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A Multilayered Greek Manuscript of Learning: Some Glimpses into the Scribal Practices Evident in the Aristotelean Codex *Vaticanus graecus* 244

Abstract: In the Greek study manuscripts of the Aristotelean tradition, the goal of combining and relating extensive core content and extensive para-content in such a way that constant interaction becomes possible, has been achieved in an exemplary manner. After introductory remarks on the complex and often multi-layered formatting of this type of manuscripts, a closer look is taken at the *Organon* codex Vat. gr. 244. The way in which Aristotle's *Analytica Posteriora* are explained in this manuscript in large marginal commentaries is illustrated by the analysis of a sample passage.

1 Introduction

During Byzantine times and the Renaissance, the active study of and interaction with Aristotelean texts and their extensive commentaries gave rise to an unusually rich manuscript production. Since these texts, particularly the *Organon*, but other works from philosophy of nature, ethics and metaphysics as well, were studied and taught in the context of the commentaries, from the Late Antique ones to those contemporary, their users required new and specific kinds of manuscripts. Teaching and learning was facilitated by 'textbook' manuscripts aiming to combine the challenging core texts with those commentaries and exegetic materials most central to their understanding. This required presenting the source texts section by section, if not sentence by sentence, along with the paratexts, thereby striving for the best possible arrangement to represent their interrelatedness on the available space of each individual page. Considering the often significant length of the Aristotelean treatises themselves, and by how much the extent of the relevant commentaries exceeded this, the production of

such combined study manuscripts must have required substantial planning and considerable aptitude in book production.¹

The most common and effective method of formatting the interrelated content was to arrange the accompanying texts around the centrally located main text. The possibilities offered by this layout were exploited to the utmost in the production of Aristotelean study manuscripts. To accommodate the ever increasing space required by the paratexts, the room reserved for the core text was reduced more and more, leaving the larger share of the page to the former.² Yet even this was frequently insufficient for the extensive commentary, thus one or even several subsequent pages were set aside just for the commentary. In effect, this was almost an inversion of the relation between core content and paratext, even though their hierarchy was still indicated by the use of larger script for the core text.

A relevant example of such a written artefact is codex Venice, Biblioteca Nazionale Marciana, Marc. gr. Z. 227 (Diktyon: 69698), from the latter half of the thirteenth century. It combines Aristotle's *Physics* with Simplicius' commentary as well as with parts of that of John Philoponus (both end of fifth or sixth century). The manuscript is for the most part an autograph of George of Cyprus (c. 1241–1289), who later became patriarch Gregorius II of Constantinople.³ As a further example, during the second third of the fourteenth century, the learned scribe Malachias created a corpus of four manuscripts that covered all Aristotelean treatises and the most central commentaries.⁴ For some of the

1 On general considerations concerning the page layout of Greek manuscripts, cf. Cavallo 2000; Maniaci 2000; Vianès 2000; Maniaci 2006; Bianconi 2011. Daniele Bianconi discovered instructions on partitioning the page and distributing the text to create an *Organon* manuscript on some folios of the manuscript Vatican City, Biblioteca Apostolica Vaticana, Vat. gr. 604.

2 A similar approach was used in creating bible manuscripts to accommodate extensive catenae, as found e.g. in two splendid tenth-century manuscripts: Vatican City, Biblioteca Apostolica Vaticana, Vat. gr. 749 (<digilib.vatlib.it/view/MSS_Vat.gr.749.pt.1>) and the *Psautier de Paris*: Paris, Bibliothèque nationale de France, Grec 139 (<gallica.bnf.fr/ark:/12148/btv1b10515446x.image>). On the origin of the catena commentary, see the new thesis developed in Goeke-Mayr and Makris 2020, who posit that this particular kind of manuscript first arose around 900 in Constantinople rather than during the sixth century. For the opposing view, see Vianès 2000.

3 Harlfinger 1987, 277–278, 286. Digital images can be consulted via <www.internetculturale.it/it/1317/venezia-biblioteca-nazionale-marciana-manoscritti>. See also the manuscript description by Ciro Giamelli for the CAGB project of the Berlin-Brandenburg Academy of Sciences and Humanities: <cagb-db.bbaw.de/handschriften/handschrift.xql?id=69698> (accessed on 10 March 2021).

4 The scribe Malachias, referred to as 'Anonymus Aristotelicus' in earlier scholarship, was identified by Brigitte Mondrain (Mondrain 2004; Koch 2017, 174–183; Martínez Manzano 2019). The four codices comprising his corpus of Aristotelean manuscripts are: Jerusalem, Βιβλιοθήκη

treatises, Malachias faced the additional challenge of having to arrange two columns (even three or more in one case) of commentary and annotational layers around the core texts, which lead him to exhaust the spatial limits of the manuscript page, as evident in the images from Paris, BnF, Coislin 166 (Figs 1 and 2). These examples are from the *Meteorology*. In addition to the commentary, the lower part of fol. 396^v (Fig. 2) is enriched by a graphical representation of the wind rose. Here, the commentary section encroaches on what was actually a generously calculated area reserved for the core content and pushes it back, as if there were a virtual strife between the two text types over dominating the page. By contrast, the upper part of the page retains unclaimed areas for commentary.⁵ The scribe evidently expected to have further commentary to add from additional manuscripts.⁶

Besides this prevalent method of aggregating and structuring a large set of content and para-content in a meaningful way, we occasionally see another, opposed method that presents the main content alternating with the pertinent additional material by sections.⁷ The interrelatedness of the layers is still

