transcendentals within metaphysics. He is indebted with al-Kindi in particular for the treatment of this topic in the context of philosophical theology, whereas he relies on al-Fārābī for the epistemological notations on the issue. The still tentative discussion of al-Kindi and the scattered remarks by al-Fārābī become in Avicenna a

<sup>13</sup> *Al-Farabi on the Perfect State. Abū Naṣr al-Fārābī’s Mabādi’ ārā’ Ahl al-Madīna al-Fāḍila*. A revised Text with Introduction, Translation and Commentary by R. WALZER, Clarendon Press, Oxford 1985; repr. 1988, pp. 58, 10-68, 13; p. 74, 2-12.

<sup>14</sup> *Alfarabi’s On One and Unity*. Arabic Text, Edited with Introduction and Notes by M. MAHDI, Les Editions Toubkal, Casablanca 1989.

<sup>15</sup> In the survey of the sciences in chapter I, 5 of this work, metaphysics (*‘ilm mā ba-da al-ṭabī‘a*) is presented as the discipline investigating (1) the things external to the categories (possibly “existent” and “one”), and (2) the things contained in the categories (the categories proper to mathematics and politics included) in so far as the extra-categorical things are their causes (*Alfarabi’s Book of Letters [Kitāb al-Ḥurūf]. Commentary on Aristotle’s Metaphysics*. Arabic Text, Edited with an Introduction and Notes by M. MAHDI, Dār al-Maṣriq, Beirut 1969, p. 69, 17-21; see BERTOLACCI, *The Reception* cit., p. 100, n. 82).

<sup>16</sup> *Maqāla ... fi Agrāḍ al-ḥakīm fi kull maqāla min al-kitāb al-mawsūm bi-l-ḥurūf*, in *Alfārābī’s Philosophische Abhandlungen*, ed. F. DIETERICI, Brill, Leiden 1890, pp. 34-38. English translation and commentary in BERTOLACCI, *The Reception*, cit., pp. 65-103.

unified, coherent and full-fledged theory, in which the transcendentals are first clearly enucleated and then precisely discussed in the context of a single work, the *Ilāhiyyāt*.

The present article consists of two sections. The first is preliminary and regards, in general, the list of the transcendentals that Avicenna provides and the common features that he ascribes to these concepts. The second section, on the other hand, focuses on "necessary", pointing at its role of property of "existent" (§2.1), its intensional dependence on this latter (§2.2), and the modalities of its universal predicability (§2.3).

### 1. List and general characterization of the transcendentals

The most complete account of the transcendentals is the one occurring in *Ilāhiyyāt* I, 5<sup>17</sup>. In this chapter, Avicenna provides two partially overlapping lists of transcendentals ("existent", *mawǧūd*, "thing", *šayʿ*, and "necessary", *darūri*; "existent", "thing" and "one", *wāḥid*), that introduce cumulatively four such concepts: "existent", "thing", "necessary", and "one"<sup>18</sup>. Four general features of these concepts are consecutively enucleated: the transcendentals are described as (i) notions impressed in the soul (or conceptualized) primarily (or by themselves, *per se*)<sup>19</sup>; (ii) "principles of conceptualization", i.e. notions by means of which all other notions are conceptualized; (iii) notions that cannot be known and defined by means of more common and previous notions, but only intuitively brought to mind and alluded to; (iv) notions that are "common" to everything, namely universally predicable.

The transcendentals enucleated by Avicenna and their features are summarized in the following table.

**Table 1**

transcendentals	feature (i)	feature (ii)	feature (iii)	feature (iv)
(29, 5) *existent*, "thing", "necessary"	(29, 5-6) notions impressed in the soul primarily		(29, 6) their impression [in the soul] does not need to be derived from things that are more known	
	(29, 13-14) conceptualized by themselves	(29, 13) principles of conceptualization [the other notions are conceptualized by means of them]	(29, 14-30, 1) cannot be made known, but only signified by means of reminders	
(30, 4) *existent*, "thing", "one"	(30, 3) worthiest to be conceptualized by themselves		(30, 4-5) cannot be clarified without circularity or by means of something more known	(30, 3) common to everything

These four features can be summarized by saying that the transcendentals are concepts that are (i) first<sup>20</sup>; (ii) starting-points

<sup>20</sup> The statement according to which these concepts "are impressed in the soul primarily", has to be understood in a logical, rather than gnoseological, sense. Said otherwise, the accent in this sentence falls on "primarily" rather than on "are impressed". Avicenna means (as he explicitly says immediately afterwards) that these concepts cannot be derived from other, better known, notions, not that these concepts are the first concepts with which the human mind gets acquainted. In the *Ilāhiyyāt*, Avicenna would seem to endorse an inductive perspective on the issue of the acquisition of the primary concepts: in I, 3, pp. 21, 17-22, 1 [p. 24, 52-54], for example, he contends that physical existence, namely a particular type of existence, rather than the universal concept of existence, is our first cognitive experience of existence. This point is corroborated by III, 3, p. 105, 1-7 [p. 115, 39-116, 51] where, while explaining the circularity conveyed by the attempt of defining "one" ("one" is defined in terms of "multiplicity", which, in its turn, is defined in terms of "one"), Avicenna contends that, although unity and multiplicity give the impression to be both conceptualized at the same time, multiplicity is first in imagination, whereas unity is first in intellect, i.e. it is not conceptualized by means of a principle that is intellectual, but, at most, by means of a principle that is imaginative (namely, by means of multiplicity). Thus, the realm in which "one" – and, by extension, the other transcendentals – are first is intellectual (i.e. logical), not imaginative (i.e. cognitive). However, if we take *stricto sensu* the analogy that in I, 5 Avicenna establishes between the transcendentals in their function of principles of "conceptualization" (*taṣawwur*) and the the primary propositions or logical axioms as principles of "granting assent" (*taṣdiq*), we are entitled to suppose some kind of innate presence of the transcendentals in the mind, since Avicenna would seem to state (I, 5, p. 29, 9-11 [p. 32, 8-11]) that the axioms are present in the "human nature" (*garīza*). In III, 3, p. 105, 4 [p. 115, 43], Avicenna states that "one" and multiplicity are conceptualized "originally" (*badīʿan*). On the acquisition of the primary intelligibles in Avicenna, see D. N. HASSE, *Avicenna's De anima in the Latin West. The Formation of a Peripatetic Philosophy of the Soul, 1160-1300*, The Warburg Institute - Nino Aragno Editore, London -

