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“NECESSARY” AS PRIMARY CONCEPT IN AVICENNA’S METAPHYSICS

“Necessary”, together with “existent”, “thing” and “one”, is among the four concepts that Avicenna (Ibn Sinā, d. 1037) expressly posits as primary in the Ilāhīyyāt (“[Science of] Divine Things”) of the Kitāb al-Šifa’ (“Book of the Cure”), his metaphysical masterpiece. 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 Ilāhīyyāt. 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

species and properties. Furthermore, Avicenna's account of "existent" and another transcendental ("thing") encompasses the metaphysical theory par excellence of the Ilâbîyyât, namely the distinction of essence and existence. Finally, whereas other doctrines of the Ilâbîyyât 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 transcendental permeates the entire work and represents somehow its theoretical framework.

Three main contexts of the treatment of the transcendental in the Ilâbîyyât 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 transcendental 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 transcendental 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 transcendental 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 transcendental in the Ilâbîyyât 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 transcendental 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 transcendental 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, 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", wag'ib al-wug'ûd) 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 transcendental 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 Ilâbîyyât or Brethren of Purity, for example) and non-philosophical (the Islamic theological literature concerning, for instance, the profession of God's unicity or tawhîd) - cannot be excluded, Avicenna's doctrine of transcendental depends mainly on his two greatest predecessors in Arabic philosophy, al-Kindî and al-Fârâbî.

The metaphysical writings of al-Kindî (d. ca. 870), especially his Falsâfa U'lla (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 Proclen 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". Thus, on the one hand, al-Kindî's treatment of the transcendental regards primarily unity, his speculation on this concept displays Plotinian

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1 See Bertolacci, The Reception cit., p. 149-211.
and Procelian motives, and he tends to subordinate "existent" to the other transcendentals (directly to "true", indirectly to "one")9; on the other hand, he states explicitly that unity is (at least extensionally) equal to existence10. Although the analysis of some transcendentals, like "thing" and "one", is occasionally performed for its own sake, as a preliminary step to the following discussion11 al-Kindi's perspective on the transcendentals is mainly theological, in so far as the investigation of two transcendentals features of created things, namely truth and unity, is meant to show the necessity of a "First True" (baqq awsal) and a "True (or: truly) One" (waḥīd baqra, waḥīd bi-l-baqq), that, having truth and unity per se, is the ultimate cause of truth and unity in all the other things12.


9. Kitāb al-Kindi ilā l-Maṭāšīm bi-l-γab fi l-falsafa al-Ulā, in Gières philosophique et scientifique d'Al-Kindi, Volume II. Métaphysique et Cosmologie, ed. R. RASHED, J. JOLIVET, Brill, Leiden-Boston-Köl 1998, pp. 1-117 (henceforth: Falsafa Ulā), 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 is, since the that-nesses exist" (reading id al-anniyya maqūdā, instead of idan li-al-anniyya maqūdā). The second clause of this passage ("since everything ... truth") can be compared with Metaph. 1, 1, 993b30-31.

10. Falsafa Ulā, p. 95, 1-2: "It is clear that being (bawiyya) 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-bawiyyata taqāla al-γab kullu ma l-alayh [il-latubīl ed.] l-waḥīdīfa l-bawiyyata taqāla li-ma tawddubu anwūt u l-waḥīdī); p. 97, 2-3: "The unity [of the True One] is nothing else than Its being (bawiyya)." The source of the first passage is Metaph. 1, 2, 1003b22-34 (see BERTOLACCI, The Reception cit., p. 400, and n. 60). See also Fi Ishānat-an il-ṣila al-farāba il-ṣila al-qariba il-γab (On the Clarification of the Agent Cause that is Proximate to Generation and Corruption), in Rasūl il-Kindi‘ al-falsafyya, ed. M. A. ABU-RIDWAN, 2 voll., Dar al-Fikr al-‘Arabi, Cairo 1950-1953, 19782, vol. I, p. 215, 4: "[God] is the true being (reading al-aniyya al-baqga, instead of al-anniyya al-baqga)" (see ADAMS, "Al-Kindi and the reception" cit., p. 38).


12. Falsafa Ulā, p. 9, 14; p. 53, 14; p. 70, 3; see the expression "First True One" (waḥīd baqga awsal) 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 Maḥdī’ arā’ Abī al-Madīna al-Fādīla (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. The Kitāb al-Waḥīd we-al-waḥīda (Book of One and Unity), on the contrary, is an independent treatment of the transcendental “one”. The role of the transcendentals in the profile of metaphysics as a science is alluded to in the Kitāb al-Ḥurūf (Book of Letters)15, and more fully articulated in Fi Agrād al-ḥakīm fi kahl maqāla min al-Kitāb al-mawsīm 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”.16

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
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 *Ilāḥīyyāt*.

