

BOOK FOUR

[Introduction]

234 In the previous book, which was the third one in this treatise, O brother Theodore, an account has been brought forth of how you should understand (Aristotle's) concept of substance. And it has been clearly demonstrated concerning it that, even if some people hold the opinion that it is extremely difficult, you should not think of refusing to give someone an explanation, especially about those things that prove to be not difficult to understand through listening. Thus we shall always be eager to explain clearly in words what we intend to say, so that even little children might not be confused by our answers.

235 Now, in the fourth book of this treatise we are going to speak about quantity. For this is what Aristotle too does in the *Categories*, turning to the teaching on it after his account of substance. In fact, we ought to know that it is not by chance that quantity is placed after substance and that the account of the latter is followed by the former, but that there is a certain logic in this which is revealed to those who consider it as having no small meaning³⁰². Thus, I will now dwell on this issue for a while in order to make it apparent for those who have interest in it.

[On sequence of the categories]³⁰³

236 The primary foundation of bodies is what they call “matter” (ὕλη) and what they say to be without form³⁰⁴ and shape (σχῆμα) in its nature. It is thus only that its nature might be able to be receptive of all forms and all shapes, for the

302 For various interpretations of the order of the categories, see Simplicius, *In Cat.* 120.27–122.1.

303 Ammonius gives a short excursus on prime matter at the beginning of that section of his commentary on the *Categories* which deals with quantity (Ammonius, *In Cat.* 54.3–10, cf. Philoponus, *In Cat.* 83.14). This excursus follows Ammonius' note that quantity comes second in the order of the categories by Aristotle and apparently aims to provide an explanation for it. Philoponus also includes a lengthy account of prime matter in the section dealing with substance, while explaining the issue of differentiae, see *In Cat.* 65.8–66.25. In the same context, the discussion of prime matter appears in Ammonius' commentary on the *Isagoge*, see *In Isag.* 106.12–107.21. Commenting on *Isag.* 11.12, Ammonius suggests that in that passage “matter means genus, while form means differentiae” (τὸ μὲν γένος ὕλης ἔχει λόγον, αἱ δὲ διαφοραὶ εἶδους). Here, Ammonius (and after him, Sergius) applies the same analogy, which in this case justifies the order substance-quantity.

304 In the margins of all three mss. (BDP) in which this passage is extant the variant “without power” is added, and it is the latter variant which appears in the epitome.

need for activity demands that it cannot possess form naturally³⁰⁵. They also call this matter the first nature of bodies, since there is nothing in bodies that can be conceived in mind prior to it. Thus, they say that it first receives some extension into length, breadth, and depth in order to gain volume, for otherwise no dimension in space might be possible in it. But when it extends into length, breadth, and depth, then these three dimensions exist in it. That is why the ancients called it the second nature of bodies³⁰⁶.

237 So, once it has received these three dimensions, then, they say, it is considered to be receptive of shapes, qualities, and faculties, and it produces the four primary bodies, which are customarily called elements (στοιχεῖα). From them all bodies here are composed which undergo coming-to-be and passing-away³⁰⁷. For they say that when matter which has gained size receives dryness and hotness it becomes fire; when it receives wetness and coldness water appears; if it acquires dryness and coldness then earth is formed; and if heat and wetness appear in it then it produces air³⁰⁸.

238 However, should one need some visual demonstration of this, we may say the following³⁰⁹. Prime matter may be compared to bronze that has not yet been treated by a craftsman. But when a craftsman takes it, and beats and shapes it, then due to his treatment it becomes large and extended similar to matter which at first acquires the afore-mentioned three dimensions and gains volume. And when bronze is first extended through the treatment of the craftsman, then it receives images which he wants to imprint on it, and there appear vessels from it which differ in their shapes and utility. Just as the

305 Cf. Philoponus, *In Cat.* 65.10–17: τὴν πρώτην ὕλην φασὶν οἱ φιλόσοφοι ἀσώματων εἶναι τῷ οικείῳ λόγῳ ἀσχημάτιστόν τε καὶ ἀμεγέθη καὶ πάσης ποιότητος κεχωρισμένην· ὅτι γὰρ ἀνείδεός ἐστι, δείκνυται σαφῶς τῷ πάντων τῶν φυσικῶν εἰδῶν αὐτὴν εἶναι δεκτικὴν <...> ἢ ὕλη ὑποβάθρα τις οὐσα καὶ δεκτικὴ πάντων τῶν εἰδῶν τῶν ἐν τοῖς σώμασι θεωρουμένων, οὐδὲ ἐν ἔξει οικεῖον εἶδος. See also Ammonius, *In Cat.* 54.4–5.

306 See Philoponus, *In Cat.* 65.17–18: αὐτὴ οὖν ἐξογκωθεῖσα κατὰ τὰς τρεῖς διαστάσεις ποιεῖ τὸ δεύτερον ὑποκείμενον κατὰ Ἀριστοτέλην (cf. Ammonius, *In Cat.* 54.5–6). Sergius calls matter the “second nature” (apparently because he has called it “first nature” just above) instead of “second subject” like Ammonius and Philoponus (following Aristotle, *De gen. et cor.* 329a33–34).

307 See Ammonius, *In Cat.* 54.4–7: ἢ γὰρ πρώτη ὕλη ἀνείδεος οὐσα καὶ ἀσώματος πρότερον τὰς τρεῖς διαστάσεις δέχεται καὶ γίνεται τριχῆ διαστατὸν τὸ καλούμενον δεύτερον ὑποκείμενον, εἴθ’ οὕτως τὰς ποιότητας καὶ γίνεται σύνθετον ποσόν.

308 See Philoponus, *In Cat.* 65.22–25: τοῦτω οὖν κατὰ τι μὲν μέρος προσγενομένη ἢ θερμὴ καὶ ξηρὰ ποιότης ἐποίησε τὸ πῦρ, κατὰ τι δὲ ἢ ψυχρὰ καὶ ὑγρὰ ἐποίησε τὸ ὕδωρ, κατὰ τι δὲ πάλιν ἢ ξηρὰ καὶ ψυχρὰ ἐποίησε τὴν γῆν, κατὰ τι δὲ ἢ θερμὴ καὶ ὑγρὰ ἐποίησε τὸν ἀέρα. Cf. Ammonius, *In Cat.* 54.7–9.

309 The same example appears in Ammonius, *In Isag.* 106.19–23.

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primary nature of all of them, i.e. bronze, is singular, so also the primary nature of bodies, i.e. matter which is shapeless like untreated bronze. And just as bronze, as we have said, when it first undergoes treatment, becomes thin and extended so that images and shapes might be imprinted on it, in the same way also matter first acquires size and (extends) into length, breadth, and depth so that all qualities and faculties may be imprinted in it.

239 We have discussed these issues here in order to show that the account of quantity is closely related to the teaching on substance and hence should be properly placed after it in the order of exposition³¹⁰. In the discussion of matter, we are going to explain in the proper way all those demonstrations and notions that the ancients seem to have expressed about matter³¹¹, while (now) we are urging the readers always to be prudent and to judge those things which are said, thus discerning between what is true and what is not. But, as you understand, O brother, it is not our goal in this treatise to refute anyone or to distinguish between what is true and what is not like that³¹².

240 But since you have convinced us to produce this treatise for you, so that you and many with you might be instructed by it, and it also appeared to me that study of these issues would not be useless, I made up my mind to elucidate clearly to you what I recall from the ideas of all the ancients and particularly from Aristotle and as far as I can not to neglect anything from what they have written about the science of logic. But if time allows us, we will also approach their treatises on nature and those which are on the invisible things³¹³. Then we will be able to demonstrate in detail that they do not agree with one another

³¹⁰ Cf. Philoponus, *In Cat.* 83.4–5: ὅτι καὶ ἐν τῇ φύσει τῶν πραγμάτων δευτέραν ἔχει τάξιν τὸ ποσόν. See also Ammonius, *In Cat.* 54.9–10.

³¹¹ As Sergius notes in the following paragraph, after having commented on the logical treatises, he planned to turn to Aristotle's natural philosophy (cf. §256, where he mentions that he aims to write a commentary on Aristotle's *Physics*). It is possible that the outcome of Sergius' work in this field became his translation of the Pseudo-Aristotelian treatise *De Mundo* and his adaptation of Alexander of Aphrodisias' *De Universo*. Both treatises in their Syriac versions bear the name of Aristotle in the title.

³¹² Here, Sergius points out potential difficulties which Christian students of Aristotle's natural philosophy might have. He further comments on this point in §256.

³¹³ Thus, after commenting on the logical treatises, Sergius intends to write about physics and theology (i.e. metaphysics). Cf. §11, where Sergius suggests a division of philosophy (derived from Ammonius).

and that many of them may be easily rebuked³¹⁴. But for now, let us turn to what we intend to say.

241 Now, matter is a certain substance, for it is mother of all bodies. As we have said, it is considered first to receive extension into length, breadth, and depth. These, however, pertain to quantity, for each one of them is either some quantity or a part of a quantity³¹⁵. That is why it is proper that the account of substance is followed by the teaching on quantity, for the latter is closely related to it and thus precedes everything else. And since after quantity, the substance of bodies receives all qualities, faculties, images, and shapes, it is therefore fitting that we place the teaching on quality after the section on quantity, for in it all shapes (σχήματα), forms (εἶδη)³¹⁶ and images that are in bodies are encompassed.

242 The other seven categories follow these three and are generated from them, similar to how all bodies come to be whose generation takes place in due order from the four elements. Their generation is the third one from matter, i.e. (the first one is) from it, then from quantity, and then from qualities, faculties, and images which are considered in it at the end³¹⁷. However, what has been said about the order of the exposition should suffice. Next we will turn to the teaching on quantity, and again start with the division that is proper to it.