<sup>17</sup> I, 5, pp. 29, 5-30, 4 [pp. 31, 2-33, 27].

<sup>18</sup> I, 5, p. 29, 5-6 [p. 31, 2-3]: "We say that the notions of 'existent', 'thing', and 'necessary' are impressed in the soul primarily ..."; p. 30, 3-4 [p. 33, 25-27]: "The things most worthy to be conceptualized by themselves are those that are common to all entities, like "existent", "thing", "one" (*wa-l-wāḥid; al-wāḥid* ed.), and so forth". I regard the differences of the two lists, with respect to the items mentioned in them as examples of primary concepts, as merely accidental.

<sup>19</sup> Cp. III, 3, p. 106, 8-9 [p. 117, 77-78], where Avicenna states that all or some of the notions taken into account there ("one", "many", number) are conceptualized by themselves (*bi-dātihā*).

of conceptual knowledge<sup>21</sup>; (iii) most notorious<sup>22</sup>; (iv) most universal<sup>23</sup>. In the case of "existent" and "one", universal predicability entails the fact of being predicated of all the categories according to priority and posteriority<sup>24</sup>. Whereas features (i)-(iii) regard, in

Turin 2000, pp. 179-180.

<sup>21</sup> Feature (ii) is not explicitly stated by Avicenna, but can be inferred from the analogous feature that, in the same context, he assigns to the "principles of granting assent", namely the logical axioms. These are said to be the causes on account of which assent is granted to other propositions (I, 5, p. 29, 7-8 [p. 32, 5]).

<sup>22</sup> Avicenna argues in three ways that the transcendentals cannot be known deductively. First, in positive terms, by establishing a comparison with the principles of granting assent: as in the case of these latter the attempt of making them known (*ta-rif*) by bringing them to mind or conveying the comprehension of their formula does not provide any new knowledge (*ilm*), but only a reminder of what the interlocutor means, likewise the transcendentals are not signified in such a way to make known (*ta-rif*) something unknown or to impart new knowledge, but only by reminding (*tanbih*) their meaning and bringing them to mind (I, 5, pp. 29, 7-30, 1 [pp. 32, 4-33, 22]). Second, negatively, by a *reductio ad absurdum*: were they not the ultimate principles of conceptualization, but could be derived from other previous concepts, conceptualization would have no principles at all, and a *regressio ad infinitum* in the starting-points of conceptualization would occur (I, 5, p. 30, 1-2 [p. 33, 22-24]). Third, by showing concretely that any attempt to define these concepts is destined to insuccess, since it implies the recourse to notions that are less known than the *definiendum*, as "to be active or passive" in the case of "existent", and "to be that about which a statement can be made" in the case of "thing" (I, 5, pp. 30, 6-31, 2 [pp. 33, 29-34, 50]); the description of "thing" involves not only two notions that are less known than "thing", like "statement" and "can be made", but also a synonym of it, i.e. "that which", *allādi*, or entails circularity: "necessary" is defined by means of "possible" and "impossible", which are defined by means of "necessary" (see below, §2.2); "one" is defined by means of "multiplicity", which is defined by means of "one" (III, 3, pp. 104, 4-105, 1 [pp. 114, 24-115, 40]). Circularity is entailed also by the recourse to notions that are less known than the *definiendum*: "active" and "passive", for example, being less known than "existent", have to be defined by means of this latter (Avicenna does not stress this point). Conversely, the circularity in the definition of "necessary" and "one" involves notions ("possible", "impossible", "multiplicity") that Avicenna qualifies as less known than the *definiendum* (see above, n. 20, and below, §2.2).

<sup>23</sup> Each of the aforementioned transcendentals possesses universal predicability individually taken. Other concepts share this feature in conjunction with complementary notions, not individually taken ("cause" and "effect", for example, are universally predicable if taken together). Occasionally, Avicenna remarks that some of the transcendentals are more universal than some of these other concepts, even if these latter are considered jointly: see VIII, 6, p. 357, 8-9 [p. 415, 18-19]: "But 'thing' absolutely [taken] is more common than 'identical' (*huwa*) or 'other' (*ḡayribī*)".

