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Non-existent but potentially actual. Aristotle on plenitude (*Met.* Θ 3-4, 1047b1-6)

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NON-EXISTENT BUT POTENTIALLY ACTUAL. ARISTOTLE ON PLENITUDE (*MET.* Θ 3-4, 1047B1-6)*

0. Methodological Preliminaries

The first half of *Metaphysics* Θ 4 is essential to understand Aristotle's concept of δυνατόν and his position regarding the so-called principle of plenitude (henceforth: PP).[1] Some scholars, however, seem to forget that the constitution of the text and the syntactic reading of this passage are far from being unanimously accepted. The authority of W.D. Ross' critical edition and of the translation revised by J. Barnes[2] might have induced many to take for granted

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1. *Metaphysics* Θ 4 includes other puzzling claims that involve modal operators. Aristotle's "two modal theses" are expounded in *Metaphysics* Θ 4, 1047b14-30; they are discussed in T. Brennan, « Two Modal Theses in the Second Half of Metaphysics Theta 4 », *Phronesis*, 39, 1994, p. 160-173, and S. Makin, « Aristotle's Two Modal Theses Again », *Phronesis*, 44, 1998, p. 114-126.

2. See Aristotle's *Metaphysics*, a Revised Text with Introduction and Commentary by W.D. Ross, I-II, Oxford, 1924; *The Complete Works of Aristotle Translated Into English*, II, edited by J. Barnes, Princeton, 1984. Besides these works, one of our main interlocutors, during the following analysis, will be the excellent commentary prepared by S. Makin (Aristotle, *Metaphysics. Book* Θ, translated with an Introduction and Commentary by S. Makin, Oxford, 2006; this book will be henceforth referred to simply as Makin).

We will also often refer to the following critical editions/translations/commentaries of the *Metaphysics* (here listed in chronological order): *Die Metaphysik des Aristoteles*, Grundtext, Übersetzung und Kommentar, nebst erläuternden Abhandlungen, von A. Schwegler. I. Grundtext und Kritischer Apparat. III. Des Commentars erste Hälfte. Tübingen, 1847 (repr. Frankfurt am Main, 1968); H. Bonitz, *Commentarius in Aristotelis Metaphysicam*, Bonn, 1849 (repr. Hildesheim-Zürich-New York, 1992); Aristotelis *Metaphysik,* übersetzt von H. Bonitz, aus dem Nachlass herausgegeben von E. Wellmann, Berlin, 1890; Aristotelis *Metaphysica*, recognovit W. Christ, nova impressio correctior, Lipsiae, Teubner, 1934; Aristote, *La Métaphysique, II, Livres H-N*, traduction nouvelle et notes par J. Tricot, Paris, 1940; Aristotele, *La metafisica*, tradotta da P. Eusebietti, con una introduzione storica, analitica e filosofica a cura di E. Oggioni, Padova, 1950; Aristotle's *Metaphysics*, newly translated as a postscript to natural science with an analytical index of technical terms by R. Hope, New York, 1952; Aristotelis *Metaphysica*, recognovit brevique adnotatione critica instruxit W. Jaeger, Oxonii, 1957; Aristotele, *La metafisica, II, libri H-N*, traduzione, introduzione e commento di G. Reale, Napoli, 1968; Aristotle's *Metaphysics*, translated with Commentaries and Glossary by H.G. Apostle, Grinnel, Iowa, 1979; Aristoteles, *Metaphysik. II: Bücher VII (Z) – XIV (N)*, in der Übersetzung von

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Ross' or Barnes' philological and grammatical choices. As a consequence, the discussion of this text often takes place only at a philosophical level, as if all philological issues had already been satisfactorily answered. We maintain, however, that this is not the case. We believe that no philosophical reading of this text should leave aside the critical discussion of the textual problems so often raised by Aristotelian treatises. In accordance with this methodological claim, we offer a new analysis of the text in order to understand the theoretical meaning of the passage.

1. The Dialectical Context and the Principle of Plenitude

Before approaching *Metaphysics* Θ 4, it should be noted that in the broader context of chapters 3-4 Aristotle engages with the "necessitarism" of the Megarians (cf. *Met.* Θ 3, 1046b29-32). In order to argue for the existence of real capacities, Aristotle develops several dialectical arguments against the "Megarian" thesis that "x is possible" if and only if "x is actual" (i.e., there is a capacity to exercise the act "y", expressed in the proposition "x", if and only if the capacity "y" is actually exercised). Since Aristotle's argument is dialectical, it is not important to establish whether the school of Megara ever endorsed the position attributed to some of its members by the Stagirite. More importantly, Aristotle's own arguments are dialectical and not demonstrative, as is common in his writings and especially in the *Metaphysics*. Hence, the premises of Aristotle's arguments against the "Megarian" position cannot be premises that Aristotle would have certainly endorsed as true in a non-dialectical context. These premises rather have the dialectical goal of refuting a particular thesis endorsed by a particular opponent. They might be introduced in the debate merely because the opponent of the hypothetical dialectical exchange is willing to grant them.

It is crucial to have this dialectical context in mind. One of these premises has attracted the attention of several scholars, because, according to some interpreters, it would contain the formulation of the so-called Principle of Plenitude (PP). This is a much debated issue. If we admit that Aristotle endorsed an unrestricted version of the PP, we attribute a bizarre philosophical view

H. Bonitz. Neu bearbeitet mit Einleitung und Kommentar herausgegeben von H. Seidl. Griechischer Text in der Edition von W. Christ. Hamburg, 1980; Aristoteles, *Metaphysik*, in der Übersetzung von F. Bassenge, Berlin, 1990; Aristoteles, *Metaphysik*, übersetzt und eingeleitet von T.A. Szlezák, Berlin, 2003; Aristoteles, *Metaphysik*, übersetzt, mit einer Einleitung und Anmerkungen versehen von H.G. Zekl, Würzburg, 2003; Aristotel. *Metafizica*, traducere, comentariu şi note de A. Cornea, Bucureşti, 2007; Aristote, *Métaphysique*, introduction, traduction, notes, bibliographie et index par M.-P. Duminil et A. Jaulin, Paris, 2008; Aristote, *Les métaphysiques*, traduction analytique des livres Γ, Z, Θ, I et Λ introduite, commentée et annotée par A. de Murault, Paris, 2010; Aristote, *Œuvres. Éthiques, Politique, Rhétorique, Poétique, Métaphysique*. Édition publiée sous la direction de R. Bodéüs, Paris, 2014.

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to the Stagirite – an option that many scholars find unappealing. However, when scholars rightly pointed out that Aristotle did not endorse the PP, they left aside the dialectical nature of the passage and chose an unnatural syntactic construction of the first sentence of *Metaphysics* Θ 4. In what follows, we shall present a systematic discussion of all the philological, syntactic, and philosophical issues involved by the analysis of this crucial passage, in order to show that Aristotle is not endorsing, here, any general formulation of the PP. The controversial passage is rather meant, in our opinion, to distinguish between *two senses* of the δυνατόν, one of which satisfies the PP, whereas the other does not. A distinction between several senses of a word is a crucial device in a dialectical game.

Let us first define the PP. Philosophers have formulated it in various ways, but in this paper we shall stick to the following definition:

> Principle of Plenitude: A sentence (p) is possibly true, if there is at least one instant of time at which (p) is true.
> $\Diamond p \leftrightarrow \exists\, t\, (p_t)$

The Finnish logician Jaakko Hintikka[3] maintained that Aristotle subscribed to an unrestricted version of the PP in *Metaphysics* Θ 4. According to Hintikka, the opposite thesis, i.e. some possibilities are never realized, may be found in *De interpretatione* 9, 19a6-22. In Hintikka's view, this latter thesis holds true if one takes into account only those possibilities that are about individuals. This claim is an exception to the general rule according to which all true possibilities are realized at some point (according to Hintikka, Aristotle stated the rule in our passage, *Met.* Θ 4, 1047b3-6).[4]

Hintikka's reconstruction has been criticized in the two most recent books devoted to *Metaphysics* Θ. Both S. Makin and J. Beere[5] focus on *Metaphysics* Θ 4, 1047b3-6 maintaining that this same passage, *pace* Hintikka, *does not* support any claim in favour of Aristotle's acceptance of the PP. One might wonder how it is possible to read these very same lines in two opposite senses. Scholars disagree on the translation of the passage, because its syntax is rather obscure. If we want to clarify the philosophical meaning of these controversial lines, it is necessary to analyse them from a philological and syntactical point of view.

3. See J. Hintikka, *Time and Necessity: Studies in Aristotle's Theory of Modality*, Oxford, 1973.

4. It should be remarked that, later in his career, Hintikka softened this claim and maintained that Aristotle subscribed to a restricted version of the PP (see in particular J. Hintikka, S. Knuuttila, U. Remes, *Aristotle on Modality and Determinism*, Acta Philosophica Fennica, 1977 [issue n. 29]). Hintikka observed that Aristotle's endorsement of the PP may lead to inconsistencies.

5. See J. Beere, *Doing and Being. An Interpretation of Aristotle's Metaphysics Theta*, Oxford, 2009.

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2. The Greek Text and Two Fundamental Queries

For a better understanding of the argument proposed by Aristotle at the very beginning of Θ 4, the passage should be put in context. In Θ 3, 1047a24 the philosopher states how the word δυνατόν should be understood, thereby introducing a definition of the "possible" as a philosophical concept.[6] The text of *Metaphysics* Θ 4, 1047a24-b14 printed by W.D. Ross runs as follows[7]

6. It is well known that Aristotle does not define the "possible" as a logical notion in *Metaphysics* Θ. Rather, he is interested in describing the "capacity" to perform a certain function. Some translators have tried to underline this choice by avoiding the English "possible" as a rendition of δυνατόν in *Metaphysics* Θ. Yet, elsewhere in the *corpus*, Aristotle employs the same term for both the wider logical notion of "possible" and for the metaphysical notion of "possible" as "able to perform a certain function". Accordingly, we choose to translate δυνατόν by "possible", in order to remind the reader of the ambiguity of the term. The reader, however, should remember that we are not simply dealing here with the wider logical notion of "possibility". Makin, in his commentary of book Θ (see p. 72-74), makes useful remarks on how δυνατόν should be understood in the context of *Metaphysics* Θ; see also the excellent remarks scattered in J. Beere, *Doing and Being* [see above, n. 5].

7. The critical apparatus we have drawn up collects data obtainable from the available critical editions prepared by Schwegler, Christ, Jaeger, and Ross [complete references above, n. 3]. Here are the abbreviations and *sigla* employed in our discussion: **E** = Parisinus gr. 1853 (10th century); **J** = Vindobonensis phil. gr. 100 (half of the 9th century [see the corresponding entry in the *Commentaria in Aristotelem Graeca et Byzantina* website: http://cagbdb.bbaw.de/handschriften/handschrift.xql?id=71214]); **A**$^{\mathbf{b}}$ = Laurentianus 87.12 (12th century); **T** = Vaticanus gr. 256 (a.D. 1321); **Π** = consensus **E** et **J**; **Al** = Alexandri Aphrodisiensis commentaria (= *Alexandri Aphrodisiensis in Aristotelis Metaphysica commentaria*, ed. M. Hayduck, Berolini, 1891); **Al**$^{\mathbf{l}}$: Alexandri lemmata; **Al**$^{\mathbf{c}}$: Alexandri citations; **Moerbeke** = *Aristoteles Latinus*, XXV 3.2. *Metaphysica*. Recensio et translatio Guillelmi de Moerbeka, ed. G. Vuillemin-Diem, Leiden, 1995; **Anonyma** = *Aristoteles Latinus* XXV.2. *Metaphysica*, Lib. I-X, XII-XIV. Translatio Anonyma sive "Media", ed. G. Vuillemin-Diem, Leiden, 1976.

It should be noted that **J** is, in book Θ, the model of Moerbeke's Latin translation (prepared between 1260 and 1270); it is also likely to be the ancestor of **T**, which was perhaps copied on a (now lost) copy of **J** prepared before the Vindobonensis lost the textual portion *Met.* A-α 994a6 (see the *stemma* drawn by O. Primavesi, in C. Steel (ed.), *Aristotle's Metaphysics Alpha: Symposium Aristotelicum*, with an edition of the Greek text by O. Primavesi [Introduction, p. 386-458; Edition p. 467-516], p. 396-397). Even though **T** shows evident traces of contamination, it is an invaluable source to reconstruct the text of **J** where the Vindobonensis is missing.