τοῦ Ὁρθοδόξου Καθολικοῦ Πατριαρχείου, 150 (Diktyon: 35387) (logic); Paris, Bibliothèque nationale de France, Coislin 161 (Diktyon: 49300) (ethics, *Politics*, *Metaphysics*); Coislin 166 (Diktyon: 49305) (natural philosophy) and Grec 1921 (Diktyon: 51548) (biology, *De anima*, *Parva Naturalia*) (cf. Harlfinger 1971, 55–57). The manuscripts held in the BnF can be consulted digitally via the Gallica website, a digitized microfilm of the codex Panaghiou Taphou 150 is provided on the website of the Library of Congress. On the Jerusalem manuscript, see the manuscript's description by Paul Moraux, in Moraux et al. 1976, 385–387, also available via the CAGB site <cagb-db.bbaw.de/handschriften/handschrift.xql?id=35387>, which also has a description of Par. gr. 1921 <cagb-db.bbaw.de/handschriften/handschrift.xql?id=51548>.

⁵ On several pages and even entire quires of the manuscript this area remains empty, cf. Devreesse 1945, 148, Mondrain, 2000, 21 and the digital images via Gallica.

⁶ It is evident that the area left blank does not represent a missing part in the commentary by Alexander of Aphrodisias, which was the main one used by Malachias in this section, for the commentary in the middle marginal column continues the four lines from the top margin, thus the uninterrupted commentary of Alexander's on the *Meteorology* is split up between these areas, and in fact reference marks and lemmata have been inserted to point to certain parts of the core text. The reserved space underneath the lemma alpha that has been prominently put in the four top lines of the upper margin suggests that Malachias was planning to add material from another commentary not available to him at the time of composing the manuscript. On the excerpts from Alexander's commentary on the *Meteorology* see Hayduck's edition 1899, 108. The top margin contains the text up to 108,12, followed by a line from the *Meteorology* as lemma alpha (2, 6, 363b11–12). The middle part of the commentary continues from the very same location, i.e. ed. Hayduck 1899, 108, line 12 after lemma beta. The inserted lemma beta matches Aristotle, *Meteorologica* 2,6, 363b26.

⁷ For the use of this approach in catena manuscripts, cf. e.g. Vianès 2000, 80; Lorrain 2020.

indicated by changes in script size and use of reference marks as with the other method. The two codices of the *Organon* Paris, Bnf, Grec 1972 (Diktyon: 51599), and Paris, BnF, Coislin 157 (Diktyon: 49296) from the first half of the fourteenth century are particularly noteworthy examples. Both are written in Metochites style, with Coislin 157 in the hand of well-known Metochites-scribe Michael Klostomalles himself (Fig. 3).⁸ Both core content and para-content of either manuscript are derived from Vatican City, BAV, Vat. gr. 244 (Diktyon: 66875), on which we will focus in this article.⁹ The latter method of arranging the texts in these two more recent codices re-structures the layout of a manuscript that used the former method: the Vatican manuscript presents the core content in windows of varying size positioned centrally on the double page spread, whereas the commentary or commentaries utilise the wide space left around these reserved areas. Thus, the transition from the original manuscript of this branch of transmission, i.e. the Vat. gr. 244, to the later manuscripts derived from it saw a fundamental reformatting of the interrelated layers of text.

2 Commenting Aristotle in the Vat. gr. 244

A closer look at the Vatican manuscript is in order. This is the main manuscript of the commentaries by Leo Magentinus on Aristotle's logical treatises. As in many other *Organon* manuscripts, Porphyry's *Isagoge* has been prepended to the Aristotelean works. This additional text is also framed by explanatory remarks of Magentinus in the margins, as well as having some added pages just for further commentary. At the start of this commentary, on fol. 3^r, the title line not only names Magentinus, but identifies him as the metropolitan of Mytilene, as is also the case in some of the other manuscripts transmitting his commentaries.¹⁰ Beyond this pointer to his ecclesiastical position on Lesbos, we

⁸ On codex Coislin 157, see Prato 1994, 129, 131 and Table 23. The Metochites scribe was identified as Michael Klostomalles by Lamberz 2000, 158–159, see also Lamberz 2006, 44–47. Additionally, see the description of Par. gr. 1972 by Diether Roderich Reinsch on the CAGB site <<https://cagb-db.bbaw.de/handschriften/handschrift.xml?id=51599>>.

⁹ Cf. Kotzabassi 1999, 53–57. The exact stemmatic relations are as follows: Par. gr. 1972 goes back to Vat. gr. 244 via a lost intermediary manuscript, and Coisl. 157 is an apograph of Par. gr. 1972.

¹⁰ Cf. the digital images available from Biblioteca Apostolica Vaticana: <https://digi.vatlib.it/view/MSS_Vat.gr.244>. Further cf. Mercati and Franchi de' Cavalieri 1923, 313; Ebbesen 1981, 302–303; Kotzabassi 1999, 47–48; Brockmann 2019, 219–220; Valente forthcoming b and c.

have practically no information on the life of this Aristotelean commentator. The manuscript can be dated to the twelfth century¹¹ and is thus the oldest manuscript containing these commentaries of Magentinus. It appears to not be far removed from the time of Magentinus himself and might have been created by him personally or by a member of his circle. This suggests that the lifetime of Magentinus would have been in the twelfth century as well.¹²