<sup>24</sup> III, 2, p. 103, 7-8 [p. 114, 17-18]: "'One' corresponds to 'existent' in so far as it is said of each category as 'existent'; V, 8, p. 243, 5-6 [p. 272, 18-19]: "'Existent' and 'one' are among the things that are common to [all] the categories, but according to priority and posteriority". In I, 2, p. 13, 6 [p. 12, 28], Avicenna seems to ascribe this fea-

ture to a larger group of concepts, which includes, besides "one *qua* one", also "many *qua* many", "coincident" (*muwāfiq*), "different" (*mu ḥaliḥ*) and "contrary" (*didd*), by saying that "they cannot be proper of a [single] category". But, first, he does not specify whether this statement applies to all the categories or only to some of them; and, second, he appears to refer to these concepts not individually taken, but in couples ("one"- "many", "coincident"- "different", "contrary"- "contrary"). The part of Avicenna's statement regarding "coincident", "different" and "contrary" is possibly the paraphrase of *Metaph.* Δ, 10, 1018a35-38, where Aristotle contends that "identical", "other" and "contrary" are different in each category.

All the transcendentals share these features in comparison to the other less primary, fundamental, notorious and universal concepts. They do not possess these features, however, in the same amount. Among the transcendentals Avicenna tends to establish a sort of hierarchy, by assigning the aforementioned four features in the highest degree to "existent", and by subordinating to this latter the remaining three transcendentals ("thing", "necessary" and "one") with regard to one or more of the traits that qualify them as primary concepts (i.e. in intension and/or extension).

## 2. "Necessary"

Avicenna is most famous for having used the concepts of "necessary" and "possible", in conjunction with the notion of "existent" and the polarity "on account of itself"- "on account of another", to draw the distinction of the Existent that is Necessary on account of itself, namely God, from all the other existents which are possible on account of themselves and necessary only on account of another, i.e. on account of the Necessary Existent (*Ilāhiyyāt* I, 6)<sup>25</sup>. Since God, according to Avicenna, provides necessity to the possible existents by being the ultimate cause of their

ture to a larger group of concepts, which includes, besides "one *qua* one", also "many *qua* many", "coincident" (*muwāfiq*), "different" (*mu ḥaliḥ*) and "contrary" (*didd*), by saying that "they cannot be proper of a [single] category". But, first, he does not specify whether this statement applies to all the categories or only to some of them; and, second, he appears to refer to these concepts not individually taken, but in couples ("one"- "many", "coincident"- "different", "contrary"- "contrary"). The part of Avicenna's statement regarding "coincident", "different" and "contrary" is possibly the paraphrase of *Metaph.* Δ, 10, 1018a35-38, where Aristotle contends that "identical", "other" and "contrary" are different in each category.

<sup>25</sup> See the thorough account in R. WISNOVSKY, *Avicenna's Metaphysics in Context*, Cornell University Press, Ithaca (New York) 2003, pp. 197-263.

existence, the concepts of “necessary” and “possible” play a crucial role in Avicenna’s account of causation within the ontological context of the *Ilāhiyyāt* (treatise VI). Likewise, by being one of the two fundamental elements of God’s nature, necessity is one of the topics most frequently discussed or touched upon in the theological context of this work (treatises VIII-IX in particular)<sup>26</sup>. Chapter I, 6, however, is not the only place of the epistemological context in which Avicenna takes into account the issue of necessity and possibility. Before formulating the aforementioned distinction of Necessary Existent and possible existents in *Ilāhiyyāt* I, 6, he provides some clues on the role of “necessary” and “possible” in the scientific organization of metaphysics (chapter I, 2), and an analysis of the mutual relationship of the concepts “necessary”, “possible” and “impossible” (chapter I, 5). These two *loci* are analyzed in the present section (§§2.1-2).

The main feature of Avicenna’s account of necessity in the *Ilāhiyyāt* is the treatment of this concept in connection with the concepts of existence and “existent”. Also the formulas that he uses to designate the Necessary Existent (*wāgʿib al-wuġūd*; lit. “the Necessary with regard to existence”) and the possible existent (*mumkin al-wuġūd*; lit. “the possible with regard to existence”) indicate that, in the context of metaphysics, the analysis of necessity is not accomplished from a purely logical point of view, but is intimately and constitutively linked with the doctrine of being. This is not surprising, given Avicenna’s repeated statements in the *Ilāhiyyāt* that the subject-matter of metaphysics is “existent *qua* existent”, and that every topic discussed in this science must be related, in a way or another, with its subject-matter. Thus, leaving aside Avicenna’s theory of logical necessity<sup>27</sup>, the following pages will focus on his view of necessity in relation to existence in the *Ilāhiyyāt*. The *loci* taken into account will document Avicenna’s tendency to subordinate the epistemological role, in one case, and the logical

<sup>26</sup> See R. ACAR, *Talking about God and Talking about Creation. Avicenna’s and Thomas Aquinas’ Positions*, Brill, Leiden-Boston 2005, pp. 86-89.

<sup>27</sup> See A. BACK, “Avicenna’s Conception of the Modalities”, *Vivarium*, 30, 1992, pp. 217-255. For the doctrine of the modalities in al-Fārābī, see P. ADAMSON, “The Arabic Sea Battle: al-Fārābī on the Problem of Future Contingents”, *Archiv für Geschichte der Philosophie*, 88, 2006, pp. 163-188; D. BLACK, “Knowledge (‘ilm) and Certitude (yaqīn) in al-Fārābī’s Epistemology”, *Arabic Sciences and Philosophy*, 16, 2006, pp. 11-45.

status, in the other, of “necessary” to that of “existent”.