A few more words about the dating of **A**$^{\mathbf{b}}$ might be useful. Cavallo (see G. Cavallo, *Scritture informali, cambio grafico e pratiche librarie a Bisanzio tra i secoli XI e XII*, in G. Prato [ed.], *I manoscritti greci tra riflessione e dibattito*, Firenze, 2000, p. 219-238, especially p. 233) has suggested that the Laurentianus should be assigned to the late 11th century, a proposal anticipated by L. Tarán (see L. Tarán, *Syrianos and Pseudo-Alexander's Commentary on Metaphysics E–N*, in J. Wiesner [ed.], *Aristoteles Werk und Wirkung: Paul Moraux gewidmet*, II, Berlin, p. 215–232, in part. p. 232) and accepted by Golitsis (see P. Golitsis, « Collation but not Contamination: on Some Textual Problems of Aristotle's *Metaphysics* Kappa 1065a 25sqq », *RHT*, n.s., 10, 2015, p. 1-23, in part. p. 4). Such a dating is however problematic, since **A**$^{\mathbf{b}}$ contains, besides the *Metaphysics*, a complete Greek commentary on books A-N: the commentary by Alexander of Aphrodisias on books A-Δ and a commentary on books E-N, that is still attributed to Alexander in the medieval manuscripts as well as in the *Commentaria in Aristotelem Graeca* edition, but is likely to have been prepared by a much later Aristotle commentator, Michael of Ephesus. Now, Michael was a learned Byzantine active in

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ἔστι δὲ δυνατὸν τοῦτο ᾧ ἐὰν ὑπάρξῃ
1047a25 ἡ ἐνέργεια οὗ λέγεται ἔχειν τὴν δύναμιν, οὐθὲν ἔσται ἀδύ-
νατον. λέγω δὲ οἷον, εἰ δυνατὸν καθῆσθαι καὶ ἐνδέχεται
καθῆσθαι, τούτῳ ἐὰν ὑπάρξῃ τὸ καθῆσθαι, οὐδὲν ἔσται ἀδύ-
νατον· καὶ εἰ κινηθῆναι ἢ κινῆσαι ἢ στῆναι ἢ στῆσαι ἢ
εἶναι ἢ γίγνεσθαι ἢ μὴ εἶναι ἢ μὴ γίγνεσθαι, ὁμοίως.
1047a30 ἐλήλυθε δ' ἡ ἐνέργεια τοὔνομα, ἡ πρὸς τὴν ἐντελέχειαν
συντιθεμένη, καὶ ἐπὶ τὰ ἄλλα ἐκ τῶν κινήσεων μάλιστα·
δοκεῖ γὰρ ἡ ἐνέργεια μάλιστα ἡ κίνησις εἶναι, διὸ καὶ
τοῖς μὴ οὖσιν οὐκ ἀποδιδόασι τὸ κινεῖσθαι, ἄλλας δέ τινας
κατηγορίας, οἷον διανοητὰ καὶ ἐπιθυμητὰ εἶναι τὰ μὴ ὄντα,
1047a35 κινούμενα δὲ οὔ, τοῦτο δὲ ὅτι οὐκ ὄντα ἐνεργείᾳ ἔσονται ἐνερ-
1047b1 γείᾳ. τῶν γὰρ μὴ ὄντων ἔνια δυνάμει ἐστίν· οὐκ ἔστι δέ,
ὅτι οὐκ ἐντελεχείᾳ ἐστίν.
4. Εἰ δέ ἐστι τὸ εἰρημένον τὸ δυνατὸν ἢ ἀκολουθεῖ, φανερὸν
ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν ὅτι δυνατὸν μὲν
1047b5 τοδί, οὐκ ἔσται δέ, ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύ-
γειν· λέγω δὲ οἷον εἴ τις φαίη δυνατὸν τὴν διάμετρον
μετρηθῆναι οὐ μέντοι μετρηθήσεσθαι – ὁ μὴ λογιζόμενος τὸ
ἀδύνατον εἶναι – ὅτι οὐθὲν κωλύει δυνατόν τι ὂν εἶναι ἢ γε-
νέσθαι μὴ εἶναι μηδ' ἔσεσθαι. ἀλλ' ἐκεῖνο ἀνάγκη ἐκ
1047b10 τῶν κειμένων, εἰ καὶ ὑποθοίμεθα εἶναι ἢ γεγονέναι ὃ οὐκ
ἔστι μὲν δυνατὸν δέ, ὅτι οὐθὲν ἔσται ἀδύνατον· συμβήσεται
δέ γε, τὸ γὰρ μετρεῖσθαι ἀδύνατον. οὐ γὰρ δή ἐστι
ταὐτὸ τὸ ψεῦδος καὶ τὸ ἀδύνατον· τὸ γάρ σε ἑστάναι νῦν
ψεῦδος μέν, οὐκ ἀδύνατον δέ.

1047a27 ὑπάρχη A^b | 28 εἰ] ἢ J | ἢ[1]] τι ἢ E^2 A^b | 29 ἢ γενέσθαι Π | 31 συντεθειμένη Al^c : συντεινομένη Diels, sed debebat esse συντείνουσα (cf. 1050a23) secundum Jaeger | 32 γὰρ Π A^b : δὲ Al^c | ἡ[1] del. censuit Bonitz (*Commentarius*), sed bis citat Al. | 35 τοῦτο δὲ om. A^b | 1047b1 οὐκ ἔστι δέ Π Al^p : om. A^b | 2 διότι A^b | εἰσίν A^b | 3 εἰρημένον] cf. 1047a24 | τὸ alt.

the scholarly circle of the noble Anna Komnene (1083-1153): if the commentary on books E-N is really his work, it cannot have been written but between 1118 (when Anna entered the monastery of the Κεχαριτωμένη and chose to devote herself to the study of Aristotle) and 1138 (when Anna started writing the *Alexiad*, in order to complete the historical work of her husband, who passed away that same year). This is why scholars like Tarán refuse to accept the attribution of the commentary to Michael, and think instead of some other Aristotle scholar active before Syrianus; on the contrary, Michael is seen as the only possible author of the commentary by C. Luna, *Trois études sur la tradition des commentaires anciens à la Métaphysique d'Aristote*, Leiden-Boston, 2001, *passim*; see also K. Praechter, « Compte rendu de M. Hayduck (éd.), *Michaelis Ephesii in Libros De partibus animalium, De animalium motione, De animalium incessu. Commentaria in Aristotelem Graeca* XXII 2 », *GGA*, 168, 1906, p. 861–907; for a useful overview of this important issue and of the still ongoing discussion between Luna and Tarán, see G. Arabatzis, « Michel d'Ephèse, commentateur d'Aristote et auteur », *Peitho,* 1, 2012, p. 199-209.

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om. Π Al^{c} | ἢ J : ἧ E A^{b} Al^{c} | lacunam statuit et cruces post ἀκολουθεῖ posuit Jaeger; post δυνατὸν haec fere excidisse putat Zeller: <ᾧ ἀδύνατον μ>ἢ ἀκολουθεῖ. Al ἐνέργεια post ἀκολουθεῖ vel legit vel ipse supplevit, cui credit Bonitz (*Commentarius*, p. 389) : "Si autem est quod dictum est possibile in quantum sequitur" Moerbeke : "Si autem est dictum possibile in quantum sequitur" Anonyma | 4 τὸ Al^{b} Al^{p} : τι Π | 5 διαφεύγει A^{b} | 7 μέντοι Π (μὴν Al^{p}) : μὲν A^{b} | μετρηθήσεται Π | 7-8 ὁ μὴ... ἀδύνατον εἶναι parenthesin esse censet Ross; haec verba commentum lectoris esse suspicatus est Jaeger, quod interrumpit sententiam, nam 8 ὅτι ad οὐ μέντοι μετρ. referendum est | ὁ om. T ex coniect. | 8 δυνατὸν Π Al^{c} : ἀδύνατον Al^{b} | 9 μηδ' A^{b} Al^{p} : δὲ μηδὲ Π | 10 εἰ Al^{p} recc. : εἴη Π : εἰ εἴη A^{b} E γρ : εἶναι εἰ E^{2} (ναι εἰ in ras.) de coniect. | 11-12 συμβήσεται... ἀδύνατον om. E, exp. J | 11 ἔσται et 12 δέ γε... ἀδύνατον om. Al^{p} | ad 11 συμβήσεται, πρόσκειται ἔν τισι συμβήσεται κτλ E marg. | 12 δὴ om. A^{b} | 13 τὸ pr. Π Al^{p} : τό τε A^{b}.

Barnes' translation of the same passage is the following:

> And a thing is capable of doing something if there is nothing impossible in its having the actuality [1047a25] of that of which it is said to have the capacity. I mean for instance, if a thing is capable of sitting and it is open to it to sit, there will be nothing impossible in its actually sitting; and similarly if it is capable of being moved or moving or of standing or making to stand or of being or coming to be, or of not being or not coming to be. The word "actuality"[a30], which we connect with fulfillment, has, strictly speaking, been extended from movements to other things; for actuality in the strict sense is identified with movement. And so people do not assign movement to non-existent things, though they do assign some other predicates. E.g. they say that non-existent things are objects of thought and desire, but not that they are moved[a35]; and this because, while they do not actually exist, they would have to exist actually if they were moved. For of non-existent things[b1] some exist potentially; but they do not exist, because they do not exist in fulfillment.
> 4. If what we have described is the possible or a consequence of the possible, evidently it cannot be true to say "this is capable of being but will not be",–a view which leads to the conclusion that there is nothing incapable of being. [b5] Suppose, for instance, that a man (one who did not understand the meaning of "incapable of being") were to say that the diagonal of the square is capable of being measured but will not be measured, because a thing may be capable of being or coming to be, and yet not be or be about to be. But from the premises this necessarily follows, that if we actually suppose that which is not[b10], but is capable of being, to be or to have come to be, there

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> will be nothing impossible in this; but the result *will* be impossible, for the actual measuring of the diagonal is impossible. For the false and the impossible are not the same; that you are standing now is false, but not impossible.

At least two fundamental textual and syntactic questions need to be answered.

a. How is the text of the discussed line 1047b3 (first line of chapter 4) to be established, read, and translated?
b. What is the syntactic structure of the complex sentence at 1047b3-6 and how should we read the infinitive διαφεύγειν (1047b5-6)?

3. The Constitution of the Text and the Syntactic Reading of 1047b3-6

Let us start with point "a". 1047b3 is a puzzling line. Which is the subject of ἐστι? Does the second τὸ need to be omitted, as it is in **E J** and in the commentary that was probably written by Michael of Ephesus? Should one print ἢ, as Ross did, or rather the better attested ἤ?[8]

What is the general meaning of the sentence and how is it related to the definition of δυνατόν that found in the previous chapter (at 1047a24)?

Even though we cannot entirely accept to any of them, it is useful to look at the different solutions proposed over the past two hundred years.

8. ἤ is attested by primary manuscripts (**E A**^{b}) belonging to different branches of the *stemma*, and it is also supported by Alexander's commentary. On the contrary, **J** is the only primary source attesting ἢ. The *stemma codicum* of the *Metaphysics* (until the beginning of book Λ) includes two branches, α and β. The primary sources for α are **E** and **J**, while the most important manuscript (but not the only primary source) belonging to β is **A**^{b} (see O. Primavesi in C. Steel [ed.], *Aristotle's Metaphysics Alpha*, p. 392 [quoted above, n. 7]; see also the complete *stemma codicum* presented by D. Harlfinger, « Zur Überlieferungsgeschichte der Metaphysik », in P. Aubenque [ed.], *Études sur la Métaphysique d'Aristote*, Paris, 1979, p. 7-36: 27; the *stemma* has been recently reproduced by S. Fazzo, *Il libro Lambda della Metafisica di Aristotele*, Napoli, 2012, p. 99).

As Harlfinger has convincingly shown, starting from the change of scribe one can spot in the Laurentianus at Λ 7, 1073a1 (τε πρότερον), **A**^{b} clearly leaves the β branch to become a member of the α family. In recent years, Silvia Fazzo (see at least the Introduction in S. Fazzo, *Il libro Lambda*, particularly p. 113-128) has suggested that such a change of source occurs earlier in **A**^{b}, namely at K 8, 1065a26. Fazzo's reconstruction is problematic from a philological point of view and has been often discussed (see for instance P. Golitsis « Collation but not Contamination » [quoted above, n. 7]). O. Primavesi notes (in C. Steel [ed.], *Aristotle's Metaphysics Alpha*, p. 395-396 [quoted above, n. 7]): "It was perhaps an overstatement to claim that **A**^{b} completely ceases belonging to the β-family already at K 8, 1065a26 since after that point, **A**^{b} continues to share with the β-text typographic minutiae which are least likely to be introduced by way of contamination. But the evidence collected by Fazzo shows in any case that the text offered by **A**^{b} from 1065a26 onwards is at least heavily contaminated by the α-text, whereas before that point it is not."

