Ancient Commentators on Aristotle

GENERAL EDITOR: RICHARD SORABJI

AMMONIUS: On Aristotle On Interpretation 1–8

Translated by
David Blank

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Introduction

Upon the death of Hermeias, the pupil of Syrianus (head of the Athenian school from 431/2) who had come to Alexandria as the first professor of Platonic philosophy in that seat of ancient learning which had meanwhile become the third See of Christendom, the city fathers continued to pay his salary to his widow. She was Aedesia, a relative of Syrianus, and she had been destined to marry Proclus (410-485),[1] until a divine sign warned against it; she died in old age around 475. Her marriage to Hermeias produced three boys, one of whom died in childhood under nearly saintly conditions and two of whom became philosophers: Ammonius, who must have been born sometime after 435, perhaps around 440-5,[2] and Heliodorus.

The continuation of Hermeias' salary was an investment by Alexandria in the education of the two sons, particularly Ammonius, who was to assume his father's chair upon his return from Athens. Ammonius studied in Athens with Proclus, who succeeded Syrianus in the professorship after the latter's death. He returned to Alexandria as professor by about 470 and taught there successfully until his death, between 517 and 526.[3] The often critical Damascius is expansive in his praise of Ammonius,[4] saying that he stood out even among his elder peers, that he helped most of the exegetes of his time, and

[1] Proclus' chronology makes better sense with this date of birth, although 409, 412 and 413 are also possible: cf. E. Zeller, *Die Philosophie der Griechen in ihrer geschichtlichen Entwicklung* III.2, Leipzig 1923, 5th ed., 835 n. 2. He came to Athens in his 20th year (thus, 430) and studied two years with Plutarch (Marinus *Life of Proclus* 12) before the latter was succeeded by Syrianus in 431/2.

[2] The *terminus post quem* is inferred from the date of Proclus' arrival in Athens and study with Syrianus; the probable later date is inferred from the late date of his death.

[3] Most of our scanty information on Ammonius comes from Damascius' *Life of Isidore* 74, 76, 79 ap. Photium *Bibliotheca*, cod. 242 Henry, and excerpts from this same work in the *Suda* (II 161,18ff., 412,22ff. Adler); the *Life* was reconstructed in German by R. Asmus, *Das Leben des Philosophen Isidoros von Damaskios aus Damaskos*, Leipzig 1911, and in the Greek by C. Zintzen, *Damascii Vitae Isidori reliquiae*, Hildesheim 1967. The evidence is summarized by L.G. Westerink, 'The Alexandrian commentators and the introductions to their commentaries', in R. Sorabji (ed.), *Aristotle Transformed: The Ancient Commentators and Their Influence*, London and Ithaca, N.Y. 1990, 325-48 at 325-7 and id., *The Greek Commentaries on Plato's 'Phaedo'*, vol. I *Olympiodorus*, Verh. d. Koninkl. Nederlandse Akad. van Wetensch., Afd. Letterkunde, n.s. 92, 1976, 19 and 24.

[4] cf. Damascius ap. Photium *Bibliotheca*, cod. 181, 127a.

that he had a broad knowledge, particularly of astronomy and geometry. Damascius also notes that Ammonius lectured primarily on Aristotle,[5] although Damascius heard him give a course on Plato,[6] and Olympiodorus says that he attended the elderly Ammonius' lectures on the *Gorgias*.[7]

The commentary on Aristotle's *On Interpretation* is the only one of Ammonius' surviving works written out by himself. We hear of monographic treatments of *Phaedo* 69D5-6 and of the hypothetical syllogisms, but of no other commentaries written by Ammonius.[8] His lectures on other works of Aristotle, as well as on Porphyry's *Isagoge*, survive as they were written down by his students[9] and published under his name or theirs: under his own name are lectures on Porphyry's *Isagoge*, Aristotle's *Categories* and *Prior Analytics*; under Asclepius' name are those on the *Metaphysics*; under Philoponus' those on *Categories*, *Prior* and *Posterior Analytics*, *Physics*, *On Generation and Corruption*, *On the Soul*, and *Generation of Animals*.[10] Such publications follow the format of the lectures (*sunousiai*) themselves, or as Proclus apparently called it, the 'joint reading' (*sunanagnôsis*)[11] of a text by the master and his pupils, and they were usually said to be 'from the voice' (*apo phônês*) of the master.[12] Often referred to as '*skholia*' ('school explanations of a text'),[13] these lecture notes retain their division into individual lectures (*praxeis*) and show a particular structure within each lecture: an abbreviated lemma[14] is followed by a general explanation of content (*theôria*) and a particular explanation of the text (*lexis*); their sentence-structure is relatively uncomplicated. Ammonius' commentary on the *Categories* is a good example of this genre.

The commentary on *On Interpretation* is labelled not '*skholia*', but '*hupomnêma*', which could be translated 'memory aid' or 'treatise', but should perhaps be rendered 'commentary', as it is the standard Neoplatonic name for a commentary as written out by its author.[15] Marinus reports in his *Life of Proclus* (c. 12):

[5] *Life of Isidore* 79 = Zintzen 110.
[6] ibid., fr. 128 = Zintzen 111,10-11.
[7] *in Gorg*. 199,8-10.
[8] Zeller, op. cit., 894 n. 1.
[9] cf. M. Richard, '*Apo Phônês*', *Byzantion* 20 (1950) 191-222, who speculates (192) that Ammonius did not particularly enjoy writing.
[10] The list appears in Westerink, 'The Alexandrian commentators', op. cit., 326.
[11] cf. Proclus *in Remp*. I 5,3; Marinus *Life of Proclus* 10; Elias *in Cat*. 107,24ff.
[12] cf. Richard, op. cit., 198-9.
[13] For the terms and distinctions in these sentences, see E. Lamberz, 'Form des philosophischen Kommentars', in J. Pépin and H.D. Saffrey (eds), *Proclus: lecteur et interprète des anciens*, Actes du colloque international du CNRS, Paris (2-4 octobre 1985), Paris 1987, 1-20.
[14] This was the original format, as Lamberz (op. cit., 7ff.) shows.
[15] ibid., 2-4.

> Proclus read with Plutarch Aristotle's *On the Soul* and Plato's *Phaedo*. And the great one assigned him also to take down what was said and, playing on the youth's ambition, he told him that once the notes (*skholia*) had been supplemented (*sumplêrôthenta*) by him there would be commentaries (*hupomnêmata*) on the *Phaedo* circulating under the name of Proclus too.[16]

Apparently, if the lecture notes were revised and supplemented, they could become *hupomnêmata*, otherwise they would remain *skholia*. Ammonius' commentary on *On Interpretation* does not present the aspect of lecture notes: it is not divided into *praxeis*, there is no standard pattern of general exegesis (*theôria*) followed by individual explanation (*lexis*), the language displays a high stylistic level, and it is written in long and often quite complex sentences. Lamberz, however, indicates that there are some points at which one can see the lecture structure in Ammonius' work.[17] Now, Ammonius states that his work is based on his memory of Proclus' exegesis of *On Interpretation*, and, if he is able to add to it, thanks should go to the god of eloquence, Hermes (1,6-11). It therefore seems likely that Ammonius has done something similar to what Plutarch instructed Proclus to do: he has taken his notes from Proclus' lectures, revised and supplemented them, and published them as an *hupomnêma* under his own name. This procedure might explain the curious fact that Proclus' name is mentioned only once more (181,30) by Ammonius in this work, which is said to owe so much to him, and this second reference too points to Proclus' oral tuition.[18] Thus a substantial portion of Ammonius' work represents the lectures of Proclus.

Ammonius' main source for the supplementation of Proclus' lectures will have been the commentary of Porphyry, except, of course, for chapter 14, which Porphyry held to be spurious and on which he did not comment (252,8). Porphyry's commentary was said by Stephanus (*in Int*. 63,9) to have been 'extensive', and it seems to have been the major source of Boethius' commentary.[19] There are many

[16] It is possible that, in context, Marinus thinks of this as an arrangement specially suited to the old age of Plutarch, which made lecturing 'difficult' for him. But it nonetheless makes sense as a not unusual practice.

[17] ibid., 18 and n. 69 refer to the following passages: 165,4; 243,22-4; 257,9-10; 272,10-11; I would add 98,5 and 120,13.

[18] '… but our professor and benefactor taught (*paredidou*) us rules which were very technical, according to which it is possible to discover the consequent to a given premiss.'

[19] Boethius II 7.5-9: '… the exposition of this book we have compiled, taking as much as possible from Porphyry, although we have also taken from others, and translating it into Latin. For he seems to us to excel as an expositor both in sharpness of mind and in the disposition of his comments.' cf. J. Shiel, 'Boethius' commentaries on Aristotle', in *Aristotle Transformed*, op. cit., 349-72: at 356-61 Shiel postulates that Boethius' sole source was a manuscript of Aristotle heavily annotated with scholia whose main source was Porphyry; S. Ebbesen, 'Boethius as an Aristotelian commentator', ibid., 373-91,

points of contact between Ammonius and Boethius, and when they overlap, that appears to be good evidence for the reconstruction of Porphyry's great commentary. When Ammonius cites commentators earlier than Porphyry, i.e. Alexander of Aphrodisias, Aspasius, Herminus, and the Stoics, he may safely be assumed to be citing them from Porphyry, given that he usually appends Porphyry's critique of each citation.[20] Note too that Boethius says that Porphyry's commentary included an exhaustive history of the problems presented by the theory of signification (II 26.18-21). Porphyry was not the only commentator to consider chapter 14 spurious: Ammonius too held it for the work either of a later writer than Aristotle or else of Aristotle writing an exercise (251,9-16). He decided to comment on this chapter nonetheless, ignoring the 'common practice' (*sunêtheia*), since it was relevant to the concerns of *On Interpretation* (252,10ff.). It is possible that Proclus' lectures did not cover this chapter either, and Ammonius is forced to rely on the commentary of Syrianus, to which, he says, at times he will have nothing to add and will hence repeat verbatim (254,22-31; cf. 253,12).[21]

Of post-Porphyrian commentators, then, Ammonius probably used Syrianus to supplement the notes he had from his 'joint reading' with Proclus. Except for the treatment of chapter 14, however, Ammonius may not have used Syrianus at first hand; Boethius, who cited Syrianus for the list of propositions in the exposition of chapter 10 (II 321.21), probably had him only through an intermediary.[22] It appears that Ammonius' presentation and critique of Syrianus' views about the undetermined negation (110,30ff.) comes from the latter's pupil Proclus, since the section is introduced with a citation from

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at 370-1 modifies Shiel's thesis, noting (correctly, I believe) that such extensive marginal annotation is unlikely in late antiquity and guessing that, although the commentary of Porphyry (under separate cover) was Boethius' main source, he may have used other works as well. This would fit with Boethius' praise of Porphyry as being better than the other commentators, as well as his mention of 'Aspasius, Porphyry, and Alexander in the commentaries they published on this book' (II 183.20f.).

[20] cf. Ebbesen, 'Porphyry's legacy to logic: a reconstruction', in *Aristotle Transformed*, op. cit., 141-71 at 141; Shiel, op. cit., 358 n. 37.

[21] It is also possible, although I think it less likely, that Ammonius is in this passage reproducing Proclus, who relied for this chapter on Syrianus. It sounds rather like one writer (Ammonius) reproducing another's written work (Syrianus'), rather than a writer reproducing an oral citation (Proclus) of a written work. Further, the reference to leaving this chapter aside as 'the common practice' would be odd coming from Proclus, whose teacher Syrianus commented on it, while it would fit Ammonius better, if his teacher Proclus skipped it.

[22] Shiel (op. cit., 359) guesses that the list in chapter 10 may be based on no more than a Greek diagram. If Boethius had been able to consult Syrianus' commentary, he would probably have been able to do better than the meagre bits he gives about chapter 14.

Aristotle's critique of Plato.[23] Boethius, however, has a different critique of Syrianus on this point (II 172.13ff.), and its origin is unknown.[24] Since, then, Boethius certainly had a post-Syrianic source which does not appear in Ammonius, there is no reason to think that he knew Ammonius. This fits with the fact that Ammonius offers passages of certain sorts which do not appear in Boethius, viz. explanations of the relation to Neoplatonic metaphysics and especially matter/form theory, comparisons with Plato's *Cratylus*, gratuitous expositions of words used in multiple senses (*pollakhôs legomena*). Probably these additions originate with Proclus' lectures. The other post-Porphyrian commentator cited by Ammonius is Porphyry's pupil, 'the divine' Iamblichus.[25] Simplicius cited Iamblichus frequently in his commentary on the *Categories*, saying that Iamblichus' commentary on that work was long; mostly followed Porphyry, sometimes even verbatim, sometimes with some critique; and added the intellectual speculation (*noera theôria*) of Neoplatonism to nearly every chapter.[26] Iamblichus, however, may not have actually written a commentary on *On Interpretation*,[27] and he in any case does not appear to have been a major source for Ammonius' commentary on that work.

Ammonius says elsewhere that the point of studying Aristotle's philosophy is to be lifted up to the common principle of all things and to know that it is one (*in Cat.* 6,10ff.); his master Proclus will hardly have thought differently about that. For this reason the commentary presents passages such as 24,24-9, in which the Aristotelian triad of vocal sound (*phônê*), passion of the soul (*pathêma tês psukhês*), and thing (*pragma*) are said to correspond to the Neoplatonic hypostases of Soul, Mind, and God. Given the rôle of Proclus in the commentary, it is not surprising if elements of his metaphysics crop up here and there.[28]

The reading of Aristotle was to be followed by the study of Plato, and the philosophies of the two masters were generally to be harmo-

[23] Syrianus is not named by Ammonius here; elsewhere (137,16; 253,12) he is called 'Syrianus the Great'.

[24] This source could have been someone outside of the tradition of Syrianus' pupils, for Boethius persistently refers to 'Syrianus, whose cognomen was Philoxenus' or 'Syrianus Philoxenus' (II 18.26, 87.30, 321.21; but just the name at 172.13 and at two places in proximity to a full citation, viz. 88.28, 324.15).

[25] 135,14; 202,3.17; 227,31 (= fr. 147, 138, 139, 142 in B.D. Larsen, *Jamblique de Chalcis: exégète et philosophe* vol. 2, Testimonia et fragmenta exegetica, Aarhus 1972).

[26] Simplicius *in Cat.*, 2,9ff. = fr. 2 Larsen.

[27] Larsen, op. cit., 53 says that, while Iamblichus commented on *On Interpretation*, he may not have written a commentary on it; he notes that, at times, Ammonius' citations appear to have come from Iamblichus' commentary on the *Prior Analytics*.

[28] cf. K. Verrycken, 'The metaphysics of Ammonius son of Hermeias', in *Aristotle Transformed*, op. cit., 199-231, at 212-15.

nized.[29] Thus, we should expect to see substantial overlap between the abbreviated notes we have from Proclus' lectures on Plato's *Cratylus* and Ammonius' version of Proclus' lectures on *On Interpretation*. In the Platonic commentary Proclus has various remarks clarifying what, in his view, Aristotle is about in *Int*., and he criticizes (*in Crat*. 16.28ff.) Aristotle's view (*Int*. 17a1-2) that names are significant not as a tool but by convention, which obviously contradicts *Cratylus* 386Dff. Ammonius' commentary, on the other hand, tries to show that, properly understood, Aristotle's doctrine is in agreement with Socrates' in the *Cratylus*. But it is not the case that the *Cratylus* commentary simply condemns Aristotle, while *in Int*. tries to save him.[30] One obvious problem for the Platonist exegete of *Int*. is the Aristotelian claim that truth is to be found only in compound thoughts, and secondarily in compound sentences (16a9-18). Proclus (12.6ff.) and Ammonius (27,27ff.) both list in essentially the same way the senses of truth recognized by Plato, Ammonius' explanation being used to reconcile Plato and Aristotle on this point. Further, Plato's dialogue does not make Socrates' position very clear, but Proclus clarifies it for the benefit of his own semantic theory (*in Crat*. 4.11ff., 8.7ff.): Socrates showed, according to Proclus, that some names (eternal ones) were natural and others (perishable ones) imposed. When Proclus attacks the argument which he attributes to Aristotle against the idea that names are natural (*in Crat*. 25.17ff.), he adds: 'even if one agrees to the premisses, nonetheless the conclusion is no more Aristotelian than Platonic; for Plato too would say that the name is not natural, as Socrates says against Cratylus later (435A); for "by nature" is double, just as "by imposition" is.' Thus he takes advantage of his interpretation of Socrates' theory in order to suggest that Plato and Aristotle are not necessarily fully at odds.

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[29] cf. R. Sorabji, 'The ancient commentators on Aristotle', in *Aristotle Transformed*, op. cit., 1-30 at 3-5.

[30] For some remarks on the relation between Proclus *in Crat*. and Ammonius *in Int*., see A.D.R. Sheppard, 'Proclus' philosophical method of exegesis: the use of Aristotle and the Stoics in the commentary on the *Cratylus*', in *Proclus: Lecteur et interprète des anciens*, op. cit., 137-15 at 140-9. See also my notes on, e.g., 19,34; 21,32; 23,1; 63,17.

I needed. Jean Lallot was kind enough to send me a copy of the translation of the first five chapters of Ammonius' commentary which he published together with F. Ildefonse.[31] This reached me while I was revising my own translation and caused me to think again about certain passages. Thanks are also due to Patrick Gomez for his work on the Indices, as well as to UCLA's Faculty Senate, which financed his work.

[31] *Archives et Documents de la Société d'Histoire et d'Épistémologie des Sciences du Langage*, Séconde Série 7, 1992, 1-91.

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Ammonius

On Aristotle
On Interpretation 1-8

Translation

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Ammonius the son of Hermeias: Commentary on the *On Interpretation*

<PREFACE>

Aristotle's book *On Interpretation* is greatly renowned among philosophers both for the sagacity of the observations it hands down and for the difficulty of its style.[1] For this reason many interpreters have devoted many lucubrations to it. Now, we have recorded the interpretations of our divine teacher Proclus, successor to the chair of Plato and a man who attained the limits of human capacity both in the ability to interpret the opinions of the ancients and in the scientific judgement of the nature of reality. If, having done that, we too are able to add anything to the clarification of the book, we owe great thanks to the god of eloquence.[2] 1,5 10

<The Five Preliminary Points of Explication>

Let our interpretation begin with the outline of the five headings which usually precede the explication of the text.[3] Let us say what is the purpose (*prothesis*) of *On Interpretation*, where it stands in the order (*taxis*) of the rest of the writings of Aristotle's course in logic (*logikê pragmateia*), what the reason for the title (*epigraphê*) 'On Interpretation' is, that this is a genuine book of Aristotle, and finally into what chapters the book divides. An additional investigation of the usefulness (*khrêsimon*) of *On Interpretation* to whoever wants to engage in philosophy will be unnecessary, as the purpose of the book, once it becomes clear, will demonstrate. 15 20

<Purpose>

So what is this purpose? This must be defined before the rest, and everything which comes after this must be related to it. In order to grasp it in an orderly manner, we must remember what was said in the preface to our reading of the *Categories*:[4] the course on logic has as its goal (*telos*) the discovery (*heuresis*) of demonstration (*apodeixis*). Preceding this is the understanding of the simple syllogism, which in turn begins with the theory of the simple sentences which compose the syllogism, which in turn begins with the comprehension of all the types of simple vocal sounds (*phônai*) out of which 2,1

the simple sentence has its origin. Therefore, once Aristotle has given his course on simple vocal sounds in his book of the *Categories*,[5] in this book he sets himself the task of giving us the simple sentences which are completed out of the interweaving (*sumplokê*) of the simple vocal sounds and which, since they are proposed (*proteinomenoi*)[6] by those who want to perform some syllogistic reasoning to their partners in reasoning, are called 'propositions' (*protaseis*). However, there are five kinds of sentence (*eidê tou logou*),[7] namely the Vocative (*klêtikos*), as in: 'O happy Son of Atreus',[8] the Imperative (*prostaktikos*), as in: 'Go! Away, swift Iris!',[9] the Interrogative (*erôtêmatikos*), as in: 'Who and from where are you?',[10] the Optative (*euktikos*), as in: 'If only, Father Zeus …',[11] and last of all the Assertoric (*apophantikos*), by which we make an assertion about anything at all, for example: 'But gods know all things',[12] 'All soul is immortal'.[13] Aristotle does not instruct us in this course about every simple sentence, but only about the Assertoric – and rightly so, for only this type of sentence is receptive of truth and falsity, and under this type fall demonstrations, for the sake of which the whole course in logic has been composed by the Philosopher.

The Stoics[14] call the assertoric sentence a 'decision' (*axiôma*), the optative an 'imprecative' (*aratikos*), the vocative an 'addressing' (*prosagoreutikos*), and they add to these five other kinds of sentence, which clearly can be brought back under the kinds already enumerated. Thus they say that one is a 'swearing' (*omotikos*), for example: 'Now let earth know this!',[15] another is a 'positing' (*ekthetikos*), as in: 'Let this be a straight line!', another is an 'hypothetical' (*hupothetikos*), as in: 'Let it be assumed that the earth is the center of the sphere of the sun!', and another is a 'quasi-decision' (*homoios axiômati*), for example: 'How pretentiously does Fortune toy with men's lives.'[16] All of these, since they are receptive of both falsity and truth, could be subsumed under the assertoric:[17] the assertion of the 'swearing' sentence has been needlessly lengthened by addition of the divinity as a witness, and that of the 'quasi-decision' by the addition of the emphatic adverb 'how'. And they say there is a fifth one in addition to these, namely the 'dubitative' (*epaporêtikos*), for example: 'Davos is here; what on earth will he announce, then?'[18] This is evidently the same as the interrogative, except that it adds the reason for the question.

Again, there are two kinds of assertoric sentence, one called 'predicative' (*katêgorikos*), the other 'hypothetical' (*hupothetikos*). The predicative indicates what belongs or does not belong to what, as when we say 'Socrates is walking; Socrates is not walking' (for we predicate 'walking'[19] of Socrates, first positively, then negatively). The hypothetical says what is or is not if something is, or what is or is not if something is not, as when we say 'If it is a man, it is also an

animal; If it is a man, it is not a stone; If it is not day, it is night; If it is not day, the sun is not above the earth'. Aristotle teaches that the predicative is the only kind of assertoric sentence, since it is complete (*autotelês*) and useful for demonstrations, while the hypothetical, since it is incomplete (*ellipês*) and utterly lacking the completion of the predicative, he will never judge worthy of primary concern. Hypothetical syllogisms assume the so-called 'substitution' (*metalêpsis*) or 'minor premiss' (*proslêpsis*) without demonstration – as the conditional (*sunêmmenon*) or the disjunctive (*diezeugmenon*) sometimes do as well – though it requires an argument, so they get *ex hypothesi* the very credibility which was the reason their first hypotheses were accepted. Thus, if one uses another hypothetical syllogism in order to establish these hypotheses, one will need another support for the proof of the hypotheses in it in turn, and for that other one yet another, and so on *ad infinitum*, as long as one wants to strengthen the hypotheses by means of hypotheses. But if the demonstration is to be complete and self-sufficient, it is clear that the predicative syllogism, which professes to demonstrate its object without any hypothesis, is needed. This is also why we call predicative syllogisms simply 'syllogisms', but we call hypothetical syllogisms by the full name '*ex hypothesi* syllogisms', and not simply 'syllogisms', in addition to the fact that, moreover, hypothetical assertions originate from predicatives: they signify either the consequence (*akolouthia*) or disagreement (*diastasis*) of one predicative premiss with another, joining them to one another either by a so-called 'copulative' (*sumplektikos*) or a 'disjunctive' (*diazeuktikos*) conjunction, so that the sentence comprised of them seems to be one.[20] For these reasons, then, Aristotle inquires into the predicative form of the assertoric sentence only.

So, in brief, the purpose of the present course is to discuss the first composition (*sunthesis*) of the simple vocal sounds, which occurs in the predicative form of the assertoric sentence. I specify 'first' because the composition of the simple vocal sounds also produces syllogisms, but that is not the *first* composition. Rather, it is the composition completed through the interweaving (*sumplokê*) of the sentences which have come to be in the first composition. Therefore, he will examine these simple sentences in this course, considering them in and of themselves, just as assertions, and not as premisses (*protaseis*). In the *Analytics*, however, he will correctly consider that he should examine them by taking them as parts of syllogisms and at the same time as premisses. Insofar, namely, as they are proposed to conversation partners by those who wish to perform syllogistic reasoning did the ancients call them 'propositions' (cf. above, 2,8f.).[21]

<Position>

From what has been said we shall see the position (*taxis*) of the book as well. If simple sentences occupy the position intermediate between simple vocal sounds and syllogisms, and the *Categories* gives the theory of simple vocal sounds, while the present book gives that of simple sentences and the *Analytics* that of syllogisms, it is clear that <our book> occupies the intermediate position between the *Categories* and the *Analytics*, i.e. following the *Categories* and preceding the *Analytics* and all the rest of the writings of the course on logic.

That the present book is useful for this course on logic, and that this in turn is useful for all of philosophy, is pellucid from what has been said.

<Title>

After this, we must investigate the reason for the title and say what Aristotle meant by 'interpretation' (*hermêneia*) when he titled the book *On Interpretation*: he surely did not entitle it *On Interpretation* thinking that 'interpretation' meant 'written style' (*hê logographikê idea*) and intending to write about that in the present book, as did the Demetrius who wrote a book about written style (*hermêneia*).[22] Now our soul has two <sets of> capacities (*dunameis*), intellectual (*gnôstikai*) and life-sustaining (*zôtikai*) or appetitive (*orektikai*). By 'intellectual' capacities I mean the ones by which we know each of the things that are, e.g. mind, thought, opinion, imagination, and sensation. By 'appetitive' I mean the capacities by which we desire good things, both real and imagined, e.g. will, choice, anger and desire. The four types of sentence other than the assertoric proceed from the appetitive capacities: the soul does not act in and of itself, but refers to someone else, who seems to be able to contribute to gaining the desire, and it seeks from him either a sentence (as in the case of the so-called questioning [*pusmatikos*] or interrogative [*erôtêmatikos*] sentence), or a thing (*pragma*), and if a thing, then it is aiming at getting either the very person who is being addressed (as in the vocative) or some action of his, an action which is sought from him as a superior (as in the case of the wish) or as an inferior (as in the case of the command properly so called).[23] Only the assertoric sentence proceeds from the intellectual capacities, and it is annunciative of the knowledge of things which, truly or seemingly, arises within us. This is also why only this type <of sentence> is receptive of truth or falsity, and none of the others is. This type of sentence, then, the assertoric, Aristotle deems worthy to call 'interpretation', since it interprets the soul's knowledge.[24] Since, therefore, as he himself will say in the preface of this book, there are also other sentence<-types> besides

the assertoric (in fact, he says the wish is a sentence), but the assertoric belongs to this investigation, this is why he called the book *On Interpretation*, since it made no difference whether he titled it thus or *On the Assertoric Sentence*.

<Authenticity>

As for the book's being a genuine work of the Philosopher, none of those who studied the writings of Aristotle wished to cast doubt on it, in view of the persuasiveness of its content, the technical character of the observations it transmits (a character quite usual for the Philosopher) and the agreement <of our treatise> with his other courses – except for Andronicus of Rhodes, who was eleventh in succession from Aristotle. When Andronicus heard Aristotle in the prooemium of this book (16a3) calling thoughts (*noêmata*) 'passions of the soul' (*pathêmata tês psukhês*) and adding (16a8) 'these have been discussed in <my> *On the Soul*', he failed to understand where in the course *On the Soul* the Philosopher called thoughts 'passions of the soul' and, thinking it necessary for one of the two courses, this one and *On the Soul*, to be shown to be a counterfeit <work> of Aristotle, he considered he had to reject this one as spurious, rather than *On the Soul*. It must, however, be understood that often in *On the Soul* the imagination (*phantasia*) is called a 'passive intelligence' (*pathêtikos nous*) by the Philosopher: 'intelligence', since it has within itself the knowable (*gnôston*) and differs in this way from sensation (*aisthêsis*), in that the external things which sensation knows but always needs to have present in order to function are the very same things of which the imagination takes an imprint, holds their imprints (*tupoi*) in itself and is able to apply these <imprints> without need of the external objects <themselves> (for this reason even in our dreams, when our senses remain inactive, we act in imagination); 'passive', since imagination knows each thing along with some division and separation, inasmuch as it holds its being (*ousia*) and actuality (*energeia*) inseparable from body and is a principle of the senses. Thus, it should be clear that Aristotle is in that work too calling thoughts 'passions of the soul', when he shows in his *On the Soul* that our soul knows none of the things here without this 'passive intelligence', saying: 'But we do not remember, because this [i.e. the active intellect] is impassive, while the passive intelligence is corruptible, and without this <our soul> knows nothing',[25] and in turn: 'So, the intelligent <part of the soul> (*to noêtikon*) thinks the forms (*ta eidê*) in images (*phantasmata*)',[26] and in addition: 'What, then, will keep the first thoughts from being images (*phantasmata*)? – perhaps the others are also not images, but are not without images.'[27] And he also clearly extends to all the activities of the soul in common the

name 'passion' (*pathos*); at any rate, he says there[28] that the passions of the soul pose a dilemma as to 'whether they are all shared by the one who has them, or whether there is one which is particular to the soul itself'. In solving this dilemma he adds: 'Of most things <the soul> seems to suffer or to do none without the body, for example becoming angry, taking heart, desiring, sensing in general. But knowing seems to be particular, if anything is; and, if it too is an imagination or is not without imagination, not even this could exist without body.'[29] Even before this, in the prooemium of the same course, he says: 'We also seek to investigate and to know both its [i.e. the soul's] nature and its being, and then all its accidents, of which some seem to be the particular passions of the soul, while others seem to belong in common to the animals too, because of her [i.e. the soul].'[30] In these words he is clearly not declining to call the knowing which belongs to the logical part of our soul too, even if it occurs without imagination, a 'passion', although this is obviously not in the aforementioned sense, but rather because of the fact that in its case the power leading to it pre-exists in time each activity – which is to say, the imperfect precedes the perfect – in order to distinguish it from the activity of the intelligence which is called 'complete' and has its activity coincident with its being, so as[31] to be impassive, unmixed and separate from all body.[32] This, he shows, is our intelligence and he distinguishes it from that which is properly called 'passive' (*pathêtikos*), which, as we said, does not differ at all from imagination. This is also why, when he is seeking the cause of our remembering, he says that the part of the soul according to which we possess our being is impassive, while the passive intelligence is corruptible, and he shows that the fact that our knowing is intertwined with this <intelligence>, which is corruptible, is the cause of forgetting. Therefore, Andronicus was not correct to suspect the <present> book of not being a genuine work of the Philosopher.[33]

<Division into sections>

Of the tasks set out at the beginning it remains for us to give the division of this book into its main sections (*kephalaia*).[34] Now, it divides clearly into four sections,[35] the first being about the principles (*arkhai*) of the assertoric sentence. I mean by 'principles' of the assertoric sentence the things which contribute to its elucidation, just as you would say that definitions (*horoi*), postulates (*aitêmata*) and the so-called 'common notions' (*koinai ennoiai*) are 'principles' of geometry, the same things which Aristotle in the *Categories*[36] decided to call 'elements' of the <geometrical> figures. Now, since in the elucidation of the propositions he will call something[37] a name (*onoma*) and something a verb (*rhêma*) and an affirmation (*katapha-*

sis) and a negation (*apophasis*) and an assertion (*apophansis*) and a contradiction (*antiphasis*),[38] before saying anything about propositions, he reasonably tells us what each of these names means. In fact, it was logical to make <these names> familiar to beginners first, and then to apply them to the elucidation of the present subject-matter. Thus, this is the first main section of the book, the one which speaks about the so-called 'principles' of the assertoric sentence. The three succeeding <main sections> give us, then, the propositions themselves. But some propositions consist of only two simple vocal sounds intertwined, one subjected (*hupokeimenê*) and the other predicated (*katêgoroumenê*) – as when I say 'Socrates walks'; for here the vocal sound 'Socrates' is called a 'subject term' (*hupokeimenos horos*) and 'walks' is predicated, because in every predicative sentence one part is that about which the sentence is, and the other part is that which is said about that thing; the part about which the sentence is, here 'Socrates', is called a 'subject' because it accepts the predications <made> of it, in this case 'walks', <which is> 'predicated' insofar as it is addressed and said of the former. Now since, as we said, some propositions are complete with just a subject and predicate, while others also have a third, added predicate (*proskatêgoroumenon*) – as when I say 'Socrates is just' (for here 'Socrates' is subject, 'just' predicate, and 'is' added predicate) – and others add a manner which signifies how the predicate belongs to the subject, for example: necessarily, impossibly, possibly, correctly, clearly, justly – as when I say 'It is possible that Socrates is musical' or 'Socrates explains clearly' – and since it is not possible to invent more terms than these which when intertwined with one another create one proposition, the second chapter of the book gives us the simplest propositions and will be about the proposition or assertion <consisting> of subject and predicate, the third <gives> the propositions more highly compounded than these because of the addition of the added predicate and will be about the proposition or assertion <consisting> of subject, predicate and a third thing predicated in addition, and the fourth <chapter gives> the modal propositions. So, in this way Aristotle brings his course to a close, having gone through all the kinds of propositions and confidently shown that there are not more assertions[39] than these. But after the actual end of the book, a particular problem will be treated besides these, it too being relevant to the present study.[40]

Since these things have been set out, it now remains for us to move to the explanation of the text, which we decided to exhibit in its entirety in order that one might see that our explanation (*ekdosis*) is more accurate, since due to its involution <the text> is full of significance and concentration, and sometimes changes its whole meaning

as a result of a slight alteration, a fate which it has already suffered in many of the copies.[41]

<CHAPTER 1>

16a1 First we must establish what a name is and what a verb is.[42]

<The meaning of 'establish'>

Aristotle's task, as we said, is to transmit to us the doctrine of the assertoric sentence. Since, however, every assertion comes to be out
9,1 of names[43] and verbs, as when I say 'Socrates walks', and it is always necessary to know the simpler things before the things which consist of them, for this reason he [i.e. Aristotle] makes a most fitting beginning of his course <with> the study of the existence of the name
5 and the verb. 'Establish' (*thesthai*), you see, is used here instead of 'define' (*horisasthai*),[44] and although it is said in other senses too, here it refers, as we said, to the definition.[45] And that 'establish' is said in several ways is clear: for we often call hypotheses 'theses' [i.e. suppositions], as when we say 'Assume that the theatre holds a crowd of such and such a size', 'Assume that it has a size of ten cubits', or
10 '<Assume you> are king; so, what will you do?'; and we also call the paradoxical notions of some famous philosopher about familiar things 'theses', for example that 'everything is in motion and the things that are partake in no way of rest', as Heraclitus said, or that 'what is is one', as Parmenides thought;[46] we also call agreements 'theses', since we say that to retract one's agreement is to 'take it back' (*anathes-*
15 *thai*);[47] some people also call the adverbs which express obligation (*epirrhêmata thetika*),[48] 'theses', such as 'one-must-marry' (*gamêteon*) or 'one-must-sail' (*pleusteon*); in addition, we also call definitions 'theses', since they precede proofs (*apodeixeis*) – for if proofs are carried out from what belongs essentially to things (*pragmata*), and if definitions signify the essence of each existing thing, then it is reasonable that the definitions must precede the proofs. Aristotle, <in
20 a usage> even more general than this one, calls 'theses' absolutely all immediate principles of proofs which are distinguished logically (*antidiairoumenai*) from the axioms, such as definitions (as was said), postulates and hypotheses, which actually need proof but are assumed without it, as is clearly explained in the first <book> of the
25 *Apodeictics*.[49] 'Establish' is said in this many, or even more, ways, but now Aristotle uses it instead of 'define', as he makes clear when he

adds: 'what a name is and what a verb is', 'what is' signifying 'definition' to us quite clearly.

<Distinction of name and verb from simple vocal sounds>

One might think there was a problem as to why, when he has treated of simple vocal sounds (*phônai*) at book length in the *Categories*, <Aristotle> here again undertakes to speak about name and verb, each of which is obviously a simple vocal sound. The answer is that a simple vocal sound, a name, a verb, an expression (*phasis*), and a term (*horos*)[50] are the same in substrate (*tôi hupokeimenôi*) and differ only in relation (*têi skhesei*),[51] like the seed and the fruit or the ascent and the descent.[52] For when we consider that simple vocal sounds are significative (*sêmantikai*) of the things (*pragmata*) to which they have been assigned (*tithesthai*), this is all we call them, 'simple vocal sounds', since we do not in this <usage> distinguish names from verbs, but when we have seen some lack of correspondence (*diploê*) among these <vocal sounds> and find that some of them are combined with articles and others are not, or also that some signify a certain time in addition <to their basic signification> while others do not, we distinguish them from one another and we call those which are combined with articles and do not additionally signify time 'names', and those which cannot be combined with articles but are said according to a certain time we call 'verbs'. But when, on the other hand, we do not take each of these kinds of vocal sounds by and for itself but rather insofar as it is a part of an affirmation or denial, then we call it an 'expression', as Aristotle will clearly teach us in what follows [cf. 16b26]. And when we examine <vocal sounds> insofar as they are used in a syllogism, we call them 'terms' (*horoi*), as will be said in the prooemium of the *Analytics*.[53] This is also how Plato spoke of simple vocal sounds as 'terms' in the ninth book of the *Laws*:[54] he says that some terms touch one another, namely those whose opposition is immediate, such as the 'hot' and 'not-hot', while others have a buffer (*methorion*), namely those of which there is some mean,[55] such as the 'hot' and the 'cold' or the 'voluntary' and the 'involuntary'. He writes there about those <last terms>, which have as a mean the damage which is done in anger and which is neither purely voluntary nor involuntary. Since even if it is the same thing with regard to the substrate to say 'name' or 'verb' and 'simple vocal sound', nonetheless these <items> differ from one another in relation, as has been said, and the book of the *Categories* taught us only about simple vocal sounds, not meddling with the difference between names and verbs, which is very useful for the study of the assertoric sentence (for it is through this <difference> that we distinguish the subject terms of

30 10,1 5 10 15 20 25

assertions from their predicates). For this reason he now undertakes the study of names and verbs, as being closest to the present course.

<Why does Aristotle mention only name and verb?>

11,1 'But why', one might ask, 'when what the grammarians call "the parts of the sentence" (*tou logou merê*) are various, does he now teach us only these, the name and verb?' 'Because', we shall say, 'these alone, without all the others, can make an assertoric sentence, as when we say "man is healthy". Therefore Aristotle conducts his investigation in this <book> only about these, which of necessity are used in every assertoric sentence and suffice to generate the simple assertion.'[56]

<What the different 'parts of the sentence' signify>

It is worthwhile knowing that, of the infamous 'eight parts of the sentence', some are significant of certain natures or simply of persons or activities or passions or some combination of these – i.e. name, pronoun (*antônumia*), verb, and participle (*metokhê*) – and these are the only ones which can suffice to generate an assertoric sentence, as when we say 'Socrates walks' or 'I walk' or 'The running <man> walks' or 'Socrates is <a> running <man>', one <part> being taken as subject and the other as predicate. But the other <parts of the sentence> do not signify these <items>, but make clear some relation (*skhesis*) of the predicate to the subject, as do most adverbs (*epirrhêmata*).[57] For <they indicate> how the predicate belongs to the subject, or when, or where, or how many times – whether finitely or infinitely many – or also according to what kind of order relative to something else (for example that this man runs next after this one or dwells apart from this one or is similar to something or more or less than something), or that it belongs in excess,[58] or also how we think it belongs or does not belong (i.e. whether we are guessing or are assured of it), or also how we are disposed toward the thing about which we are making an assertion (i.e. whether we are complaining or admiring or even ratifying the assertion by <calling on> the testimony of the stronger <power>),[59] or also showing that it is profitable for us to choose the predicate, as in the case of the adverbs which are called 'expressive of obligation' (*thetika*), or also exaggeratedly proclaiming the condition of the soul bearing the imprint of the highest good itself, as in the case of the enthusiastic adverbs, which signify that those who are possessed (*katokhoi*) are in a good state,[60] or also appropriating the assertion said by others through our agreement or shaking it off through our refusal or denial. I mean that, on the one hand, both the

adverbs significative of the <golden> mean (*mesotês*) and of quality (*poiotês*) signify how <something> belongs – for example 'Socrates converses well', 'Melanthius struck Odysseus with-his-foot', 'Bees fly bunchwise' – and the <adverbs> which indicate that the predicate belongs to all or to not all of the things, taken collectively, which the sentence is about, such as 'The enemy attacked all-at-once' or '… in-a-scattered-manner' (these too are qualities of a sort, for both collection and division fall under the <category of> quality). But about the rest of those listed there is no need to add anything more, for they are clear even to those who can only briefly pay attention to what is indicated by each of them. So these, as we said, in indicating a certain relation of the predicate toward the subject seem to contribute something to the generation of the corresponding sorts of assertions. The rest of the adverbs, however, signify without being useful for assertion, but rather for other kinds of sentence – as those which signify prayer <are useful> for the optative sentence, those <signifying> forbidding or commanding for the imperative sentence, and those <signifying> interrogation for the interrogative <sentence>. And the <other> so-called 'parts of the sentence' besides these are absolutely without significance (*asêma*) by themselves, such as the article (*arthron*), preposition (*prothesis*) and conjunction (*sundesmos*).[61]

<Distinction between 'parts of the sentence' and 'parts of speech'>

So Aristotle divides into names and verbs all the things significative of natures, persons, activities, passions or some kind of combination of a person with an action or passion.[62] He calls those which are said with reference to time or predicated in propositions 'verbs', while those which are said without time or which have the function of subjects he calls 'names'.[63] But those which are found in neither territory, even if they are added in another way to the propositions and signify that the predicate belongs or does not belong, or when, how, or how often it belongs to the subject, or that they have any other relation to one another, he does not want to call 'parts of the sentence' properly speaking. For just as the planks of a ship are properly speaking its parts, while bolts, sail-cloth and pitch are also added to hold them together and for the unity of the whole,[64] in the same way in the sentence conjunctions, articles, prepositions and adverbs themselves fill the job of bolts, but they would not correctly be called parts inasmuch as they cannot be put together and on their own produce a complete sentence. So these are not parts of a sentence (*logos*), but they are parts of speech (*lexis*), of which the sentence itself is also a part, as has been said in *On Poetry*.[65] And these are useful for the

specific sorts of composition (*sunthesis*) and construction (*suntaxis*)[66] of the parts of the sentence with one another, just as a bond (is useful) for adding unity to things bound and glue to the things joined by it.[67] But these are not parts of the things bound or glued, and neither are conjunctions, articles, prepositions or adverbs 'particles' (*moria*) of the sentence.[68]

<Sentence vs. speech>

The sentence differs from speech in that the former is an aggregate chiefly composed of the vocal sounds which signify things, while the latter consists of absolutely all the vocal sounds which are used in language.[69] You have the difference between the sentence and speech set out also by Plato, in the third book of the *Republic*,[70] where he says: 'Now let this be the end of the <discussion> about sentences, but next speech[71] must be examined, and then we shall have completely considered both what must be said and how it must be said.' Here it is clear that he is calling the thought (*dianoia*) 'sentence', and the message (*apangelia*) 'speech',[72] whether the message comes to be from the most necessary parts,[73] – name and verb – in which case we have a sentence which is uttered and is properly called 'sentence', or whether it also uses the remaining parts of what is called the 'sentence' in a wider sense, in other words, of the style (*hermêneia*),[74] which strives for beauty and a particular construction.

<Rejection of Alexander's classification of adverbs as names>

Now, it seems to the interpreter from Aphrodisias [i.e. Alexander] that adverbs too are names,[75] and that the same also holds for pronouns and for what the grammarians call the 'appellative' (*prosêgoria*, i.e. common noun or adjective). But this does not seem justified, because he could hardly suppose that certain adverbs were names, such as the adverbs of assent, refusal, forbidding, or those which are prefixed to oaths, or very many others, while others seemed to him, because they were derived from certain names, to have the same force as the names, such as 'well' and 'clearly', which come from 'good' and 'clear' in the same way as 'justly' comes from 'justice'. But if this were so, we would call 'must-marry' and 'must-sail' 'verbs',[76] but not 'names', inasmuch as they have arisen from 'to be necessary to marry' and 'to be necessary to sail'. Actually, it is not reasonable either to call these 'verbs' or to call the former 'names', since none of them can be either a subject or a predicate in propositions, which is what the name and verb respectively must do.[77] You will, namely,
14,1 find the name 'clear' predicated in the sentence 'This stretch of *On*

Interpretation is clear', but you will not find 'clearly' <so predicated>. Nor yet again do we say that a sort of compound predicate arises from this vocal sound and from the vocal sound of which 'clearly' is said, as in 'he interprets clearly', as occurs in the case of 'dead man' and 'debased coin'. If that were so, the denials of these affirmations would have to arise in the same way as those which have a simple predicate, just as occurs in the case of the true compound predicates: just as the affirmation 'The deceased is a man' takes the negation 'The deceased is not a man', and 'The deceased is dead' takes the negation 'The deceased is not dead', in the same way 'The deceased is a dead man' takes the negation 'The deceased is not a dead man'. But in the case of modal propositions (*meta tropou protaseis*), the negations must become rather different, and not just like the negations of propositions without mood (*aneu tropou*): the affirmation 'Socrates walks' takes the negation 'Socrates does not walk', but 'It is possible that Socrates walks' takes not 'It is possible that Socrates is not walking', but rather 'It is not possible that Socrates walks', as Aristotle will instruct us quite clearly in the last section of this book.

<Only name and verb are properly called 'parts of a sentence'>

This is why he says that the assertoric sentence is always composed of and breaks up into a name and a verb, believing as he does that these alone are properly called 'parts of a sentence'. 'Be' and 'not be' belong, on this view, to the things predicated immediately of some things, in which case they become as much parts of the propositions as the subjects are, as in 'Socrates exists', 'Socrates does not exist'; but sometimes they belong to the vocal sounds used additionally in the propositions with a third added predication or in modal propositions, which are said to be added to the parts of the proposition or to be divided or to undergo something of this sort, as we shall learn in the proem of the *Analytics*.[78] Thus, the part of the affirmation must always be either a name or a verb, but the verb is not always a part of the proposition, namely when it is not immediately predicated of the subject as having to signify an activity or a passion or simply the existence or non-existence of the subject, but is rather used for the sake of joining the predicate to the subject. The truth of what we have said is also clear from the fact that the very names of the other parts of the sentence relate to the name and the verb. For they name the pronoun as they do (*antônumia*, literally: 'instead-of-name') as being 15,1
a 'name', not of certain natures (*phuseis*), but simply of persons, and the participle (*metokhê*, literally: 'sharing', 'partaking') as 'partaking' of both, i.e. of the name and the verb, even if it inclines more to the particular nature of the verb by indicating certain times, and the

article (*arthron*, literally: 'link') as 'linked' to names and having reference to them. And why should we even speak of prepositions (*prothesis*), adverbs (*epirrhêma*) or conjunctions (*sundesmos*)? The first of them has its name since it 'precedes' both names and verbs equally, the second since it is combined in such-and-such a way with 'verbs', and the third since it 'conjoins' detached (*apêrtêmenoi*) sentences. And you will find that, in certain <passages>, Aristotle seems to relent and call all <the types of vocal sounds> more generally 'parts of the sentence'. This is why in what follows[79] he will say that some of the parts of the sentence are significant, as though there were also some which were non-significant – unless some more appropriate explanation of this manner of speaking, which does not in any way contradict what we have now said, occurs to us.

16a1 Then what are negation and affirmation and assertion and sentence.

<How is the assertion divided into affirmation and negation?>

It is clear that there are three kinds of division properly so called: that of the genus into its species, of the whole into its parts, and of the homonymous vocal sound into its different meanings, and it is also clear that assertion is divided into affirmation and negation, since we say that, of assertion, one sort is affirmative and the other negative. But the interpreters of Aristotle have asked how assertion is divided into affirmation and negation.[80] Some, Alexander of Aphrodisias for example, have chosen to say that it is as an homonymous vocal sound is divided into different meanings, but others, such as the philosopher Porphyry,[81] that it is as a genus is divided into species. No one dared say that it is divided as a whole into parts, since it is seen to be divided neither as a whole whose parts are similar to one another and to the whole (*homoiomeres*), there being a great difference between affirmation and negation, nor as one whose parts are dissimilar from one another and from the whole (*anomoiomeres*), in which case one could not call each of the parts by the name of the whole. As we go on to interpret the definitions Aristotle gives of these terms, we shall demonstrate at the proper time what the truth is and that the opinion of the philosopher Porphyry is correct.[82]

<Why does he list only negation, affirmation, assertion, and sentence?>

Right now, however, we must first say that the expression 'we must establish', which meant 'define', is to be understood as applying to 16,1
these vocal sounds too: 'Then we must establish what are negation and affirmation and assertion and sentence.' And in addition, <we must say at the outset> that there are four things listed which he says one must define after 'name' and 'verb' because the present task, as we said,[83] is to teach about the predicative form of the assertoric 5
sentence, and that is always either affirmative or negative, and so it was necessary to teach about affirmation and negation, as well as about their common genus, assertion. And since assertion too is one of the kinds of sentence, and it was necessary for 'sentence' to be mentioned in the definition of 'assertion', because all genera are constituent parts of the definitions of their own species and what is 10
given in elucidation of anything must be better known than what is explained by it, for this reason the theory of the sentence also seemed necessary and had to be handled before assertion. But if anyone wonders why it has not for this same reason seemed worthwhile <for Aristotle> to mention that the genus of sentence (or 'speech', *logos*), <namely> vocal sound (*phônê*), needs to be explained by means of a 15
definition, one must say that it was proper to physiology to discuss vocal sound, since vocal sound is a product of nature alone, like seeing and hearing – for we have vocal sound by nature. Speech and assertion, along with their species affirmation and negation are indeed vocal sounds, but have the additional characteristic of being shaped by our concept (*ennoia*) and pronounced in one way or another. For 20
this reason a special course (*pragmateia*) has been assigned them, distinct from the courses on nature, and it is called 'logic', with the result that vocal sound is also not simply the genus of speech, as some assume.[84] For it was impossible that the species not be by nature, when the genus was by nature, or if so, then one must say that simple vocal sound is the genus of vocal sound in speech (*logos*);[85] but we shall say that, with respect to speech itself, vocal sound is accepted in the position of matter (*hulê*), as Aristotle himself indicates when 25
he examines the differences of the animals in regard to vocal sound in the fifth book of *On the Generation of Animals*,[86] and not that vocal sound is the genus of speech, as will be clear from what follows (i.e. 30,4; 39,18f.). He who does ask what the genus of speech is must be reminded of the division of the category of quantity given in the 30
Categories.[87]

<The order of the terms>

We should note that in the four enumerated things Aristotle has
17,1 begun from the more deficient and rises to the more perfect, from the more particular to the more general.[88] For affirmation is more perfect than negation, inasmuch as it signifies existence (*huparxis*), while negation indicates non-existence, and assertion <is more perfect> than affirmation, since it is its genus, as we said, and the sentence <is more perfect> than assertion, since the affirmative is one of the
5 five species of sentence. And the order of the given enumeration is suited to us, who are such as to proceed from the worse to the better and from the more particular to the more general because of the progress of our knowledge from the imperfect to the more perfect. However, he will in the teaching of these things move backwards, so
10 to speak, with respect to the natural order of the things, putting the genera before the species and the more perfect before the more imperfect.[89] Hence he also enumerated them in the way we have said, since he wanted to make the end of the list the beginning of his instruction.

16a3 Now, what is in the vocal sound are symbols of the
15 affections in the soul, and what is written <are symbols> of what are in the vocal sound. And just as not all have the same letters, neither do they all have the same vocal sounds. Yet those of which, as the first ones, these are signs,[90] the affections of the soul, are the same for all; and that of which these are likenesses, the things, are also the same. These, then, have been discussed in the *On the Soul*, as they belong to another course.