[Division of quantity]

243 So, first of all, there are two kinds of quantity. One of them has parts that are separate and delimited from one another, while the other is a unified whole and is not made up of distinct parts³¹⁸. But also that whose parts are separate from one another is in turn divided into two types, number and language. And further, that whose parts are not separate, but united and joined to one another, 4b20–25

314 Here Sergius takes up the tradition of Christian apologists who were eager to stress that non-Christian (“pagan” or “outer”) philosophers disagree on nearly every question and thus may easily be refuted, cf. for instance Eusebius, *Praeparatio Evangelica* II.6.22.

315 Cf. Philoponus, *In Cat.* 83.21–84.4.

316 A marginal note in mss. BD specifies that this term should be understood as εἰκόνες (Syr. *yuqne*) here.

317 Thus, Sergius draws a parallel between the ontological order and the order of the categories as follows: matter (= substance) generates three-dimensionality (= quantity), which in turn generates forms and shapes (= quality), which finally produce all bodies from the four elements (= other seven categories). Marginal notes in mss. BD aim at making clear these parallels. Ammonius’ account differs slightly from what we find in Sergius in that Ammonius makes relatives fourth in the list and after it places the rest of the categories, see Ammonius, *In Cat.* 54.10–12, more explicitly in Philoponus, *In Cat.* 83.18–20.

318 I.e. continuous and discrete, see *Cat.* 4b20: τοῦ δὲ ποσοῦ τὸ μὲν ἐστὶ διωρισμένον, τὸ δὲ συνεχές.

is in turn divided into five types, for one of them is line, another is surface, still another is body, another is place, and the final one is time³¹⁹.

244 As it becomes apparent from this division, the species of quantity are together seven, which are: number, language, line, surface, body, place, and time. And it is not possible to find any quantity beyond them, but all its species are encompassed and comprehended by them, as it seemed to the one who was the father and discoverer of this science. Now that we have thus properly outlined the species and differentiae³²⁰ which embrace all quantities, let us set out each one of its parts separately and make an inquiry about it that is fitting to it according to the teaching of the Philosopher, starting with the first species.

[Number]

245 Concerning number, it is not necessary to prove whether it is quantity or not, since it is evident to everyone that it is a quantity³²¹. In fact it is this name that all of us apply when we await an answer from someone on how big or how small some number is; for instance, when it happens that we ask how many people are in the house or how many measures fit in a particular vessel, and we hear that they are ten, or twenty, or thirty, or any other number, depending on circumstances and on what the respondent says. That is why it is not necessary to prove that number is a quantity, but it is proper to investigate whether its parts are separate and delimited from one another, since this is what constitutes this kind of quantity³²². 4b25–31

246 Now, we say that this is also obvious to anyone who correctly regards it. And even if it seems that numbers are completely unified when someone says “hundred” or “thousand”, since they are pronounced as one word, their parts, however, are separate and not joined to one another. For what kind of unity

319 See Philoponus, *In Cat.* 84.5–9: διαρεῖ δὲ τὸ ποσὸν εἰς τὸ συνεχές καὶ τὸ διωρισμένον. συνεχές δέ ἐστι ποσὸν τὸ ἔχον τὰ μόρια ἠνωμένα καὶ συμπεφυκότα πρὸς ἄλληλα, διωρισμένον δὲ τὸ ἐναντίως ἔχον, λέγω δὴ τὸ ἔχον τὰ μόρια διηρημένα ἀλλήλων. τοῦ δὲ συνεχοῦς πέντε φησὶν εἶδη, γραμμὴν ἐπιφάνειαν σῶμα τόπον χρόνον, τοῦ δὲ διωρισμένου δύο, ἀριθμὸν καὶ λόγον. Cf. Ammonius, *In Cat.* 54.16–18.

320 Simplicius notes that the outlined seven kinds of quantity should be considered its differentiae (διαφοραί) rather than species, which are magnitude and amount, see Simplicius, *In Cat.* 122.35–123.1. Also Porphyry in his question-and-answer commentary designates the continuous and the discrete as two differentiae of quantity, see Porphyry, *In Cat.* 100.29.

321 Cf. Ammonius, *In Cat.* 57.3–5; Philoponus, *In Cat.* 89.22–23.

322 I.e. it is proper to prove that number is a discrete quantity, cf. Ammonius, *In Cat.* 57.3–5 and Philoponus, *In Cat.* 89.22–24. According to Aristotle (*Cat.* 4b24–25), numbers share the characteristics of discrete quantities in that they “have no common boundary at which their parts meet” (κοινὸς ὄρος πρὸς ὃν συνάπτει τὰ μόρια αὐτοῦ), a point which is not elaborated upon by Sergius.

does three form with seven, or ten with four, or fifty with five, or any kind of number with another number? But it is obvious that every part of it is separate and exists singularly by itself, and it is only through addition and combination with one another that they increase, or through subtraction that they are reduced. Thus, its parts are not unified with one another, but they maintain one composition and unity like parts of a vessel, or a piece of wood, or any particular body³²³.

[Language]

- 247 But since we have said that the second kind of quantity is language³²⁴, we shall also inquire into it, by distinguishing first what kind of language pertains to quantity. For if we pass over this without investigation, then synonymous words might bring confusion of no small amount to the reader, as there is not one single kind of language but many. There is, namely, spoken language which is composed of many words and of phrases, and there is rational language that is in the intellect, which arises silently in the mind and because of which we are rational beings and are called like that³²⁵. But there is also another, professional language that is collected and imprinted in the mind of a craftsman. By means of it he always contemplates a sort of prototype from which he receives an example for his craftsmanship and in whose image he produces everything that is done by him³²⁶.
- 248 So, while there are these three general species of language, we ought to know that the last and the middle ones do not pertain to quantity, since they are firmly rooted in the incorporeal soul³²⁷. The first one, on the other hand, that is composed of utterances is one of the kinds of quantity because its nature

323 Cf. Ammonius, *In Cat.* 57.8–9; Philoponus, *In Cat.* 89.25–27.

324 *Syr. mella* corresponding to Gr. λόγος.

325 Cf. Ammonius, *In Cat.* 57.22–24: ἐπειδὴ δὲ ὁ λόγος πολλαχῶς λέγεται (λέγεται γὰρ καὶ ὁ προφορικὸς λόγος, λέγεται καὶ ὁ ἐνδιάθετος λόγος), νῦν περὶ τοῦ προφορικοῦ λόγου φησίν. See Porphyry's question-and-answer commentary (*In Cat.* 101.26–27), concerning the second kind of language: ὁ ἐν τῇ διανοίᾳ ὅς καὶ σιωπῶντων ἡμῶν ἐγγίνεται. Cf. also Simplicius, *In Cat.* 124.8–10. All these commentators distinguish only two kinds of language, the spoken and the internal, and do not mention the third kind discussed by Sergius.

326 This kind of language is not mentioned by other commentators. It is likely that here Sergius is elaborating upon the Platonic teachings on Forms, or prototypes, which he presented in §§72–79. It is also possible that Sergius had in mind Aristotle's theory of language in *De Int.* 16a3–8.

327 Cf. Philoponus, *In Cat.* 90.2–7. Philoponus speaks of only one kind of language, which is the second in Sergius, i.e. the unspoken one.

consists in words and phrases which are long and short³²⁸. Thus, it includes that kind of language which is measured, as we have said, by length and shortness and which is composed of different phrases and words that are multiple or few and are either long or short. And since being multiple and few is a characteristic of quantity, it is apparent that also this kind of language which includes them pertains to quantity.

249 It is also evident that parts of this language are not unified to one another without separation that would set them apart and distinguish them. For even if the whole treatise is considered to be one utterance³²⁹, its words and phrases may be separated and distinguished from one another. Neither the idea nor the sense that is formed from them are completely unified as one line or as one surface, and its parts are not strung together in such a way that no division or separation between them is seen. Hence, it has become apparent that the spoken language pertains to quantity, namely to the first differentia of quantity, the one whose parts do not maintain complete unity and conjunction to one another.

[Line, surface, and body]

250 Now it is necessary for us to approach also another kind of quantity whose parts are equal and unified with one another without any division and without separation³³⁰. But since Aristotle divides this quantity too into five items, as we have said, namely into line, surface, body, place, and time, we ought to speak about each one of them according to our knowledge and following the goal that is set before us now³³¹. 5a1–6

251 Now, the point may be grasped in thought but is not found in any body. Geometers call it *simeyon* (σημειον)³³², considering it to be without parts and

328 Aristotle explains how language pertains to quantity by the fact that it is measured by long and short syllables: καταμετρεῖται γὰρ συλλαβῆ μακρᾷ καὶ βραχείᾳ (*Cat.* 4b33–34). The same characteristic appears in Philoponus, *In Cat.* 90.1. Sergius speaks of *šmahe* and *petgame* which both may have the meaning “words”, although the second term refers rather to constructions of words, hence “phrases”. Cf. Porphyry, the question-and-answer commentary, *In Cat.* 101.30–32: πᾶς λόγος ἐξ ὀνομάτων σύγκειται καὶ ῥημάτων καὶ τῶν λοιπῶν, ἃ λέγεται εἶναι τοῦ λόγου μέρη. ταῦτα δὲ πάντα ἐκ συλλαβῶν συνέστηκεν· αἱ δὲ συλλαβαὶ ἢ μακραὶ εἰσιν ἢ βραχεῖαι.

329 Syr. *mellta*, Gr. λόγος.

330 I.e. continuous quantity.

331 For the following paragraphs, see Ammonius, *In Isag.* 7.15–24; idem, *In Cat.* 57.26–58.11; Philoponus, *In Cat.* 90.11–91.15.