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When Albert Schwegler published his commented edition and translation of the *Metaphysics* in 1847, he chose to print the following text: Εἰ δ' ἐστὶ τὸ εἰρημένον δυνατὸν ᾗ ἀκολουθεῖ κτλ., "Wenn aber, wie gesagt, dem Vermögen nach etwas insofern ist, als ihm die Wirklichkeit folgt usw". As it is explicitly stated in his commentary (p. 165), Schwegler's reading mainly relied upon pseudo-Alexander's commentary (543.21-25 = p. 574.6-10 Hayduck):

> Εἰπὼν ὅτι δυνατὰ μὲν λέγεται τὰ μὴ ὄντα μὲν δυνάμενα δὲ γενέσθαι, λέγει ὅτι εἰ ἔστι τὸ εἰρημένον δυνατὸν ᾗ ἀκολουθεῖ, τουτέστιν εἰ δυνατὸν λέγεταί τι, καθὸ δύναται γενέσθαι καὶ ἀκολουθεῖ αὐτῷ τὸ ἐνεργῆσαι, οὐκ ἔστιν ἀληθὲς τὸ λέγειν ὅτι ἔστι μέν τι δυνατόν, οὐκ ἔσται δὲ οὐδὲ δυνήσεται εἰς ἐνέργειαν ἐλθεῖν.
>
> Having said that the non-existing beings are possible, because they are capable of coming to being (γενέσθαι), he says that "if the above mentioned possible is inasmuch as it follows", i.e. if it is said possible the thing that is capable of coming to being and to which the actualization follows, it is not true to say that this is possible, but will not be nor will be capable of reaching the actual state. [Our translation]

Immediately after quoting Alexander's text, Schwegler adds a very honest remark and he reveals the main issue raised by his own solution: "Zu ᾗ ἀκολουθεῖ muss also, nicht ohne Härte, aus dem vorangehenden Satze τὸ ἐντελεχείᾳ εἶναι ergänzt werden". However, in spite of the mentioned "Härte", the text printed by Schwegler found an authoritative support in the commentary published in 1849 by Hermann Bonitz, who suggested (p. 389) the following syntactic explanation: "Construe: εἰ δ' ἐστὶ δυνατὸν τὸ εἰρημένον (int. τοῦτο, ᾧ ἐὰν ὑπάρξῃ ἡ ἐνέργεια, – οὐθὲν ἔσται ἀδύνατον, 1047a24), ᾗ ἀκολουθεῖ, int. ἡ ἐνέργεια, quod voc. propterea potest suppleri, quia per τὸ εἰρημένον est significatum." Bonitz's translation (edited in 1890 "aus dem Nachlass" by E. Wellmann) is not far from Schwegler's: "Wenn aber, wie gesagt, möglich etwas insofern ist, als ihm die Wirklichkeit folgt usw."

Thanks to the support of Bonitz, undoubtedly one of the greatest Aristotle scholars of all times, and of pseudo-Alexander's commentary, [9] this solution has enjoyed some popularity also after the publication of Ross' and Jaeger's critical editions. [10] Yet, Bonitz's reading did not satisfy everyone. In 1889

9. Thomas Aquinas shares the same view (see *in Metaphysicam*, ed. Marietti, lib. IX, p. 523, n. 1807): *dicit [Philosophus] quod si verum est quod aliquid dicatur esse possibile ex eo quod aliquid sequitur, secundum quod dictum est, quod possibile est, quod si ponatur esse, non sequitur impossibile.*

10. The reading suggested by Bonitz is the textual basis for many later translations: cf. Tricot: "S'il est vrai que le possible est, comme nous l'avons dit, dans la mesure où son actualisation est

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Eduard Zeller[11] suggested the following *exempli gratia* emendation: Εἰ δέ ἐστι, τὸ εἰρημένον, δυνατὸν <ᾧ ἀδύνατον μ>ὴ ἀκολουθεῖ κτλ. This intrusive proposal, almost never accepted by Aristotle scholars, is the ground of the most recent German translation provided by Thomas A. Szlezák: "Wenn aber das Mögliche (Vermögende), wie wir sagten, dasjenige ist, das nichts Unmögliches impliziert usw."[12]

In 1924, the publication of Ross' commented critical text marked a turning point in the history of the studies about Aristotle's *Metaphysics*. In the second volume (p. 247), a comparatively long remark is devoted to our passage. This is the most thorough textual discussion among the very few available and we believe it might be helpful to quote it in full:

> The traditional text εἰ δ' ἐστὶ τὸ εἰρημένον ᾗ ἀκολουθεῖ can only mean "if what we have described is possible in so far as the two things are convertible" (with ᾗ ἀκολουθεῖ may be compared ᾗ ἔπεται *An. Post.* 73b22); it is quite impossible to understand, as Alexander and Bonitz do, τὸ ἐνεργῆσαι as the subject of ἀκολουθεῖ. There is much to be said for Zeller's Εἰ δέ ἐστι, τὸ εἰρημένον, δυνατὸν <ᾧ ἀδύνατον μ>ὴ ἀκολουθεῖ. ᾧ ἀδύνατον μὴ ἀκολουθεῖ would be a good summary of τὸ εἰρημένον, i.e. of the criterion of δυνατόν given in 1047a24. (Alternatively we might omit Zeller's commas and interpret "assuming that the δυνατόν about which we have been speaking is that", etc.) This reading derives some support from the phrase in the Κυριεύων of Diodorus Cronus (cf. 1046b29 note [p. 244 in Ross' commentary]) δυνατῷ ἀδύνατον μὴ ἀκολουθεῖν. A comparison of 1047b9 with the phrase in the Κυριεύων, δυνατὸν εἶναι ὃ οὔτ' ἔστιν ἀληθὲς οὔτ' ἔσται suggests that Diodorus was borrowing Aristotle's language. There is, however, no absolute need to depart from the well-attested reading given in the text,

réalisation etc." (p. 32; however, on p. 32 n. 1, Tricot expresses strong perplexities about both Bonitz's and Ross' solutions); Eusebietti: "Se il così detto potenziale è tale in quanto segue, poi, [nella realtà] etc."; Reale: "Se, come si è detto, una cosa è in potenza in quanto ad essa segue l'atto etc." (no textual remarks can be found in Reale's commentary *ad locum*, p. 72); Zekl: "Wenn aber möglich das (soeben) Vorgetragene ist, insofern ihm <die Verwirklichung> folgt usw."; Bodéus: "Mais si le possible dont on a parlé existe dans la mesure où il suit l'acte etc." [for all complete references, see above n. 2].

11. See E. Zeller, « Bericht über die deutsche Literatur der sokratischen, platonischen und aristotelischen Philosophie 1886, 1887. Dritter Artikel: Aristoteles », *Archiv für Geschichte der Philosophie*, 1889, 2, p. 259-299, especially p. 263 (quoted in Bonitz, *Metaphysik*, p. 102 n. 1 [quoted above, n. 2]).

12. See Szlezák, *Metaphysik*, p. 155 n. 3: "Übersetzt ist die einleuchtende Ergänzung von Zeller, die Jaegers *crux* überflüssig macht." See also the translation by Bassenge (p. 218): "Wenn nun das Vermögende, das wir beschrieben haben, ein Etwas ist, mit dem nicht Unmögliches verbunden ist usw." No critical remarks about the constitution of the translated Greek text can be found in Bassenge's book [for all complete references, see above n. 2].

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> which derives some support from *An. Pr.* 32a24 ἤτοι ταὐτά ἐστιν ἢ ἀκολουθεῖ ἀλλήλοις.

As we have implied above, Ross' critical text and his syntactic reconstruction are the foundation of Barnes' translation, which is very close to that presented by S. Makin in his recent commentary on *Metaphysics* Θ: "If what has been said is the possible or follows from it etc." [13]

Ross' conclusions were in part rejected by Werner Jaeger in his critical edition. Jaeger agrees with Ross (against Bonitz) in keeping the second τὸ, and agrees with Bonitz (against Ross) in printing the better attested ἦ instead of ἢ. In Jaeger's view, a lacuna occurred after ἀκολουθεῖ. The text of our manuscripts is unsound and no modern conjecture has been able to restore it: Jaeger prints *cruces*. Unfortunately, Jaeger's apparatus's trademark is the *brevitas* and the reader can only speculate about the reasons why Jaeger rejected Ross' editorial choices.

More recently, J. Beere took up the question, stating that conjectural intervention is needed at this juncture. Since he was however not able to find any satisfactory solution, Beere chose Ross' reading for the following reasons.

> (1) It [i.e. Ross' solution] yields an intelligible and sensible text. (2) It is the reading of one manuscript, **T**. (One must consult Ross' apparatus for this reading: Jaeger does not mention **T** here.) (3) the more authoritative manuscripts **E** and **J** have different readings from one another, (4) neither of which is intelligible. (5) The text of **T** differs only slightly from the texts of **E** and **J**. (It differs from both in omitting the τὸ before δυνατὸν, and from **E** in having ἢ rather than ἦ.) (6) The proposed emendations of **E** and **J** differ far more from the texts of **E** and **J** than does the reading of **T**. It seems to me that further conjectures might well be fruitful, although I have not discovered a satisfying one. One strategy would be to provide a dative to go with ἀκολουθεῖ, perhaps simply adding τῷ δυνατῷ, to yield Εἰ δέ ἐστι τὸ εἰρημένον τὸ δυνατὸν ἢ τῷ δυνατῷ ἀκολουθεῖ. [14]

13. Ross' text is rendered in the following way by Duminil-Jaulin (p. 301): "Si le possible est ce qu'on a dit ou conforme à ce qu'on a dit etc." [for a complete reference, see above n. 2].

14. See J. Beere, *Doing and Being*, p. 126 n. 14 [quoted above, n. 5]. Beere's claim that Ross' textual choices are supported by the readings attested by **T** is untenable. Harlfinger's *stemma codicum* (see Harlfinger, « Zur Überlieferungsgeschichte der Metaphysik », p. 27 [quoted above, n. 7]) shows **T** to be not an independent witness: one could easily look at **T** in order to find valid conjectures, just as one might do while reading critical editions or textual notes. Beere is thus right in paying attention to **T**, but is wrong in assuming that **T** offers anything more than judicious conjectures. We are *not* saying that taking into account non-independent sources is useless in establishing a critical text. But we maintain that editorial choices *cannot* be supported by non-independent sources (which are considered as being able only to provide us with good conjectures).

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All mentioned solutions present evident weaknesses. We have seen that Schwegler himself had to admit the difficulty of supplying an understood τὸ ἐντελεχείᾳ εἶναι on the ground of the previous sentence (Ross explicitly refuses to accept this way of making sense of this passage). Jaeger and Beere agree in maintaining that our medieval manuscripts are corrupted and that we should find a satisfactory conjecture (which is, of course, yet to be proposed: Beere follows Ross *faute de mieux*).

In our view Ross' text is not satisfactory for two reasons: 1. it displays at 1047b3 ἢ against the much better attested ἧ; 2. it presupposes an interpretation of the word ἀκολουθεῖ and of its subject that is difficult to defend. For the "Aristotelian" meanings of ἀκολουθεῖν are listed by H. Bonitz as follows: 1. *sequi videtur causam effectus, propositiones conclusio, conditiones id quod ex iis suspensum est, substantiam accidens; de his rationibus* ἀκολουθεῖν *usurpatur*; 2. *inde* ἀκολουθεῖν τινί *eadem vi usurpatur, atque* ὑπάρχειν τινί, κατηγορεῖσθαι τινός.[15] Hence, Barnes' translation is the only possible one for Ross' text: "If what we have described is the possible or a consequence of the possible etc." If the meaning of Aristotle's sentence is this, the reference ("what we have described") is very likely to be pointing to the argument following the definition of possible given at 1047a24-26 ("And a thing is capable of doing something if there is nothing impossible in its having the actuality of that of which it is said to have the capacity"). However, the possible *cannot be a consequence* of its own definition: as Bonitz's *Index* shows, the verb ἀκολουθεῖν is usually employed by Aristotle in order to express the final consequence deriving from a given start point connected to the consequence itself (for instance, an effect is connected to and is a consequence of its cause). In our case, however, the possible *per se* would be supposed to be a consequence of its own definition, which is clearly absurd.

Therefore, it is necessary to read this passage in a different way and we believe we can get some useful hints from manuscript **J**. A particularly interesting aspect is punctuation, a detail not noted, to our knowledge, in any apparatus. Our transcription of this **J** passage (1047b3-6; f. 171r) is as follows:[16]

15. See *Index Aristotelicus*, ed. H. Bonitz, Berolini, 1870, *s.u.* ἀκολουθεῖν.

16. The manuscript page is free to online collation in the site of the Teuchos Projekt at the following address: http://beta.teuchos.uni-hamburg.de/TeuchosWebUI/manuscripts/tx-container-manuscripts.

The Vaticanus **T** (mentioned by Beere [see above, n. 14]) can also be helpful. As a (direct or indirect) copy of **J**, it faithfully follows almost everywhere, in our passage, its model's punctuation, here presenting a period above the line instead of a colon after ἐστίν at 1047b2. If the reader were interested in verifying this data, we point out that Vaticanus **T** (122r) is available for collation in the website of the Biblioteca Apostolica Vaticana at the following address: http://digi.vatlib.it/view/MSS_Vat.gr.256.pt.1/0249?sid=081c2c08eb423ac68a7cf52374346b4c&zoomlevel=1. We are perfectly aware of the fact that modern editors are perfectly free in establishing punctuation, and that they are not bound to follow what Byzantine scribes did in preparing their copies. We

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τῶν γὰρ μὴ ὄντων, ἔνια δυνάμει ἐστίν· οὐκ ἔστιν δὲ ὅτι οὐκ ἐντελεχείᾳ ἐστίν:
εἰ δέ ἐστιν τὸ εἰρημένον δυνατὸν ἢ ἀκολουθεῖ. φανερὸν ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναί τι εἰπεῖν· ὅτι δυνατὸν μὲν
1047b5 τοδί· οὐκ ἔσται δέ· ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν: κτλ.