But before turning to the texts, let us posit some preliminary terminological clarifications. By “necessary” Avicenna means *grosso modo* what is not contingent. The idea of contingency is instead conveyed by Avicenna’s concept of “possible” (labeled “possible<sup>a</sup>” below), so that “necessary” and “possible” are opposed to one another. Avicenna, at least in this context, does not use the term “possible” to signify pure possibility, independently from the connotation of contingency, i.e. non-impossibility (“possible<sup>b</sup>” below); according to this type of possibility, both “necessary” and “contingent” would be possible. Thus:

Necessary = non-contingent  
Possible<sup>a</sup> = contingent  
Necessary ≠ Possible<sup>a</sup>  
[Possible<sup>b</sup> = non-impossible, so that Necessary is Possible<sup>b</sup>, and  
Possible<sup>a</sup> is Possible<sup>b</sup>]

where the square brackets include the concepts and the equations that Avicenna does not posit.

### 2.1. “Necessary” is a property of “existent”

In the conclusion of the three arguments proving that “existent *qua* existent” is the subject-matter of metaphysics in *Ilāhiyyāt* I, 2 (p. 13, 12-19 [p. 13, 36-46]), Avicenna provides a list of the “proper accidents”, or properties, of “existent *qua* existent”, which includes, among others, also the concepts of “possible” and “necessary”<sup>28</sup>.

Text 1: *Ilāhiyyāt* I, 2, p. 13, 16-19 [p. 13, 42-46]:

Some of these [i.e. of the things pertaining to “existent *qua* existent”] belong to it<sup>29</sup> as proper accidents, like “one” and “many”, potency and act, “universal” and “particular”, “possible” (*mumkin*) and “necessary” (*wāgʿib*). For “existent”, in order to receive these accidents and be predisposed to them, does not need to be specified as natural, mathematical, ethical and so on.

When in this text Avicenna qualifies “possible” and “necessary” as properties of “existent”, he takes them as disjunctive prop-

<sup>28</sup> On this text, its context and its function in the *Ilāhiyyāt*, see BERTOLACCI, *The Reception* cit., pp. 125-126, 155-159.

<sup>29</sup> Reading *ba ʿdu hā dībi lahū* instead of *ba ʿdu hā dībi*.

erties: every existent, in so far as it is existent (i. e. regardless whether it is a hylomorphic movable item, or a mathematical entity, or one of the things brought about by human actions, etc.), is either possible or necessary, namely either contingent or non-contingent.

The presence of “possible” and “necessary” among the properties of “existent *qua* existent” in this text is remarkable. First, this is the only passage of the *Ilāhiyyāt*, as well as of the other works by Avicenna, in which these two concepts are included among the properties of “existent” as the subject-matter of metaphysics<sup>30</sup>. Second, whereas the other properties of “existent” in the text reported above (“one” and “many”, potency and act, “universal” and “particular”) are related to “existent”, more or less directly, by Aristotle himself in the outline of the science of metaphysics that he provides in *Metaphysics* Γ, 1-2 and elsewhere, “possible” and “necessary” appear to be introduced in this context *ex novo* by Avicenna<sup>31</sup>. The insertion of “possible” and “necessary” in the list of the properties of “existent” is even more original than the inclusion in the same list of two further concepts, somehow related to these ones, that Aristotle equally does not regard as properties of being, namely “cause” and “effect” (more precisely, “cause” and “thing caused”)<sup>32</sup>. The addition of “possible” and “necessary”, and

<sup>30</sup> See the synopsis in BERTOLACCI, *The Reception* cit., pp. 159-162.

<sup>31</sup> In the course of *Metaph.* Γ, 2, Aristotle links or equates “one” and “being” in many respects: both are said in many ways (1003a33-b19, 1004a22-31), mutually convertible (1003b22-25), principles of contraries (1004b28), none of them is an univocal universal predicate or a separate entity (1005a9). Since it deals with “one”, metaphysics investigates also “plurality” (*al-kātra*, πλῆθος, 1004a9-10). “Potency” is one of the main four meanings of “being” that Aristotle distinguishes in Δ, 7, E, 2 (1025a33-b2), Θ, 1 (1045b32-35). Furthermore, the concrete treatment of potency and act in *Ilāhiyyāt* IV, 2 is encapsulated between the analysis of further concepts mentioned by Aristotle as properties of being, namely “prior” and “posterior” (Γ, 2, 1005a16) in IV, 1, and “perfect” and “imperfect” (1005a12), “all” and “part” (1005a17) in IV, 3. “Universal” and “particular” are taken by Avicenna as the common heading under which “genus” and “species” (Γ, 2, 1005a17) are subsumed, since their treatment in *Ilāhiyyāt* V encompasses the analysis of “genus” and “species” in V, 3-5 (see also the mention of the “universal” and the primary substance among the things investigated by the metaphysician in Γ, 3, 1005a34-35). The other properties of “existent” mentioned by Avicenna in the part of chapter I, 2 preceding Text 1 (“coincident”, “different”, “contrary”, p. 10, 5-13, 9 [pp. 9, 59-12, 31]; see above, n. 24) correspond to further notions introduced by Aristotle in *Metaph.* Γ, 2 (1003b35-36, 1004a21-22; see BERTOLACCI, *The Reception* cit., pp. 200-202).