332 A marginal note in mss. BD suggests a synonym *qentima* which is a transliteration of the Gr. κέντημα.

indivisible, and, as someone might say, a kind of incorporeal principle of all bodies. Though it remains inside their mind³³³, they say about it that when it receives certain length without breadth, it is called line, which has length but no breadth. And if the line receives another extension into breadth, then surface appears, which has length and breadth only³³⁴. And if it is further extended into depth becoming perceptible, then body appears, which has three dimensions, i.e. length, breadth, and depth. That is why any particular body is called three-dimensional.

252 From this, it becomes clear that the point is the origin of the line, while the line is the origin of the surface, and the surface is in turn the origin and the beginning of all bodies. And each one of them, if you start from the body and proceed upwards, will have one fewer dimension than the other. Thus, the point turns out to have no dimension at all, and because of this it does not have parts either, but is a sort of incorporeal first principle³³⁵.

253 For, if the body has three dimensions, while the surface which is its origin has only two, and furthermore the line which is the beginning of the surface has one dimension less than it, so that it acquires only one dimension, i.e. length, consequently, since it is necessary for the origin of the line which is the point (σημείον) to have one dimension less than it, it is apparent that it is without dimension. And if it is without dimension, then it is clear that it has no size, and because of this it does not pertain to quantity³³⁶.

254 However, concerning the three things that derive from it, i.e. the line, the surface, and the body, there is no dispute at all whether they pertain to quant-

333 I.e. it may be considered in theory, but does not actually happen. Cf. Ammonius, *In Cat.* 58.1: δεῖ δὲ λαβεῖν τὴν διαίρεσιν νῶ καὶ μὴ ἐνεργεῖα.

334 Cf. Philoponus, *In Cat.* 90.18–22.

335 Ammonius remarks (*In Cat.* 33.23–34.2) that a point may not be subsumed under one of the ten categories since it is not something that has independent existence, but is “a principle of things in general”: τὸ δὲ γε σημείον αὐτὸ μὲν τι πρᾶγμα ὑφεστηκὸς οὐκ ἔστιν, ἀρχὴ δὲ ἔστιν ὅλως πραγμάτων.

336 See Ammonius, *In Isag.* 7.17–24: ἐπειδὴ γάρ φησι πᾶν τὸ περατοῦν τοῦ περατουμένου λείπεται μιᾷ διαστάσει· τὸ γὰρ σῶμα τρεῖς ἔχον διαστάσεις περατοῦται ὑπὸ τῆς ἐπιφανείας, ἣτις ἔχει δύο διαστάσεις, μήκος καὶ πλάτος (βάθος γὰρ οὐκ ἔχει ὃ λείπεται τοῦ σώματος), ἡ δὲ ἐπιφάνεια δύο ἔχουσα διαστάσεις περατοῦται ὑπὸ τῆς γραμμῆς, ἣτις μίαν ἔχει διάστασιν τὸ μήκος μόνον, ἡ δὲ γραμμὴ περατοῦται ὑπὸ τοῦ σημείου, ὃ δῆλον ὅτι οὐχ ἕξει οὐδεμίαν διάστασιν, ἀλλ’ ἔσται ἀμερές, εἴ γε, ὡς εἴρηται, πᾶν πέρας τοῦ περατουμένου λείπεται μιᾷ διαστάσει.

ity or not. For the dimensions of length in which the line appears, and also those of length and breadth which bring up the surface, and most of all those of length, breadth and depth which generate the body, signify a certain magnitude. And magnitudes of any kind, even if they are considered in theory, are always a quantity, since their size is grasped through the latter.

255 Now, from the fact that the line, the surface, and the body pertain to quantity, it becomes clear to the readers, that parts of each one of them are not divided or separated from one another, like the (parts) of number and language are separate. This is quite evident, since all the parts of a line are unified from one end to its other end without separation, and the same holds for the surface. Also, any particular body is unified in virtue of the unity of its parts and has its subsistence from them, so that there is neither division nor separation between one part and another, as between words and phrases in language or between parts of any particular number. So much for these matters.

[Place]

256 In order to make our discourse on quantity complete, let us now talk about place and time, which, as we have said above, belong to the division of quantity. 5a6–14
A full account, including all necessary examples, of place and of time, i.e. what and of what kind each one of them is, is given in subtle and excellent fashion by Aristotle in his treatise *Physics*³³⁷. If we proceed so far as to speak about his views in this treatise, we will sufficiently explain everything what we have learned not only from this man, but also from other philosophers and from our Christian writers who have diligently searched for truth³³⁸. However, lest the

³³⁷ See Aristotle's *Physics*, book IV, chapters 1–5 (on place) and 10–14 (on time). The commentaries of both Ammonius and Philoponus contain brief notes on place with a reference to Aristotle's *Physics* as the proper source of information on this subject matter.

³³⁸ Philoponus, who belonged to the same Alexandrian group of Christian students of philosophy as Sergius, included the so-called *Corollaries* in his commentary on Aristotle's *Physics*. However, no commentaries on the latter work written by Christian authors are known prior to Philoponus. It is possible that Sergius meant not only commentaries in the proper sense, but also another Christian works (e.g., the Hexaemeron literature) which dealt with issues of natural philosophy and provided criticism of Aristotle's views.

account of them (i.e. place and time) become obscure and mysterious, we shall make an inquiry about them as it is necessary and proper at this moment. For it is not our task now to speak about their nature, but to demonstrate that they also belong to quantity, namely to that type whose parts are not divided and not at all separated from one another.

257 Now, concerning place there are not a few debates among writers, first of all with regard to whether it exists or not, and next to that with regard to what it is and how it exists³³⁹. But while these inquiries (ζητήματα) are extensive, we will remain brief and say what is necessary about it, for as we have said, the subject of our discussion now is not its nature but its relation to quantity³⁴⁰.

258 That the nature of place exists is testified already by the common sense that is implanted naturally in everybody³⁴¹. For all people understand that every thing that is perceptible and intelligible exists in space and in some place. And even their concept of incorporeals is the same, bearing likeness to the visible phenomena, since their mind is not capable of comprehending that everything that is incorporeal is omnipresent.

259 One may also understand that there is place from motion and from the increase and decrease of the bodies. For how would something be able to move from one point to another³⁴² and become bigger or smaller, unless there were the nature of place in which this would happen? But the change that occurs in virtue of motion from one point to another clearly testifies that the change of what is moved happens in place.

339 Cf. the questions formulated by Aristotle in *Phys.* 208a28–29: εἰ ἔστιν ἢ μή, καὶ πῶς ἔστι, καὶ τί ἔστιν.

340 In spite of this remark, Sergius provides a much longer account of place than we find in Ammonius and Philoponus and than one might deem necessary in view of Aristotle's very brief notion of space in the *Categories*. The following paragraphs by Sergius are in fact based on Aristotle's *Physics* IV, ch. 1–5, rather than on the *Categories*. According to §261, Sergius was aware of a possible criticism that his excursus might be out of place here but was still eager to include it.

341 Cf. Simplicius, *In Phys.* 521.6–7: τὸ μὲν ἔνδοξον εἶναι δοκεῖ ἀπὸ τῆς κοινῆς ὑπολήψεως εἰλημμένον.

342 I.e. locomotion, Gr. φορά. Cf. Aristotle, *Phys.* 208b31–32.

260 It also becomes apparent that there is place from the fact that bodies sometimes depart from their position and are replaced by other bodies³⁴³. For, behold, we see how air intrudes where originally water was as soon as the latter departs, and also how the change occurs when water is poured into where air was while the latter makes room for it. Thus, if bodies replace one another while that in which they were remains the same, it becomes apparent that place has subsistence. It is also obvious to everybody that it does not transform together with the bodies but remains unmoved, while bodies transform and make room for one another.

261 There are innumerable other things by means of which one may demonstrate that place exists but, as we have said, this is not the point of our account here. I am aware that certain people, who turn to the writings of others for the sake of reproach rather than profit, sometimes criticize us for this. They might blame us for talking about things that are unrelated to the discussion. However, since we are sure that there is no small instruction and learning for the minds of those who will read these kind of things, we will occasionally ignore the lovers of criticism and, when this seems suitable to us, wander away a little from our subject.

262 So, I mean that it has become apparent from what has been said that place exists. It has also become obvious from this that place has great power³⁴⁴. For since it does not change together with bodies but exists even if they are corrupted in it, not being corrupted by them, and always encompasses them while not being encompassed by them, it is clear that its nature is greater than theirs, since there is more excellence in encompassing something than in being encompassed, and in remaining unaffected by corruption of those things which are corrupted in it.

343 Cf. Aristotle, *Phys.* 208b1–11. Aristotle speaks of ἀντιμετάστασις, “mutual replacement” of the bodies.

344 Aristotle stresses that place has a “power”, or “potency” (δύναμις), which is prior to everything else: εἰ δ’ ἐστὶ τοιοῦτο, θαυμαστή τις ἂν εἴη ἡ τοῦ τόπου δύναμις καὶ προτέρα πάντων (*Phys.* 208b33–35).

263 Thus, because Plato saw that place is similar to form (εἶδος)³⁴⁵ in that it encompasses but is not encompassed, and also that similar to matter (ύλη) it is receptive³⁴⁶ of bodies, he considered it to be either matter or form. It is because of this that he openly called matter “place”³⁴⁷. The argument which he constructed about it run like this: Place encompasses but is not encompassed, and form encompasses but is not encompassed, hence place is form. And further in this way: Place is receptive of bodies, and matter is receptive of everything, hence place is matter.