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 predicableability (§2.3).

1. List and general characterization of the transcendentals

The most complete account of the transcendentals is the one occurring in *Ilāḥīyyāt* I, 5. In this chapter, Avicenna provides two partially overlapping lists of transcendentals ("existent", mawğūd, "thing", šay', and "necessary", darārū; "existent", "thing" and "one", waḥīd), that introduce cumulatively four such concepts: "existent", "thing", necessary", and "one". 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*)¹⁹; (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>
<thead>
<tr>
<th>Transcendentals</th>
<th>Feature (i)</th>
<th>Feature (ii)</th>
<th>Feature (iii)</th>
<th>Feature (iv)</th>
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</thead>
<tbody>
<tr>
<td>(28, 5) &quot;existent&quot;, &quot;thing&quot;, &quot;necessary&quot;</td>
<td>(28, 5-6) notions impressed in the soul primarily</td>
<td>(28, 6) their impression [in the soul] does not need to be derived from things that are more known</td>
<td>(28, 13-14) principles of conceptualization (the other notions are conceptualized by means of them)</td>
<td>(30, 4) cannot be conceptualized by themselves</td>
</tr>
<tr>
<td>(29, 3) &quot;existent&quot;, &quot;thing&quot;, &quot;one&quot;</td>
<td>(30, 3) worthiest to be conceptualized by themselves</td>
<td>(30, 4) cannot be conditioned without circularity or by means of anything more known</td>
<td>(30, 3) common to everything</td>
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These four features can be summarized by saying that the transcendentals are concepts that are (i) first²⁰; (ii) starting-points

²⁰ 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 *Ilāḥīyyāt*, 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 non-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 primary propositions or logical axioms as principles of "granting assent" (*taźdiq*), 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" (*gatūza*). In III, 3, p. 105, 4 [p. 115, 43], Avicenna states that "one" and multiplicity are conceptualized "originally" (*ḥaḍṭī*). 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 -
of conceptual knowledge\(^{21}\); (iii) most notorious\(^{22}\); (iv) most universal\(^{23}\). In the case of “existent” and “one”, universal predicability entails the fact of being predicated of all the categories according to priority and posteriority\(^{24}\). Whereas features (i)-(iii) regard, in Turin 2000, pp. 179-180.

\(^{21}\) 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]).

\(^{22}\) 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 (\textit{tarīf}) by bringing them to mind or conveying the comprehension of their formula does not provide any new knowledge (\textit{tlima}), but only a reminder of what the interlocutor means, likewise the transcendentals are not signified in such a way to make known (\textit{tarīf}) something unknown or to impart new knowledge, but only by reminding (\textit{tanbih}) their meaning and bringing them to mind (I, 5, pp. 29, 7-30, 1 [pp. 32, 4-33, 22]). Second, negatively, by a \textit{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 \textit{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 \textit{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”, \textit{allādā}, 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 \textit{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 \textit{definiendum} (see above, n. 20, and below, §2.2).

\(^{23}\) 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’ (\textit{isbaa}) or ‘other’ (\textit{gasytī}).”

\(^{24}\) 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]; “‘Existential’ 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 feature to a larger group of concepts, which includes, besides “one qua one”, also “many qua many”, “coincident” (\textit{muwaqaf}), “different” (\textit{ma balif}) and “contrary” (\textit{ldid}), 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 \textit{Metaph. A}, 10, 1018a35-38, where Aristotle contends that “identical”, “other” and “contrary” are different in each category.

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 (\textit{llahiyyat 1, 6})\(^{25}\). Since God, according to Avicenna, provides necessity to the possible existents by being the ultimate cause of their
existence, the concepts of "necessary" and "possible" play a crucial role in Avicenna's account of causation within the ontological context of the Ilahiyyat (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). 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 Ilahiyyat 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 Ilahiyyat 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 (waqib al-wug'ud; lit. "the Necessary with regard to existence") and the possible existent (mumkin al-wug'ud; 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 Ilahiyyat 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, the following pages will focus on his view of necessity in relation to existence in the Ilahiyyat. The loci taken into account will document Avicenna's tendency to subordinate the epistemological role, in one case, and the logical 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") 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 ("possibleb" below); according to this type of possibility, both "necessary" and "contingent" would be possible. Thus:

Necessary = non-contingent
Possiblea = contingent
Necessary ≠ Possiblea
[Possibleb = non-impossible, so that Necessary is Possibleb, and Possible is Possibleb]

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 Ilahiyyat 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".