When compared to Ross' critical text, **J** shows different punctuation several times: it displays a colon, not a period, before εἰ δ'ἐστι (1047b3) and a period, not a comma, after ἀκολουθεῖ (1047b3). The first solution (colon before εἰ δ'ἐστι 1047b3) is an excellent suggestion in our opinion, because the colon marks a clear break in the syntax, but the break is not as strong as a period. We shall propose a similar solution.

In our opinion, the traditional chapter division of Aristotle's *Metaphysics* has deceived the interpreters of this crucial passage. We deem the first lines of chapter 4 (according to the current chapter division) to be part of the same argument developed by Aristotle from line 1047a24. More specifically, we suggest that the opening phrase of chapter 4 is part of a single sentence starting at 1047b1. As a consequence, we propose a punctuation that presents the text of lines 1047b1-b6 as one single sentence, that was wrongly divided into two sentences in the current chapter division (introduced in the 16th century, when the *Metaphysics* was printed in Basel).[17] Are we authorized to make such a move? The rationale behind our proposal is that punctuation is never consistent in the extant manuscripts and editors are always responsible for establishing the punctuation of a text. The traditional chapter division is certainly not binding.

All in all, we propose the following editorial choices:

1. A period above the line should be printed before εἰ δέ ἐστι (1047b3). In this way, δέ (1047b3) continues the preceding argument and marks a new logical step just as the preceding δέ (1047b1) does.
2. A comma should be printed after εἰ δέ ἐστι (1047b3). This δέ marks an opposition with respect to the phrase οὐκ ἔστι δέ (1047b1).
3. The second τὸ (1047b3), omitted by **E J** (that is, by the β branch of the *stemma*) and by Michael of Ephesus (?), should be printed (in agreement with both Jaeger and Ross).

should not rule out the possibility that medieval manuscripts provide us with fine solutions even for punctuation issues.

17. See Vuillemin-Diem's edition of Moerbeke's *Metaphysics* translation, I (Einleitung), p. 176 [quoted above, n. 7]:

"Sie [i.e. the chapters division] wurde zum ersten Mal in die durch Michael Isingrinus herausgegebene Neuauflage der Edition des Erasmus (Basel 1550) – die vierte gedruckte griechische Ausgabe der aristotelischen Werke – eingeführt und ist seitdem, jedenfalls was die Metaphysik angeht, unverändert beibehalten worden."

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4. The better attested ᾗ should be printed instead of ἢ (with Jaeger, against Ross).
5. A comma needs to be printed after φανερόν, thus eliminating any punctuation after ἀκολουθεῖ[18] in this way, φανερόν (followed by an understood ἐστι) constitutes the main verb of the second part of the sentence starting at 1047b3. The proposed syntactic construction is the following: εἰ δέ (*scilicet* ἔνια τῶν ὄντων, cf. 1047b1) ἐστι, φανερόν (*scilicet* ἐστι)[19] τὸ εἰρημένον τὸ δυνατὸν ᾗ ἀκολουθεῖ. Moreover, ὅτι (1047b4) does not depend on φανερόν any more. Hence, it does not introduce a declarative clause, but should be read as a causal subordinate conjunction, thereby displaying the same syntactic function of the ὅτι that we read at 1047b2.
6. The implicit subject of ἀκολουθεῖ should be guessed, as Schwegler suggested, on the basis of the preceding line 1047b2 (ὅτι οὐκ ἐντελεχείᾳ ἐστίν). In our view, punctuating the passage as we do makes the task

18. Following **T** in punctuating after ἀκολουθεῖ is impossible, since the sentence starting with φανερόν would be in need of an inexistent (and, accordingly, to be conjectured) connecting particle.

19. It should be observed that in Aristotle's *corpus* φανερόν is normally followed (or preceded) by ὅτι + a verb in the indicative mood. It can also be construed with an indirect interrogative clause: see, for instance, *Physics* 191a17: πρῶτον μὲν οὖν ἐλέχθη ὅτι ἀρχαὶ τἀναντία μόνον, ὕστερον δ' ὅτι ἀνάγκη καὶ ἄλλο τι ὑποκεῖσθαι καὶ εἶναι τρία· ἐκ δὲ τῶν νῦν **φανερὸν τίς** ἡ διαφορὰ τῶν ἐναντίων, καὶ **πῶς** ἔχουσιν αἱ ἀρχαὶ πρὸς ἀλλήλας, καὶ **τί** τὸ ὑποκείμενον. Other constructions however exist, supporting our reading of the beginning of *Metaphysics* Θ 4. See, for instance, *Politics* 1317a18: καὶ πρῶτον περὶ δημοκρατίας εἴπωμεν· ἅμα γὰρ καὶ περὶ τῆς ἀντικειμένης πολιτείας **φανερόν**, αὕτη δ' ἐστὶν ἣν καλοῦσί τινες ὀλιγαρχίαν. Here, φανερόν should govern an implicit verb meaning "to speak", probably the infinitive εἰπεῖν (easily understandable from εἴπωμεν), without a conjunction like ὅτι, and without an explicit ἐστι, just like in our *Metaphysics* sentence. See also *Prior Analytics* I 28a36: ὅροι τοῦ ὑπάρχειν ζῷον – ἵππος – ἄψυχον, τοῦ μὴ ὑπάρχειν ἄνθρωπος – ἵππος – ἄψυχον· μέσον ἄψυχον. **φανερὸν** οὖν καὶ ἐν τούτῳ τῷ σχήματι πότ' ἔσται καὶ πότ' οὐκ ἔσται συλλογισμὸς καθόλου τῶν ὅρων ὄντων. This is a very special case. Here φανερόν clearly means "it is evident that", and is followed by a clause the subject of which is in the nominative (masculine) case; this clause is however not preceded by the expected ὅτι; note that here an explicit ἐστι is not present either. This construction is very similar to ours: in our sentence the meaning would be "it is evident that what we have mentioned is the possible insofar <actuality> follows". Consider also *Physics* 222a14, another elliptic syntactic structure with no explicit verbal form and with no conjunction: ἀλλὰ τοῦτ' οὐχ ὥσπερ ἐπὶ τῆς στιγμῆς μενούσης φανερόν. διαιρεῖ δὲ δυνάμει. One can therefore maintain that Aristotle employs φανερόν in several different ways, the most common construction being φανερὸν ὅτι + indicative (while the second most common construction is φανερὸν + indirect interrogative clause). The adjective φανερόν, used as an impersonal, can however be followed by an indicative clause with a nominative subject and without ὅτι (like in the example from the *Prior Analytics*); it can also govern an understood infinitive (like in the *Politics* passage). One would perhaps object that the connection φανερόν + ὅτι is too strong to be split. There are however cases of φανερόν + ὅτι where the conjunction is not governed by the adjective, see, for instance, *Physics* 202a13: Καὶ τὸ ἀπορούμενον δὲ **φανερόν**, **ὅτι** ἐστὶν ἡ κίνησις ἐν τῷ κινητῷ· ἐντελέχεια γάρ ἐστι τούτου [καὶ] ὑπὸ τοῦ κινητικοῦ. Note that this is exactly the same punctuation, which, we believe, should be printed at the beginning of *Metaphysics* Θ 4.

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of identifying this implicit subject much easier, inasmuch as the sentence beginning at 1047b3 is separated from the previous one only by a period above the line, and the chapter division shoud not be taken into account any more. It is indeed likely, on the ground of the previous claim ("For of non-existent things some exist potentially; but they do not exist, because they do not exist in fulfillment," 1047b1-2), that something very similar to the infinitive τὸ ἐντελεχείᾳ εἶναι should be the subject of ἀκολουθεῖ.[20]

Let us now have a first glance at the lines at stake with the punctuation we have just suggested:

1047b1 τῶν γὰρ μὴ ὄντων ἔνια δυνάμει ἐστίν· οὐκ ἔστι δέ,
1047b2-3 ὅτι οὐκ ἐντελεχείᾳ ἐστίν· εἰ δέ ἐστι, τὸ εἰρημένον τὸ δυνατὸν ἢ ἀκολουθεῖ φανερόν,
ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν ὅτι δυνατὸν μὲν
1047b5 τοδί, οὐκ ἔσται δέ, ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν·

Our editorial choices imply a new syntactic interpretation of the passage. The following points should be stressed:

1. According to our reading, φανερόν (<ἐστι>, 1047b3) constitutes the independent clause governing the remaining element of the apodosis (τὸ εἰρημένον τὸ δυνατὸν ἢ ἀκολουθεῖ) and εἰ δέ ἐστι is the protasis of the same hypothetical sentence. ὅτι (1047b4) is a causal conjunction that introduces a complex sentence that ends at line 1047b6. According to Bonitz's, Jaeger's, and Ross' critical editions (thus, according to most translators), φανερόν (ἐστι) is an independent clause governing a subordinate declarative clause introduced by the (declarative) conjunction ὅτι.
2. τὸ εἰπεῖν (1047b4) is an accusative, and, as such, the subject of the infinitive εἶναι; ἀληθές is a predicate referring to τὸ εἰπεῖν. Hence: "… since (causal ὅτι) one cannot admit (οὐκ ἐνδέχεται) that it is true (ἀληθὲς εἶναι) to say (τὸ εἰπεῖν) etc."
3. ὅτι δυνατὸν μὲν τοδί, οὐκ ἔσται δέ (1047b4-5) is a subordinate declarative clause introduced by τὸ εἰπεῖν. The subject of the future

20. An analogous proposal was advanced, after Schwegler, by Bonitz in his commentary. Bonitz's punctuation, however, made it really difficult to identify the subject of ἀκολουθεῖ (which was very likely to be identified *ad sensum*). Accordingly, Bonitz was suggesting the (arguably improbable) ἐνέργεια of line 1047a25 as the subject of ἀκολουθεῖ. Our suggestion has the advantage of being easier to justify, even though it has the same theoretical appeal of Bonitz's proposal [for complete references, see above n. 2].

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ἔσται is clearly the same τοδί which is the subject of δυνατόν (ἐστι). Hence: "… that it is true to say that (ὅτι) this thing (τοδί) is possible (δυνατόν), but will never be (οὐκ ἔσται) etc."

4. ὥστε (1047b5) is a subordinate conjunction introducing a consecutive clause (without antecedent) and the verb of this consecutive clause is the infinitive διαφεύγειν (1047b5-6).[21] τὰ ἀδύνατα is the subject of the infinitive εἶναι, which is qualified by the adverb ταύτῃ.
5. According to the LSJ (*sv* διαφεύγειν; Bonitz does not gloss the verb in his *Index*), the meanings of διαφεύγειν are the following: I. get away from, escape (with accusative); II. survive; III. escape one's notice or memory. In this context, διαφεύγειν (employed intransitively) cannot but mean "escape one's notice", the sentence thus requiring to be translated as follows: "…so that (ὥστε) it escapes our notice (διαφεύγειν) that the impossible (τὰ ἀδύνατα) is (εἶναι) in such a condition (ταύτῃ, the condition of the ἀδύνατα, that is, the condition of never being the case)."
6. It is however possible (and it is the most frequent choice among *Metaphysics* translators) to read εἶναι as governed by ἀδύνατα, which takes, in this way, the same meaning as οὐ δυνάμενα (εἶναι, of course). This is not a common construction in classical Greek prose;[22] it is however not uncommon in Aristotle's prose style. The sentence is accordingly translated by Bonitz in the following way: "… so kann es offenbar nicht wahr sein, wenn man sagt, das und das (τοδί) sei zwar möglich (δυνατόν), aber es werde nicht eintreten (οὐκ ἔσται), da

21. Despite the variety of solutions adopted over the centuries by readers and translators of the passage, there is only one translator who has not read ὥστε as a conjunction introducing a consecutive clause. In fact, L. Jansen, *Tun und Können. Ein systematischer Kommentar zu Aristoteles' Theorie der Vermögen im neunten Buch der Metaphysik*, Frankfurt am Main-München-London-Miami-New York, 2002, p. 162, translates the passage as follows: "Wenn aber das Gesagte das Vermögende ist – oder [das Gesagte dem Vermögenden] logisch folgt –, dann ist es offensichtlich, daß es nicht wahr sein kann zu sagen, daß jenes zwar *dynaton* ist, aber nicht sein wird, wenn [ὥστε] es einem [dadurch] entfällt, daß es unvermögenden Dinge gibt." In Jansen's translation, ὥστε is understood as a conditional conjunction: it is a suggestion based on a meaning attested by the Liddell-Scott-Jones Greek-English Dictionary [henceforth LSJ] ("sometime implying 'on condition that'"; see L. Jansen, *Tun und Können*, p. 163 n. 256) and on classical prose texts like, for instance, Thucydides 4, 37, 2 (ἐκήρυξάν τε, εἰ βούλονται, τὰ ὅπλα παραδοῦναι καὶ σφᾶς αὐτοὺς Ἀθηναίοις ὥστε βουλεῦσαι ὅτι ἂν ἐκείνοις δοκῇ). To our knowledge, however, no Aristotelian passage provides a parallel to such a reading. See, for instance, the meanings listed by Bonitz in his *Index* [quoted above, n. 15]: a ὥστε clause can be employed as an apodosis by Aristotle, but not as a conditional *on its own*.