While Magentinus' commentaries on *Categories*, *Sophistikoi Elenchoi*, *Topics* and *Prior Analytics* have seen scholarly research and in some cases even (partial) editions over the last decades, the one on *Posterior Analytics* was mostly neglected and is now the focus of a project in the Hamburg Centre for the Study of Manuscript Cultures.¹³ Though the author of this particular commentary in Vat. gr. 244 is not named, from Leo Magentinus' name being associated with the preceding commentaries in the manuscript it can be safely deduced that the extensive paratexts surrounding the core text of *Posterior Analytics* are also his.¹⁴ It is a striking feature of the *Vaticanus* that the exegetical paratexts of Magentinus are divided into sections treatise by treatise and book by book, with the sections sequentially numbered using Greek letters. These Greek numerals are simultaneously used as reference marks, and the same numbers are added in the area of the core text to indicate the passages to which the commentary refers. As a later step, the scribe added further marginal notes to the remaining outermost parts of the margins, mostly excerpting commentaries on Aristotle from Late Antiquity and linking them to the existing content using a different kind of reference marks.¹⁵

In the following, an attempt will be made to further determine the nature of the commentary of Leo Magentinus on the *Analytica Posteriora* by analysing a sample passage. Previous research has shown that on the one hand Leo follows the exegetic tradition of John Philoponus and frequently uses the latter's work as a source, on the other hand, though, he frequently also adds material of his own.¹⁶ However, the exact relations between dependencies or reuse versus amendment, extension and change of focus in the commentary have yet to be elucidated. The final step of later adding earlier commentary, including literal excerpts from Philoponus on some pages, attests to Magentinus' commentary

11 Hunger 1990/1991, 33–34 and Hunger 1991, 74–75.

12 See the forthcoming edition by Agiotis.

13 Cf. Ebbesen 1981; Bülow-Jacobsen and Ebbesen 1982; Kotzabassi 1999; González Calderón 2015, 361–376; Brockmann 2019; Valente forthcoming a, b and c.

14 Cf. Ebbesen 2015, 13–14; Brockmann 2019, 220; Valente forthcoming a, b and c.

15 Cf. Valente forthcoming b.

16 Cf. Brockmann 2019, 223–227, Valente forthcoming b.

being recognised as a distinct and independent work. The scribe would hardly have gone to the trouble of adding Philoponus in what looks like an attempt to further increase the usefulness of the main paratext, if he had considered Leo's commentary, to which he had assigned the main parts of the marginal areas, not as a work in its own right, but as substantially identical to that of Philoponus.

Now we will turn to the sample passage, it is the commentary numbered $\mu\zeta'$ (= 47) on fol. 311^v (cf. Fig. 4), in reference to *An. Post.* I 4, 73a37–38. This is in the context of Aristotle drawing the distinction between four cases of belonging *in itself*, i.e. between four different kinds of how A can belong to B *in itself*, with the selected passage referring to the second kind. To add further context, let us contrast how Aristotle distinguishes between the first and second kind of belonging *in itself*.¹⁷ The first kind of these propositions are those where that, what is being predicated (A) is part of the definition of what is underlying (B), e.g. 'animal belongs to man in itself' or 'delineated by three straight lines belongs to the triangle in itself', for the terms 'animal' and 'delineated by three straight lines' are part of the definition of 'man' and 'triangle', respectively. Looking at this in a more contemporary way rather than the customary Aristotelean formulas: in the statement 'all men are animals', the predicate (A) 'animal' applies to the subject (B) 'man' because the predicate occurs in the definition of the subject. The second kind of these propositions are those where what is underlying (B) is present in the account of what is being predicated (A), i.e. where the subject is required to define the predicate. Aristotle uses the examples of 'straight' and 'curved' (A) applying to 'lines' (B), and 'even' and 'odd' (A) applying to 'numbers' (B). In this sense, the attributes 'odd' and 'even' belong to 'numbers' *in their own right*, since the term 'number' is required to explain what 'odd' and 'even' mean, e.g. 'odd' is a property of numbers not divisible by two.

The sample of the commentary by Magentinus from Vat. gr. 244 is an explanation of the phrase used by Aristotle to introduce the second kind of propositions *in themselves*. That phrase as transmitted presents a difficulty that Philoponus and Magentinus observed in a similar way and tried to improve upon, and that continues to be discussed in modern commentaries.

17 Detailed discussions of this part of the text and its numerous issues can be found in Bonitz 1866, 366–368; Aristotle's *Prior and Posterior Analytics*, ed. Ross 1965, 518–521; Mignucci 1975, 59–68; Aristotle, *Posterior Analytics*, tr. Barnes 1993, 112–114; Detel 1993, II, 100, 107–109, 122–126; Bronstein 2016, 43–50.

In the *Vaticanus* the Aristotelean sentence that is commented on here reads:

καὶ ὅσοις τῶν ἐνυπαρχόντων αὐτοῖς, αὐτὰ ἐν τῷ λόγῳ ὑπάρχουσι τῷ τί ἐστὶ δηλοῦντι [...]

and (I call in itself) all those of the attributes that inhere in them, for which they themselves (in turn) belong to the account that explains what it is.¹⁸

Let me now present a first edition of the corresponding commentary (cf. Fig. 4):¹⁹