<Why does Aristotle not begin by defining name and verb?>

20 The next topic in order, according to what had been promised, would have been to give the definitions of name and verb, but since not every word (*lexis*) is a name or verb (for meaningless words like '*blituri*' and '*skindapsos*'[91] are neither of these) and names and verbs differ from meaningless vocal sounds by being significative of something, Aris-
25 totle first uses these lines to teach us what are principally and immediately signified by them [i.e. by names and verbs], that <these are> thoughts, and through them as intermediates, things, and that one must not invent anything else beside these between the thought[92] and the thing, which is what the men of the Stoa posited and thought they should call the 'sayable' (*lekton*).[93] This, then, is what will be taught by what is said here, especially <the question:> among which

of the things which are in any way should one look for truth and falsity?[94] Our investigation now concerns these [i.e. truth and falsity]: do they belong to things or to thoughts or to vocal sounds (*phônai*) or to any two or even to all of these; and if they belong to vocal sounds, then to which ones, to names and verbs or to the sentences which consist of them? It will be set out that names and verbs are simple vocal sounds signifying neither truth nor falsity, as was also said in the preface to the *Categories*.[95] But it is with respect to the assertoric sentence fashioned by the interweaving of name and verb that both the true and the false are observed, and, since the <thoughts> are prior to the vocal sounds these [i.e. truth and falsity] are observed with respect to the thoughts, which are causes of the vocal sounds. In fact, some of these <thoughts> are simple, signified by simple vocal sounds and admitting neither truth nor falsity, while the compound ones are concerned with compound things [or: states of affairs (*pragmata*)], signified by compounded vocal sounds and admitting falsity and truth. Yet one would not suppose these [i.e. truth and falsity] to be <inherent> in the things taken by themselves nor even among the compound things.[96] So it is clear that Aristotle is here right to clarify these [i.e. truth and falsity] before giving the definitions of name and verb. Actually, since he proposed to consider falsity and truth primarily in this book, he had to teach us right from the preface what admits each of these and what is naturally such as to admit neither of them and, having reminded us that one thing is found in compound vocal sounds and another in simple vocal sounds, he had to go on to divide the simple vocal sounds, which do not admit falsity or truth, into name and verb, and the vocal sounds compounded from them, which are always either true or false (that is to say, those vocal sounds which are in the assertoric sentence), into their proper species in turn, viz. affirmation and negation.[97]

<On things, thoughts, vocal sounds, and letters>

That being so, if we organize what the Philosopher teaches, we say that he takes these four items here as being useful for the present investigation: things and thoughts, as well as vocal sounds and letters. The things are first among these, thoughts are second, vocal sounds third, and letters last. Thoughts, namely, have as their goal the knowledge (*katalêpsis*) of things, and they are truly thoughts when they are, so to speak, in harmony with the things themselves; for they are images in the soul of things. Vocal sounds are enunciative of thoughts and therefore are given to us by nature so as to indicate through them the concepts of our soul, so that we can share with one another and be part of the same society, man being a social animal. Hence, those who do not use the same vocal sounds also do not share

a state with one another, as they do not know one another's thoughts.
19,1 The goal of letters is to preserve the memory of vocal sounds. Of these four items, Aristotle says that two are by nature and two by imposition: things and thoughts are by nature, vocal sounds and letters by imposition. He divides those by nature from those by imposition using the following rule: that which is the same for all people, he says, is by nature, and what is not the same for all is not by nature but by imposition. And he is right in this. For, since the nature of the universe is one, it obviously makes the things said to belong to one species everywhere similar; but if some things be different from one people to another, these would not be products of nature. Now, since things and thoughts are the same among all peoples (for everywhere the species of man or horse or lion is the same, and similarly the thought concerned with man or stone or any other thing is the same), while vocal sounds and letters are not the same among all peoples (for Greeks use different vocal sounds from Phoenicians, as do Egyptians: 'different is the tongue of different peoples' says the poet;[98] and, moreover, each people writes its own vocal sounds with different letters), then it is for this reason that <Aristotle> insists that things and thoughts are by nature, but that vocal sounds and letters are by imposition, not by nature. And it is clear that the term 'by imposition' will be more obviously applicable to letters than vocal sounds. That is why he thought letters absolutely needed to be mentioned, since they have some relationship to vocal sounds, not merely by being associated as tokens for remembering them, but also since they are obviously by imposition and are able by themselves to call our attention more clearly to the fact that vocal sounds are by imposition,[99] which is not as familiar as the fact that letters are by imposition (in fact, the ancients thought it worthwhile to investigate whether vocal sounds should be said to be by nature or by imposition, and among these thinkers it was legitimate to distinguish which of these modes of existence would fit them and use this mode for the definitions of name and verb and of the sentence which consists of them; but no dispute ever arose among them concerning letters), although he himself will show next that they will not otherwise be needed for the study of the present subjects, inasmuch as he leaves letters aside and examines only things, thoughts, and vocal sounds as being simple or compound. Now, of these last he calls thoughts 'likenesses' (*homoiômata*) of things, while he does not want to call vocal sounds 'likenesses' of thoughts, but rather 'symbols' (*sumbola*) and 'signs' (*sêmeia*), and similarly letters <he calls 'symbols' and 'signs'> of vocal sounds.[100]

<Likeness vs. symbol>

Likeness differs from symbol in that it wants to image (*apeikonizesthai*) the very nature of a thing as far as possible and it is not in our power to change it (for if the painted likeness of Socrates in a picture does not have his baldness, snub nose and bulging eyes, it would not be called his likeness), while a symbol or sign (the Philosopher calls it both) is entirely up to us (*eph' hêmin*), given that it arises from our invention (*epinoia*) alone. For example, both the hearing of the trumpet and the hurling of a torch can be symbols of when the opposing troops must join[101] battle, as Euripides says: 20,1

> but when the torch was released, like an Etruscan trumpet's sound, it was the sign (*sêma*) for bloody battle,[102]

but one can posit it also <as a sign for> putting forward one's spear, releasing an arrow or ten thousand other things. So, it is possible for the same vocal sounds to be written with ever different letters, as the invention of so-called 'idiographic'[103] characters shows, and to express the same thoughts with ever different vocal sounds, as the multitude of languages indicates, as well as the changing of names within one language (as the ancients decided to call Aristocles 'Plato' and Tyrtamus 'Theophrastus').[104] It is, however, impossible to think of one and the same thing with ever different thoughts; each thought must rather be an image (*eikôn*) of the thing of which it is the thought,[105] graven in the soul as if in a tablet,[106] given that thinking (*noein*) is nothing other than having received the form of what is thought or made it accessible.[107] For this reason he calls thoughts 'likenesses' of things, but names and verbs, as well as letters, 'symbols' and 'signs' of thoughts or of names and verbs respectively. Of these four, things, thoughts, vocal sounds, and letters, leaving aside letters, since they are not necessary for the following instruction concerning the things, which is what the Philosopher primarily wants to study, he investigates thoughts, through which we know these <things>, and he draws distinctions concerning vocal sounds, without which teaching and learning cannot arise.

<Compound vs. simple things, thoughts, and voices; the locus of truth>

For this reason, then, Aristotle skips over letters and handles things, thoughts and also vocal sounds, and says that each of these is sometimes seen to be simple and sometimes compound.[108] For example, a simple thing is 'Socrates', a compound thing is 'Socrates running' (for here the substance of Socrates has taken on the activity 21,1

involved with running), and in the same way, the thought concerning the running Socrates is compound, and the vocal sound by which we say that 'Socrates runs' is compound. Since the compounds, i.e. compound thoughts and vocal sounds, are completed out of the conjunction (*sundromê*) of the simples, truth, he says, and falsehood will not be seen in any of the simples, but exist only regarding compound thoughts and compound vocal sounds, given that not even regarding compound things could there exist any truth, in the sense we are now looking for, or falsehood, because such truth and falsehood are effected in a particular relation of the thoughts or vocal sounds to the things.[109] For when the thoughts harmonize, as it were, with the things or the vocal sounds accord with the existence of the things, it is then that we say that truth exists regarding each of them, and when they do not <harmonize> in this way, falsehood. For example, when Socrates is walking, if we too either think or say that he is walking, both the thought and the assertion are true, but if we either believe or say that he who walks is not walking, it is necessarily false. However, things would be called neither true nor false by themselves (cf. 18,10-12), but by the truth seen in the knowledge <of these things>. In fact, we are used to saying that Socrates is truly a man, but the statue of Socrates is falsely <a man>, by which we mean merely that the definition of man is truly predicated of the notion (*ennoia*) of Socrates, but not of the <notion of the> statue. But being predicated and being the subject of a predication by no means fits things, but primarily thoughts and because of these vocal sounds, so that the same explanation will also fit regarding the truth and falsehood of such things, since it is in another sense that we shall say that the true and the false will exist in things themselves by themselves and in pleasures.[110] For the forms which are always separate from matter and, as will be said of them in what follows, are actualities without potency are not beings in the same way as what requires matter for its proper existence and as matter itself, wholly formless and rightly called the 'foundation' (*hupostathmê*) of things, and as the mirror-images of visible things: rather, some are truly beings, others not truly such, others even falsely such;[111] nor is the pleasure in intelligent activities (*noerai energeiai*), that in wicked activities, and that which follows upon false imaginings true in the same way. But this has nothing to do with the project of the present course, because here the discussion concerns only the truth which is observed in the linguistic modes (*sc.* of truth).

<Why does Aristotle say 'what is in the vocal sound'?>

So much, then, can we write about the overall sense of what Aristotle says. Starting over from further back,[112] following what is said in the text and attending to the things which are worth our attention, we say first that Aristotle began the teaching of these matters not from the things or the thoughts, but from the vocal sounds, since his task in this course was to examine the predicative vocal sounds at the level of the assertoric sentence.[113] Next, <we note> that he did not say 'Now, *vocal sounds* are symbols of the affections in the soul, i.e. of thoughts', but rather '… what is in the vocal sound …', making the entire teaching about names and verbs coherent. For he said at the beginning that 'It is necessary to set out what are name and verb', since they and the sentence composed of them are seen in three ways:[114] in the soul according to the simple thoughts and the so-called 'internal' speech (*endiathetos logos*), in the actual pronunciation (*ekphôneisthai*), or in the writing (as we also say that of written items one is a name, another a verb, another a sentence). Thus, since both names and verbs, which he said one must set out, are seen, as we said, in three ways, in being thought, said, or written, for this reason he said in this way that 'what is in the vocal sound are symbols' of the thoughts in the soul, which he says are its 'affections' for the reason given at the beginning,[115] and that 'what is written' are in turn 'symbols of what is in the vocal sound'. So it was either for this reason[116] that he began his discourse in this way, i.e., by speaking of 'what is in the vocal sound', or rather <for the sake of> showing that it is one thing to speak of 'voice' and another to speak of 'name' or 'verb', and that being a symbol and by imposition (*thesei*) in general do not fit the vocal sound *simpliciter*, but the name and verb. For vocalizing (*phônein*) belongs to us by nature, just as seeing and hearing do, whereas names and verbs come to be out of our own invention and use the vocal sound as their matter (*hulê*). Just as the door is said to be 'wood' and the coin 'bronze' or 'gold' (they are called thus as coming to be out of these <stuffs>, which are natural things, and they themselves have their existence in accordance with the characters imposed upon the underlying <matter> and with their shapes; for whenever pieces of wood have been put together in this way or that way, then we say that a door or a throne has come into being, but not otherwise, and whenever gold takes on these sorts of impressions, then an accepted coin comes into being), in the same way here too, names and verbs are not simply vocal sounds, but vocal sounds shaped and formed in this way by linguistic imagination (*lektikê phantasia*) and accepted as symbols of the thoughts in the soul.[117] One can clearly see what we are saying – that vocal sounds

are natural while names and verbs are by convention (*kata sunthêkên*) – in the case of people deaf from birth, who are observed making certain inarticulate vocal sounds, but not using names and verbs. So, having shown this Aristotle was right to say that 'what is in the vocal sound', which is the same thing as names and verbs, are not simply vocal sounds, but vocal sounds with a certain quality and shape, and inasmuch as they also signify thoughts, they are imposed (*thesei*) and therefore might be called 'symbols of the affections in the soul'.

<Why does Aristotle say 'what is written'?>

But in what follows, what can it mean that neither the elements (*stoikheia*) nor the letters (*grammata*) are said to be symbols of what is in the vocal sound, but rather 'what is written'? As has been said, we note that names and verbs are said in three ways – those which are thought, those which are pronounced, and those which are written – and Aristotle posits that those which are pronounced are symbols of those which are thought, and those which are written of those which are pronounced. This is the answer, if one takes what was said as being about names and verbs. But if one thinks the inquiry extends to all of expression (*lexis*) without qualification,[118] it must be stated that one calls 'letter' and 'element' both the written trace of each of the elements, and also the pronunciation by which we utter each one. Also, although each of the names is said of both, nonetheless, the name 'letter' primarily signifies the character made by means of writing, and 'element' the pronunciation, 'because of having a line-up (*stoikhos*) and order (*taxis*)', as Dionysius says.[119] But the pronunciation would not be said to be a symbol of the name, but rather a part of it, while the character would correctly be said to be a symbol, since different ones can be invented for the same pronunciation.[120] For this reason, then, he spoke of neither 'elements' nor 'letters', since each of these names is applied also to the pronunciation, the proper name being 'element' and the ambivalent name 'letter', but he spoke of 'what is written', so that what he said would more clearly signify the <written> traces of the <pronounced> elements.

<Thoughts and things are by nature, vocal sounds and letters by imposition>

Then he brings in the next thing, the reason why vocal sounds are said to be 'symbols' of thoughts and letters of vocal sounds, and why both, i.e. the vocal sounds and the letters, are by imposition (*thesei*), namely that neither of them is the same among all peoples; for he

says: 'And just as not all have the same letters, neither do they all have the same vocal sounds.' And at the same time, by this means he made it clear that it was because of the benefit they bring to vocal sounds that he thought letters worth mentioning,[121] since they are more obviously by imposition and show us how vocal sounds too might, in respect of their similarity to letters, be called 'symbols' of thoughts, as letters are of vocal sounds. To this he adds the <part> about thoughts and things, namely that each of these is by nature, because of their being the same among all peoples; for he says: 'Yet those of which, as the first ones, these are signs', where 'these' are what is in the vocal sound, i.e. names and verbs, thus 'those of which, as the first ones, these are signs' (he means thoughts; for things are also signified by them, not immediately, however, but by means of thoughts; however, thoughts are not signified by means of other items, but first and immediately); therefore those first entities of which what is in the vocal sound are signs – i.e. are significant, as being symbols – these are thoughts, which are affections of the soul and the same among all peoples, and hence by nature. So the '*tauta*' in the phrase '*t'auta pasi pathêmata tês psukhês*' ('affections of the soul <are> the same for all') should be read with accent on the last syllable.[122] And 'that of which these', he says, '<are> likenesses' (and by 'these' he means the affections of the soul); so that of which the affections of the soul are likenesses (and of what are they likenesses? – clearly of things), these are things, he says, which are the same among all peoples. Hence, here too the '*tauta*' in the phrase '*pragmata êdê t'auta*' ('things are also the same') must be read with the accent on the last syllable, and not with circumflex on the penultimate as Herminus[123] <read it>, in order that Aristotle's teaching appear complete in establishing that letters and vocal sounds are by imposition from their not being the same among all peoples, and that thoughts and things are by nature from their being the same among all peoples.

35 24,1 5 10 15 20

<Articulate vocal sounds formed by souls>

Since these things have been set out, we must next, for those who wish to bring themselves up to the examination of the things that are, i.e. to look at the transcendent (*exêirêmenai*) causes of those things which the discussion is about, add that, as there are three primitive orders above the natural substances, the divine (*theion*), the intellectual (*noeron*), and in addition to these the psychic, we say that things are derived (*paragesthai*) from the divine, thoughts have their subsistence from (*huphistasthai apo*) intellects (*nous*), and vocal sounds are produced (*apoteleisthai*) by souls which are formed in accordance with the rational and contain substance separate from all

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body.[124] For, now our discussion is not about just any vocal sound, but about that which signifies things by means of thoughts according to some convention or agreement, and which is itself capable of being signified in letters – that is to say, the articulate (*enarthros*), human vocal sound, also called language (*dialektos*), which physicians correctly distinguish from simple vocal sound according to the organs <which produce them>.[125] They say that on the one hand there are the phonetic organs, for example the lungs and trachea, where the former supplies the matter for vocal sound and the latter contributes to the 'formation', so to speak, of vocal sound with respect to low and high pitch and similar factors. And on the other hand there are the organs useful for language, for example the tongue, palate, lips, and teeth, which serve in different ways the impulse (*hormê*) of the rational soul and form as a kind of matter the low or high vocal sound simply emitted as by an animal so as to generate letters,[126] syllables and language in general, under which falls the assertoric kind of sentence which is our subject in this course. If, however, one were to inquire about the cause of inarticulate (*anarthros*) vocal sounds, such as we call the vocal sounds <produced by> irrational animals, although one would be seeking nothing necessary for the present purpose,[127] it is clear that we shall hold immediately responsible the irrational souls in them, in virtue of which they were allotted their existence. These follow the sensations and presentations of things which impinge on them and cause those animals which have this power to vocalize, each according to its own nature, and to undergo all the motions they naturally do according to the affections which they have on any occasion. However, to assume that these <sensations and presentations> too are signified by means of letters, which has occurred to some of those who pretend to be grammarians, would be ridiculous. Comic poets imitate frogs by 'brekekekex koax koax'[128] and swine by 'koï, koï'[129] and different birds by different vocal sounds composed of letters (*engrammatoi*), but one must not consider these actually to be the vocal sounds of those animals, since we shall <in that case have to> admit that the sound of the sea as well, and the sounds of wheels[130] and many other inanimate things are articulate, because we see comic poetry daring to imitate each of these things too. But if one must find some cause analogous to these in the case of the elements too,[131] we shall cite no productive cause other than the particular soul (*hê merikê psukhê*), whose inventiveness gives them their birth,[132] and nothing prevents us from giving as their model natural production itself,[133] which attaches to each of the things it makes weight and dimensions, which are that in which letters too excel vocal sounds.[134]

<Reference to *On the Soul*>

But about these matters[135] he says he has spoken in the *On the Soul*,[136] where he said: 'What will prevent the first thoughts from being mental images (*phantasmata*)? Or perhaps the others are not 26,1
mental images either, but do not exist without mental images?', and where he wanted to call the imagination 'passive intellect'.[137]

16a9 Just as in the soul some thoughts are neither true nor false but to some it is indeed necessary for one of these two to belong, so is it in the vocal sound too, for truth and falsity are concerned 5
with combination and division. So names and verbs themselves resemble the thought without combination and division, e.g. 'man' or 'pale', when nothing is added; for these are neither false nor true yet. And there is a sign of this; for 'goat-stag' does signify something, but not yet truth or falsity, unless existence 10
or non-existence is added, either absolutely or temporally qualified.

<The utility of the foregoing for the purpose of *Int.*>

The Philosopher gives the utility of what has been said for the purpose of the present course in these words. He says that truth and falsity are seen both in thoughts and in what is in the vocal sound – 15
not, however, in the simple ones, but in the compounds. And at the same time he teaches us the analogy of vocal sounds to thoughts, saying that names and verbs resemble simple thoughts and that neither truth nor falsity is seen concerning either of these, while the sentence brought together out of names and verbs, when they are 20
either combined (*suntithemenoi*) or divided, <resembles> the thoughts which accept composition (*sunthesis*) or division (*diairesis*), and to each of these [i.e. complex thoughts and sentences] one of them must belong, either truth or falsity.

<Truth and falsity are found only in certain compounds>

Now, that no simple thought accepts either truth or falsity is clear from induction. One who forms in himself the thought of Socrates 25
knows nothing true or false, unless walking or reading or being is added to it; for if the thing should happen to be in this state which the imagination (*epinoia*) envisages, the thought will be true, but if the thing is in a different state and the soul envisages the opposite,

and, say, when Socrates is not walking, we imagine him as walking, it is necessarily false. It is clear that what is in the vocal sound is also similar to this; for one who has pronounced the name of Socrates ten thousand times has said nothing either true or false, and neither has one who says the verb 'walks' by itself. However, one who has combined both and says 'Socrates walks' has spoken either truth or falsehood. And one denying 'walking' of Socrates (he called this denial [*anairesis*] 'division' [*diairesis*], since it separates the predicate from the subject by means of the negative particle, which plays the role of a dividing tool in the sentence) and saying 'Socrates walks not', has again said a sentence which accepts truth or falsity. Hence, Aristotle said: 'for truth and falsity are concerned with combination and division', calling affirmation 'combination' and negation 'division', whether they are seen in mental imaginings (*epinoiai*) or in expressed sentences. So truth and falsity are wholly concerned with combination and division, but[138] not every combination or division accepts one or the other of these. In fact, one who wishes or uses any other sentence besides the assertoric combines names and verbs while saying nothing either true or false. But the combination or division must be of the 'belonging' (*huparktikê*) type, that is, it must reveal that one item belongs or does not belong to another, a character seen only with regard to the assertoric sentence. That is not to say that, even in regard to the assertoric sentence, just any construction of names with verbs will make a complete sentence, i.e. a true or false one: of course, the oblique cases of a name[139] signify nothing either true or false when constructed with 'is', but <this requires> either the construction of 'is' with names said in the nominative, or, in the oblique cases, the juxtaposition to the predicate of what suffices for the production of a complete sentence, as when we say 'The book is Socrates's'. Thus, it is clear that truth and falsity will be seen only in regard to the assertoric sentence and its species, affirmation and negation, which it is now up to Aristotle to deal with. Therefore Alexander's interpretation is most correct, in that it says the transmitted investigation of things, thoughts and expressions points to this. So much, then, for that.

30 27,1 5 10 15 20 25

<Aristotle's remarks are confined to linguistic truth>

However, it is necessary to note that the Philosopher is not saying that all truth is concerned with combination or division (for what combination or division could there be in the case of the truth which is called 'noetic' by Plato and even by Aristotle, which is seen in respect of the existence[140] of the most simple, because truly existent, things, or <in the case of the truth> which, existing in respect of the

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intelligent cognition of these <beings>, is wholly excluded from being opposed to the false, and about which Aristotle himself has spoken in his theological treatise[141] and in the third book of his *On the Soul*?[142]), but <only> that truth which subsists in linguistic motions 28,1
(*lektikai kinêseis*), which has been shown to be capable of subsisting in respect of the assertoric sentence alone among all the things which are spoken (*lekta*).[143] One must remember both this and also the fact that when he says that names themselves, that is, by themselves, and verbs resemble simple thoughts, he introduced these wanting to set out models of <bare names and verbs>, 'e.g. "man" or "pale", when nothing is added', taking 'man' as a name and 'pale' as a verb,[144] even 5
though it seems to be no less a name than 'man'.[145] Thereby he decided to count 'pale' among the verbs not according to the usual definition of verbs,[146] but according to the definition which directs that any vocal sound which forms a predicate in a proposition be called a verb. About this we shall speak more clearly when we explicate the doctrine of 10
the verb.[147]

<Verbs with definite understood subjects>

Perhaps someone may wonder how Aristotle could say that no name or verb was receptive of truth or falsity, when it is quite apparent that all verbs of what the grammarians call the 'first person' indicate either truth or falsity, for example, when I say '(I) am walking' (*peripatô*), as do those of the second person, such as '(you) are walking' 15
(*peripateis*),[148] as well as those third person verbs which are said of some definite subject, such as '(it) is raining' (*huei*), or '(it) is thundering' (*brontai*), or '(it) is lightning' (*astraptei*).[149] The answer is that it is not the verbs themselves on their own which signify truth or falsity, but the combination of such verbs with the names of the persons of which they are said. In fact, even if those <names> are not actually said, they are understood in addition – i.e. for those of the 20
first person, 'I', for those of the second, 'you', and for those of the third which are said of some definite subject, that very subject of which they are said, e.g. in the case of 'it's raining' or 'it's thundering', <the name> 'Zeus' – so that here too there is the whole sentence consisting of verb and the name understood in addition to it, and which receives truth or falsity: 'I walk' (*egô peripatô*), 'you walk' (*su peripateis*), 'Zeus 25
is raining' (*ho Zeus huei*). For this reason all verbs of the third person which are not said of any definite subject signify neither anything false nor true, for example, 'is walking' (*peripatei*), since, it not being clear about whom 'is walking' is said, it could not signify anything either true or false. So far this is obvious, but the phrase 'when nothing is added' would indicate that it was necessary, in order for a 30
sentence to become true or false, either for a verb to be added to the

name or a name to the verb. For, he made clear that not just any addition which is made to the names or verbs produces an assertoric sentence when he adduced the name 'goat-stag' (*tragelaphos*), in
29,1 which to the name 'stag' (*elaphos*) is added 'goat' (*tragos*) – admittedly, not all of it – but nothing either true or false is signified from this <addition>. At the same time this would prove *a fortiori* that no simple name signifies anything true or false. For, if those names which are even more likely to admit one of these [i.e. truth or falsity]
5 does not admit it – such names are the compounds, like 'goat-stag', which by the very fact that they are compounds resemble the things which agreedly admit truth or falsity – then simple names could hardly signify anything true or false, since they are further from assertoric sentences than are compound names. So, not to exist,
10 added to the name 'goat-stag', which signifies a thought present only in imagination, will make a true sentence, and to exist a false one, although the name signified neither of these before the addition.

<What does 'either absolutely or temporally qualified' mean?>

What does 'either absolutely or temporally qualified' mean? I say that 'absolutely' would mean 'indeterminately', and that one speaks 'absolutely' thus: '<There> was a goat-stag', or '<There> is a goat-stag', or '<There> will be a goat-stag', while 'temporally qualified' refers to
15 this with the addition of the time at which it was or will be, for example, '<There> was a goat-stag yesterday or last year, or there will be tomorrow or next year'. So that would be the meaning of 'either absolutely or in time'.[150]

<'When nothing is added'>

One must note that, having said [16a13-14] that names and verbs themselves resembled thoughts without compounding or division, he
20 did not add what would follow <from that> about sentences consisting of names and verbs, namely that they resemble thoughts with compounding or division. Not that he left it out entirely, but he indicated (*endeiknusthai*) <it> by saying 'when nothing is added'. For this is by itself indicative of the fact that names and verbs which are said with
25 the addition of one another no longer resemble simple thoughts (*noêmata*), but rather those which arise with the compounding or division of the simple thoughts.[151]

Now, since we have dealt with these matters completely, we must next move to the study of the name and verb and the rest of what Aristotle promised in the preface that he would teach us.

<CHAPTER 2>

16a19 Now, a name is a vocal sound significant by convention without time, of which no part is significant when separated.

<Vocal sound, the matter of a name, is a species of generic sound>

That the name has rightly been put before the verb in the lesson is clear. For names signify the existence of things, verbs their actions or passions, and existence comes before actions and passions. In the transmitted definition of name, 'voice' is used in the sense of matter for the name, the verb, and the sentence consisting of them, as the genus of the vocal sound present in the name, in contradistinction to simple sounds (*psophoi*),[152] which often arise even from inanimate objects. For sound differs from vocal sound as genus from species: sound is an impact of air perceptible by hearing, while vocal sound is sound arising from an animal when inhaled air pushed out of the lungs by the contraction of the chest at once strikes the so-called 'rough' artery [i.e. the trachea] and the palate or uvula, causing through the impact a sound which is perceptible and in accordance with an impulse (*hormê*) of the soul – which is what happens in the case of what musicians call 'wind' instruments, such as flutes and pipes – the tongue, teeth, and lips being necessary for language, although they do not contribute at all to plain vocal sound.[153]

<The specifications 'significant' and 'by convention'>

The words 'significant', etc. are included as *differentiae* of the name *vis-à-vis* other vocal sounds. Now, 'significant' distinguishes the name from meaningless vocal sounds, such as '*blituri*' and '*knax*'.[154] For, if a name belongs to something which is named, then clearly meaningless vocal sounds would not be names, since there is nothing named. 'By convention' (*kata sunthêkên*) distinguishes <the name> from the vocal sounds significant by nature. Such are the vocal sounds of the irrational animals. For, when a stranger suddenly appears, a dog by his bark signifies the presence of the stranger; but dogs do not produce this sort of vocal sound according to any convention or agreement among themselves. One could note such vocal sounds also among men, which we utter when strongly affected – I mean, for example, groaning, guffawing, and what we said (23,3) regarding those who are deaf from birth or regarding children who

utter inarticulate sounds before they are able to follow <speech>. The vocal sounds of irrational animals resemble these in being uttered by them now excitedly, now gently and with a certain peaceful disposition. So it is from such vocal sounds that the name is distinguished by the addition of 'by convention', which means the same thing as 'by imposition' (*thesei*). For Greeks agreed with one another to call things by these names, Indians by other names and Egyptians by others, and the same people called the same things sometimes by other names and sometimes by still others. These names are significant of our thoughts. However, groans and guffawing and the vocal sounds of small children or irrational animals signify no thought, but passions and dispositions of the soul.

<'Significant' and lettered>

Let vocal sound *simpliciter* be divided twice into two, i.e., into significant and meaningless, and into lettered (*engrammatos*) and unlettered (*agrammatos*), the former of which is called 'articulate' (*enarthros*) and the latter 'inarticulate' (*anarthros*), because the syllables which the language comprises, which are actually divided from one another, resemble the limbs of one animal, which are capable of being divided from one another (just as the letters [*stoikheia*], of which a particular aggregation [*sullêpsis*] makes syllables [*sullabai*], resemble the natural elements [*stoikheia*] themselves, of which a particular mixture [*sunkrasis*] completes each of the limbs). This results in there being four classes with respect to the combinations of the simple vocal sounds. Of these, there is one under which are ordered the name, verb, and the sentences comprised of these. For there will be vocal sound which is significant and lettered, like 'human', vocal sound which is significant and unlettered, like the bark of a dog, vocal sound which is meaningless and lettered, like '*blituri*', and vocal sound which is meaningless and unlettered, like whistling which is done for no reason and not to signify anything or the imitation <by a man> of some vocal sound made by irrational animals when it happens not in order to mimic (for that would already be significant), but in a random and purposeless manner. Thus, since a name is a significant and lettered vocal sound, it differs from meaningless vocal sounds, whether or not they are lettered, by being significant, and from significant but unlettered vocal sounds, such as those which are called 'by nature', by being lettered. This Aristotle rightly called 'by convention', since agreement about vocal sounds is a solely human product; for nothing either above or below men is such as to use convention, the former not needing, and the latter not being able to agree with one another. So agreement is a solely human product, and since they were unable to remember all the vocal sounds,

each group invented the letters by which they would describe the vocal sounds used among themselves. Thus, being lettered follows from being 'significant by convention' of the particularity of things (which is what philosophers talk about) and vice versa. For the job of letters is nothing other than to be symbols of human vocal sounds, which we have shown to be conventional. Hence, Aristotle himself will in what follows (16a29) call the vocal sounds of irrational animals 'unlettered noises'.

<'Without time'>

However, since all these are common to the name and verb (for that too is a vocal sound significant by convention), the phrase 'without time' is added to exclude verbs. That 'without time' does not mean that it never signifies time in any way, but rather that it does not additionally signify (*prossêmainein*), was well remarked by the philosopher Porphyry.[155] The words 'today's', 'yesterday's', 'last year's' are names, although they indicate time. But they signify a certain time by themselves and not by additionally signifying it, as verbs do, each of which signifies in the first instance some action or passion, secondly also the time at which acting or suffering occurred, e.g. 'I walk' indicates primarily this particular kind of motion of the body, and only secondarily the present time. Hence, in the discussion devoted to them [i.e. chapter 3], verbs will be said also to signify time in addition, since in addition to signifying something else primarily they also have the attestation of time almost as a consequence. 'Yesterday's' does not additionally signify time, but signifies it as the name assigned to this very portion of time, or rather assigned to a thing which happened during this portion of time. For we signify time itself, e.g. the just completed day, either with the adverb 'yesterday' or with this very phrase, saying 'the just completed day', where the phrase signifies the actual time by itself, while the adverb demands, as is the rule with adverbs, the addition of the actions or passions which happened at the time. Such names too would differ from verbs by indicating no action or passion, as verbs do, and by circumscribing more than verbs do the times at which things come to be. 32,1

<'Of which no part is significant when separated'>

The phrase 'of which no part is significant when separated' distinguishes the name from the vocal sounds constructed out of several names, as when I say 'rational mortal animal'. For all the rest <of the definition> will fit such a phrase, since it is incomplete and makes no assertion.[156] But names differ from such phrases because the latter's

parts are significant when said by themselves, i.e. 'rational', 'mortal', 'animal', while the parts of names do not signify at all, e.g. the syllable '*an*' in the name '*anthrôpos*', and are said to 'signify together' (*sussêmainein*) when arranged with the other parts of the name, not, however, to 'signify'.

16a21 For in the name '*Kallippos*' ('Fair-horsed') the '*(h)ippos*' ('horse') signifies nothing by itself, just as in the phrase 'fair horse'. However, it is not in simple names just as it is in compounds. For in the former the part is by no means significant, while in the latter it has some force, but when it is separate it is significant of nothing, for example the '*kelês*' ('skiff') in '*epaktrokelês*' ('pirate-skiff'). 'By convention' because no name is by nature, but only when it becomes a symbol, since even unlettered sounds indicate something, e.g. beasts' sounds, none of which is a name.

<'Of which no part is significant when separated' and compound names>

The usefulness of the distinctions included in the definition of the name is taught in these lines, the lesson taking up from what was said last. For it is first said why the phrase 'of which no part is significant when separated' was added. Now, he states that it was said to distinguish this [i.e. the name] from phrases composed of names. Thus, in the case of the name '*Kallippos*' the '*(h)ippos*' by no means signifies an animal of this kind [i.e. a horse], although in the phrase '*kalos hippos*' it happens to signify it, nor in '*epaktrokelês*', which is the name of a piratical boat, does '*kelês*', nor in any other such name. For such names signify simple thoughts, even if some seem to have composition in their word-structure, just as sentences signify compound thoughts, according to what was previously defined about them (18,2ff.). Also in the case of '*Kallippos*', therefore, since it indicates the simple thought of the man whose name this is, it is clear that '*(h)ippos*', when taken as a part of it, does not have the same force as when it is said by itself. Said by itself as a name, '*hippos*' signifies this sort of animal. But when it is taken as part of '*Kallippos*', then, broken off from its proper whole, it becomes a dead thing as far as signifying is concerned, no different from the totally meaningless syllables which are the parts of simple names, as in the case of 'Platon' or 'Dion', with this one exception, that the parts of simple names do not even have the appearance of being significant by themselves, while those of compounds give an impression of signifying, which Aristotle called 'wanting <to signify>', but they do not

actually accomplish this. So according to this rule we shall often distinguish names from sentences pronounced with the same syllables as in names, as in the case of '*Neapolis*' ('New-City') and '*Hêlioupolis*' ('Sun's-City'). For, when '*nea*' and '*polis*' or '*Hêliou*' and '*polis*' are taken as significant, there will be a sentence signifying either the city now founded or that sacred to the sun, each of the parts indicating its own idea. But when neither of the <parts> is significant by itself, there will be the proper name of this particular city, only one thought being signified by the whole and, for this reason, neither of the parts being capable of signifying anything.

<'By nature', 'by imposition': Aristotle and the *Cratylus*>

So Aristotle introduced these things to explicate the last *differentia* he gave of the name. Although the next thing would have been to explain the *differentia* given before this – I mean 'without time' – he passed over this, since he will speak of it more properly in the doctrine of the verb, where he will teach how the verb is defined, namely by its additionally signifying time. Thus, he explains what comes before that, the phrase 'by convention', saying: ' "By convention" because no name is by nature.'[157] Here it is worth asking how, when Socrates in the *Cratylus* argues against Hermogenes' assertion that names are by imposition and shows that they are by nature, Aristotle can insist in these words that no name is by nature. It must be said that 'by nature' is said in two ways by those who count names as by nature, and similarly 'by imposition' is said in two ways by those positing that they are by imposition.[158] Some of those who think they are by nature[159] say 'by nature' opining that they are products (*dêmiourgêmata*) of nature, as Cratylus the Heraclitean thought when he said that a fitting (*oikeion*) name had been assigned by <the agency of> nature to each thing,[160] just as we see that a different perceptual sense is also assigned to different perceptibles. For he said that names resemble the natural, but not the artistic images of visible things, for example, shadows and what usually appears in water or mirrors,[161] that those who say this kind of name are truly 'naming', while those who do not say this are not 'naming' at all,[162] but merely 'making noise',[163] and that this is the job of the knowledgeable man, to hunt down the fitting name provided by nature for each thing, just as it is the job of the sharp-sighted man accurately to know the appearance proper to each thing.[164] Others say they are 'by nature' since they fit the nature of the things named by them, so that, for example, 'Archidamos' ('Ruler of the people') and 'Agesilaos' ('Leader of the people') and 'Basiliskos' ('Kinglet') and all such are by nature names of one with a mind fit for ruling (*arkhikê*), but hardly of a

stupid man, and 'Eutuchios' ('Fortunate') and 'Eupraktos' ('Successful') of one who enjoys good fortune, but not of an unlucky man. And they too say that names resemble images – not natural ones, but those made by the art of painting, which makes different likenesses of different models and still strives to copy as well as possible the form of each <model>, according to which we often analyse <starting> from the names in an attempt to hunt down the natures of the things named by them, and once we have recognized these natures we try to show that the names applied to the things are consonant with the natures.

<'By imposition'>

Of those who classify names as by imposition, some mean 'by imposition' in this way, that it is possible for any man to name any thing with whatever name he likes, as Hermogenes thought,[165] while others do not mean it thus, but rather mean that names are given by the 'namegiver' alone, and that he is the one who has knowledge of the nature of things and states a name appropriate to the nature of each existing thing, or else he is the servant of the one who knows, and, learning from him the substance of each existing thing, is instructed to invent and impose a fitting and appropriate name for it. It is in this very respect that names are 'by imposition', because not nature, but the inventiveness of a rational soul established them, looking both at the particular nature of the thing and at the analogy of the male and female, which are such as to be seen in their proper sense among mortal animals. For the craftsmen of names did not thoughtlessly call rivers masculine, but seas and harbours feminine, but rather because they decided to speak of the latter with the feminine gender, as receptacles of rivers, while they thought the rivers, as flowing into them, appropriately related to the analogy of the male; and similarly in the case of all other things they found this analogy more or less clearly. It was with respect to this idea that they also determined to speak of the mind as masculine and the soul as feminine, since they observed that the former was able to illuminate, and the latter was naturally such as to be illuminated by it. Continuing in this way, not even in the case of the gods did they shrink from employing this distinction according to genders, deciding to call the sun masculine and the moon, since it receives its light from the sun, feminine. In fact, if the Egyptians used to call the moon masculine,[166] then they did so, I believe, because they compared it to the earth, the latter being illumined not only by the sun, but by the moon as well. Hence, too, Aristophanes' speech in the *Symposium*[167] claimed that the masculine befitted the sun, the feminine the earth, and the mascufeminine (*arrenothêlu*) the moon. And it is clear that the

Greeks are more correct than the Egyptians, since the moon receives its light in the first instance from the sun, and that light crosses over by reflection from it to the earth. In the same way they say that the sky is masculine and the earth feminine, as receiving the active force of the sky and because of it becoming productive of things which grow. And, in a way similar to these, seeing with the eyes by which these things were naturally seen that the activities of the hypercosmic entities were different, even if from far off, they have nonetheless adopted the same analogy in the case of the names which signify these entities. From these one can easily infer the sense of the so-called 'neuter' names too, as either referring to what comes before both, as when we say 'the First', or to what is from both, as when we say 'the child', or according to what proceeds from the superior to the inferior, as when we say 'the sperm' and 'the water',[168] or according to what applies jointly to both, as when we say 'the animal', or according to other such modes (*tropoi*), not to dwell too long on these matters.

<Agreement of a sense of 'by nature' with a sense of 'by imposition'>

Now, it is clear that the second sense of 'by nature' coincides with the second sense of 'by imposition', for what is imposed by the name-giver as being appropriate to the things for which they stand would be called on the one hand 'by nature', but on the other, as imposed by someone, 'by imposition'. Therefore, Socrates in the *Cratylus*, mediating between Cratylus and Hermogenes,[169] who are diametrically opposed on the question of whether names are 'by nature' or 'by imposition', shows[170] that they are neither 'by imposition' in the way that Hermogenes thought (for 'by nature' applies to them in the second sense of 'by nature', especially to those <names> by which we indicate the universal and simply the eternal[171] things, since these have a nature which is determinate and intelligible to us; to ensure the success of the first imposition of names upon individual things whose nature it is to be constantly changing, one must call chance [*tukhê*] a co-worker of tradition[172]), nor 'by nature' in the way Heraclitus said. For they are also 'by imposition', most of those imposed on individual things being also what Hermogenes in his coarse way called 'by imposition', and those which signify the eternal nature, these too are 'by imposition' in the second sense of 'by imposition'.

37,1

<What Aristotle means in denying 'by nature'>

Nor does Aristotle prescribe any differently from this when he says here that no name is 'by nature'. For he denies of them the sense of 'by nature' which the Heracliteans were advocating, just as Plato did,

and he would not have declined to call them 'by nature' in the same sense as the divine Plato does. He makes this clear in many of his treatises, where he attempts to show that names are consonant with things. For example, in the *Physics* lecture, the name of 'spontaneity'[173] and that of 'void',[174] or in the *Meteorology*, that of 'raindrop' and 'shower',[175] as well as all the names we know that he posited, such as 'entelechy' for the form,[176] or 'term' for the simple vocal sounds in syllogisms,[177] or 'figure' for a certain combination of premisses[178] and, in this very work *On Interpretation*, the 'indefinite name' (16a32, etc.) or 'indefinite verb' (16b13, etc.) or 'contradiction' (17a33, etc.). These names posited by him show very clearly what the Philosopher thought about these matters.

<Reply to arguments against 'by nature'>

If someone thinks he can show that names ought not to be said to be 'by nature' even in this way, attacking[179] on the grounds that names are substituted (*metathesis*)[180] and that the same thing is often named by several names, we shall reply that the substitution actually shows
38,1 quite clearly that names are by nature. For it is clear that we use the substitution <only> in changing over to certain names which are more appropriate to the things, and that we shall by no means say that the plurality of names prevents each one of them from being suited to the nature of what it names. Just as there can be several images of the same man, each of a different material – say, brazen, wooden, or stone – all having a resemblance to him, here too in the same way, nothing prevents the same nature from being named with some syllables and then others, one and the same substance being signified out of all <the syllables> according to first one concept (*ennoia*) and then another. For example, the names '*anthrôpos*', '*merops*', and '*brotos*' signify the same thing, but the first is <the name> according to which one 'looks up at what one sees' (*anathrei ha opôpe*),[181] the second according to which one 'has a divisible vocal sound' (*meristê phônê*; where *phônê* is a synonym for *ops*), and the third <is said> according to 'the fall of the soul into birth and the pollution in this world'; or else, with reference to the <fact that each is a> compound, '*anthrôpos*' according to his 'having an articulate vocal sound' (*ops*) or 'holding his countenance (*ôps*) aloft', '*merops*' since he 'uses a divided (*memerismenê*, i.e. articulate) vocal sound (*ops*)', and '*brotos*' as 'being mortal' (*mortos*) or 'divisible', 'fatal' (*moirêtos*),[182] whence the poet from Cyrene wrote:

> we mortals built cities (*edeimamen astea mortoi*).[183]

And if this is correct, it is clear that we shall not accept the opinion

of Diodorus the Dialectician, who thought that every vocal sound is significant and as a proof of this claim called one of his servants 'Allamen' (i.e. *alla mên*, 'but in fact') and others by other conjunctions. For it is hard even to imagine what meaning such vocal sounds will have, that of some nature or person, as names do, or of an action or passion, as verbs do.

<'By imposition' is not contradicted by the efficacy of prayer>

Others attempt to rule out the <application> of 'by imposition' to names, as Dousareios of Petra[184] does, citing our prayers and curses, in which our names, when they are said, clearly either help or harm the people named <by them>. <They say this> even though the agreement of men has arisen between men, and an agreement between men and gods could not even arise in our imagination. So to them one must say that in creating us rational and self-moving the gods appropriately made us masters of many deeds; both seeing all our <affairs> unerringly and accepting our own impositions they give us our due as self-movers with respect to those <impositions>. But we are rather the ones who establish this type of life among ourselves through these sorts of representations, appetites and inclinations in addition to the impositions, and then in this life we enjoy the foresight 39,1 of the gods which is appropriate to us. We see that bodies, when they are consumed by fire, become naturally light and upwardly mobile, but then change again, becoming more earthy and heavy, and are borne back downwards by the inclination which they then have. In the same way, when King Sun[185] at noon illuminates the entire hemisphere of the earth, those who are awake and have healthy eyes enjoy the good things that come from the light, while those who are asleep or whose eyes are closed or otherwise covered do not have vision by their own fault, but not by any stinginess of the god who unstintingly provides light for all.

<Refutation of the syllogism of Alexander>

But we have gone on too long about these matters, since we wanted to show the agreement of the philosophers and since we decided not to leave fully unexplored this problem (*theôrêma*) which was customarily discussed by the ancients. After this, let us investigate the syllogism set out by the interpreter from Aphrodisias, which purports to establish that names and verbs are solely by nature. For he says that names and verbs are vocal sounds, vocal sounds are by nature, and thus names and verbs are by nature. However, against this one must say that names and verbs should be called 'vocal sounds' not

simply, but in respect of their matter. So, just as if someone said 'the door is wood, wood is a product of nature, thus the door is a product of nature', he would be ridiculous (for the door is said to be 'wood' in respect of its matter, but it is not necessary for that which uses natural matter to be by nature itself, since all works of craft, while they owe their existence to our invention, subsist on natural matter), in the same way here too it must be said that the vocal sound is a product of nature (for we are vocalizers [*phônêtikoi*] by nature) but names and verbs should be called 'vocal sounds' not simply, but having been shaped and transformed in a given way by the so-called 'verbal imagination' (*lektikê phantasia*),[186] which moves this way and that way the organs of speech, just as the wood is shaped by the craftsman for the creation of the door. So, just as one would not call the wood a 'door' before it has been shaped, so also one would not call vocal sounds which had not been shaped in a certain way 'names' or 'verbs', so that in respect of their form they are said to be 'names' and 'verbs', having come to be from our invention and being for that reason by imposition. So much, then, against this syllogism.

<'Symbols' vs. 'likenesses'>

Aristotle, for his part, reminds us that names are by convention from the fact that their being immediate symbols of what they name, rather than natural likenesses, is clear right at the first creation or imposition of names; or, if they are <likenesses>, this likeness (*homoiôma*) is entirely artificial. Hence too, if one should seek the genus of name, since we say that vocal sound has the rôle of its matter, we shall answer 'symbol', so that the actual definition <of name> will be: 'a symbol from vocal sound which is significant by convention without time, of which no part is significant when separated, indicative of the existence of something or of a person.' Now that its genus has been given, what was said earlier in place of a definition leads us to the concept of name both from its matter and its proximate species. <It is> as if someone wanting to clarify 'throne' considered it sufficient for the establishment of its concept to say that it is wood shaped in this way, although it was possible to be accurate and say that it is a furnishing useful for this and made out of wood shaped in this way. Obviously, this same thing will be the genus of both the verb and the sentence too, in respect of the significant capacity in them. For 'signifying' (*sêmainon*) and 'signified' (*sêmainomenon*) are said relative to one another, so that the things which signify by convention are reasonably <said to be> symbols of the things signified. But with regard to the word (*lexis*) and the number of syllables which complete it, we shall refer each of these to the <category of> 'quantity'. It is no wonder that we want to call the name both a 'symbol' and an 'artificial

likeness' (*homoiôma tekhnêton*). For what is imposed unreflectively (*askopôs*) is merely a symbol, while what is imposed according to reason resembles symbols in being able to be composed of now some and now other syllables, but in being appropriate to the nature of what is named it is a likeness, not a symbol.[187] But one must accept these things as corollaries from what has been said, agreeing with what is taught about the name by Socrates in the *Cratylus*.[188] In fact, he says the name is a representation (*mimêma*) of the substance of each thing through articulate vocal sound, which is the same as saying it is constructed out of letters and syllables, just as verbs are representations of what follows upon – that is, of what belongs to – substances, and the sentence consists of both, i.e. of name and verb, so that he himself both here and in what is said in the *Sophist*[189] would be positing before Aristotle that only the name and verb are properly parts of the sentence.

<'Beasts' sounds, none of which is a name'>

The Philosopher, demonstrating the point of 'by convention', says: 'since even unlettered sounds (*hoi agrammatoi psophoi*)' – that is, inarticulate vocal sounds (for he uses sound now as genus of vocal sound, instead of its species) – 'indicate something, e.g. beasts' sounds, none of which is a name', as if to say, 'since apart from this addition we would not have meant the name any more than the unlettered vocal sounds uttered by nature, e.g. those of irrational animals', which he calls 'beasts', just as Plato does,[190] since they rather have 'wild' as a concomitant because of their irrationality and their not being made for society, but accepting tameness as something acquired – in all those to which this seems to belong at all – when they are domesticated. The phrase 'of which none is a name' is said either instead of 'no one' – 'of which sounds no one is a name' – or by ellipse of 'utterance' (*phthegma*) – 'of which beasts no utterance is a name'. For I do not suppose he would say that there were no names of the vocal sounds of the irrational animals, since one is called 'barking', another 'neighing' or 'lowing'.[191] Having explained these things, he adds nothing about the rest, about 'voice' and 'significant', since they are too obvious. But he takes up the doctrine of the 'indefinite name' and says:

> **16a30** 'Not man' is not a name. In fact, there is not even a name which one should call it, for it is neither a sentence nor a negation. But let it be an 'indefinite name', because it applies equally to either, both what is and what is not.

<'Indefinite name'>

He introduced this observation at this time because he saw that such vocal sounds too were often included in assertions, as when we say 'Not man walks' (*ouk anthrôpos peripatei*), although they were not accorded any name by the ancients. And so, he teaches both which vocal sounds which do have names might be suspected of being the same as they, although they are not in truth the same, and also what it is correct to call them. Now, although one would most likely think that they were names, both because they occupy the place of subjects in propositions in a way similar to true names and because the given definition of the name fits them (for the other <qualities> are obviously true of them, and moreover not even in their case are their parts significant by themselves, i.e. 'not' and 'man', when they are taken as parts of the unit 'not man'), Aristotle nonetheless thinks they ought not to be called simply 'names', because a name signifies one nature, that of the thing named, while each such vocal sound destroys one thing, what is signified by the name said without the negative <particle>, but introduces all the other things besides that, both those which are and those which are not. For 'not man' is not said just of a man, but also of a horse or dog, or of a goat-stag or hippocentaur, and
42,1 of absolutely all things which are or are not. For this reason he bids us call them, this whole class, 'indefinite names': 'names', on the one hand, because, as will be said about them in the sequel, they too signify one thing in a way, namely everything besides the definite thing considered as one, e.g. 'not man' signifies everything besides man as being one in just this respect, that all have in common their not being just what a man is; but 'indefinite' because what is signified by them does not signify the particular existence of any thing, which is the rule among names, but rather a non-existence which applies equally to things which are and which are not. But, since one might have assumed that such vocal sounds were either negations, because of the addition of the negative particle, or sentences quite generally, because they show some compounding, for this reason he adds the indication that neither of these is a possible name for them, neither 'negation' nor simply 'sentence'. They are not negations, because every negation becomes an affirmation when the negative particle is removed, given that this is precisely what it has in addition to an affirmation. But such vocal sounds, when the negative particle is removed, make names and not affirmations. Nor, however, are they simply sentences. For neither are they wishes, nor commands, nor addresses, nor questions, nor assertions in general, since every assertion is significant of either truth or falsity, but neither of these is signified by such vocal sounds. So, since it is neither possible to call them either 'sentence' or 'negation', nor do we have any other name

in common usage for such vocal sounds, for this sort 'name', for that sort 'verb' and for these 'affirmation' and for still others another name, let us call them, says he, 'indefinite names', by the phrase 'but let it be an "indefinite name" ' indicating that he is the one who has imposed this name on vocal sounds of this sort.[192]

16a33 But 'Philônos' ('Philo's') or 'Philôni' ('to Philo') and all such words are not names, but rather cases of names. The definition of this is in other respects the same, but together with 'is' or 'was' or 'will be' it does not make a true or false assertion, which a name always does, e.g. 'Philo's is' or 'Philo's is not'. For it is not yet true or false.