22. The adjective ἀδύνατος is followed by an infinitive only when it is referred to persons (and not to things or abstract ideas, as is the case in our passage). See, for instance, LSJ *s.u.* ἀδύνατος I.

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> auf diese Weise (ταύτη) die Bedeutung von unmöglich (τὰ ἀδύνατα εἶναι) uns ganz entginge (διαφεύγειν)." [23]

Bonitz's translation can obviously be defended. In our view, however, the adverb ταύτη should be connected to εἶναι, and not, as most translators imply, [24] to διαφεύγειν. If one links the adverb to διαφεύγειν, Bonitz's syntactic reading is the only possible solution. However, in this case, the addition of the infinitive εἶναι after ἀδύνατα is useless, inasmuch as τὰ ἀδύνατα εἶναι (to be understood, according to Bonitz, as a synonymous of τὰ οὐ δυνάμενα εἶναι) is essentially the same as τὰ ἀδύνατα. ***Brevitas***, however, is the trademark feature of Aristotle's style in this passage and it is not easy to explain why he might have written τὰ ἀδύνατα εἶναι, if he could have omitted εἶναι. Furthermore, εἶναι with the meaning "to exist" does not occur elsewhere in Aristotle's *corpus* in an infinitive introduced by an adjective like ἀδύνατα. We only have similar syntactic structures in which εἶναι has a predicative meaning ("to be [such-and-such]"). This suggests that Bonitz' reading is problematic, even though it is certainly defensible.

We argue that our solution provides the reader with a more poignant meaning: in our reading, the adverb ταύτη loses the generic sense ("in this way") attributed to it by Bonitz and the infinitive εἶναι is not pleonastic, because it is qualified by ταύτη (εἶναι ταύτη = "to be in this way, to be in this condition"). This is meant to state that the condition Aristotle has just described (i.e. that of an object which will never exist) is the condition of

23. See the commentary by Seidl, p. 111 [for a complete reference, see n. 2]. It should be noted that Bonitz includes our passage in his *Index* [quoted above, n. 15] *s.u.* ἀδύνατον as an explicit case of the mentioned adjective + infinitive construction. After Bonitz, the German translation by Szlezák provides us with a good solution: "… so ist offenkundig, daß es nicht wahr sein kann zu sagen, dies sei zwar möglich (vermögend | zu sein), werde aber nie sein – mit der Folge, daß uns auf diese Weise das, was unvermögend ist zu sein, entschwinden würde." Reale's solution is very close to Szlezák's: "… è evidente che non può essere vero il dire che questa data cosa *può* essere, ma *non esisterà mai*, perché, in questo modo, non si potrebbe più parlare di *cose che non possono essere*" (Reale emphasizes); see also Eusebietti: "… evidentemente non può essere vero il dire che una cosa è potenziale, ma non sussisterà; e così ci sfuggirebbero le cose impossibili"; Bassenge: "… so kann die Behauptung offenbar nicht wahr sein; dieses da sei vermögend zu sein, werde aber nicht sein: denn auf diese Weise würde uns das Unvermögende entgleiten"; Zekl: "… so liegt auf der Hand, daß es nicht angehen kann, es wäre wahr zu behaupten: Dies und das ist zwar möglich, doch es wird nicht eintreten, – was zur Folge hätte, daß auf die gleiche Weise, *was unmöglich sein kann*, ganz entschwindet"; Bodéüs: "manifestement il ne peut être vrai de dire que ceci est possible, mais il ne sera pas, d'où il résulte que nous échappent les choses impossibles" (it should be noted, however, that Bodéüs does not translate ταύτη). The only available translation choosing to separate τὰ ἀδύνατα and εἰπεῖν (thereby reading τὰ ἀδύνατα as the subject of the infinitive) is, to our knowledge, Duminil-Jaulin: "… manifestement il ne peut être vrai de dire : « ceci est possible, mais il ne sera plus », car la conséquence logique de cette façon de penser est d'ignorer *qu'il y a des choses impossibles*" (we emphasize) [for complete references, see above n. 2].

24. See again Bassenge, Bodéüs, Eusebietti, Reale, Szlezák, Zekl [for complete references, see above n. 2].

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the "impossible", not of the "possible". We therefore propose to translate the passage as follows: "… so that it escapes our notice that it is the impossible that is in this condition [i.e. that of never being the case]."

It should be noticed, however, that the most common reading of 1047b5-6, and, particularly, the most common translation of the infinitive διαφεύγειν is quite different from Bonitz's and from ours. Let us analyse Barnes' translation:

> If what we have described is the possible or a consequence of the possible, evidently it cannot be true to say "this is capable of being but will not be",–a view which leads to the conclusion that there is nothing (διαφεύγειν) incapable of being.

Here, the consecutive ὥστε is translated by the expression "a view which leads to the conclusion." The rest of the sentence is a rather free translation. διαφεύγειν is probably understood as meaning "to get away, to escape", or, metaphorically, "to disappear". According to the *LSJ*, however, no Greek source employs διαφεύγειν with this (metaphorical) meaning: the verb refers to a very concrete situation, e.g. a soldier escaping from death, a prisoner escaping from prison, etc. Hence, Barnes' proposal is not correct, as are mistaken other translators who understood this verb in a similar way. [25]

Let us go back to the Greek text as we believe it should be printed:

δοκεῖ γὰρ ἡ ἐνέργεια μάλιστα ἡ κίνησις εἶναι, διὸ καὶ
τοῖς μὴ οὖσιν οὐκ ἀποδιδόασι τὸ κινεῖσθαι, ἄλλας δέ τινας
κατηγορίας, οἷον διανοητὰ καὶ ἐπιθυμητὰ εἶναι τὰ μὴ ὄντα,
1047a35 κινούμενα δὲ οὔ, τοῦτο δὲ ὅτι οὐκ ὄντα ἐνεργείᾳ ἔσονται ἐνερ-
1047b1 γείᾳ. τῶν γὰρ μὴ ὄντων ἔνια δυνάμει ἐστίν· οὐκ ἔστι δέ,
1047b2-3 ὅτι οὐκ ἐντελεχείᾳ ἐστίν· εἰ δέ ἐστι, τὸ εἰρημένον τὸ
δυνατὸν ἢ ἀκολουθεῖ φανερόν,
ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν ὅτι δυνατὸν μὲν

25. Several translators understand διαφεύγειν just like Barnes does. See, for instance, the Latin translation by Moerbeke:… *palam quia non contingit uerum esse aliquid dicere quia possibile hoc, non erit autem, ut et impossibilia esse sic diffugiant.* Cf., moreover, Tricot: "… il est clair qu'il n'est pas vrai de dire : « telle chose est possible mais ne sera pas », de sorte que toute notion d'impossibilité disparaît de cette façon"; Hope: "… clearly it cannot be true to say that something is possible, but will never be; for then there would be no impossibilities"; Apostle 1966: "… evidently one cannot truly say "so-and-so is possible, but it will not be" in a way so as to eliminate the impossible"; de Muralt: "… il est manifeste qu'il ne peut être vrai de dire que telle [chose] est possible, mais ne sera pas, car par là toute impossibilité disparaît" [for all complete references, see above n. 2].

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1047b5 τοδί, οὐκ ἔσται δέ, ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν·

We propose to translate and understand the passage as follows:

> Actuality in the strict sense is identified with movement. And so people do not assign movement to non-existent things, though they do assign some other predicates to them, e.g. <we say that> non-existent things are objects of thought and desire, but not that they are moved, because they do not exist in actuality (they would have to actually exist<, if they were moved>). For of non-existent things some exist potentially; but they do not exist, because they do not exist in actuality; and if they exist, it is clear that what is said <i.e., that they exist *potentially*> would be the "potential", inasmuch as <the state of being in actuality> would follow <from it>, because it is not possible that it is true to say that this is possible, but will not be the case. For the consequence of this would be that it escapes our notice that it is the impossible that is in such a condition <that is, of never being the case>.

4. Non-Existing-but-Potentially-Existing *vs.* Non-Existing

Our translation yields to a new philosophical interpretation of the passage. In our reconstruction, the whole sentence is about "non-beings" (τῶν… μὴ ὄντων, 1047b1). Aristotle explicitly maintains that some (ἔνια) things that do not exist may be said to exist *potentially* (δυνάμει ἐστίν). Therefore, it is safe to infer that other non-existing things do not even exist *potentially* (these are identified with the "impossible", the ἀδύνατον). My non-existing twin brother does not exist actually nor potentially, whereas my non-existing daughter exists *potentially* – if it will be true that I will have a daughter at some point in the future.

Non-existent-but-potentially-existing things may be considered in two ways, i.e. from an actual and from a potential viewpoint.

From an actual viewpoint, these things are merely non-existing (οὐκ ἔστι δέ, ὅτι οὐκ ἐντελεχείᾳ ἐστίν, 1047b1-2).

From a potential viewpoint, on the other hand, they *may be said to exist* in a certain way. In our opinion, the obscure 1047b3 is meant to make this latter step explicit. Aristotle is maintaining that non-existing things are said to exist, if they are said to exist potentially. This modal operator, "potentially", Aristotle adds, should be understood as implying a future actualization. What has been said (τὸ εἰρημένον), i.e. that some non-existing things *exist potentially*, should be understood as making reference to the "potential", i.e. to the "possible" (τὸ δυνατόν).

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The expression ἢ ἀκολουθεῖ, and the issue of the identification of its subject, has long puzzled interpreters. In our view, the expression ἢ <τὸ ἐντελεχείᾳ εἶναι> ἀκολουθεῖ qualifies the "possible"/"potential" (τὸ δυνατόν) by restricting its widest meaning. Aristotle might therefore be committing himself to the claim that there are two fundamental senses of τὸ δυνατόν.

a. τὸ δυνατὸν ἢ <τὸ ἐντελεχείᾳ εἶναι> ἀκολουθεῖ.
b. τὸ δυνατὸν ἢ <τὸ ἐντελεχείᾳ εἶναι> οὐκ ἀκολουθεῖ.

These two senses are exhaustive because one is the negation of the other. Aristotle would therefore subscribe to the idea that something is said to be possibly-φ in two senses: either (a) because it will eventually be actually-φ, or (b) without considering any future realization of the quality "φ". The philosopher does not list these two senses of possibility when he writes about the meanings of the word δυνατόν in *Metaphysics* Δ 12, 1019a33-b15, but he seems to have the above distinction in mind in a crucial passage of *De interpretatione* 9. At lines 19a1-6, Aristotle observes that, if it is true at t_k that *p*, then for every $n<k$, it is true at t_n that *p* will be true at t_k.

ὥστ' εἰ ἐν ἅπαντι
τῷ χρόνῳ οὕτως εἶχεν ὥστε τὸ ἕτερον ἀληθεύεσθαι, ἀναγκαῖον
ἦν τοῦτο γενέσθαι, καὶ ἕκαστον τῶν γενομένων ἀεὶ οὕτως ἔχειν
ὥστε ἐξ ἀνάγκης γενέσθαι· ὅ τε γὰρ ἀληθῶς εἶπέ τις ὅτι
19a5 ἔσται, οὐχ οἷόν τε μὴ γενέσθαι· καὶ τὸ γενόμενον ἀληθὲς ἦν
εἰπεῖν ἀεὶ ὅτι ἔσται. [ed. Minio Paluello, OCT]

> Hence, if in the whole of time the state of things was such that one or the other was true, it was necessary for this to happen, and for the state of things always to be such that everything that happens happens of necessity. For what anyone has truly said would be the case cannot not happen; and of what happens it was always true to say that it would be the case. [Barnes' translation]

Accordingly, the future event may be said to be *possible* before it takes place according to a sense of possibility including a future actualization. This sense is identical to the above mentioned sense (a) of τὸ δυνατόν. It is worthy to recall that few lines later Aristotle introduces the sense (b) of τὸ δυνατόν, when he states that there are instances of predication in which we assert that something is possibly-φ, even though it will *never be actually*-φ (cf. *De interpretatione* 9, 19a7-22).