μζ' : – “καὶ ὅσοις τῶν ἐνυπαρχόντων αὐτοῖς;” τοῦτο τὸ δεῦτερον σημαινόμενον τοῦ καθ' αὐτό· τὸ δὲ αὐτοῖς ἀντὶ τοῦ τισὶν ὑποκειμένοις ληπτέον· ὅσοις γοῦν τῶν συμβεβηκότων τῶν ἐνυπαρχόντων τισὶν ὑποκειμένοις αὐτὰ τὰ ὑποκείμενα ἐνυπάρχουσι καὶ λαμβάνονται ἐν τῷ λόγῳ καὶ ὀρισμῷ τῶν κατηγορουμένων τῷ δηλοῦντι τί ἐστὶ τὸ κατηγορούμενον, καὶ αὐτὰ καθ' αὐτὰ λέγονται ὑπάρχειν τῷ ὑποκειμένῳ· οἷον ἡ σιμότης καθ' αὐτὸ λέγεται ὑπάρχειν τῇ ῥίνι. λαμβάνεται γὰρ ἡ ῥὶν τὸ ὑποκείμενον εἰς τὸν ὀρισμὸν τοῦ κατηγορουμένου ἤγουν τῆς σιμότητος· σιμότης γὰρ ἐστὶ κοίλανσις ἐν ῥίνι. καὶ ἡ εὐθεΐα καθ' αὐτὸ ὑπάρχει τῇ γραμμῇ· εὐθεΐα γὰρ ἐστὶ πάθος γραμμῆς, ἥτις ἐξ ἴσου τοῖς ἐφ' ἑαυτῇ²⁰ σημείοις κείται. καὶ τὸ περιφερὲς καθ' αὐτὸ κατηγορεῖται τῆς γραμμῆς· περιφέρεια γὰρ ἐστὶ πάθος γραμμῆς, ἅφ' οὗ σημείου ἀρχομένης εἰς τὸ αὐτὸ πάλιν καταληγούσης· τὸ δὲ περιφερὲς δηλοῖ τὸν κύκλον : –

Nr. 47: *And all those of the attributes that inhere in them, for which:* This is the second meaning of ‘in itself’. The term ‘them’ is to be understood as ‘the respective underlyings’ (‘the subjects’). In any case, all those among the accidental attributes that belong to certain underlyings, to which these very underlyings (in turn) themselves adhere and for which they are employed in the account and definition of the predicates, which explains the ‘what-it-is’ of the predicate, they too are said to belong in themselves to the underlyings.

¹⁸ In its reading ὑπάρχουσι instead of ἐνυπάρχουσι, the Vat. gr. 244 follows codex Paris, Coisl. 330, which is its model for the core text. A further point: Both in the core text and in the lemma of the commentary, the Vatican manuscript has the reading ἐνυπαρχόντων, which is that of the main tradition. Hermann Bonitz pointed out that this is a small mistake: according to Aristotelean terminology that clearly distinguishes between ὑπάρχειν and ἐνυπάρχειν in such contexts, ὑπαρχόντων should be read here rather than ἐνυπαρχόντων (Bonitz 1866, 367–368). William David Ross concurred and chose ὑπαρχόντων in his edition, for his reasons see *Aristotle's Prior and Posterior Analytics*, ed. Ross 1965, 520–521.

¹⁹ The text has been cautiously updated to modern conventions as regards accents, punctuation, and the use of iota subscript. In its constitution, the further manuscripts transmitting it have been taken into account, i.e. Vatican City, BAV, Reg. gr. 107 (Diktyon: 66277) Paris, BnF, gr. 1972, Coisl. 157, and Coisl. 167 (Diktyon: 49306), as have the excerpts added by a twelfth-century scribe to Vatican City, BAV, Urb. gr. 35 (Diktyon: 66502). However, all of these offer only very minor variants for the section under discussion.

²⁰ In the version of part of this commentary added to Urb. gr. 35 by a later hand, the reading is ἐφ' ἑαυτῆς, cf. the digital images of the Vatican Library, fol. 198^v.

As e.g. snub-nosedness is said to belong to the nose in its itself. For the nose is used as the underlying in the definition of the predicate, i.e. of snub-nosedness. For snub-nosedness is a hollowing of the nose. And straightness belongs to the line in itself. For straightness is a quality of a line that falls levelly onto its points. Being curved is also used of the line in itself. For curvedness is a quality of a line that ends on the same point again from which it began. Being curved indicates the circle.

In a second pass over the commentary passage $\mu\zeta'$, the scribe added three supplements in a colloquial, less restrained script, one to the top right near the spine, two to the outermost left margin (cf. Fig. 4). The first supplement adds to the initial statement of this being the second meaning of ‘in itself’ by stating that Aristotle lists a total of four kinds (τέσσαρας γὰρ τρόπους παραδίδωσι). In the supplements to the left, the scribe first adds a second description of the quality of a straight line to the first, traditional one, i.e. that of one whose inner points are in a line with the outer points (ἢ ἢς τὰ μέσα τοῖς ἄκροις ἐπιπροσθεῖ). In this case, he starts his addition by inserting the conjunction ἢ between the core text and the right side of the commentary and then continuing it in the outer part of the left margin (cf. Fig. 5, detail of Vat. gr. 244, fol. 311^v).

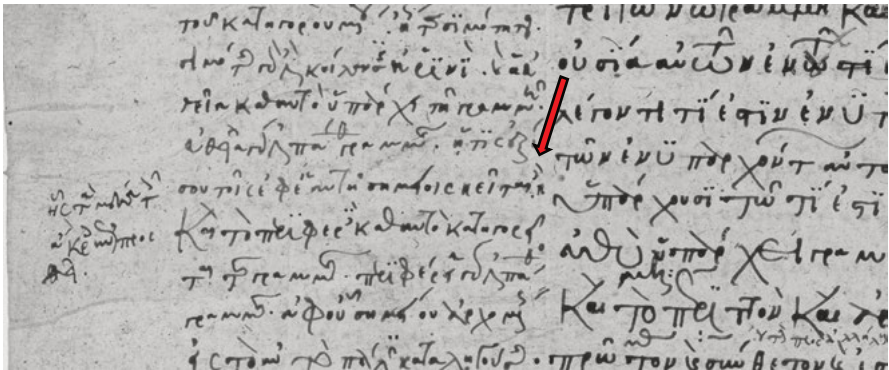


Fig. 5: Vatican, Biblioteca Apostolica Vaticana, Vat. gr. 244, fol. 311^v (detail); 12th c. © Biblioteca Apostolica Vaticana.