<The nominative is not a case>

Concerning the utterance of names in the nominative (*eutheia*, literally 'direct'), the ancients used to investigate whether it was proper to call this a 'case' (*ptôsis*) or not, <or whether> it was itself rather the name of each thing which it names, while the other cases of the name came about by the reshaping of the nominative. Aristotle represents the second opinion, and all the Peripatetics follow him, while the Stoics[193] and, since they follow them, those who pursue the art of grammar represent the first opinion. But when the Peripatetics say to them that, while we are correct in calling the others 'cases' because of their having 'fallen' (*peptôkenai*) from the nominative, by what reasoning is it correct to call the nominative a 'case', as though it has fallen from what? (for it is clearly proper for every 'case' to come from something placed above it), the Stoics reply that it too has fallen, namely from the thought in the soul: 'For when we want to make clear the thought of Socrates which we have in ourselves, we utter the name "Socrates". So, just as a stylus released from a height and lodged upright is said both to "have fallen" and to have "the upright fall" (*orthê ptôsis*), in the same way do we <Stoics> think that the nominative "has fallen" from the concept (*ennoia*), and that it is "upright" because it is the archetype of the utterance used in the expression <of its other forms>.' 'But if this is the reason', say the Peripatetics, 'why you think you should call the nominative a "case", then verbs too will turn out to have cases, along with adverbs, which are not even such as to have case-endings (*kliseis*). But this is clearly absurd and at odds with your own teachings.'[194] So, for this reason, one should prefer the Peripatetic arrangements concerning these matters.[195]

<Cases do not make an assertion when combined with just the copula>

Here[196] Aristotle distinguishes the cases from the name, although these[197] too accept the definition which has been given of the name in a way similar to it. <He distinguishes them> by the fact that the name is true or false when taken with 'is', 'was', or 'will be', while the cases are not. For one who has said 'Philo is' or 'Philo was' or 'Philo will be' has said either something true or false, while one who has said 'Philo's is', or '… was', or '… will be' has said nothing true or false, since such phrases (*logoi*) require some addition in order to complete a thought. So, if 'son', 'this' or[198] 'field' is not added, e.g. 'this is Philo's son' or '… field' or 'this (man) is a friend to Philo', nothing either true or false is completed. Some other kind of sentence, e.g. the vocative, can be indicated even by one mere case of the name, namely the one called for this very reason 'vocative', which requires no verb in order to signify, e.g.

> O blessed Son of Atreus, child of Destiny, wealthy-spirited one!
> Homer, *Iliad* 3.182

Hence, we both break off the vocal sound after this, and move the one addressed, if nothing prevents it, to respond, the thought being in this respect completed. It is, however, not possible for either this or any other case to make an assertion, not even by adding 'is'.

<Porphyry on the Stoic classification of predicates>

Very well indeed did the philosopher Porphyry indicate that 'is' does not stand for just any verb, but only that <verb> which is derived from 'being' and signifies existence is used to make a complete sentence along with a name and an incomplete one along with cases. For there are some verbs which, when constructed with cases, also make true or false sentences, while being incapable of being constructed with names, such as 'it is a regret' (*metamelei*) in 'it is a regret for Socrates' (*Sôkratei metamelei*), 'Socrates it is a regret' (*Sôkratês metamelei*) being unconstruable. There he also reports the Stoics' arrangement of predicate terms in propositions as follows:[199]

> What is predicated is predicated either of a name or a case, and each of these is either complete (*teleion*) as a predicate and sufficient along with the subject for the generation of an assertion, or incomplete (*ellipes*) and in need of some addition in order to make the predication complete (*teleion*). So, if something makes an assertion when predicated of a name, it is called by them a 'predicate' (*katêgorêma*) or

'occurrence' (*sumbama*) – they both mean the same thing – like the word 'walks' in 'Socrates walks' (*Sôkratês peripatei*); but if when predicated of a case, it is called a 'paroccurrence' (*parasumbama*), as if it lay beside an occurrence and were like a parapredicate (*parakatêgorêma*), as in the case of 'is a regret' in 'it is a regret for Socrates'. For 'feels regret' (*metameleitai*) is an occurrence, but 'it is a regret' (*metamelei*) is a paroccurrence which is neither capable of being constructed with a name to effect an assertion, e.g. 'Socrates it is a regret' (*Sôkratês metamelei*),[200] which is not an assertion, nor capable of being declined (as 'I walk', 'you walk', 'he walks') nor of taking on a different form to go with its number: for, as we say 'It is a regret to him' (*toutôi metamelei*), so do we also say 'It is a regret to them' (*toutois metamelei*). Again, if what is predicated of a name needs the addition of a case of some name in order to make an assertion, it is called 'less than a predicate' (*elatton ê katêgorêma*), as with 'loves' (*philei*) and 'is well disposed' (*eunoei*), for example 'Plato loves' (for when the 'whom' is added, e.g. Dio, it makes the definite assertion 'Plato loves Dio'). But if what is predicated of the case is what needs to be joined with another oblique case in order to make an assertion, it is called 'less than a paroccurrence' (*elatton ê parasumbama*), as with 'it is a care' (*melei*), for example 'It is a care for Socrates about Alcibiades' (*Sôkratei Alkibiadou melei*); all these they call 'verbs' (*rhêmata*).

<The five senses of 'name' in Aristotle>

Such is the Stoics' teaching about these matters. But summing up what Aristotle said about the name, we say that according to the current teaching a name properly speaking is a vocal sound significant by convention without time, of which no part is significant when separated, signifying something definite, and either true or false when taken along with 'is', 'was' or 'will be'. But why did not Aristotle give this definition of name from the start, so that neither indefinite names nor cases would disturb the exposition?[201] We say that many things are signified by 'name' in Aristotle. In fact, he deems (1) every vocal sound which is significant by convention of any existing thing at all to deserve the appellation 'name', just as the wise man in Plato's *Sophist*[202] did when he divided name *tout court* into name in the proper sense and verb, according to which meaning all verbs would also be called 'names' (and Aristotle himself makes this clear in what follows [16b19]: 'now, verbs said by themselves are names and signify something', apparently deciding to call them 'names' because of their power of signification, since they are also 'names', in a way, of the activities and passions signified by them). You will also find him calling (2) every vocal sound which produces a subject in a proposition a 'name', as he will make clear when he says in the third section of the book (ch. 10, 20b1): 'but when the names and verbs are transposed it signifies the same thing', so that according to this signification 'fair' and 'just' and all such <terms>, when considered as participating in

certain other <terms>, which, as subjects, participate in them and of which they are such as to be predicated, are called 'verbs' and not 'names', while in turn 'to walk' and 'to philosophize' are 'names' and not 'verbs', because they form subject terms in the propositions 'To walk is to move' (*to badizein kineisthai esti*), 'To philosophize is helpful' (*to philosophein ôphelimon esti*). That is also why the article 'the' (*to*) is constructed with these, inasmuch as they now fill the place of names. 'Name' is also said in another way, (3) in accordance with the definition of 'name' given at the beginning: 'every vocal sound significant by convention without time, of which no part is significant when separated', in which case 'fair', 'just', 'not man', 'Philo's' and 'to Philo' would be names. And in addition to these, (4) every vocal sound which admits the given definition of 'name' and signifies something definite would be called a 'name', in which signification nothing prevents cases from being called 'names', although one can not yet call things said indefinitely 'names'. He gives us an idea of this when he says (19b10) that every affirmation and negation is <composed> either of a name and verb or of an indefinite name and verb, since he distinguishes the name only from the indefinite name, and no longer from the cases. Further, besides all the enumerated senses of 'name', that (5) which results from the qualifications added to the given definition of name, apart from the cases and indefinite names, is also called 'name'. Therefore, given that 'name' is said in five ways, one must admit that all the things Aristotle speaks of using these senses are correct<ly so called>. In fact, the definition given of name is sound in respect of the third of the enumerated senses of 'name', and the qualifications added later do not belie the definition, but give us other senses of 'name', the qualification about indefinite names giving us the fourth signification and that about cases giving us the fifth.

<'In other respects the same, but …' is a formula from the assembly>

However, the passage which says: 'the definition of this is in other respects the same' is said about the name pronounced in a certain case, saying that it will have a definition – which he calls '*logos*' – no different in the other respects from the definition of 'name' given at the beginning (since this too is a vocal sound significant by convention without time, of which no part is significant when separate), but going beyond it in the *differentia* which distinguishes the cases from the 'name' properly speaking, that is, in the fact that the cases, taken solely along with 'is' or 'was' or 'will be', do not yet make a complete assertion and hence are neither true nor false, while just one of the verbs suffices to make the name into a complete assertion. This phrase is taken from the Attic custom of introducing several decrees

before the people at once. You see, the secretary would read the first of the written decrees to the people and say the name of the one who wrote it, along with his father and his deme, e.g. 'Demosthenes son of Demosthenes, of Paiania introduces the following decree', but mentioning the second or the third, if there was one, he would indicate only that he would read another decree of the same man by 45,1
saying to the people before his reading of it: 'in other respects it is the same, but the following is also decreed …' Hence too Socrates in the *Gorgias*[203] used this same wording and attributed it to the secretaries 5
of the people.

<CHAPTER 3>

16b6 A verb is that which additionally signifies time, of which no part signifies separately, and is always a sign of things said of another. I say that it additionally signifies time, e.g. 'health' is a name, while 'is healthy' (*hugiainei*) is a verb, for it additionally signifies being true now. And it is always a sign of things 10
said of another, e.g. of things said of a subject or in a subject. But 'is not healthy' and 'is not ill' I do not call verbs. For they additionally signify time and always belong to something, but there is no name for their *differentia* <from verbs>. Let this be an 'indefinite verb', since it belongs to anything in the same way, whether existing or not existing. And similarly 'was healthy' 15
and 'will be healthy' will also not be verbs, but cases of a verb. They differ from a verb in that while it additionally signifies the present time, they signify the surrounding time.

<The definition of verb is given in abbreviated form>

The complete rendering of the definition of the verb would be close to the definition given of the name: 'a vocal sound significant by convention, additionally signifying time, of which no part signifies sepa- 20
rately', but inasmuch as Aristotle loves brevity, he passes over everything the verb has in common with the name as having been said in the definition of the name and teaches his lesson about the verb starting from where it differs from the name, i.e. in its additionally signifying time. But if this is so, why on earth does he add 'of 25
which no part signifies separately', which was also included in the definition of the name? Let me respond to this difficulty with the answer of Porphyry,[204] that some sentences consisting of verbs have significant parts, by which I refer to the actual verbs of which the sentences are constructed, as when I say 'To walk is to move' (*to*

badizein kineisthai esti); for 'to walk' and 'to move' and 'is' are significant by themselves, although they are parts of the whole sentence. So, in order to distinguish verbs from such sentences, which
48,1 fit the other parts of the definition of 'verb' – i.e. 'voice', 'significant', 'by convention', 'additionally signifying time' – he needed to add this *differentia* here too. But how could he say that the verb does not 'signify', but '*additionally* signifies' time? Because 'signify' is, as we said earlier (32,7), to indicate something primarily, but 'additionally
5 signify' is to make something else clear in a second statement (*logos*), in addition to what is indicated in the first place. We utter verbs when we want primarily to indicate certain actions or passions, but the times adjunct to the actions or passions, according to which they are said to be, to have been, or to be going to be, we see along with these actions and passions as appearing alongside them.

<Verbs occupy the place of the predicate in propositions, as already in Plato>

10 Next it remains for Aristotle to teach us the place which the verb occupies in propositions, saying: 'and is always a sign of things said of another', i.e. that verbs always occupy the place of the predicate, not that of the subject. And that is correct; for, if they signify actions
15 or passions, and these are not detached and existent on their own, but refer to other things, namely those acting and suffering, then it would clearly befit them to be predicated of the latter. Plato too makes the same arrangement concerning them when he says in the *Sophist* about the fact that every significant vocal sound is called a 'name':

20 > <Stranger>: Come now; just as we were saying about forms and letters, let us investigate in the same way again about names, since the present topic of investigation is observed in this sort of way. – <Theaetetus>: Now, what must be understood concerning names? – Either they all fit with one another, or none do, or some want to and others do not. – That, at least, is clear: some want to and others do not. – You mean this, perhaps, that names said one after another and indicating something particular fit together, while those signifying nothing in their conjunc-
25 > tion do not fit together?[205]

Here that too is clear, that before Aristotle Plato says that there is one identical sentence significant of one identical thing (the meaning of 'indicating something'), since even the <words> which do not fit together (i.e. names said one after another without a verb, or verbs without a name) certainly signify, but they signify several things and
30 not some particular thing. Concerning there being only two kinds of significant vocal sounds, name and verb, the one indicating exist-

ences, the other actions or passions, which he called jointly 'doings' (*praxeis*), <Plato says>:[206]

> <Stranger>: That's what I thought you assumed when you agreed; for we have two kinds of indications about existence in the vocal sound, one called 'name' and the other 'verb', the verb being said for doings, and the other sign of the vocal sound, the name, being applied to the very things which do those. 49,1

Here he not only clearly says that the verb indicates actions or passions (the meaning of 'doing') but he also calls it a 'sign' (*sêmeion*) before Aristotle ('sign' indicating in both philosophers the significant) and he calls it significant by imposition, not by nature, according to what was earlier defined (cf. 34,17ff.) about these in the treatment of the name.

<The verb is *always* predicated>

The word 'always' is also not added in vain in 'and is always a sign of things said of another'. For this especially makes the particular property of verbs clear, since nothing prevents names too from sometimes being predicated, as 'animal' is predicated of 'man', but they neither belong to those which are only and always predicated nor, when they are predicated by themselves without some verb, e.g. 'is' or 'is not', are they such as to effect a complete sentence, while verbs, which preserve their peculiar force, come to be predicated only and always and by themselves.

<'Said of a subject or in a subject'>

Having said this about the verb, <Aristotle> next attempts to explain each of the things used for his doctrine, and justifiably first of all that verbs additionally signify time. That this was added of necessity to distinguish the verb adequately from the name, he indicated briefly by comparing to one another a name and a verb concerned with the same thing (*pragma*), health and he-is-healthy, and showing that while the name indicated no time, the verb also signified time in addition to the particular state (*diathesis*) which it primarily indicated. Next, passing over 'of which no part signifies separately', since it received sufficient explanation in what was said about the name, he moves on to the rest and says that verbs have been said to be significant 'of things said of another', namely 'of things said of a subject or in a subject'.[207] And he says this because, of verbs just as also of names, some belong to the things of which they are predicated according to their essence and are said to be predicated as completing

them, which he called 'of a subject' in the *Categories*,[208] while others belong as accidents to their subjects, which we refer to as 'in a subject'. For just as, when we predicate of 'man' both 'animal' and 'pale', which are names, we do not predicate both in the same way, but 'animal' as *of* 'man' as subject and 'pale' as having its being *in* him as subject, the same will hold in the case of the predication of verbs. For, when I say 'To walk is to move according to place' or 'To warm is to act', I have predicated as *of* a subject first 'to move according to place' of 'to walk' and then 'to act' of 'to warm', since the former are more general than the latter. But when I say 'Socrates walks' or 'Plato reads', here the predicates are predicated *accidentally* of their subjects. Now, for this reason, in order to set out both kinds of predication, once he said that verbs always like to be predicated, he added how, namely sometimes *of* a subject and sometimes *in* a subject. And this explanation will fit with the text as we have set it out, just as we find it in the majority of copies. But if, despite that, some would prefer the reading 'and is always a sign of things which exist, e.g. of those said of a subject' (*kai aei tôn huparkhontôn sêmeion estin, hoion tôn kath' hupokeimenou*), as Porphyry the philosopher says,[209] we shall say that 'of a subject' has been included here standing for 'in a subject' too, for Aristotle is accustomed sometimes to speak indifferently of 'in a subject' and 'of a subject'. All in all, of these we should prefer the first reading and explanation.

<Verbs as subjects: infinitives and mentions>

That verbs sometimes also become subjects, as 'to philosophize' in 'To philosophize is beneficial' and 'to walk' in 'To walk is to move', and that then they are included in sentences not as verbs but as names, which is why they are also preceded by the article, has been said earlier (45,29). Perhaps one must say that actions and passions have both particular natures and proper characters, according to which they both differ from one another and are said to be of others, which act or suffer, and that we signify them sometimes seeing them as existing and having some particular nature, and sometimes observing them as subsisting with regard to some other subjects, and that we must call the vocal sounds which signify their existences 'names', and those which indicate their reference to their subjects 'verbs'. Thus, 'to philosophize' and 'to walk' and all those which grammarians call 'infinitives' (*aparemphata*), inasmuch as they additionally signify time, are called 'verbs' and not 'names'; but insofar as they signify things subsisting in any way – I mean the actions or passions – the article, which usually fronts only names, precedes them, and they do not always occupy the place of predicates, which Aristotle wants to be peculiar to verbs, <and so> they must be called 'names' and not

'verbs'. One must understand that even when these become predicates, like 'to move' in 'To walk is to move' or 'to be beneficial' (*ôphelesthai*) in 'To philosophize is to be beneficial', they are no different in respect of being predicated from what are agreedly 51,1
names, e.g. of 'animal'. For neither can these produce a complete sentence without the addition of 'is' or 'is not' or 'is said' or 'I'm going' (in 'I'm going to speak') or some other such word. Now, when we take these as being names of things existing in whatever way, then we try both to indicate something about what is signified by them and to 5
predicate certain real verbs of them, just as we are accustomed to do in the case of real names. But this has been said about what the grammarians call the 'infinitive inflection' (*aparemphatos enklisis*) of verbs, with which, even alone, we are accustomed to signify properly the actions or passions which are used in the position of subjects, 10
when it is necessary to say something about them. But if some verb ever becomes a subject in the other inflections, as 'I am healthy' (*hugiainô*) in ' "I am healthy" is a verb', it must be understood that in that case we are not speaking about the actual state (*diathesis*) being signified, but about the vocal sound which signifies it, examining it as a vocal sound and specifying the name mentioned by means of this 15
vocal sound. Moreover, the vocal sounds <belong to the class of> existent things and, just as we also distinguish other things from one another by names, <so> do we signify these <voices> themselves, some with certain names and others with other names. Therefore, you will not find this sort of thing happening only among verbs, but also in the case of every vocal sound, both significant and meaningless; for we say 'the conjunction *men*', 'the article *to*', '*knax* is a meaningless vocal sound'. Aristotle, however, did not say that the 20
actual vocal sound of a verb itself was what always wants to be predicated, but what is signified by it, which is some action or passion. Hence he also said that it is 'always a sign of things said of one another'. Now, enough of this.

<The indefinite verb>

Concerning the indefinite verb we shall not need much discussion. 25
For we shall say the same things as about the indefinite name: that it has not entirely left behind the nature of verbs, as Aristotle briefly reminded us when he said 'they additionally signify time and always belong to something', and that this whole <class> is called 'indefinite 30
verb' because it is not said of something definite. When he says 'but there is no name for their *differentia*', by '*differentia*' he means the difference between the indefinite verb and the definite one. He says that there is no name for this difference, by which we can make clear that this indefinite verb, about which he is speaking, is different from

51,1 the verb – just as for the difference of the name from the verb we have this existing name, the actual calling of the one 'name' and the other 'verb'. Now, since we do not in the same way, in the case of the verb and indefinite verb, have two names, which are able to indicate to us 5 that these are different from one another, but one of them got a name, that is, to be called 'verb', while the other was overlooked by those who gave names and has no such vocal sound which signifies it, Aristotle says that there is no name in common use for the *differentia*, the peculiarity which the indefinite verb has *vis-à-vis* the definite verb and which the 'fathers of names' ought to have thought worthy 10 of an appellation. Hence, giving it a name himself, he decides to call it an 'indefinite verb', 'since', he says, 'it belongs to anything in the same way, whether existing or not existing', using 'to belong' (*huparkhein*) instead of 'to be truly predicated'. For nothing prevents something being truly predicated even of what is not, as not belonging to it or not being such as to belong <to it> – as when I say 'The 15 hippocentaur is not healthy' or '… is not ill' – but it is impossible for something to belong to what is not.

<Cases of the verb; three senses of 'verb'>

In addition to this he teaches us the distinction of verbs from their cases, just as he did in the case of names. He says that those which are said of present time, of whatever person they may be, he calls 20 'verbs', such as 'I am healthy', 'you are healthy', 'he is healthy' (obviously meaning the extended [*en platei*] present, since it is not possible to do or utter anything according to the 'timeless' [*akariaios*: 'momentary'] present[210]), while those additionally signifying the surrounding time (by which he means the past and future, since they surround the present) he calls 'cases' of the verb, as if they arose by 25 altering the form of the verbs which are said of the present time. Thus, the 'verb' properly speaking is the one which is said of the present time and signifies something definite. But if someone should wonder here too why Aristotle did not add these distinctions to the definition of the verb from the beginning, we shall not say, as did Herminus,[211] that the definition given at the beginning was deficient, 30 but rather that the Philosopher also uses several senses of 'verb', and that the definition given at the beginning belongs to one sense, while the Philosopher describes another sense by means of the present additions. For you will find 'verb' said in three ways by Aristotle: 53,1 either (1) 'every vocal sound additionally signifying time, of which no part signifies separately, and which is always said of something else', as he defined it in the beginning, according to which sense both indefinite verbs and cases of the verb would be verbs; or (2) 'every vocal sound additionally signifying only the present time and indi-

cating something definite', the sense which is taught us in what he says now; or (3) 'every vocal sound making a predication in a proposition', so that according to this sense 'fair', 'just', 'pale', and 'animal', when they are taken as predicates, are called 'verbs', which they were not according to either of the earlier senses. That he also knew this sense of 'verb' he indicated already at the start of this course, when he said: 'So names and verbs themselves resemble the thought without combination and division, e.g. "man" or "pale", when nothing is added' (16a13ff.). And in what follows you will find that he has the same idea about this, when he says: 'When the names and verbs are transposed, the meaning is the same' (20b1). For, having said this, he transposes 'man' and 'pale', <treating> one of these as a name and the other as a verb. If, however, in the proposition which says 'The man is pale', the word 'man' is used as a name, just as had been assumed at the beginning, then it is clear that 'pale' would be used as a verb, and in the <proposition> opposed (*antistrephousa*) to this one, which takes 'pale' as subject and makes 'man' predicate, it is clear that 'pale' will be said to be a name and 'man' a verb. But this predication is unnatural, just as when we say that the man is an accident of the master. Hence too you would not properly say that 'man' is called a 'verb' when 'pale' is a name, since it is also not naturally predicated of it. But when we predicate paleness of the man, the predication will be natural and the predicate will correctly be called a 'verb', since it signifies what is shared by the man and since it is such as to be predicated of him as its subject. Now, since these things have been clarified, let us examine what Aristotle says next about the verb.

16b19 Now, verbs said by themselves are names and signify something (for the speaker stops his thought and the listener rests), but they do not yet signify whether it is or is not. For not even 'to be' is a sign of the thing nor is 'not to be', nor is 'being', if you say it by itself. For by itself it is nothing, but it additionally signifies some composition which it is not possible to know without the constituents. 54,1

<Verbs 'signify something'>

Having taught us the definition of the verb in the foregoing at both a general and specific level, Aristotle wants in these words to say how verbs stand with respect to signifying something true or false. He has already said in a general way at the beginning (16a9ff.), where he spoke about the relation of things, thoughts, and vocal sounds to one another, about all the simple vocal sounds that they resemble

thoughts without composition or division and are receptive of neither truth nor falsity. But now he wants to establish it more clearly by showing that what seems most of all the simple vocal sounds to admit truth and falsity, i.e. the verb, signifies neither of these. For he dealt there with the other part of the sentence (*meros tou logou*), the name, showing that, even if it is as compound as can be, e.g. 'Kallippos' or 'goat-stag', it signifies a nature or a thought, but not truth or falsity, unless some verb be added to it. Here, teaching us the same observations about the verb, namely that it is significant of certain activities or passions, but not of truth or falsity, unless some name be joined to it,[212] he says: 'Now, verbs said by themselves are names and signify something', where 'names' stands for 'significant', which is why he also added the clarification 'and signify something'. Then, in support of this contention that verbs are significant of certain things, he adds 'for the speaker stops his thought and the listener rests'. By this he means either, let us say, that we terminate the thought of the verb 'is healthy', which was being extended along with the length of the utterance and which, being pronounced at length with the production of the word, we in a way stop, having said or heard the whole verb, or that if the thought of him who has asked 'What, perchance, is Socrates doing?' is in doubt and wandering, so to speak, because of thinking of several things, of which each is capable of belonging to him, but knowing definitely about none of them that it is what is true, the one who answers, saying 'He is walking' or 'He is conversing', stops the thought, rescuing it from doubt, and the one who asked, whose thought was previously wandering and indefinite, upon hearing the response given with the verb, rests. Thus, the verb, when it was said, clearly signified something, since these things happened when it was said, and the answerer did something when he said the verb (for he stopped the thought of the one who asked), and the other man suffered <something> when he heard it: for he rested.[213] So, that verbs signify is clear from this.

<The verb alone does not signify truth or falsity>

'But whether it is', Aristotle says (16b21), 'or is not', is not yet clear. For him 'it is' signifies affirmation, and 'or is not' signifies negation, or rather 'it is' signifies truth, 'or is not' falsity. For he who in accordance with nature[214] says that what is 'is' speaks the truth, and he <who says> that it 'is not' speaks falsehood. So, verbs signify something, Aristotle says, a suffering or activity, but they do not yet signify truth or falsehood.[215] And he adds this by way of a syllogism: 'For not even "to be" is a sign of the thing, nor is "not to be".' This is an argument *a fortiori* that verbs do not admit the true and false. For,

if the most primitive and general of verbs, those into which all the rest are analysed, since they immediately signify being so (*huparkhein*) or not being so (*mê huparkhein*)[216] itself, are not true or false when said by themselves, then clearly other verbs would accept these properties much less. And in fact, the first is so; thus, so is the second. He assumes that of all verbs 'is' and 'is not', which he calls 'to be' and 'not to be', are most primitive, since each verb could be analysed into a participle and one of these, definite verbs into 'is' and indefinite verbs into 'is not': for example, 'he runs' – 'he is running' (*trekhei* – *trekhôn esti*), 'he thrives' – 'he is thriving' (*hugiainei* – *hugiainôn esti*), 'he runs not' – 'he is not running', 'he thrives not' – 'he is not thriving'. If, therefore, <since> these verbs are such and by themselves they signify nothing true or false, how could it be reasonable for the verbs posterior to these, which signify being so or not being so entirely by their participation in these, to indicate anything true or false? And that 'is' or 'is not' by themselves signify nothing true or false, is perhaps clear just by itself: for one who has said ten thousand times 'is, is' or 'is not, is not' has signified neither of these. But he establishes this too by a similar *a fortiori* argument, taking something more primitive than 'is', namely 'being' (*on*), from which 'is' and 'is not' are derived. For he says that not even this 'being', which is a name, is a sign of the thing, just as neither is the verb derived from it, 'is'. That is to say, it is not revelatory of the thing's truly existing, when it is said baldly (*psilon*), i.e. by itself. For 'is' signifies something when said by itself, and 'being' likewise; but neither of these posits itself and says that it exists, even when said ten thousand times, so as to signify something true or false. For, as has been said many times, only sentences, consisting of names and verbs, are such as to accept either of these, and each of these, i.e. 'being' and 'is', is simple and far from any such composition.

<A variant reading of Porphyry>

If the text is as we have set out, 'For not even "to be" (*oude gar to einai*) is a sign of the thing, nor is "not to be" ', you will find that only the interpretation given will support it. But if it is as Porphyry the philosopher writes, 'For <verbs> are not signs of the being or not being of the thing',[217] although when he continues he comes around to the first reading and interpretation, <the text> would say in common about all verbs that they are significant of something, which has been said, but not of truth or falsity, which <Aristotle> showed by the words 'but they do not yet signify whether it is or is not', and he would be giving the reason for this in the words 'For <verbs> are not signs of the being or not being of the thing.' This means: for the verb said by itself is not significant of the fact that the thing indicated

by it exists or does not exist, and, if it did so, it would only then have been receptive of falsity and truth. For he who said 'is walking', signified some activity, but did not say anything true or false about it, unless some subject was added, to which the walking did or did not belong and thus would make a true or false sentence. So, 'For <verbs> are not signs of the being or not being of the thing' is the same as saying that the verb said by itself is not significant either of the thing's being, that is, the thing signified by it, which affirmation usually signifies, nor of its not being, which is indicated by negation.

<'By itself it is nothing'>

57,1 So, <according to Porphyry> this has been said of every verb in common. However, the phrase 'nor is "being", if you say it by itself' would, even according to this interpretation, be proving *a fortiori* that no verb is receptive of truth and falsity. But how could it become probative of that, unless again by means of the 'is', which, as it is derived from 'being', is common to all verbs? Yet he next adds the phrase 'for by itself it is nothing', and says that 'being' is 'nothing', not as meaningless nor as predicated homonymously of things, but he says it is 'nothing' either true or false. 'But it additionally signifies some composition which it is not possible to know without the constituents.' This means: but it becomes part of a composition, like that which says 'Being is', concerning which the true and false are observed, a composition which 'without the constituents', that is the simples, 'it is not possible to know'. So, what he is saying is clear. But that 'being' 'additionally signifies' the composition, and that not only this, but also each of the simple vocal sounds does so in the same way, seems not to have been said in the same way as the verb was said to 'signify' time 'additionally': rather, <it is used> instead of 'signifies additionally to something else', i.e. when joined with something else it signifies a composition which is now receptive of falsity and truth, before which composition the simples must be understood. But if someone does not agree with this interpretation of 'additionally signify', let him be persuaded by Alexander when he says that in the words 'for by itself it is nothing', etc., Aristotle is again speaking about the word 'is' after having spoken parenthetically about 'being', and saying that not even this, when it is said by itself, is capable of signifying anything true or false, and also that this word 'is' or also 'is not' (for the same story goes for each of them), when said just by itself, is not such as to signify anything true or false, but being a name, just as are the other verbs too, it primarily has a power to signify participation in or deprivation of being, but also secondarily to signify the predicate's joining (*sumplokê*) with the subject, and in addition to these it makes the sentence complete and significant of

truth or falsity.[218] In fact, even if it is immediately predicated of the subject, even then the word '(it) is' potentially signifies its joining with 30
'being', e.g. 'Socrates is a being' (*Sôkratês on esti*), and '(it) is not' potentially signifies its division, or actually both of them signify their composition, for as was said in *On the Soul*: 'even he who says that something is not pale has put together not being pale with the subject.'[219]

<CHAPTER 4>

Having taught us the theory of the parts of the sentence, the name 58,1
and the verb, Aristotle next moves on to the sentence which consists of them and says:

> **16b26** A sentence is a significant vocal sound, some part of which is significant when separated as an expression, but not 5
> as an affirmation. I mean, for example, that 'animal' signifies something, but not that it is or is not; but it will be an affirmation or a negation, if something is added. But one syllable of 'animal' does not <signify something>; for neither is the *us* in *mus* ('mouse') significant, but it is now simply a vocal sound. In double [i.e. compound] words each part is significant, but not by 10
> itself, as was said.

<*Some* part is significant, but not just any part>

Now, I have earlier (17,9) given the reason why Aristotle does not, as he has promised in the beginning, speak after the doctrine of name and verb about negation and affirmation, then about assertion and finally about sentence, but rather, in his teaching about them, inverts the order in which he has, in the preface of this book, made the list 15
of how they should be handed down. In our explanation of what Aristotle has included in order to show the particular character of the sentence, we pass over that it is a 'voice' and 'significant', since that is too obvious and was already included in the definitions of the parts of the sentence. And we say that the phrase 'by convention' has been left out as being familiar from what was said about the name being 20
'by convention' (it was also left out in the case of the verb, since that was similar), and since it will be inserted in a timely manner a little later, after the refutation of the argument which seems to prove the opposite, that <the sentence> is not by imposition but by nature, and perhaps too since it is contained in the following *differentia*. For the phrase 'some part of which is significant when separated' applies only 25

to the articulate vocal sound which subsists according to our convention. But merely having some significant part differentiates the sentence from its complete (*autotelê*) parts, the name and verb, because in their case no part of either was significant, while some parts of the sentence, I mean the names and verbs, are significant. And it is not simply said that the parts of the sentence are significant when taken by themselves, but rather that 'some part of which' is, because of the negative particle in negations, as well as the articles and conjunctions, for example when I say 'Man is an animal' (*ho anthrôpos zôion estin*)[220] or 'Yes, Socrates sits, but Plato walks' (*Sôkratês men kathêtai, Platôn de peripatei*).[221] For these are said in the broad sense to be 'parts of the sentence', but they are meaningless when seen by themselves. And not just these, but also the parts of the names and verbs which, although they seem no less to be parts also of the sentence which consists of the names and verbs, are completely meaningless, as has often been said (e.g. 32,25). Thus, because of these he indicates that 'some part of the sentence is significant'.

<The significant part is a name or verb, not a whole assertion>

He says it is significant 'as an expression, but not as an affirmation', and an expression (*phasis*), as we said earlier (10,14), is the simple vocal sound, when it is taken as part of an assertoric sentence. Aristotle explains this clearly in what follows, saying (17a17): 'Now, let the name or verb be only an expression, since it is not possible for one to speak indicating something with the vocal sound [i.e. with just a name or verb] in such a way as to make an assertion.' So, because every sentence has some significant parts, and these, in the case of certain sentences, are actually simple vocal sounds (which we said were called 'expressions' when they are in propositions), while in other cases they happen to be whole affirmations or negations – e.g. in the sentence which says 'Socrates sits and Plato does not sit', the phrases 'Socrates sits' and 'Plato does not sit' – and because those sentences having affirmations or negations as parts also contain expressions, from which the former originate, while those sentences having expressions <as parts> do not necessarily also contain affirmations or negations, for this reason the Philosopher added this qualification, wanting to indicate the significant part which is always in sentences, so that you would not assume, when you yourself saw that some sentences had affirmations or negations as parts, that this was how the parts of the sentence had to be significant, as signifying one thing belonging or not belonging to another, but you would rather understand that it was necessary to see the part of the sentence only

as expressive (*phantikon*) and indicative of some nature or activity. Perhaps the fact that some of the parts of the sentence are significant should not be taken by itself as pertaining to the contrast with the articles, conjunctions, and the like. But the whole context must be read, that 'some part of which is significant as an expression', in contrast with the parts which are combined (*suntethenta*) and already said as an assertion, so that all the things which are parts of the sentence are significant, but some signify in the manner of expressions and are necessarily seen in every sentence, while others signify in the manner of assertions and cannot be seen in simple sentences. Thus, this too agrees with the whole rest of the teaching of Aristotle and Plato about the parts of the sentence, namely that they are divided only into names and verbs.[222]

<The parts of names and verbs are not called 'parts of the sentence'>

One should not be surprised if we do not want to call the parts of the names and verbs parts of the sentence consisting of them, strictly speaking. For in all articulated and complete things we are accustomed to speak of each of their parts in terms of the proximate totality, e.g. we call the short piece of wood which has been removed from the rudder or the keel of the ship part of these very things [i.e. of the rudder or the keel] and do not speak of it with reference to the ship; and the same is true in all other cases, both artificial and natural. This is obviously why we call 'syllables' only the first combinations of the letters, and we call a name 'trisyllabic' or 'tetrasyllabic', referring each of the simple items to that which immediately consists of them. Moreover, the parts of names and verbs would be said to be 'parts' of them only in pronunciation, not in respect of their semantic force. Hence it was also said previously (32,25; 47,25) that none of their parts was significant when separated, so that in the case of sentences too things will be said to be or not to be parts in the same way. However, the names and verbs themselves, which effect not only the pronunciation but also the signification (*sêmasia*) of sentences through their own combination (*sunthesis*) and which are the most primitive parts to have semantic force, are rightly said by us to be 'first parts of the sentence'. Hence, Socrates in the *Cratylus* also says that the smallest part of the sentence is the name,[223] by which, of course, he means both the name properly speaking and the verb.

<One word in the vocative is not a sentence>

If someone should wonder how we think that every sentence has a significant part, although we see that for the so-called 'vocative'

sentence even a single case of one name is sufficient, such as 'Hector!' (the <subsequent> phrase 'but you are for me'[224] belongs to a different sentence, the assertoric one) and 'Mentor!' (the <following> words 'help, a curse'[225] are the remainder of a command, not of an address), we shall solve the problem by saying that an address or invocation arises even by means of one name uttered in this case, but there is not a vocative sentence, unless a sentence is put together out of several names or cases said in this way, e.g. 'O blessed Son of Atreus'[226] and 'O Nestor Son of Neleus'[227] and the like, given that a name and a sentence are not the same thing.

<Parts of sentences, of compound words, of simple words>

When he said that the part of the sentence is significant as an expression, but not as an affirmation, he did not add 'nor as a negation', since it was clear that one who did not want to see the parts of the sentence as affirmations, but as simple vocal sounds, would be much less inclined to take them as negations, since affirmation too is even necessarily contained in negation. He himself explains this in taking 'animal' as an example of expression, because it 'signifies something', he says, 'but not that it is or is not', i.e. but not an affirmation or negation. He makes this clearer by adding: 'but it will be an affirmation or negation, if something is added', i.e. either an affirmed or negated verb. Thus, from these <words> too it is clear that Aristotle here calls 'expression' that part of the statement which is significant, just because it signifies. But that sentences differ from simple vocal sounds by having significant parts, he reminds us by saying: 'but one syllable of "animal" does not', with '… signify something' being understood in parallel <from what precedes>; for he said 'I mean, for example, that "animal" signifies something', so to this one must connect the phrase 'but one syllable of "animal" does not'. And establishing this in turn, i.e. that the parts of simple vocal sounds do not signify anything by themselves, he makes the proof here too *a fortiori*. 'For neither is the *us* in *mus* ("mouse") significant', he says, 'but it is now simply a vocal sound': that is to say, that the '*us*', said by itself, signifies 'swine', but when you take it as part of the name '*mus*' ('mouse'), it is totally meaningless, and 'now', i.e. in its being seen as a part, it is merely a vocal sound, in no way different from any meaningless vocal sound. But in the case of simple names, as was said earlier too (32,25ff.), the parts would by no means be significant, as in the case of 'animal or 'mouse'. In fact, in this case, the '*us*' part did not complete the name '*mus*' as something compounded with some other part, but coincided by chance with the name signifying swine, and hence, taken as a part of the simple name '*mus*', signifies nothing,

not even in one's imagination.[228] For no one who hears the name '*mus*' comes to think of a swine in the way that one who hears '*Kallippos*' ('fair-horsed') or '*tragelaphos*' ('goat-stag') does not remain unreminded of a horse or stag. So, among simples it is thus; 'But in double words', he says, 'it has some force, but when it is separate it is significant of nothing',[229] that is, the parts seem to be significant, 62,1
because in them there clearly appears a compounding of more than one name in speech, even if there is one thought and thing signified by them, but actually not even these <parts> signify anything when said by themselves. In sum, the argument is as follows: if the vocal 5
sounds which are significant by themselves, like '*(h)us*', once they have become parts of names, are totally meaningless when they are separated from the totalities to which they belong, then what must one think of one of the syllables of '*anthrôpos*' ('man') or of the other parts of names, which without being incorporated in names clearly do not signify anything? So, this is clear. But it is necessary to 10
conclude from what Aristotle says here that he wants to call 'sentence' (*logos*) not only that which effects a complete thought and is finished, but also that which is incomplete. For all that has been said about the sentence applies to this latter as well.[230]

17a1 Every sentence is significant, not as an organ, but as has been said, by convention. Not every one, however, is assertoric, 15
but that one in which being true or being false are present. They are not present in all: for example, the wish is a sentence, but neither true nor false. Now, let the other <types> be dismissed, for their examination is more proper to rhetoric or poetics; but the assertoric sentence belongs to the present investigation. 20

<The sentence is not an organ of a natural capacity>

In these words Aristotle refutes an argument which seems to show that the sentence is not by imposition, but by nature. What is the argument? The sentence (or: reason, *logos*), it says, is an organ[231] of the power of vocal sound in us, which is natural; through it we signify to one another what we want, as if by means of an organ. Every organ 25
of a natural capacity is itself natural as well, just as eyes, being organs of the optic capacity in us, are the work of nature and not of art, and ears, <organs> of our acoustic capacity, and any other part, <which is organ> of another capacity. Therefore the sentence is natural and owes nothing to our invention. Of the two premisses assumed in the argument, Aristotle concedes the major, which says 30
that every organ of every natural capacity is natural, but he attacks

the minor, which says that the sentence is an organ of the vocal capacity in us. So, one must say what the organ of our vocal capacity
63,1 would be, since it, being natural, requires an organ, just as each of the other natural faculties does, and what the sentence would have to be to the vocal capacity, since it is said not to be its organ, <if it is> to be not by nature, but by imposition. Now, the organs of the vocal capacity are the lungs and the so-called 'rough' artery (i.e. the trachea). These are the organs simply of vocal sound, while those of
5 language are the tongue, the palate, and the other organs which are said in this way to be 'voiced' (*phônêtika*) or 'linguistic' (*dialektika*). But the sentence would be a product of the vocal capacity, arising by means of a particular movement of these organs. Hence, it is not necessary for it to be natural. For nothing prevents the products of natural faculties from being by imposition, as in the case of dancing:
10 for although the capacity in us for locomotion is natural, its product, dancing, is by imposition – in fact, the dancer is able, by moving his hands in this way or that, to signify, say, Achilles, representing and presenting by means of his gestures now some, now others of his characteristics.[232] So, just as locomotion is natural, but dancing is by
15 imposition and by convention, and wood is natural, but the door is by imposition, so also is vocalizing natural, but signifying by means of names or verbs or the sentences consisting of them – which take their existence from the unpatterned (*aruthmistos*) vocal sound as their matter, but which are formed by our thought[233] – that is by convention and not by nature. It seems that man has the vocal capacity, which
20 is an organ of the psychic faculties in us, intellective or appetitive, by nature, similarly to the irrational animals, but the use, for signification, of names or verbs or the sentences consisting of these, which are no longer natural but by imposition, makes him exceptional compared to the irrational animals, because alone among mortal animals he partakes of a self-moving soul which is capable of acting artisti-
25 cally, so that, even in voicing, its technical capacity shines through. And this is shown by the sentences which are composed for beauty, both with and without metre.

<The thinking soul uses the sentence as an organ>

Now, that the sentence and its parts, both name and verb, are by convention, has been proved at length. But since we also say that it is an organ of the signification of thoughts or of things, we must say
30 what it is which uses it as an organ. It is clear that this is the thinking (*dianoêtikê*) soul, for it is the job of this alone to use a sentence [or:
64,1 reason]. But how is it possible for it, being by convention, to be an organ of any natural capacity? If that seems surprising to anyone

because of the rule which says that every organ of a natural capacity is natural, we shall say that this rational and artistic capacity in us is extraordinary, since it has an essence separate from all body. And that what we are saying was also Aristotle's opinion is proved by what he says toward the end of the second book of the *Physics* course about irrational animals devoid of thought not acting according to art but according to nature, as if art proceeds from some capacity in us placed above nature, where he says that it is not by art but by some nature that the nightingale builds her nest and the spider her web.[234] Is there any need to mention the proofs in *On the Soul* that the mind is separate from the body?[235] Now, it is not surprising that the <soul>, acting through natural capacities, both uses their organs, which are necessarily natural, and also makes for itself other artificial organs for its appropriate activities. So, just as it uses the natural organs of its locomotive capacity, which is natural, hands and feet, for preserving the body and warding off enemies, but it also uses artificial organs, sword and spear – and the same is true in farming, building, and the other practical or productive activities – in the same way, the soul, in signifying, uses the natural organs of the vocal and speaking capacity, lung, tongue, palate, teeth, and lips, but also the sentence or its parts, creating them artistically and by convention as future organs of signification, but operating on the natural matter of the vocal sound to create them, as it does on the iron to create the sword and on the wood to create the rudder.

<Rhetoric and poetics study the non-assertoric sentence>

Thus far, Aristotle has shown us the elements of the sentence (*logos*), I mean the name and verb, as well as what consists of them and is generally called 'sentence' (*logos*), from which every language (*dialektos*) has its origin. Next, according to the division made at the beginning, he goes on to the study of the assertoric sentence, which we said was one form of the simple sentence, like the vocative, optative, interrogative, and imperative, each of which is complete and by itself signifies a perfected thought. For just as the phrase 'The soul is immortal' indicates something, so also do 'Men of the jury', 'Would that I could philosophize!', 'When did you come?' and 'Go off to him!' And he says that the others do not pertain to the present course, which is philosophical and dialectical, but that their study is proper to rhetoric or poetics,[236] because those who work with each of these are both concerned with the sentences themselves, in their own right, the orators busying themselves with their rhythms, periods, and figures, the grammarians with metres and the forms (*skhêmatismoi*), patterns (*suskhêmatismoi*), or derivatives (*paraskhêmatismoi*) of the

first vocal sounds (*prôtai lexeis*),[237] and declensions and all such things, and furthermore they are accustomed to represent people calling others or ordering or asking or wishing about something, but they also frequently act *in propria persona* in some of these activities, saying: 'First, o men of Athens, I pray to all the male and female gods', or 'Stand up and answer me now!'[238] So, let those who work on these arts and have such sentences as the subject of their study consider whether these are the only forms of the sentence besides the assertoric or whether there is another, and whether each of them is divided into limited or unlimited kinds, or rather, through which finite numbers in each of them the progression from one to infinity occurs. For it befits each artisan to consider the things assigned to him, as Socrates made clear in the *Philebus*.[239] And this seems not to be the job of rhetoric or poetics *per se*, but of the art of discourse (*logoi*) taken generally, about which the most divine Plato taught us after the palinode in the *Phaedrus*,[240] whose job it is to investigate the principles of both poetics and rhetoric. And <Aristotle> says that only the study of the assertoric sentence befits the present course, because we have chosen to teach the principles of the science of proof (*apodeiktikê epistêmê*), and one who works on these things must busy himself with no other kind of sentence besides the assertoric, which alone it befits the philosopher to study, since it includes proof and is necessary for the understanding of proof, through which alone it is possible to gain an accurate familiarity with the nature of what is.

<Assertion is the genus of affirmation and negation>

For, since there are two relations (*skheseis*) of the sentence, as the philosopher Theophrastus[241] distinguished them, that toward the listeners, to whom it also signifies something, and that toward the things, about which the speaker intends to persuade the listeners, it is with the relation <of the sentence> to the audience that poetics and rhetoric deal, whence it is their job both to select the more solemn words, and not the common and popularized ones, and to weave these together harmoniously, so as to delight the listener, surprise him, and render him ready for persuasion through using these and what follows upon them, such as clarity, sweetness, and the other styles (*ideai*), as well as prolixity and brevity at the right time.[242] But the philosopher will primarily care for the relation of the sentence to the things, both refuting the false and establishing the true, <in> each case proposing to deduce some disputed assertion by means of evident assertions. But as for the assertoric sentence itself, which shares with all the other forms of the sentence its being significant, Aristotle sets out earlier what nature it has and how it differs from the other forms

of the sentence: 'Not every one, however, is assertoric, but that one in which being true or being false are present'. One must note that in these words he renders the definition of the assertoric sentence without at all needing affirmation and negation to teach this. In what follows he gave some people[243] the impression that he did this, causing them to suspect that the assertion is divided into affirmation and negation in the manner of ambiguous (*homônumoi*) vocal sounds being divided into their meanings, but not in the manner of the genera being divided into their species. However, what would be the definition of an homonymous vocal sound which signified no common nature? And if the assertion is actually adduced for the definition of affirmation and of negation, where it will be said 'An affirmation is an assertion of something about something, and a negation is an assertion of something from something' (17a25), how can the assertion not clearly be seen as the genus of both, since homonymous vocal sounds are never adduced for the completion of definitions? Hence, to the definitions of the assertoric form of the sentence, about which he will, for the rest, primarily be teaching, he joins the study of its forms, affirmation and negation, saying:

<CHAPTER 5>

17a8 The first (*prôtos*) one (*heis*) assertoric sentence is the affirmation, then the negation; all the others are one by (a) conjunction.

<'One by (a) conjunction'>

Here he says that there are two kinds of unity in sentences, the first being of the sentences by themselves, <their unity> being present in them as if by their own nature, as in the case of 'Socrates walks', and the second <with unity> being added to them from outside in a sort of imposition by means of what is for this reason called a 'conjunction' (*sundesmos*), as in the case of 'Socrates sits and Plato walks'. For the conjunction 'and' seems to have been added in the middle as conjoining through itself as a middle term or unifying what are obviously two sentences here, 'Socrates sits' and 'Plato walks'. The same is true for all the so-called 'hypothetical' sentences too. They consist of several simple sentences, which are unified by means of what is known as the 'conditional' (*sunaptikos*) conjunction, such as: 'If it is day, the sun is above the earth.' The conjunction 'if ' joins what are again two sentences, 'It is day' and 'The sun is above the earth', to complete the impression (*phantasia*) of unification. And the unified

form of such sentences is not indicative of one existence (for the things signified by them are obviously many), but rather of one consequence (*akolouthia*) of the existences signified by them, or of one divergence (*diastasis*), as in sentences said in disjunction (*diazeuxis*), e.g. 'Either it is day or it is night'. Hence, the sentence which signifies one existence and which is properly-speaking one would also be analogous to a timber which has not yet been cut and is therefore called one, while the sentence which indicates more than one existence, but seems to be unified in a way because of some conjunction, is analogous to a ship consisting of many timbers, but which has its apparent unity by means of dowels.[244]

<The affirmation is prior to the negation>

Of the sentence which is properly-speaking one and because of this prior in nature to that which is one by a conjunction, one kind is affirmation and the other is negation. The difference between affirmation and negation is not in their being one (since each of these sentences is one without any outside help for its unity), but in their priority. For each of these sentences is not equally primary, but rather the affirmation is prior to the negation in the simplicity of its phrasing (*lexis*), because it becomes a negation by incorporating the negative particle, and it is necessary for the one receiving the addition to pre-exist the one which is completed by the addition. For this reason Aristotle spoke as he did, saying that 'The first (*prôtos*) one (*heis*) assertoric sentence is the affirmation, then the negation', saying 'then' not about the 'one' but about the 'first'.[245] For this very reason the opinion of the Aphrodisian about assertion appears to be reasonable in not agreeing that assertion is the genus of affirmation and negation.[246] For among things prior and posterior to one another, how can what is predicated of both in common be their genus?[247] Or do they have this order not by being assertions (for each of them is similarly receptive of falsity and truth), but by some external accident, i.e. the simplicity of their phrasing? But we say that the stated rule is then operative, when it is according to the very thing which is predicated of them in common that the things under <the genus> are first and second. This point has been proved often and at length. But here, when we predicate assertion of affirmation and negation in common, we do not say that affirmation is the first <kind of> assertion and negation is the second <kind of> assertion, but rather the 'first' and 'second', as has been said, should be understood as applying to the simplicity of their phrasing.

<Merging an incomplete sentence with a complete one>

When Aristotle clearly says that each of the assertoric sentences apart from the affirmation and negation is always one by a conjunction, one might enquire what we shall say about the sentence 'The sun being above the earth, it is day'. For this sentence is apparently neither simple, nor in need of a conjunction for its unification.[248] In response to this, one must say that it is impossible for two complete assertions to be joined with one another to make one sentence without a conjunction actually being used. Then, how could 'The sun is above the earth', which is complete, be mixed (*sunkratheiê*) with 'It is day', which itself too is complete, without the conditional conjunction? We frequently change the antecedent proposition together with the conjunction in such a way that it is no longer complete <so as to make an> assertion, but by potentially containing the conjunction or the adverb – which, in this respect, has the same force as the conjunction – it is merged (*sumphuesthai*) with the consequent proposition, which remains complete, as is the case in the present example. For 'the sun being above the earth' is incomplete <and so unable to make an> assertion, but potentially contains either the adverb 'when' or the conditional conjunction 'if ' and says the same thing as 'when the sun is above the earth' or 'if the sun is above the earth', each of which is incomplete for making the intended assertion because of the addition of the conjunction or the adverb, like the phrase which contained these [i.e. the conjunction or the adverb] potentially, e.g. the phrase 'the sun being above the earth'. Hence, <the phrase 'the sun being above the earth'> can also be merged, in the same way as those can, with the consequent 'it is day'.