<sup>32</sup> Just adumbrated in the *Ilāhiyyāt*, where the status of “principle” as property of “existent” is stated *a posteriori*, in the answer to an objection following Avicenna’s

“cause” and “effect” to Aristotle’s properties of “existent” underscores the two main doctrines differentiating the *Ilāhiyyāt* from the *Metaphysics*. The distinction of the world’s possible existence from God’s necessary existence is rightly regarded as the doctrine that Avicenna himself reckoned as “his big idea”, namely his most original and influential theory<sup>33</sup>. Avicenna’s doctrine of causality, on the other hand, contains, under the heading of the efficient cause, the fundamental discrimination of the Aristotelian “physical” cause producing motion and change, from the “metaphysical” cause bestowing existence, to which God as First Principle of the universe belongs, and to which the idea of creation is connected<sup>34</sup>.

The status of “necessary” as disjunctive property of “existent” has two main consequences. First, being a property of “existent”, “necessary” determines in this latter a separation of the sphere of what is necessary from the sphere of what is not necessary, i.e. possible (as “odd” determines in “number” a separation of the group of odd numbers from the group of non-odd, i.e. even, numbers): thus, within “existent”, the existent that is necessary is distinct from the existent that is not necessary, but possible. This division precedes the division of “existent” into the ten categories, since the categorial articulation, according to Avicenna, regards only the possible existent and does not affect the Necessary Existent<sup>35</sup>. Second, being a disjunctive property of “existent”, “neces-

positive exposition of his own doctrine (I, 2, p. 14, 13 [pp. 13, 47-14, 67]), the function of “cause” and “effect” as properties of “existent” can be regarded as the transfer on the level of properties of what Aristotle states about the metaphysical investigation of the causes and principles of being in *Metaphysics* Γ, 1 (1003a31-32) and E, 1 (1025b3-4). In the same function of property of “existent”, “principle” is linked with “cause” in the *Maqāla fi l-Nafs ‘alā sunnat al-iḥtiṣār* (*Compendium on the Soul*), whereas “principle” and “cause” are replaced by “cause” and “effect” in the *Risāla fi Aqṣām al-‘ulūm al-aqliyya* (*Treatise on the Division of the Intellectual Sciences*) (see BERTOLACCI, *The Reception* cit., pp. 159-162).

<sup>33</sup> See WISNOVSKY, *Avicenna’s Metaphysics* cit., p. 199.

<sup>34</sup> See *Ilāhiyyāt* VI, 1, p. 257, 10-16 [pp. 291, 14-292, 24]. Due to the doctrinal connection between “necessary” and “possible”, on the one hand, and “cause” and “effect”, on the other (the Necessary Existent is the ultimate cause of the possible existents), “cause” and “effect” are the last properties of “existent” taken into account by Avicenna in the *Ilāhiyyāt* (treatise VI), before the investigation of the existence, nature and action of the Necessary Existent in the theological part of this work (treatises VIII-X, 3).

<sup>35</sup> Avicenna contends that the threefold division of substance in form, matter and compound regards only the possible existence (see below, n. 40), and that the Necessary Existent is not a substance (see VIII, 4, pp. 348, 6-349, 6 [pp. 403, 74-404, 1]).

sary” is less extensive than this latter, since not all existents are necessary, some of them being possible.

By being a property of “existent”, “necessary” has good credentials to be also intensionally dependent on “existent”, in such a way that its concept or meaning contains the concept of meaning of this latter (as the concept of “odd” or “even” contains the concept of “number”). This is precisely what chapter I, 5 is going to establish.

## 2.2. “Necessary” is defined in terms of existence

The inclusion of “necessary” among the primary concepts at the beginning of chapter I, 5 brings Avicenna to discuss the relationship between “necessary” and the other two modal concepts, namely “possible” and “impossible”, later on in this chapter. In the first part of the discussion, Avicenna shows that these concepts cannot be properly defined. This is attested by the unsuccessful attempts to define these concepts performed by “the Ancients” (*al-awwalūna*) – above all, if not exclusively, Aristotle, whose *Prior Analytics* are quoted in the same context – who defined each of these three concepts in terms of the other two, thus falling in a sort of *petitio principii*<sup>36</sup>. The circular definitions of “necessary”, “possible” and “impossible” that Avicenna reports are the following:

Outline 1: Pseudo-definitions of “necessary”, “possible”, “impossible” in *Ilāhiyyāt* I, 5

A (p. 35, 8-16):

- 1) possible (*mumkin*) = non-necessary (*g’ayru l-darūri*)
- 2) possible (*mumkin*) = the non-existent (*ma dūm*) whose existence (*wuġūd*) in the future is not impossible (*laysa bi-muḥāl*)
- 3) necessary (*darūri*) = what is not possible (*lā yumkinu*) to suppose as non-existent (*ma dūm*)

Even though it determines a division within “existent”, “necessary”, properly speaking, is a property rather than a division of this latter (division of “existent” is the “necessary existent”). The “first divisions” (*aqṣām uwal*) of “existent” and “thing” mentioned in the title of I, 5 (p. 29, 3 [p. 31, 00]) are in all likelihood the categories (pp. 34, 15-35, 2 [p. 40, 46-53]), rather than the concepts “necessary”, “possible” and “impossible” investigated later on in the same chapter.

<sup>36</sup> Avicenna’s appears to be referring to Aristotle’s tables of conversion of the modal propositions in *De Interpretatione* 13, 22a24-31, and, as far as the definition of “necessary” in terms of the impossibility of being otherwise is concerned (see Outline 1 [A4]), *Metaphysics* Δ, 5, 1015a33-35. See BERTOLACCI, *The Reception* cit., pp. 331-333.