The third supplement is added straight to the end of the $\mu\zeta'$ passage, commencing in the small margin between commentary and core text as well, with its first word being directly adjacent to the final term τὸν κύκλον, and continuing once more in the left margin. The short introductory particles and conjunctions are thus also used as a kind of reference marks. The third supplement dwells on the connection of the curved line to the circle: ‘However, the section of the circle

should be called bent rather than curved, as can be understood from that which Aristotle says here. For the circle is an encompassing curve (“circumference”), as the geometer also decreed’.²¹

In some of the other manuscripts transmitting this commentary of Magentinus, the three supplements have been cleanly integrated into the exegetic passage. This matches the stemmatic observations of Sten Ebbesen and Sofia Kotzabassi on his commentaries on *Sophistikoi Elenchoi* and *Topics*.²² For the three fourteenth-century manuscripts that Ebbesen and Kotzabassi have shown to be linked to the Vat. gr. 244 via a lost intermediary manuscript, i.e. the Reg. gr. 107, the Paris gr. 1972 and the Coisl. 157, all have the extended version of this exegetic passage.²³ It would thus already have been inserted by the scribe of the intermediary manuscript. While the general formatting of content and para-content of the Vat. gr. 244 is to be found also in the *Reginensis*, the two Paris manuscripts alter it completely. For these latter manuscripts alternate between the layers of text and commentary in the central part of the page. Accordingly, they have the discussed passage from the commentary as number two (β') in smaller script following the corresponding Aristotelean core text passage (cf. Fig. 3).

An additional manuscript from Paris, the Coislin 167, also from the fourteenth century, is independent of the codices discussed above, including the intermediary. Its scribe probably had access to Vat. gr. 244 itself, but was not interested in creating a new Aristotelean study manuscript that intertwines core text and para-content. On the contrary, he left out the core text and exclusively copied the commentary of Leo Magentinus. Thus, he transformed the para-content into a new core text, creating a manuscript that has the commentary as its main (and only) content, however ignoring the supplements previously discussed. As evidence that they were nevertheless present in his exemplar, and that this exemplar probably was the Vat. gr. 244, we offer the following textual peculiarity. Towards the end of the exegetic passage we discussed, this manuscript has an additional ἢ ('or') on fol. 191', a conjunction interfering with the

²¹ τὸ μέντοι τμήμα τοῦ κύκλου καμπύλον μᾶλλον κληθεῖη ἢ περιφερὲς ὡς ἔστιν ἐντεῦθεν ἐξ ὧν ὁ Ἀριστοτέλης λέγει γινῶναι· περιφέρεια γὰρ ὁ κύκλος ἐστὶν ὡς καὶ ὁ γεωμέτρης ὠρίσατο.

²² Cf. Ebbesen 1981, III, 71; Kotzabassi 1999, 57; and see note 9 above.

²³ See the images on the Vatican Library and Gallica (BnF) sites: Vat. Reg. gr. 107, fol. 217'; Par. gr. 1972, fol. 335'; Coislin 157, fol. 291'. The Vat. Reg. gr. 107 is based on the lost intermediary independently of the two Paris manuscripts and forms a different branch of the transmission. In the *Analytica Priora* and the *Analytica Posteriora*, the *Reginensis* only took over the commentaries from Vat. gr. 244 (via the intermediary). In the core content it is a descendant from (an)other manuscript(s). I am grateful to José Maksimczuk, who has established this result for the *Analytica Priora*.

sense and clearly intrusive in this place: ἡ καὶ τὸ περιφερὲς καθ' αὐτὸ κατηγορεῖται τῆς γραμμῆς. This clearly traces back to the palaeographical layout of Vat. gr. 244, for it is the exact place where the second supplement was introduced by the single ἡ ('or') that was added to the right of the commentary, while the remaining supplemental text appeared to the left. The appearance of the text (cf. Fig. 5) with the single word as a reference mark could easily be misread in the way the scribe of codex Coisl. 167 did, particularly since he ignored the supplements to the left, making the composition of the page even less comprehensible to him. Thus, he would have regarded the ἡ ('or') as part of the original commentary.

To conclude this inquiry, let us compare this sample from Leo's commentary to its somewhat more extensive counterpart in Philoponus' exegetical treatise.²⁴ First, it should be noted that all central content of it is already present in Philoponus, however Magentinus added his own personal touch through certain changes.

Philoponus' commentary on *An. Post.* I 4, 73a37 is structured thus:

- classification as pertaining to the second meaning of 'in itself'
- concise general explanation of this meaning
- first example: snub-nosedness defined as concavity of the nose
- second example: the definition of 'straight' uses the term 'line'
- definition of the straight line (as in Magentinus)
- additional definition of the straight line (as in the supplement to Magentinus) and the suggestion that there are further possible definitions
- third example: accurate definition of 'circular' (more appropriate than Magentinus')
- contrasting with a section of the circle and the term 'bent' (as in the third supplement to Magentinus)
- definition of 'even' and 'odd' using the term 'number'
- detailed analysis of the textual difficulty in the Aristotelean text, including a full quotation of the part in question
- another succinct description of the second meaning of 'in itself' to conclude the argument.²⁵

²⁴ Ioannis Philoponi in *Aristotelis Analytica Posteriora*, ed. Wallies 1909, 61.