17a9 Every assertoric sentence must consist of a verb or a case of a verb. In fact, the definition of man, if 'is' or 'was' or 'will be' or some such <verb> is not added, is not yet an assertoric sentence; why the footed biped animal is one thing, but not many – for it will not be one by being said together – to say this is the job of another course. 69,1

<Subject and predicate terms>

Having set out to speak about the assertoric sentence and its species, affirmation and negation, since each of these has one part which is predicated and another which is subject, he teaches us a *differentia* of these which is useful for him in the articulation of what will be said next. He says that it is absolutely necessary that the predicate term

in the proposition be a verb or a case of a verb (perhaps, sometimes, also an indefinite verb, as in negations; but Aristotle seems to have included this in the verb here, or else to have left it out on the grounds that he was speaking primarily about affirmation), while the subject is not always a name, a case of a name or an indefinite name, but is sometimes a phrase (*logos*) consisting of several names.[249] For, when I say 'Socrates is healthy', 'Socrates was healthy', while the subject in these is a name, the predicate is now a verb, now a case of a verb; but when I say 'It is Socrates', 'It is a regret to Socrates', 'It is not Socrates', 'It is a rational mortal animal', the subject in these is not only a name or a case of a name, but now an indefinite name, now a phrase consisting of several names. It is due to his brevity that Aristotle does not state this clearly enough.[250] For, having clearly said the part about the predicate, he merely hinted at that regarding the subject, saying 'In fact, the definition of man, if "is" or "was" or "will be" or some such <verb> is not added, is not yet an assertoric sentence.'

<He insists on the presence of a verb in order to rule out definitions>

But why is it said here about the predicate that without it there is no proposition, while nothing similar is added about the subject, even though a proposition requires both of these equally and these things were already said where he states (16a13) that neither can a name, even if it is compound, signify anything true or false without a verb, nor can a verb without some subject, as we were taught in the conclusion of the discourses about the verb? One can respond to this problem, just as the philosopher Porphyry did,[251] that in the predicative form of the assertoric sentence the predicate has special weight, since it signifies the existence or nonexistence of the assertion (hence, the entire sentence is for this reason too called 'predicative', and in negations we add the negative particle to this, the more important phrase, so that if an affirmation is destroyed by the removal of the most important of its parts, a negation arises), and for this reason Aristotle makes his argument here only about this part, since without this there would be no assertion. But perhaps it would better fit the present purpose to say[252] that, where the discussion was about the name, he indicated in addition that, no matter what sort was used, without a verb it would not be sufficient to make an assertion ('For "goat-stag" does', he says [16a16], 'signify something, but not yet truth or falsity, unless existence or non-existence is added, either absolutely or in time'), and again when he discussed the verb, adding the same things about it too he said (16b21) that it is not, when said by itself, sufficient to make an assertion. But there (i.e. at 16b21) he

no longer added the phrase 'without a name' (for the sentence would have been immediately refuted because of the propositions which use phrases as subjects), but <he said> only that there is need of something else too, added or joined to which the verb will make an assertion signifying being or not being. But, having discussed the sentence in what he taught after that point and saying that it is a significant vocal sound having a significant part, which we said (59,14ff.) was common to complete and incomplete sentences, and having passed on to the theory of the assertion and its parts, he adds this now because he was, in a way, afraid that one might assume that definitive phrases (*horistikoi logoi*), inasmuch as they are compounds of several <parts> and are significant of one nature, are capable of making an assertion, although he has not been seen earlier to speak about this.

<The unity of a definition>

Since he has mentioned definitions here in general, and these are sentences consisting of several names concerned with the essence of the same thing – and for this reason each of them is one – but the theory of this requires much study (for sometimes one essence is signified by the names which have been brought together, and one sentence is completed out of them, but sometimes it is not one), he postpones the teaching of these matters to a more perfect (*teleiotera*) course, whose job is to examine what is in its being (*ta onta hêi onta*). Hence, both in the seventh and the eighth book of the *Metaphysics* he will have much discussion about this, showing that genus, to give a summary account of the main point of what he teaches there, has the rôle (*logos*) of matter in definition, but that *differentia*, and especially the last *differentia*, which fits only the thing to be defined, is form-giving and perfects the proper matter, needing nothing else for its unification with it. For it is unified not with something separate and existing on its own, but the form is a disposition (*diathesis*) of the immediate matter, the universal and intelligible <form> being of the so-called 'intelligible' matter, which is the same as saying it is of the matter conceived more generally, and the sensible and particular <form> being of the matter which is naturally such as to be disposed according to it. It is for this reason, then, that the definitive sentence is one – not because it consists of particularities (*idiotêtes*) separated earlier and then joined with one another – and that each individual thing is one. For this is how that which is disposed must be, existing along with its proper disposition, as in the case of the bronze sphere, and one could not imagine that which is disposed without imagining the disposition along with it. So, it is that which properly makes the definitive sentence one, and indeed the very thing to be defined, which

he teaches there. But the reason which one might incautiously give of the origin of the one sentence, that the names which make it up are said one after the other without being separated by silence between them, this he rebukes as ignorant, saying 'for it will not be one by being said together'. It is necessary for the sentence which is to be one that the names of which it consists be said in sequence, without any pause of the vocal sound, since when we say each one by itself we are not saying a definition and not even making one proposition with the verb applying in common to all <the names>, but making as many propositions as there are names being said in unconnected enumeration, e.g. 'animal', then 'rational', then 'it is mortal'; for the 'it is' will seem to be understood with each one. Saying just any names in sequence and without interruption is not sufficient to make one sentence, either definitive or assertoric. For, when the names happen to be significant either only of substances which cannot be joined, such as forms or individuals, or only of accidents, one sentence will never arise from them – as when I say 'man cow horse' or 'Socrates Plato Alcibiades' or 'snub-nosed bald philosopher walks' – because the accidents join with the substances as being such as to exist in them as subjects, but neither do substances which are distinguished by form or number <join with> one another, nor indeed do accidents, of which none can even exist without subjects.[253] Hence, it is also necessary to understand the indefinite name 'someone' (*tis*) in addition to what has been said, since it fills the need for a subject and makes the whole sentence true or false.

17a15 An assertoric sentence that is one is either that which signifies one thing or that which is one by a conjunction, but those assertoric sentences are many which signify many things, not one thing, or which are unconnected.

<Single and multiple assertoric sentences>

Having distinguished between simple assertoric sentences in regard to priority and posteriority and taught that the affirmative kind precedes the negative, in these words he adds the opposition in respect of their being one and many, which is different from that in respect of being first and posterior. For one must understand that, while these two things are necessarily observed with regard to every sentence, viz. expression (*lexis*) and meaning, concerning the expression two different ways of being one sentence are observed, one in respect of being simple or a compound of several simple sentences, and another in respect of being prior and posterior (this arrangement appearing primarily in simple sentences, and because of these in

compound sentences as well, obviously <arising> from the quality of the propositions, i.e. affirmation and negation), but concerning the meaning there is one way, that in respect of the singularity or plurality of the meanings. Now, having given in the preceding one of the oppositions observed concerning the expression, that with respect to priority and posteriority, when he said 'The first <kind of> one assertoric sentence is affirmation, then negation', and then teaching that we do not think that only these sentences deserve the appellation 'one' when he added that 'all the others are one by (a) conjunction', i.e. not properly speaking, but not having added that these sentences said to have unity by a conjunction are compounds of simple affirmation and simple negation, by which he would have taught the division of assertoric sentences in respect of being simple and compound as well, but rather postponing this to another occasion, in the present passage he adds for us the distinction between them which arises from their meanings, that one sort of sentence both is and appears to be one, while the other seems to be one but is actually many. But a little later he will clearly add the distinction of them in respect of being simple and compound.[254]

<Unity and multiplicity of signification>

Now, how do we distinguish the one sentence and the many on the basis of their meanings? He says that where each of the terms comprising the proposition indicates some one nature, we say this proposition is one, even if you take a whole definition instead of a name, as subject, or as predicate, or as both, as when I say 'The mortal rational animal is a living sentient essence'. But when either one of the terms happens to signify several things, we say that these propositions are several, indeed, as many as the number of the meanings, even if these are signified by one name. For, when we say 'Ajax fought Hector' without distinguishing which of the Ajaxes we are speaking about,[255] how could a reasonable person say that this proposition, which we see to be true and false at the same time, is one? And it is clear how <to distinguish one sentence from many>.

<Types of unity>

So, having taught us in these words the distinction observed among propositions which arises from their meanings, he says that the assertoric sentence is one properly speaking if it signifies one thing, and also secondarily if it is said to have unity by a conjunction, but that those sentences are many which signify many things and not one or are unconnected. Here one must understand that <what is> one sentence 'by (a) conjunction' is not the sentence which has an

adventitious unity in its expressions alone because of the conjunction, like a bunch, which is called 'one' because of the tie holding together the several vegetables – as when we say 'Socrates sits and Alcibiades walks' or 'Socrates sits and Alcibiades sits' or 'Socrates and Alcibiades sit' (for all those said in this way are multiple, but have a unity which is indicated [*emphainesthai*] because of the conjunction only with respect to the expression) – but those sentences used in so-called 'hypothetical' syllogisms in the conditional (*sunêmmenon*) or the disjunctive (*diezeugmenon*) – for example, 'If god is good, the universe is eternal' and 'The universe is either eternal or created'. For, although these are multiple, and are tied together in their expression, the former by the so-called 'conditional' conjunction, and the latter by the 'disjunctive', they have something more than those mentioned earlier, because they signify either the consequence (*akolouthia*) or the disjunction (*diastasis*) of the several things included in them. So, this itself, the actual consequence of the things or their disjunction, is the one thing signified by them. Now, one must say that these are for this reason said by Aristotle to have their unity 'secondarily', after those which signify one thing predicated of one subject, so that what is being said is that an assertoric sentence is one either if it predicates one thing of one affirmatively or negatively and is called for this reason 'predicative', or if it signifies one relation of two existences which is indicated (*emphainesthai*) either by consequence or by disjunction by means of the conjunctions which have this force, and it says either that if something is the case, something is the case [i.e. consequence] or that if something is the case, something is not the case [i.e. disjunction], and for this reason it is called 'hypothetical'. But those sentences which indicate (*emphainein*) an adventitious unity concerning only the expression and signify independent existences, but no relation between them, are by no means to be thought to be included among these, even if they use so-called 'copulative' (*sumplektikoi*) conjunctions for the sake of the continuity of expression. For what sense would it make to refuse to call the sentence which has one homonymous term 'one' because of the number of its meanings, even when these are simple in their expression, but to attribute to the sentence which obviously, even in its expression, is compounded and has fallen away in every sense from that which is naturally one something more in this very respect than the other <sentence> by thinking it worthy of the title 'one'?

<'And not one thing'>

After having said that those sentences signifying many things are multiple, he added 'and not one thing' because of the sentences which make an assertion about some universal. For, they too signify many

things, which are included under the universal about which they speak, but which <look> toward the one nature of the many things which is predicated of all of them, according to which the proposition which predicates something of this universal also becomes one proposition.[256] Homonymous vocal sounds merely signify many things, but nothing common to them; for then they would not be homonymous. Yet it is also possible, as the philosopher Porphyry explains, to understand the phrase 'many things and not one' as having been said to distinguish those propositions which use a definition as subject or predicate, since they too seem to signify many things[257] – for example, the one which says 'a mortal rational animal walks' <signifies> the animal, the rational, and the mortal. However, these have been included in order to describe the one thing which consists of them, which is why we say this proposition is one. But if some proposition either has one homonymous term or actually collects many names, when the things cannot be joined with one another, e.g. 'Socrates Plato Alcibiades walks' or 'Socrates walks speaks is feverish', it is merely multiple, because the things meant by it are only multiple and cannot complete any one nature of a thing.

<Sentences with and without conjunctions>

But how could Aristotle, in enumerating the sentences which signify many things, accept only those which have an homonymous term and the unconnected ones, in neither group of which will be found those sentences which have the unity which is due to a conjunction, only in their expression? Perhaps one should say that they too belong to those which 'signify many things and not one', no longer because of homonymy but because the terms signifying various things are actually multiple in expression. If some people want to ascribe unity to them, not in their own right but because of the comparison to unconnected sentences, let them understand that they are returning to the expression instead of the meaning. And by 'unconnected' sentences, he clearly must mean those which have not even the apparent unity caused (*phainesthai*)[258] by a conjunction, such as 'It is day, it is light, it is not day, it is night' or again 'Socrates sits, Alcibiades walks'. For in all these there is indicated (*emphainesthai*) no consequence, nor any disjunction, nor even any adventitious unity of expression.

17a17 Now, let a name or a verb be only an expression (*phasis*), since it is not possible for one to speak indicating something with the vocal sound in such a way as to make an assertion (*apo-*

phainesthai), whether someone is asking or not, but rather one is himself choosing <to speak>.

<Names and verbs are expressions, not assertions>

Aristotle is going in the next passage to teach about assertion (*apophansis*), as well as about affirmation (*kataphasis*) and negation (*apophasis*) and contradiction (*antiphasis*) too, and since in all of these the name 'expression' (*phasis*) is used, for this reason it is right that before teaching the other terms he introduces the meaning of 'expression' and says that it is a name or a verb, these being accepted as parts of the assertoric sentence. And that this is so, he clearly showed by immediately bringing in the reason for the name of the 'expression'. Since, he says, each of these [i.e. name and verb] indicates something, but not something true or false, for this reason each would justly be called an 'expression', as signifying something or making something apparent (*phainon*), but not an assertion (*apophansis*), inasmuch as it indicates neither of the things always meant by an assertion, i.e. the true or the false. This fact, that the preposition 'from' (*apo*) should not be added to the appellation 'expression' (*phasis*) in the case of the name or verb, he showed by the word 'only', saying 'let … be only an expression'. Next, he gave the causes of both together, of both the suitability for them of the name 'expression' and the unsuitability of the name 'assertion', in the words 'since it is not possible for one to speak indicating something with the vocal sound in such a way as to make an assertion' and what comes after them. That is to say: since even if they have a force which signifies certain things, nonetheless, by itself each of these produces no assertion. Then he adds the ways in which we are accustomed to making assertions, in these words too signifying that the name 'assertion' is not suitable for names or verbs, given that it is necessary to make an assertion in one of two ways, and that we make an assertion in neither of these ways when we say a name or verb, as we shall next make clear. Now, at the beginning of the treatise (16a11-18) he distinguished names and verbs from the assertion, arguing from the very essence of the assertion that <names and verbs> do not indicate anything true or false, which is the peculiar task of the assertion, and here he attempts from the ways of using assertoric sentences to distinguish them again. For, since we make an assertion either when we have been asked by someone and we are responding to the question, or when no one asks a question and we ourselves decide to reveal our thought to those around us, while one who says a name or a verb makes an assertion in neither of these ways, it is clear that these are different from assertion.

<Problems regarding questions>

Now, that we do not make an assertion when, with no one asking us a question, we say names or verbs by themselves, has been said many times. But it is also not possible to say anything true or false when we use names and verbs in response to a question, even though one would assume we could: when someone asks 'What is *his* name?', and we say 'Socrates', we have signified something true or false; and having been asked 'What is Socrates doing', we respond that '(He is) walking', we indicate something true or false. But, as we said (54,31ff.) in the interpretation of what was said about the verb, it is the combination of the question with the answer, producing a complete expression, which signifies the true or false.[259] The question is, in truth, neither the name nor the verb, but demands one of these, without having been said as a name or verb. For it is not possible for either a name or a verb to be presented as a question. And that this is so, we should understand from the assertions uttered as questions, with which one may compare the questions consisting of names and verbs, if they exist at all. For we ask an affirmation when we say 'The soul is immortal?' (*ara hê psukhê athanatos esti*) and similarly a negation when we say 'The soul is not immortal?' (*ara hê psukhê ouk estin athanatos*).[260] Thus, the name: if it could be uttered by itself as a question, we would have to say, e.g. 'A man?' (*ara anthrôpos*), 'An animal?' (*ara zôion*); and similarly in the case of the verb: 'Runs?' (*ara trekhei*). Each of these is unintelligible. But if so, then '(I) shall wash?' is not unintelligible, but rather clear, since it is not a question consisting of the verb alone but potentially of the entire affirmation: 'I shall wash?' And the same is true for all things said of a definite person.[261]

<He only needs to distinguish expression from assertion>

Once it has been proved that expression is different from assertion, Aristotle does not add the difference between expression and affirmation, negation, or contradiction, since it is too obvious. For, if something is not an assertion at all, how could it be an affirmation or negation, each of which is an assertion? And how could what is not an affirmation or negation and is also not divided into these ever be a contradiction, which is a whole containing the combination of these parts? However, the fact that the assertion is different from what is now being called an 'expression' was in need of some explanation, and it is reasonably explained by the Philosopher, first by the essential meaning of 'assertion' and now, as we said, from our own usage. It is clear that 'let … be' in 'Now, let a name or a verb be only an expression'

signifies that the imposition of the name 'expression' for the simple vocal sounds in propositions is Aristotle's, as we said, since even before Aristotle Timaeus in Plato uses the name 'expression' (*phasis*), but only for things predicated in some way.[262] He says that the enmattered forms which have their existence in genesis and destruction because of the continual flux do not abide the expression 'this' (*tode kai touto*) and every expression which would indicate that they were persistent.[263]

17a20 Of these, one is the simple assertion, i.e. <that which asserts> something of something or <abjudicates> something from something, while the other is composed of these, i.e. a sentence already compound. The simple assertion is a significant vocal sound about whether something belongs or does not belong to something, as the times are divided. An affirmation is an assertion of one thing of another, and a negation is an assertion of one thing from another.

<Types of compound sentence>

By 'these' he means what we assert when we speak either having been asked by someone or of our own volition, which he was talking about a moment ago. And he says that one of them is the simple assertion and the other is a compound of several, not of several words (*lexeis*) but of several sentences, i.e. the sentence which has its unity by a conjunction, either predicatively or hypothetically,[264] calling it a compound of the simple sentences, that is, of two affirmations, or two negations, or an affirmation and a negation. But sometimes when we say several sentences one after the other even without a conjunction, we speak of the <compound> of all of them as one, with the continuity or their being said in order taking the place of the conjunction, for example 'Because of anger against mistreatment Alcibiades battled his country, Achilles raged at the Achaeans, Ajax slaughtered himself', and all the other things we are accustomed to saying unconnectedly. And sometimes, collecting several names together unconnectedly, not constructed to mean one thing, as in the case of definitions, but indicating independent things, we predicate one thing of them, saying by all means several sentences, because their subjects are several, but using the successive list instead of a conjunction, as in 'Achilles, Ajax, Diomedes (were) best of the Greeks'. And it is clear that the sentences are many, because it is possible for one of them to be true and another false, for example, if one listed Epeius instead of or in addition to the above <heroes>. The same is also true of the propositions unconnectedly predicating many things

of one subject, for example, 'Socrates rubs his leg, converses, rejoices'. So, of the sentences compounded of several simpler sentences and for this reason said to be many, some consist of actually complete sentences, either unconnected or connected, while others consist not of separate sentences, but either only of several unconnected or connected subjects or of predicates or also of both, as if we said 'Socrates and Plato walk and talk', or we said these same <words> without the conjunction.

<Order of the types of simple sentence>

It is possible, even in so-called 'simple' sentences, in another way to find a great distinction with regard to simplicity and compounding, not in respect of being composed of several sentences or not, but in respect of the number of words (*lexeis*) used to constitute the sentence. For, the truly simplest and most primitive sentence is that consisting of the most necessary parts, name and verb, and the one which in any way has more than these parts is no longer in this respect properly speaking simple or primitive, whence Aristotle said the affirmation was simple compared to the negation and showed that the affirmation had the prior position, even though these sentences are similar in their unity (if they do not use an homonymous term) and their simplicity (since they do not consist of several sentences). However, among affirmations themselves you might find a great difference of one to another, and similarly among negations. For, the propositions <consisting> of a subject and predicate are prior in simplicity to those <consisting> of a third thing predicated in addition, and these <are prior in simplicity> to those with mood (*meta tropou*). And again, among the <propositions consisting> of a subject and predicate, those consisting of a definite subject precede those consisting of an indefinite subject, and those using a name as subject precede those incorporating a definition instead of a name. And among those consisting of a third thing predicated in addition, those predicating a name or verb <precede> those making a whole definition the predicate, e.g. the proposition 'Socrates is a man' is prior to 'Socrates is a mortal rational animal'.

<The oppositions reviewed: simple/compound, prior/posterior, one/many>

Now, these things are not worth much attention because they are obvious. But it is worth investigating how the things said here will differ from those said a little earlier (17a15): 'An assertoric sentence that is one is either that which signifies one thing or that which is one by a conjunction, but those assertoric sentences are many which

signify many things, not one thing, or which are unconnected', and those even a little before that (17a8): 'The first (*prôtos*) one (*heis*) assertoric sentence is the affirmation, then the negation.' So one must say that, with the difference between sentences being assumed to be, as we also said earlier (72,15), either from the word-forms (*lexeis*) or the meanings, and with the difference in the word-forms on the one hand making either the sentence which consists of one subject according to the expression (*lexis*) and one thing predicated positively or negatively, whether 'is' is predicated in addition or not, and whether some mood is added or not – in short, a mere affirmation or a mere negation – or the sentence compounded of two affirmations or negations or an affirmation plus a negation, which Aristotle called 'one by (a) conjunction', and with the difference in respect of being affirmative and negative being observed again in both the simple sentences and those said to be one by a conjunction, while the distinction of sentences from their meanings on the other hand makes them now one, now many, there will be three oppositions among sentences: simple to compound, prior to posterior, one to many. Now, when he said 'The first (*prôtos*) one (*heis*) assertoric sentence is', he gave the difference in respect of prior and posterior of the affirmation from the negation, demonstrating that we think only these simple sentences properly speaking worthy of the appellation 'one' by adding 'all the others are one by (a) conjunction', as if we are not able to call any of those sentences simply 'one', and <he gave> what is common to affirmation and negation, that they are both simple assertions, according to which they are distinguished from those which are one by a conjunction. So, when he added to those words the phrase 'An assertoric sentence that is one is that which signifies one thing, but those assertoric sentences are many which signify many things, not one thing', he gave us the distinction in the meanings of the sentence which is one from that which is many. But in the present passage he gives the difference between them in respect of simplicity and compounding, very clearly defining this very thing, that affirmation and negation differ in simplicity from sentences which are one by a conjunction. For, having divided assertion in the broader sense first into the simple and compound, he divides the simple one again into the affirmation and negation, whose order with respect to one another he gave earlier (17a8). And if he had changed the order of the presentation of the differences, giving us first the difference of the simple from the compound assertion, and following this what was earlier said about the order in which the affirmation and negation stand to one another, and added as last the difference <arising> from the meanings of the one sentence <compared> to the many, so as to say at the beginning, 'of the assertoric sentence, one <kind> is simple and the other is compounded of several sentences, and of the simple

sentence, one <kind> is first and the other is second, and of each of these, that sentence is one which signifies one thing and that is many which signifies many things', no one would have thought that the same thing had been said many times about the same things.

<Assertion is the genus of affirmation and negation>

But one must not believe that the definition of the simple assertion or, as some would say, its description (*hupographê*), has been given on the basis of the affirmation and the negation because of Aristotle's saying 'the simple assertion, i.e. <that which asserts> something of something or <abjudicates> something from something', and again, 'a significant vocal sound about whether something belongs or does not belong to something', of which the first are obviously affirmations and the second negations. Supposing this to be so, some thought that the assertion was not a genus, but a vocal sound homonymously divided into the different meanings which fall under it.[265] <However,> in the case of homonymous vocal sounds, it is appropriate that elucidation should start from what they mean, because these are indicative of no common nature, which definitions signify. For we already possess the definition of 'assertion' through what was taught earlier, namely that it is a sentence to which being true or false applies. But intending in these words to distinguish the simple from the compound assertion and to say which are the simple assertions, from which the compound ones have their origin, <namely> that they are the affirmation and negation, and to give their definitions, he rightly teaches the division of <assertions> into their kinds or rather a conceptual (*ennoêmatikos*) sentence taken from the division into kinds. But that the Philosopher wants assertion to be a genus, he made clear by including it in the definitions of affirmation and negation and by adding the *differentiae* to it as to a genus, <adding> in the case of affirmation the phrase 'something of something', and for negation 'something from something'.[266] And since the phrase 'whether something belongs or does not belong to something' has been uttered only with respect to the present time, while assertions are likewise able to be said also about the past and the future, for this reason he added 'as the times are divided'.

<CHAPTER 6>

17a26 Since it is possible to state what holds as not holding, what does not hold as holding, what holds as holding, and what

does not hold as not holding, and similarly for the times besides the present, it would be possible both to deny what someone has affirmed and to affirm what someone has denied. And so, there is a negation opposite to every affirmation and an affirmation for every negation. Let this be a 'contradiction', the opposing affirmation and negation. I say that statements are opposite when they <affirm and deny> the same thing of the same thing, but not homonymously, and all the other such <qualifications> which we additionally distinguish in opposition to sophistic intrusions.

<Our affirmations and negations can accord or conflict with the facts>

In these words he wants to teach the definition of contradiction and to say that it is a conflict of an affirmation and a negation which always divide the true and the false so that when one of them is false the other is true, and *vice versa*. But before this he necessarily had to establish that there is a conflict of false negation with true affirmation and of false affirmation with true negation. Now, in order to show that this is so, he takes two oppositions, one from the things themselves and another from our judgement about the things.[267] For, since the discussion is about affirmation and negation, and each of these is observed in the combination of some predicate with a subject, the opposition taken from the things is that the predicate holds or does not hold of the subject, and from our thought (*ennoia*) about them <is taken> the utterance (*prophora*) where we either say the predicate holds of the subject or we say that it does not hold. Now, of these four parts of the two oppositions, holding, not holding, being said to hold, being said not to hold, there will be four combinations. For, either we say that what really holds does hold, or we say that what really holds does not hold, or we say that what does not hold does
82,1 hold, or we say that what does not hold does not hold. Now, if we say that what holds does hold, for example that Socrates is just, we are making a true affirmation when we say that the justice which actually holds of Socrates holds of him; but if we say that what holds does not hold we are making a false negation, for example if we say that Socrates is not just, because we are saying that the justice which holds of Socrates does not hold of him; but if, again, we say that what holds does not hold, for example that Socrates is unjust, we are making a false assertion by saying that the injustice which does not hold of Socrates does hold of him; and finally, if we state that what does not hold does not hold, for example that Socrates is not unjust, we are making a true negation, for what in truth does not hold of Socrates, injustice, we say that this does not hold of him. For our

saying 'holds' or 'does not hold' makes an affirmation or a negation (it is obvious that one saying that something holds affirms that which he says holds of that of which he says it holds, while one saying it does not hold denies it), but <saying this> in agreement or disagreement with the things makes a true or false assertion. It is clear again that we shall hit upon the truth when we make an assertion in accordance with the things, i.e. when we say that what holds does hold or that what does not hold does not hold, but that we shall speak falsely when we disagree with the nature of the things, i.e. when we say that what holds does not hold or that what does not hold does hold. So, four propositions were shown to us here: two affirmations, those saying that what holds does hold and that what does not hold does hold, and the other two negations. Of the affirmations, one is true, the other false: the one saying that what holds does hold is true, and the one saying that what does not hold does hold is false. And of the negations, again, one is true and the other false: the one saying that what does not hold does not hold is true, and the one saying that what holds does not hold is false. Therefore, we find that in all cases there is a proposition conflicting with a true affirmation, namely the false negation, and conflicting with the false assertion is the true negation. And so the discourse is methodical, setting out from the two divisions and revealing to us the four most generic kinds of propositions which are considered along with the quality of truth and falsity, and two of the oppositions in propositions, one being that of a true affirmation versus a false negation, and another that of a false affirmation versus a true negation. He intended to discover these matters first, since they are necessary for the understanding of contradiction, which we shall now discuss.

<Relation to Platonic usage>

Aristotle wants to call this conflict of affirmation with negation a 'contradiction', as its parts say the opposite of one another in respect of the true and false; and he himself imposes this name upon it, as he shows when he says 'and let this be a "contradiction" ', although he said no such thing in the case of affirmation, negation, or assertion. For, it is possible to find each of these names used in the most divine Plato too,[268] just as you would also find the majority of theorems about the principles of the assertoric sentence taught in this <book> scattered in many places in Plato, and taught especially in the *Sophist*, after the many marvellous speeches about the mixture of not-being with being, in which he shows that in thoughts (*dianoiai*), in judgements (*doxai*), and in the discourse (*logos*) which proceeds from these but flows outwards[269] is observed the not-being corresponding to these, i.e. the false. For in that text, in a manner befitting the best

philosopher, he thinks that, even in logic, he need only deal with first principles; and so he merely dealt with the first principles of the assertoric sentence, leaving it to those who have made a special study of it to work out the various differences of the kinds of propositions, of the contradictions, and of the consequences. However, it is possible for those who love learning to glean these things from there.

<The order of Aristotle's exposition>

It is necessary to see that in the enumeration of the propositions, Aristotle, wanting the discourse to proceed from the lesser to the greater and, so to speak, from privations to forms, gave the false propositions first, and after these the true ones. And among the false ones he set the false negation before the false affirmation, because negation in itself is worse than affirmation, since it is its privation. But in the enumeration of the true propositions, he decided to mention first the one opposite to the first false one mentioned, so that the first of the false ones mentioned conflicts with the first of the true ones, and second the one opposite to the second of the false ones, so that again the second of the false ones conflicts with the second of the true ones, and for this reason he had to set the true affirmation before the true negation. So, you have two contradictions revealed here, one
84,1 of a false negation with a true affirmation, and another of a false affirmation with a true negation, nor is it possible to imagine another besides these. Now, having proved because of this that some negation conflicts with every affirmation, the false with the true and the true with the false, and likewise some affirmation with every negation, he defined the contradiction as a conflict of an affirmation and negation which are opposed in respect of their truth and falsity. But since the definition of contradiction was not yet precise (for not just any false negation makes a contradiction with just any true affirmation, nor does just any true negation with just any false affirmation; for who would claim that one saying 'Man is not a biped' contradicts one who said 'Man is an animal' because the affirmation is true and the negation false, or that one saying 'Man is not a stone' <contradicts> one who said 'Man is four-footed' because the <truth and falsity of> the propositions is reversed?), it is for this reason that he is correct in adding which affirmations and negations one must consider to be opposite, namely those which use the same subject and which predicate the same predicate <term> of it, which he showed when he said 'the <contradiction> of the same thing about the same thing', i.e. 'I mean that one proposition contradicts another when it makes a predication of the same predicate about the same subject as that also used in the other proposition with which the contradiction exists'. For the proposition 'Man is not an animal' conflicts with 'Man is an

animal', but 'Man is not a biped' does not, since the one set have both terms in common, while the others are different in their predicate, and the proposition 'Man is not a stone' <conflicts> with 'Man is a stone', but 'Horse is not a stone' does not, for these use different subjects.

<Problems of homonymy, etc.>

Lest we think it sufficient for the subject term to be the same only in its expression, and the predicate term too, and wanting us to have handy the distinctions which specify these things, he added 'but not homonymously, and all the other such <qualifications> which we additionally distinguish in opposition to sophistic intrusions'. For, one saying 'Ajax did not fight Hector' does not contradict one who said 'Ajax fought Hector'. In fact, it is possible for both to be equally true and false, although the propositions seem to consist of the same terms; their identity is only in expression (*lexis*), not in their meaning (*sêmainomenon*), when we take them as being true or false together. If, however, having defined which of the <two> Ajaxes the sentence was about, we predicate of him the fighting or anything else both affirmatively and negatively, at the same time as we observe the other distinctions which we shall add next, it would be necessary that one of the propositions be true and the other false. The same thing also happens frequently with the predicate because there is also homonymy among verbs. The verb '*erô*' signifies both 'I am erotically disposed' and 'I shall speak', and because of this 'I *erô* – I do not *erô*' is not a contradiction, so long as it is taken as being now of one meaning and now of another. So one must guard against this, that either of the terms is used homonymously, and further, against their being used relative now to one thing and now to another and therefore being capable of being truly affirmed and denied – for example, if we say 'Ten are more – Ten are not more'; for it is clear that the affirmation will be true of those less than ten, and the negation of both those equal and more than ten – and <against something being used which> belongs and does not belong to the same thing now in one respect and now in another – for example, if we say 'The Ethiopian is dark' and '… not dark'; for he is dark with respect to the surface of his skin, but not dark with respect to his teeth[270] – and <against something being used which is> able to belong and not to belong to the same thing now at one time and now at another, unless the time at which we state that something belongs or does not belong is also determined: for 'Socrates was healthy' and '… was not healthy' can both be true, if the one is taken with respect to last year, say, and the other with respect to yesterday. And in addition to these, it is necessary that the predicate which is affirmed and denied be under-

stood in the same way. By 'in the same way' I mean either in each of the propositions in actuality or in each potentially, since the affirmation saying about the sleeping man that he sees is true together with the denial stating that he does not see, the former being understood of his being such as to be actualized in his visual capacity if nothing prevents it, as opposed to one who never acquired the capacity and one who has lost it, and the latter <being understood> of his not being actualized in it at that time.[271]

<'… sophistic intrusions'>

Now, about these matters Aristotle has spoken most fully in the course entitled *On Sophistic Refutations*, setting out that there are, in all, thirteen tropes according to which the sophists attempt to baffle those who converse with them without knowledge, the six <tropes> used by them involving expression (*lexis*) and the seven involving thought or simply outside of expression, and also teaching the refutations of these tropes. But here he has mentioned one trope, the one involving homonymy, which is one of those involving expression, and he thinks that in the same way we should also observe all the other distinctions necessary for the accurate opposition of propositions which contradict one another, excusing himself on the grounds that it is not now the right time to teach us the accurate account of these matters. And he very rightly called sophistic 'intrusions' their untimely objections, which contain nothing substantive, but only provide annoyance and useless distraction to the intelligent.

But since we have gone through the material concerning the principles of the assertoric sentence, let us next begin again and examine <what is said> about the propositions themselves.

<CHAPTER 7>

17a38 Since some things are universal and others are singular (by 'universal' I mean what is such as to be predicated of several things, by 'singular' what is not such, for example, 'man' belongs to the universals, and 'Callias' to the singulars), but it is necessary to assert that something holds or does not hold, sometimes for some universal, and sometimes of a singular, then if one states universally of what is universal that something holds of it or not, then these assertions will be contraries (by 'to state universally of what is universal' I mean, e.g. 'Every man is pale – No man is pale'). But if one states something of universals, but not universally, these assertions are not contraries, but the

things they indicate can sometimes be contraries. By 'to state not universally of what is universal' I mean, e.g. 'There is a pale man – There is not a pale man', for, although 'man' is universal, the assertion is not used in a universal way; for the word 'every' signifies not the universal, but that <it is used> universally.

<Introduction to the second main section of the book>

Here begins the second main section of the book, which we said (8,13-16) was about the propositions or assertions <consisting> of a subject and predicate. But before the explanation of what is said in the text, we must examine the points which are necessary for the understanding of the entire section.[272] These are: first, how do we make negations out of affirmations; next, how should we get from a 87,1 division all the propositions <consisting> of subject and predicate, so that we may confidently state that there is no other proposition of this kind besides these; and after that, which propositions among these contradict one another, which propositions seem to contradict, without actually contradicting, and how must we speak of their oppositions with one another.[273]

<On the placement of the negative particle>

Now, that the negation arises when the affirmation takes on the negative particle, is clear. But where in the affirmation one must place it, in order to make the negation, and why this is so, we must specify. I say, therefore, that one must not join it to the subject, but to the predicate; first, because the predicate is more important, as has been said (70,4f.), and prior to the subject, which is also why the whole sentence is called 'predicative' (so, if we want to destroy the affirmation and make a negation, we must not attach the negative particle, which is the cause of the destruction, to the less important of the parts, but to the more important, since in animals too, more than any other living things, the whole does not perish if just any part is destroyed, but only if one of the more important parts <is destroyed>); next, because we said the affirmation is characterized by saying that something is the case, but the proposition which combines the negative particle with the subject still says this, for one who has said 'Not Socrates walks' did not remove the walking from Socrates, which one intending to say a negation had to do, but says that someone other than Socrates is walking; and how could it be a negation of the <proposition> 'Socrates walks' if it does not even speak about the same subject and says that walking belongs to another <subject>? Thus, it is necessary that the denial make a

negation only when added to the predicate, as in the proposition 'Socrates does not walk'. So, the <proposition> 'Not Socrates walks', since it has been shown not to be a negation and every proposition is either a negation or an affirmation, will be an affirmation with an indefinite subject (for we call the name which has added the negative particle an 'indefinite name'), and we shall find, by the same reasoning, that the negation of this proposition is 'Not Socrates does not walk', which places the negative particle with the predicate of the affirmation. Thus, two contradictorily opposed propositions arise concerning the same subject, one using it as definite, and the other as indefinite.

<Division of the types of propositions consisting of subject and predicate>

These things being so, let us in turn examine the divisions from which it is possible to get the number of propositions which consist of a subject and predicate; and first, let us enumerate the contradictions which are found among them. For it is clear that there will be twice as many propositions as contradictions. So, since these propositions contain only two terms, the subject term and the predicate term,[274] and also the relation of the predicate term to the subject term, and nothing else besides these, it is absolutely necessary that the divisions of these <propositions> too are based either only on the subject term or only on the predicate term or on the relation of the predicate term to the subject term. I am talking about the relation according to which the predicate term either always holds of the subject term, as when we say the sun moves or man is an animal, or never holds <of it>, as when we say 'The sun stands still' or 'Man is winged', or sometimes holds and sometimes does not hold, as when we say Socrates walks or reads. Those who care about the technical treatment of these things call these relations the 'matters' (*hulai*) of the propositions, and they say that one of them is necessary (*anankaia*), another impossible (*adunatos*), and the third contingent (*endekhomenê*). The reason for these names is obvious, but they decided to call these relations 'matters' in the first place because they are seen together with the things which underlie (*hupokeimena*) the propositions and are not obtained from our thinking or predicating, but from the very nature of the things.[275] For we say that what is such as always to obtain makes the necessary matter, what always does not obtain makes the impossible, and what is ambivalent about obtaining or not obtaining makes the contingent. So, since the things underlie the propositions and we say that always what underlies either is matter or has the rôle of matter for that which it underlies, for this reason they decided to call them 'matters'.

<The division based on the subject term>

Now, the division on the basis of the subject term arises in this way. The subject term in a proposition is either singular or universal. And the division is immediate: for there must, as we said, be one nature signified by the subject term, just as that signified by the predicate too, if the proposition is really going to be one. But it is necessary that this one nature be predicated either of several things or only of one. If what is used as subject term is something predicated of one thing only, such as Socrates or Plato, it is clear that the proposition will be singular (*kath' hekasta*), but if it is something predicated of several things, such as man or animal, the proposition will be universal; and besides these there is nothing. But if it is universal, it is necessarily said either without determination (*prosdiorismos*) or with determination. 'Determinations' are what we call certain designations (*prosrêmata*) which combine with the subject terms and indicate how the predicate relates to the multitude of individuals (*atoma*) under the subject term, whether it is taken as holding or as not holding. Hence, they too are four in number, 'every' and 'none', 'some' and 'not every': two universal ('every' and 'none'), and two particular (*merikoi*) ('some' and 'not every'). And of the universal ones, 'every' is affirmative, e.g. 'Every man is an animal', signifying that 'animal' holds of all individuals under man, and 'none' is negative, e.g. 'No man is winged', indicating that the predicate term belongs to none of the singular men. And of the particular ones, again one is affirmative and one negative: 'some' is affirmative, e.g. 'Some man is pale', signifying that the predicate term belongs to at least some one of the individuals under the subject term; and 'not every' is negative, e.g. 'Not every man is just', which is destructive of 'every' and signifies that it is not true that the predicate term belongs to all the individuals under the subject term. However, the determinations do not make the aforementioned distinctions (*aphorismoi*) only in the case of individuals, but if the subject term in the proposition happens to be a genus, the determinations will fit primarily for the species occurring under that genus, when what is predicated of it is something essential (*ousiôdes*), but secondarily also for the individuals under those species, since it is not even possible for the individuals to participate in the genus in any other way except through the intermediaries of the appropriate species. So, when we say 'Every animal is a substance' or 'Some animal is winged', since the predicate terms belong to their subjects essentially, you will say that 'substance' is primarily predicated of absolutely all the species of animal, and 'winged' of those <species of animal> which are such as to participate in it, and, because of them, of the individuals under the species. But sometimes we make a statement concerning species alone, as when we say 'Every species

of quantity consisting of parts which have position is also a species of the continuous', 'Every natural species in the world has its own existence (*hupostasis*)'. But it is clear that we shall say that accidents, which are episodic and such as both to belong and not to belong to the same thing, are primarily predicated of individuals, which are such as to be changing in every way both with regard to these <accidents> and to their essence, but <that accidents are> not properly <predicated> of the species which from the outset, because of their incorporeal and unchanging nature, cannot participate in them.

<The four species of opposition based on the subject term>

Now, if none of the determinations is added to the subject term, the proposition is called 'undetermined' (*aprosdioristos*), e.g. 'Man is healthy', and if it has some determination, the proposition is called 'determined' (*prosdiôrismenê*). But if the determination is universal, it is called 'universal', and if particular, 'particular'. So, from the division of the subject term, we see four species of opposition in propositions:[276] the singular; the undetermined; the universal or universal as universal (for they call them this too, distinguishing them from the others which, like these, use a universal subject by the fact that, in these instances, the universal determinations have been combined with universal subject terms); and in addition to these the particular or universal as particular (for these have particular determinations combined with universal subject terms, and for this reason are so called). And the particular propositions differ from the singular in that singular propositions make their assertion about some one definite thing, e.g. Socrates, while particular propositions, even if they are stated with reference to one thing, signify nothing definite, but can be true of any chance thing, as when we say 'Some man (*tis anthrôpos*) is just': for this proposition is no more true on account of Socrates than of Plato or Aristides. Hence Theophrastus[277] correctly calls the singular proposition 'definite' and the particular 'indefinite'. And the singular proposition is opposed to the proposition which is universal without qualification, while the particular is opposed to the universal as universal.

<The division of propositions based on the predicate term>

Now, such is the division of propositions on the basis of their subject term. But on the basis of their predicate term one must say that all these four kinds are trebled. For, since it is necessary that the predicate term be a verb, and we said (47,23) that the verb addition-

ally signifies time, but time is understood in three ways, according to the past, present and future, it is clear that it is possible to vary each of the four kinds of proposition[278] on the basis of the predicate term, saying, for example, in the case of singular propositions, 'Socrates was healthy', 'Socrates is healthy', 'Socrates will be healthy', so that for this reason the kinds of opposition in propositions become twelve. For we shall hear Aristotle teach that sometimes a difference arises among propositions regarding the times as well (19b12f.).[279] But, since it is possible to understand each of these twelve oppositions in three ways according to the three matters, it happens that all their oppositions total thirty-six, if the subject term is definite. And it is necessary that those containing an indefinite subject term be equal to these (for you will make the indefinite one for each of those which use a definite subject term by adding the negative particle to the subject), so that all the oppositions and contradictions of the propositions which we are here examining total seventy-two.

<Which oppositions are contradictory and which are not?>

But, since we have given their number, it follows in turn that we should examine which propositions among the enumerated oppositions oppose one another contradictorily, and which do not, and, further, what relations do those not opposed contradictorily bear to one another, and what proposition conflicts contradictorily with each of the propositions among <the oppositions>. For it has been assumed that for every affirmation there is a contradictorily opposed negation, and for every negation an affirmation. Now, that those which are singular conflict contradictorily is agreed by all (although their acceptance [*lêpsis*] with regard to the future time causes a certain difficulty, which Aristotle will set out and solve in what follows[280]), but about the undetermined propositions there is disagreement among those who have said something about this topic, and it is impossible to learn the truth until we have examined how things stand with the determined propositions, concerning which no dispute either has arisen or could arise. Thus, we must first speak about these.

<Which determined propositions contradict one another?>

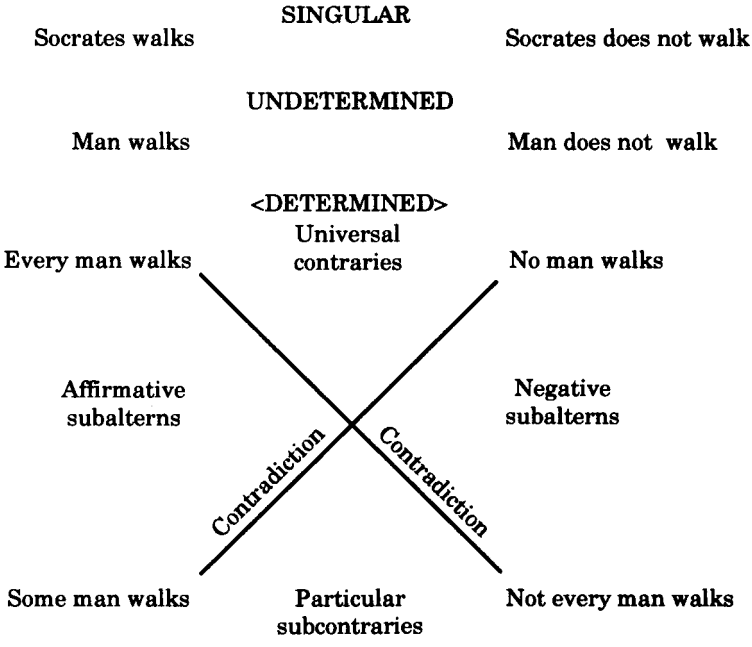
Since, therefore, we defined contradiction (81,13-15) as a conflict of affirmation and negation in each case dividing the true and the false, it is clear that whatever propositions we find either sometimes simultaneously false or simultaneously true, we should not say that

these are opposed contradictorily to one another. Now, the universal propositions said as universal would not be said to make a contradiction, since they can be simultaneously false in the contingent matter. Nor, indeed, shall we say that the particular propositions contradict, when they can be simultaneously true with regard to that same matter. However, in each of the remaining matters they both divide the true and the false. For in the necessary matter, both affirmations saying that what necessarily holds is so are true, and the negations which attempt to deny it are false; but in the so-called impossible matter, these are properly reversed, for the negations, which say that what is impossible and for this reason never holds does not hold, are true, while the affirmations, which state that it holds, are false. In the contingent matter both the universal propositions are false, but both the singular propositions are true, because things predicated of this matter are such as sometimes to hold of their subjects and sometimes not to hold of them, and to hold of some but not of others, e.g. 'Every man is pale – No man is pale' (these are both false, the affirmation because of the Ethiopians, and the negation because of, say, the Scythians), or 'Some man is pale – Not every man is pale', it being clear that these are simultaneously true.

<Contraries, subcontraries, subalterns>

Now, having shown that the universal as universal propositions are not contradictory, they call them contraries (*enantiai*), because when contraries are divided into immediate (*amesa*) and mediated (*emmesa*), these propositions, in the necessary and the impossible matter, resemble immediate contraries, one of which necessarily belongs to the subject, and these have one of their propositions true, which because of this imitates the existence of the thing, just as the false is an image of nonexistence; but in the contingent matter <they resemble> mediated contraries, of which it is possible that neither belongs to the subject.[281] Or, since it is disputed whether some contraries are immediate, which those who give the cause of the appellation of the so-called 'contrary' propositions in the manner just mentioned want to assume as agreed, we should rather say that it is impossible for contraries actually to obtain simultaneously with one another with regard to the same subject, but that it is possible for them to be simultaneously absent. So, these propositions which are never simultaneously true, but are sometimes simultaneously false, and in this way mimic the contraries, would reasonably be called 'contraries'. And it is possible to say that these propositions are actually called 'contraries' since they have the greatest distance from one another. For of things under the same genus, contraries are most distant from one another, and so do these propositions too relate to one another,

since the one says that the predicate belongs to all individuals under the subject, and the other to none. And they call the particular propositions 'subcontraries' (*hupenantiai*), as ordered under the contraries and consequent upon them.[282] For, when one of the universal propositions is true, then the particular proposition ordered under it will also be true, as being like a part of it and contained by it. Hence they also call the affirmations, the particular and the universal, and similarly their negations, 'subaltern' (*hupallêloi*).[283] Now, the singular propositions would not even properly be said to be 'opposed' (*antikeisthai*) to one another. For what species of opposition will fit them? But if you seek those contradictorily opposed to these, you will find that singular propositions which are opposed in respect of quality contradict those which are universal, that is, the particular negation <contradicts> the universal affirmation, while the particular affirmation contradicts the universal negation. Thus, according to the diagram given, those which have their determinate propositions placed diagonally to one another contradict one another, for they always divide the true and the false. And that is reasonable, for the contraries and subcontraries, while differing in their quality, have the same quantity, but the subalterns differ in quantity, while having the same quality, and those which conflict in both respects are completely different from one another. Hence, it is also impossible for them to be either simultaneously false or true. For the fact that in the necessary



matter, when the affirmations are true, the negations are false, and in the impossible matter the opposite, is obvious from what was said earlier. But when, in the contingent matter, the universal affirmation is false, the particular negation is true, since it contradicts it, and when the universal negation is false, the particular affirmation is true, as contradicting it. Hence, when the former are false, the latter are true.