264 But this has not been stated correctly, because if there is something which is characteristic of two objects, it does not follow from this that they are not two any more but one. For if it were not like that, this sage might say: Since man is rational and angel is rational, hence, according to his word, man is angel. And since man is mortal and also ass is mortal, thus man is ass. And since it has been proven already that man is angel, I am ashamed of saying what follows from this.

265 In fact, it would be proper for this philosopher to see that form and matter are changing together with bodies and are parts of them. Place, instead, does not change with them and is no part of them. Thus, it is neither form nor matter. But neither is it a certain body, for its subsistence is apart from bodies which make room for one another in it and are mutually replaced while it remains in its place.

266 They also make a detailed inquiry into what place is, i.e. whether it is a body or incorporeal³⁴⁸. That it is not a body is clear from the fact that it is

345 Ms. D adds in the margin: “That form which is with matter.”

346 Ms. D adds in the margin: “It contains every (thing) and image (εικόν).”

347 Cf. Aristotle, *Phys.* 209b11.

348 Cf. Aristotle, *Phys.* 209a2–7. See also Philoponus, *In Phys.* 504.28–506.20.

receptive of bodies. For if it were a body and received in itself another body, then body would be in body, which is impossible³⁴⁹. If, in fact, a body were ever be in a body, then it would be possible for a big body to be inside a small body that cannot contain it. But if something does not have enough room in itself (for something else), then it is obvious that it will not contain it at all. From this would follow that the whole sky might be enclosed in a small body and that one small eggshell might encompass the whole sea.

267 Thus, it is impossible that place should be a body. But one cannot state that it is incorporeal either, since if something is without body then it cannot be expanded, occupy space, and have any extension. Place, however, is expanded and occupies space together with the bodies that are in it, thus containing them. This makes apparent that place is not incorporeal, for we may never believe that bodies are encompassed by something that is without body, for what encompasses them must necessarily be extended and enlarged according to their size³⁵⁰.

268 Now, based on this one may even conclude that there is no place at all. Thus Zeno of Citium³⁵¹, who always tried to posit in his statements different things which contradicted what is clearly known, acted the same way also in this case. So, he said that there is no place, constructing his argument as follows: Each thing is in a place. So, if place exists, since it is also a thing among other things, it is in a place too. Thus we find a place in a place, and the latter is

349 Sergius slightly modifies the argument of Aristotle as formulated in *Phys.* 209a6–7: “But it is impossible for place to be a body, for then two bodies would be in the same thing” (ἀδύνατον δὲ σῶμα εἶναι τὸν τόπον· ἐν ταύτῳ γὰρ ἂν εἴη δύο σώματα).

350 Cf. Philoponus, *In Phys.* 505.1–11.

351 I.e. Zeno of Elea. Aristotle mentions Zeno's paradox in *Phys.* 209a23–24.

in turn in another (place), which is in another one, and so on without end. Therefore, no place exists at all.

269 However, his argument follows a false assessment which is made at the beginning and on which the rest is built up. So, first of all, not everything is in a place, as Zeno assumes, for there are many things, and most of all those which are incorporeal, that have no place and are not in space, while those that are in space do it not in the same manner, not every one of them being in a place. For, as we have explained earlier in this treatise, there are eleven ways of saying that something is in space³⁵². This makes it apparent that not everything which is in space is also in a place, as Zeno believes. However, on whether place exists and how it exists enough (has been said). Now we will discuss what it is and whether it pertains to quantity.

270 To put it briefly: place is a limit and a surface of every container that surrounds what is contained by it³⁵³. Now, any particular body has a limit and a surface which is its outer boundary. However, if it is solid, it has one surface which surrounds it from the outside; but if it is hollow or vaulted, it has two surfaces, i.e. the outer and the inner. And if something is contained in its cavity, then its outer surface is surrounded by air. In this case, the limit of air which adjoins its outer surface will be the place of this body. The inner surface of the same body, on the other hand, which adjoins something that it contains in its cavity will be the place of what is contained in it, since the latter adjoins its limit and is surrounded by it from the outside.

352 In §§138–149, Sergius lists eleven ways of being-in-something (cf. the reading of ms. P and of the epitome, which is probably a later correction of the text), and one of them (no. 2) is “as in a place”. In both passages, Sergius uses the Syriac word *’atra* for “place” (i.e. a concrete position), while “space” is expressed by the term *dukkta*. Thus, the point which Sergius makes here is that there are eleven ways of saying that something is in something else, i.e. in space, and only one of them means to be in a concrete place. Aristotle lists eight ways of being-in-something in *Phys.* 210a14–24, where being in a place is combined with being in a vessel to yield the eighth way.

353 See Aristotle, *Phys.* 209b1–7 and 212a5–6. Cf. Philoponus, *In Phys.* 519.12–13: εἰ δὲ τὸ προσεχῶς ἕκαστον περιέχον ὁ τόπος ἐστί, πέρασ τί ἐστί δηλονότι ὁ τόπος· περατοῖ γὰρ τὸ ἐν αὐτῷ. See also Ammonius, *In Cat.* 58.16–17.

271 So, place is the inner limit of a certain body that adjoins the outer limit of what is contained in it. That is why it turns out that place is not a body but the inner limit of a body. But neither is it incorporeal, since it acquires extension into length and breadth, according to the size of the body which is contained in it. Thus, it is not the cup (κάδος) that is called the place of the water which is in it, since this is a body, but it is the inner limit of the cup which adjoins the water contained in it that is the place of the latter. Moreover, it is not the celestial sphere (σφαῖρα) that we say is the place of the air, but it is its inner surface which adjoins the outer limit of the air that is said to be the place of it. Moreover, it is not the air in which we are that is really the place of natures, even if it is thought of like that, but it is its limits which from outside adjoin each one of the bodies that are the places of each nature which are contained inside them. So, to put briefly what place is: it is the inner limit of that which surrounds something that is contained in it.

272 From what has been said, as it seems to me, it also becomes evident and comprehensible to everyone that place pertains to quantity. For if it surrounds all bodies and there is not a single perceptible nature which might be thought not to be in a place, it is evident that place in some cases will be extended according to the large size of any particular body and in other cases will be contracted according to the small size of bodies that are in it. Thus, if body pertains to quantity, it is apparent that place pertains to it too. And if line which has only one dimension, i.e. that of length, due to its dimension pertains to quantity, place turns out to pertain to quantity much more, since it has two dimensions, i.e. those of length and breadth³⁵⁴.

273 If someone, however, were to say that place does not extend according to the whole constitution of bodies, then he would be compelled to state that not

³⁵⁴ Sergius' conclusion that place is two-dimensional agrees with his notion that it is not a body, but a surface of a container. Since a surface is two-dimensional (cf. §§250–255, above), the same holds for place. In the next paragraph, Sergius raises a puzzle which naturally comes up in this context, without going into detail about it. It seems that this point was not the Sergius' main concern in this section, but a way to show that place pertains to quantity, similar to Ammonius, *In Cat.* 58.16–26.

all parts of bodies are in a place³⁵⁵. But this is impossible, first of all, because if it happens that some parts of a body have no place, then all of it might be without place as well; and if this were true, then any particular body might be without place. This, in turn, will necessarily require the one who says this to introduce a certain void into the nature of creatures and to postulate something that is empty of bodies and contains no natures at all³⁵⁶. But that this is something that may not exist has been demonstrated through many investigations and through powerful arguments by all natural philosophers. And even those who introduce empty space and admit that there is void in the creation do not state that it exists naturally, but that it is completely beyond nature. But so much will suffice for it.

[Time]³⁵⁷

274 Now is the moment we should turn to time and discuss this subject matter in the same concise manner, since this is the last among the seven kinds of quantity left for us to speak about. So, you ought to know that just as place is considered prior to body, so also body is comprehended prior to motion, while motion in turn (is considered) prior to time. For just as a body is a concomitant of the place which always contains it, and just as natural motion is a concomitant of a body, so also time is a concomitant of any particular natural motion³⁵⁸.

275 So, above we have said enough on whether place and body pertain to quantity, while about time we are going to speak now. Concerning motion³⁵⁹, however, one might rightfully raise a puzzle as to why the Philosopher did not mention it in the chapter on quantity. We shall say in response to this that, since

355 Cf. Philoponus, *In Phys.* 505.1–5. Based on the same arguments, Philoponus comes to the conclusion that place is three-dimensional and not two-dimensional, as Sergius states in the previous paragraph. However, in his commentary on the *Categories* which is based on Ammonius' lectures, Philoponus admits that the "limit" of a body, which is actually the place it occupies, must have one dimension less than body itself and thus be two-dimensional (see Philoponus, *In Cat.* 84.24–25).

356 Aristotle discusses void in chapters 6–9 of Book IV of the *Physics*, ultimately rejecting its existence. A number of puzzles that may be raised in this context are discussed by Philoponus in the *Corollaries on Void*, which have been preserved as a part of his commentary on the *Physics*.

357 The following paragraphs are not based on the text of the *Categories*, where Aristotle mentions time only briefly but in contrast to place does not further elaborate on this issue. Instead, Sergius explicates the contents of Book IV of the *Physics* where Aristotle deals with time in chapters 10–14, right after the discussion of place and void.

358 Cf. Philoponus, *In Phys.* 702.13–14: καὶ γὰρ οὗτος τῶν παρακολουθούντων ἐστὶ πᾶσι τοῖς φυσικοῖς πράγμασι.

359 Syr. *zaw'a* corresponding to Gr. κίνησις which might be understood as either "motion" or "change".

the treatise *Categories* has been written for students and it forms the beginning of the study of logic, for this reason he has not included there a section on motion, for an account of this would not be suitable for the ears of those who have not been previously trained³⁶⁰.