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Εἰ δὴ ταῦτα ἀδύνατα, – ὁρῶμεν γὰρ ὅτι ἔστιν ἀρχὴ τῶν ἐσομένων καὶ ἀπὸ τοῦ βουλεύεσθαι καὶ ἀπὸ τοῦ πρ�= ξαί τι, καὶ ὅτι ὅλως ἔστιν ἐν τοῖς μὴ ἀεὶ ἐνεργοῦσι τὸ δυνατὸν
19a10 εἶναι καὶ μή, ἐν οἷς ἄμφω ἐνδέχεται καὶ τὸ εἶναι καὶ τὸ μὴ εἶναι, ὥστε καὶ τὸ γενέσθαι καὶ τὸ μὴ γενέσθαι· καὶ πολλὰ ἡμῖν δῆλά ἐστιν οὕτως ἔχοντα, οἷον ὅτι τουτὶ τὸ ἱμάτιον δυνατόν ἐστι διατμηθῆναι καὶ οὐ διατμηθήσεται, ἀλλ' ἔμπροσθεν κατατριβήσεται· ὁμοίως δὲ καὶ τὸ μὴ διατμη-
19a15 θῆναι δυνατόν· οὐ γὰρ ἂν ὑπῆρχε τὸ ἔμπροσθεν αὐτὸ κατατριβῆναι, εἴγε μὴ δυνατὸν ἦν τὸ μὴ διατμηθῆναι· ὥστε καὶ ἐπὶ τῶν ἄλλων γενέσεων, ὅσαι κατὰ δύναμιν λέγονται τὴν τοιαύτην· – φανερὸν ἄρα ὅτι οὐχ ἅπαντα ἐξ ἀνάγκης οὔτ' ἔστιν οὔτε γίγνεται, ἀλλὰ τὰ μὲν ὁπότερ' ἔτυχε καὶ οὐδὲν μᾶλλον
19a20 ἢ ἡ κατάφασις ἢ ἡ ἀπόφασις ἀληθής, τὰ δὲ μᾶλλον μὲν καὶ ὡς ἐπὶ τὸ πολὺ θάτερον, οὐ μὴν ἀλλ' ἐνδέχεται γενέσθαι καὶ θάτερον, θάτερον δὲ μή. (ed. Minio Paluello)

> But what if this is impossible? For we see that what will be has an origin both in deliberation and in action, and that, in general, *in things that are not always actual there is the possibility of being and of not being; here both possibilities are open, both being and not being, and consequently, both coming to be and not coming to be*. Many things are obviously like this. For example, it is possible for this cloak to be cut up, and yet it will not be cut up but will wear out first. But equally, its not being cut up is also possible, for it would not be the case that it wore out first unless its not being cut up were possible. So it is the same with all other events that are spoken of in terms of this kind of possibility. Clearly, therefore, not everything is or happens of necessity: some things happen as chance has it, and of the affirmation and the negation neither is true rather than the other; with other things it is one rather than the other and as a rule, but still it is possible for the other to happen instead. [Barnes' translation – we emphasize]

It is safe to state that Aristotle uses of the above distinction between two senses of δυνατόν to develop dialectical arguments concerning the contradictory pair describing a future contingent event as well as its denial. Sound arguments should not employ ambiguous terminology (cf. Arist., *Soph. Ref.* 20), hence a preliminary disambiguation is needed.

We believe that Aristotle has a philosophical reason to introduce the (b) sense of δυνατόν. If (a) were the only sense of δυνατόν, one could hardly explain why some future events are said to be possible, even though they are *never* the case. This is why many scholars have maintained that Aristotle does not subscribe to the PP at the beginning of *Metaphysics* Θ 4. But they

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did not to see that in that passage Aristotle talks about *one* of *two senses* of δυνατόν.

We are aware that the distinction between the above mentioned two senses of δυνατόν is matter of speculation (the text at line 1047b3 does not explicitly draw the distinction). Yet, we suggest that Aristotle would not have qualified the δυνατόν as the one ἢ <τὸ ἐντελεχείᾳ εἶναι> ἀκολουθεῖ, if there was no need to add such qualification. Accordingly, Aristotle should have added this qualification only to distinguish the above sense of δυνατόν from a different sense – by negating the sense explicitly spelled out by Aristotle, we obtain a sense of δυνατόν that is open to both the realization and the not-realization of the event that is said to be δυνατόν (this latter sense is certainly at work whenever Aristotle is talking about rational capacities, cf. e.g. cf. *De interpretatione* 9, 19a7-22). Since it is possible to show that the aforementioned distinction regarding the idea of δυνατόν is at work elsewhere in Aristotle's *corpus*, nothing prevents us from believing that in *Metaphysics* Θ 4, 1047b3 the expression ἢ <τὸ ἐντελεχείᾳ εἶναι> ἀκολουθεῖ is implicitly referring to the same distinction by expounding *one of these two senses* of δυνατόν.

5. More Syntax: Two Different Readings for 1047b3-6

There is an intricate scholarly discussion about our passage. In what follows, we confront our interpretation with the recent readings of the text.

There are two fundamental syntactic readings of the passage, which we will label (A) and (B) reading respectively. In order to clearly identify the elements distinguishing these two readings, we suggest to go back once more to the original Greek text printed by Ross, that serves as the basis for the translations of S. Makin and of J. Rosen & M. Malink. [26]

> (1) φανερὸν ὅτι (2) οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν (3) ὅτι (3a) δυνατὸν μὲν τοδί, (3b) οὐκ ἔσται δέ, (4) ὥστε τὰ ἀδύνατα εἶναι ταύτη διαφεύγειν.

The two interpretations differ in their analysis of the relation to be established between sections (3a) + (3b) and section (4).

Interpretation (A): (4) "ὥστε τὰ ἀδύνατα εἶναι ταύτη διαφεύγειν" is a part of the argument including sections (3) and (4). In other words, the

26. See J. Rosen & M. Malink, « A Method of Modal Proof in Aristotle », *Oxford Studies in Ancient Philosophy*, 2012, 42, p. 179-261. As we have seen, Ross' text differs from ours inasmuch as the punctuation before and after φανερόν is concerned.

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sense of the sections (3)-(4) would be: "saying that (3a) X is possible, (3b) and that X will not be the case, (4) leads to the conclusion that (ὥστε), in this way (ταύτῃ), what is incapable of being (τὰ ἀδύνατα εἶναι) escapes our understanding (διαφεύγειν)". Now, in the (A) syntactic reading, the sense of sections (3)-(4) is negated by section (2), so "(1) it is clear (2) that it is not acceptable to state that (3) + (4) is true". Interpretation B: (4) "ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν" is to be considered as a clause expressing the (absurd) consequence of the *entire* preceding argument. Again, "saying that (3a) X is possible, (3b) and that X will not be the case, (4) leads to the conclusion that (ὥστε), in this way (ταύτῃ), what is incapable of being (τὰ ἀδύνατα εἶναι) escapes our understanding (διαφεύγειν)". Hence, "(1) it is clear (2) that it is not acceptable to state that (3) is true, because, if (3), then (4) [and (4) is clearly an absurd consequence]". [27]

(A) is endorsed by many scholars, including S. Makin (in his commentary) and J. Rosen & M. Malink. [28] These scholars argue that Aristotle could have never subscribed to the PP. On the contrary, (B) allows interpreters to embrace the opposite view. The (A) reading implies the following: we have a fictive objection (proposed by a hypothetical opponent in the dialectical debate) stating that "X is possible, but it will not be, the consequence being that in this way the nature of the impossible escapes our notice"; this means that, in our hypothetical opponent's view, the sentence "X is possible, but it will not be" is false, because what will never be the case is the impossible. *E converso*, what is possible will be the case. This would tantamount to state the PP. However, since the fictive objection [(3) + (4)] is negated by the

27. It might be interesting to note that the (B) reading was suggested by several Latin translations of Aristotle's *Metaphysics*. See *Alexandri Aphrodisiei commentaria in duodecim Aristotelis Libros de prima philosophia*, interprete I.G. Sepulveda Cordubensi, Parisiis, 1536, p. 304: *Quod si id quod diximus, est id quod possibile est, ad quod sequitur actus: patet fieri non posse quo [sic] vere quispiam dicat, possibile quidem esse hoc, non autem fore. Alioqui nos praetereunt ea quae impossibilia sunt*. See also *Aristotelis Metaphysicorum libri quatuordecim*, a Bessarione Cardinale Niceno latinitate donati, denuo vero castigati ac in Summas et capita divisi, Averrois in eosdem cum ipsius tectu commentarij, ex Antiquis doctissimorumque virorum exemplaribus castigati, Venetiis, 1552, p. 109r, coll. A-B: *Si autem possibile est quod dictum est, quatenus sequitur, manifestum est quod non potest verum esse dicere, quod possibile quidem est hoc, non tamen erit. Alioqui quenam impossibilia sint, hoc modo fugiunt nos.*

28. It might be worth noting that G.E.L. Owen and M. Kneale first proposed the reading defended by Makin in his commentary of book Θ, and, later, by Rosen-Malink, p. 226-229 [quoted above, n. 26]. In a private communication to J. Hintikka, M. Kneale understands the sentence as follows: "It cannot be true to say that this is possible but will not happen and to say this *to such effect* that the existence of the impossible will escape us in this way" (see Hintikka, *Time and Necessity*, p. 108 [quoted above, n. 3]). This translation is unequivocally based on the (A) syntactic reading.

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preceding clause (2) (οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν), one can safely maintain that Aristotle is explicitly refusing the PP. [29]

In his commentary on *Metaphysics* Θ, Makin proposes the following translation of these lines:

> If what has been said is the possible or follows from it, it is evident that it cannot be true to say that this is possible but nevertheless it will not be, the consequence being that in this way what is impossible to be gets away. [30]

This translation displays some infelicities that have been already discussed above: the choice to translate διαφεύγειν by means of something like "to get away" and the choice of referring ταύτῃ to διαφεύγειν (rather than to εἶναι). Apart from that, what is at stake here is the philosophical understanding of the passage (with special regard to the PP), which strictly depends on the chosen syntactical interpretation, (A) or (B). This point is crucial to our understanding of Aristotle's doctrine.

Let us start by analysing Makin's position. While his translation is admittedly compatible with both (A) and (B) readings, [31] Makin's commentary makes explicitly clear that the translator has a preference for the (A) interpretation. According to Makin, there are three possible readings of our passage, the first of which corresponds to our (B) interpretation. Makin, however, immediately discards it, on the basis of the fact that it entails an unrestricted version of the PP. There are, Makin adds, passages like the already cited *De int.* 9, 19a12-14 that are "consistent with Aristotle's commitment to a more limited form of the PP: for example, that, if something is *eternally* possible, then it is sometime actual." [32] The idea is clear: one can prove that Aristotle subscribes to a "soft" form of the PP, but it is difficult to believe that the philosopher accepted an unrestricted version of the same principle. This remark is problematic for three reasons:

(a) Makin seems to understand *De int.* 9, 19a12-14 as introducing a "limited form" of the PP and *Metaphysics* Θ 4, 1047b3-6 (read according to the [B] interpretation), as introducing an "unrestricted form"

29. According to us, the text is rather stating that the hypothetical opponent is rejecting the PP. Most scholars, however, take the (A) reading as evidence that *Aristotle* rejected the PP.

30. See Makin's commentary *ad locum* (p. 5). Cornea, p. 334-335, translates in a similar vein [see complete references above, n. 2].

31. In his commentary (p. 84), Makin observes that he intended to provide a translation that suits both the (A) and the (B) interpretations: "I have translated the connective Aristotle uses at 1047b5 as "the consequence being that". That translation is intended to preserve a latitude which the Greek allows between different claims Aristotle might be making" [complete reference above, n. 2].

32. See again Makin's commentary, p. 84 [complete reference above, n. 2].

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of the PP. However, from the logical viewpoint both statements are equivalent. For it is the same to state that what is necessary is always the case and to state that what is possible is the case at least in one instance. [33]

(b) Makin maintains that (B) is only compatible with an unrestricted version of the PP. There are, however, other ways of undermining the strength of an "unrestricted" reading of the principle. For one might suggest that the principle is applicable at a certain level of analysis only, but not at another level. Thomas Aquinas, for instance, clearly endorsed this perspective. Even though Aquinas was reading our passage according to the (B) interpretation, he believed that there were other cases of possibilities that are not necessarily realized in time. [34]

(c) Makin rejects one possible interpretation of the passage on the basis of a philosophical interpretation. In his opinion, according to the

33. This equivalence is true if expressed in the language of symbolic logic. Of course, one could argue against translating Aristotle's claims into the language of first order logic. Concerning this point, J. Beere (see *Doing and Being*, p. 126 [quoted above, n. 5]), writes: "we should reject the argument that commits Aristotle to a Principle of Plenitude, on the basis of his view that what always is the case is necessarily the case. The substitution seems plausible if one translates Aristotle's view into the symbolism of formal logic, using symbols that stand for any arbitrary well-formed sentence. Then, one would think that the view also applies to negative sentences, to what is always or necessarily *not* the case. But this only shows how dangerous it can be to translate Aristotle's views into the symbolism of formal logic." Beere's claim is certainly legitimate, even though it is equally legitimate to state that we need some positive evidence to state, as Beere does, that Aristotle's statements cannot be rephrased in the language of first order logic. In a recent article, Derek von Barandy (« How to save Aristotle from Modal Collapse », *Studia Neoaristotelica*, 2013, 1, p. 89-98) has argued along these lines, by maintaining that Aristotle is open to accept that "for any [concrete] x, x is eternal if and only if x is necessary" (see p. 93), but from this it does not follow that an eternally true proposition is a necessary proposition and *vice versa*. Von Barandy presents a sketch of an argument in favour of this claim, but his point is ultimately that, if we were to grant that an eternally true proposition is a necessary proposition and *vice versa*, Aristotle would be inconsistent, inasmuch as he would adopt an unrestricted version of the PP, and yet he would deny it in some passages of his works (including *De int.* 9). Even though this line of argument might have some potential, we believe that scholars who support this view should make the case that Aristotle's theory of propositions does not entail that, if a thing is eternal if it is necessary, then if a proposition is necessary, it is eternally true.