<Particular negations>

Since the particular negation tends to unsettle simpler people, seeming in the impossible matter to be false simultaneously with the universal affirmation, as when we say 'Not every man is winged', because it seems that in 'not every' are brought together 'but someone' and 'but someone not', which is manifestly false in the case of impossibles, we must say something about these too. Now, it is possible from what has been said earlier about the determination 'not every', readily to give the solution of this problem. For we said (89,15) that 'not every' must be taken just by itself, since it has a peculiar force, according to which it denies the determination 'every', without dragging in anything else. So, for those things where 'every' is seen to be false, there 'not every' is true. Thus, in the present instances too, since he who says 'every man is winged' speaks falsely, he who says 'not every <man> is winged' will speak truly, for: either 'every' or 'not every', but 'every' is false, thus 'not every' is true. So that we
94,1 may further fill in the difficulty, we should say that the particular negation has a force similar to the particular affirmation, with regard to their very particularity. So, however the particular affirmation has its truth, whether it always goes along with the particular negation or not, clearly the particular negation will also have it in the same way. Now, since affirmations are analogous to dispositions (*hexeis*, literally 'havings') and negations to privations, and dispositions are better known than privations, the examination of negation must be undertaken starting from the affirmation, since it is better known. We see that, whereas the universal affirmation is true only in the necessary matter, the particular affirmation is true in two matters, the necessary and the contingent – not in both in the same way, but in the contingent matter <it is true> because of itself, so that the predicate belongs to one subject but not to another (when the particular affirmation also goes along with the particular negation, but is at odds with the universal affirmation), and in the necessary matter <it is> no longer <true> because of itself, but because of the universal affirmation, and hence it does not then go along with the particular negation. For 'Some man is an animal' is true because of the 'every', but the 'not every' is no longer true,[284] just as occurs in the impossible

matter: because the universal affirmation is false entirely on its own, the particular affirmation is also false, as when we say 'some man is winged'; for not even this is false because of itself. So, in the same way, since the universal negation too is true only in the impossible matter, the particular negation must be true in two matters, the contingent, which is neither congenital nor completely foreign (so it will both be true by itself and go along with the particular affirmation, but it will be at odds with the universal negation), and the impossible, in which it will accord with the universal negation, since it is because of that one that it has its truth, but it will be at odds with the particular affirmation. Now, our discussion has dwelt on these matters longer than it should, but let us now attempt to speak generally about the negative determinations themselves, which the philosopher Porphyry teaches with a rather elegant theory, ourselves adding anything we can to make the lesson about them more clear.[285]

<The negation is added to the determination of a determined affirmation>

For one might wonder how, making negations from determined affirmations, we combine the denials not with the predicates, as we advised earlier (87,10), but with the determinations themselves,[286] which become parts of the subjects, not the subjects said by themselves, but those which are, so to speak, specified by the <determinations>, and are not predicated at all, as long as there is a subject about which the sentence is and a predicate which is said about that. For we state of every man that he is an animal, although not that a man is every animal (this at least will be proved both false and impossible a little later), and of some man that he is pale, although not that the pale is some man. So, why do we not say that 'Every <man> does not walk' is the negation of 'Every man walks', but that 'Not every <man> walks' is, and that 'Some <man> does not walk' <is the negation> of 'Some <man> walks', but 'No <man> walks' is? And we must also say what force this 'none' could possibly have. Now, answering the objection over again, we shall say according to the rules given earlier (87,14) that the denials must be added in every case to the more important part of the proposition in order to make the negations. Now, for the singular propositions and the undetermined ones, seeing that the predicate is more important than the subject and finding nothing more important than this in such propositions, we rightly added the negative particle to it, but in determined propositions the most important part is the determination, which is why the proposition is named for it: 'determined'. In fact, if the determinations are combined with the subjects and become, as was said (94,31), parts of them, still, they somehow touch upon the predicates too, indicating

that the predicate belongs either to one of the things which fall under the subject or to all, since to limit it to some but not all without giving the number is impossible. So, for these reasons the negative particle is rightly combined with these, and the negations arising in this way are contradictorily opposed to the affirmations; but of the <propositions> combining the negative particle with the predicate, that which does this in the case of the universal affirmation has the same force as the universal negation (for 'Everyone does not walk' signifies the same thing as 'No one walks'), and that <which does it> in the case of the particular <affirmation has the same force> as the particular negation; for what does 'Some <man> does not walk' mean, other than that not everyone walks? And so, in this case, the negations which arise in both ways go together with one another.

<On 'none'>

Now, that 'not every' is a compound of 'every' and the particle which denies it, is clear. But whence shall we say that 'none' (*oudeis*) has its origin? For the negation which added the particle negating the determination 'some' (*tis*) should have been 'not some' (*oukhi tis*). Or should we say that it would have signified nothing definite in regard to quantity, if it were said in this way, since in fact 'Not someone walks' is true if no one is walking and if several people are walking? And this fate would have been even more clearly suffered by 'Not someone walks' (*oukhi tis peripatei*) than by 'not one' (*oukh heis*), which arises by contraction from it. So, wanting to indicate that the predicate belongs to neither all, nor several but not all, nor indeed to one of the things under the universal subject, we say 'none', which is a compound of three parts of speech: the negative particle 'not', the conjunction 'but' (whether that is a connective regarding <the fact that holds of> neither all nor many,[287] or whether, as the philosopher Porphyry thinks,[288] it is taken as guarding against and distinguishing the ambiguity), and in addition to these the numerical name 'one' (*heis*) – which we also see declined, when we say 'with no one walking' (*oudenos peripatountos*), and rendered according to the differences of the three genders: 'no (feminine) one walks' and 'nothing walks'. So, 'none' (*oudeis*) arose from the conjunction by the contraction of 'but-not-one' (*ou-de-heis*), and is similar to

> 'nor whom (*mêd' hontina*) a mother in her belly'[289]

or to one responding absolutely 'Not a whit' (*oude gru*), while the other form of 'none', *outheis*, comes from 'and' (*te*) by contraction of 'and-not-one' (*ou-te-heis*).

<'One' vs. 'some'>

But why, when the affirmation says 'some' (*tis*), do we say 'none' (*oudeis*) in the negation which denies it? Or shall we say that 'one' (*heis*), considered absolutely, is understood in more ways than 'some'?[290] For, while 'some' always wants to be joined to the subject, like each of the other determinations too, since they signify how the things under the subject stand with respect to participating in the predicate or not, the word 'one' is understood in this way, as in:

> 'but one certain (*heis de tis*) leading man'[291]

and in:

> '… one (*heis*) chief let there be',[292]

but it is also understood as predicated not only of things said singularly (*monadikôs*) – as when we say 'The sun is one' or 'The world is one', when we also add 'only' (*monos*) to it, either in actuality or entirely in potentiality – but also absolutely of each of however many, so that their multitude also has existence, whereas the determinations are neither able to be predicated by themselves nor are they reasonably coupled with other predicates, as the discourse will show us in what follows. So, for these reasons the word 'one', as we said, is understood in more ways than 'some'. But, as they go along with one another in being combined with subjects – not with singular subjects because there is no part of them, but with subjects which are such as to be predicated of several things – there seems even so to be some difference between them. For since each of the many is both a whole and like a part of what is predicated of them in common, as a whole (which you may call an 'individual' [*atomon*]), set apart from those of the same species, it accepts being combined with 'one', and as being in a way a part of what is common <to the many>, <it accepts being combined with> 'some'; hence, it is not even possible to say 'some one' (*hen ti*) of what are only wholes. And 'one' has this difference from 'some' in the case of particular propositions, the same difference as the singular article has from 'every' in the case of universal propositions. That is, you would say 'Man is an animal' (*ho anthrôpos zôion*)[293] and 'Every man is an animal' (*pas anthrôpos zôion*), for the article has the force of the universal determination, as we shall learn near the end of the book. However, the article fits the unity of the universal subject (hence, it is also combined with each of the singulars and the individuals, for we say 'the sun' and '[the] Socrates'; but sometimes it is also said of what is outstanding in its field, as when we say 'the Poet' or 'the Orator'), but 'every' <fits> the multitude of things

subsumed under <the universal>. So, when we deny 'one' as predicate, then we join the denial not to it, but to the 'is', which is always actually said in this sort of proposition and is such as to bind the predicate with the subject; for, when the affirmation says, for example, 'this stone is one' (*hode ho lithos heis estin*), the negative will say 'this stone is-not one' (*hode ho lithos heis ouk estin*). But, when we deny the 'one' or the 'some' as joined with the subject and make the negation which contradicts the particular affirmation, we say 'none' (*oudeis*) or 'not some' (*outis*), and when we say 'none', we are responding not to the 'some' (*tis*), but to the 'one' (*heis*), and rejecting 'not one' (*oukh heis*) as ambiguous, and 'no(t) one' (*ou heis*) as not only ambiguous but ugly as well, we say 'none' in either of its forms (*oudeis ê outheis*). But it is to the 'some' that we then seem properly to respond when we say 'not some' (*outis*), with an acute accent not on the 'some' (for this pronunciation is unknown to Greek usage), but on the 'not',[294] as it is in:

'no one (*outis*) while I live …'[295]

and in:

'no one (*mêtis*) now of the spoils …'.[296]

But this is more common in poetic and 'none' (*oudeis*) <is more frequent> in common usage.

<Which undetermined propositions contradict one another?>

98,1 So much did we have to say about the determined propositions. But how the undetermined propositions relate to contradicting or not, i.e. whether they have the same force as some of the determined propositions, let us examine in what follows, travelling along with Aristotle.

<Return to speak about universals; undetermined propositions>

In addition to this, let us examine the text itself,[297] in which <Aristotle>, having taught us the division just discussed of the propositions on the basis of their subject and distinguished the singular from the universal, says: this is universal, 'what is such as to be predicated of several things', distinguishing the universal from things predicated homonymously of several things by their being naturally such as to be predicated of several things, that is, not by some convention

(*nomôi*) or imposition (*thesei*), such as 'Ajax' and 'Alexander',[298] but by revealing one nature, which, by belonging to each of the several, makes the name which signifies it also be predicated of them. And, in general, although speaking about vocal sounds, he makes the distinction of things, because for philosophers discourse is not primarily about vocal sounds, as we said earlier (65,2ff.) that it is for rhetoricians and grammarians, but <it is> rather for the sake of understanding the things.[299] So, having divided the species of propositions into the universal and the singular, he adds the division of the universal into those called 'universal as universal' and the undetermined; he will mention the particular ones next. And in these words he says that the universal assertions about universals are contraries, for the reasons we stated (92,3ff.), while those about universals but not universally, i.e. the undetermined ones, are not themselves contraries, although the things indicated by them can sometimes be contraries. That by 'universal not universally' he means the undetermined propositions, is also clearly shown by the examples he gives, 'Man is pale' and 'Man is not pale'. And he calls them thus because in them the universal determinations are not added to the universal subject, and even though <this reason> can also apply to particular propositions, those still have a peculiarity, namely the particular determinations from which they take their name. Why are they said not to be contraries, but sometimes to signify contraries? This has already caused many problems for interpreters; unless perhaps it fits the text itself to say that Aristotle wants the undetermined propositions to be true simultaneously with one another,[300] as will be obvious in what follows, and for this reason rightly states that they are not contraries: for obtaining simultaneously with one another does not belong to contraries.

<Porphyry on contraries>

Since, however, it is possible that the fact that the negation is sometimes true in the case of the affirmation of the contrary might make some people suspect that these propositions would then have to be called 'contraries', since they signify contrary things, for this reason <Aristotle> adds the cause of the paralogism for those who make this assumption, and he says the same thing as will be said in the last theorem of the book (23b3-7): 'To think that contrary judgements are defined in this way, by being of contraries, is false; for the judgement of the good, that it is good, and of the bad, that it is bad, is perhaps the same judgement and is true, whether they are one or more than one. These are contraries, but they are not contraries by being of contraries, but rather by being to contrary effect.' Now, Aristotle clearly showed in these words that the name 'contraries' in

no way fits undetermined propositions. But the philosopher Porphyry[301] well analysed when it is possible for the things signified to be contraries.[302] For, he says, there is not always something contrary to what is being affirmed, nor is it possible to say that the negation is always true of the contrary of what has been affirmed, but rather sometimes of the contrary, sometimes of the privation, and sometimes of neither of these, merely denying what is said by the affirmation. For the even is contrary to the odd and the dark to the pale, and 'not odd' and 'not pale' are true of these (so they are necessarily brought together with their negations in the case of the so-called 'immediate' contraries, but also contingently in the case of mediate <contraries>). However, the opposite of seeing is a privation, either of the activity or of the capacity as well: of the activity as in one who is not blind, but is sleeping or has his eyes closed, and of the capacity as in the blind person; and these are the meanings of 'not seeing' (but sometimes we also signify by the negation of the activity that which has not yet acquired the capacity which brings on the activity, as in the puppy, and also that which is in no way receptive of the capacity, as in wood, for in fact we say that wood does not see). And in neither of these cases would you say that what is signified by the negation is contrary to the affirmation, but rather that it is now a privation, now not even a privation, but merely a difference (*heterotês*), and you would never find something opposed to 'animal' or another substance, either as a contrary or a privation, nor to a definite quantity or shape, nor to the activities which do not arise in respect to some contrary. For cooling is contrary to heating, since the cool is also contrary to the warm, but there would be no contrary to thinking or walking. So, for these reasons he says that what is signified by the negation is
100,1 sometimes contrary to what is indicated by the affirmation, although the propositions themselves are by no means contraries of one another. But he correctly added that this is only so for undetermined propositions, because, of universal propositions, only those have affirmations and negations which arise only in respect of the predicate terms, and not according to certain determinations, such as 'every', 'not every', 'some', 'none', which would not even be suspected by themselves of being understood as affirmatively and negatively signifying a contrast of things as predicates do, and especially when we make the affirmation and the negation in the case of so-called 'immediate' contraries (for it is the task of the determinations, as we have often said, to signify only the difference in quantity of the <things> falling under the subject as participating or not participating in the predicate of the proposition), and because what happens in the case of the other oppositions is obvious, e.g. that the universal propositions <taken> as universal are simultaneously false, and hence contraries, that the particular propositions are simultaneously

true and one would not even suspect that the name 'contraries' pertained to them, that the diagonal and singular propositions divide the true and the false. But in the undetermined propositions, since this <sort of> subject neither is singular and definite, nor is any of the determinations added to it, it is not very clear what the manner of their opposition is, but one might even suspect that they are at times opposed as contraries. The Aphrodisian interpreter insists that this is shown by the fact that the things meant by them are sometimes contraries,[303] and that although Aristotle shouts in what follows that they have the same force as the particular propositions, and although the particular propositions are diagonally related to the contraries. And this very fact which seems to Aristotle correct, that they are simultaneously true in a certain matter, someone else might <deny>, think<ing> that they even contradict one another, but in a way similar to the other diagonal, that of 'some' and 'none'. For these reasons, then, Aristotle here indicated only this much, that it is not right to call them contraries, even if they sometimes came to signify contrary things, but going on he will also try to establish that they are simultaneously true, but do not contradict.

<' "Every" signifies not the universal, but that it is used universally'>

Having given the reason why the undefined[304] propositions are called 'universal not universally', namely that they are not universally stated of universal subjects, since they do not attach to them the universal determinations which cause us to make assertions universally about universals, he again gave the reason for this very fact, that the universal determinations become causes of such assertions, 101,1 by couching his lesson in terms of the affirmative 'every', as if the same arguments also fit in the case of 'none'. And what is the cause of this? That 'the word "every" ', he says, 'signifies not the universal, but that <it is used> universally', i.e. it does not signify the actual nature of the universal species, e.g. 'man' (for, since the species is one in respect of its own nature, it is also said to gather and unite the infinitude of individuals which constantly arises; but how could 'every' be said of one?), so 'every' does not signify the universal itself, 'but that <it is used> universally', that is, 'but that we state that the predicate is predicated of all the individuals under the species'.

17b12 But in the predicate it is not true to predicate the universal universally. For there will be no affirmation in which the universal is predicated universally of the predicate, for example, that 'Every man is every animal'.

<The universal cannot be predicated universally of the predicate>

In these words Aristotle investigates whether, just as when it is added to the subject the affirmative determination creates a different species of propositions, so also when added to the predicate it can create a different proposition. But he states that such an affirmation does not even exist to start with, e.g. that which says 'Every man is every animal', because one who says this is saying that every one of the individual men is every animal – horse, cow and all the rest. And so, it is impossible for one who has stated this to be telling the truth. So he correctly says that such an affirmation does not even come to be, where he leaves out the word 'true': 'For there will be no' *true* 'affirmation in which the universal is predicated universally of the predicate', i.e. in which it is possible for the universal determination to be joined to the universal predicate term and say that 'man', of each individual of which (what he calls 'universally') 'animal' is predicated, 'is not simply animal, but every animal'. For this reason, then, he states that such an affirmation does not even exist, meaning it never happens to be true, since even this is an affirmation, but it is always false and hence fraudulent and totally useless for syllogistic method, given that it is always contrary to nature and could not be useful for the discovery of truth, which is the goal of the study of logic.

102,1 But, since many propositions can arise from the different combination of the determinations with the subject term in the proposition and the predicate term, he correctly chose only this one and segregated it from the propositions which are correctly said, namely the one which combines the determination 'every' with both its terms, which is also defined in the first book of the *Analytics*, at the beginning of the chapter on the abundance of propositions.[305] For, speaking about the choice of universal propositions, in which the predicate follows upon every subject, he added: 'But that which follows must not itself be taken to follow wholly, I mean, for example, that every animal <follows> man or that every science <follows> music, but only to follow without qualification, as we indeed state our propositions. In fact, the other is useless and impossible, for example, that every man be every animal or justice every good thing.' And in the first book of the *Apodeictics*,[306] having said that in syllogisms which reach universal affirmative conclusions the major extreme is said of every middle and this in turn of every minor, i.e. that in each of the propositions completing the syllogism the predicate is said of every appropriate subject, he added 'but the predicate is not said to be "every" '.

<Sixteen types of propositions with determined subject and predicate>

Now, that he correctly rejects only this <kind of proposition> as utterly useless, we may learn if we remember that, there being four – as we shall show in turn – propositions which are always false, two affirmations and two negations, the former universal, the latter particular, it was through the one which is more stately than the others with regard to quantity and quality and which provides the remaining three with their reason for being always false – as we shall see – that he also wanted to delete the others which are mistaken like this one from the list of the propositions which are correctly expressed. For if it is necessary accurately to investigate the technical details of these too, and to say what appears to be the case about them, we shall find sixteen propositions arising from the distribution of the determinations over each of the terms of the proposition: given that there are four determinations, with any one of them joined to the subject, it turns out that the predicate combined with each of the four determinations makes four species of propositions, so that through these the total of propositions becomes four times four, sixteen. So, first let the determination 'every' be joined to the subject. Now, if we want to join some determination to the predicate too, we 103,1
shall say either 'Every man is every animal' or 'Every man is no stone', or 'Every man is some animal', or 'Every man is not every animal'. And it is clear that, of the remaining three besides the one singled out by Aristotle, each is true. But indeed, let the determination 'none' be joined to the subject; now, again, we shall say either 'No man is every animal', or 'No man is no animal', or 'No man is some stone', or 'No man is not every animal'. And it is clear that each of the propositions joining to the predicate one of the universal determinations is true, since in fact a man is some animal and some not, so that because he is some animal he cannot be none, and that proposition is true which says 'No man is no animal'. And true in the impossible matter is also the proposition which joins the particular affirmative determination to the predicate, as that which says 'No man is some stone'. But the only one which is always false is the proposition which combines the particular negative determination with the predicate, while the subject contains the universal negative determination, as in 'No man is not every animal', or '… not every stone', or '… not every pale'. For, since the proposition which joins the determination 'every' to each of its terms is always false, it is clear that that proposition is always true which denies the cause of the falsehood, i.e. the universal affirmative determination which is constructed with the predicate – e.g. the proposition 'Every man is not every animal'. Thus, the proposition contrary to this, which says 'No man is not every animal',

will always be false, for it is not possible for contraries to be true simultaneously. But indeed, again, let the determination 'some' be combined with the subject; then we shall say either 'Some man is every animal' (this too is always false, for which reason the proposition more general than it, 'Every man is every animal', is also always false; and so, the former, being contained by the latter and always following it, will always be false[307]), or 'Some man is no stone', or 'Some man is some animal', or 'Some man is not every animal'; these too are all true. So, let the remaining determination, 'not every', be combined with the subject; now, again, we shall say either 'Not every man is every animal' (this too is always true, as it contradicts the always false 'Every man is every animal'), or 'Not every man is no animal' (and again, this is true in the necessary and the contingent matters, because in them the proposition contradicting it, 'Every man is no animal', or '… no pale', is false), or 'Not every man is some stone' (and it is clear that this too is true in the impossible matter, because in that matter the proposition contradictory to it, 'Every man is some stone' is false), or the remaining 'Not every man is not every animal' (again, this one too happens to be always false, since it denies the always true proposition 'Every man is not every animal; and we have already stated that the cause of this one's always being true is that it denies the universal affirmative determination badly constructed with the predicate by the proposition which says 'Every man is every animal', <the determination> which does not even allow the proposition to be true in the necessary matter, in which the predicate necessarily belongs to the subject).

<How each of these propositional types is true or false>

And so, having gone through the sixteen propositions, we find that four are always false, four are always true, and the rest are able to be both true and false, as their matter varies. Among those which are always false, two are affirmations which have in common the construction of the determination 'every' with the predicate and which differ in the affirmative determinations they attach to the subject, namely the propositions 'Every man is every animal' and 'Some man is every animal', while two are negations which have in common the construction of the determination 'not every' with the predicate and which differ in the negative determinations they attach to the subject, namely the propositions 'No man is not every animal' and 'Not every man is not every animal'. And among those which are always true, two are again affirmations which contradict the negations which are always false – 'Every man is not every animal' and 'Some man is not every animal' or '… Not every stone' or '… Not every pale' – and two

are negations which contradict the affirmations which are always false – 'No man is every animal' and 'Not every man is every animal' or '… every stone' or '… every pale'. And all the rest are understood to be true or false, as their matter changes, as we said. That is, of those propositions which construct one of the affirmative determinations with the subject, and with the predicate only the particular affirmative <determination>, the particular <proposition> is found to be true in both the necessary and the contingent matter, and the universal one only in the necessary matter (for only in this matter can the predicate belong to all the individuals under the subject) and is clearly false in the other matters. And similarly for the rest.

<Why did Aristotle reject only one type?>

But what about the question we posed at the beginning: why, although there are several <types of> propositions which are always false, Aristotle rejected only that which joins to each of its terms the universal affirmative determination? Perhaps he saw that, of the rest, the particular affirmation, like the one which says 'Some man is every animal', because it is contained in the universal <affirmation>, is obviously always false, and that the negations go along with the affirmations, since they deny the particular negative determination joined to the predicate by means of those <determinations> which are said with the subject and which are themselves also negative. For it happens in this way that, when each of the denials is denied by the other, the proposition comes back around to the original affirmation: how is saying 'Every man is every animal' different from saying 'Not every man is not every animal'? Clearly we are potentially saying 'Every man is not not every animal' or 'It is not the case that every man is not every animal', and in each case we bring in the original proposition 'Every man is every animal'. Or again, how is saying 'Some man is every animal' different from saying 'No man is not every animal'? Again we are potentially saying 'Man is not not every animal' or 'It is not the case that no man is every animal', and we bring in the proposition 'Some man is every animal'. Hence, it is also possible to observe that the negations mentioned conflict with these same propositions of those which are always true, with which those which are always false also conflicted. For with the always true affirmation 'Every man is not every animal' conflict both the always false affirmation 'Every man is every animal' because of its predicate term, and the <negation> 'Not every man is not every animal' because of its subject term, and thus, they go along with one another; and with that which says 'Some man is not every animal' conflict similarly both 'Some man is every animal' because of its predicate term, and 'No man is not every animal' because of its subject

105,1

term, and thus, these too go together. If, therefore, the aforementioned negations have the same force as the affirmations, then one who has removed the always false universal affirmation, and with it the particular affirmation which always follows it, from the list of propositions would also, through them, have rejected the rest, namely the two negations which are also always false themselves because they agree with the aforementioned affirmations. For one must understand that the cause of their always being false was provided to the propositions which are always false solely by the combination of 'every' with the predicate (you see, it is present in all of them either actually or potentially), and to those which are always true by the denial of this <determination> (for in fact, all of these have 'not every' constructed with the predicate either actually again, as do the affirmations among them, or potentially, as do the negations; for 'No man is every animal' is true for this reason, that every <man> is not every animal, and 'Not every man is every animal' likewise, because the particular <man> is also not every animal. Thus, the Philosopher rightly states that he makes the propositions unreceptive of the construction only of 'every' with the predicate.

<Determinations should never be added to the predicate term>

It is clear that even if we take the subject without determination, constructing it with or even without the article, propositions arising in this way will have the same failing as those including the aforementioned determinations. For the proposition '<The species> man (*ho anthrôpos*)[308] is every animal' will have a similar force to 'Every man is every animal', and '(A) man (*anthrôpos*)[309] is every animal' to 'Some man is every animal'. For the same reasons, even if we take the singular subject, we shall avoid constructing the determination 'every' with what is predicated of this subject. For it is not possible for a reasonable man to say, meaning it to be true, that 'Socrates is every man'. However, neither does Aristotle want to add some determination to the predicate, so that either always- or sometimes-true propositions may arise. For in general those who propose to examine assertions uttered without excessive variety must reject those which are always true no less than those which are always false, as neither signifying something different in the necessary or the impossible matter, nor contributing to our ability to distinguish truth and falsity. But neither should propositions which can accept either of these in part have some distinction added to their predicate. For, if the proposition which makes its predication without determination has the same force as these, why should we not say the simpler propositions instead of those which include extra things, for example, instead

of 'Every man is some animal (*ti zôion*)' or 'Every man is not every animal (*ou pan zôion*)' saying 'Every man is (an) animal (*zôion*)', and instead of 'Every man is no stone (*oudeis lithos*)' saying 'Every man is not (a) stone (*lithos ouk estin*)' or the simpler and more naturally stated proposition 'No man is (a) stone (*lithos estin*)'? Since, even when we find some of the ancients believing that the particular affirmative determination is constructed with the predicate, as when Aristotle himself calls the soul a <kind of> entelechy (*entelekheia tis*),[310] and Plato calls rhetoric a <kind of> experience (*empeiria tis*),[311] in these the 'some' (or 'kind of ': *tis*) should be said to be there in order to show that the predicate is not convertible with the subject but is its genus and requires the addition of some *differentiae*, in order to make the definition of the subject.

107,1

<Apparent cases of determined predicates>

But why, they say, is Aristotle's argument not refuted in the case of the things themselves, since we speak truthfully when we say 'Every man is receptive of every science' and construct the universal determination with the universal predicate? To which one must reply that we do not actually join 'of every' to the predicate; for what is said of the subject is predicated, but what is said of man is not that he is science, but that he is receptive of science. So, if, when 'every' is constructed with 'receptive', the proposition can then be true – for example, if we said 'Every man is every<thing> receptive of science' – Aristotle's argument would be refuted. But now it is impossible for <the proposition> to be true. For one saying this says nothing other than that, of men, each one is every man, for example, Socrates is not only Socrates, but also Plato and Alcibiades and each of the rest. For, if every man is every<thing> receptive of science, and Socrates is also one of the all, then he too is every<thing> receptive of science, so that Socrates will also be Plato and Alcibiades, since they too are receptive of science; for, if Socrates is not also simultaneously Plato and Alcibiades, he will no longer be every<thing> receptive of science. So, 'of every' here is not a determination of the predicate, but a part, for this is just what is said about man, that he is receptive of every science. But that 'of every' is not a determination of the predicate, is clear from the fact that, when we join to this proposition another <proposition as a> major premiss and we use what is predicated in the former proposition – I mean that very phrase 'receptive of every science' – as a subject of which something else is universally predicated, so that we can produce some conclusion from them, we then add to it the universal determination, since it has none, as if we say 'Every man is receptive of every science, Every<thing> receptive of every science is rational, Therefore every man is rational', although

108,1 if 'of every' was a determination, why would we have needed another determination too? And how was it possible for two determinations to be said one after the other? But it is clear that neither can 'of every' be a determination of the predicate, nor is the predicate 'science', but rather 'receptive', to which, when it becomes the subject in the second 5 premiss,[312] according to the rule of propositions combined in the first figure,[313] we add at times the article, at times the universal determination.

<The subject term must be less inclusive than the predicate>

So, that one must not add the universal affirmative determination to the predicate, whether the predicate is more general than the subject, as in 'Every man is every animal', or whether it is of equal <general- 10 ity> to the subject, as in 'Every man is every<thing> able to laugh', is clear from what has been said.[314] In fact, the strangeness is also just as great in the equal terms, because one who has stated that every man is every<thing> able to laugh is stating that each of the particular men is the same <one> as all <of them>, e.g. Socrates, 15 because he is a man, is every<thing> able to laugh, i.e. Socrates is every man. Now, this is also clear from what was said earlier, where we showed that it is not possible to say that every man is every<thing> receptive of science; indeed, 'receptive of science' is equal to 'man'. But what is the reason why the predicate is not such as to tolerate the addition of the determination 'every', even though 20 it seems to combine with 'none'? Perhaps it is that, if what is affirmatively predicated is universally predicated of the subject, it always wants to include the subject, either as being equal and, in a way, consonant with it, or also as exceeding it, and furthermore it is such as to bind and unite to itself the entire multitude of individuals under the subject by participation in itself. For this is just what 25 Aristotle said in the preceding, that 'the word "every" signifies not the universal, but that <it is used> universally' (17b11). If, therefore, what is predicated affirmatively intends to bring together also things divided by nature, as if their being seen as many is prior <to the predicate> in respect of its simplicity, and 'every' indicates not some one thing but a multitude, it is clear that the impossibles themselves 30 are combined with one another. But when what is negatively predicated is completely separate from the subject, then we can also deny each of the things under the predicate – for example, when we say 'Every man is no stone' – except that we shall make the proposition heaped up (*estoibasmenê*), when we could more simply say 'No man 35 is a stone', so that we do not use the affirmative determination of a denial.

17b16 Now, I say that an affirmation is contradictorily (*antiphatikôs*) opposed to a denial when it signifies what is universally for the same subject <as that for which the denial signifies> that it is not universal, e.g. 'Every man is pale – Not every man is pale', 'No man is pale – Some man is pale'; but the affirmation of the universal and its denial are contrarily opposed, e.g. 'Every man is just – No man is just'. Hence, it is not possible for the latter to be true simultaneously, although their contradictories can sometimes be true of the same thing, e.g. 'Not every man is pale' and 'Some man is pale'. 109,1 5

<Summary of the oppositions>

Aristotle teaches us here all the oppositions of the determined propositions: the oppositions of propositions related diagonally in the diagram given previously, that of the universal propositions taken universally, and also that of the universal propositions said as particular (*hôs merikai*). He says that the diagonal propositions are contradictorily opposed to one another (i.e. they always divide the true and false), the universal affirmation along with the particular negation and the universal negation along with the particular affirmation; but the universal propositions taken universally are no longer contradictorily but contrarily opposed to one another because they are simultaneously false in the contingent matter, where the so-called 'particular' and 'subcontrary' propositions must be simultaneously true because each of them is true when the universal proposition which conflicts with it contradictorily is false, so that these in no way conflict with one another. This is made clear through the examples given by the Philosopher, as well as from what we stated about it earlier. However, one must be aware that, instead of 'contradictorily' (*antiphatikôs*), 'assertorically' (*apophantikôs*) is also written,[315] and, as the philosopher Porphyry says,[316] with this word Aristotle signifies of which affirmation to which negation he wants to take the opposition, namely that it is of the <opposition taken> as an assertion, since, as he says, they are also accustomed to calling definite verbs 'affirmations' and indefinite ones 'negations', and someone might have suspected that the discussion was of the opposition of such vocal sounds, had he not added the 'assertorically'. But it is clear that what follows accords better with the former reading; for according to this <latter variant> the contraries would also be said to be 'assertorically' opposed, although Aristotle immediately set them out as opposed in a different way from those which come before them.[317] 10 15 20 25 30 110,1

17b26 Now, all contradictory propositions of universals which are <taken > universally must be one true and one false, and so must all <such> of individuals, such as 'Socrates is pale – Socrates is not pale'. But all those which are of universals but not universally are not always one true and one false. For it is possible simultaneously to say truly that '(A) man is pale' and '(A) man is not pale, that '(A) man is fair' and '(A) man is not fair', for if he is ugly, he is also not fair, and if he is coming to be something, he also is not. <This> would immediately seem strange because '(A) man is not pale' appears also to signify at the same time that 'No man is pale'. But the latter signifies neither the same thing nor necessarily simultaneously.

<Undetermined propositions are not contradictory>

Of the eight propositions arising from the division of the subject, the Philosopher teaches us here which ones oppose each other contradictorily and which seem to contradict without <actually> contradicting, stating that the diagonal propositions, which he calls 'universal taken universally' because one of their propositions is universal <taken> universally, conflict with one another contradictorily, that is the affirmation 'every' with the negation 'not every' and the negation 'none' with the affirmation 'some', and also the singular proposition 'Socrates is pale' with 'Socrates is not pale'. But he does not say that the undetermined propositions, which he here too called 'universal not <taken> universally', contradict one another; for they do not divide the true and false, but, having the same force as the particular propositions, they are simultaneously true in the contingent matter, in which the <particular propositions> too were seen to be simultaneously true. For the undetermined affirmation 'Man is pale', taken, say of a Scythian, and the undetermined negation 'Man is not pale', applied to an Ethiopian, are simultaneously true, as are 'Man is fair' (*estin anthrôpos kalos*) of Achilles or Nireus and 'Man is not fair' (*ouk estin anthrôpos kalos*) of Thersites. However, when Aristotle states these things thus and famous men whom I respect[318]
111,1 contradict him, it would be fitting for us, who have considered the truth more dear and revered than anything else,[319] to do just what they urge us and not to leave this theorem untested, but to examine both Aristotle's intent, according to which he wants the undetermined propositions to be simultaneously true with one another, and what is said on this point by those arrayed against him, and in addition to this <to examine> the actual nature of the things and the force of these propositions themselves in their own right, so that

having heard out the opposing arguments and studied for themselves the things about which the argument is, we may be able more accurately to judge the truth about them.

<Claim of equivalence of undetermined and universal negations>

Now, Aristotle, as we said earlier, wants the undetermined propositions to say the same thing as the particular propositions, affirmation for affirmation and negation for negation, for one saying 'Man is pale' signifies the same thing as one saying 'Some man is pale', and one saying 'Man is not pale' as one saying 'Some man is not pale' or 'Not every man is pale'. Hence, in the matter where the particular propositions are simultaneously true (they are simultaneously true in the contingent matter), in that same matter the undetermined propositions also go together with one another. But let us examine whether the propositions under discussion actually have this force, taking as the starting point of our examination the following common notion about them.[320] We all agree that the undetermined propositions function as matter for the determined propositions, since when they add the determinations, which are analogous to species, they complete the determined propositions – something from both, as it were. Now, since matter, being formless, underlies all informed things, but has a greater resemblance to those things which are inferior among them and to those which do not yet have an articulated form, inasmuch as these have a duller force and are not much superior to it in essence, it is clear that the undetermined propositions too must have the same force as the inferior of the determined propositions. There, let us consider which of the determined propositions should be called 'inferior', and we shall say that the undetermined propositions say the same thing as these. Now, of the determined affirmations, there is no doubt that the particular is inferior to the universal, whence it is necessary for the undetermined affirmation to have equal force to the particular affirmation. But concerning the negations the interpreters debate with one another, and some follow Aristotle in saying that the particular negation is inferior to the universal (for the universal is more stately in the quantitative opposition of the propositions than the singular, just as the affirmative is <more stately> than the negative in the qualitative opposition), while others state that the universal negation is inferior to the particular one, because we understand the quantitative element in these propositions not alone, but along with its combination with the negative 112,1
quality, and it is the job of this combination to deny the existence (*huparxis*) of the things.[321] Since the particular negation tries to deny only the universal affirmation and can sometimes be said together

with the particular affirmation, just as in the contingent propositions (for 'Not every man is pale' is true simultaneously with 'Some man is pale'), if it is not possible that any expression (*emphasis*) of existence is left according to the universal negation, while according to the particular negation we do not remain unmindful of some particular existence, they say it is clearly necessary that the universal negation is inferior to the particular negation.[322] But that this is so and that the undetermined negation has the same force as the universal negation, if it is understood as a complete[323] proposition, they say is shown by the fact that not only the rest of Greek usage (*khrêsis*)[324] but even Aristotle himself frequently in his own writings uses the undetermined instead of the universal negation – as when he wants to state that it is not possible for motion to be just by itself, without the moving things, and he says: 'There is not motion (*ouk esti de kinêsis*) besides the things',[325] making the negation without a determination and saying the same thing as 'No motion exists (*oudemia kinêsis esti*) besides the things', but not the same as 'Not every (*ou pasa <kinêsis esti>*) …'. And instead of saying 'No sense exists (*oudemia aisthêsis esti*) besides the five senses', he says 'There is not a different sense (*ouk estin aisthêsis hetera*) besides the five'.[326] Thus too, when we say 'Man is not (*ouk estin anthrôpos*) just' we say the same as 'No man (*oudeis anthrôpos*) is just'. But if someone wants to understand 'Anytus', '(Anytus) is not (a) just man' (*ouk estin anthrôpos dikaios ho Anutos*) or '(The Ethiopian) is not (a) pale man' (*ouk estin anthrôpos leukos ho Aithiops*), and thinks that in this way the undetermined negation 'Man is not just' (*ouk estin anthrôpos dikaios*) says the same thing as 'Not every man is just' (*ou pas anthrôpos dikaios*) and 'Man is not pale' (*ouk estin anthrôpos leukos*) as 'Not every man is pale' (*ou pas anthrôpos leukos*), then, first, they say, he no longer agrees that the proposition is complete, and second, he will not be keeping to what Aristotle said about the opposition of negations and affirmations. For it was said that those which include the same subject and the same predicate are opposite to one another, when he stated: 'I say that statements are opposite when they <affirm and deny> the same thing of the same thing, but not homonymously, and all the other such <qualifications> which we additionally distinguish in opposition to sophistic intrusions.' (17a34). But if, when the affirmation 'Man is just' is true because of Socrates, and we say that its negation 'Man is not just' is true because of Anytus, we shall make
113,1 the subject term in the negation different from that understood in the affirmation, and that will not make a contradiction.[327] Thus, if we preserve the notion of contradiction and we accept the undetermined propositions as complete, and we do not make them change over into the species of the singular propositions, understanding with them some singular subjects as if the <undetermined propositions> them-

selves were incomplete, then it is necessary, they say, that the undetermined negation can be stated together with the universal negation. Now, this being so and the undetermined affirmation going along with the particular affirmation, as when we say 'Man is five cubits tall' (for we think we speak truly when we say this, even if there happens to be only one who has this height), they think that the undetermined propositions are contradictorily opposed to one another, just as the particular affirmation and the universal negation are.

<More on claim of equivalence of undetermined and universal negations>

But if someone says that, in the case of evils, the universal negation is preferable to the particular negation, first he is unaware that in the field of logic we do not examine the natures of things, but the force of the vocal sounds themselves, on their own. Second, in this way he will not even be able to show that the undetermined propositions are said together with one another; for it is clear that, according to the same reasoning, he will say that, in the case of evils, the particular affirmation is preferable to the universal affirmation. Just as it is better for evil things entirely not to exist than that they particularly not exist, so also that they exist particularly than that they exist entirely. So, it must follow in these cases that the undetermined affirmation is true simultaneously with the universal affirmation, since the latter is inferior to the particular one. However, he did think that in these cases the negation was true simultaneously with the particular negation for the same reason. Thus, even in the case of evils, the undetermined propositions will be opposed in this way, <the same way> in which the particular negation <is opposed> to the universal affirmation. And it is impossible for these to go along with one another, so that in this way too the undetermined propositions will always divide the true and false. But if someone wants the undetermined negation sometimes to go along with the particular negation, and sometimes with the universal negation (for, when '*estin*' ['is'] is understood with the first syllable accented in '*anthrôpos dikaios ouk ésti*' <and one understands '(A) just man does not exist'>, it says the same thing as 'No man is just', and if with a final acute accent <understood as 'Man is not just'>, the same as 'Not every man is just'), then, first, he would be said not to persuade but to legislate, and second, one must say against him that Greek usage does not know the construction of the negation and '*estin*' with a final acute accent at the end <of the phrase> or indeed in any location at all. So, if he himself agrees that, if '*esti*' has no final acute accent, then the undetermined negation says the same thing as the universal nega-

tion, and that it is always necessary for it to have no final acute in
114,1 such propositions, then it is clear that <the undetermined negation> will go along with the universal negation and will contradict the relevant affirmation.[328]

<Possible rebuttal of equivalence of undetermined and universal negations>

Now, this is the argument of those who contradict Aristotle. But perhaps it is possible to respond to each of the objections by saying:
5 it is neither reasonable to say that the universal negation is inferior to the particular, since they do not differ in quality, and comparing the propositions with one another in quantity alone we confess that the universal negation is superior to the particular one as the whole <is superior> to the part, not bringing in the things[329] about which they make the distinctions (for in this way we would no longer be
10 sticking to the hypothesis, namely, that the judgement is being made only about the quantitative difference of the propositions); nor shall we say that the particular negation introduces some existence by itself, but rather that it merely denies the universal affirmation, and <we shall say that> it denies no less than the universal does, but only that it is sometimes <negative> of fewer things (hence it is also said
15 to underlie it in quantity, like the relation of the particular to the universal affirmation); nor, if Aristotle is seen to use the undetermined negation instead of the universal, is that anything surprising, since one is uttered along with the other in the impossible matter, like the particular <negation> too. But it is clear that the Philosopher wrote the cited negations in respect to this <matter>,[330] for he does not want it to be possible for there to be any motion besides the
20 moving things or any sense besides the five, but <he wants it> to be impossible. And if certain of the ancients are seen to use it loosely (*katakhrêsthai*) in this way in the contingent matter, that is, as having the same force as the universal and being true where that one is (for this is what 'having the same force' means), it is obvious that <they do not do this> interchangeably, since we shall agree that it is manifestly impossible for it to be instead of the contingent matter
25 (for only in the impossible matter is the universal negative proposition true, while in the necessary and the contingent matters, as we said before [91,25], it is false), but it is limited in time – for example, that now man is not just or wise – and it relates to those known to us either from association or by reputation. For we shall not dare to make an assertion about those of whom we have no knowledge, either
30 from experience or witnesses, unless we are to be more misanthropic than Knemon and Timon, as if <human beings> in no way participated in <those qualities> in which human nature normally partici-

pates, since this is possible according to the hypothesis.[331] But this is not the same as the universal negation; for to limit <with respect to time>, either in actuality or in imagination, the individuals of which the predicate denies something is clearly to admit that it sometimes 115,1
has some existence among the remaining <individuals>. In general, in which sort of matter shall we say that those who have said and truly stated an undefined[332] instead of a universal negation, like:

It is not possible to inhabit (a) house without evil[333]

and 5

Multiple chiefdom is not (a) good thing[334]

have used the negation? If it was in the impossible matter, it is irrelevant; if in the contingent matter (for it must also be in this matter, if they always have the same force), first, it will turn out that the universal negations will never be false in the contingent matter, 10
although this is the reason we call them 'contraries', and second, we shall clearly admit that those very <critics> hold what is said by Aristotle, that the undefined negations are simultaneously true in the contingent matter. For if they use the negation as true, and about the affirmation there neither has been nor could there be any doubt that it is not always true in the case of contingents, just as neither is 15
the singular negation, it is clearly necessary that the undetermined propositions be true simultaneously with one another. But if someone should say that the undefined[335] negation is true only in the impossible matter, similarly to the universal negation, first, the original question will be begged, and second, how will it not be absurd to agree in the case of the undetermined affirmation that the subject term, 20
when it signifies the same thing as that said with the determination 'some' and no individual is actually understood, makes the proposition both complete and true in the contingent matter, but not to admit either of these in the case of the negation? Why does 'Man is pale' have the same force as 'Some man is pale', while 'Man is not pale' will 25
not have the same force as 'Some man is not pale', which signifies that there is a man who is not pale? For it is in no way necessary to understand specific individuals along with the undetermined <negations>, in order that they will be true simultaneously, unless <it is also necessary to understand them> with the individual <negations>. But if we say that 'Man is fair' (*estin anthrôpos kalos*) is true because of Nireus, and 'Man is not fair' (*ouk estin anthrôpos kalos*) because of 30
Thersites, we make neither these propositions complete nor their subject terms different, unless we are going to be puzzled about the same things in the particular propositions too, which we agree are

both complete and true simultaneously with one another. However,
116,1 because of the different parts of the subject, we shall say that these propositions are true just as those are, e.g. 'Some man is just – Some man is not just'. But if we deduce it to be strange that these, understood in this way, do not make a contradiction, we shall say nothing contrary to what was said about them by Aristotle. For this
5 is just what is meant here, that because they sometimes go together they do not make what is properly called a contradiction.

<Perhaps a compromise is possible>

Now, we say this in defending Aristotle, or rather <defending> what seems to us to be the truth, and, as we proposed in the beginning,[336]
10 working through[337] whatever came to mind apart from the arguments set down on both sides about it towards a decision about the theorem, we want to point out first, that we are trying to deny the particular affirmation, which we agree has the same force as the undefined <affirmation>, when we construct the negative particle with it; and we do this in two ways, joining it either to the 'is' or to the determi-
15 nation. But when we put it before the determination, then we are denying the proposition as a determined <proposition>, and before the 'is', <we are denying it> as having the same force as the undetermined <proposition>, since only in its determination did the determined <proposition> exceed it, and it is necessary that the negation of the undetermined <affirmation> arise only with respect to the 'is'. However, if the negation which combines the denial with the 'is' is
20 particular, as that which places it before the determination is universal, then the negation of the undetermined affirmation too will have the same force as the particular <negation>. In addition, it is worth keeping in mind the syllogistic constructions which arise in the first figure. For, if we agree that the undetermined affirmation has the same force as the particular and for this reason is inferior in quantity
25 to either of the universal <affirmations> and its conclusion must resemble one of the premisses assumed in the syllogism and always follow upon the one which is inferior both in quantity and quality, and in addition to this, when the premisses are true and their construction is unobjectionable, the conclusion is necessarily true, then what conclusion shall we say is brought about from an undeter-
30 mined affirmative minor and a universal negative major <premiss>? Because of what has been assumed before, it is necessary to agree both that <the conclusion> is an undetermined negation and that it is true, if the <premisses> are true. But how can it be true by itself in the contingent matter, if it says the same thing as the universal
35 negation, e.g. 'Man is just, Nothing just is unjust, Therefore man is not unjust'? Shall we say that this is true simultaneously with the

universal or with the particular <affirmation>? But let us not yet condemn even the earlier arguments as saying nothing true. They seem, if I must say what appears to me, not even to conflict with those said later, if one arbitrates for them impartially, stripping from each of them their contention that the undetermined negation is uttered together with only one of the determinations and never with the other. For perhaps one must say that it [i.e. the undetermined negation] is used instead of either, not accidentally as in the impossible matter, in which it happens that even the determined negations go along with one another, but *per se*, in respect of the different senses of the things being asserted. Hence it is able both to be true simultaneously with the relevant affirmation and to contradict it in respect of a different sense and having, as has been said,[338] a different force than those who say that it has by itself no force definite in quantity. Hence, perhaps, each of the arguments which seemed to conflict is able to employ many justifications. 117,1

<Evidence for the compromise>

That we say this truly, we may learn from the fact that the affirmations agreedly are equivalent to one another, i.e. the undetermined and the particular <affirmations>, and because of this so are the propositions which place the negative particle in front of the 'is', whether that is understood actually or potentially in them; however, the particular <negation> which arises in this way and seems somehow in its vocal sound (*phônê*) to be an affirmation because the denial is not combined with the determination, but has the force of a negation (which we shall demonstrate more clearly in what follows), sometimes has the same force as the universal and sometimes as the particular <negation>, because the denial can be understood with both the 'some' and the predicate: when understood with the 'some', it signifies the same thing as 'no one' and 'none', but with the predicate, <the same as> 'not every'. For having heard 'Some (*tìs*) man is not immortal *(athanatos ouk estin*)', if we understand the 'is not' with the 'some', we think it signifies the same thing as 'none' (*oudeis*), which seems clearer than the 'is not' placed before the 'some' in:

> 'There is not among mortals any one who is free'[339]
> (*ouk esti thnêtôn hostis est' eleutheros*),

<or> 'There is not some (*ouk ésti tis*) man <who is> immortal', where the 'some' is enclitic along with the 'is' and cannot take its own accent,[340] but hearing 'Some man (*tìs anthrôpos*) in old age is not grey' or '… is not five-fingered', if we understand the 'is not' with the 'in

old age is not grey' or 'is not five-fingered', which happens more
118,1 clearly if we punctuate after 'some man', we think the proposition signifies the same thing as 'There is some <man> (*ésti tis*) <who is> not such' or as 'Not every <man> is such', as in:

> 'And some speech he produced, which unsaid <had been> better' (*kai ti epos proeêken, hoper t' arrhêton ameinon*);[341]

for this is no different from saying 'some<thing> of what was said (*ti tôn eirêmenôn*) ought not to have been said'. We want the first one[342] to make the proposition true in the impossible matter, and the second[343] to <make the proposition> true by itself in the contingent matter but <true> because of the universal <proposition> in the impossible matter. But if in the first <proposition> we understand the 'is not' with the 'immortal' and in the second with the 'some' (*tis*), we shall think the former is particular and is true because of the universal <proposition>, inasmuch as the matter is impossible, and the latter is universal and always false in the contingent matter. Thus we must say in the case of the undefined (*adioristos*) negation too that both are signified, the universal and the particular, according to the meanings, as has often been said,[344] of the things stated, and although the denial is again constructed either as though with the 'some' which is potentially contained in the undefined affirmation or as though with the predicate, this too inclines rather toward the universal when we begin the negation from the denial, saying 'there is not (*ouk éstin*) a winged or just man' and speaking either truthfully or falsely. Hence too, perhaps all those who have used[345] the undefined instead of the universal negation turn out to have used it in this way, saying 'There is not motion besides the things'[346] and 'There is not sense besides the five'[347] and:

> It is not possible to inhabit (a) house without evil[348]

and

> Multiple chiefdom is not (a) good thing[349]

and

> 'There is not of mortals anyone who is free'.[350]

<The consequences for the universal affirmation>

But if one must also examine by the same method the consequences for the universal affirmation, since Aristotle will mention such propo-

sitions in what follows, one must obviously say that, since here too the denial is placed before the 'is' and is capable of being understood either with the 'every' or with the predicate, the proposition turns out to have the same force as the particular negation, insofar as it denies the 'every', which again is seen more clearly when the 'is not' is placed at the beginning of the proposition, as in '(It) is not every man (who 119,1
is) wise' (*ouk esti pas anthrôpos sophos*), but insofar as it denies the predicate, it has the same force as the universal negation 'Every man is not-wise' (… *ou sophos esti*) and '… is not wise' (… *sophos ouk estin*), which have the same force as 'No one is wise'. But we shall say that this happens not only in the propositions <arising> from a third, 5
added predicate, but also in those <consisting> of subject and predicate, e.g. 'Some man does not do geometry' (*tis anthrôpos ou geômetrei*) or '(He) does not do geometry, some man' (*ou geômetrei tis anthrôpos*) and 'Every man does not do geometry' (*pas anthrôpos ou geômetrei*) or 'Not do geometry does every man' (*ou geômetrei pas anthrôpos*). In fact, in these cases the first and third, which have their predicate even more clearly, seem to preserve the same quantity as the original affirmations, since the denial is constructed immediately 10
with the predicate and is not at all understood with anything else, while the others, having denials which seem to deny the determinations which follow them, are seen to incline rather to the opposite quantity. Thus, we shall again say the same of the undefined (*adioristos*) negation as of the particular <negation> which has its denial 15
constructed not with the determination, but with the predicate, and neither of the arguments which at the beginning seemed to conflict turns out to miss the goal entirely.

<The first-figure syllogism with an undetermined minor premiss>

So, the argument allows us to use the undetermined negation instead of either of the defined (*diôrismenai*) ones. However, none of the ancients is seen using it instead of the particular <negation>, perhaps 20
since it signifies this less clearly, in the way we described, since even of the determined negations those prefixing the denial to the 'is' are for this reason more rare among the ancients than those constructing it with the determinations. But if the undefined (*adioristos*) negative conclusion drawn from an undefined affirmative minor and a universal negative major <premiss> always turns out to agree with the 25
particular <negation> and not the universal, it is not surprising.[351] For the predicate in conclusions of the first figure must be predicated of the subject assumed in the minor premiss, <and that subject must> remain the same not only in name and in meaning, but also in quantity, because in this figure too it happens that the quantity of 30

the conclusion follows the quantity of the minor. Thus, if in the <minor> the predicate has been potentially assumed to belong to some <one> (*tis*) of the subjects, in the conclusion too it will be said not to belong to some <one> (*tis*), which is more clearly seen in the groups <consisting> of a particular affirmative minor and a universal
120,1 negative major, which draw particular negative conclusions, such as 'Some man is just, nothing just is unjust, therefore some man is not just', which has in the aforementioned way the same force as 'Man is not just'. For, to put it concisely, the negation in singular <propositions>, which do not even in our imagination accept any differentiation in quantity, necessarily retains the same quantity as the affirmation; but in all those which use a universal subject and for this reason are able to do double duty as universal and as particular, if it is opposed in quantity to the affirmation, either actually or potentially, it will be the contradictory, but if <it is opposed> in the 'is', again either actually or potentially, being contained in the proposition, it will no longer <be the contradictory>, but in the case of the universal <it will be> the sometimes simultaneously false <proposition>, and in the remaining cases, <it will be> the <proposition> which is able to agree.

