

ΤΟΠΙΚΩΝ

Α

100 a 18 I. Ἡ μὲν πρόθεσις τῆς πραγματείας μέθοδον
εὐρεῖν, ἀφ' ἧς δυνησόμεθα συλλογίζεσθαι περὶ παν-
20 τὸς τοῦ προτεθέντος προβλήματος ἐξ ἐνδόξων, καὶ
αὐτοὶ λόγον ὑπέχοντες μηθὲν ἐροῦμεν ὑπεναντίον.
πρῶτον οὖν ῥητέον τί ἐστι συλλογισμὸς καὶ τίνες
αὐτοῦ διαφοραί, ὅπως ληφθῇ ὁ διαλεκτικὸς συλ-
λογισμὸς. τοῦτον γὰρ ζητοῦμεν κατὰ τὴν προκει-
μένην πραγματείαν.

25 "Ἐστι δὴ συλλογισμὸς λόγος ἐν ᾧ τεθέντων τινῶν
ἕτερόν τι τῶν κειμένων ἐξ ἀνάγκης συμβαίνει διὰ
τῶν κειμένων. ἀπόδειξις μὲν οὖν ἐστίν, ὅταν ἐξ
ἀληθῶν καὶ πρώτων ὁ συλλογισμὸς ᾗ, ἢ ἐκ τοιού-
των ἃ διὰ τινων πρώτων καὶ ἀληθῶν τῆς περὶ αὐτὰ

30 γνώσεως τὴν ἀρχὴν εἴληφεν· διαλεκτικὸς δὲ συλ-
100 b 18 λογισμὸς ὁ ἐξ ἐνδόξων συλλογιζόμενος. ἔστι δὲ
ἀληθὴ μὲν καὶ πρῶτα τὰ μὴ δι' ἐτέρων ἀλλὰ δι'
αὐτῶν ἔχοντα τὴν πίστιν· οὐ δεῖ γὰρ ἐν ταῖς
20 ἐπιστημονικαῖς ἀρχαῖς ἐπιζητεῖσθαι τὸ διὰ τί,
ἀλλ' ἐκάστην τῶν ἀρχῶν αὐτὴν καθ' ἑαυτὴν εἶναι
πιστήν. ἔνδοξα δὲ τὰ δοκοῦντα πᾶσιν ἢ τοῖς πλεί-
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TOPICA

BOOK I

I. THE purpose of the present treatise is to discover a method by which we shall be able to reason from generally accepted opinions about any problem set before us and shall ourselves, when sustaining an argument, avoid saying anything self-contradictory. First, then, we must say what reasoning is and what different kinds of it there are, in order that dialectical reasoning may be apprehended; for it is the search for this that we are undertaking in the treatise which lies before us.

INTRODUCTION
(I. 1-3).
The design
of the
treatise.

Reasoning is a discussion in which, certain things having been laid down, something other than these things necessarily results through them. Reasoning is *demonstration* when it proceeds from premises which are true and primary or of such a kind that we have derived our original knowledge of them through premises which are primary and true. Reasoning is *dialectical* which reasons from generally accepted opinions. Things are true and primary which command belief through themselves and not through anything else; for regarding the first principles of science it is unnecessary to ask any further question as to 'why,' but each principle should of itself command belief. Generally accepted opinions, on the other hand, are those which commend themselves

The different
kinds
of reason-
ing:

(a) De-
monstra-
tive.

(b) Dia-
lectical.