276 There have been many investigations and profound studies of it by the ancients, and also by Aristotle himself, apart from the constant inquiries into it which he carried out in his many writings. There are four whole books which he dedicated to the issue of motion and which others included in his treatise on physics³⁶¹. But because of the complexity of this subject matter and the confusion in the opinions of the ancients concerning it, let it remain far from the students and let their ears be spared at this moment³⁶² from this kind of hard labour! It is also probable that, since he knew that time is a concomitant of motion and that there is no motion without time so that both of them have great affinity to each other, he mentioned only the one which was easier to explain than the other, namely time, for from its account it becomes apparent that also motion pertains to quantity.

277 So, let us turn to time and carry out a fitting inquiry into it³⁶³. Now, it is possible that someone would say regarding these issues that there is no time at all. For one part of time, the past, has already gone for good and perished, while another, the future, has not yet happened. Thus, it does not exist at all, for how can something exist that has perished and does not exist in one part, and in another part has not yet come to be?³⁶⁴

360 Cf. Ammonius, *In Cat.* 55.10–13; Philoponus, *In Cat.* 87.21–88.2. In his commentary on the *Isagoge* (*In Isag.* 53.1–2), Ammonius discusses the question why Porphyry does not include motion (or change) in his account of genera and answers that it was not Porphyry's task to speak "naturally" (i.e. as a natural philosopher) about these issues, but rather "in a way appropriate to the issues of logic" (ἀλλ' οὐ πρόκειται τῷ Πορφύριῳ περὶ τούτων φυσικῶς εἰπεῖν, ἀλλὰ πρεπόντως τῇ λογικῇ πραγματείᾳ).

361 I.e. Books V–VIII of the *Physics*. According to Simplicius, Porphyry considered these four books as a separate treatise *On motion* (Simplicius, *In Phys.* 802.7–13).

362 An extensive account of motion, or change, appears in the last, seventh, book of Sergius' *Commentary* dedicated to what is called the *postpraedicamenta* (i.e. chapters 10–15 of the *Categories*). Since Aristotle himself considers this issue in the 14th chapter of the *Categories*, Sergius comments on it in the corresponding paragraphs (§§445–448). But additionally, he also turns to the question of change at the beginning of Book VII (§§409–418), thus breaking the order of Aristotle's narrative and including an additional excursus on the six types of change.

363 The following paragraphs are either a literal rendering of chapters 10–11 of the fourth book of the *Physics* (as is the case with §§280, 283, and 284) or a periphrastic account of Aristotle's text.

364 Cf. Aristotle, *Phys.* 217b32–218a8.

278 Now, everything that exists should acquire its subsistence either in respect of itself or in respect of something else. If time is something composite and it has subsistence, it is necessary that also those things should exist which it is composed of. But one part of it has perished and the other does not yet exist. So, how can one think about something that is composed of what does not exist? And further, everything that exists contains certain parts out of which it is constituted. But there are no parts of time at all, neither the ones of the past, for they have already perished, nor the ones of the future, since they do not yet exist³⁶⁵.

279 Some people say that time is the movement of the heavenly sphere, because they observe that the whole extent of the world is moving without ceasing, while its parts only move from one place to another. But they do not comprehend that, although time and motion are related to one another, each one of them is something different from its counterpart, and they only have an affinity to one another, but it is not that both of them have one and the same nature. Indeed (ἄρα), provided that there are many spheres, because their motions seem to be multiple, time too should turn out to be of many kinds. But behold, there is one time which remains the same while its parts are changeable. But, since they say that the motion of the whole sphere goes from the east to the west, while the motion of the five stars and the two luminaries, which are called “deceivers”³⁶⁶, proceeds from the west to the east, then, if indeed time were movement, it would necessarily mean that the nature of time is not one, but rather there are times which are contrary to one another in their nature³⁶⁷.

280 But you may also argue as follows: Every change and any particular movement exists in what is moved by it, and its movement occurs in that fashion of which it is naturally capable. Time, on the other hand, is the same at

365 Cf. Aristotle, *Phys.* 218a9–30.

366 Sergius has the term *πλανητός* in mind, which he explains as deriving from the verb *πλανάω*, “to wander”, but also “to lead astray, deceive”. The same rendering of the Greek *τὰ πλανητά* appears in the Syriac version of Ps.-Aristotle’s *De Mundo*, which is considered to have been prepared by Sergius, see 392a14.

367 Cf. Aristotle, *Phys.* 218a33–218b9.

every place and to everything and it is not different in different things. Thus, time is something other than motion. And this is furthermore what one should see from the fact that the quickness and slowness characteristic of particular movements are determined by time. For we say that something is moving quickly when it moves a great deal in a short time. And we further say that something moves slowly when it moves a little during a long time. But time is not determined by time. Thus movement is not the same as time³⁶⁸.

281 Indeed, we say that something is moving quickly or slowly when we attach time to its nature and not when we take those things which are not of similar kind and make them equal to one another. For it would be not correct to make equal a person running on foot to the running of a horse, even if (that person) were superior in running. But it would be proper to say that a (man's) foot runs a great deal, while the running of a horse is superior. It is apparent that the movement of each one of these is determined according to the kind of its nature and it is called superior or quick from the firmness or superiority which is in its nature and which is determined by the time which suits it. From these and similar (examples) it becomes apparent that time is not movement.

282 So, in order to see what (time) is, let us consider the statement which we are accustomed to pronounce that the now should be defined by the past and the future. Indeed, the now has no persistence, since when it is spoken it is already gone and does not exist. Thus, it is not a time but what we consider in our intellect as a certain now and what is extended by our intellect to another certain now, and it is this interval in between that we call time. So, it seems that

368 This paragraph appears to be a quotation, with some alterations, of *Phys.* 218b9–20: ἡ μὲν οὖν ἐκάστου μεταβολὴ καὶ κίνησις ἐν αὐτῷ τῷ μεταβάλλοντι μόνον ἐστίν, ἢ οὐ ἂν τύχη ὄν αὐτὸ τὸ κινούμενον καὶ μεταβάλλον· ὁ δὲ χρόνος ὁμοίως καὶ πανταχοῦ καὶ παρὰ πᾶσιν. ἔτι δὲ μεταβολὴ μὲν ἐστὶ θάπτων καὶ βραδυτέρα, χρόνος δ' οὐκ ἔστιν· τὸ γὰρ βραδὺ καὶ ταχὺ χρόνῳ ὤρισται, ταχὺ μὲν τὸ ἐν ὀλίγῳ πολὺ κινούμενον, βραδὺ δὲ τὸ ἐν πολλῷ ὀλίγον· ὁ δὲ χρόνος οὐχ ὤρισται χρόνῳ, οὔτε τῷ ποσός τις εἶναι οὔτε τῷ ποιός. ὅτι μὲν τοίνυν οὐκ ἔστιν κίνησις, φανερόν.

it is in something before and after that time is. But since the before and after pertain to number, time is some number, i.e. it is not motion but a number of motion³⁶⁹.

283 Now, an indication of this is that we discriminate between many and few by number, but more and less motion we discern by time. Hence, time is a number of motion and not motion itself. But since number is said in two ways — namely of what is numbered and of that by which we number — we ought to know that time is number not in the sense of that with which we count, but in the sense of what is counted³⁷⁰. So, it is the duration of such motion that contains extension and is counted gradually through various parts that we call time. Thus we have also determined what time is, namely that it is the number of the motion.

284 What has been said makes it clear that time belongs to quantity. For since its subsistence is in the extension of motion, while every particular extension is a part of quantity, it is obvious that time is also a quantity. And since there is no division or separation between its parts but all of them are joined to one another, so that the end of what passes by brings into existence what comes after it, it is apparent that time pertains to that type of quantity whose parts are not separate and set apart from one another rather than to that which is definable and divisible and each part of which does not hold the same position with respect to the others³⁷¹. However, let what has been explained thus far concerning all seven kinds of quantity suffice.

369 This paragraph is a periphrasis of *Phys.* 219a22–219b3, which appears in some parts to be a very literal rendering of Aristotle's text: ἀλλὰ μὴν καὶ τὸν χρόνον γε γνωρίζομεν ὅταν ὀρίσωμεν τὴν κίνησιν, τῷ πρότερον καὶ ὕστερον ὀρίζοντες· καὶ τότε φαμέν γεγονέναι χρόνον, ὅταν τοῦ προτέρου καὶ ὕστερου ἐν τῇ κινήσει αἰσθησιν λάβωμεν· ὀρίζομεν δὲ τῷ ἄλλο καὶ ἄλλο ὑπολαβεῖν αὐτά, καὶ μεταξύ τι αὐτῶν ἕτερον· ὅταν γὰρ ἕτερα τὰ ἄκρα τοῦ μέσου νοήσωμεν, καὶ δύο εἴπη ἢ ψυχὴ τὰ νῦν, τὸ μὲν πρότερον τὸ δ' ὕστερον, τότε καὶ τοῦτο φαμέν εἶναι χρόνον· τὸ γὰρ ὀριζόμενον τῷ νῦν χρόνος εἶναι δοκεῖ· καὶ ὑποκείσθω. ὅταν μὲν οὖν ὡς ἐν τῷ νῦν αἰσθανώμεθα, καὶ μὴ ἦτοι ὡς πρότερον καὶ ὕστερον ἐν τῇ κινήσει ἢ ὡς τὸ αὐτὸ μὲν προτέρου δὲ καὶ ὕστερου τίνος, οὐ δοκεῖ χρόνος γεγονέναι οὐδεὶς, ὅτι οὐδὲ κινήσις, ὅταν δὲ τὸ πρότερον καὶ ὕστερον, τότε λέγομεν χρόνον· τοῦτο γὰρ ἐστὶν ὁ χρόνος, ἀριθμὸς κινήσεως κατὰ τὸ πρότερον καὶ ὕστερον. οὐκ ἄρα κινήσις ὁ χρόνος ἀλλ' ἢ ἀριθμὸν ἔχει ἡ κίνησις.