Some of these [i.e. of the things pertaining to "existent qua existent"] belong to it as proper accidents, like "one" and "many", potency and act, "universal" and "particular", "possible" (mumkin) and "necessary" (waqib). 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 propri-

28 On this text, its context and its function in the Ilahiyyat, see BERTOLACCI, The Reception cit., pp. 125-126, 155-159.
29 Reading be du hā dibī labī instead of be du hā dibī.
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 Ilāḥiyāt, 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\(^{30}\). 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* \(\Gamma\), 1-2 and elsewhere, “possible” and “necessary” appear to be introduced in this context *ex novo* by Avicenna\(^{31}\). 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”\(^{32}\)). The addition of “possible” and “necessary”, and...
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4) necessary (darūrī) = what is impossible (muḥāl) to suppose different from how it is
5) impossible (muḥāl) = what is necessarily non-existent (darūrī al-adamī)
6) impossible (muḥāl) = that for which it is not possible (lā yumkinū) to exist (an yūg’āda)

B (pp. 35, 17-36, 2):
1) impossible (munṭanī) = that for which it is not possible (lā yumkinū) to be
2) impossible (munṭanī) = that for which it is necessary (yag’ibu) not to be
3) necessary (waq’ib) = that for which it is prevented and impossible (munṭanī, wa-muḥāl) not to be
4) necessary (waq’ib) = that for which it is not possible (laysa bi-munkin) not to be
5) possible (munkin) = that for which it is not prevented (laysa yamṭanī) to be or not to be
6) possible (munkin) = that for which it is not necessary (laysa bi-waq’ib) to be or not to be

The varying terminology that Avicenna uses to refer to “necessary” and “impossible” in A and B (darūrī and muḥāl, waq’ib and munṭanī, 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. 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 B3-6; “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” (waq’ūd) or the verb “to exist” (an yūg’āda)

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 existence”). The “first divisions” (aṣāmāt wasl) 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.

36 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.
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>dûm)” (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 Ilahiyyat 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: Ilahiyyat 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-wugûd), [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 Ilahiyyat)

| Necessity | = assuredness of existence |
| Possible | = something having neither assuredness of existence nor assuredness of non-existence |
| Impossible | = something having assuredness of non-existence |
| Existent | = 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 predicatable

How can “necessary” be a primary concept if, despite its priority with regard to “possible” and “impossible”, it is subordinated both extensionally ($\S2.1$) and intensionally ($\S2.2$) 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 predictability, 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: Ilahiyyat 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]38.

38 This passage, and chapter I, 6 in its entirety, is not the proof of God’s existence provided by Avicenna in the Ilahiyyat, contrary to what many scholars contend (this point, rightly noticed by A. HASSAWI, “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: Ilāḥiyāt 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 (wūgʿūd) and its non-existence (adan) are due to a cause. [...] In sum, one of the[se] two entities [i.e either existence or non-existence] becomes necessary (wāgʿīb) to it not by itself, but due to a cause. [...] We say that [the possible existent] must become necessary (wāgʿīb) 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])
Necessary1 = something having assuredness of existence by itself (Text 3 [c])
Necessary2 = 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)
Possible1 = 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 [hawādīs]”) 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.

Possible2 = 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, Necessary2 is predicatable of Possible2, and therefore Necessary is somehow predicatable of Possible, thus having universal extension like “existent”39. 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” (wūgʿūd al-wūgʿūd) in the following text:

Text 5: Ilāḥiyāt I, 7, p. 45, 9-11 [pp. 51, 92-95]:
[a] The essence of the necessity of existence (wūgʿūd al-wūgʿūd) is nothing else than the assuredness of existence (taʾakkud al-wūgʿūd) itself.
[b] [It is] not like the essence of animality, which is a notion other than the assuredness of existence (taʾakkud al-wūgʿūd), of which existence (wūgʿūd) 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” (lāzīm) or “thing supervening” (dāʾbil ḍīlā) to essence – thus positing a transitive identity between necessity of existence and existence.

Conclusion

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

39 The same pattern of reasoning can be found also elsewhere in the Ilāḥiyāt: 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 Necessary4 from the necessity proper to the Possible/Necessary2 in the above scheme.

40 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, I, 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 Ilahiyyat 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 predictable 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”).

Dopo la pubblicazione nel 1953 del saggio di Alistair C. Crombie su Robert Grosseteste and the Origins of Experimental Science, 1100-17001, gli scritti di Grossatesta dedicati alla teoria della scienza e a fenomeni naturali sono stati fatti oggetto di numerosi studi2, come era già avvenuto e continua ad avvenire per un altro pensatore inglese, Ruggero Bacone, a sua volta presentato come precursor 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 Lincoln3, 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 agostiniano4; quello di Richard W. Southern, che si segnala per la ricostruzione storigráfica che prospetta gli interessi e gli scritti del vescovo di Lincoln come tipico frutto della cultura inglese maturata nel secolo precedente5, e

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1 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.