- 4) necessary (*darūri*) = what is impossible (*muḥāl*) to suppose different from how it is
  - 5) impossible (*muḥāl*) = what is necessarily non-existent (*darūri al-ādam*)
  - 6) impossible (*muḥāl*) = that for which it is not possible (*lā yumkinu*) to exist (*an yūġāda*)
- B (pp. 35, 17-36, 2):
- 1) impossible (*mumtani*) = that for which it is not possible (*lā yumkinu*) to be
  - 2) impossible (*mumtani*) = that for which it is necessary (*yag’ibu*) not to be
  - 3) necessary (*wāġ’ib*) = that for which it is prevented and impossible (*mumtani wa-muḥāl*) not to be
  - 4) necessary (*wāġ’ib*) = that for which it is not possible (*laysa bi-mumkin*) not to be
  - 5) possible (*mumkin*) = that for which it is not prevented (*laysa yamtani*) to be or not to be
  - 6) possible (*mumkin*) = that for which it is not necessary (*laysa bi-wāġ’ib*) to be or not to be

The varying terminology that Avicenna uses to refer to “necessary” and “impossible” in A and B (*darūri* and *muḥāl*, *wāġ’ib* and *mumtani*, respectively), as well as the different order of the concepts in the two lists (“possible”, “necessary”, “impossible” in the first; “impossible”, “necessary”, “possible” in the second), might either mirror the peculiarity of the Arabic translations of Aristotle or indicate the use of different and non-congruent sources<sup>37</sup>. Leaving this issue aside, it is noteworthy that in both lists each of the modal concepts is defined by means of the other two (“possible” by means of “necessary” and “impossible” in A1-2 and B5-6; “necessary” by means of “possible” and “impossible” in A3-4 and B3-4; “impossible” by means of “necessary” and “possible” in A5-6 and B1-2), and therefore, indirectly, by means of itself. What is especially relevant for the present investigation is Avicenna’s recourse to the terminology of existence and non-existence in the definitions of all three modal concepts in the first list (A2, A3, A5-6). The noun “existence” (*wuġūd*) or the verb “to exist” (*an yūġāda*)

<sup>37</sup> “Necessary” is rendered both as *darūri* and as *wāġ’ib* in Ishaq ibn Ḥunayn’s Arabic translation of the *De Interpretatione* (see WISNOVSKY, *Avicenna’s Metaphysics* cit., pp. 215-216).

recur in the description of “possible” and “impossible”. As to “necessary”, it is described by means of the idea of non-existence as “what is not possible to suppose as non-existent (*ma dūm*)” (A3). This is a first indication of the intensional dependence of “necessary” and the other modal concepts on “existent”, and of their logical subordination to it.

But the clearest attestation of this dependence comes from the second part of the discussion of “necessary”, “possible” and “impossible” in *Ilāhiyyāt* I, 5.

Here Avicenna does not simply report the traditional definitions of these concepts, but establishes on his own a hierarchy between “necessary”, on the one hand, and “possible” and “impossible”, on the other, by describing these concepts in terms of existence and non-existence, and by invoking the priority of existence over non-existence.

Text 2: *Ilāhiyyāt* I, 6, p. 36, 4-6 [p. 41, 79-82 *partim*]:

[a] However [i.e. despite the mutual circularity of their definitions], the worthiest of these three to be conceptualized as first is “necessary”. [b] For “necessary” signifies the assuredness of existence (*ta’akkud al-wuġūd*), [c] and existence is more known than non-existence (*adam*). Existence is known by itself, whereas non-existence is known, in a certain way, by means of existence.

Avicenna’s argument in this text can be reconstructed as follows. (i) “Necessary” includes in its meaning the notion of existence, whereas it does not include in its meaning the notion of non-existence (it signifies only the assuredness of existence); “impossible” and “possible”, on the contrary, include in their meaning the notion of non-existence, since “impossible” signifies the assuredness of non-existence, and “possible” signifies the assuredness of neither existence nor non-existence. (ii) The notion of existence is better known than the notion of non-existence, since the latter is the negation of the former. (iii) “Necessary” is better known than “possible” and “impossible”, since includes in its meaning a notion that is better known than the notions included in the meaning of these latter.

If we assume the following descriptions (the first two more or less explicitly stated in Text 2; the second two implied by this text; the last one taken from other passages of the *Ilāhiyyāt*)

Necessity<sub>descr.</sub> = assuredness of existence  
 Necessary<sub>descr.</sub> = something having assuredness of existence  
 [Possible<sub>descr.</sub> = something having neither assuredness of existence nor assuredness of non-existence]  
 [Impossible<sub>descr.</sub> = something having assuredness of non-existence]  
 Existent<sub>descr.</sub> = something having existence

we realize that “necessary” is intensionally subordinated to “existent”, since includes the meaning of this latter in its own meaning (the same applies *a fortiori* to “possible” and “impossible”, on account of their subordination to “necessary”).

### 2.3. “Necessary” is universally predicable

How can “necessary” be a primary concept if, despite its priority with regard to “possible” and “impossible”, it is subordinated both extensionally (§2.1) and intensionally (§2.2) to another primary concept, namely “existent”? A further distinction that Avicenna introduces in the concept of “necessary existence” or “assuredness of existence” (Texts 3-4 below) grants “necessary” universal predicability, and hence co-extensionality with “existent”.

In the following text, Avicenna distinguishes the existence that is necessary *per se*, i.e. the existence proper to the Necessary Existent (section [c]), from the existence that is neither necessary nor impossible *per se*, i.e. the existence proper to the possible existent (section [b]).