370 The Syriac text follows very closely (with some explicative elements) *Phys.* 219b3–8: σημεῖον δέ· τὸ μὲν γὰρ πλείον καὶ ἐλάττων κρίνομεν ἀριθμῷ, κινήσιν δὲ πλείω καὶ ἐλάττω χρόνω· ἀριθμὸς ἄρα τις ὁ χρόνος. ἐπεὶ δ' ἀριθμὸς ἐστὶ διχῶς (καὶ γὰρ τὸ ἀριθμούμενον καὶ τὸ ἀριθμητὸν ἀριθμὸν λέγομεν, καὶ ὧ ἀριθμοῦμεν), ὁ δὲ χρόνος ἐστὶν τὸ ἀριθμούμενον καὶ οὐχ ὧ ἀριθμοῦμεν. While Aristotle actually suggests three terms for the ways of speaking about number, Sergius subsumes them under two categories, as also does Philoponus in *In Phys.* 723.15–24.

371 I.e. time is a continuous and not a discrete kind of quantity. Cf. Aristotle, *Phys.* 220a4–26.

[Aristotle's other division of quantity]

285 We shall also not forget to mention that some of the Stoics and even Plato himself divided all of quantity into three kinds, namely into number, magnitude, and weight³⁷². For they said that language is a certain number which is composed of the multitude of words, so that number and language are one kind of quantity. Also, line, surface, and body, although they differ from one another in their subsistence, designate a certain magnitude, and hence they (constitute) one kind of quantity. And because they saw that the inclination towards heaviness and lightness also signifies a certain quantity, they also established this kind which they called weight. And thus, as we have said, they divided all of quantity into number, magnitude, and inclination³⁷³.

286 But Aristotle who was diligent in precise divisions of various things, also provided one for quantity. So, as we have said above, he divided it into seven kinds, namely, at first, into two, i.e. into that kind whose parts may be separated through division from one another and into that one whose parts are joined and bound to one another without separation; but also each one of these he further divided as far as it was possible. I mean that the quantity whose parts are separable from one another he sub-divided into number and such language that is spoken, while the quantity whose parts may not be separated from one another he divided into line, surface, body, and also place and time.

287 Then, after having made this division, since he wanted the student to be instructed in multiple ways, he also provided another division of the same seven parts of quantity. Thus, he said that there are some quantities whose parts have position in relation to one another so that it is obvious where each

372 Cf. Ammonius, *In Cat.* 55.4–5: τινές δὲ τὰ κυρίως εἶδη τοῦ ποσοῦ φασιν εἶναι τρία, ἀριθμὸν ὄγκον δύναμιν, τοῦτ' ἔστι ροπήν.

373 Cf. Ammonius, *In Cat.* 55.4–10.

one of them is situated; and there are some whose parts do not have position but each one of them is generated gradually one after another. So the parts of time, number, and language do not have position, so that each one of them might be seen in its place and they all would be fastened and fixed in that whose parts they are.

288 As for time, it has no parts at all which would have position in it and be seen, but the generation of each one of its parts always comes together with the destruction of the previous one. The same holds for language and number: when their first parts pass away then those after them are generated one after another by way of succession, while the preceding ones do not persist. Line, surface, body, and place, on the other hand, contain parts which have position in relation to one another, each one of them being fixed in its place and comprehended through that whose part it is, and it is not such that after the destruction of the first ones the successive ones are generated one after another³⁷⁴.

289 Now, this division of quantity differs from the first one only by mode and it does not contribute anything more or less to the nature of quantity. So, in the first division, number and language came together, while line, surface and body were combined with place and time. In the second division, on the other hand, time was separated from place, body, surface, and line, and attached to language and number, since according to the principle of the second division its position should be with the latter and not with the former³⁷⁵.

[Quantities in the strict sense and per accidens]

290 Now, after these two divisions, the Philosopher wished to provide a definition of quantity. It has been told to us and clearly demonstrated in other

374 Cf. Ammonius, *In Cat.* 59.11–13.

375 Cf. Philoponus, *In Cat.* 91.28–92.6.

treatises³⁷⁶ that the craft of dividing is prior to that of defining, since it is first necessary to have a proper division of things and then from the division to derive what is suitable for definitions. Hence, the Philosopher and all other authors who have received from him this rule (κανόν) always first employed division and after that defined the subject of their discussion.

291 That is why he first properly divided quantity, as he also did with substance, and now defines it. However, since it has been said to us above that definitions derive from a genus and those differentiae which constitute species³⁷⁷, but none among the categories has a genus, since each one of them is a primary genus that is called the most generic genus, it is apparent that for this reason no definition of any of them may be a perfect definition in the strict sense. What remains for us is to draw, as if we paint a certain image, a definition based on their properties, i.e. those things which are individual concomitants of particular entities and through which they may be separated from everything else. So, it is from them that we shall try to produce a description of quantity which we may use instead of a definition. Just as we described substance not by means of a definition, but by means of those things which are its individual concomitants, so is it also proper for us to try to define quantity according to our capacity from those things which are concomitant of it³⁷⁸.

292 However, since it is the job of the scholar to investigate not only those things which exist in reality but also those which are believed and to reveal that their nature is contrary to that³⁷⁹, he (i.e. Aristotle) considered in his account not only what pertains to quantity in reality, but also included in it what is believed to be quantity when it is not and demonstrated where such a

5a38–5b10

376 It is possible that Sergius means Porphyry's *Isagoge* here, for it is in the commentary on the latter by Ammonius that we find the discussion of the sequence between division and definition, cf. Ammonius, *In Isag.* 35.10–13. See also §197, above.

377 In §§197–199, where Sergius discusses this issue, he in fact does not mention differentiae. See however, Philoponus, *In Cat.* 19.26: πᾶς γὰρ ὀρισμὸς ἐκ γένους ἐστὶ καὶ συστατικῶν διαφορῶν.

378 Cf. Ammonius, *In Cat.* 61.7–9; Philoponus, *In Cat.* 93.15–27.

379 Cf. Ammonius, *In Cat.* 60.14–16: ἔργον ἐπιστήμονος μὴ μόνον τὰ ὑποβεβλημένα αὐτῷ πράγματα σκοπεῖν, ἀλλὰ καὶ τὰ δοκοῦντα μὲν εἶναι, κατὰ ἀλήθειαν δὲ οὐκ ὄντα διεξέρχεται καὶ καὶ διελέγχειν (= Philoponus, *In Cat.* 92.11–13).

belief about it comes from. Now, since of any particular colour, e.g. a certain white, it is said that there are three cubits of it, or four, or something else; and furthermore, of some action it is said that it is long or short, e.g. one usually speaks about length when talking about a war that lasted ten years or something like that, — based on this one believes that colours and actions also pertain to quantity. However, they do not fall beneath any of the kinds of quantity which have been established above, but in reality they belong to quality, as we are going to demonstrate in the section on it³⁸⁰.

293 Now, we shall consider that of things that are said, some exist primarily and in the strict sense, and some of those things that are said exist secondarily and accidentally³⁸¹. In the Syriac language, we are accustomed to call these two kinds “truly” and “seemingly”, so that what the ancients named “strictly” and “primarily” we usually call “truly”, while what we designate as “seemingly” they referred to as “accidentally” and “secondarily”. Thus, there are quantities in the true and strict sense, namely those which have been divided and discussed thus far, and there are those of another kind, seeming and derivative, of which we say that they are quantities only in belief and not in reality.

294 Now, when some colour — e.g., white, or black, or any other — is said to have three or four cubits or any other particular amount, it is said not in respect of the colour which is measured, but since the body in which it is contained happens to have some size, that is how the colour which is in it is

³⁸⁰ Cf. Ammonius, *In Cat.* 60.16–19; Philoponus, *In Cat.* 92.13–20.

³⁸¹ Cf. *Cat.* 5a38–39: κυρίως δὲ ποσὰ ταῦτα μόνον λέγεται τὰ εἰρημένα, τὰ δὲ ἄλλα πάντα κατὰ συμβεβηκός.

said to have size. Also, if an action is said to be long or short, it is not because the action itself is like that, but because the time over which it took place was either lengthy or not. In fact, if an action which was believed to last long time occurs briefly, then due to the briefness of time taken for it this action will be called brief. But if the action which was believed to be over briefly were to extend over a long time, then again the length of time taken for it would make this action seemingly long. Hence, it is the body receptive of colours that is truly measured and not colours themselves; and it is also the time that is short or long and not the action which happens in it. It is thus obvious that body and time pertain to quantity, as it has been explained above, while colours and actions are called like that seemingly and accidentally, since they occur to one of the kinds of quantity, as we have said³⁸².

295 So, if someone states about a small body that the white in it, as one says, is more white than that of a bigger body and falls into error by trying to measure it by means of measures and saying that the white in the small body is greater than that in a body larger than it, so that such a person will deduce from it that it is whiteness that pertains to quantity and not the body which is receptive of it, then it is obvious that he merely corrupts the proper meaning of the words and is led astray with respect to the rest. In fact, he should not say that one white is greater than the other; but that it is more (white) in one case than in the other³⁸³. For the terms “great” and “small” are related to quantity, while the “more” and the “less” are also applied to colours, shapes (σχήματα) and all

³⁸² Cf. Ammonius, *In Cat.* 60.20–29; Philoponus, *In Cat.* 92.20–93.2.