<Return to Aristotle's own arguments>

These things having been defined, let us in turn examine the arguments of Aristotle, by which he wants to establish that the undetermined propositions go along with one another in the contingent matter.[352] Now, of his two arguments the first makes its approach to the proof from the contraries, and the second from what are not contraries. He takes as examples of the contraries the fair and the ugly, of the non-contraries that which is coming to be and that which is – these are not contraries, since coming to be is a path to being. The first attempt is introduced in the following way: he takes two undetermined affirmations which are true simultaneously with one another and which use contrary predicates, namely 'Man is fair' (*estin anthrôpos kalos*) and 'Man is ugly' (*estin anthrôpos aiskhros*), of which the former happens to be true because of Nireus and the latter because of Thersites. For we said that undetermined affirmations indisputably have the same force as particular affirmations. So, if 'Some man is fair' and 'Some man is ugly' are true together, it is clear that the <affirmations> said undeterminedly are also simultaneously true. Now, having shown that one of the affirmations taken in this way expresses the same thing as the negation of the other, he concludes that in the case of such propositions it turns out that the affirmation goes along with its own negation. For 'There is (a) man not fair' (*estin anthrôpos ou kalos*), he says, is simultaneously true

with 'Man is ugly' (*estin anthrôpos aiskhros*) – for it is clear that he who is ugly would be not fair – and 'There is (a) man not-fair' is the same as 'Man is not fair' (*ouk estin anthrôpos kalos*) – for it is clear that he who is not-fair would not be fair. Thus, the negation 'Man is not fair' will be true together with the affirmation 'Man is fair'. Now, 121,1
it seems, as we said before,[353] that the undetermined negation which begins with the denial inclines more towards the universal, inasmuch as the denial is more closely understood with the 'some' which is potentially present in the undetermined affirmation, but Aristotle 5
even so uses it as having the same force as the particular <negation>, inasmuch as the denial is capable in this way too of being constructed not with the determination but with the predicate. And the argument from non-contraries proceeds in a similar manner to that from contraries, having the following sort of force: again he takes two undetermined affirmations, '(There) is (a) man' and 'Man comes to 10
be', of which the first is true because of the man who actually exists and the second because of the one still gestating. Now, he wants the one which says '(There) is not (a) man' to be simultaneously true with that which says 'Man comes to be', for the man who is coming to be is not yet (a) man. So, if 'Man comes to be' is true simultaneously with '(There) is (a) man' and '(There) is not (a) man' with 'Man comes to be', it is clear 15
that '(There) is not (a) man' will be true simultaneously with '(There) is (a) man', which is what we needed to prove from the beginning.

<Aristotle on contradiction>

One might ask how Aristotle thought he could call the opposition of these propositions 'contradiction' at all, given that he thought they were simultaneously true and defined contradiction in the *Analytics* as 'opposition of which *per se* there is nothing in between',[354] and 20
indeed said in the *Categories*,[355] where he distinguished the species of opposed items, that all those which are opposed as affirmation and negation differ from those opposed according to the other oppositions by the fact that only in these is it necessary that one be true and the other false. So, how could the one who distinguished these things everywhere want here to call the opposition of propositions which are simultaneously true, as he himself says, with one another, I mean 25
the undetermined ones, a 'contradiction'? At any rate, having first said 'Now, all contradictory propositions of universals which are <taken> universally', he added: 'But all those which are of universals but not universally', as if the opposition of these too is called 'contradiction'. Now, one must respond to this question that he sometimes uses the name 'contradiction' for the conflict of an affirmation and 30
negation which always divide the true and false, as what is said in the *Categories* shows, as well as the definition of contradiction given

in the *Analytics*, and sometimes <he uses it> more generally, <as> simply every opposition of an affirmation and negation using the same subject and the same predicate. He makes <this> clear when
122,1 he says in turn that 'not every contradiction is true or false' (18a10), meaning the same as "it does not belong to every contradiction that it is necessary for one of its parts to be true and the other false" (cf. 18a26). And if in the *Categories* it was said[356] that, of opposing affirmations and negations, when one is true the other is false and
5 when <one is> false <the other is> true, we shall not say that the accurate account of these matters is the job of that treatise, but that the Philosopher has spoken there only about the singular propositions which indisputably contradict one another, as in the contradiction properly so called. Indeed, after the arguments in which he established that the undetermined propositions are simultaneously
10 true, pointing out himself that he will sometimes not seem to certain people to speak persuasively because the undetermined negation does not seem to go along with the singular, but with the universal <negation>, he says that to those listening immediately (he says 'immediately' [*exaiphnês*] in the sense of 'at first encounter' or 'unex-
15 aminedly', 'untestedly') the theorem given about the undetermined <propositions> will seem strange because 'Man is not pale', which is an undetermined negation, seems to signify the same thing as 'No man is pale', which, if it were really so, then when the undetermined affirmation always indisputably went together with the particular affirmation, the undetermined propositions would have always di-
20 vided the true and false, just as the particular affirmation and the universal negation do. But now, he says, neither do the aforementioned negations, the undetermined and the universal, signify the same thing, nor are they necessarily simultaneously true, adding this as another <criterion> besides their signifying the same thing. For there are propositions which do not signify the same thing, but are simultaneously true because they follow one another, such as 'It is
15 impossible for there to be a winged man' and 'It is necessary that there not be a winged man': of these, when the universal is true, the undetermined (*adioristos*) <proposition> is also true, but not *vice versa*. This is the point to which the investigation of the oppositions which are present among the propositions arising from the division of the subject has advanced.

123,1 **17b38** It is also obvious that there is one negation of one affirmation. For the negation must negate the same thing as the affirmation affirmed and <it must negate this> of the same <subject>, either of some individual or of some universal taken either universally or not universally; I mean, for example,

'Socrates is pale – Socrates pale is not'. If something else <is denied> or the same thing <is denied> of something else, it will not be the opposite, but something other than it: <corresponding> to 'Every man is pale' is the <negation> 'Not every man is pale', to 'Some man is pale' is 'No man is pale', to 'Man is pale' is 'Man is not pale'. So, that to one negation one affirmation is contradictorily opposed, and what these are, has been said, and also that the contraries are different, and what they are, as well as that not every contradiction is true or false, and why and when it is true or false.

<Relation of this paragraph to what came before>

Having gone through all the oppositions of the propositions, Aristotle sums up as a kind of corollary and teaches us here that with one affirmation it is only possible for one negation to conflict, and impossible for several <to conflict> with one. Now, how shall we say that this is concluded in what was said before?[357] Perhaps it is because two negations appeared to conflict with the universal affirmation taken universally, namely the universal <negation> taken universally and the particular (*kata meros*), of which the particular <appeared to conflict> as actually contradicting it, and the universal was seen to be simultaneously false with it in the contingent matter. In the same way the two aforementioned negations appeared to conflict with the particular (*merikê*) affirmation too, and of them the universal actually conflicted with it as always dividing with it the true and false, while the particular was understood to go along with it in the contingent matter. So, teaching us that there is one negation of one affirmation and adding the reason for this result, he says: 'For the negation must negate the same thing as the affirmation affirmed and <it must negate this> of the same <subject>.' By 'the same' he means the predicate, and by 'of the same' <he means> the subject; for it has often been said before that propositions contradictorily opposed to one another must use both the same subject and predicate. Then, as if to remind us of the division which had been made on the basis of the subject of the propositions, he says 'either of some individual or 124,1
of some universal taken either universally or not universally'. Clearly, 'either of some individual'[358] speaks about the opposition of the singular propositions, and 'or of some universal' about absolutely all <propositions> which use a universal subject, and of this the phrase 'taken either universally' speaks about the determined <propositions> and 'or not universally' about the undetermined <propositions>. Then, having given examples of the singular propositions in 'for example, "Socrates is pale – Socrates is not pale" ', before bringing on the examples of the other propositions, he explains what

<he wanted> to distinguish when he said that the negation must negate the same thing as the affirmation affirmed. He says:[359] 'If something else <is denied> or the same thing <is denied> of something else, it will not be the opposite, but something other than it', i.e. if the negation negates some other predicate and not what the affirmation affirmed (for example, if the negation said 'Man is not just' when the affirmation said 'Man is pale'), this will not be the negation of the given affirmation, but will be a different one besides it; for its negation will be 'Man is not pale', and 'Man is not just' is different in its predicate from 'Man is not pale'. Similarly, if the negation negates the predicate of a different subject and not of that one of which the affirmation affirmed it, again this will not be the negation of that affirmation. Who would think that 'Horse is not walking' was the negation of 'Man is walking'? It is clear that the real negation of 'Man is walking' is 'Man is not walking', while 'Horse is not walking' has been changed from it in its subject term. Having said these things parenthetically, he adds the remaining examples of the propositions, saying: 'to "Every man is pale" ' ('is opposed' obviously must be understood) 'the <negation> "Not every man is pale", to "Some man is pale" is "No man is pale", to "Man is pale" is "Man is not pale" ', of which clearly some are determined <propositions> and others are undetermined. Then, summing up[360] what was said by way of corollary (*porisma*),[361] he says: 'So, that to one negation one affirmation is contradictorily opposed, and what these are, has been said'; for he has gone through all the species of propositions, the singular, the determined, and also the undetermined, and in all cases he showed that this happens. And summing up the remainder of what was said about the oppositions among propositions, he added: 'and also that the contraries are different' (he obviously means 'different' from those which are contradictorily opposed), 'and what they are' (both here and in what follows 'has been said' is understood in common), 'as well as that not every contradiction is true or false'. What this means for him we have already said, namely that he says that the parts of what is called contradiction in the more general sense,[362] which signifies just an opposition of the affirmation to the negation of the <propositions> using the same terms, do not always divide the true and false. This was said because of the undetermined propositions, which he wanted to be true simultaneously in the contingent matter because they are uttered together with the particular propositions, which his 'and why' signifies. And the phrase 'and when it is true or false' is also said about the undetermined propositions; for in the remaining matters besides the contingent, I mean the necessary and the impossible, these too divide the true and false.

<CHAPTER 8>

18a13 That affirmation or negation is one which signifies one thing about one <subject>, either of a universal <subject> taken universally or not in the same way, e.g. 'Every man is pale – Every man is not pale', 'Man is pale – Man is not pale', 'No man is pale – 'Some man is pale', if 'pale' signifies one thing. But if one name stands for two things, out of which one cannot be <made>, then the affirmation is not one, nor is the negation one. For example, if one imposed the name 'cloak' (*himation*) on horse and man, 'Cloak is pale' is not one affirmation, nor is <its> negation one; for it is no different to say this than 'Horse and man is pale'. And this is no different from saying 'Horse is pale' and 'Man is pale'. Now, if these signify many things and are many, it is clear that the first <proposition> too signifies either many things or nothing; for a particular man is not a horse. Thus, neither in these <propositions> is it necessary for the contradiction to be <one proposition> true and the other false.

<Restatement of the definition of the unity of a proposition>

Having first said that one negation conflicts with one affirmation, in these words he adds what the one affirmation or the one negation is, although he has already taught us what he thought about these too 126,1 in what went before, when he said: 'An assertoric sentence that is one is either that which signifies one thing or that which is one by a conjunction, but those assertoric sentences are many which signify many things, not one thing, or which are unconnected' (17a15). There he riddled about the difference between the one <sentence> and the many sentences, but here he states the theorem more thoroughly. For he says that proposition is one which uses a subject which is one in signification and one predicate, 'either of a universal <subject> taken universally or not in the same way', that is, whether particular or undetermined or also singular, even if he has not given here examples of the singular ones: 'Man is pale' is one proposition if '(a) man' signifies one nature and we do not take 'pale' as homonymous but as revealing something definite. But if the subject in the proposition is homonymous, or the predicate is, then the proposition is no longer one but however many as are the meanings of the homonymous vocal sound used. If, as he himself says, we impose on both man and horse the name 'cloak', and then we say 'Cloak is pale', we are saying

nothing other than that 'Horse and man is pale', and here the copulative conjunction 'and', by seeming to bind together the man and the horse, provides an appearance of the proposition's being one. But if we remove the conjunction and say 'Horse is pale, Man is pale', no appearance of the proposition's being one will still be assumed. Now, if the propositions which are said in this way are agreedly many, it is clear that also the <proposition> which has the same force as these, the one saying 'Cloak is pale', which he called 'first' since he was going from this one to those which agreedly use different subjects, signifies either nothing or many things. For it is not possible for it to signify one thing, as the division into the significations of its homonymous vocal sound – I mean 'cloak' – showed. But since it is necessary that every vocal sound either be meaningless or signify something, and if it signifies, either to signify one or many things, it is clear that the given proposition, 'Cloak is pale' will belong either to the meaningless or to the significant <propositions>, and either to those signifying one thing or many and not <just> one. However, since that it signifies one thing has been refuted, it is necessary that one of the remaining two be left. But it is irrational for it to signify nothing, even if this too has been included for the sake of the perfection of the division in the
127,1 scrutiny of the theorem. Therefore, it can only signify many things, even if the proposition seems to be one in expression (*phônê*) by its subject's seeming to be one because there is one name for several meanings, e.g. 'cloak' signifying man and horse.

<Terms in a definition signify one thing>

'For a particular man is not a horse' seems to me to have been said because even propositions understood in this way sometimes cannot signify many things, but one, <namely> when one posits any one chance name for the several things used in some definition, I mean for the genus and the *differentiae*. Let there be a common name for the rational mortal animal receptive of intelligence and knowledge, 'cloak', as Aristotle used it. Now, when we say 'Cloak is pale', shall we say that this proposition is not one but many? Not at all, since from all the things for which the name 'cloak' stands some one nature, that of man, is completed, and it is the same thing to say 'Cloak is pale' and 'Rational mortal animal receptive of intelligence and knowledge is pale'; but this is the same as 'Man is pale'. Thus, someone predicating one thing of the name posited in common for all things which fulfil the same definition would not say several propositions.[363] Now, what is the difference between the things for which it is not possible for the name imposed on them to effect one proposition and those for which it is possible? It is that those things for which it is not possible for the proposition to become one are necessarily distin-

guished from one another, as we said in the case of man and horse, but those things for which it is possible for the proposition to be one are necessarily asserted of one another, sometimes universally but always particularly (*kata meros*) – for example, as we said in the case of 'rational' and 'mortal' and 'animal' and absolutely all those which are included in the fulfilment of some one definition. For it is necessary that each of these which are universally predicated of the thing to be defined also be asserted particularly of each of the things which fulfil the same definition as it does. Since 'animal' is predicated of every man and 'rational' equally so, it is clearly necessary that each of them be predicated of the other particularly; and in fact some rational thing is an animal and some animal is rational. The same argument also holds for 'animal' and 'mortal' (in fact some mortal thing is an animal and some animal is mortal) and for 'rational' and 'mortal' (in fact some rational thing is mortal and some mortal thing is rational), even if some of these turn out to be true because of the universals. So, he himself demonstrated these things concisely, saying: 'For a particular man is not a horse.'[364] And to teach how this theorem also contributes to the theory of the contradiction properly speaking he added: 'Thus, neither in these <propositions> is it necessary for the contradiction to be <one proposition> true and the other false', which means the same as 'thus, neither in such contradictions, which use an homonymous subject or predicate, is it necessary for one of the propositions to be false and the other to be true' (cf. above, 122,1). And this is correct, since nothing prevents one of the different things signified by the homonymous vocal sound from partaking of what is predicated of them in common, while the other does not partake <of it>, as we said in the case of 'Ajax fought with Hector' and 'Ajax did not fight …', and as in the case of the aforementioned example 'Cloak is pale' and 'Cloak is not pale'. For it is possible that, if a man, say, is pale and a horse not pale, both propositions could be true and both false, and also that one could be false and the other true.

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Notes

1. cf. Boethius II 4.9-13: 'Although much of Aristotle is hidden with his most subtle art of philosophy, nonetheless this book is more than all the rest excessively constrained by both the sharpness of its thoughts and the brevity of its expression.' At *in Cat*. 7,7-14 Ammonius explains the obscurity of Aristotle's style: 'We reply that it is just as in the temples, where curtains are used for the purpose of preventing everyone, and especially the impure, from encountering things they are not worthy of meeting. So too Aristotle uses the obscurity of his philosophy as a veil, so that good people may for that reason stretch their minds even more, whereas empty minds that are lost through carelessness will be put to flight by the obscurity when they encounter sentences like these' (S. Marc Cohen and Gareth B. Matthews (trs), *Ammonius On Aristotle's Categories*, London and Ithaca N.Y. 1991). On the difficulty of the exegete, who must make clear what he recognizes has good reason for being obscure, cf. J. Barnes, 'Metacommentary', *Oxford Studies in Ancient Philosophy* 10, 1992, 267-81 at 267-74.

2. 'The god of eloquence' (*ho logios theos*) was used by Julian the Apostate to refer to Hermes, the herald of the gods. Given the association of 'Hermes' with *hermêneia* ('interpretation', 'translation', 'expression'), this is presumably a pun on the title of Aristotle's book and the task of 'interpreting' it.

3. The ninth of ten points which Ammonius at the beginning of his *Categories* commentary says must be investigated by all who would study Aristotle is: 'how many and which are the things which must be prefaced to the explication of each Aristotelian work?' (7.15f.). There Ammonius lists the above points in the order: aim (*skopos*, which corresponds to theme in our passage), usefulness, order, reason for the title, authenticity, division into chapters. On different versions of the questions, see Westerink, 'The Alexandrian commentators', in R. Sorabji (ed.) *Aristotle Transformed*, London and Ithaca N.Y. 1990, 341-8. This list of questions is known to have already been used by Proclus (Elias *in Cat*. 107,24-6). On the topics of the philosophical prologues and their relation to those used by Origen in his biblical commentaries, especially that on the *Song of Songs*, see now B. Neuschäfer, *Origenes als Philologe*, Basel 1987, 58-84 and 355-69 and J. Mansfield, *Prolegomena: Question to be settled before the Study of an Author or a Text*, Leiden 1994.

4. cf. Ammonius *in Cat*. 5,4ff., 10,22.

5. cf. Boethius II 7.12ff., who already here brings in the theory that the vocal sound signifies things with thoughts as intermediaries.

6. Aristotle plays on this etymology at *Top*. 1.10, 104a5. We may also translate the word as 'premisses', as often below. Literally it means 'stretched out [before one's partner in discussion]'.

7. D.M. Schenkeveld, 'Stoic and Peripatetic kinds of speech act and the distinction of grammatical moods', *Mnemosyne* 37, 1984, 291-353, studies the occurrences of this list of five kinds of sentence and concludes that the list does not antedate the fifth century A.D. Cf. below 5,1ff. for the two capacities of the soul (which Schenkeveld 298 says are not found limited to two before Ammonius) and the

derivation of the five kinds of sentence from them. Boethius also discusses the five kinds of sentence in the context of the intention of our work. The presence of the five kinds (called 'parts') of complete sentence in Boethius (II 9.6ff.) may indicate that they go back to Porphyry. This seems especially likely in view of the other parts of Boethius' discussion here, viz. the citation of Theophrastus' *On affirmation and negation* (fr. 79 Fortenbaugh), the mention of the list of Stoic types of complete *lekta*, and the opinions of Aspasius and Alexander about the intention (II 10.4ff.) with the comments of Porphyry on Alexander's further remarks about the title (II 11.10).

8. *Iliad* 3.182, etc.

9. *Iliad* 8.399, etc.

10. *Odyssey* 7.238.

11. *Iliad* 4.288.

12. *Odyssey* 4.379.

13. Plato *Phaedrus* 245C5.

14. Schenkeveld, op. cit., in his study of the lists of these 'complete things said' (*lekta autotelê*), maintains that the Stoics originally listed ten types: assertoric (*lekton apophantikon*, or *axiôma*), interrogative (*erôtêma*), question (*pusma*), dubitative (*lekton epaporêtikon*), imperative (*lekton prostaktikon*), swearing (*lekton horkikon*), imprecative (*lekton aratikon*), addressing (*lekton prosagoreutikon*), hypothetical (*lekton hupothetikon*), quasi-decision (*homoion axiômati*). He also argues (324ff.) that these represent various types of illocutionary force, but that their status as states of affairs or actions was overlooked by the Peripatetics, which allowed the latter to equate the types of complete *lekta* with their own five 'kinds of sentence' although those are verbal expressions.

15. *Odyssey* 5.184.

16. Menander, fr. 855 Kock.

17. That is because they are all indicative of truth and falsity.

18. cf. *Com. Att. fr.* III p. 460, fr. 287 Kock.

19. I have used quotes here because in general Ammonius thinks that what is predicated is a vocal sound *qua* significant.

20. cf. Chapter 5 below.

21. This paragraph places the *On Interpretation* in the overall scheme of Aristotelian logic, insofar as this was seen to correspond to Porphyry's semantic theory (cf. A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 38): *On Interpretation* deals with simple vocal sounds understood as semantic – and hence broken down into names and verbs – and the combination of these vocal sounds to make the assertoric sentence; the *Prior Analytics*, on the other hand, deals with the combination of the assertoric sentences made up of semantic vocal sounds to form syllogisms.

22. The work *On Style* (*peri hermêneias*) is traditionally ascribed to Demetrius of Phalerum, governor of Athens from 317-307 B.C. and a pupil of Theophrastus. This attribution is not now accepted by scholars, and the treatise is generally ascribed to the first century B.C. or A.D. Had Ammonius attributed the treatise to Demetrius of Phalerum, he would have been less vague about the name here. The treatise shows some knowledge of things Egyptian (cf. chapters 158 and 94-7), and if 'Demetrius' is actually the author's name, he could be the eighth 'Demetrius' listed by Diogenes Laertius (5.84, probably taken from Demetrius of Magnesia's work on homonymous poets and writers), the 'Alexandrian sophist who wrote rhetorical *artes*'. The work in question deals with periods and cola, as well as with the four types of style (*kharaktêres tês hermêneias*), the plain, elevated, elegant,

and the forcible styles; it includes discussions of figures, hiatus, poetical coloration, euphony, clarity, vividness, persuasiveness, etc.

23. 'Thing' or 'state of affairs' (*pragma*) is often used to refer to the action indicated by a verb; for example, the infinitive, which points to no person or number doing the action, is referred to as 'the name of the action' by grammarians. Cf. J.M. van Ophuijsen, 'The semantics of a syntactician. Things meant by verbs according to Apollonius Dyscolus "Peri suntaxeôs" ' in *Aufstieg und Niedergang der Römischen Welt* II 34.1, Berlin 1993, 731-70 at 733-9.

24. Boethius II 6.4 defines 'interpretation' in the same way as '*logos*', i.e. as 'articulate voice significant by itself '. In his discussion of the intention, he reports (II 10.4ff.) that Aspasius and Alexander said that *Int*. was about *oratio* (= *logos* or 'sentence, discourse'), for if to pronounce something in a sentence is to 'interpret', the book *On Interpretation* must be about the sentence. Boethius objects that 'interpretation' refers to the sentence, name, and verb equally. Alexander then added that the title of the book was not complete, since it did not state which kind of sentence it was about and should have specified the philosophical or dialectical sentence, which can express truth or falsity (II 10.14ff.). Porphyry weighed in against this addition (II 11.9-11), saying that it amounted more to inventing than to explaining the meaning of the word.

25. *DA* 3.5, 430a23ff.

26. *DA* 3.7, 431b2.

27. *DA* 3.8, 432a12ff.

28. *DA* 1.1, 403a3ff.

29. *DA* 1.1, 403a5ff.

30. *DA* 1.1, 402a7ff.

31. Reading *hôste* with Busse, for *hôsper*.

32. cf. *DA* 3.5, 430a17-18.

33. Boethius reports (II 11.13ff.) that Alexander defended the authenticity of *Int*. against Andronicus' attack, on the grounds that it agrees with what Aristotle says about expression, that it conformed with Aristotle's obscure style, that Theophrastus supplemented it, treating it as a genuine work of Aristotle, and that it is needed for Aristotle's project to write about syllogisms (this last a singularly bad argument!). Boethius (II 12.28-13.9) adds an argument (from Porphyry?) that our thoughts, which we express in speech and sentences are called 'passions of the soul' inasmuch as they arise from the necessity which caused men to gather in social groups and make laws to govern themselves, whereby everything which arises to be useful must proceed from *passion* (n.b.: as the divine is without passion, so is it not touched by external utility). That leaves Ammonius' explanation to be post-Porphyrian, with which its metaphysical character certainly accords.

34. These 'main sections' or 'chapters' (*kephalaia*) are noted in most of the mediaeval manuscripts of *Int*. and are not related to the modern division of the treatise into fourteen chapters. Since the division into five (four plus one extra, cf. 8,22) chapters is not found in Boethius' translation or commentaries and Boethius must have known Syrianus' commentary, Tarán conjectures that it originated with either Proclus (whom Boethius does not mention) or Ammonius (Leonardo Tarán (ed.), *Anonymous Commentary on Aristotle's De Interpretatione*, Beiträge zur Klassischen Philologie 95, Meisenheim am Glan 1978, xvi f.). Division into *kephalaia* is the sixth task listed under the 'prerequisites for the study of each of the Aristotelian writings', which is the ninth of the ten questions preliminary to the study of Aristotle's philosophy (Ammonius *in Cat*. 1,3ff.).

35. i.e. (1) 16a1-17a37; (2) 17a38-19b19; (3) 19b19-21a33; (4) 21a34-23a26; (5) 23a27-24b9.

36. *Cat*. 14a39.

37. Reading *ti* without accent for Busse's interrogatives.

38. A *phasis* is simply something said, from the verb *phêmi*, meaning 'to say' (I shall translate it as 'expression' later); its varieties are compounds with the following prefixes: that for 'down' in affirmation (*kataphasis*; Greeks would – and still do – nod their heads downward in agreement and upward in disagreement); that for 'away' in negation (*apophasis*); that for 'against' in contradiction (*antiphasis*). *Apophansis* comes from a different verb-form, *phainô*, meaning 'reveal', 'show'.

39. Reading *apophanseis* for *antiphaseis*, as suggested by Busse.

40. Ammonius believes that the last section of *Int*. is either post-Aristotelian or written by Aristotle as an exercise. He comments on it nonetheless, as he believes it relevant to the rest of the book; cf. below 251,25 ff.

41. As Lamberz points out ('Form des philosophischen Kommentars', in J Pépin and H.D. Saffrey (eds), *Proclus: lecteur et interprète des anciens*, Actes du colloque international du CNRS, Paris 1987, 12f.), this sentence does not state that Ammonius has consulted several texts and constructed his own preferred text. Ammonius seems to have one MS and to know about textual controversies from other commentators, especially Porphyry, as was surmised by A. Busse, 'Über die in Ammonius' Kommentar erhaltene Überlieferung der aristotelischen Schrift *peri hermêneias*', in *Festschrift J. Vahlen*, Berlin 1900, 73-85 at 73-5. He supplies a copy of the text he himself is using, in order to prevent the reader from becoming confused by using a commentary which contains only partial lemmata along with a text which may disagree with that used by Ammonius. Lamberz also argues that the absence of most of this sentence from two of the MSS used by Busse does not impugn its genuineness. For *ekdosis* in the sense of 'explanation', rather than 'text edition', see H. Erbse, 'Über Aristarchs Iliasausgaben', *Hermes* 87, 1959, 275-303 at 291f.

42. The first of the 'chapters' (*kephalaia*) into which Ammonius divides Aristotle's treatise (7,15ff.) runs from 16a1-17a37 and treats, according to Ammonius, 'the principles (*arkhai*) of the assertoric sentence' (7,17f.).

43. I translate *onoma* as 'name', rather than 'noun', because it designates a word used to name something, which can hence be used as a subject. The oblique cases of names cannot be used in this way and hence are not classed as 'names'.

44. cf. Boethius II 14.1f.

45. Ammonius is concerned to show that 'establish' means 'define' because only then does the first sentence of Aristotle's book fit Ammonius' description of giving the 'principles' of the assertoric sentence, which he sees as equivalent to the definitions, postulates and common notions which are principles of geometry (7,18-20).

46. Ammonius takes this sense of 'thesis', including the examples, from Aristotle *Top*. 104b19ff.

47. The use of the group of verbs denoting placement or change of placement to denote 'moves' in argument – here, *anatithesthai*, to 'take back' a move – is common in Plato's Socratic dialogues (e.g. *Gorgias* 461D-462A). It is usually thought to be derived from the board game *pessoi*.

48. These words, which end in *-teos*, etc., are now usually classed as verbal adjectives.

49. i.e. *An. Post*. 1.3, 72a15.

50. These represent the four stages of Porphyry's semantic theory (cf. Lloyd, *The Anatomy of Neoplatonism*, op. cit., 38 and Ebbesen, 'Porphyry's legacy to logic: a reconstruction', op. cit., 146ff.): 'simple vocal sounds' are the result of the 'first imposition of names'; when these are seen syntactically, as constituents of a sentence, they are divided into names and verbs, a meta-linguistic categorization which corresponds to the 'second imposition of names'; name and verb, each considered as part of an assertion (*apophansis*), are called 'expression' (*phasis*); expressions conceived as parts of a syllogism are 'terms'.

51. The difference in relation (*skhesis*) is a favorite device of Porphyry and later Neoplatonists in general.

52. Ammonius' point is that, like the apple which can be seen as either a seed(-holder) or a fruit and the path which can be seen as leading upwards or downwards according to its relation to the observer, Aristotle will treat simple words differently in *Int*. than in *Cat*. In *Cat*. he is interested in words as they are imposed upon or assigned to the things they mean, while in *Int*. his subject is the words themselves and the application to them of the metalinguistic classifications 'name' and 'verb'. Once the words are seen as names and verbs and these are combined, each name or verb can be seen as a part of an assertoric sentence, as an 'expression'. This explanation is taken from Porphyry (*in Cat*. 57,20-58,5), who refers to these two relations as the first and second 'impositions' (58.1ff.: *thesis*). Cf. Tae-Soo Lee, *Die griechische Tradition der aristotelischen Syllogistik in der Spätantike*, Hypomnemata 79, Göttingen 1984, 27ff.

53. *An. Post*. 1.1, 24b16.

54. *Laws* 9.878B.

55. Plato says that the 'buffer' is between the two extremes and touches both; it is what we might call a 'grey area'.

56. cf. Boethius II 14.7-30.

57. cf. 8,8-19 on the manner (*tropoi*) in which the predicate is said to belong to the subject.

58. This is indicated by the so-called 'adverbs of exaggeration' (*epirrhêmata epitaseôs*), such as *lian* ('excessively') and *sphodra* ('too much'); cf. Dionysius Thrax 84.1. Apollonius Dyscolus *De Coniunctionibus* 223.4 speaks of *mallon* ('more') as an *epitatikon epirrhêma*, meaning a comparative adverb, what Dionysius calls an *epirrhêma sunkriseôs*.

59. This last mode refers to interjections, such as 'By Zeus!'.

60. I cannot find another reference to *enthousiastika epirrhêmata* ('enthusiastic adverbs'), but these are probably the same as Dionysius' *epirrhêmata theiasmou* ('adverbs of inspiration'), such as the Bacchic shouts *euhoi*, *euan* (86.1); cf. *Scholia on Dionysius Thrax* (Melampous) 61.6: 'to be enthusiastic is to be moved to inspiration (*theiasmos*) by a god, and "*euhoi*, *euan*" are adverbs signifying enthusiastic actions' and note the conjunction with 'possessed' in Dionysius of Halicarnassus *Roman Antiquities* 7.68: 'women possessed (*katokhoi*) by inspirations (*theiasmoi*)', as well as Ammonius' words 'in a *good* state', where 'good' may correspond to the *eu-* part of these adverbs.

61. This assertion runs counter to the Stoic position that all words have their own meaning.

62. The 'combination of a person with an action or passion' reminds us of the possibility of substituting a participle for either a name or a verb in expressions such as: 'The running (one) perambulates' or 'Socrates is running' (11,10f.).

63. Thus, Ammonius has both verbs and participles included under 'verbs' and

both names and pronouns under 'names', as he indicated already in 11,10ff. Jacques Brunschwig (at the XIIIth *Symposium Aristotelicum*) cites the parallel with 11,9-14 and says that the first part of the phrase about verbs points particularly to finite verbs, the second part to participles; the first conjunct about names points to nouns, the second to pronouns. This seems correct, except for the point about participles. Participles have tense and therefore could be taken as 'additionally signifying time'. The phrase 'or predicated in propositions' seems to be added in light of another of Aristotle's uses of 'verb', that which is mentioned *à propos* 'pale' in 16a15 at 28,8: 'any word which forms a predicate in a proposition.' This use of 'verb' is perhaps reflected in the second sentence of Aristotle's definition of 'verb' (16b7): 'It is a sign of what is said of another.'

64. This is a common simile, known already to Apollonius Dyscolus in the early second century as Peripatetic; cf. R. Schneider (ed.) *Apollonii Dyscoli Quae Supersunt*, *Grammatici Graeci* II 3 *Librorum Apollonii Deperditorum Fragmenta*, Leipzig 1910, 31.26ff. = *Scholia in Dionysii Thracis Artem Grammaticam* [Sch. Lond.] 515,19ff. Hilgard; Schneider (30) attributes this discussion to Apollonius' lost work on the division of the parts of speech (*peri merismou*). It was probably used also by Porphyry (Ebbesen, 'Porphyry's legacy to logic', in *Aristotle Transformed*, op. cit., 156f.), as it appears here, in Boethius *in Int*. II 6 Meiser, and elsewhere as well.

65. *Poet*. 20,1456b20; cf. below.

66. *Sunthesis* and *suntaxis* may be used as synonyms; where they are not, however, the former refers to the way letters, syllables and words as sounds are used together, while the latter refers to the combination of the meanings of words to create larger units such as the sentence.

67. For the various bonds and joins used in this paragraph, see *Metaph*. 8.2, 1042b17f.

68. The long discussion of this 'Peripatetic' argument in our fragment of Apollonius Dyscolus' *On Division* is concerned solely with the question whether name and verb are the only parts of *logos*; that all the word-classes together are the 'parts of *lexis*' is never mentioned. The discussion of Theophrastus' *On the Elements of the Sentence* by Simplicius (*in Cat*. 10,20-11,2 = fr. 683 Fortenbaugh) makes it clear that Theophrastus did not actually make this distinction, for the words as expression (*lexis*) were discussed by him in that work. It seems likely that the Stoics used the term 'elements of expression' (*stoikheia lexeôs*) to refer to the letters and 'elements of the sentence' to refer to the word-classes (Diogenes Laertius 7.56; Galen, *On the Doctrines of Plato and Hippocrates* 8.3). I believe that the distinction made here by Ammonius cannot be traced back further than Porphyry, whose interest in Stoic logic may have inspired him to interpret Aristotle's usage in this way; note that it is with Porphyry's books *To Gedalius* and *By Question and Answer* that Simplicius introduces the note which cites Theophrastus. Boethius, who is dependent upon Porphyry, gives a fuller account of the distinction (II 6.15ff.): like Ammonius, he cites *Poet*. 20 to the effect that 'the parts of expression (*locutio* = *lexis*) are syllables or also conjunctions', neither of which are significant by themselves, while 'the parts of the "interpretation" ' (*interpretatio*, one might translate 'speech') he establishes in this book as name and verb'. He ends with the explanation: 'hence in this book Aristotle deals not merely with the sentence (*oratio*), but also with verb and name, nor indeed with mere expression (*locutio*), but actually with significant expression, which is speech (*interpretatio*).'

69. The distinction between *lexis* and *logos* was a standard feature of the Stoic

teaching about dialectic, e.g. Diogenes of Babylon ap. Diogenem Laertium 7.56: '*Lexis* is, according to the Stoics, as Diogenes says, vocal sound divided into letters, e.g. "day". *Logos* is meaningful vocal sound sent forth by thought, e.g. "it is day" '. Thus, for the Stoics, *lexis* was not necessarily meaningful, although it was articulate. Aristotle himself gave the 'parts of *lexis*' as: 'element (i.e. letter), syllable, conjunction, name, verb, article, case, sentence' (*Poet*. 20,1456b20). By '*lexis*' Aristotle meant simply 'verbal expression' (cf. *Poet*. 6,1450b13). It appears, then, that Ammonius has taken Aristotle's list of the parts of *lexis* and combined its implications with those of the Stoic distinction between meaningful *logos* and not necessarily meaningful *lexis*.

70. 392C.

71. In the Platonic context 'content' and 'style' would be more appropriate translations for *logoi* and *lexis*, respectively.

72. i.e. there is a certain thought (*dianoia*) which is to be expressed, and there is also the expression of that thought, the actual utterance (*apangelia*).

73. Similar terminology is also used by Apollonius Dyscolus in speaking of the name and verb: *thematikôtera merê* ('more primitive parts'), *De Adverbiis* 121.5; *empsukhôtera merê* ('more vital parts'), *De Syntaxi* 28.6; cf. *kuria kai gnêsiôtata merê* ('proper and most legitimate parts') (*Scholia on Dionysius Thrax* [Vat.] 216.14), so called because 'these parts, when woven together, produce a complete and not-deficient sentence, such as "Socrates walks", while all the other parts were excogitated as additions to the complete combination'. But another scholium on Dionysius (Lond. 516.28-36) does not take the priority of name and verb as warranting the Peripatetics' inference, which it specifically denies, that since there can be no sentence without name and verb, but there can be one without any of the other parts, therefore only name and verb are parts of the sentence. The scholium notes that some parts are important, others not, so that a man can exist without a hand or foot, but not without a brain or heart.

74. This term occurs in Aristotle's definition of *lexis*: '*lexis* is the *hermêneia* by means of names, which has the same capacity in the case of poetry or prose' (*Poet*. 6.1450b13).

75. G.F. Schoemann, *Die Lehre von den Redetheilen nach den Alten*, Berlin 1862, 157 points out that Aristotle nowhere mentions a designation for adverbs, but at *Top*. 6.10, 148a10-13 he speaks of *ôphelimôs* and *poiêtikôs* as 'cases of names', i.e. of the appellative names *ôphelimon* and *poiêtikon*. Alexander is presumably making an inference from this passage of the *Topics*, as is clear from Ammonius' examples 'well' < 'good' and 'clearly' < 'clear'.

76. These are verbal adjectives in *-teon*, referred to above as 'obligation adverbs' (*epirrhêmata thetika*). The infinitives (*dein gamein* [to be necessary to marry], etc.), from which these are said to have arisen, are classed as verbs; hence, if derivative words were to be classified in the same part of speech as their primitives, these 'obligation adverbs' would be verbs.

77. This, of course, goes to the question of why Aristotle in *Int*. refuses to say that 'cases of names' are 'names'.

78. *An. Pr*. 1.1, 24b17f.

79. cf. *infra*, 58,26-59,12 on 16b26.

80. cf. Boethius II 16.6ff. = Porphyry, no. 77aF. Smith.

81. = no. 77F. Smith.

82. At 67,30-68,9 (cf. 80,15-81,2) Ammonius criticizes Alexander's argument against applying the first kind of division here. Alexander had argued that since

affirmation is prior to negation, therefore the two cannot be species of one genus. His argument for the relation of species to genus comes from Porphyry, as we see from Boethius II 16.6ff.

83. cf. pp. 2-4.

84. The reference is to Alexander, as is clear from 39,13-32; cf. 22,21-23,9.

85. With 'voice in speech' cf. 'voice according to the name' 30,5-6.

86. In the cited passage, *GA* 5.7, 786b21, Aristotle compares the fact that some animals have low and others high voices to the fact that, with the exception of bovines, young animals have high voices and older ones low voices, a pattern which is also true of the fact that females speak at a younger age than males: 'and this is especially clear in humans; for nature has granted them this capacity in special measure, because they alone of animals use speech (*logos*), and vocal sound is the matter of speech.'

87. *Cat*. 4b32. 'That speech is a quantity is clear, for it is measured by the short and long syllable. I mean just the speech which occurs with vocal sound; for vocal sound's parts do not come together in any common definition, there being no common definition in which the syllables join, each being divided by itself.'

88. Boethius II 18.26ff. cites Syrianus as asking about the order of these terms. Syrianus pointed out that in cases where both an affirmation and a negation can exist, the negation can be prior to the affirmation. He also followed Alexander in noting that the order here is the opposite of that followed in the explanation; but he went beyond Alexander by observing that the list moves from species to genus, while the explanation does the reverse. This corresponds to the second part of Ammonius' explanation here.

89. Aristotle often speaks of the difference between what is better known to us, from which investigation should begin, and what is better known in nature, where investigation should end; cf., e.g., *Physics* 1.1, 184a10ff.

90. For this reading (*prôtôn*, where Busse reads *prôtôs*) as that which Ammonius had before him, see E. Montanari, *La sezione linguistica del Peri Hermeneias di Aristotele*, vol. I, Florence 1984, 126-32 and II, 1988, 45-57, as well as Brunschwig, XIIIth *Symposium Aristotelicum*, 37-40.

91. '*Blituri*' is a standard example of an articulate sound, indeed a word, which does not have any meaning: in Stoic terminology, a *lexis*, but not a *logos*. It is first attested in Diogenes Laertius' report of Diocles of Magnesia's work on Stoic logic and hence can be traced back at least to the *On Vocal Sound* of Chrysippus' student Diogenes of Babylon. '*Skindapsos*' often appears with '*blituri*', but may be traced back even further, if it is represented by the poetic genitive '*kindapsoio*' in Timon's parody of Zeno (DL 7.15 = Timon fr. Lloyd-Jones and Parsons). At Syrianus *in Metaph*. 84,16 Kroll speaks of 'the much-prated-about *skindapsos*'. Despite the Stoic claim that these words are meaningless, there is good reason to believe that '*blituri*' represents the 'twang' of a string and '*skindapsos*' a stringed instrument (cf. W. Ax, *Laut, Stimme und Sprache. Studien zu drei Grundbegriffen der antiken Sprachtheorie*, Göttingen 1986, 194-9).

92. An alternate reading in MS G gives name (*onomatos*) here, instead of thought (*noêmatos*).

93. It appears that, contrary to what is often supposed, Ammonius does not identify the Stoic *lekton* with the thought or concept (*pace* Lloyd, *The Anatomy of Neoplatonism*, op. cit., 68 n. 24). This comment evidently comes from Porphyry, as Boethius says here that he will pass over what the Stoics said about this (II 24.20).

94. For a discussion of this issue which focuses on Stoic points of view, cf. Sextus *M* 8.11ff.

95. *Cat*. 2a9.

96. Note Aristotle *Metaph*. 6.4, 1027b25f.: 'For the false and the true are not in the things (*pragmata*).'

97. Boethius (II 25.19ff. = no. 78F. Smith) cites the reasoning of three commentators on this question of the interposition of the remarks on things, words, and thoughts. He says Herminus is furthest from the truth, since he claims it is useful for us to know the symbols of the passions of the soul, since we are all familiar with the passions of our own souls. Alexander hits upon a secondary reason when he says that we must first learn about what is signified by vocal sounds because the latter derive their force and their truthfulness or falsity from what they signify. Porphyry gives the main reason, viz. that, in view of the controversy among his predecessors over what vocal sounds signified, in order to say that name and verb are significant Aristotle had to tell us what they signified (II 27.6ff.). Ammonius' explanation appears closest to that of Alexander.

98. *Iliad* 2.804.

99. A similar argument for the point of including letters here is attested by Boethius (II 37.5ff.) for Alexander.

100. Boethius (II 25.6ff.) translates both 'symbol' (*sumbolon*) and 'sign' (*sêmeion*) with *nota*, although *signum* was also available to him for the latter. He also fails to discuss any distinction between these and 'likeness' (*similitudo*). This should be a sign that the weight placed on this distinction by Ammonius is the result of a peculiarly Proclan problematic (cf. Proclus *in Crat*. 15.27ff.) and that Porphyry did not attempt to compare our text with Plato's *Cratylus* on this point.

101. The word is *sumballein*, indicating that we have an etymology of *sumbolon* from the sign for joining battle. A scholium on the Euripides passage states that a torch was hurled to give this sign before trumpets were invented, whence Ammonius' example.

102. *Phoenician Women* 1377f.

103. This reference is unclear. The word *idiographos* usually refers to autographic documents; possibly it refers here to secret, encoded writing or to tachygraphic writing. All that is required, however, would be a reference to the different characters used to represent different languages, as at 19,15 above.

104. The same metonomastic pair appears in Proclus *in Crat*. 6.26 Pasquali.

105. Boethius (II 35.5ff.) reports Porphyry's explanation of the working of the mind: 'Indeed, every image bears a resemblance to that thing of which it is an image: thus, when the mind thinks, it comprehends a resemblance of things.'

106. The reference is to a wooden tablet with a wax surface which can be inscribed with a stylus. Presumably Ammonius has Plato's *Theaetetus* in mind, although literally speaking the wax there (191Cff.) is a block on which representations are impressed, rather than inscribed.

107. cf. Aristotle *DA* 3.4 on thought (*dianoia*), as well as Plato *Theaetetus* 197B, where 'to know' is defined as 'having acquired' knowledge.

108. Note that simple and compound only appear in the next lemma. Ammonius' use of them here is probably due to his preoccupation with the locus of truth and falsity (cf. 18,12).

109. cf. *Theaetetus* 190C, where the relationship of *logos* to thinking does not allow falsity, since, while judging (talking to oneself, as the theory would have it) one's thought would be both p and not-p simultaneously.

110. Here there is obviously a glance at the talk of 'true' and 'false' pleasures in Plato's *Philebus* here (36Cff.).

111. The four items (separate forms, non-separate forms, matter, mirror-images) are distributed among three types of being: truly being, not truly being, falsely being. Brunschwig suggests (XIIIth *Symposium Aristotelicum*) that it is better to take matter and mirror-images together as 'falsely being' than to group non-separate forms and matter together as 'not truly being'. Proclus (*in Crat*. 12.6ff.) says that Plato recognized four senses of truth and falsity: (1) according to the very existence of the things, as when he says that really real things truly exist, but those which are not really real falsely exist; (2) according to the feelings which follow upon our actions, as Socrates distinguished true and false pleasure in the *Philebus*; (3) according to knowledge, as when he distinguishes false and true opinions; (4) according to the organs of intelligent life (*gnôstikê zôê*), such as sentences, names and elements – it is in these that Plato sees truth and falsity according to their fit and harmony with the things. Given this parallel, it is possible that Ammonius expresses himself misleadingly at 21,26ff.: perhaps the four items (separate forms, non-separate forms, matter, mirror-images) are not to be distributed among three types of being (truly being, not truly being, falsely being), but only among two (truly being and falsely being); the same would apply to the pleasures, which would be not of three kinds (corresponding to intelligent activities, wicked activities, and false imaginings), but only two (true and false). Cf. below 27,27ff.

112. Boethius has an almost exactly similar passage at II 42.6ff.

113. cf. 3,7ff.

114. Boethius (II 29.29ff. = no. 79F. Smith, and 36.10ff. = no. 80F. Smith) attributes this explanation to Porphyry.

115. i.e. 5,30f.

116. Reading *ê oun toutou*, where AM omit *oun*, but G2 gives *oun ou*; cf. Brunschwig (XIIIth *Symposium Aristotelicum*) n. 34.

117. Proclus invokes the 'verbal imagination' as a helper of the 'imaging power' (*eikastikê dunamis*) of the soul in the making of names (*in Crat*. 19.11). In that passage the names in question are those of divine things and they resemble (cf. 'images' [*agalmata*]) those things; hence, Proclus must not have considered this verbal imagination to stand in the way of the iconicity of names. In fact, at 25.17ff. Proclus attacks the following syllogism which he attributes to Aristotle: 'Natural items are the same for all, but names are not the same for all, so natural items are not names, nor are names natural.' He objects to the major premiss: 'If the name is a form seen in a different matter, it is the same for all, since it is a form; but the first, thus the second.' Against the minor he argues: 'The eye, voice, colour, and quantities are natural, but these are not the same for all because of their great tightening and slackening; thus, not everything which is natural is the same for all.' And he adds that: 'Even if one agrees to the premisses, nonetheless the conclusion is no more Aristotelian than Platonic; for Plato too would say that the name is not natural, as Socrates says against Cratylus later (435A); for "by nature" is double, just as "by imposition" is.'

118. The two answers, then, are conditioned by acceptance or non-acceptance of Ammonius' interpretation that 'what is in the vocal sound' refers only to the name and verb: if so, then what Aristotle needs to do is to differentiate three levels of these intelligible items, i.e. the thought, spoken, and written levels, and 'what is written' is used instead of 'letters' or 'elements' because it plainly distinguishes

the written level without giving the impression that individual graphemes are included (as 'letters' might) and because its participial form (i.e. 'the written …') requires completion by 'names and verbs'; if one thinks, on the other hand, that Aristotle's inquiry includes all of expression (*epi pasan haplôs lexin*) – i.e. the 'parts of speech (*lexis*)' (and not only the name and verb, the 'parts of the sentence [*logou*]' [cf. 12,30ff.]), and all of their parts – then 'what is written' is chosen to exclude the spoken and include only the written version of each of these parts.

119. Dionysius (2nd cent. B.C.), called Thrax ('Thracian') although he lived in Alexandria, where he was a pupil of the great Homeric scholar Aristarchus, wrote a book known to Sextus Empiricus (*M.* 1.57) under the title *Precepts* (*Parangelmata*). It appears from Sextus' discussion that this work set the agenda for subsequent authors, who modified and criticized its definition of grammar. A work whose introduction corresponds to what Sextus quotes from Dionysius survives under the title *Art of Grammar* (*Tekhnê Grammatikê*) and is ascribed to Dionysius. The authenticity of the extant work has, however, been questioned with strong arguments by V. Di Benedetto, who claims that only the first four paragraphs are truly Dionysian, while the brief, schematic presentation of grammar in the rest of the work are actually of late antique origin.

Ammonius cites §6 of what is known as Dionysius' *Art of Grammar*. The citation is not, however, just supposed to support the point that *gramma* tends to refer to the written, and *stoikheion* to the pronounced unit. We must recall the context in Dionysius, as all Ammonius' students, who must have known much of Dionysius by heart, would have done: 'On *Grammata*. *Grammata* are 24, and the same are also called *stoikheia* because of their having a *stoikhos* and *taxis*.' Why does Ammonius cite Dionysius where he does, not after the statement that both *gramma* and *stoikheion* are said of both the written and spoken versions, but rather after he has said that one tends to signify the written and the other the spoken version? I think it is because he believes that the quotation does all three things: the context clearly shows that Dionysius wants *gramma* and *stoikheion* to be the same; the etymology of *stoikheion* contains two parts, first *stoikhos* or 'line-up', which I think was taken to refer to the order of the written abecedarium (*Scholia in Dionysii Thracis…* [Lond.] 488), an order which was thought to be justified by the names of the letters (*alpha* from *alphein*, which means 'discover', so that the name refers to the first letter discovered, *bêta* because it *epibebêke* or 'ascended' the second position) and *taxis*, which was taken to refer to the rules governing the sequence of phonemes in spoken words.

120. In this explanation we have *ex hypothesi* not accepted Ammonius' argument that 'what is in the voice' refers only to names and verbs. If we believe, on the basis of Ammonius' lines about the written trace of each letter, that phonemes and graphemes are at issue, then the point here is that the pronunciation of the letter is not a symbol of the name of that letter, but rather a part of it (/a/ is not a symbol of 'alpha', but a part of it), while the shape of a letter is indeed a symbol of its pronunciation, since another shape could be substituted.

121. cf. 19,18ff., above.

122. Greek texts of Aristotle's day did not divide words or include accent marks or apostrophes, and this continued into Ammonius' day, except that some accent marks were included in some Hellenistic and later papyri. It was one of the primary tasks of the grammarian to decide how texts were to be read, especially how the continuous script was to be separated into words and which words of the possible homographs were to be read. In the present instance, the debate is over whether

the same letters are to be read as the article in elision followed by the adjective meaning 'same' (*t' auta*, which has the accent on the last syllable) or as the demonstrative pronoun meaning 'these' (*tauta*, which has the circumflex accent on the first syllable).