100 b

- στοις ἢ τοῖς σοφοῖς, καὶ τούτοις ἢ πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς μάλιστα γνωρίμοις καὶ ἐνδόξοις. ἐριστικὸς δ' ἐστὶ συλλογισμὸς ὁ ἐκ φαινομένων
- 25 ἐνδόξων, μὴ ὄντων δέ, καὶ ὁ ἐξ ἐνδόξων ἢ φαινομένων ἐνδόξων φαινόμενος. οὐ γὰρ πᾶν τὸ φαινόμενον ἐνδοξον καὶ ἔστιν ἐνδοξον. οὐθὲν γὰρ τῶν λεγομένων ἐνδόξων ἐπιπόλαιον ἔχει παντελῶς τὴν φαντασίαν, καθὰ περὶ τὰς τῶν ἐριστικῶν λόγων ἀρχὰς συμβέβηκεν ἔχειν· παραχρῆμα γὰρ καὶ ὥς
- 30 ἐπὶ τὸ πολὺ τοῖς καὶ μικρὰ συνορᾶν δυναμένοις
- 101 a κατὰδηλος ἐν αὐτοῖς ἡ τοῦ ψεύδους ἐστὶ φύσις. ὁ μὲν οὖν πρότερος τῶν ῥηθέντων ἐριστικῶν συλλογισμῶν καὶ συλλογισμὸς λεγέσθω, ὁ δὲ λοιπὸς ἐριστικὸς μὲν συλλογισμὸς, συλλογισμὸς δ' οὐ, ἐπειδὴ φαίνεται μὲν συλλογίζεσθαι, συλλογίζεται δ' οὐ.
- 5 Ἔτι δὲ παρὰ τοὺς εἰρημένους ἅπαντας συλλογισμοὺς οἱ ἐκ τῶν περὶ τινὰς ἐπιστήμας οἰκείων γινόμενοι παραλογισμοί, καθάπερ ἐπὶ τῆς γεωμετρίας καὶ τῶν ταύτῃ συγγενῶν συμβέβηκεν ἔχειν. ἔοικε γὰρ ὁ τρόπος οὗτος διαφέρειν τῶν εἰρημένων συλ-
- 10 λογισμῶν· οὔτε γὰρ ἐξ ἀληθῶν καὶ πρώτων συλλογίζεται ὁ ψευδογραφῶν, οὔτ' ἐξ ἐνδόξων. εἰς γὰρ τὸν ὅρον οὐκ ἐμπίπτει· οὔτε γὰρ τὰ πᾶσι δοκοῦντα λαμβάνει οὔτε τὰ τοῖς πλείστοις οὔτε τὰ τοῖς σοφοῖς, καὶ τούτοις οὔτε τὰ πᾶσιν οὔτε τοῖς πλείστοις οὔτε τοῖς ἐνδοξοτάτοις, ἀλλ' ἐκ τῶν οἰκείων μὲν τῇ
- 15 ἐπιστήμῃ λημμάτων, οὐκ ἀληθῶν δὲ τὸν συλλογισμόν ποιεῖται. τῷ γὰρ ἢ τὰ ἡμικύκλια περιγρά-

TOPICA, I. 1

to all or to the majority or to the wise—that is, to all of the wise or to the majority or to the most famous and distinguished of them. Reasoning is *contentious* (c) Contentious, if it is based on opinions which appear to be generally accepted but are not really so, or if it merely appears to be based on opinions which are, or appear to be, generally accepted. For not every opinion which appears to be generally accepted is actually so accepted. For in none of the so-called generally accepted opinions is the illusory appearance entirely manifest, as happens in the case of the principles of contentious arguments; for usually the nature of untruth in these is immediately obvious to those who have even a small power of comprehension. Therefore, of the above-mentioned contentious reasonings the former should actually be called reasoning, but the other should be called, not reasoning, but contentious reasoning, because it appears to reason but does not really do so.

Furthermore, besides all the above-mentioned reasonings, there are false reasonings based on premises peculiar to certain sciences, as happens in geometry and the sciences kindred to it. For this kind seems to differ from the reasonings already mentioned; for the man who constructs a false figure reasons neither from true and primary premises nor from generally accepted opinions; for he does not fall within the definition, since he does not take as his premises either universally accepted opinions or those which commend themselves to the majority or to the wise—that is to all of the wise or to the majority or to the most distinguished of them,—but his process of reasoning is based on assumptions which are peculiar to the science but not true; for he reasons

False reasonings.

101 a

φειν μὴ ὡς δεῖ, ἢ γραμμάς τινας ἄγειν μὴ ὡς ἂν ἀχθείησαν, τὸν παραλογισμὸν ποιεῖται.

Εἶδη μὲν οὖν τῶν συλλογισμῶν, ὡς τύπῳ περιλαβεῖν, ἔστω τὰ εἰρημένα. καθόλου δ' εἰπεῖν
 20 περὶ πάντων τῶν εἰρημένων καὶ τῶν μετὰ ταῦτα ῥηθησομένων, ἐπὶ τοσοῦτον ἡμῖν διωρίσθω, διότι περὶ οὐδενὸς αὐτῶν τὸν ἀκριβῆ λόγον ἀποδοῦναι προαιρούμεθα, ἀλλ' ὅσον τύπῳ περὶ αὐτῶν βουλόμεθα διελθεῖν, παντελῶς ἱκανὸν ἡγούμενοι κατὰ τὴν προκειμένην μέθοδον τὸ δύνασθαι γνωρί-
 ζειν ὅπως οὖν ἕκαστον αὐτῶν.