³⁸³ See Ammonius, *In Cat.* 60.29–61.5; Philoponus, *In Cat.* 93.8–13.

kinds of quality. Thus, if someone would like to study this subject but will resist knowing the precise meaning of the terms, he will be rebuked, as we have said. But if being unaware of this, he would study, then he will learn and will not resist in a quarrelsome way those things which are evident to everyone.

[Whether quantity admits of contraries]

296 So, after this, Aristotle defines quantity by means of its distinctive features. 5b11–16

And he first says that a concomitant of quantity is that there is nothing contrary to it³⁸⁴. For, indeed, none among its kinds — i.e. number, language, time, line, surface, body, and place — seems to truly admit of contraries. Now, someone might wish to say that large and small, plenty and few are contrary to one another, and since they pertain to quantity and are contrary to one another, it is obvious that quantity admits of contraries. However, if we demonstrate that they are not contraries, but in their subsistence they pertain to the genus of relatives, this will prove correct the statement of the Philosopher that a concomitant of quantity is that it has no contrary³⁸⁵.

297 Since we have already discussed large and small and plenty and few in the section on substance³⁸⁶, it would be proper to say now only a few things about them, in order to demonstrate that, if they are contraries they do not belong to quantity, and if they do belong to quantity they are not contrary to one another, but the subsistence of their nature belongs rather to the genus of relatives³⁸⁷. So, in order to make our account of them comprehensive, let us start our inquiry into them, making it as brief as possible.

³⁸⁴ See *Cat.* 5b11: ἔτι τῷ ποσῷ οὐδέν ἐστιν ἐναντίον. Sergius paraphrases Aristotle's text rather than quoting it.

³⁸⁵ In the second half of this paragraph, Sergius paraphrases *Cat.* 5b14–16: εἰ μὴ τὸ πολὺ τῷ ὀλίγῳ φαίη τις εἶναι ἐναντίον ἢ τὸ μέγα τῷ μικρῷ. τούτων δὲ οὐδέν ἐστι ποσὸν ἀλλὰ τῶν πρὸς τι.

³⁸⁶ Sergius probably means §224, where he mentioned that not admitting of contraries is characteristic not only of substance but also of quantity. Philoponus points out that it is Aristotle himself who mentioned large and small briefly in the section of the *Categories* dealing with substance, see Philoponus, *In Cat.* 94.6–7: ἐν γὰρ τῷ περὶ τῆς οὐσίας λόγῳ μνημονεύσας αὐτῶν μόνον παρήλθε, συγχωρήσας αὐτὰ ἐναντία εἶναι.

³⁸⁷ This is what Aristotle himself implies, as Philoponus stresses in *In Cat.* 94.9–10: καὶ δείκνυσι πάλιν διχῶς, διὰ τε τῆς ἐνστάσεως ὅτι οὐκ εἰσι ποσά, καὶ τῆς ἀντιπαραστάσεως ὅτι εἰ καὶ ποσὰ συγχωρηθεῖ εἶναι, οὐκ ἔστιν ἐναντία (cf. Ammonius, *In Cat.* 62.15–18).

298 Now, we say that one kind of quantity is definite and concrete and another is indefinite and may be grasped generally. As for the definite and concrete kind of quantity, it has been set out through the division discussed above. That which is indefinite may be comprehended through another division, when one takes the whole nature of quantity and divides it by saying that one part of it is regarded in terms of large and small and other in terms of many and few. About all bodies, surfaces and lines we say that some of them are larger or smaller than others. About time, language and number, on the other hand, we say that some of them are more or less than others. Thus, large and small apply to that kind of quantity whose parts have position, while many and few apply to that kind of quantity whose parts do not remain in one established position with respect to one another³⁸⁸.

299 That is why the Philosopher used the following examples for the two kinds of quantity and based his whole discussion of them on these. As examples for body, line and surface he took a mountain and a certain small grain, saying that any particular body is called large and small through comparison to other things of the same genus³⁸⁹. Concerning time, number and language, on the other hand, all things belonging to them are said to be many or few also through comparison to one another. Hence, if these things pertain to quantity, as we have shown, then they are not contrary to one another, but this comes from the category (κατηγορία) of relatives. So, from these and other (examples) one is able to see that they are not contraries³⁹⁰. 5b16–29

300 There is nothing at all that is called large or small simply, i.e. in its own right, but rather it is called thus in relation to something else. Thus, the same

³⁸⁸ Cf. Ammonius, *In Cat.* 63.2–9; Philoponus, *In Cat.* 95.4–96.20. Ammonius divides quantities into “definite” (ὀρισμένα), which are quantities in the strict sense, and “indefinite” (ἀόριστα), to which large and small belong and which are not quantities in the proper sense. Philoponus provides a more detailed analysis of these two kinds.

³⁸⁹ See *Cat.* 5b16–20: οὐδὲν γὰρ αὐτὸ καθ’ αὐτὸ μέγα λέγεται ἢ μικρόν, ἀλλὰ πρὸς ἕτερον ἀναφέρεται, οἷον ὄρος μὲν μικρόν λέγεται, κέγχρος δὲ μεγάλη τῷ τὴν μὲν τῶν ὁμογενῶν μείζον εἶναι, τὸ δὲ ἔλαττον τῶν ὁμογενῶν.

³⁹⁰ See Ammonius, *In Cat.* 62.2–18, particularly 62.15–18: εἰ γὰρ καὶ ἐναντία εἰσὶ τὸ μέγα καὶ τὸ μικρόν, οὐκ εἰσὶ ποσά, ἀλλὰ τῶν πρὸς τι· <...> ὕστερον δὲ δείκνυσιν ὅτι οὐδὲ ἐναντία εἰσιν, ἀλλὰ πρὸς ἕτερον ἀναφέρεται.

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mountain will be called large with regard to one (mountain) and small with regard to another. And also a grain will be called large as compared to one (grain) and small as compared to another. For if things were called large or small in virtue of themselves, then neither would something large ever be called small, nor would something small ever be called large, but each thing would always maintain the order of its nature. Thus, a grain which is incomparably smaller than any mountain could never be called large, nor could a mountain be called small³⁹¹. But since a grain is called large as compared to a smaller (grain), while a mountain is named small as compared to a bigger (mountain), it is apparent that these terms are applied only by way of comparison and do not derive from the nature of things³⁹².

301 Moreover, things that are contraries first have their own existence and only then fight with one another. But as for relatives, they are said of by way of reference (to one another) and it is in this reference that their names subsist³⁹³. What I mean is this. Black and white are contrary to one another, but each one of them has subsistence by itself and exists in its own right. Large and small, on the other hand, and plenty and few do not exist in their own right, but each one of these terms appears by way of reference to the other, while what is signified by them in itself is different from what is grasped from these namings. Hence, they do not belong to contraries, but to the category of relatives, in which we usually include a slave and a master, a son and a father, a half and a double, and other things like that. 5b30–33

391 Cf. *Cat.* 5b20–22: οὐκοῦν πρὸς ἕτερον ἢ ἀναφορά, ἐπεὶ εἶγε καθ' αὐτὸ μικρὸν ἢ μέγα ἐλέγετο, οὐκ ἂν ποτε τὸ μὲν ὄρος μικρὸν ἐλέγετο, ἢ δὲ κέγχρος μεγάλη.

392 Cf. Philoponus, *In Cat.* 94.16–25.

393 See Ammonius, *In Cat.* 63.15–18: δεῖ τὰ ἐναντία πρῶτον εἶναι καθ' ἑαυτὰ ἀπολελυμένην ἔχοντα τὴν ὑπόστασιν, εἶτα οὕτως συνέρχεσθαι καὶ τὴν μάχην ἀναδέχεσθαι, τοῦτ' ἔστιν ἀντικεῖσθαι, ὅπερ ἐπὶ τῶν πρὸς τι ἀδύνατον, διὸ οὔτε πολεμεῖ ἀλλήλοισι, ἀλλὰ μᾶλλον καὶ συνεισάγει (cf. Philoponus, *In Cat.* 97.10–12).

302 In this way, then, each of those things which are contraries persists even after the perishing of its counterpart. E.g., black exists apart from white, and also white does not perish if there is no black. But there is neither large apart from small nor few apart from many, since their subsistence is based on their reference to one another. Thus, if there is no father, then the word “son” may not be applied any more, and if a slave is taken away, the name “master” perishes together with him³⁹⁴.

303 One may also argue like this³⁹⁵. There is nothing that is able to be receptive of those things that are contraries at the same time. E.g., white and black may not be present in the same body at once. However, what is called large and small may be receptive of both (characteristics) at once, since, as we have said, for a mountain, for a grain and for many other things it is possible at the same time to be both large and small, many and few. Thus, the same mountain turns out to be large in relation to one (mountain) which is smaller than it, and small in relation to another which is bigger than it. Also, e.g., the number fifty is considered many in relation to twenty and few in relation to one hundred. Hence, also from this it becomes obvious that large and small do not belong to things which are contraries but to those that are grasped in relation to something else³⁹⁶.

304 In order to make this completely apparent, I am saying that there is nothing at all that might be contrary to itself or become its own opposite³⁹⁷. For what is receptive of contrariety remains one and the same at different times. But a person who states that large and small are among contraries, since each

394 Cf. Ammonius, *In Cat.* 63.20–25.

395 Ammonius notes that this argument of Aristotle proceeds by way of *reductio ad impossibile*, see *In Cat.* 63.27: ἕτερον ἐπιχείρημα διὰ τῆς εἰς ἀδύνατον ἀπαγωγῆς (cf. Philoponus, *In Cat.* 97.16).