123. Herminus (c. A.D. 120-180/190) was a teacher of Alexander of Aphrodisias (Alexander ap. Simplicium *in Cael*. 430,32ff.). On him see P. Moraux, *Der Aristotelismus bei den Griechen* II, Berlin 1984, 361-3. Boethius (*in Int*. II 39-40 = Porphyry, no. 81F. Smith) relates a passage of Porphyry in which Herminus contends that the thoughts, which expressions signify, are not the same among all people, since in equivocation it happens that the same form of expression signifies more than one. Herminus prefers to read: 'Yet that first, of which these are signs, these are affections of the soul, and that of which these are likenesses, these are also things', so that it appears to be a demonstration of what are signified by expressions or of what the affections of the soul are likenesses of. That is, Herminus wants to say that what expressions signify are affections of the soul, and on the other hand that of which what is in the mind are likenesses are things. Porphyry, says Boethius, argued against both contentions and supported Alexander's opinion that Aristotle's assertion was not false when applied to equivocation: the speaker focuses his mind on one certain thing, which he thinks about and expresses, and the listener, for his part, expects one thought; but if both think about different things under one name, the speaker will clarify what he wanted to signify by that name, the listener will accept that, and both will agree on one thought, so that the same thought will now be in both of those who at first had had different affections of the soul due to the equivocity of the name (cf. S. Ebbesen, 'Porphyry's legacy to logic', in *Aristotle Transformed*, op. cit., 162ff; see also *Int*. 5, 17a15-17, with Ammonius, below 72-5).

124. These are the three hypostases of Neoplatonic theology: the One or the Good, which is the first principle and cause of all; the Creator God or Demiurge of Plato's *Timaeus*, which is the second principle and is a Mind or *Nous*; the world soul (*psukhê*) or third principle. Ammonius' point is apparently that articulate vocal sounds, the subject of *Int*., are in fact connected to the highest principles of Neoplatonic metaphysics. The terminology used here is thoroughly Proclan: cf., e.g., *in Crat*. 20.10ff. 'Some names are offspring of the gods which arrive as far as soul, while others are offspring of individual souls (cf. Ammonius 25,27) capable of creating them by intellect and knowledge, and others subsist through intermediate *genera*' (see also 33.28ff.).

125. cf. Boethius II 4.20ff., who distinguishes 'sounds' which are not formed by the tongue and are not 'lettered', such as a cough, from 'vocal sounds' which are; he also gives another possible definition of 'voice', viz. that sound which is uttered with some semblance of signifying, again distinguishing it from a cough.

126. i.e. not written letters here, so much as 'writable units'. In line with his claim that *gramma* = *stoicheion*, he uses the former where one would expect the latter. cf. *engrammatos* vs. *enarthros*.

127. i.e. not for this chapter. In the commentary on chapter 2, however, he treats these vocal sounds at 30,22-31,2; 31,31-2; 40,31-41,9.

128. Aristophanes *Frogs* 209.

129. Aristophanes *Akharnians* 780.

130. At *Republic* 3.397A Socrates speaks of the shameful kinds of things some people imitate, including the vocal sounds of winds, axles and wheels.

131. The elements' production would need explanation, as they are meaningless, like the above vocal sounds, but come from a rational soul.

132. cf. Proclus *in Crat*. 27.4ff.: '… how does the individual soul use the irrational <soul> and the bony body, which are creations of the young gods?'

133. Reading *autên* FMa for *autês*.

134. i.e. every product of nature adds measure to matter, as it is measure (pitch, length, etc.) that the soul adds to simple vocal sounds to make them articulate.

135. What is the reference of 'these matters', and what does Ammonius assume it is? Jacques Brunschwig (XIIIth *Symposium Aristotelicum*) wants it to refer back to the end of the previous section of the commentary, to the thoughts and things which are by nature, since they are the same among all peoples.

136. *DA* 3.8, 432a12-14.

137. cf. Ammonius' reply to Andronicus' claim (in 5,24-7,14) that Aristotle did not equate affections of the soul with thoughts in *DA*. From the fact that Ammonius does not explain to which discipline the doctrines of *Int*. and *DA* respectively belong, Jacques Brunschwig (XIIIth *Symposium Aristotelicum*) surmises that his text of Aristotle may not have contained the last words of this lemma, viz. 'as they belong to another course'.

138. This is a preview of material which Aristotle will treat later: cf. the treatment of non-assertoric sentences, including the wish at 17a2-7.

139. Again we have a preview of things to come: the cases of a name are treated by Aristotle in chapter 2, 16a32-b5.

140. At 21,16-24 Ammonius noted that things may be 'true' or 'false' in respect of their ability to have their definition predicated of them (the picture of Socrates is falsely a man). He then went on (21,24-33) to speak of truth being in things themselves according to their ontological status. Cf. Proclus' four 'Platonic' senses of truth (*in Crat*. 12.6ff.): in the existence of things (e.g. the truly real), in our feelings about our actions (e.g. true and false pleasures), in knowledge (e.g. true or false opinions), in accord with the organs of intelligence (e.g. sentences, names, letters).

141. *Metaph*. 12.9, 1074b15ff. is usually taken as the text to which Ammonius refers. Brunschwig points out other texts in the *Metaphysics* to which he could equally well refer.

142. The reference is to *DA* 3.6, 430a26ff.

143. This is not the Stoic technical term *lekton*, i.e. 'sayable', but the general, non-technical usage, as often in grammarians. Ildefonse and Lallot prefer the Aldine reading *lektikôn*, but *utrum in alterum* after *lektikai* above?

144. Note that in this sense *rhêma* is not a 'verb' in our ordinary sense of 'action word' (cf. Plato *Sophist* 262B). It is a word which signifies the predicate, or, as the Stoics would put it, has a predicate (*katêgorêma*) as what it says (*lekton*).

145. To the grammarian each of these is an appellative (*prosêgoria*) or appellative name, i.e. a common as opposed to a proper name.

146. In the official definition of 'verb', Aristotle includes the requirement that a verb 'additionally signify time', which 'pale' does not.

147. At 52,32-53,16 Ammonius expounds three Aristotelian uses of 'verb', of which the third corresponds to that given here. One might think back to 12,17, where Ammonius sums up what he sees as Aristotle's doctrine of the two 'parts of the sentence': 'He calls those which are said with reference to time or predicated in propositions "verbs" …'

148. Here 'I' and 'you' are in parentheses, since there are no pronouns in the

relevant Greek expressions; however, the personal endings of these Greek verbs unambiguously imply the first and second persons respectively.

149. Each of the examples is a complete sentence in Greek: the first and second person pronouns are never required as subjects of independent clauses in Greek, since it is apparent who 'you' and 'I' are, and the verbal endings of the first three persons hardly coincide; in the third person Greek has no pronoun for the subject of an independent clause, all third person personal pronouns in Greek being in the oblique cases, and a demonstrative pronoun or a noun is required to relieve the indefinite reference of the third person; 'impersonal' verbs, which occur only in the third person, were conceived by ancient grammarians to have an understood definite subject, as Ammonius explains for the case of the verbs denoting weather conditions, whose subject is 'Zeus' (cf. Apollonius Dyscolus *Synt*. II 16, 138.15-17 with I 17, 18.8-19.2).

150. Boethius discusses this question at II 51.3-52.9, giving three explanations of 'either absolutely or in time': we say something is 'absolutely' when we speak of its substance, but we say that it is 'in time' when we refer to its presence; 'absolutely' refers only to the present, which however is not a time, but rather the limit of past and future, while 'in time' refers to the past and future; 'absolutely' refers to verbs in any tense used by themselves, indefinitely, i.e. without another word indicating a definite time, and 'in time' refers to the addition of 'is' in any tense. Ammonius' explanation is basically the same as Boethius' third candidate. But Brunschwig (XIIIth *Symposium Aristotelicum*, 53) points out that Ammonius' examples of additions giving a definite time refer only to the future and past, which Boethius' second explanation said were the only two times (or tenses).

151. Proclus, *in Crat*. 15.27-16.4 argues that Aristotle contradicts himself in saying at 16a19ff. that names are conventional symbols while maintaining that sentences resemble thoughts combined together and are themselves the locus of truth and falsity.

152. This whole discussion overlaps with Boethius II 4.18-6.5.

153. On 'voice', cf. Plato *Timaeus* 67B and Aristotle *DA* 2.8, 420b5-421a6 (with a good definition at 420b29), as well as numerous passages of the *HA*. At *DA* 2.8, 420b5 Aristotle says that '*phônê* is a particular *psophos* of an animal'. See also Ax, *Laut, Stimme und Sprache*, op. cit., 119-37. These paragraphs of Ammonius are closely paralleled in Boethius II 53ff.

154. '*Blituri*' has appeared before (17,22) as a standard example (e.g. Sextus Empiricus, *Against the Mathematicians* 8.133) of an articulate sound which does not have any meaning: in Stoic terminology, *lexis*, but not *logos*. '*Knax*' sometimes appears together with '*blituri*', but it also has a somewhat different set of associations, appearing as part of a group of verses attributed to the legendary inventor of tragedy, Thespis (fr. 4 Snell-Kannicht = Clement of Alexandria *Strom*. 5.8.48, who cites Apollodorus of Corcyra and Callimachus as well). These verses have the attribute of using every letter in the alphabet, a kind of 'the quick brown fox …' in metre. Like '*blituri*' and '*skindapsos*' (which appears at 17,22, below, as well as at Boethius II 53.29), '*knax*' is sometimes said to have meaning. For Clement is speaking about symbolic or veiled expressions, and the words forming these verses were said to have meanings; thus, '*knax*' (or '*knaxzbi*' or '*knaxzbikh*' in some versions) is said to mean 'milk' (Hesychius): Clement says Thespis is riddling about 'the first, milky nourishment of the soul which comes from the twenty-four elements <of the alphabet>'.

155. = no. 82F. Smith. 'Signify in addition' (*prossêmainein*) was the term used

for whatever a word signified not in virtue of its own lexical meaning, but in virtue of its various suffixes. Thus, names would additionally signify number, case, and gender, while verbs would additionally signify number, person, time, mood, and voice.

156. i.e. a phrase like 'rational mortal animal' satisfies all other qualifications for being a name, except the one requiring that none of its parts be significant when separated. Boethius (II 57.12ff.) takes this requirement as distinguishing a name from a phrase (*oratio*), e.g. 'Socrates and Plato', and as introducing what is next said about compound names.

157. Boethius' lemmata omit 16a26-9 ('By convention … none of which is a name'), although parts of the sentence receive scattered commentary. But he does not bring in the *Cratylus* in this connection, an indication that Ammonius' discussion is a particularly Proclan bit.

158. cf. Proclus *in Crat*. 26.2-3: 'for "by nature" is twofold, as is "by imposition".'

159. cf. Proclus *in Crat*. 7.18 ff.: 'That "by nature" is said in four senses: (1) either as the whole substances and the parts of animals and plants; (2) or as their activities and capacities, e.g. the lightness and warmth of fire; (3) or as shadows and images in mirrors; (4) or as artistic images which resemble their models.' Here Epicurus is said to have held that names were natural in the second way, as products (*erga*) of nature, in the same relation to naming as sight is to seeing or vocal sound is to hearing. Cratylus is said to have advocated the third (as emended by A.D.R. Sheppard, 'Proclus' philosophical method of exegesis', in *Proclus: lecteur et interprète des anciens*, op. cit., 148) sense and hence to have said that each thing has its own name which was fittingly (*oikeiôs*) imposed by those who first imposed names with craft and knowledge, as opposed to the Epicurean thesis that the first namegivers gave names not knowledgeably but as they were moved naturally, e.g. like coughing or groaning. Socrates, Proclus says, maintained that names were natural in the fourth sense, as offspring of scientific thought, not of natural desire but of the soul when it represents, and hence imposed upon things from the beginning as fittingly as possible. Further, Socrates is supposed to claim that in their form names are natural and resemble the things, but in their matter they are different from one another and are by imposition. Proclus' fourth sense of 'by nature' is the second sense mentioned by Ammonius above.

160. Cratylus actually says (Plato *Cratylus* 438C) that the first names were assigned by a more than human power, which Socrates, in line with Cratylus' earlier statement about 'legislators' (429A), interprets as a god or daimon.

161. cf. Plato *Republic* 402B; this does not appear in Cratylus' thesis, and in fact the painting image is used there (429A, 430Bff.). Ammonius may be alluding to the fact that Cratylus says that, while paintings may be in error, names may not (430DE), although he later admits (431E) that some craftsmen of names are poor. The terms are taken here from Proclus' third sense of 'by nature', that he attributes to Cratylus (quoted above).

162. *Cratylus* 433C, 436C; cf. Proclus *in Crat*. 4.6ff.: '… Cratylus the Heraclitean, whom Plato heard as well, who said all names were by nature, for those which were not by nature were not even names, just as we say that one who lies is "saying nothing".'

163. *Cratylus* 430A of someone calling Cratylus 'Hermogenes'.

164. This terminology is not used by Cratylus, who does, however, say that names are useful in teaching us about things (435Dff.; cf. 436AB 'if one seeking the things should follow the names').

165. *Cratylus* 384D; cf. Proclus *in Crat*. 4.9f.: 'and Hermogenes the Socratic, who said the opposite, that no name was by nature, but all were by imposition.'

166. The Egyptian name for the moon is *j'h*, a masculine noun. The Egyptian moon gods are also masculine, Thoth and Khons.

167. *Symposium* 190B.

168. These distinctions are all cast in the terms of Neoplatonic metaphysics. The 'First' is the One, the first principle of all; it is neuter because it is prior to anything male or female. The 'superior' and 'inferior' are the male and female: sperm and water (i.e. rain) are each produced by the superior male (male animal or sky [as in 'Zeus rains']) and are carried into the inferior female (female animal or sea).

169. cf. Proclus *in Crat*. 4.11ff.: 'And third is Socrates, who judged and showed that some names were by nature and others by imposition, as though arisen by chance. For the names of eternal things partake more of "by nature", those of perishable things more of chance. For one who names his own son "Athanasios" ("Immortal") shows the faultiness of names regarding these things. Furthermore, since names have form and matter, in respect of their form they partake more of "by nature" and in respect of their matter more of "by imposition". Contradicting Hermogenes he differentiates the names which are lastingly grounded among the gods, such as "*murinê*" ("myrtle") and the like, from those among souls, such as "*batieia*" [a name derived from 'bramble'; on both these examples as names, cf. 34.17 and 35.5]. Speaking against Cratylus he accepts the reference of names to things, but he shows that there is also a large chance element among names, at the same time as showing that not all things are in motion.'

170. *Cratylus* 386Aff., 427Dff.

171. Reading *aïdia* with G for Busse's *idia*.

172. cf. *Cratylus* 395E.

173. *Phys*. 2.6, 197b29.

174. ibid., 4.7, 213b31.

175. *Meteor*. 1.9, 347a11.

176. cf. *DA* 2.1, 412a10.

177. *An. Pr*. 1.1, 24b16.

178. ibid., 1.5, 26b33.

179. cf. Proclus *in Crat*. 6.20ff.: Democritus used four arguments to establish that names are by imposition: from homonymy; from polyonymy; from change (*metathesis*) of names, as with Aristocles > Plato and Tyrtamus > Theophrastus; from the lack of names. In answer some say: it is no wonder if one name images several things; nothing prevents different names from indicating the same thing in different respects, such as *merops* and *anthrôpos*, which regard having a 'divided' (*memerismenê*) life and looking up at what one sees; as to the third point, this very fact is a sign that names are by nature, since we alter names which are not properly set to those in accordance with nature; it is no wonder that words which exist from the very beginning are lost over a long period of time.

180. cf. 20,18 for the 'substitution' of 'Plato' for 'Aristocles' and 'Theophrastus' for 'Tyrtamus'; Stephanus gives more examples (9,30-2).

181. *Cratylus* 399C; the point is that man does not look down at the ground, like other animals, but because of his upright posture looks up.

182. The origin of the Homeric words '*brotos*' and '*merops*' was unclear in antiquity (the etymology of '*merops*' is still unclear), although it was clear enough that both were used for 'mortal'. It was natural for a Greek to take *merops* as derived from '*meiromai*' (to distribute), its meaning 'mortal' being due to the limited

allotment of life given each man, plus '*ops*' (voice), as Ammonius does here (cf. Hesychius: '*meropes*: men, because they have a distributed [i.e. articulate] *ops* or voice'). From the privative form '*ambrotos*' it could be seen that '*brotos*' derived from a word beginning with m- and -r-. That etymon is here thought to be '*mort-*' (mortal, a cognate) or, again, '*meiromai*' (distribute, divide; the -o- stem form being seen in the nominal forms, such as *moirêtos*, an adjective which is not found elsewhere in Greek and which could mean 'divisible' or 'fatal' or 'mortal', in the latter two cases being related to the noun '*moira*' (fate, alloted end, doom). In fact, the derivation of *brotos* from **mrt-* is correct, while *meir-*/*moir-* derives from another root, **smer-*.

183. i.e. Callimachus, fr. 467 Pfeiffer.

184. J. Bernays, 'Ein nabataïscher Schriftsteller', *RhM* 17, 1882, 304-5 (repr. in H. Usener (ed.), *Gesammelte Abhandlungen*, Berlin 1885, II 291-3), saw that the corrupt text of Ammonius, whose context makes us expect the name of a philosopher, could be made to yield the name 'Dousareios of Petra'. This name would be derived from the Nabataean god Dousares, whom the Greeks assimilated to Dionysius (cf. the article on this name by the late H.D. Saffrey in the forthcoming *Dictionnaire des philosophes antiques*). Dousareios' argument is presumably that gods must be involved in the agreement on how things are to be named.

185. King Helios is the subject of a hymn by Julian the Apostate (*Oratio* IV), where he is addressed in four ways, corresponding to the realms of reality: as the first hypostasis, intelligibly as the name of what causes existence for thought, intellectually as the name of god as act, as the sun in the sky (cf. Lloyd, *The Anatomy of Neoplatonism*, op. cit., 30).

186. cf. 23,1.

187. cf. Proclus *in Crat*. 16.17ff.: 'So it is clear from this (i.e. the consideration of name and organ) that the name is not a symbol nor the product of any chance imposition, but related to the things and proper to them by nature.'

188. *Cratylus* 430Aff.

189. *Sophist* 261Eff.

190. *Cratylus* 399C.

191. The same explanation, evidently that of Porphyry, is found at Boethius II 60.16-25 (= Porphyry, no. 83F. Smith).

192. Again, Boethius' discussion (II 61.8ff.) is closely parallel to that of Ammonius.

193. = *FDS* 776.

194. At this point several MSS have a longish addition arguing against the grammatical notion of a 'generic name' (*genikon onoma*) from which the particular name has 'fallen'; cf. *Scholia in Dionysii Thracis …* (Heliodori) 546.5-14 for the attribution of this theory to Apollonius Dyscolus and Herodian.

195. On the metaphors and theory of 'case', see: M. Frede, 'The origins of traditional grammar', in his *Essays in Ancient Philosophy*, Oxford 1987, 338-59, at 350-1. Frede argues that there are two pictures: first the Aristotelian, according to which the 'name', the word in the nominative, exists alongside its oblique 'cases', which are thought to fall from or be derived from the name; then the Stoic 'case' which is so-called from 'falling under' a concept and hence applies properly to the nominative as well as the oblique.

196. = *FDS* 791 (43,21-45,9).

197. Following Busse's suggestion that *tautas* be read for the *tauta* of the MSS.

198. Reading the conjunction *ê* where Busse has printed the article by mistake.

199. = *SVF* II, no. 184 = Porphyry, no. 84F. Smith.

200. Following Hülser's suggestion that this ungrammatical example should be repeated from the previous page; Busse's text (*Sôkratei metamelei*) gives a correct sentence.

201. It seems likely that Herminus was the author of this query, as in the parallel case for verbs, below, 52,27ff.

202. *Sophist* 261Dff.

203. cf. 451B, where the formula found in Attic inscriptions is given (*ta men alla kathaper* …); the wording taken from Aristotle by Ammonius (*ta men alla kata ta auta*) is not the standard form. The phrase is explained in the same way by Olympiodorus, *In Plat. Gorg*. 4.14.2ff.

204. = no. 85F. Smith

205. *Sophist* 261DE.

206. *Sophist* 261Ef., but the citation is not always exact and the brief responses of Theaetetus are omitted.

207. This reading of the text is: *kai aei tôn kath' heterou legomenôn sêmeion estin, hoion tôn kath' hupokeimenou ê en hupokeimenôi*; it is compared to Porphyry's reading below.

208. cf. *Cat*. 1a20ff.

209. = no. 86F. Smith.

210. Someone must have raised a question about the propriety of Aristotle's use of 'the present time' (*ho parôn khronos*). Recall that Boethius (II 51.20f.) says that the present is not a time, but the end of the past and the beginning of the future. The anonymous commentator (9.5-8 Tarán) notes: 'For the momentary present was shown in the *Physics* [i.e. 222b14f. on the "sudden"] not to subsist, but to pass as soon as it is realized, so as not to allow the realization of any actuality in it.'

211. Herminus was also criticized at 24,18.

212. See the formulation of Boethius: '… that which I say, "knows", is the name of a certain thing which would always exist in another and be predicated of another' (II 73.28-30).

213. Boethius (II 74.9-31) notes that it seems neither to be true that, when just a verb is uttered, the speaker completes his thought nor that the listener's thought stops. He guesses that Aristotle would have responded to this that one rests upon the understanding of any and only a significant vocal sound.

214. The words translated here 'in accordance with nature' (*ekhei phuseôs*) are obscure and perhaps even intrusive. The Latin version gives: *ut se habet natura.*

215. Boethius, following Aspasius, also takes this sentence as another instance of Aristotle arguing that affirmation and negation, that is truth and falsity, are not found in thoughts or words without conjunction (II 74.31-76.10).

216. *Huparkhein* is difficult to translate; it has the sense of 'to exist', 'to be so', and 'to belong to'.

217. = no. 88F. Smith. The text as printed by Busse (*ou gar to einai sêmeion esti* …) would be translated: 'For "to be" is not a sign of the thing or "not to be"'. Busse suggests that Porphyry appears to have read … *tou einai* …, and that is what I have translated. But I do not believe that Porphyry read … *tou einai* or that Ammonius' text should be emended here. Boethius discusses this passage, but he gives no indication that Porphyry's text of Aristotle had a different reading. Instead, he thinks that the same text (i.e. *to einai*) needs to be interpreted as though it were the genitive. He says that if ' "to be" and "not to be" are "not a sign of the thing" ', means that they do not signify anything by themselves, there is a problem,

since they certainly do mean something just by themselves; thus, it must mean that they are not a sign of the existence or non-existence of the thing, and this is a better interpretation (II 76.10-77.1). The 'better interpretation' coincides with that of Porphyry. Ammonius differs from Porphyry in thinking that Aristotle is here re-emphasizing that vocal sounds without conjunction cannot be a locus of truth and falsity. The difference between his own reading *oude gar* and Porphyry's *ou gar* goes directly to this question of re-emphasis, and Ammonius apparently feels that Porphyry altered the sentence connection in order to support his idea that something else is being said here.

218. Boethius cited Alexander for his interpretation of the preceding words ('nor is "being", if you say it by itself'), namely, that 'is' or 'being' is ambiguous, as are all predicates which do not fall under a common genus, i.e. all categories; as it is ambiguous, no single word signifies any specific thing just by itself, without being fitted to specific things by the will of the speaker. Porphyry, on the other hand, said that 'is' indicates no substance, but is always a 'conjunction', either of the things which exist or – by participation – of something else: 'Socrates exists' joins Socrates to the things which exist, while 'Socrates philosophizes' joins him by participation to philosophy. By itself, then, 'is' signifies nothing at all (II 77.1-78.13). This passage of Porphyry (= no. 89F. Smith) seems to be what Ammonius refers to in saying 'although when he continues he comes around to the first reading and interpretation' and in his remark that: the phrase 'nor is "being", if you say it by itself' would, even according to this interpretation, be proving *a fortiori* that no verb is receptive of truth and falsity. For here, instead of insisting that a verb said by itself signifies something, Porphyry says that 'is' just signifies conjunction, not any thing.

219. cf. *DA* 3.6, 430b2.

220. The Greek sentence has the definite article with 'man', indicating the species, and no article with 'animal', indicating indefiniteness.

221. The Greek conjunctions *men* … *de* ('on the one hand … on the other hand', represented in the translation by 'yes, …, but') are at issue here.

222. Boethius gives a lengthy disquisition on Aristotle's addition of '… as an expression, but not as an affirmation'. Alexander (II 82.4ff.) argues that Aristotle defines the simple sentence first, since it is prior to the compound sentence, but means to include both simple and compound sentences, since compound sentences have parts which contain simple expressions (84.25ff.); he argues that Aristotle means to say that an expression is either simple or it is an affirmation, but the parts of the sentence signify in the manner of the simple expression, not as the affirmation type of expression does. Porphyry (85.24ff. = no. 90F. Smith) agrees, except he says that an expression is a name or verb (either simple or compound) or an incomplete sentence, but not a complete sentence. Then (87.6ff.), because not every sentence has affirmations and negations as parts and because not every sentence has incomplete sentences as parts, while every sentence does have simple expressions as parts (since all are made up of names and verbs), Aristotle says that the parts of sentences always signify as expressions, in agreement with Alexander. Boethius also chides Aspasius (87.17ff.) for saying that Aristotle only wanted to include simple sentences in his definition, as well as Syrianus (87.30ff. = Porphyry, no. 91F. Smith) for claiming that if the sense of a phrase is incomplete, it is not a sentence and thus has no parts at all. Clearly, Ammonius' explanation agrees with that of Porphyry.

223. *Cratylus* 385C.

224. cf. *Iliad* 6.429.

225. *Odyssey* 22.208.

226. *Iliad* 3.182.

227. *Odyssey* 3.79, etc.

228. Boethius (II 89.1ff.) gives two possible explanations of 'but one syllable of "animal" …', both relating it to what went before ('but it will be an affirmation or negation, if something is added'). It appears that both are from Porphyry, but the second of them is said to be preferable. Ammonius' explanation corresponds to the second explanation given by Boethius (90.26ff.), that what is completed by the addition is not the sentence (as the first explanation claimed), but the meaning of the expression: a part of a sentence signifies as an expression, but these expressions are complete names and verbs, not parts of names and verbs. He concludes: parts of compound names have the appearance of meaning, but they signify additionally, rather than signifying; parts of simple names do not even signify in imagination.

229. In the second half of this sentence, Ammonius has jumped back to 16a25, instead of finishing the quote from the current passage: 'each part is significant, but not by itself, as was said'; perhaps he was moved by '… as was said' to pick up the earlier passage.

230. This may be intended as a rejection of Syrianus' opinion (Boethius II 87.30ff.) that, if the sense of a phrase is incomplete, it is neither a sentence nor has it any parts.

231. 'Organ' (*organon*) is an instrument or tool.

232. At *in Crat*. 16.28ff. Proclus summarizes Aristotle's argument: 'Aristotle says that the sentence is significant, not as an organ, but by imposition (for it is no wonder, he says, when vocal sound is by nature just as bodily motion is, if names are by imposition just as dancing is).' On the correspondence of these passages, and their sequels, see: A.D.R. Sheppard, 'Proclus' philosophical method of exegesis', in *Proclus: lecteur et interprète des anciens*, op. cit., 144f. This can be traced further back, however, as the dancer simile also occurs in Boethius (II 94.22ff.), where it is attributed to Alexander, who gave many arguments to show that the sentence is not an organ (93.9). Note also that Boethius says (94.14ff.) that we are naturally vocal (cf. Ammonius 63,19) and capable of imposing names upon things, while we signify not naturally but by imposition, which corresponds to Alexander's opinion elsewhere as well. For Alexander's opinion Sheppard (146 n. 22) refers to *Quaestio* 3.11 and R.B. Todd, 'Alexander of Aphrodisias on *De interpretatione* 16a26-9', *Hermes* 104, 1976, 140-6.

233. cf. Proclus' response to Aristotle at *in Crat*. 17.2ff.: the name is not a product (*apotelesma*, cf. Ammonius 63,6) of the natural organs, i.e. of the tongue, trachea, lungs, etc., which produce vocal sound; these organs help produce the name *qua* matter, but it is the thought of the namegiver which mostly creates the name by harmonizing the matter with the form and model. Proclus goes on to distinguish the maker of the tool from its user: since its maker makes it while looking at the things and its user uses it because of its ability to distinguish between the things, for this reason it is called 'by nature' both as a product and as an organ (17.18ff.). Since the name is said to be 'instructive', Socrates gives it the benefit of the doubt and calls it by the honorific 'organ', an organ being intermediate between the teacher and the learner (17.26ff.).

234. *Phys*. 2.8, 199a20ff.

235. *DA* 3.4, 429a10ff.

236. The same is said at Boethius II 95.24ff.

237. Much of Greek grammatical theory used an etymological model, viewing

word-forms, inflections, etc., as derivations of more original forms. The grammarian Philoxenus, for example, who worked in Rome in the first century B.C., posited an original stock of 'monosyllabic verbs', from which all other names and verbs were derived. Stoic linguistic theory posited a set of 'first words' (*prôtai phônai*) which represented (*mimeisthai*) the things they named and which changed over time to yield the imperfectly representative language we now use: cf. *FDS* 643 (= Origen *Contra Celsum* 1.24) and 644 (= Augustine *De Dialectica* VI). Ammonius may, however, be using the term 'first words' to refer to the products of the 'first imposition of names' in Porphyry's semantic theory, i.e. the names and verbs, as opposed to the metalinguistic names 'name' and 'verb', etc.

238. cf. Demosthenes *On the Crown* 1 and *On the False Embassy* 120.

239. *Philebus* 16Dff.

240. *Phaedrus* 243B.

241. Theophrastus fr. 78 Fortenbaugh.

242. Compare the description given earlier of the contents of Demetrius, *On Style* (*peri hermêneias*).

243. cf. what is said of Alexander at 67,31.

244. The same analogy occurs at Boethius II 97.7ff. In fact, the whole paragraph is closely paralleled by Boethius, except that Boethius mentions the hypothetical syllogisms only by giving one example (97.6), but is interested in the interpretation that the first kind of unification is 'natural' and the second 'artificial' (which, although it is not mentioned by Ammonius, may be responsible for his use of 'imposition' for the unification added from outside).

245. Ammonius' understanding of Aristotle is that both the affirmation and negation are unitary and primary assertoric sentences, but that the negation is less primary than the affirmation, since it is formed from the affirmation by the addition of a negative particle.

246. This argument was mentioned at 66,17, as well as at 15,22. Boethius' reference to Alexander (II 98.14: 'But again [*rursus*] we run up against the question raised by Alexander …') must refer back to the beginning (II 16.10ff.)

247. It was perhaps to avoid this problem that the question arose (Boethius II 97.24ff.) whether Aristotle's 'first' applied to both affirmation and negation, with 'then' relegating only the sentence with a conjunction to a posterior status.

248. In our terms, the first clause is 'subordinated', rather than 'co-ordinated' with the second.

249. cf. Boethius II 100.4-6: 'the subject term does not always consist of a name, but the predicate term always consists of a verb' and the examples which follow.

250. cf. Boethius II 99.26f. on the brevity and obscurity of this sentence.

251. = no. 92F. Smith. This is the explanation given (unattributed) by Boethius at II 105.9-31.

252. The author of this suggestion is not known. Boethius does not mention it, and he may actually be saying the inverse: 'thus he taught that an affirmation or negation could not be formed without a verb when he said "In fact, the definition of man …" ' (II 100.31ff.).

253. cf. Boethius II 103.7ff.: '… the whole sentence indicates to me one thing and is said continuously …', where most of this material is paralleled. Typically, however, Boethius does not go beyond a bare reference to the *Metaphysics*, while Ammonius (Proclus) expands on it.

254. Boethius (II 106.19f. = no. 93aF. Smith) indicates that this approach to the present passage, distinguishing carefully between the expression and the signifi-

cation and hence between the oppositions one/many and simple/compound, derives from Porphyry.

255. i.e. Ajax son of Telamon, King of Salamis, 'the Great', or Ajax son of Oileus, King of Locri, 'the Lesser'.

256. cf. below 127,5ff.

257. = no. 93F. Smith. According to Boethius, Porphyry said that both the hypothetical syllogism and the definition were compound propositions signifying one thing, although they 'seemed' to signify many things (II 110.10ff.).

258. Ammonius' concern with priority among the different ways in which a sentence can be 'one' causes him to speak of the compound sentence in terms of 'apparent unity'; cf. 126,18 'by seeming (*dokein*) to join … provides the appearance (*phantasia*) of being one proposition'.

259. In the earlier passage Ammonius was explaining Aristotle's statement that verbs said alone are names and signify something, since in saying them one stops the thought and the listener rests (16b20f.). He takes Aristotle to refer to question and answer: the questioner's thought wanders with no definite focus, but the answer, which may consist of a simple name or verb, makes the questioner's thought definite and brings it to rest. The question, *qua* question, does not express something true or false, since it is indefinite; the answer must signify something, since it is able to complete the questioner's thought, but not something true or false, if it consists of a name or verb by itself; the combination of the question and the answer signifies something true or false. See also Boethius II 113.16: if the answer is taken together with the whole question, it can have a true or false sense.

260. Direct questions in Greek have the same word order as affirmations, unlike in English where the subject and verb are reversed. The introductory particle *ara* functions merely to mark the sentence as a question.

261. It is not the question, *qua* question, which concerns Aristotle here, since that is always indefinite, but the expression of which the question consists. This may be a complete statement or a verb-form, but only a verb-form which clearly indicates its person. One way of stating this is that the person 'subsists' (*huphistatai*) on the verb-form, so that the utterance is not simply a verb, but contains a name as well.

262. *Tim*. 49E.

263. This is another (cf. 48,17ff., 13.9ff.) not very relevant parallel from Platonic usage, which is not paralleled in Boethius and is thus likely to be a Proclan trait.

264. Boethius (II 115.26ff.) gives a hypothetical syllogism as an example of a compound assertion.

265. Again, this objection was made by Alexander (followed by Aspasius) and rejected by Porphyry, as we learn from Boethius' extended treatment of the topic (II 119.13ff.).

266. Note the parallel expression at Boethius II 123.12ff. (in Porphyry, no. 94F. Smith), which indicates that, again, Ammonius is following Porphyry in his rejection of Alexander.

267. It is noteworthy that Ammonius' treatment starts from the opposition of things to judgements about things, unlike Boethius'.

268. This is another typically Proclan addition specifying Aristotle's claim to have invented a usage and the priority of Platonic usage otherwise; cf. 10,17ff.; 13,9ff.; 48,17ff.; 77,21ff.

269. i.e. the expressed sentence, vs. the internal thoughts and judgements.

270. See *SE* 1.5, 167a11 under the trope concerning 'things said absolutely or in a certain way'.

271. Boethius shares with Ammonius certain of these examples (II 133.11ff.). At the end of his discussion, he adds Porphyry's thesis that Aristotle's words are directed against the common way of speaking and to establish the law of excluded middle (II 134.20ff. = no. 95F. Smith).

272. Ammonius probably chooses this systematizing procedure here because Aristotle's exposition was considered to have confused the path by which the contradictions are discovered and their order (Boethius II 147.3f.).

273. It is perhaps due to a desire to stick to his thematic division of the work, according to which Aristotle now turns to assertions with both subject and predicate, that Ammonius postpones speaking of the distinction between 'quality' and 'quantity' and the nature of the various 'quantities' of terms. He will come back to these points when he 'returns to the text' at 98,5ff.

274. After the mention of 'terms' here, Ammonius uses mostly masculine, rather than neuter, forms of 'subject' (*hupokeimenos*) and 'predicate' (*katêgoroumenos*), which I have therefore translated 'subject term' and 'predicate term'. It is not, however, clear that Ammonius intends to distinguish the subject and predicate from the subject and predicate terms.

275. cf. Ammonius *in An. Pr.* 4,9ff.: 'The things themselves, of which the syllogism is woven, are analogous to the matter, and the figures to the form.' The various 'matters', then, depend on the type of things one is dealing with in syllogisms, whether eternal, contingent, or impossible.

276. Boethius gives these species at II 141.11ff.

277. Theophrastus, fr. 82E Fortenbaugh. For this passage, cf. Boethius II 140.3ff.

278. Ammonius should perhaps have spoken of kinds of opposition, rather than kinds of proposition here, as he does below.

279. Theo Ebert suggests (in correspondence) the reference may be to *Rhet.* 1.3, 1359a15f.

280. i.e. in our Chapter 9.

281. cf. Boethius II 148.16ff., who, however, does not speak (here or elsewhere) of the different 'matters'. He treats the series in the order subalterns (147.30ff.), contraries (148.16ff.), subcontraries (150.27ff.).

282. Boethius (II 151.11ff.) gives an alternate explanation as well: 'since they have parties contrary to those under which they are arranged.'

283. Ammonius' insistence that both the particular and universal propositions are called 'subaltern' may be conditioned by the form of the term: *hupallêloi* = 'beneath one another'.

284. i.e. when the matter is necessary, as in the case of men being animals, 'Some man is an animal' is true because 'Every man is an animal' is true; but it would be true on its own if the matter were contingent, for then some A would be B and others not ('Some man walks', 'Some man does not walk'). Again, where the matter is such as to be necessary, 'Some man is an animal' will be true, but 'Not every man is an animal' will not be true.

285. = no. 96F. Smith. Since Ammonius says that the following exposition depends upon Porphyry (cf. 99,9), we should expect to find a high degree of correspondence with Boethius.

286. cf., e.g., Boethius II 143.1ff., 144.19ff., but without the argument given by

Ammonius that the determination is the most important part of a determined proposition and hence must be negated.

287. As was just indicated (95,32), 'Not some walk' would be true if no one is walking and if several are walking; Ammonius is here stating that the 'but' (*de*) may have been placed between 'not' (*ou*) and 'one' (*heis*) in order to prevent that combination from being the same as 'not some' (*ou tis*).

288. = no. 96F. (second part) Smith.

289. *Iliad* 6.58.

290. Here Ammonius seizes yet another opportunity for an explanation of a word used in multiple senses.

291. *Iliad* 1.144.

292. *Iliad* 2.204.

293. Here the definite article (*ho*) indicates that 'man' refers to the species.

294. There is no specific rule governing such cases; they fall under the general rule that a proclitic (like the negative particle *ou*, a word which normally has no accent of its own but forms an accentual unit with the accented word which follows it) acquires an accent when followed by an enclitic (like the indefinite pronoun *tis*, a word which has no accent of its own but 'leans on' the word before it) or by a pause.

295. *Iliad* 1.88.

296. *Iliad* 6.68.

297. This appears to be a remnant of the method according to which the lecture was divided into a general treatment or *theôria*, followed by the explanation of the particular text or *lexis* (cf. Introduction).

298. cf. Boethius II 140.12ff. with the example of 'Alexander' (either the Trojan also known as Paris or the son of Philip of Macedon). Boethius does not here say that the universal must, in contradistinction to the homonym, indicate one nature, but he must agree, since that is derived from Porphyry's theory cited earlier (II 106.19ff.; cf. Ammonius 72,11ff.).

299. cf. Boethius II 136.1ff.: 'Every proposition takes the properties of its own signification from the underlying thoughts. But because it is necessary that the thoughts be likenesses of the things, the force of propositions extends to the things as well. For, that which we conceive in imagination and thought we affirm or deny by placing it in an affirmation or negation. And while propositions take their force and propriety principally from thought, they get it in the second place from the things of which the thoughts themselves must be. Hence a proposition will participate in both quantity and quality: in quality by the very pronunciation of an affirmation or negation, which one puts forth and pronounces by one's own decision; in quantity from the underlying things which the thoughts capture. For we see that there are various qualities in things which are such as could not apply to anything other than some one singular, particular substance.'

300. cf. Boethius II 154.5ff.: '… do not divide the true and the false between them, though they are like definite particular propositions'; also 156.18ff.

301. = no. 97F. Smith.

302. Boethius gives a fuller account of this question: Herminus (II 157.30ff.) said that indefinite propositions sometimes signify contraries, namely when they are of universal things, e.g. 'Man is rational' – 'Man is not rational'. But then, Boethius asks, why did Aristotle add that the things they indicate can sometimes be contraries? Alexander (158,17 ff.) answered that because the propositions are indefinite nothing prevents them from being reduced to universal propositions,

just as they can be reduced to particular propositions, and these are indeed contraries: 'Man is an animal' – 'Man is not an animal' are indefinite and thus can be contraries (as the first can mean 'Every …', the second can mean 'No …'); but in 'Man is walking' – 'Man is not walking' the listener's mind is drawn to the subcontraries, not the contraries. Porphyry finds that this is not wholly wrong, but it is incomplete, since it does not account for Aristotle's words: 'But if one states something of universals, but not universally, these assertions are not contraries, but the things they indicate can sometimes be contraries.' Porphyry (159.6ff. = no. 97aF. Smith) preferred the account of Aspasius (159.25ff.), which Alexander had purposely rejected: Some negations contain in themselves the contrary of the affirmation they deny, as 'is not healthy' can mean 'is ill', which is the contrary of 'is healthy'. But in some cases, e.g. 'Man is walking' – 'Man is not walking', there is no contrary. Aristotle says that the indefinite propositions are not contraries because, although they are universal they are not said universally, but he says that they can at times signify contraries, when the contrary of the affirmation is contained in the negation. The information given by Boethius meshes well with that in Ammonius and clarifies what was meant by both Alexander and Porphyry.

303. i.e. the undetermined propositions can be reduced to universal propositions, which are contraries.

304. Ammonius uses *adioristous* here in the sense of *aprosdioristous* (as is clear from 98,22); cf. 115,2 and 18.

305. *An. Pr.* 43b17.

306. *An. Post.* 77b30.

307. If the *i*-proposition is false, then the *a*-proposition will also be false. But the next claim neither follows from this nor is true: the falsity of the superaltern does not imply that of the subaltern. The same error is made at 105,5f.

308. This construction uses the definite article with 'man' to indicate that the subject is taken generically.

309. The Greek definite article was originally a demonstrative pronoun which, however, did not distinguish between near and far and thus could simply indicate some specific individual whose identity would be apparent to the listener either as having been mentioned before or as being the only reasonable individual of the kind mentioned. Thus, its absence can be taken to indicate a lack of specificity and is often translated by the English indefinite article 'a'.

310. e.g. *DA* 2.2, 414a27.

311. e.g. *Gorgias* 462C3.

312. Here the second premiss is the major.

313. Reading *skhêmati* for the *khrêmati* printed (perhaps by error?) in Busse's text.

314. This is the focus of Boethius' comments on the present lemma (II 161.11ff.), where we also find 'able to laugh' as a predicate equal to 'man' in inclusiveness.

315. Actually, the word *apophantikôs* does not appear anywhere in our texts of Aristotle, although *apophatikôs* ('negatively') does.

316. = no. 98F. Smith.

317. Unfortunately, Boethius does not mention this alleged Porphyrian variant reading. He takes the passage in the same way as Ammonius does.

318. cf. Plato *Sophist* 243a.

319. cf. *EN* 1096a16.

320. The argument which follows seems typical of the post-Porphyrian contributions to the commentary in its talk of 'matter' and of 'superiority vs. inferiority'.

321. Boethius (II 172.13ff.) cites the opinion of Syrianus that the undetermined affirmation has the force of the particular affirmation, but the undetermined negation has the force of the universal negation. There Syrianus is said to have argued his point with 'his own, but also with Platonic and Aristotelian arguments' (172.15-18). It seems likely that the arguments adduced here by Ammonius represent either the new arguments used by Syrianus or possibly his 'Platonic' arguments (the Aristotelian arguments are probably represented by the two citations of Aristotle given below). Syrianus' contention is in any event rejected in no uncertain terms by Boethius. It would be appropriate for Proclus to have used the Platonic and Aristotelian tags alluded to just above, and particularly the citation of Aristotle preparing to criticize Plato, when he is about to criticize his master Syrianus (he speaks of Syrianus as his 'father' at *in Remp*. II,318,4 Kroll).

322. i.e. the particular negation does not deny *every* instance, as the universal negation does, and hence it must be superior to the universal, as existence is superior to nonexistence.

323. i.e. as becomes clear below, if one does not assume that some singular term needs to be added to the subject, such as 'Man is unjust' = 'Anytus is an unjust man', in which case the equivalence is to the particular negation 'Not every man is just'.

324. cf. Anonymous *in Int*. 45.16 for the appeal to 'common usage' (*sunêtheia*).

325. *Phys*. 3.1, 200b32.

326. *DA* 3.1, 424b22. It is, of course, a mistake to think that the negated existential proposition can clarify the undetermined proposition.

327. The argument here rejected (by Syrianus) is just that offered (against those who claim that the indefinite propositions divide the true and the false) by Tarán's anonymous commentator (45.8-46.5), who says Aristotle believes that we must understand a singular subject with an undetermined proposition. This argument is obviously inspired by Aristotle's own example, but Ammonius believes that the example need not be interpreted as indicating that the undetermined propositions are 'incomplete' (115,28ff.).

328. The copula *esti* is normally not needed in a present tense Greek sentence. When it is used, it is unaccented and unemphatic. But the same word can also be accented on the first syllable, and thus emphatic, with the meaning 'exists' (or 'is possible'). The former, copulative use, is called 'enclitic', since it 'leans on' the word which precedes it and is subsumed under that word's accent. Due to its placement with respect to other words, the unemphatic, enclitic *esti* may acquire an accent on its first syllable, and that is behind the statement here. But if *esti* follows the negation *ouk*, which is 'proclitic' and depends for its accent on the following word, it will always be accented with an acute on the first syllable (n.b.: and have no acute accent on the final syllable) and signify existence, not predication. Cf. Herodian, *General Prosody* (*Grammatici Graeci* III 1) 553.10: 'When *estin* begins a sentence or when it follows the negation *ou* or also the conjunction *kai* or *ei* or *alla* or the adverb *hôs* or <the demonstrative pronoun> *touto*, it has an acute on the *e* …', and *Iliadic Prosody* (III 2) 22.22: '*Estin* is enclitic, unless it begins <a sentence> or the negation *ou* precedes it.'

329. This comment looks back to the opponents' reproach at 113,13.

330. i.e. the necessary material.

331. i.e. one would be more unfair to human beings than even the legendary misanthropes Knemon (the title character of Menander's *Duskolos* ['Grouch']) and Timon (an Athenian of the fifth century who became a hermit) if one insisted that

'Man is not wise' or '… just' was absolutely universal in its scope, denying the human qualities justice and wisdom to all men.

332. Again, 'undefined' (*adioristos*) is used in the sense of 'undetermined' (*aprosdioristos*); cf. 100,30 and n. 304.

333. cf. *Comicorum Atticorum Fragmenta*, I.3 Kock (Susario).

334. *Iliad* 2.204.

335. cf. note 332 on 115,2.

336. i.e. 111,5.

337. Reading *prosexaporountes* with William of Moerbeke, against the Greek MSS, which have *prosexeuporountes*.

338. cf. 112,2.

339. Euripides *Hecuba* 864.

340. Enclitics are short words which are unemphatic and do not take their own accent, but rely on the accent of the preceding word. When one enclitic follows another, it may throw an accent back onto the first enclitic. Strictly speaking, Ammonius is wrong (cf. Herodian, cited above): *esti* is not enclitic after *ouk*, but is emphatic and existential and therefore has the accent *ésti*. The enclitic *tis* can force an enclitic preceding it to acquire an accent, as in *ésti tis*; if it precedes an accented word and is itself not preceded by anything, *tis* takes the grave accent (*tìs*), distinguishing it from the interrogative *tís*, which always has the acute.

341. *Odyssey* 14.466.

342. i.e. 117,25: *tis anthrôpos athanatos ouk estin* ('Some man is not immortal').

343. i.e. 117,30: *ouk ésti tis anthrôpos athanatos* ('There is not some man <who is> immortal').

344. e.g. 117,10.

345. cf. 112,11; 114,21; 115,2.

346. cf. 112,15.

347. cf. 112,19.

348. cf. 115,4.

349. cf. 115,6.

350. cf. 117,29.

351. cf. 116,34 above: 'Man is just; Nothing just is unjust; Therefore (a) man is not unjust', where the conclusion is clearly equivalent to a particular negation.

352. This appears to be another example of Ammonius turning from the general exposition of the *theôria* to the explanation of the text or *lexis* (cf. 98,5 and the Introduction). As we might expect, the material in this paragraph is paralleled in Boethius (II 169.11ff., 170.11ff.).

353. i.e. 118,16.

354. *An. Post.* 1.2, 72a12.

355. i.e. 10, 11b17ff., and the cited distinction at 13a37-b3.

356. i.e. 10, 13b2-4 and 27-9.

357. Ammonius is in some difficulty here because he has been unwilling to have Aristotle exclude the possible equivalence of the negative undetermined and the negative universal propositions. Boethius, who has fought against that equivalence, simply takes the current passage as a further confirmation that the two are different (II 174.2ff.).

358. I add *tinos* after *kath' hekasta* here (124,2).

359. Ammonius' discussion of this line is very closely paralleled in Boethius (II175.2ff.).

360. cf. Boethius II 176.8f.

361. On *porisma* as a geometer's term, cf. Anonymous *in Int*. 48.16ff. Tarán; he is apparently commenting here on Ammonius.

362. cf. 121,33f. and Boethius II 176.22ff.

363. Boethius (II 180.3ff.) attached his discussion of the fact that the terms of a definition signify many things, all of which can be reduced to one thing, to Aristotle's words: 'But if one name stands for two things, out of which one cannot be made.'

364. This part of the discussion is paralleled in Boethius II 182.13ff., who also (25ff.) connects it to the broader sense of 'contradiction'. He then goes on (183.7ff.) to report a controversy arising out of 'But if one name stands for two things, out of which one cannot be <made>, then the affirmation is not one'. Herminus claimed that when we say 'Man is footed', that 'footed' can be 'biped', 'quadruped', or 'multiped', but all these can be reduced to one, viz. 'having feet', so that 'Man is footed' does not signify many things, but only one. Boethius says (183.15ff.) that this was contrary to Aristotle's opinion, for 'biped' etc. make the number of feet, not the fact of having feet, and (183.19ff.) that Aspasius, Porphyry (= no. 99F. Smith), and Alexander in their commentaries on *Int*. agree with his own exposition. He ends this paragraph (183.22-184.2) with the example of the two Ajaxes.

Appendix
The Commentators*

The 15,000 pages of the Ancient Greek Commentaries on Aristotle are the largest corpus of Ancient Greek philosophy that has not been translated into English or other European languages. The standard edition (*Commentaria in Aristotelem Graeca*, or *CAG*) was produced by Hermann Diels as general editor under the auspices of the Prussian Academy in Berlin. Arrangements have now been made to translate at least a large proportion of this corpus, along with some other Greek and Latin commentaries not included in the Berlin edition, and some closely related non-commentary works by the commentators.

The works are not just commentaries on Aristotle, although they are invaluable in that capacity too. One of the ways of doing philosophy between A.D. 200 and 600, when the most important items were produced, was by writing commentaries. The works therefore represent the thought of the Peripatetic and Neoplatonist schools, as well as expounding Aristotle. Furthermore, they embed fragments from all periods of Ancient Greek philosophical thought: this is how many of the Presocratic fragments were assembled, for example. Thus they provide a panorama of every period of Ancient Greek philosophy.

The philosophy of the period from A.D. 200 to 600 has not yet been intensively explored by philosophers in English-speaking countries, yet it is full of interest for physics, metaphysics, logic, psychology, ethics and religion. The contrast with the study of the Presocratics is striking. Initially the incomplete Presocratic fragments might well have seemed less promising, but their interest is now widely known, thanks to the philological and philosophical effort that has been concentrated upon them. The incomparably vaster corpus which preserved so many of those fragments offers at least as much interest, but is still relatively little known.

The commentaries represent a missing link in the history of philosophy: the Latin-speaking Middle Ages obtained their knowledge of Aristotle at least partly through the medium of the commentaries. Without an appreciation of this, mediaeval interpretations of Aristotle will not be understood. Again, the ancient commentaries are the unsuspected source of ideas which have been thought, wrongly, to originate in the later mediaeval period. It has been supposed, for example, that Bonaventure in the thirteenth century invented the ingenious arguments based on the concept of infinity which attempt to prove the Christian view that the universe had a beginning. In fact, Bonaventure is merely repeating arguments devised

* Reprinted from the Editor's General Introduction to the series in Christian Wildberg, *Philoponus Against Aristotle on the Eternity of the World*, London and Ithaca, N.Y., 1987.

by the commentator Philoponus 700 years earlier and preserved in the meantime by the Arabs. Bonaventure even uses Philoponus' original examples. Again, the introduction of impetus theory into dynamics, which has been called a scientific revolution, has been held to be an independent invention of the Latin West, even if it was earlier discovered by the Arabs or their predecessors. But recent work has traced a plausible route by which it could have passed from Philoponus, via the Arabs, to the West.