At any rate, Makin does not take stance, in his commentary, against a possible translation of Aristotle's claim that "the necessary is what is always the case" into the language of modal logic. Consequently, one can hardly see on which grounds Makin can affirm that, by stating that it is necessary what is always the case, Aristotle would say anything different from a standard version of the PP (i.e., it is possible what is the case at least once).

34. See Thomas Aquinas, *in Met.*, lib. 9, l. 3, p. 433, n. 1808: *Sunt enim aliqua, de quibus nihil prohibebit dicere quod sunt possibilia esse aut fieri, cum tamen nunquam sint futura, nec unquam fiant; sed hoc non potest dici de omnibus. Sed secundum ea quae superius dicta sunt, et quae nunc oportet nos supponere, illa solum possibile est esse aut fieri, licet non sint, quibus positis non sequitur aliquid impossibile. Posito autem quod diametrum commensuraretur, sequitur aliquid impossibile. Et ideo non potest dici quod diametrum commensurari, sit possibile. Est enim non solum falsum, sed impossibile.*

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> (B) interpretation the passage of *Met.* Θ 4 would contradict other passages (e.g. *De int.* 9). As we have just seen, this perspective is far from certain. Moreover, Makin does not verify the syntactic validity of both (A) and (B) readings. He rather builds on the fact that an interpretation akin to his had already been favored by Kung and McClelland. [35] Kung has, in our view, the special merit of presenting the issue at hand in what we take to be the clearest way. According to her, the distinction between the (A) and (B) interpretations relies on the understanding of the conjunction ὥστε. After having briefly presented both alternatives, Kung writes "either reading is philologically acceptable." [36] As we shall explain, there are some syntactic concerns preventing us from embracing (A).

Makin continues his analysis by noting that the (A) interpretation is compatible with two readings of the passage. According to Makin, as we have seen *supra*, "it is Aristotle's opponent, rather than Aristotle himself" [37] who claims that positing the fact that one can think of possibilities never realized has the consequence that *impossibilia* get away (i.e. that we forget what the impossible is). In Makin's view, what Aristotle is saying at 1047b3-6 is that one "cannot assert (1) that something is possible but will never be the case *and draw from that the consequence that* (2) nothing is really impossible." [38]

Makin's interpretation is upheld by J. Rosen and M. Malink too. They translate the passage (1047b36) as follows:

> [i] If what we have stated is the possible or follows from it, [ii] it is clear that it cannot be true to say that this is possible but will not be, [iii] in such a way that what is incapable of being thereby disappears. [39]

Rosen and Malink do not state how the Greek syntax of the passage should be understood. It is evident, however, that their reading requires the (A) construction. In fact, after having explicitly rejected all interpretations grounded on the (B) syntactic construction, [40] they support the view "according to which Aristotle in [ii] is not denying the truth of all claims of this form, but only of a certain restricted subclass of them. The appropriate

35. See J. Kung, « Metaphysics 8.4: Can Be but Will Not Be », *Apeiron*, 1978, 12, p. 32-36; R. McClelland, « Time and Modality in Aristotle, Metaphysics IX, 3-4», *Archiv für Geschichte der Philosophie*, 1981, 63, p. 130-149.

36. See J. Kung, « Metaphysics 8.4 », p. 32 [quoted above, n. 35].

37. See Makin's commentary, p. 85 [complete reference above, n. 2].

38. See Makin's commentary, p. 87. Makin emphasizes [complete reference above, n. 2].

39. See Rosen-Malink, « A Method of Modal Proof », p. 226 [quoted above, n. 26].

40. See Rosen-Malink, « A Method of Modal Proof », p. 226-227 [quoted above, n. 26].

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restriction is given in [iii]: Aristotle is denying the truth only of those claims of the form 'A is possible but will never be' which lead to the consequence that, as he puts it, 'what is incapable of being disappears.'" [41] Rosen-Malink's reading is thus very similar to Makin's.

As we have seen, however, Makin's understanding of the passage relies on Kung's statement that both (A) and (B) are valid from the syntactic point of view. It is worth noting that no one after Kung has ever discussed her claim. While it is certainly true that both readings are *grammatically defensible*, (A) is evidently harder and far less natural than (B) according to the *usus scribendi* of most classical authors. Let us see why.

Section (4) of our sentence is introduced by the subordinate conjunction ὥστε followed by the infinitive διαφεύγειν, which produces the usual structure of a consecutive clause. The function of such a subordinate clause is to introduce the consequence of something stated or implied by the superordinate clause. [42] The meaning of διαφεύγειν ("escape one's mind") suggests a "bad"/"not desirable" consequence. The verb states the fact that something important, which is not supposed to be missed, is on the contrary being missed by someone. This "bad"/"not desirable" consequence needs to be somehow anticipated in the superordinate clause (this anticipation is syntactically required, as we have seen, by the presence of the consecutive conjunction ὥστε). [43]

If one reads the passage according to (B), the "bad" aspect of the consequence introduced by ὥστε… διαφεύγειν is clearly anticipated by Aristotle's explicit refusal of accepting what would lead to such a "bad"/"not desirable" consequence (section [2] of our sentence: οὐκ ἐνδέχεται ἀληθὲς εἶναι etc.). On the contrary, if one reads the passage according to (A), things are quite different. As we have seen, according to (A), one has to deal with a fictive objection raised by some opponent exposing the argument the philosopher is refusing. In Greek, this objection would correspond to the following: δυνατὸν μὲν τοδί, οὐκ ἔσται δέ, ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν. [44] Following this syntactic reading, the superordinate clause (with respect to the consecutive subordinate) is δυνατὸν μὲν τοδί, οὐκ ἔσται δέ. It is therefore here that the "bad"/"not desirable" consequence expressed by the consecutive should be somehow anticipated and one would

41. See Rosen-Malink, « A Method of Modal Proof », p. 228 [quoted above, n. 26].

42. See, for example, the introductory remarks in R. Kühner & B. Gerth, *Ausführliche Grammatik der Griechischen Sprache*, II.2, Hannover-Leipzig, 1904, p. 501: "Die Konstruktion von ὥστε (ὡς) c. inf., welche, wie wir eben sahen, aus dem Gebrauche des Infinitivs hervorgegangen ist, findet statt, wenn die Folge als eine solche bezeichnet werden soll, welche aus dem Wesen des Hauptsatzes fliesst, als eine Folge einer Qualität oder Quantität. Die Folge ist alsdann eine bloss ideelle, bloss in der Vorstellung befindliche, nicht objektiv in der Wirklichkeit gegebene und darum auch keiner bestimmten Zeitsphäre angehörige."

43. See Kühner-Gerth, II.2, p. 501 [quoted above, n. 42].

44. It is on purpose that we leave aside the conjunction ὅτι introducing the fictive objection: for the sake of the argument it can be actually treated as a colon introducing a direct speech.

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expect to find a semantic indication that something not desirable would follow from the premise. This is however *not* the case. The absence of this anticipation of the consequence is evidence that (A) is less natural than (B). Hence, the very meaning of the ὥστε suggests that a Greek speaker or writer would rather understand Aristotle's passage according to (B) rather than according to (A).

In the clause δυνατὸν μὲν τοδί, οὐκ ἔσται δέ, there is nothing allowing us to expect a "bad"/"not desirable" consequence, or, for a matter of fact, any consequence at all. If the sentence δυνατὸν μὲν τοδί, οὐκ ἔσται δέ were the superordinate of a consecutive, any consequence expressed by the consecutive clause would appear somehow out of place. If Aristotle's purpose had been the introduction of a fictive objection, he could have much more easily used a hypothetic construction (*if*-clause), something like, for instance, εἰ δυνατὸν μὲν τοδί, οὐκ ἔσται δέ, τὰ ἀδύνατα διαφεύγει ("if <we assume that> something is possible, but will never be, the impossible escapes our mind"). [45] In our view, to justify the presence of ὥστε… διαφεύγειν here, the "bad"/"not desirable" aspect of the consequence expressed by the consecutive should have been anticipated or alluded to, even by a particle, *in the superordinate clause*.

Therefore, we maintain that (B) is the preferable reading from the syntactic viewpoint. If this is true, the refusal of (B) in favour of (A) merely relies on philosophical reasons, that is, on some scholars' reluctance to accept the idea that Aristotle could have subscribed to an unrestricted version of the PP. If this difficulty were to disappear and (B) were to turn out to be compatible with Aristotle's rejection of PP, nothing, in our view, could prevent us from reading the passage according to (B). [46]

Let us therefore turn our attention to (B).

One might wonder whether it is consistent with some version of the PP. According to Rosen-Malink [47], (B) is consistent with both a version of

45. An adversative structure would have been equally possible, even though, in our view, somehow less effective (one could think like, for instance, of: δυνατὸν μὲν τοδί, οὐκ ἔσται δέ· τὰ ἀδύνατα μέντοι [or μὴν] ταύτῃ διαφεύγει).

46. It is to be remarked that, methodologically speaking, as (B) is syntactically far easier, and far more natural, in Greek, than (A), the burden of the proof lies on the shoulders of the supporters of (A). That is, it is up to them to show that their philosophical reading is the right one despite an unnatural syntactic structure. This means that, if the philosophical interpretations involved by (A) and (B) were to be deemed equally sound, the (B) reading should be preferred because it sounds more natural to a Greek ear.

47. See Rosen-Malink, « A Method of Modal Proof », p. 226-227 [quoted above, n. 26].

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the PP (J. Hintikka)[48] and its denial (H. Weidemann and J. Beere).[49] We believe that this is correct. In our opinion, however, it is impossible to shed light on the sense of (B) without taking into account the problems posed by the difficult line 1047b3. It is necessary, we believe, to look at the whole passage in a new way.

We have seen that our new punctuation brings us to consider the sentence φανερόν <ἐστι> as an independent clause introducing a declarative one (τὸ εἰρημένον τὸ δυνατὸν ᾗ ἀκολουθεῖ <εἶναι>). As a consequence, ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν ὅτι δυνατὸν μὲν τοδί, οὐκ ἔσται δέ ("since one cannot accept that it is true to state that something is possible but never will be the case") must be considered as a causal clause (introduced by ὅτι) explaining why "it is clear that what has been said (τὸ εἰρημένον) is the possible (τὸ δυνατόν) insofar as is followed (ᾗ ἀκολουθεῖ) by the actual state." Accordingly, the possible is followed by the actual state because one cannot say that something is possible, but will not be the case.

We have suggested that Aristotle is endorsing a restricted version of the PP. In our view, the Stagirite is stating that one particular meaning of the word δυνατόν, i.e. the "possible" that is followed by actuality, entails that the truth-conditions for propositions that include the modal operator "possible" with this meaning are such that these propositions cannot be true, if the possible event they describe will not be actually the case in a future instant of time.

Yet, there is another meaning of δυνατόν that does not entail any of these truth-conditions. For this reason, we believe that in this passage Aristotle is certainly endorsing the PP, but in a restricted sense – a sense that, we believe, is consistent with passages in which Aristotle clearly rejects the idea that *all* possibilities, i.e. all senses of δυνατόν, are actualized (cf. *De int.* 9, 19a8-20).

48. See Hintikka, *Time and Necessity*, p. 96-107 [quoted above, n. 3]. Hintikka's view has been defended by several commentators of this passage during the long history of Aristotelianism and Aristotle scholarship. Rosen-Malink, « A Method of Modal Proof », p. 226 [quoted above, n. 26] list Ps.-Alex. Aphr. *in Met.* p. 575, 20-3 (ed. Hayduck); Ross 1924, II, p. 246-247 [complete reference above, n. 2]; G. Seel, *Die aristotelische Modaltheorie*, Berlin-New York, 1982, p. 337-338; Aristoteles, *Analytica Posteriora*, I, hrsg. von W. Detel, Leipzig, 1993, p. 186.

49. See on this H. Weidemann, « Das sogenannte Meisterargument des Diodoros Kronos und der Aristotelische Möglichkeitsbegriff », *Archiv für Geschichte der Philosophie*, 1987, 69, p. 18-53, in part. p. 35; J. Beere, *Doing and Being*, p. 126-127 [quoted above, n. 5]. Rosen-Malink, « A Method of Modal Proof », p. 227 [quoted above, n. 26], describe Weidemann's and Beere's interpretation as tantamount to saying that "Aristotle's statement in [ii] is relying on a certain view about truth and tense, according to which a future-tense sentence is neither true nor false at a given time unless it is already necessary or impossible at that time."

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6. From Syntax to Philosophy: Summing Up, and Solving the Puzzle

Let us finally see how our syntactic reading of the passage supports the philosophical interpretation we have just sketched.