396 Cf. Ammonius, *In Cat.* 63.28–64.9; Philoponus, *In Cat.* 95.4–96.20.

397 Here, as also above (cf. §223), Sergius applies both the term *dalqubla* and the adjective *saqqubla* synonymously for rendering the Gr. ἐναντίος, “contrary”. Porphyry, in his question-and-answer commentary, makes a distinction between opposites and contraries, affirming that some quantities may be opposed to one another but not as contraries, see Porphyry, *In Cat.* 108.5–12.

one of them is applied to the same subject by way of reference, as we have shown, to what is large or small, such a person is saying that the same thing is contrary to itself, thus being obviously wrong in stating what is impossible³⁹⁸.

305 Thus, the Philosopher demonstrates that, if they were contraries then they could not belong to quantity, and if they belonged to quantity then they could not be contraries. The truth is, however, that neither do they belong to quantity nor are they contraries, but rather they are associated with quantity through what is receptive of them³⁹⁹. Just as we have shown earlier that substance is receptive of contraries, so too we state about quantity that it is also receptive of them. Thus, as we have said, the truth is that their nature belongs to that genus which is grasped through relation to something else.

306 Now, if someone is absolutely bent on asserting that there is contrariety in quantity, he deduces it from the constitution of place⁴⁰⁰. Indeed, up and down are parts of space, and they are easily grasped as contraries. For a definition of what is contrary goes like this: they are those things that are most distant from one another⁴⁰¹. And this most of all applies to up and down, for these are furthest apart from one another. That is why someone might state, that they are contraries and occur in place, and since place belongs to quantity, they too belong to quantity. Thus, it turns out that there is contrariety in the division of quantity. 6a11–18

307 Now, up and down shall not be understood here as particular things in this world⁴⁰². But even if they were, they should still be grasped through their relation to something else. In fact, people are generally inclined to understand up as the heavenly sphere, above which there is no other physical place, and

398 Ammonius comments that with this argument Aristotle “increases the absurdity”: ἐπιτείνων οὖν τὸ ἀτοπὸν φησιν ὅτι εἰ ἔστι τὸ μέγα τῷ μικρῷ ἐναντίον, συμβήσεται οὐ μόνον τὸ αὐτὸ ἅμα κατὰ τὸν αὐτὸν χρόνον τῶν ἐναντίων εἶναι δεκτικόν, ἀλλὰ καὶ αὐτῷ ἑαυτῷ μάχεσθαι, ὅπερ ἀδύνατον (Ammonius, *In Cat.* 64.11–13; cf. Philoponus, *In Cat.* 97.26–29).

399 Cf. Ammonius, *In Cat.* 64.16–18: πρότερον ὑποθέμενος αὐτὰ ἐναντία εἶναι ἔδειξεν ὅτι ποσὰ οὐκ ἔστιν, ἔπειτα ὑπέθετο ποσὰ καὶ ἔδειξεν ὅτι οὐκ εἰσὶν ἐναντία. τὸ δὲ ἀληθές οὔτε ποσὰ ἔστιν οὔτε ἐναντία, τῶν δὲ πρὸς τι. See also Philoponus, *In Cat.* 97.31–98.1.

400 Sergius paraphrases *Cat.* 6a12–13: μάλιστα δὲ ἡ ἐναντιότης τοῦ ποσοῦ περὶ τὸν τόπον δοκεῖ ὑπάρχειν.

401 See *Cat.* 6a17–18: τὰ γὰρ πλείστον ἀλλήλων διεστηκότα τῶν ἐν τῷ αὐτῷ γένει ἐναντία ὀρίζονται. Cf. Ammonius, *In Cat.* 64.25–65.1 and Philoponus, *In Cat.* 99.22–23. Sergius omits the expression “in the same genus” in the definition (Ammonius, on the contrary, stresses this point, see 65.5–8).

402 Cf. Philoponus, *In Cat.* 99.23–24: κατὰ ἀλήθειαν γὰρ οὐκ ἔστιν ἐν τῇ φύσει τῶν ὄντων τὸ ἄνω καὶ τὸ κάτω.

חַסְדָּם. כִּי כִּי אֵלֶיךָ יִשְׁתַּחֲוֶה וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ.
 וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ. וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ.

P74r

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B128r

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וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ. וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ.
 וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ. וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ.

L28v

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וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ. וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ.
 וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ. וְיִשְׁתַּחֲוֶה לְפָנֶיךָ יְיָ אֱלֹהֵינוּ.

2 BLP: D | 3 BLP: B | 4 BLP: B | 5 BLP: B | 6 BLP: B | 7 BLP: B | 8 BLP: B | 9 BLP: B | 10 BLP: B | 11 BLP: B | 12 BLP: B | 13 BLP: B | 14 BLP: B | 15 BLP: B | 16 BLP: B | 17 BLP: B | 18 BLP: B | 19 BLP: B | 20 BLP: B

down as the earth, below which there is no other place. This is how human reason naturally understands up and down rather than through their relation to something else. But it is not this way that the ancients wished to explain the contrariety in the nature of things. For they did not define up as heaven, nor did they apply down to earth. Instead, they spoke of the outer limits and centre in the world, thus defining heaven as the limit and the boundary of everything, while placing earth in the centre of everything that exists⁴⁰³.

308 Thus, if there is no up and down in the world but (only) outer limits and centre, it is apparent that contrariety is neither in the world nor in quantity, since limits and centre are spoken of in relation to something else. For a limit is a limit of something, namely of what is limited by it; and also a centre is a centre of something, namely of what surrounds it as a sphere⁴⁰⁴. So, what has been said thus far concerning the fact that no contrariety is in quantity should suffice. Next, we will turn to other concomitants which the Philosopher considered to be peculiar to it.

[Other properties of quantity]

309 So, there is another property of quantity, namely that it does not admit of more and less, because none of its parts may be called more quantity than the other, but all of them equally possess its name and general nature. For number is not more quantity than language, neither is language less (quantity) than number. Similarly, number or language are no less quantity than line or body. So also, time, or place, or surface are called quantity to no greater or lesser an 6a19–25

⁴⁰³ Periphrasis of *Cat.* 6a11–12: τὴν πρὸς τὸ μέσον χώραν κάτω λέγοντες, διὰ τὸ πλείστην τῶ μέσῳ διάστασιν πρὸς τὰ πέρατα τοῦ κόσμου εἶναι. Cf. Philoponus, *In Cat.* 99.28–100.29.

⁴⁰⁴ Cf. Ammonius, *In Cat.* 65.1–3.

extent than them. But, as we have said, all its kinds are equally quantity, and none among them is more or less than the others⁴⁰⁵.

310 And this is plausible, for we have said above that there is no contrariety in quantity, it being from a mixture of contraries that more and less arise⁴⁰⁶. But since there are no contraries in quantity, it is apparent that more and less are not applied to it. However, although this property is characteristic of all of quantity, it is not found only in it. For it has been shown to us in the previous section that substance does not admit of more and less either⁴⁰⁷, but all parts of substance are equally said to be substance.

311 Now, the property of quantity in the strict sense which is concomitant for it alone and does not happen to occur to any other genera is being equal and unequal⁴⁰⁸. For this is characteristic of all parts of quantity and appears only in them⁴⁰⁹. A number is said to be equal to another number or unequal to it. Also, an utterance⁴¹⁰ is sometimes called equal to another utterance which is like it and sometimes unequal. Line, surface, and body, and also time and place — each one of them is called either equal to something of its kind or unequal⁴¹¹. What we obviously mean by this is that, when each one of them is compared to something else, we characterize it either as equal or as unequal. That is why an individual property of quantity in the strict sense which is concomitant for it alone, as we have said, is that it is always and by everyone called equal and unequal.

405 This argument does not appear in Ammonius and Philoponus. Instead, Philoponus stresses that, similar to substance, quantity is receptive of contraries (τῶν ἐναντίων εἶναι δεκτικὴν), but does not have the contrariety itself, see *In Cat.* 101.1–19.

406 Cf. Ammonius, *In Cat.* 65.13–16: καὶ τοῦτο εἰκότως· ὅπου γὰρ ἐστὶν ἐναντιότης, ἐκεῖ τὸ μᾶλλον καὶ ἥττον, ὅπου δὲ οὐκ ἐστὶν, οὐδὲ τὸ μᾶλλον καὶ ἥττον εὐρίσκεται· τὸ γὰρ μᾶλλον καὶ ἥττον ἐκ τῆς τῶν ἐναντίων μίξεως γίνεται (cf. Philoponus, *In Cat.* 101.23–25).

407 Cf. Ammonius, *In Cat.* 65.20–21; Philoponus, *In Cat.* 101.25–26.

408 See *Cat.* 6a26: ἴδιον δὲ μάλιστα τοῦ ποσοῦ τὸ ἴσον τε καὶ ἄνισον λέγεσθαι.

409 Cf. Philoponus, *In Cat.* 101.29–102.1: τοῦτο κυρίως ἰδίον ἐστὶ τοῦ ποσοῦ, ἐπειδὴ καὶ μόνῳ ὑπάρχει καὶ παντί.

410 *Syr. mella*, Gr. λόγος.

411 Cf. Philoponus, *In Cat.* 102.1–3.

312 These remarks bring to an end this book, which is the fourth of the treatise that I wrote on the study of logic, where I described quantity according to the teaching of Aristotle based on what I could remember⁴¹².

End of Book Four.

Divisions of Book Four

First division

Of quantities:

- some have parts that are separate and delimited from one another, i.e. number, language;
- others are in a single unity which has no parts separate from one another, i.e. line, surface, body, place, time.

Second division

Also, of quantities:

- some contain parts which have position and remain at their place, i.e. line, surface, body, place;
- others contain parts which are not fixed and are brought forth one by one, i.e. time, language, number.

⁴¹² It is possible that here Sergius refers to his notes (ὕπομνήματα) written on the basis of Ammonius' lectures.