The new availability of the commentaries in the sixteenth century, thanks to printing and to fresh Latin translations, helped to fuel the Renaissance break from Aristotelian science. For the commentators record not only Aristotle's theories, but also rival ones, while Philoponus as a Christian devises rival theories of his own and accordingly is mentioned in Galileo's early works more frequently than Plato.[1]

It is not only for their philosophy that the works are of interest. Historians will find information about the history of schools, their methods of teaching and writing and the practices of an oral tradition.[2] Linguists will find the indexes and translations an aid for studying the development of word meanings, almost wholly uncharted in Liddell and Scott's *Lexicon*, and for checking shifts in grammatical usage.

Given the wide range of interests to which the volumes will appeal, the aim is to produce readable translations, and to avoid so far as possible presupposing any knowledge of Greek. Notes will explain points of meaning, give cross-references to other works, and suggest alternative interpretations of the text where the translator does not have a clear preference. The introduction to each volume will include an explanation why the work was chosen for translation: none will be chosen simply because it is there. Two of the Greek texts are currently being re-edited – those of Simplicius *in Physica* and *in de Caelo* – and new readings will be exploited by

1. See Fritz Zimmermann, 'Philoponus' impetus theory in the Arabic tradition'; Charles Schmitt, 'Philoponus' commentary on Aristotle's *Physics* in the sixteenth century', and Richard Sorabji, 'John Philoponus', in Richard Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science* (London and Ithaca, N.Y. 1987).

2. See e.g. Karl Praechter, 'Die griechischen Aristoteleskommentare', *Byzantinische Zeitschrift* 18 (1909), 516-38 (translated into English in R. Sorabji (ed.), *Aristotle Transformed: the ancient commentators and their influence* (London and Ithaca, N.Y. 1990); M. Plezia, *de Commentariis Isagogicis* (Cracow 1947); M. Richard, '*Apo Phônês', Byzantion* 20 (1950), 191-222; É. Evrard, *L'Ecole d'Olympiodore et la composition du commentaire à la physique de Jean Philopon*, Diss. (Liège 1957); L.G. Westerink, *Anonymous Prolegomena to Platonic Philosophy* (Amsterdam 1962) (new revised edition, translated into French, Collection Budé; part of the revised introduction, in English, is included in *Aristotle Transformed*); A.-J. Festugière, 'Modes de composition des commentaires de Proclus', *Museum Helveticum* 20 (1963), 77-100, repr. in his *Études* (1971), 551-74; P. Hadot, 'Les divisions des parties de la philosophie dans l'antiquité', *Museum Helveticum* 36 (1979), 201-23; I. Hadot, 'La division néoplatonicienne des écrits d'Aristote', in J. Wiesner (ed.), *Aristoteles Werk und Wirkung* (Paul Moraux gewidmet), vol. 2 (Berlin 1986); I. Hadot, 'Les introductions aux commentaires exégétiques chez les auteurs néoplatoniciens et les auteurs chrétiens', in M. Tardieu (ed.), *Les règles de l'interprétation* (Paris 1987), 99-119. These topics are treated, and a bibliography supplied, in *Aristotle Transformed*.

translators as they become available. Each volume will also contain a list of proposed emendations to the standard text. Indexes will be of more uniform extent as between volumes than is the case with the Berlin edition, and there will be three of them: an English-Greek glossary, a Greek-English index, and a subject index.

The commentaries fall into three main groups. The first group is by authors in the Aristotelian tradition up to the fourth century A.D. This includes the earliest extant commentary, that by Aspasius in the first half of the second century A.D. on the *Nicomachean Ethics*. The anonymous commentary on Books 2, 3, 4 and 5 of the *Nicomachean Ethics*, in *CAG* vol. 20, is derived from Adrastus, a generation later.[3] The commentaries by Alexander of Aphrodisias (appointed to his chair between A.D. 198 and 209) represent the fullest flowering of the Aristotelian tradition. To his successors Alexander was The Commentator *par excellence*. To give but one example (not from a commentary) of his skill at defending and elaborating Aristotle's views, one might refer to his defence of Aristotle's claim that space is finite against the objection that an edge of space is conceptually problematic.[4] Themistius (*fl.* late 340s to 384 or 385) saw himself as the inventor of paraphrase, wrongly thinking that the job of commentary was completed.[5] In fact, the Neoplatonists were to introduce new dimensions into commentary. Themistius' own relation to the Neoplatonist as opposed to the Aristotelian tradition is a matter of controversy,[6] but it would be agreed that his commentaries show far less bias than the full-blown Neoplatonist ones. They are also far more informative than the designation 'paraphrase' might suggest, and it has been estimated that Philoponus' *Physics* commentary draws silently on Themistius six hundred times.[7] The pseudo-Alexandrian commentary on *Metaphysics* 6-14, of unknown

3. Anthony Kenny, *The Aristotelian Ethics* (Oxford 1978), 37, n.3: Paul Moraux, *Der Aristotelismus bei den Griechen*, vol. 2 (Berlin 1984), 323-30.

4. Alexander, *Quaestiones* 3.12, discussed in my *Matter, Space and Motion* (London and Ithaca, N.Y. 1988). For Alexander see R.W. Sharples, 'Alexander of Aphrodisias: scholasticism and innovation', in W. Haase (ed.), *Aufstieg und Niedergang der römischen Welt*, part 2 *Principat*, vol. 36.2, *Philosophie und Wissenschaften* (1987).

5. Themistius *in An. Post.* 1,2-12. See H.J. Blumenthal, 'Photius on Themistius (Cod. 74): did Themistius write commentaries on Aristotle?', *Hermes* 107 (1979), 168-82.

6. For different views, see H.J. Blumenthal, 'Themistius, the last Peripatetic commentator on Aristotle?', in Glen W. Bowersock, Walter Burkert, Michael C.J. Putnam, *Arktouros*, Hellenic Studies Presented to Bernard M.W. Knox (Berlin and N.Y., 1979), 391-400; E.P. Mahoney, 'Themistius and the agent intellect in James of Viterbo and other thirteenth-century philosophers: (Saint Thomas Aquinas, Siger of Brabant and Henry Bate)', *Augustiniana* 23 (1973), 422-67, at 428-31; id., 'Neoplatonism, the Greek commentators and Renaissance Aristotelianism', in D.J. O'Meara (ed.), *Neoplatonism and Christian Thought* (Albany N.Y. 1982), 169-77 and 264-82, esp. n. 1, 264-6; Robert Todd, introduction to translation of Themistius *in DA* 3.4-8, in *Two Greek Aristotelian Commentators on the Intellect*, trans. Frederick M. Schroeder and Robert B. Todd (Toronto 1990).

7. H. Vitelli, *CAG* 17, p. 992, s.v. Themistius.

authorship, has been placed by some in the same group of commentaries as being earlier than the fifth century.[8]

By far the largest group of extant commentaries is that of the Neoplatonists up to the sixth century A.D. Nearly all the major Neoplatonists, apart from Plotinus (the founder of Neoplatonism), wrote commentaries on Aristotle, although those of Iamblichus (*c.* 250–*c.* 325) survive only in fragments, and those of three Athenians, Plutarchus (died 432), his pupil Proclus (410–485) and the Athenian Damascius (*c.* 462–after 538), are lost.[9] As a result of these losses, most of the extant Neoplatonist commentaries come from the late fifth and the sixth centuries and a good proportion from Alexandria. There are commentaries by Plotinus' disciple and editor Porphyry (232–309), by Iamblichus' pupil Dexippus (*c.* 330), by Proclus' teacher Syrianus (died *c.* 437), by Proclus' pupil Ammonius (435/445–517/526), by Ammonius' three pupils Philoponus (*c.* 490 to 570s), Simplicius (wrote after 532, probably after 538) and Asclepius (sixth century), by Ammonius' next but one successor Olympiodorus (495/505–after 565), by Elias (*fl.* 541?), by David (second half of the sixth century, or beginning of the seventh) and by Stephanus (took the chair in Constantinople *c.* 610). Further, a commentary on the *Nicomachean Ethics* has been ascribed to Heliodorus of Prusa, an unknown pre-fourteenth-century figure, and there is a commentary by Simplicius' colleague Priscian of Lydia on Aristotle's successor Theophrastus. Of these commentators some of the last were Christians (Philoponus, Elias, David and Stephanus), but they were Christians writing in the Neoplatonist tradition, as was also Boethius who produced a number of commentaries in Latin before his death in 525 or 526.

The third group comes from a much later period in Byzantium. The Berlin edition includes only three out of more than a dozen commentators described in Hunger's *Byzantinisches Handbuch*.[10] The two most important are Eustratius (1050/1060–*c.*1120), and Michael of Ephesus. It has been suggested that these two belong to a circle organised by the princess

8. The similarities to Syrianus (died *c.* 437) have suggested to some that it predates Syrianus (most recently Leonardo Tarán, review of Paul Moraux, *Der Aristotelismus*, vol.1 in *Gnomon* 46 (1981), 721-50 at 750), to others that it draws on him (most recently P. Thillet, in the Budé edition of Alexander *de Fato*, p. lvii). Praechter ascribed it to Michael of Ephesus (eleventh or twelfth century), in his review of *CAG* 22.2, in *Göttingische Gelehrte Anzeiger* 168 (1906), 861-907.

9. The Iamblichus fragments are collected in Greek by Bent Dalsgaard Larsen, *Jamblique de Chalcis, Exégète et Philosophe* (Aarhus 1972), vol. 2. Most are taken from Simplicius, and will accordingly be translated in due course. The evidence on Damascius' commentaries is given in L.G. Westerink, *The Greek Commentaries on Plato's Phaedo*, vol. 2, Damascius (Amsterdam 1977), 11-12; on Proclus' in L.G. Westerink, *Anonymous Prolegomena to Platonic Philosophy* (Amsterdam 1962), xii, n. 22; on Plutarchus' in H.M. Blumenthal, 'Neoplatonic elements in the de Anima commentaries', *Phronesis* 21 (1976), 75.

10. Herbert Hunger, *Die hochsprachliche profane Literatur der Byzantiner*, vol. 1 (= *Byzantinisches Handbuch*, part 5, vol. 1) (Munich 1978), 25-41. See also B.N. Tatakis, *La Philosophie Byzantine* (Paris 1949).

Anna Comnena in the twelfth century, and accordingly the completion of Michael's commentaries has been redated from 1040 to 1138.[11] His commentaries include areas where gaps had been left. Not all of these gap-fillers are extant, but we have commentaries on the neglected biological works, on the *Sophistici Elenchi*, and a small fragment of one on the *Politics*. The lost *Rhetoric* commentary had a few antecedents, but the *Rhetoric* too had been comparatively neglected. Another product of this period may have been the composite commentary on the *Nicomachean Ethics* (*CAG* 20) by various hands, including Eustratius and Michael, along with some earlier commentators, and an improvisation for Book 7. Whereas Michael follows Alexander and the conventional Aristotelian tradition, Eustratius' commentary introduces Platonist, Christian and anti-Islamic elements.[12]

The composite commentary was to be translated into Latin in the next century by Robert Grosseteste in England. But Latin translations of various logical commentaries were made from the Greek still earlier by James of Venice (*fl. c.* 1130), a contemporary of Michael of Ephesus, who may have known him in Constantinople. And later in that century other commentaries and works by commentators were being translated from Arabic versions by Gerard of Cremona (died 1187).[13] So the twelfth century resumed the transmission which had been interrupted at Boethius' death in the sixth century.

The Neoplatonist commentaries of the main group were initiated by Porphyry. His master Plotinus had discussed Aristotle, but in a very independent way, devoting three whole treatises (*Enneads* 6.1-3) to attacking Aristotle's classification of the things in the universe into categories. These categories took no account of Plato's world of Ideas, were inferior to Plato's classifications in the *Sophist* and could anyhow be collapsed, some

11. R. Browning, 'An unpublished funeral oration on Anna Comnena', *Proceedings of the Cambridge Philological Society* n.s. 8 (1962), 1-12, esp. 6-7.

12. R. Browning, op. cit. H.D.P. Mercken, *The Greek Commentaries of the Nicomachean Ethics of Aristotle in the Latin Translation of Grosseteste, Corpus Latinum Commentariorum in Aristotelem Graecorum* VI 1 (Leiden 1973), ch. 1, 'The compilation of Greek commentaries on Aristotle's Nicomachean Ethics'. Sten Ebbesen, 'Anonymi Aurelianensis I Commentarium in *Sophisticos Elenchos*', *Cahiers de l'Institut Moyen Age Grecque et Latin* 34 (1979), 'Boethius, Jacobus Veneticus, Michael Ephesius and "Alexander" ', pp. v-xiii; id., *Commentators and Commentaries on Aristotle's Sophistici Elenchi*, 3 parts, *Corpus Latinum Commentariorum in Aristotelem Graecorum*, vol. 7 (Leiden 1981); A. Preus, *Aristotle and Michael of Ephesus on the Movement and Progression of Animals* (Hildesheim 1981), introduction.

13. For Grosseteste, see Mercken as in n. 12. For James of Venice, see Ebbesen as in n. 12, and L. Minio-Paluello, 'Jacobus Veneticus Grecus', *Traditio* 8 (1952), 265-304; id., 'Giacomo Veneto e l'Aristotelismo Latino', in Pertusi (ed.), *Venezia e l'Oriente fra tardo Medioevo e Rinascimento* (Florence 1966), 53-74, both reprinted in his *Opuscula* (1972). For Gerard of Cremona, see M. Steinschneider, *Die europäischen Übersetzungen aus dem arabischen bis Mitte des 17. Jahrhunderts* (repr. Graz 1956); E. Gilson, *History of Christian Philosophy in the Middle Ages* (London 1955), 235-6 and more generally 181-246. For the translators in general, see Bernard G. Dod, 'Aristoteles Latinus', in N. Kretzmann, A. Kenny, J. Pinborg (eds), *The Cambridge History of Latin Medieval Philosophy* (Cambridge 1982).

of them into others. Porphyry replied that Aristotle's categories could apply perfectly well to the world of intelligibles and he took them as in general defensible.[14] He wrote two commentaries on the *Categories*, one lost, and an introduction to it, the *Isagôgê*, as well as commentaries, now lost, on a number of other Aristotelian works. This proved decisive in making Aristotle a necessary subject for Neoplatonist lectures and commentary. Proclus, who was an exceptionally quick student, is said to have taken two years over his Aristotle studies, which were called the Lesser Mysteries, and which preceded the Greater Mysteries of Plato.[15] By the time of Ammonius, the commentaries reflect a teaching curriculum which begins with Porphyry's *Isagôgê* and Aristotle's *Categories*, and is explicitly said to have as its final goal a (mystical) ascent to the supreme Neoplatonist deity, the One.[16] The curriculum would have progressed from Aristotle to Plato, and would have culminated in Plato's *Timaeus* and *Parmenides*. The latter was read as being about the One, and both works were established in this place in the curriculum at least by the time of Iamblichus, if not earlier.[17]

Before Porphyry, it had been undecided how far a Platonist should accept Aristotle's scheme of categories. But now the proposition began to gain force that there was a harmony between Plato and Aristotle on most things.[18] Not for the only time in the history of philosophy, a perfectly crazy proposition proved philosophically fruitful. The views of Plato and of Aristotle had both to be transmuted into a new Neoplatonist philosophy in order to exhibit the supposed harmony. Iamblichus denied that Aristotle contradicted Plato on the theory of Ideas.[19] This was too much for Syrianus and his pupil Proclus. While accepting harmony in many areas,[20] they could see that there was disagreement on this issue and also on the issue of whether God was causally responsible for the existence of the ordered

14. See P. Hadot, 'L'harmonie des philosophies de Plotin et d'Aristote selon Porphyre dans le commentaire de Dexippe sur les Catégories', in *Plotino e il neoplatonismo in Oriente e in Occidente* (Rome 1974), 31-47; A.C. Lloyd, 'Neoplatonic logic and Aristotelian logic', *Phronesis* 1 (1955-6), 58-79 and 146-60.

15. Marinus, *Life of Proclus* ch. 13, 157,41 (Boissonade).

16. The introductions to the *Isagôgê* by Ammonius, Elias and David, and to the *Categories* by Ammonius, Simplicius, Philoponus, Olympiodorus and Elias are discussed by L.G. Westerink, *Anonymous Prolegomena* and I. Hadot, 'Les Introductions', see n. 2 above.

17. Proclus in *Alcibiadem 1* p. 11 (Creuzer); Westerink, *Anonymous Prolegomena*, ch. 26, 12f. For the Neoplatonist curriculum see Westerink, Festugière, P. Hadot and I. Hadot in n. 2.

18. See e.g. P. Hadot (1974), as in n. 14 above; H.J. Blumenthal, 'Neoplatonic elements in the de Anima commentaries', *Phronesis* 21 (1976), 64-87; H.A. Davidson, 'The principle that a finite body can contain only finite power', in S. Stein and R. Loewe (eds), *Studies in Jewish Religious and Intellectual History presented to A. Altmann* (Alabama 1979), 75-92; Carlos Steel, 'Proclus et Aristotle', Proceedings of the Congrès Proclus held in Paris 1985, J. Pépin and H.D. Saffrey (eds), *Proclus, lecteur et interprète des anciens* (Paris 1987), 213-25; Koenraad Verrycken, *God en Wereld in de Wijsbegeerte van Ioannes Philoponus*, Ph.D. Diss. (Louvain 1985).

19. Iamblichus ap. Elian *in Cat.* 123,1-3.

20. Syrianus *in Metaph.* 80,4-7; Proclus *in Tim.* 1.6,21-7,16.

physical cosmos, which Aristotle denied. But even on these issues, Proclus' pupil Ammonius was to claim harmony, and, though the debate was not clear cut,[21] his claim was on the whole to prevail. Aristotle, he maintained, accepted Plato's Ideas,[22] at least in the form of principles (*logoi*) in the divine intellect, and these principles were in turn causally responsible for the beginningless existence of the physical universe. Ammonius wrote a whole book to show that Aristotle's God was thus an efficent cause, and though the book is lost, some of its principal arguments are preserved by Simplicius.[23] This tradition helped to make it possible for Aquinas to claim Aristotle's God as a Creator, albeit not in the sense of giving the universe a beginning, but in the sense of being causally responsible for its beginningless existence.[24] Thus what started as a desire to harmonise Aristotle with Plato finished by making Aristotle safe for Christianity. In Simplicius, who goes further than anyone,[25] it is a formally stated duty of the commentator to display the harmony of Plato and Aristotle in most things.[26] Philoponus, who with his independent mind had thought better of his earlier belief in harmony, is castigated by Simplicius for neglecting this duty.[27]

The idea of harmony was extended beyond Plato and Aristotle to Plato and the Presocratics. Plato's pupils Speusippus and Xenocrates saw Plato as being in the Pythagorean tradition.[28] From the third to first centuries B.C., pseudo-Pythagorean writings present Platonic and Aristotelian doctrines as if they were the ideas of Pythagoras and his pupils,[29] and these forgeries were later taken by the Neoplatonists as genuine. Plotinus saw the Presocratics as precursors of his own views,[30] but Iamblichus went far beyond him by writing ten volumes on Pythagorean philosophy.[31] Thereafter Proclus sought to unify the whole of

21. Asclepius sometimes accepts Syranius' interpretation (*in Metaph.* 433,9-436,6); which is, however, qualified, since Syrianus thinks Aristotle is realy committed willy-nilly to much of Plato's view (*in Metaph.* 117,25-118,11; ap. Asclepium *in Metaph.* 433,16; 450,22); Philoponus repents of his early claim that Plato is not the target of Aristotle's attack, and accepts that Plato is rightly attacked for treating ideas as independent entities outside the divine Intellect (*in DA* 37,18-31; *in Phys.* 225,4-226,11; *contra Procl.* 26,24-32,13; *in An. Post.* 242,14-243,25).

22. Asclepius *in Metaph.* from the voice of (i.e. from the lectures of) Ammonius 69,17-21; 71,28; cf. Zacharias *Ammonius, Patrologia Graeca* vol. 85 col. 952 (Colonna).

23. Simplicius *in Phys.* 1361,11-1363,12. See H.A. Davidson; Carlos Steel; Koenraad Verrycken in n. 18 above.

24. See Richard Sorabji, *Matter, Space and Motion* (London and Ithaca, N.Y. 1988), ch. 15.

25. See e.g. H.J. Blumenthal in n. 18 above.

26. Simplicius *in Cat.* 7,23-32.

27. Simplicius *in Cael.* 84,11-14; 159,2-9. On Philoponus' *volte face* see n. 21 above.

28. See e.g. Walter Burkert, *Weisheit und Wissenschaft* (Nürnberg 1962), translated as *Lore and Science in Ancient Pythagoreanism* (Cambridge Mass. 1972), 83-96.

29. See Holger Thesleff, *An Introduction to the Pythagorean Writings of the Hellenistic Period* (Åbo 1961); Thomas Alexander Szlezák, *Pseudo-Archytas über die Kategorien*, Peripatoi vol. 4 (Berlin and New York 1972).

30. Plotinus e.g. 4.8.1; 5.1.8 (10-27); 5.1.9.

31. See Dominic O'Meara, *Pythagoras Revived: Mathematics and Philosophy in Late Antiquity* (Oxford 1989).

Greek philosophy by presenting it as a continuous clarification of divine revelation[32] and Simplicius argued for the same general unity in order to rebut Christian charges of contradictions in pagan philosophy.[33]

Later Neoplatonist commentaries tend to reflect their origin in a teaching curriculum:[34] from the time of Philoponus, the discussion is often divided up into lectures, which are subdivided into studies of doctrine and of text. A general account of Aristotle's philosophy is prefixed to the *Categories* commentaries and divided, according to a formula of Proclus,[35] into ten questions. It is here that commentators explain the eventual purpose of studying Aristotle (ascent to the One) and state (if they do) the requirement of displaying the harmony of Plato and Aristotle. After the ten-point introduction to Aristotle, the *Categories* is given a six-point introduction, whose antecedents go back earlier than Neoplatonism, and which requires the commentator to find a unitary theme or scope (*skopos*) for the treatise. The arrangements for late commentaries on Plato are similar. Since the Plato commentaries form part of a single curriculum they should be studied alongside those on Aristotle. Here the situation is easier, not only because the extant corpus is very much smaller, but also because it has been comparatively well served by French and English translators.[36]

Given the theological motive of the curriculum and the pressure to harmonise Plato with Aristotle, it can be seen how these commentaries are a major source for Neoplatonist ideas. This in turn means that it is not safe to extract from them the fragments of the Presocratics, or of other authors, without making allowance for the Neoplatonist background against which the fragments were originally selected for discussion. For different reasons, analogous warnings apply to fragments preserved by the pre-Neoplatonist commentator Alexander.[37] It will be another advantage of the present translations that they will make it easier to check the distorting effect of a commentator's background.

Although the Neoplatonist commentators conflate the views of Aristotle with those of Neoplatonism, Philoponus alludes to a certain convention

32. See Christian Guérard, 'Parménide d'Elée selon les Néoplatoniciens', forthcoming.

33. Simplicius *in Phys.* 28,32-29,5; 640,12-18. Such thinkers as Epicurus and the Sceptics, however, were not subject to harmonisation.

34. See the literature in n. 2 above.

35. ap. Elian *in Cat.* 107,24-6.

36. English: Calcidius *in Tim.* (parts by van Winden; den Boeft); Iamblichus fragments (Dillon); Proclus *in Tim.* (Thomas Taylor); Proclus *in Parm.* (Dillon); Proclus *in Parm.*, end of 7th book, from the Latin (Klibansky, Labowsky, Anscombe); Proclus *in Alcib. 1* (O'Neill); Olympiodorus and Damascius *in Phaedonem* (Westerink); Damascius *in Philebum* (Westerink); *Anonymous Prolegomena to Platonic Philosophy* (Westerink). See also extracts in Thomas Taylor, *The Works of Plato*, 5 vols. (1804). French: Proclus *in Tim.* and *in Rempublicam* (Festugière); *in Parm.* (Chaignet); Anon. *in Parm* (P. Hadot); Damascius *in Parm.* (Chaignet).

37. For Alexander's treatment of the Stoics, see Robert B. Todd, *Alexander of Aphrodisias on Stoic Physics* (Leiden 1976), 24-9.

when he quotes Plutarchus expressing disapproval of Alexander for expounding his own philosophical doctrines in a commentary on Aristotle.[38] But this does not stop Philoponus from later inserting into his own commentaries on the *Physics* and *Meteorology* his arguments in favour of the Christian view of Creation. Of course, the commentators also wrote independent works of their own, in which their views are expressed independently of the exegesis of Aristotle. Some of these independent works will be included in the present series of translations.

The distorting Neoplatonist context does not prevent the commentaries from being incomparable guides to Aristotle. The introductions to Aristotle's philosophy insist that commentators must have a minutely detailed knowledge of the entire Aristotelian corpus, and this they certainly have. Commentators are also enjoined neither to accept nor reject what Aristotle says too readily, but to consider it in depth and without partiality. The commentaries draw one's attention to hundreds of phrases, sentences and ideas in Aristotle, which one could easily have passed over, however often one read him. The scholar who makes the right allowance for the distorting context will learn far more about Aristotle than he would be likely to on his own.

The relations of Neoplatonist commentators to the Christians were subtle. Porphyry wrote a treatise explicitly against the Christians in 15 books, but an order to burn it was issued in 448, and later Neoplatonists were more circumspect. Among the last commentators in the main group, we have noted several Christians. Of these the most important were Boethius and Philoponus. It was Boethius' programme to transmit Greek learning to Latin-speakers. By the time of his premature death by execution, he had provided Latin translations of Aristotle's logical works, together with commentaries in Latin but in the Neoplatonist style on Porphyry's *Isagôgê* and on Aristotle's *Categories* and *de Interpretatione*, and interpretations of the *Prior* and *Posterior Analytics*, *Topics* and *Sophistici Elenchi*. The interruption of his work meant that knowledge of Aristotle among Latin-speakers was confined for many centuries to the logical works. Philoponus is important both for his proofs of the Creation and for his progressive replacement of Aristotelian science with rival theories, which were taken up at first by the Arabs and came fully into their own in the West only in the sixteenth century.

Recent work has rejected the idea that in Alexandria the Neoplatonists compromised with Christian monotheism by collapsing the distinction between their two highest deities, the One and the Intellect. Simplicius (who left Alexandria for Athens) and the Alexandrians Ammonius and Asclepius appear to have acknowledged their beliefs quite openly, as later

38. Philoponus *in DA* 21,20-3.

did the Alexandrian Olympiodorus, despite the presence of Christian students in their classes.[39]

The teaching of Simplicius in Athens and that of the whole pagan Neoplatonist school there was stopped by the Christian Emperor Justinian in 529. This was the very year in which the Christian Philoponus in Alexandria issued his proofs of Creation against the earlier Athenian Neoplatonist Proclus. Archaeological evidence has been offered that, after their temporary stay in Ctesiphon (in present-day Iraq), the Athenian Neoplatonists did not return to their house in Athens, and further evidence has been offered that Simplicius went to Harrān (Carrhae), in present-day Turkey near the Iraq border.[40] Wherever he went, his commentaries are a treasurehouse of information about the preceding thousand years of Greek philosophy, information which he painstakingly recorded after the closure in Athens, and which would otherwise have been lost. He had every reason to feel bitter about Christianity, and in fact he sees it and Philoponus, its representative, as irreverent. They deny the divinity of the heavens and prefer the physical relics of dead martyrs.[41] His own commentaries by contrast culminate in devout prayers.

Two collections of articles by various hands have been published, to make the work of the commentators better known. The first is devoted to Philoponus;[42] the second is about the commentators in general, and goes into greater detail on some of the issues briefly mentioned here.[43]

39. For Simplicius, see I. Hadot, *Le Problème du Néoplatonisme Alexandrin: Hiéroclès et Simplicius* (Paris 1978); for Ammonius and Asclepius, Koenraad Verrycken, *God en wereld in de Wijsbegeerte van Ioannes Philoponus*, Ph.D. Diss. (Louvain 1985); for Olympiodorus, L.G. Westerink, *Anonymous Prolegomena to Platonic Philosophy* (Amsterdam 1962).

40. Alison Frantz, 'Pagan philosophers in Christian Athens', *Proceedings of the American Philosophical Society* 119 (1975), 29-38; M. Tardieu, 'Témoins orientaux du *Premier Alcibiade* à Harrān et à Nag 'Hammādi', *Journal Asiatique* 274 (1986); id., 'Les calendriers en usage à Harrān d'après les sources arabes et le commentaire de Simplicius à la *Physique* d'Aristote', in I. Hadot (ed.), *Simplicius, sa vie, son oeuvre, sa survie* (Berlin 1987), 40-57; id., *Coutumes nautiques mésopotamiennes chez Simplicius*, in preparation. The opposing view that Simplicius returned to Athens is most fully argued by Alan Cameron, 'The last day of the Academy at Athens', *Proceedings of the Cambridge Philological Society* 195, n.s. 15 (1969), 7-29.

41. Simplicius *in Cael.* 26,4-7; 70,16-18; 90,1-18; 370,29-371,4. See on his whole attitude Philippe Hoffmann, 'Simplicius' polemics', in Richard Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science* (London and Ithaca, N.Y. 1987).

42. Richard Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science* (London and Ithaca, N.Y. 1987).

43. Richard Sorabji (ed.), *Aristotle Transformed: the ancient commentators and their influence* (London and Ithaca, N.Y. 1990). The lists of texts and previous translations of the commentaries included in Wildberg, *Philoponus Against Aristotle on the Eternity of the World* (pp. 12ff.) are not included here. The list of translations should be augmented by: F.L.S. Bridgman, Heliodorus (?) in *Ethica Nicomachea*, London 1807.

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English-Greek Glossary

accidents: *sumbebêkota*
act (v.): *energein*
  action: *energeia*
  activity: *energeia*
  actuality: *energeia*
address: *klêtikos*
addressing: *prosagoreutikos*
adverb: *epirrhêma*
affection: *pathos*
affirm: *kataphanai*
  affirmation: *kataphasis*
  affirmative: *kataphatikos*
agreement: *homologia*
appearance: *emphasis*
appellation: *epônumia*
appellative: *prosêgoria*
appetite: *orexis*
  appetitive: *orektikos*
argument: *epikheirêma*, *epikheirêsis*
artery: *artêria*
article: *arthron*
articulate: *enarthros*
articulate (v.): *diarthroun*
assertion: *apophansis*
  assertoric: *apophantikos*
axiom: *axiôma*

be, be real: *einai*
being: *ousia*
belong: *huparkhein*

capacity: *dunamis*
case: *ptôsis*
case-ending: *klisis*
chapter: *kephalaion*
characteristics: *sumbebêkota*
combine: *sumplekein*
  combination: *sumplokê*
command: *prostaxis*
common: *koinos*
complete (v.): *apartizein*
complete: *sumplêrôma*, *teleios*, *autotelês*
  completion: *sumplêrôsis*, *teleiotês*
  completing: *sumplêrôtikos*
composition: *sunthesis*
  compound: *sunthetos*
concept: *ennoia*
conditional: *sunaptikos*, *sunêmmenon*
conflict: *makhê*
conflict (v.): *makhesthai*
conjunction: *sundesmos*
content: *apangelia*
(be) contingent: *endekhesthai*
contradiction: *antiphasis*
  contradictorily: *antiphatikôs*
contrary: *hupenantios*
convention: *nomos*, *sunthêkê*
convert (v.): *antistrephein*
copulative: *sumplektikos*
copy (v.): *apotupoun*
corollary: *porisma*
counterfeit: *nothos*
course: *pragmateia*
craftsman: *dêmiourgos*
curse: *ara*

decision: *axiôma*
declension: *klisis*
define: *horizein*
  defined: *horistos*
  definition: *horos*, *horismos*
  definitive: *horistikos*
demonstration: *apodeixis*
derive: *paragein*
designation: *prosrêma*
determine: *prosdiorizein*
  determined: *prosdioristos*
diagonal: *diametros*
diametrical: *diametros*
differentia: *diaphora*
discourse: *logos*
disjunction: *diazeuxis*

disjunctive: *diazeuktikos*
distinction: *aphorismos*, *diorismos*
divide: *diairein*
division, *diairesis*

element: *stoikheion*
enunciative: *exangeltikos*
equal (v.): *exisazein*
(have) equal force: *isodunamein*, *isosthenein*
essence: *ousia*
essential: *ousiôdês*
eternal: *aïdios*
every : *pas*
exist: *einai*
existence: *huparxis*, *hupostasis*
expressed: *prophorikos*
expression: *phasis*, *lexis*
expressive: *phatikos*

faculty: *dunamis*
(be simultaneously) false: *sumpseudein*
familiar: *gnôrimos*
feminine: *thêlukos*
forbidding: *apagoreusis*
force: *dunamis*
form: *eidos*
form-giving: *eidopoios*
fortiori, *a*: *mallon*
future: *mellôn khronos*

general: *koinos*
genuine: *gnêsios*
genus: *genos*
goat-stag: *tragelaphos*

heading: *kephalaion*
hold (v.): *huparkhein*
homonymous: *homônumos*
homonymy: *homônumia*
hypothesis: *hupothesis*
hypothetical: *hupothetikos*

image (n.): *eikôn*
image (v.): *apeikonizein*
imagination: *phantasia*
imperative: *prostaktikos*
imposition: *thesis*
imprecative: *aratikos*
impression: *phantasia*
inarticulate: *adiarthrôtos*
incline (v.): *apoklinein*
inclination: *enklisis*
incomplete: *atelês*, *ellipês*
indefinite: *aoristos*
indeterminate: *aoristos*
indicate: *emphainein*, *episêmainein*
individual: *atomos*, *(kath') hekaston*
induction: *epagôgê*
infinite: *apeiros*
inflection: *enklisis*
inform: *eidopoiein*
intellectual: *noeros*
intelligent: *noeros*
intelligible: *noêtos*
interchangeably: *aparallaktôs*
internal: *endiathetos*
interpretation: *hermêneia*
interrogative: *erôtêmatikos*
intertwine: *sumplekein*
invert: *antistrephein*

join: *sumplekein*

known: *gnôrimos*

language: *dialektos*
letter: *gramma*, *stoikheion*
lettered, composed of letters: *engrammatos*
likeness: *homoiôma*
linguistic: *lektikos*
logical: *logikos*
lung: *pneumôn*

major: *meizôn*
mascufeminine: *arrenothêlus*
masculine: *arrenikos*
matter: *hulê*
mean (v.): *sêmainein*
meaning: *ennoia*
meaningless: *asêmos*
mediated: *emmesos*
message: *apangelia*
minor: *oligos (elattôn)*
modal: *tropos*

name: *onoma*
namegiver: *onomatothetês*
nature: *phusis*
natural: *phusikos*
negate: *apophanai*
negation: *apophasis*, *arnêsis*
negative: *apophatikos*, *arnêtikos*

neuter: *oudeteros*
noetic: *noêtos*
noise: *psophos*
nominative: *eutheia (ptôsis)*
non-existence: *anuparxia*
non-significant: *asêmos*

oath: *horkos*
obligation: *thetikos*
occurrence: *sumbama*
one: *heis*
(be) opposed: *antistrephein*, *antidiairein*
opposition: *antithesis*
optative: *eukhê*
orator: *rhêtôr*
organ: *organon*
organize: *diarthroun*
origin: *genesis*

parapredicate: *parakatêgorêma*
paroccurrence: *parasumbama*
part: *meros*
participation: *methexis*
participle: *metokhê*
particle: *morion*
particular: *merikos*
particular character: *idiotês*
passion: *pathos*
past: *parôikhêmenos*
perception: *aisthanesthai*
perfect: *teleios*
person: *prosôpon*
poetic: *poiêtikê*
postulate (n.): *aitêma*
potentiality: *dunamis*
prayer: *eukhê*
predicate (v.): *proskatêgorein*
predicate: *katêgoria*, *katêgorêma*, *katêgorein*
  predicative: *katêgorikos*
preposition: *prothesis*
presentation: *phantasia*
primitive: *arkhikos*, *arkhoeidês*
principle: *arkhê*
privation: *sterêsis*
product: *apotelesma*, *dêmiourgêma*
production: *poiêsis*
  productive: *poiêtikos*
pronoun: *antônumia*
pronounce: *ekphônein*
  pronunciation: *ekphônêsis*, *prophora*
proof: *kataskeuê*, *apodeixis*
  proving: *kataskeuastikos*
proposition: *protasis*
psychic: *psukhikos*

qualification: *diorismos*
quality: *poios*, *poiotês*
question: *erôtêsis*, *zêtêsis*
questioning: *pusmatikos*

rational: *logikos*
reason: *logos*
relation: *skhesis*
rhetoric: *rhêtorikê*
ruling: *arkhikos*, *arkhoeidês*

sayable: *lekton*
self-moving: *autokinêtos*
sense: *ennoia*
sensation: *aisthanesthai*
sentence: *logos*
separate: *khôristos*
set apart: *antidiastellein*
shape (v.): *eidopoiein*
sign: *sêmeion*
significance: *emphasis*
signify: *sêmainein*
  signify in addition: *prossêmainein*
  signify together: *sussêmainein*
  significant: *sêmantikos*
  signification: *sêmasia*
simple: *haplous*
  simplicity: *haplotês*
singular: *monadikos*, *(kath') hekaston*
soul: *psukhê*
sound: *psophos*
speech: *lexis*
style: *idea*, *hermêneia*, *lexis*
subaltern: *hupallêlos*
(be) subject: *hupokeisthai*
substance: *ousia*
syllogism: *sullogismos*
symbol: *sumbolon*

think: *noein*
thought: *dianoêma*, *dianoia*
thought: *noêma*, *ennoia*
time: *khronos*
tongue: *glôtta*
tool: *organon*
trachea: *artêria*

(be simultaneously) true: *sunalêtheuein*
type: *genos*

unconnected: *asundetos*
undefined: *adioristos*
understanding: *katalêpsis*, *katanoêsis*
undetermined: *aprosdioristos*, *adioristos*
unite: *henoun*
unity: *henôsis*
universal: *katholou*, *katholikos*
unlettered: *agrammatos*, *anarthros*
unlimited: *apeiros*
usage: *khrêsis*
utterance: *prophora*
uvula: *gargareôn*

verb: *rhêma*
verbal: *lektikos*
vocal sound: *phônê*
vocative: *klêtikos*

wish: *eukhê*
word: *lexis*
write: *graphein*

Greek-English Index

abasanistôs, untested, 111,2
untestedly, 122,14
adekastôs, impartially, 117,4
adiakopôs, without interruption, 71,33
adianoêtos, unintelligible, 77,5
adiarthrôtôs, inarticulate, 30,28
adiereunêtos, unexplored, 39,13
adioristos
undefined, 115,2.12
undetermined, 115,18
adokimos, unreceptive, 106,8
adunatos, impossible, 8,10; 88,19.24
agathos, good, 11,26
agrammatos, unlettered
(*phônê*), 31,4.13.15.20; 41,1
(*psophoi*), 31,32; 40,32
aïdios, eternal, 37,5.12; 73,27.28
aidoios, revered, 110,32
ainittesthai, hinted, 69,24
riddled, 126,4
aisthanesthai, sensing, 6,28
aisthêsis, perceptual sense, 6,11.14; 34,25; sensation, 5,4; 6,7; 25,14
aisthêtos, perceptible(s), 34,26; sensible, 71,15
aitêma, postulates, 7,20; 9,22
aitia, cause, 24,24
akhrêstos, useless, 101,29
akhôristos, inseparable, 6,13
anomoiomerês, dissimilar, 15,27
anônumos (*ouk anônumon*), greatly renowned, 1,3
anôphoros, upwardly mobile, 39,3
antidiairein, distinguish logically, 9,21
be opposed, 90,19
antidiastellein, set apart, 97,5
antidiastolê, contrast, 59,28
antidiatattein, be arrayed, 111,4
antigraphon, copy, 8,27; 50,8
antilêpsis, cognition, 27,31
antiphasis, contradiction, 37,26; 81,13; 83,5; 84,5; 91,18; 121,28.29.32; 125,6
contradictorily, 88,2
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antiphthengesthai, contradict, 110,31; 114,3
antistrephein, opposed, 53,19
invert, 58,13
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opposition, 10,19; 72,14; 81,19; 121,19.22.24.28.33
antônumia, pronoun, 11,10; 13,20
instead-of-name, 14,33
anuparxia, non-existence, 14,29; 17,2; 42,7; 70,6
aoristos, indefinite
(*dianoia*), 55,5
(*onoma*), 37,25; 41,11; 51,26; 72,7; 87,30
(*rhêma*), 37,25; 51,25.30.31.33
(*hupokeimenon*), 79,5; 87,28; 90,34
(*protasis*), 90,18
(opp. *hôrismenôs*), infinitely, 11,18
(*to aoristôs*), indeterminately, 29,13
apagoreusis, forbidding, 12,11; 13,23
apangelia, content, 5,26
message, 13,14
suntomon tês apangelias, brevity, 69,24
apantan, respond, 114,4
aparallaktos, interchangeably, 114,23
aparemphatos, infinitive, 50,26
(*enklisis*), infinitive inflection, 51,7
aparithmein, enumerate, 17,11
aparithmêsis, enumeration, 17,6; 71,30; list, 58,15; 78,13
apartân, detached, 15,8

apartizein, complete, 43,27; 44,8; 62,12; 64,32
independent, 74,6; 78,11
apathês, impassive, 7,6.10
apeikonizein (*apeikonizesthai*), to image, 20,2
apeiria, infinitude, 101,5
apeiros, unlimited, 65,16
epi to apeiron, infinity, 65,18
eis apeiron, *ad infinitum*, 3,25
apêkhêsis, hearing, 20,9
sound, 25,23
aperiskeptôs, incautiously, 71,23
unexaminedly, 122,13
aphesis, releasing, 20,13
aphorismos, distinction, 89,18; 114,9
aphorizein, define, 34,14
aphorizesthai, be defined, 1,21
aphôristhai (var. *aphorizesthai*), had been assigned, 34,25
aphôrismenôi (var. *aphorismenôi*), definite, 99,27
apoblepein, strive, 13,18
apodeiktikos (*apodeiktikê epistêmê*), science of proof, 65,26
apodeixis, demonstration, 2,1.24; 3,26
proof, 9,16; 65,28
apodokimazein, reject, 105,2.32
apoklêrôtikos, absurd, 115,19
apoklinein, incline, 118,16; 119,13; 121,2
apokrinein, remove, 105,30
apokrisis, answer, 76,26
apoluein, detach, 48,15
apomattein, take an imprint, 6,9
apomnêmoneuein, record, 1,7
apoperaioun, terminate, 54,29
apophanai (opp. *kataphanai*), negate, 124,9.12.18
apophansis, assertion, 3,31; 4,12; 8,15.17.21.31; 11,7; 15,18.21; 16,2.7.8.9.14; 17,3.4; 42,16; 66,18; 75,28; 76,1.4.7.11.12; 78,1; 80,3.7.15.17.20.24.27.28
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apophasis, denial, 11,30
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apophaskein, negated, 61,12
denies, 82,15
apophatikos, negative, 15,20; 16,6; 72,13; 79,24; 89,11.13.15; 95,13; 112,1
apophatikôs, negatively, 74,1; 85,1; 100,6
apopiptein, fall away, 74,12
apoplêroun, fill in, 93,31
aposeiein, shake off, 11,30
apoteinein, refer, 5,8
apotelein, complete, 2,7
apotelesma, product, 63,6.8.10
apotupoun (*apotupousthai*), to copy, 35,9
aprosdeês, self-sufficient, 3,26
aprosdioristos, undetermined, 90,2.6; 98,2.22; 110,22.27.28; 111,4.10.17.19.26.29.31; 117,5
apsukhos, inanimate, 25,24
ara, curse, 38,24
arakhnês, spider, 64,10
arakhnion, web, 64,10
ararotôs, definitely, 55,2
aratikos, imprecative, 2,27
arithmos, number, 65,17
arkhetupos, archetype, 43,15
arkhê, principle, 6,14; 7,17.18; 9,21; 65,23.26; 83,10
arkhikos, primitive, 24,25
ruling, 35,2
arkhoeidês, primitive, 55,19.23; 56,3
arnêsis, refusal, 11,30; 13,23
denial, 95,9; 97,17; 116,19; 117,20.22
negative, 41,30
arnêtikos, negative, 27,2; 42,9; 59,1; 67,26; 70,8; 87,8.14.19; 116,12; 117,18
arnêtikôs, negatively, 79,18
arrenikôs, masculine, 35,25.31
arrenothêlus, mascufeminine, 36,7
artêria, trachea, 25,2
artery, 30,11; 63,4
arthron, article, 10,8.10; 12,14.27;

13,5; 15,4; 50,18.29; 59,2.27; 97,9; 106,13
enarthros, articulate, 31,5
anarthros, inarticulate, 31,5
artios, even, 99,13
aruthmistos, unpatterned, 63,17
asêmos, without significance, 12,14
non-significant, 15,11
meaningless, 17,22.23; 30,20; 31,4.14.15.19; 59,4.7; 126,27,29
askein, attained, 1,11
askeptôs, thoughtlessly, 35,24
askopôs, in a purposeless manner, 31,18
unreflectively, 40,18
asômatos, incorporeal, 89,35
astraptein, be lightning, 28,16
asundetos, unconnected, 71,30; 75,4.10.11; 78,21.23
asundetôs, unconnectedly, 78,9.10.18
atelês, incomplete, 32,27; 68,23.26; 113,5; 115,30
to ateles, imperfect, 7,5; 17,8
athetein, athetize, 6,4
atomos, individual, 71,35; 89,5ff.
atreptos, unchanging, 89,35
atreptôs, unerringly, 38,30
aulos, flute, 30,14
autarkês, sufficient, 70,14.18; 71,32
autarkes hupolambanôn, he need only deal with, 83,16
autokinêtos, self-moving, 38,29.31; 63,23
autophuês,
autophuôs, their own nature, 65,32
autophuesteron, more naturally, 106,32
autoprosôpôs, *in propria persona*, 65,11
autotelês, complete, 3,16; 7,5; 44,14; 58,27; 62,11; 64,31; 68,14.16.17.19.22
autothen, immediately, 14,28; 70,20
by itself, 29,23; 32,6; 56,1
manifestly, 114,24
per se, 65,21; 117,9
ek tôn eirêmenôn, from what has been said, 4,17
axia, due, 38,32
axiôma, decision, 2,26
axiom, 9,21
homoion axiômati, quasi-decision, 2,32; 3,2

barunein, have no final acute accent, 113,34
barutonein, have no final acute, 113,35
belos, arrow, 20,13
blituri, blituri, 17,22; 30,19; 31,14
botrudon, bunchwise, 12,1
boulesthai, wanting, 33,31
have force, 61,34
boulêsis, will, 5,5
brakhulogia, brevity, 66,5
brakhus (*kata brakhu)*, briefly, 12,6
brontan, be thundering, 28,16.22
brotos, brotos, 38,11.14

deiktikos (*deiktikos an eiê*), would prove, 29,2
dein (*ta dedemena*), things bound, 13,4.5
dektikos, receptive, 2,23.35; 5,16; 107,9.13
dêlôtikos, reveal, 27,13
indicative, 29,23; 67,11
dêmeuein (*ta dedêmeumena*), popularized, 66,3
dêmiourgêma, product, 19,9; 34,23
dêmiourgos, craftsman, 35,26
desmos, bond, 13,3
deuteros, second, 68,5.8
posteriority, 72,11
deuterôs, secondarily, 73,17.34
dexios (*dexia tukhê*), good fortune, 35,4
diabebaioun (*diabebaioumenos*), assured, 11,21
diadokhos, successor, 1,8
diagnôsis (*pros diagnôsin)*, in order that one might see, 8,28
diagônios, diagonal, 92,32; 109,11.13
diagramma, figure, 7,21
diagram, 92,32; 109,12
diagraphein, segregated, 102,4
delete, 102,26
diairein, divide, 15,19; 26,20; 66,18
diairesis, division, 15,16; 26,19; 27,1.6.9.12.28; 29,19.21; 57,31; 88,31
divide, 1,18
diairetikos, dividing, 27,3

diaitein, arbitrate, 117,4
diakeisthai (*to diakeimenon*), that which is disposed, 71,19.20
diakosmos, order, 24,25
diakouein (*tôn logôn diakêkootes*), having heard, 111,7
diakrinein, to separate, 71,17; 78,22
distinguish, 72,5; 127,20
diakrisis, division, 12,4
distinction, 72,31
pros diakrisin, distinguish, 7,5; 33,13; 106,24; exclude, 32,3; in contrast, 59,29; as opposed to, 85,25
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dialektos, language, 13,9; 20,17; 24,33; 25,5.8; 30,15; 31,6; 63,4; 64,28
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diagonally, 100,22
diamorphôsis, formation, 25,3
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dianoêtikos, thinking, 63,30
dianoia, thought, 5,4; 55,1.4.5; 62,11; 63,18; 64,32; 83,13; 85,32
dianomê, distribution, 102,28
diapherein, make a difference, 5,22
diapherontôs, especially, 83,11
diaphônein, disagree, 82,18
be at odds with, 94,13.22.24
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diaplattein, to form, 22,34
diaporthmeuein, cross over, 36,9
diarthrôsis, articulation, 69,10
diarthroun, organize, 18,23
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to einai, be, 14,20
ta ontôs onta, truly existent, 27,30
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eispherein, add, 1,7
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ekpuroun, consumed by fire, 39,2
ekteinein, extend, 6,23
ekthetikos, a positing, 2,31
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enargôs, obviously, 67,3.12
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eukhê, wish, 5,13.21; 42,15
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exairetos, exceptional, 63,22
exakouein, understand, 117,23.24; 121,3
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exisazein, be equal, 108,9.11.17.22
exorizein, rule out, 38,23
exôthen, outside, 67,1.23
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exuphainein, work out, 83,21

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gargareôn, uvula, 30,11
gê, earth, 36,11
gelastikos, able to laugh, 108,10ff.
genesis, origin, 2,4
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glukutês, sweetness, 66,5
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gnôsis, understanding, 2,2
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gnôstikos, intellectual, 5,2
intellective, 63,20
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gomphos, bolt, 12,25.28
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grammateus, secretary, 46,30
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hoi tên grammatikên metiontes tekhnên, those who pursue the art of grammar, 43,4
graphein, (*en tôi graphesthai*), in the writing, 22,15
ta graphomena, what is written, 23,11.14.18
gegraphotos, written, 46,32
grapheion, stylus, 43,12
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hexis, dispositions, 94,4.6
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ho, hê, to, the, 45,32; 51,19
hodeuein, to move, 17,9
holoklêros, complete, 78,20
holikos, general, 17,1.7; 103,26
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holotês, whole, 33,26
  totality, 60,7; 62,7
homoeidês, same species, 97,5
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homoiotês, resemblance, 38,6
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hormê, impulse, 30,12
horos, definition, 7,20
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hôsper, so to speak, 18,29
hudôr, water, 36,19
huein, be raining, 28,16.22.25
hugeia, health, 49,19
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huperteinein, exceed, 108,22
hupnos, dream, 6,11
hupodeiknunai, represent, 63,12
hupodokhê, receptacle, 35,26
hupographê, description, 80,15
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  underlie, 88,26
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hupopsia, suspect, 98,36
hupopteuein, suppose, 13,22
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hupostathmê, foundation, 21,29
hupostizein, punctuate, 118,1
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have equal force, 111,31
isosthenein, be equivalent, 117,15

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kanôn, rule, 68,4
karpos, fruit, 10,3
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katadeês, deficient, 16,32
katalêpsis, comprehension, 2,3
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