25 II. Ἐπόμενον δ' ἂν εἴη τοῖς εἰρημένοις εἰπεῖν πρὸς πόσα τε καὶ τίνα χρήσιμος ἢ πραγματεία. ἔστι δὴ πρὸς τρία, πρὸς γυμνασίαν, πρὸς τὰς ἐντεύξεις, πρὸς τὰς κατὰ φιλοσοφίαν ἐπιστήμας. ὅτι μὲν οὖν πρὸς γυμνασίαν χρήσιμος, ἐξ αὐτῶν
 30 καταφανές ἐστι· μέθοδον γὰρ ἔχοντες ῥᾶον περὶ τοῦ προτεθέντος ἐπιχειρεῖν δυνησόμεθα. πρὸς δὲ τὰς ἐντεύξεις, διότι τὰς τῶν πολλῶν κατηριθμημένοι δόξας οὐκ ἐκ τῶν ἀλλοτρίων ἀλλ' ἐκ τῶν οἰκείων δογμάτων ὁμιλήσομεν πρὸς αὐτοὺς, μεταβιβάζοντες ὅ τι ἂν μὴ καλῶς φαίνωνται λέγειν ἡμῖν.
 35 πρὸς δὲ τὰς κατὰ φιλοσοφίαν ἐπιστήμας, ὅτι δυνάμενοι πρὸς ἀμφοτέρω διαπορῆσαι ῥᾶον ἐν ἐκάστοις κατοψόμεθα τἀληθές τε καὶ τὸ ψεῦδος. ἔτι δὲ πρὸς τὰ πρῶτα τῶν περὶ ἐκάστην ἐπιστήμην [ἀρχῶν]¹. ἐκ μὲν γὰρ τῶν οἰκείων τῶν κατὰ τὴν προτεθείσαν ἐπιστήμην ἀρχῶν ἀδύνατον εἰπεῖν τι περὶ αὐτῶν,
 101 b ἐπειδὴ πρῶται αἱ ἀρχαὶ ἀπάντων εἰσὶ, διὰ δὲ τῶν περὶ ἕκαστα ἐνδόξων ἀνάγκη περὶ αὐτῶν διελθεῖν. τοῦτο δ' ἴδιον ἢ μάλιστα οἰκείον τῆς διαλεκτικῆς

¹ Omitting ἀρχῶν with B corr. and C.

TOPICA, I. I-II

falsely either by describing the semicircles improperly or by drawing lines as they should not be drawn.

Let the above then be a description in outline of the different kinds of reasoning. In general, as regards all those already mentioned and to be mentioned hereafter, let this much distinction suffice for us, since we do not propose to give the exact definition of any of them but merely wish to describe them in outline, considering it quite enough, in accordance with the method which we have set before us, to be able to recognize each of them in some way or other.

II. After the above remarks the next point is to explain for how many and for what purposes this treatise is useful. They are three in number, mental training, conversations and the philosophic sciences. That it is useful for mental training is obvious on the face of it ; for, if we have a method, we shall be able more easily to argue about the subject proposed. It is useful for conversations, because, having enumerated the opinions of the majority, we shall be dealing with people on the basis of their own opinions, not of those of others, changing the course of any argument which they appear to us to be using wrongly. For the philosophic sciences it is useful, because, if we are able to raise difficulties on both sides, we shall more easily discern both truth and falsehood on every point. Further, it is useful in connexion with the ultimate bases of each science ; for it is impossible to discuss them at all on the basis of the principles peculiar to the science in question, since the principles are primary in relation to everything else, and it is necessary to deal with them through the generally accepted opinions on each point. This process belongs peculiarly, or most appropriately to dialectic ;

The uses
of the
treatise.

101 b

ἐστίν· ἐξεταστικὴ γὰρ οὖσα πρὸς τὰς ἀπασῶν τῶν μεθόδων ἀρχὰς ὁδὸν ἔχει.