1) We have maintained that 1047b3-6 is not a fresh start in Aristotle's line of argument, but rather belongs to the same sentence that starts at line 1047b1. Aristotle is talking about things that do not exist and divides them between things that never existed and will never exist, and things that do not exist now, but may exist in the future. He refers to these latter beings as "actually-non-existing, but potentially-existing things" (τῶν γὰρ μὴ ὄντων ἔνια δυνάμει ἐστίν). The general context is ontological. The modal notions expressed by the dative nouns "δυνάμει" and "ἐντελεχείᾳ" do not express epistemic modalities, but rather the ways in which a thing is said to exist or not to exist (cf. 1047b1: τῶν γὰρ μὴ ὄντων). By stressing Aristotle's consistency in speaking about modalities that describe the real world (and not our ways of knowing the world), we avoid interpreting the passage in the way suggested by Hermann Weidemann. According to him,[50] 1047b3-5 may be translated as follows: "offensichtlich nicht wahr sein kann, wenn man behauptet, das und das sei zwar möglich, es werde aber nicht der Fall sein, um auf diese Wiese das, was unmöglich der Fall ist, loszuwerden." This translation is clearly consistent with the (B) reading of the passage. Yet, Weidemann does not believe that Aristotle is endorsing the PP and maintains that any contradiction with this passage (e.g. *De int.* 9, 19a12-14) is only apparent ("scheinbar"). In his interpretation, in *Metaphysics* 1047b3-6 Aristotle is talking about the epistemic conditions to be met in order to classify an event as "possible". The German scholar maintains that "p" may be said to be possible, even though it will never be the case,[51] provided that those uttering the sentence "p is possible" do not know that "p" will never be the case and rather assume that "p" will eventually be the case.[52]

50. See H. Weidemann, « Das sogenannte Meisterargument », p. 35 [quoted above, n. 49].

51. N. Denyer, "Never Will and Cannot", *Proceedings of the Aristotelian Society*, Supplementary Volume 74, 2000, p. 163-178, makes analogous remarks on the notion of "necessity". According to Denyer, Aristotle is entitled to state that what is always the case is necessary, if we grant that some is necessarily the case, if it can be false under the condition that it can *come to be false*, i.e. under the (impossible) condition that there will be an instant in time in which the event, that is by hypothesis always taking place, will be falsely said to be taking place.

52. It should be noted that, according to many interpreters, Aristotle dwells at length about the lack of a truth-value of future tense statements in *De int.* 9. Yet, as Rosen-Malink, « A Method of Modal Proof », p. 228 [quoted above, n. 26], rightly remark, Aristotle is unlikely to have employed this highly technical doctrine here in *Met.* 1047b3-6 without making the reference more explicit. Since Weidemann's interpretation presupposes such an implicit reference at this juncture, his reading

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Weidemann's reading of the syntax of the passage is similar to ours, inasmuch as our reading is more similar to the (B) than to the (A) reading. Unlike Hintikka, Weidemann believes like us that Aristotle is not committed to an unrestricted PP. Yet, he grounds his interpretation on the idea that Aristotle is talking about the modality in which we know the world in 1047b4-5, and not about modalities that describe the world. In this respect, our readings differ. We believe that our interpretation has the advantage of not assuming, as Weidemann is forced to do, that Aristotle is inconsistent in referring first to ontological modalities (1047b1-2) and then to epistemic ones (1047b4-5).

2) Aristotle goes on to say that the "actually-non-existing, but potentially-existing things" are said not to exist because they are not "actually-existing" (οὐκ ἔστι δέ, ὅτι οὐκ ἐντελεχείᾳ ἐστίν).
3) The third step is connected to the above two. Contrary to what the current chapter division suggests, we believe that Aristotle is not introducing a new argument, but is simply continuing the preceding line of thought. He states that if we say these "potentially-existing" (δυνάμει ἐστίν, cf. 1047b1) but "actually-non-existing things" exist (εἰ δέ ἐστι), we cannot but mean that they potentially-exist (δυνάμει ἐστίν, cf. 1047b1).
4) This entails that what has been said (τὸ εἰρημένον) is clearly (φανερόν) the "possible" (τὸ δυνατόν) inasmuch as the actual existence follows (ᾗ ἀκολουθεῖ) from it. Interpreters have found this sentence difficult, because they did not read it as an elucidation of what Aristotle was saying in lines 1047b1-2. In our reading, the syntactic difficulty raised by the missing subject of the verb ἀκολουθεῖ is easily solved, because the context points to actual existence as the stage that follows potential existence that will be realized. At this juncture, it is important to underline that the specification ᾗ ἀκολουθεῖ implies that there is a different sense of δυνατόν that is not followed by the actual state. This alternative reading is left implicit, but we can fairly reconstruct it on the basis of the passage of *De int.* 9, 19a8-20, where Aristotle talks about non actualized potentialities. Despite its brevity, line 1047b3 attests to a distinction that Aristotle must have had in mind while he was drafting this passage, i.e. the distinction between two senses of δυνατόν.
5) The clause introduced by ὅτι explains what Aristotle means by stating that the "possible" (δυνατόν) that is currently discussed is followed by the actual state. Aristotle observes that one cannot say that it is true for something to be possible – according to the sense of δυνατόν

turns out to be rather difficult to accept (see H. Weidemann, « Das sogenannte Meisterargument », p. 35 [quoted above, n. 49]).

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that entails future actualization – and yet not to become actual in the future (ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν ὅτι δυνατὸν μὲν τοδί, οὐκ ἔσται δέ). It is worth noting that our reading does not entail that Aristotle is committed to the unrestricted PP. Our syntactic reading has the benefit that only the potential-that-will-be-actual (τὸ δυνατὸν ἢ ἀκολουθεῖ) cannot be said (οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν) to be possible (δυνατὸν μὲν τοδί), and yet not to be actual in the future (οὐκ ἔσται δέ).

6) In the following clause, Aristotle observes that if one were to say that the possible-that-will-be-actual does not realize, one would state that this type of δυνατόν has the same characteristics of the impossible. In other words, one would not grasp that it is the impossible that is in the condition of never being realized (ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν).[53] The "impossible" is thus identified with the negation of the "possible" that is followed by actualization. In other words, in the square of opposition of modal operators we put only one of the two senses of δυνατόν, i.e. the δυνατόν that is followed by actualization, so that the "impossible" (i.e. what is *never* the case) can be understood as its contradictory operator. This clearly suggests that Aristotle defined his modal operators with a temporal semantics. Yet, the two senses of δυνατόν suggest that Aristotle was aware of other semantic values of the word δυνατόν.
7) The most natural syntactic value of ὥστε + infinitive makes of ὥστε the subordinate conjunction introducing a consecutive clause that expresses the consequence of some antecedent implied by the superordinate clause. The main argument in favor of the (A) reading is philosophical: since the endorsement of an unrestricted PP on the part of Aristotle is philosophically repugnant, many scholars understand the syntax of this passage according to the quite unnatural (A)

53. Apart from our linguistic and stylistic remarks about the meaning of the infinitive διαφεύγειν and of the adverb ταύτῃ, we believe that following Bonitz in his reading of this passage can be misleading in our attempt at understanding these lines properly. Let us see, for instance, a few lines taken from Rosen-Malink, « A Method of Modal Proof » [quoted above, n. 26]: "Aristotle *does not explain exactly* what this consequence [*scil.* the consequence expressed by the ὥστε clause] is, but he evidently regards it as *undesirable*. The consequence *seems* to consist *in denying* the impossibility of things which Aristotle regards as obviously impossible" (we emphasize). We would like to stress the fact that, reading the passage as we suggest: 1. Aristotle explains *exactly* which is the "evidently… undesirable" consequence of the misleading argument he has just introduced; 2. this consequence is that it escapes our notice that it is the impossible that is in the condition of never being the case; 3. therefore, such a consequence *does not* consist in a conscious denial of things regarded as impossible by Aristotle, but in a "bad", mistaken conclusion, to which one is lead if one were to accept the wrong claim mentioned by the philosopher (a proper understanding of the meaning of the infinitive διαφεύγειν cannot but show that such is the correct reading of the sentence at hand).

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construction. Even though we are sympathetic to their concern, we believe that our solution is easier to accept from both the linguistic and the philosophical viewpoint. If the preceding lines do not introduce any unrestricted version of the PP, there is no reason to think that ὥστε… διαφεύγειν expresses the consequence of the (wrong) endorsement of the unrestricted PP.

8) Our interpretation squares with what Aristotle says in the following lines 1047b6-12. In this passage, Aristotle seems to explain the ὥστε… διαφεύγειν clause. In the previous section, Aristotle notes that one cannot say that something is possible but will not be the case, because it is the impossible that is such, i.e. if something is impossible, it will not be the case. Aristotle has to assume that possible and impossible designates different things. A true positive sentence with an impossible operator (like "it is impossible to measure the diagonal of the square") is true if and only if the state of affairs expressed by the sentence (e.g., "to measure the diagonal of the square") never obtains. By assuming that the "possible" is *different* from the impossible, Aristotle is not (explicitly) implying that for a sentence to be truly possible, the sentence without the possibility-operator should be true at least at an instant of time. This consequence would logically follow from the assumption that the "impossible" is the negation of the "possible". As we have seen, the "possible" which is obtained by negating the "impossible" in the square of modal opposition is *one of the two meanings* of "possible". Aristotle's point is thus more sophisticated. If "possible" without any further qualification designates both the "possible-that-is-followed-by-actuality" (τὸ δυνατὸν ἢ <τὸ ἐντελεχείᾳ εἶναι> ἀκολουθεῖ 1047b3) and the "possible-that-is-not-always-followed-by-actuality" (τὸ δυνατὸν ἢ <τὸ ἐντελεχείᾳ εἶναι οὐκ> ἀκολουθεῖ), the "impossible" will still be *different* also from this unqualified and common sense of "possible" that is applicable to both specific senses. With this in mind, we can easily understand what Aristotle means by his example of the diagonal of the square. If one were to assume that the *unqualified* sense of "possible" does not refer to both senses expounded above, but is rather a modal operator that is truly added solely to sentences that expound states of affairs that never obtain, then the "possible" would be the same as the "impossible" (cf. 104 b5 ὥστε… διαφεύγειν). For example, if one – with little knowledge of mathematics – says that it is true that "it is possible to measure the diagonal of the square", even though this were never to happen, this person would be able to make his or her claim if and only if "possible" and "impossible" mean the same thing. Aristotle, however, assumes that "possible" and "impossible" clearly do not mean the same thing. Consequently, one cannot state that it is true that "it is possible to

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measure the diagonal of the square" even though this will never be the case. It should be stressed that there is a sense of "possible" that *can* appear in true sentences that describe states of affairs that never obtain. As has been shown above, this is the sense of δυνατόν that is not always followed by actuality.

9) Our reading is furthermore consistent with the general philosophical purpose of the passage. Aristotle developed a dialectical argument against the "Megarian" thesis that there are no real capacities. In so doing, he needs to clarify what he means by using the term δυνατόν, because every dialectical discussion presupposes that the two opponents agree on the meaning of the employed terms. In this hypothetical discussion, one might be tempted to define the possible as "what could be the case, but will never be the case". The opponent would then object that the "impossible" is defined in the same way. Hence, the "possible" has to be defined differently. Aristotle has this possible exchange in mind when he notes that the "possible" is said in two ways. The first meaning of "possible" involves a further actualization – this meaning cannot be confused with the "impossible". The second meaning of "possible" does not include any reference to any future actualization. In our opinion, Aristotle is stating that, if something is possible according to the first meaning of "possible", then this something will be the case and it would be false to state that it will not. Does this mean that Aristotle endorse a "restricted" version of the PP, i.e. a PP valid only for one of the two senses of the "possible"? Certainly yes. The context, however, is dialectical. Hence, there is no conclusive evidence that Aristotle would subscribe to this distinction of the senses of the "possible" and even to the "restricted" PP.

7. Conclusion

We maintain that it is possible to offer a new reading and a new understanding of *Metaphysics* Θ 4, 1047b3-6. Our interpretation has the advantage of not changing the text attested by the medieval manuscripts by any intrusive conjecture. By merely changing the punctuation and by overcoming the problems posed by the division of *Metaphysics* Θ into chapters (a division which is clearly not Aristotelian), we offer a satisfactory philosophical reading of the passage and an effective solution to its grammatical and syntactic difficulties.

We believe that our reading solves many of the difficulties raised by the punctuation proposed by both Ross and Jaeger. Our change in punctuation allows us to maintain that the passage is not corrupt at 1047b3, as Jaeger suggested. In addition, we have saved the manuscripts' reading without proposing a philosophical interpretation that unnaturally stretches the syntax of

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the passage. On the contrary, our smoother syntactical reading enables us to present a fresh philosophical interpretation of these lines. Our proposal has an advantage over Makin and Rosen-Malink, because it does not impose an unnatural syntax. Unlike Hintikka[54] (whose syntactic reading is similar to ours), we do not maintain that Aristotle endorsed an unrestricted version of the PP. Finally, our proposal is preferable to that of Weidemann and of Beere because it does not read the modalities of 1047b3-6 as epistemic modalities. Our reading, on the other hand, states that Aristotle is consistently discussing ontological modalities.

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54. See J. Hintikka, *Time and Necessity* [quoted above, n. 3].

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