²⁵ Ioannis Philoponi in *Aristotelis Analytica Posteriora*, ed. Wallies 1909, 61: Τοῦτο δεῦτερον τοῦ καθ' αὐτὸ σημαίνον. φημὲν γὰρ καθ' αὐτὰ καὶ ὧν ἐν τοῖς ὀρισμοῖς τὰ ὑποκείμενα αὐτοῖς παραλαμβάνονται· οἷον ὀριζόμενοι τὴν σιμότητα παραλαμβάνομεν ἐν τῷ ὀρισμῷ αὐτῆς τὸ ὑποκείμενον, λέγω δὴ τὴν ῥίνα, λέγοντες σιμότητα εἶναι κοιλότητα ἐν ῥίνι. ὁμοίως καὶ τὸ

Whereas Leo's commentary on the same passage is structured like this:

- classification as pertaining to the second meaning of 'in itself'²⁶
- immediately followed by a suggestion on how to resolve the textual difficulty, albeit without further discussion
- somewhat laborious rephrasing of the Aristotelean thought
- first example: snub-nosedness defined as concavity of the nose, explained in his own words
- definition of 'straight' as in the first of Philoponus' examples on that item (the latter's second example on this is only added during the later supplementation of the text)
- unsatisfactory definition of 'circular'
- since the commentator seems to have realised the shortcomings of his definition, he adds the slightly clumsy remark that the term 'curved' refers to the circle
- he later supplements the contrasting with the section of the circle and between the terms 'bent' and 'curved' from Philoponus, however adding his own pointer that this could be understood from the text of Aristotle's.

The processes of revision that are evident in this passage and characteristic of the commentary in the manuscript Vat. gr. 244, can be summarised as follows: Leo Magentinus changes the order of annotation. He commences with the

εὐθὺν ὀριζόμενοι παραλαμβάνομεν τὴν γραμμὴν εὐθὺν λέγοντες εἶναι πάθος γραμμῆς ἣτις ἐξ ἴσου τοῖς ἐφ' ἑαυτῆς σημείοις κείται, ἥ ἢ τὰ μέσα τοῖς ἄκροις ἐπιπροσθεῖ, ἥ ὅπως ἄλλως ὀρίζεται. ὁμοίως δὲ καὶ περιφερὲς ἦτοι περιφέρειαν φαμεν εἶναι πάθος γραμμῆς πρὸς ἣν ἀφ' ἐνὸς σημείου τῶν ἐντὸς αὐτῆς κειμένων πᾶσαι αἱ προσιπτουσαι εὐθεῖαι ἴσαι ἀλλήλαις εἰσὶ. καὶ δῆλον ὅτι οὐ τὸ τμήμα τοῦ κύκλου αὐτὸ καλεῖται περιφέρεια, ἀλλὰ μᾶλλον καμπύλον κληθεῖη κυρίως ἐκεῖνο ἢ περιφέρεια. περιφέρεια δὲ ὁ κύκλος, ὡσπερ καὶ ὁ γεωμέτρης ὠρίσατο. ὡσαύτως καὶ ἄρτιόν φαμεν ἀριθμὸν τὸν διαιρούμενον δίχα καὶ περιττὸν ἀριθμὸν τὸν μὴ διαιρούμενον δίχα· καὶ ἐπὶ τῶν ὁμοίων ὡσαύτως. τὸ μὲν οὖν δευτέρον σημαινόμενον τοῦ καθ' αὐτὸ τοῦτο. ἔχει δὲ τινα ἀσάφειαν ἢ λέξις, ἣν καταστήσομεν τοῦτον τὸν τρόπον. φησὶ γὰρ καὶ ὅσοις τῶν ἐνυπαρχόντων αὐτοῖς αὐτὰ ἐν τῷ λόγῳ ἐνυπάρχουσι τῷ τί ἐστὶ δηλοῦντι. τὴν δὲ ἀσάφειαν ἐνεποίησε τὸ αὐτοῖς· διὸ ἀντὶ τούτου τὸ 'τίσι' παραλάβωμεν, καὶ σαφὴς γίνεται ὁ λόγος ἔχων οὕτως. καὶ ὅσοις τῶν κατὰ συμβεβηκὸς ἐν τισιν ὑπαρχόντων αὐτὰ ἐν τῷ λόγῳ ἐνυπάρχουσι τῷ τί ἐστὶ δηλοῦντι, τουτέστιν αὐτὰ τὰ ὑποκείμενα, οἷς ὑπάρχουσι τὰ συμβεβηκότα, ἐν τῷ λόγῳ παραλαμβάνονται τῶν συμβεβηκότων τῷ δηλοῦντι τὸ τί ἐστὶ, τουτέστι τὸ εἶναι ἐν τοῖς ὀρισμοῖς αὐτῶν, ὡς εἶναι τὸ ὅλον τοιοῦτον· ταῦτα, φησὶ, λέγω καθ' αὐτὰ τῶν ἐν ἄλλοις τὸ εἶναι ἐχόντων ὅσων ἐν τοῖς ὀρισμοῖς τὰ ὑποκείμενα αὐτοῖς παραλαμβάνεται. Since the main points of Philoponus' commentary have been highlighted in the structural analysis, I do not include a translation here (but see the rendering by Richard McKirahan: Philoponus, *On Aristotle, Posterior analytics*, tr. McKirahan 2008, 67).