5 III. Ἐξομεν δὲ τελέως τὴν μέθοδον, ὅταν ὁμοίως ἔχωμεν ὥσπερ ἐπὶ ῥητορικῆς καὶ ἱατρικῆς καὶ τῶν τοιούτων δυνάμεων. τοῦτο δ' ἐστὶ τὸ ἐκ τῶν ἐνδεχομένων ποιεῖν ἃ προαιρούμεθα. οὔτε γὰρ ὁ ῥητορικὸς ἐκ παντὸς τρόπου πείσει, οὔθ' ὁ ἱατρικὸς ὑγιάσει· ἀλλ' ἐὰν τῶν ἐνδεχομένων μηδὲν παρα-
10 λείπη, ἱκανῶς αὐτὸν ἔχειν τὴν ἐπιστήμην φήσομεν.

IV. Πρῶτον οὖν θεωρητέον ἐκ τίνων ἡ μέθοδος. εἰ δὴ λάβοιμεν πρὸς πόσα καὶ ποῖα καὶ ἐκ τίνων οἱ λόγοι, καὶ πῶς τούτων εὐπορήσομεν, ἔχοιμεν ἂν ἱκανῶς τὸ προκείμενον. ἔστι δ' ἀριθμῶ ἴσα καὶ
15 ταῦτά, ἐξ ὧν τε οἱ λόγοι καὶ περὶ ὧν οἱ συλλογισμοί. γίνονται μὲν γὰρ οἱ λόγοι ἐκ τῶν προτάσεων· περὶ ὧν δὲ οἱ συλλογισμοί, τὰ προβλήματα ἐστί. πᾶσα δὲ πρότασις καὶ πᾶν πρόβλημα ἢ γένος ἢ ἴδιον ἢ συμβεβηκὸς δηλοῖ· καὶ γὰρ τὴν διαφορὰν ὥς οὖσαν γενικὴν ὁμοῦ τῷ γένει τακτέον. ἐπεὶ δὲ
20 τοῦ ἰδίου τὸ μὲν τὸ τί ἦν εἶναι σημαίνει, τὸ δ' οὐ σημαίνει, διηρήσθω τὸ ἴδιον εἰς ἄμφω τὰ προειρημένα μέρη, καὶ καλείσθω τὸ μὲν τὸ τί ἦν εἶναι σημαῖνον ὅρος, τὸ δὲ λοιπὸν κατὰ τὴν κοινὴν περὶ αὐτῶν ἀποδοθεῖσαν ὀνομασίαν προσαγορευέσθω ἴδιον. δῆλον οὖν ἐκ τῶν εἰρημένων ὅτι κατὰ τὴν
25 νῦν διαίρεσιν τέτταρα τὰ πάντα συμβαίνει γίνεσθαι,

TOPICA, I. II-IV

for, being of the nature of an investigation, it lies along the path to the principles of all methods of inquiry.

III. We shall possess the method completely when we are in a position similar to that in which we are with regard to rhetoric and medicine and other such faculties ; that is to say, when we carry out our purpose with every available means. For neither will the rhetorician seek to persuade nor the physician to heal by every expedient ; but if he omits none of the available means, we shall say that he possesses the science in an adequate degree.

IV. We must, then, first consider on what bases our method rests ; for if we could grasp to how many and to what kind of objects our arguments are directed and on what bases they rest, and how we are to be well provided with these, we should sufficiently attain the end which is set before us. Now the bases of arguments are equal in number and identical with the subjects of reasonings. For arguments arise from 'propositions,' while the subjects of reasonings are 'problems.' Now every proposition and every problem indicates either a genus or a peculiarity or an accident ; for the differentia also, being generic in character, should be ranged with the genus. But since part of the peculiarity indicates the essence and part does not do so, let the peculiarity be divided into the two above-mentioned parts and let that which indicates the essence be called a 'definition,' and let the remaining part be termed a 'property' in accordance with the nomenclature usually assigned in these cases. It is clear therefore, from what has been said, that, as a result of the division just made, there are four alternatives in all, either property or

The limitations of the proposed method.

SUBJECTS
AND
MATERIALS
OF DISCUSSION
(I. 4-12).

Propositions and Problems.