Text 3: *Ilāhiyyāt* I, 6, p. 37, 7-10 [p. 43, 8-13]:

[a] We say: Entities that enter into [the domain of] existence can be intellectually divided into two divisions. [b] One of these is [given by] that which [is such that], when it is considered in itself, its existence is not necessary [i.e. the possible existent]. But it is evident that its existence is not even impossible, otherwise [this type of existent] would not enter into the [realm of] existence. This thing, therefore, is in the realm of possibility. [c] The other of these [divisions] is [given by] that which [is such that], when it is considered in itself, its existence is necessary [i.e. the Necessary Existent]<sup>38</sup>.

<sup>38</sup> This passage, and chapter I, 6 in its entirety, is not the proof of God’s existence provided by Avicenna in the *Ilāhiyyāt*, contrary to what many scholars contend (this point, rightly noticed by A. HASNAWI, “Aspects de la synthèse avicennienne”, in *Penser avec Aristote*, ed. M.A. SINACEUR, Erès, Toulouse 1991, pp. 238-239, is further developed in A. BERTOLACCI, “Avicenna and Averroes on the Proof of God’s Existence

Later on in the same chapter, the existence of the possible existent is qualified as being necessary through another (namely through its cause):

Text 4: *Ilāhiyyāt* I, 6, pp. 38, 11-12; 39, 4, 6-7 [pp. 44, 38-39; 45, 55-56, 59-60]:

Furthermore, everything that is a possible existent by itself is [such that] both its existence (*wuġūd*) and its non-existence (*adam*) are due to a cause. [...] In sum, one of the[se] two entities [i.e. either existence or non-existence] becomes necessary (*wāġib*) to it not by itself, but due to a cause. [...] We say that [the possible existent] must become necessary (*wāġib*) due to [its] cause and in relation to it.

Taking “assuredness of existence” and “necessary existence” as synonyms, and applying the tenets of Texts 3-4 to the descriptions of “necessary” and “possible” resulting from Text 2, we obtain the following scenario:

Necessary = something having assuredness of existence (Text 2 [b])

Necessary<sup>1</sup> = something having assuredness of existence by itself (Text 3 [c])

Necessary<sup>2</sup> = something having assuredness of existence through another (Text 4)

Possible = something having neither assuredness of existence nor assuredness of non-existence (implied by Text 2)

Possible<sup>1</sup> = something having neither assuredness of existence nor assuredness of non-existence by itself (Text 3 [b])

and the Subject-Matter of Metaphysics”, *Medioevo*, 32, 2007, forthcoming). Avicenna’s aim is rather to distinguish the Necessary Existent from the possible existent, and to elucidate the properties of each of them. The title of the chapter (p. 37, 2-5 [p. 43, 2-6]: “Chapter dealing with the beginning of the discussion of the Necessary Existent and the possible existent. That the Necessary has no cause. That the possible existent is caused. That the Necessary Existent is neither equal to anything else in existence, nor dependent on anything else with regard to it [i.e. with regard to existence]”) does not mention any proof of God’s existence. Its beginning (p. 37, 6-7 [p. 43, 7-8]: “Let us go back to the point where we were. We say: The Necessary Existent and the possible existent have each [some] properties [*ḥawāṣṣ*]”) refers only to the properties of the Necessary Existent and the possible existent. These properties are taken into account after Text 3, until the end of the chapter (p. 37, 11ff. [p. 43, 14ff]: “We say: What is Necessary Existent by itself has no cause, whereas what is possible existent by itself has a cause, etc.”). It is thus clear that the rather brief Text 3 does not provide a proof of God’s existence, but the “division” (*inqisām*) of “existent” into Necessary Existent and possible existent.

Possible<sup>2</sup> = something having neither assuredness of existence nor assuredness of non-existence by itself, but having assuredness of existence through another (Text 4)

This being the case, Necessary<sup>2</sup> is predicable of Possible<sup>2</sup>, and therefore Necessary is somehow predicable of Possible, thus having universal extension like “existent”<sup>39</sup>. In other words: either by itself in the Necessary Existent, or through another in the possible existent, existence, according to Avicenna, is always necessary. Thus, existence is equated with the “necessity of existence” (*wuġūd al-wuġūd*) in the following text:

Text 5: *Ilāhiyyāt* I, 7, p. 45, 9-11 [pp. 51, 92-92, 95]:

[a] The essence of the necessity of existence (*wuġūd al-wuġūd*) is nothing else than the assuredness of existence (*ta’akkud al-wuġūd*) itself. [b] [It is] not like the essence of animality, which is a notion other than the assuredness of existence (*ta’akkud al-wuġūd*), of which existence (*wuġūd*) is an inseparable concomitant or [something] supervening on it, as you know.

“Necessity of existence” is identified with “assuredness of existence” in section [a], and this latter is mentioned as synonym of “existence” in section [b] – along the lines of Avicenna’s famous theory of existence as “concomitant” (*lāzim*) or “thing supervening” (*dā’hil alā*) to essence – thus positing a transitive identity between necessity of existence and existence.

### Conclusion

The distinction of Necessary Existent and possible existent, formulated in *Ilāhiyyāt* I, 6, together with the related distinction of essence and existence, is one of the basic doctrines of Avicenna’s metaphysical *magnum opus*<sup>40</sup>. The present article has taken into ac-

<sup>39</sup> The same pattern of reasoning can be found also elsewhere in the *Ilāhiyyāt*: the distinction of the truth of the Necessary Existent, which is true by Itself always, from the truth of the possible existent, which is false by itself, and true through another (namely through the Necessary Existent) in I, 8, p. 48, 7-9 [p. 65, 61-64], for example, resembles the distinction of the necessity proper to the Necessary<sup>1</sup> from the necessity proper to the Possible<sup>2</sup>/Necessary<sup>2</sup> in the above scheme.