²⁶ With a slight deviation from Philoponus by one transposition and the addition of an article.

textual difficulty, however instead of discussing it as did Philoponus, he just posits that the term ‘them’ is to be understood as ‘the respective underlyings’, yet with this he extends his gloss in a manner particular to him. For, while Philoponus recommends using the expression ‘certain things’ in place of ‘them’, Magentinus is more precise in stating that what is meant in each case is ‘the respective underlyings’. His subsequent paraphrasis of the second meaning of ‘in itself’ may have been influenced by the concluding part of Philoponus’ commentary. With good reason, he introduces the term for (logical) predicates (τὰ κατηγορούμενα), instead of Philoponus’ accidental attributes (τὰ συμβεβηκότα), even if his juxtaposition of two participles is a bit clumsy.²⁷ The example using the term nose and the attribute snub-nosedness is clearly explained in what seem to be partially his own words. The next example of the straight line has been abridged by omitting Philoponus’ second example and the indication of further existing definitions. While Magentinus limits himself to the first of these in his commentary, the scribe, who might be Magentinus himself or a scholar of his circle, later supplements the second in the margin. When explaining περιφερές (circular), Magentinus uses an explanation (not found in Philoponus on this passage) that is less accurate, as it would also cover any non-circular line that returns to its starting point.²⁸ However, recognising the shortcomings of this explanation, the scribe tries to restrict it to the case in point by adding that it is in reference to the circle. In his later addition of Philoponus’ passage on a section of the circle and the differences between ‘bent’ and ‘curved’, the scribe once more deviates from the earlier comment by restructuring and shortening it as well as by adding to it. He even refers back to Aristotle himself in his addition, claiming that the explanation matches the Aristotelean wording. Succinctly: in quoting Philoponus and excerpting from his commentary while adding his own variations, he invokes Aristotle as his authority.

Magentinus uses a similar process in other parts of his commentaries. To create an annotated Aristotelean study manuscript perfectly adapted to his own

²⁷ I.e. he writes τῶν συμβεβηκότων τῶν ἐνυπαρχόντων τισὶν ὑποκειμένοις (instead of Philoponus’ τῶν κατὰ συμβεβηκὸς ἐν τισὶν ὑπαρχόντων, Ioannis Philoponi in *Aristotelis Analytica Posteriora*, ed. Wallies 1909, 61, ll. 22–23).

²⁸ Philoponus’ commentary has this description of the circle in a later passage entirely unrelated to this context (Ioannis Philoponi in *Aristotelis Analytica Posteriora*, ed. Wallies 1909, 395): ὡς γὰρ ὁ κύκλος ἀφ’ οὗ σημείου ἄρχεται, εἰς τὸ αὐτὸ καταλήγει [...] The somewhat daring participle construction of Magentinus’ (περιφέρεια γὰρ ἐστὶ πάθος γραμμῆς, ἀφ’ οὗ σημείου ἀρχομένης εἰς τὸ αὐτὸ πάλιν καταλήγουσας) is probably based on a formula such as the one we find here in Philoponus, and should be taken as a mere transposition of the statement into a genitive expression with omission of the necessary adaptation.

scholarly aims, he builds on the commentators from Late Antiquity and follows the structure of their works, however he mostly does not reproduce their explanations literally, rather using techniques of excerpting, compiling, adding, shortening and replacing to result in new and autonomous exegetic corpora. We would not do justice to his extensive transformative accomplishment that is evident in the end result, the comprehensive *Organon* manuscript Vat. gr. 244 with its intricate interdependencies of core text and para-content, if we were to apply modern criteria of plagiarism. It would be more useful and appropriate to further examine Magentinus' techniques of transforming and reworking in terms of the scholarly manuscript work of his time. While this brief inquiry could only make use of a sample passage for its analysis, it would be worthwhile to study the extensive labour of Magentinus' that is evident in this manuscript at a larger scale and adduce further examples for its more precise reconstruction.

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Abbreviations

CAG	Commentaria in Aristotelem Graeca.
CAGB	Commentaria in Aristotelem Graeca et Byzantina.

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Fig. 1: Paris, Bibliothèque nationale de France, Coislin 166, fol. 363r; written by Malachias, second third of the 14th c. © Bibliothèque nationale de France.



Fig. 2: Paris, Bibliothèque nationale de France, Coislin 166, fol. 396^v; written by Malachias, second third of the 14th c. © Bibliothèque nationale de France.

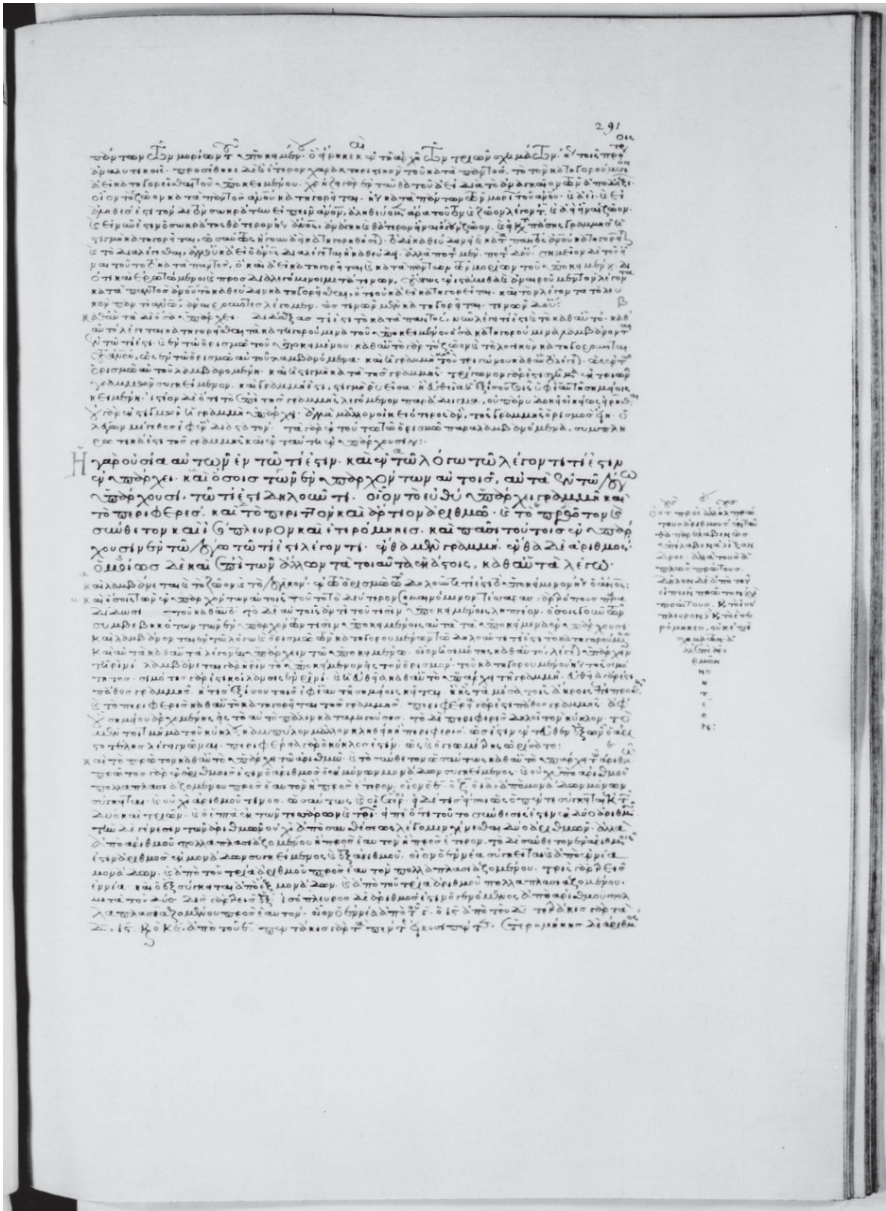


Fig. 3: Paris, Bibliothèque nationale de France, Coislin 157, fol. 291r; written by Michael Klostomalles, first half of the 14th c. © Bibliothèque nationale de France.

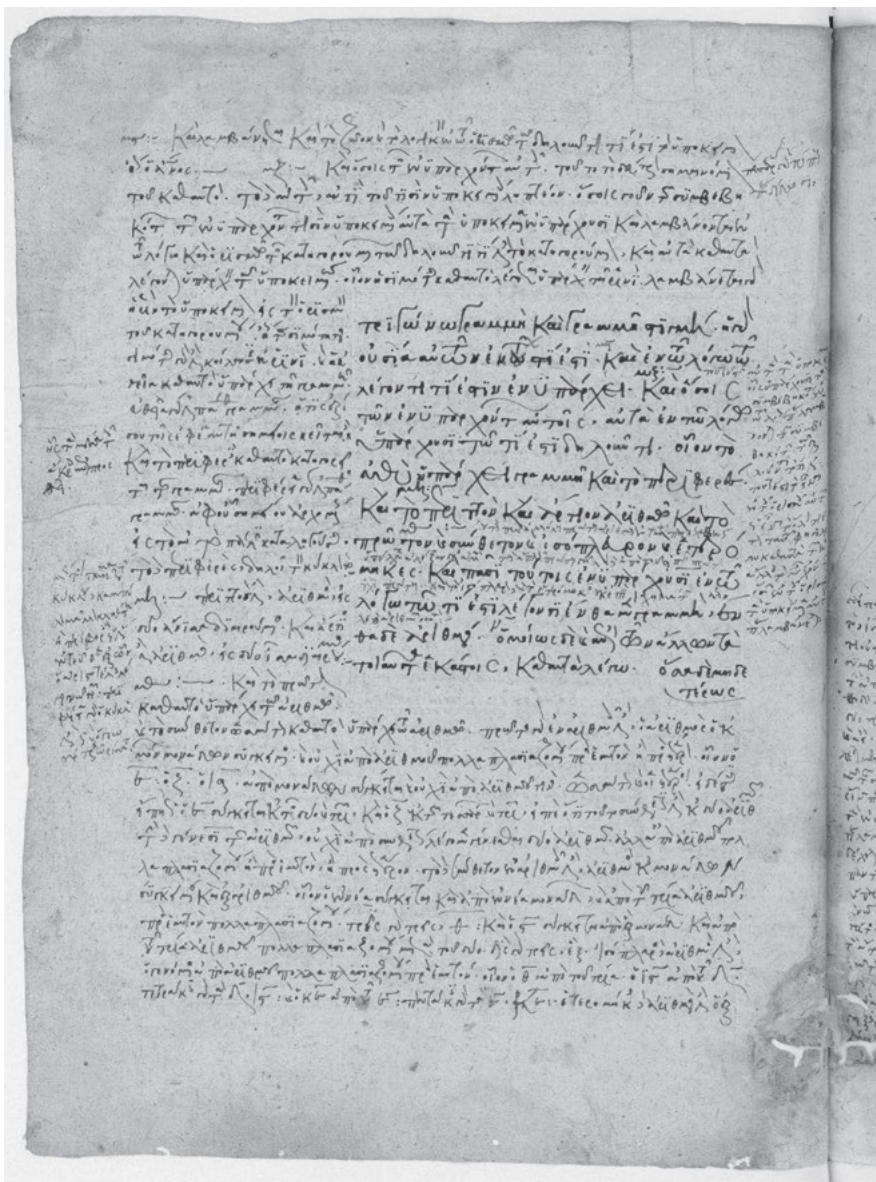


Fig. 4: Vatican, Biblioteca Apostolica Vaticana, gr. 244, fol. 311v; 12th c. © Biblioteca Apostolica Vaticana.