<sup>40</sup> It recurs not only, as we have seen, in the account of truth in chapter I, 8 (see above, n. 39), but also, for example, in Avicenna’s metaphysical treatment of the categories in treatise II, in which substance, according to all its three main types (matter II, 1, p. 60, 5-8 [p. 68, 70-75]).

count the treatment of the relationship of “necessary” with “existent” that precedes, both locally and theoretically, the place of the *Ilāhiyyāt* where Avicenna establishes the distinction of Necessary Existent and possible existent.

In chapter I, 2, “necessary” and “possible” appear among the disjunctive properties of “existent”. This entails that “necessary”, if taken as opposite to “possible”, is less extensive than “existent” (§2.1). In chapter I, 5, Avicenna intends to show that, despite the mutual dependence of the traditional descriptions of “necessary”, “possible” and “impossible”, “necessary” is logically prior to the other two concepts, since it conveys the idea of existence (more precisely of “assuredness of existence”), whereas “possible” and “impossible” signify also or exclusively non-existence. This implies, however, not only that “necessary” is logically prior to “possible” and “impossible”, but also that the intension of “necessary” (“something having assuredness of existence”) includes the concept of existence (“something having existence”), and depends therefore on it (§2.2). The universal predicability of “necessary”, however – the second main feature of its status of primary concept – is guaranteed by the distinction of the assuredness of existence (or: necessary existence) by itself and the assuredness of existence through another: this latter type of assuredness of existence can be possessed also by the “possible”, and thus determines a wider concept of “necessary” that is not opposite to “possible”, but includes both this latter and what is necessary *stricto sensu* (§2.3).

Thus, according to Avicenna, “necessary” is a primary concept in so far as it is intensionally prior to the other two modal concepts (“possible” and “impossible”) and universally predicable like “existent”. The fact that “necessary” remains intensionally dependent upon “existent”, although being coextensional with it if taken in a wider sense, is congruent with the role of “existent” as the sole subject-matter of metaphysics, and hence as the absolutely first among the primary concepts (“existent”, “thing”, “one”, “necessary”).

*Pietro B. Rossi*

FILOSOFIA NATURALE E SCIENZA  
DEL CONTINGENTE IN GROSSATESTA\*

Dopo la pubblicazione nel 1953 del saggio di Alistair C. Crombie su *Robert Grosseteste and the Origins of Experimental Science, 1100-1700*<sup>1</sup>, gli scritti di Grossatesta dedicati alla teoria della scienza e a fenomeni naturali sono stati fatti oggetto di numerosi studi<sup>2</sup>, come era già avvenuto e continua ad avvenire per un altro pensatore inglese, Ruggero Bacone, a sua volta presentato come precursore del metodo sperimentale nell’indagine scientifica. A parte il fondamentale saggio di J. McEvoy sulla figura e sul pensiero filosofico e teologico del vescovo di Lincoln<sup>3</sup>, fra questi studi si distinguono quello di Steven P. Marrone, che pone l’accento sulle novità presenti nella teoria della conoscenza in generale e in quella scientifica in particolare, sviluppate da Grossatesta nel commento agli *Analitici secondi* rispetto agli influssi del platonismo agostiniano<sup>4</sup>; quello di Richard W. Southern, che si segnala per la ricostruzione storiografica che prospetta gli interessi e gli scritti del vescovo di Lincoln come tipico frutto della cultura inglese maturata nel secolo precedente<sup>5</sup>, e

\* Una versione parziale di questo contributo è stata letta al convegno “From Natural Philosophy to Science: Team 3: Intuitive Knowledge, Induction, and the Role of Experiment” (Local organizer: John Cleary; Team leader: Frans de Haas), promosso dalla European Science Foundation, e tenutosi dal 10 al 12 giugno 2005, presso la National University of Ireland, Maynooth.

<sup>1</sup> Oxford, Clarendon Press.

<sup>2</sup> Cfr. S. GIEBEN, *Bibliographia universa Roberti Grosseteste ab anno 1472 ad annum 1969*, in «Collectanea Franciscana», 39 (1969), pp. 362-418; ID., *Robertus Grosseteste: Bibliographia 1970-1991*, in *Robert Grosseteste: New Perspectives on His Thought and Scholarship*, ed. by J. MCEVOY, Brepols, Turnhout 1995, pp. 415-431; C. PANTI, *Moti, virtù e motori celesti nella cosmologia di Roberto Grossatesta. Studio ed edizione dei trattati ‘De sphaera’, ‘De cometis’, ‘De motu supercelestium’*, SISMEL/Edizioni del Galuzzo, Firenze 2001, pp. 394-408.

<sup>3</sup> J. MCEVOY, *The Philosophy of Robert Grosseteste*, Oxford 1982.

<sup>4</sup> S.P. MARRONE, *William of Auvergne and Robert Grosseteste. New Ideas of Truth in the Early Thirteenth Century*, Princeton University Press, Princeton 1983.

<sup>5</sup> R.W. SOUTHERN, *Robert Grosseteste: The Growth of an English Mind in Medieval Europe*, Clarendon Press, Oxford 1992<sup>2</sup>.