101 b

ἢ ἴδιον ἢ ὅρον ἢ γένος ἢ συμβεβηκός. μηδεὶς δ' ἡμᾶς ὑπολάβη λέγειν ὡς ἕκαστον τούτων καθ' αὐτὸ λεγόμενον πρότασις ἢ πρόβλημά ἐστιν, ἀλλ' ὅτι ἀπὸ τούτων καὶ τὰ προβλήματα καὶ αἱ προτάσεις γίνονται. διαφέρει δὲ τὸ πρόβλημα καὶ ἡ πρότασις
 30 τῷ τρόπῳ. οὕτω μὲν γὰρ ῥηθέντος, ἀρά γε τὸ ζῶον πεζὸν δίπουν ὀρισμός ἐστιν ἀνθρώπου; καὶ ἀρά γε τὸ ζῶον γένος ἐστὶ τοῦ ἀνθρώπου; πρότασις γίνεται. ἐὰν δέ, πότερον τὸ ζῶον πεζὸν δίπουν ὀρισμός ἐστιν ἀνθρώπου ἢ οὐ; [καὶ πότερον τὸ ζῶον γένος ἐστίν;],¹ πρόβλημα γίνεται. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ὥστ' εἰκότως ἴσα τῷ
 35 ἀριθμῷ τὰ προβλήματα καὶ αἱ προτάσεις εἰσίν. ἀπὸ πάσης γὰρ προτάσεως πρόβλημα ποιήσεις μεταβάλλων τῷ τρόπῳ.

V. Λεκτέον δὲ τί ὅρος, τί ἴδιον, τί γένος, τί συμβεβηκός. ἔστι δ' ὅρος μὲν λόγος ὁ τὸ τί ἦν εἶναι
 102 a σημαίνων. ἀποδίδεται δὲ ἡ λόγος ἀντ' ὀνόματος ἡ λόγος ἀντὶ λόγου· δυνατὸν γὰρ καὶ τῶν ὑπὸ λόγου τινὰ σημαινόμενων ὀρίσασθαι. ὅσοι δ' ὅπως οὖν ὀνόματι τὴν ἀπόδοσιν ποιοῦνται, δηλὸν ὡς οὐκ ἀποδιδόασιν οὗτοι τὸν τοῦ πράγματος ὀρισμόν,
 5 ἐπειδὴ πᾶς ὀρισμὸς λόγος τίς ἐστιν. ὀρικὸν μέντοι καὶ τὸ τοιοῦτον θετέον, οἷον ὅτι καλὸν ἐστὶ τὸ πρέπον. ὁμοίως δὲ καὶ τὸ πότερον ταῦτὸν αἰσθησις καὶ ἐπιστήμη ἢ ἕτερον· καὶ γὰρ περὶ τοὺς ὀρισμούς, πότερον ταῦτὸν ἢ ἕτερον, ἡ πλείστη γίνεται διατριβή. ἀπλῶς δὲ ὀρικὰ πάντα λεγέσθω τὰ ὑπὸ τὴν
 10 αὐτὴν ὄντα μέθοδον τοῖς ὀρισμοῖς. ὅτι δὲ πάντα

¹ Omitting καὶ πότερον . . . ἐστίν; with A B.

definition or genus or accident. But let no one suppose that we mean that each of these stated by itself is a proposition or a problem, but only that problems and propositions are made up of these. The problem and the proposition differ in the way in which they are stated. If we say, "Is not 'pedestrian biped animal' a definition of man?" or "Is not 'animal' the genus of man?" a proposition is formed. But if we say, "Is 'pedestrian biped animal' a definition of man, or not?" a problem is formed. Similarly too with the other cases. It naturally follows, therefore, that the problems and the propositions are equal in number; for you will be able to make a problem out of any proposition by altering the way in which it is stated.

V. We must next say what definition, property, genus and accident are. A *definition* is a phrase indicating the essence of something. The definition is asserted either as a phrase used in place of a term, or as a phrase used in place of a phrase; for it is possible to define some things also which are indicated by a phrase. But it is obvious that everyone who makes an assertion by means of a term in any way whatever, does not assert the definition of the thing, because every definition is a phrase of a certain kind. However, such a statement as "That which is seemly is beautiful" must also be put down as being 'definitory,' and likewise the question "Are sensation and knowledge the same thing or different?" For when we are dealing with definitions, we spend most of our time discussing whether things are the same or different. In a word, let us call 'definitory' everything which comes under the same kind of inquiry as do definitions; and it is self-evident that all the above-

*The four
predicables:
(a) Definition.*

102 a

τὰ νῦν ῥηθέντα τοιαῦτ' ἐστί, δῆλον ἐξ αὐτῶν.
 δυνάμενοι γὰρ ὅτι ταῦτόν καὶ ὅτι ἕτερον διαλέγε-
 σθαι, τῷ αὐτῷ τρόπῳ καὶ πρὸς τοὺς ὁρισμοὺς ἐπι-
 χειρεῖν εὐπορήσομεν· δείξαντες γὰρ ὅτι οὐ ταῦτόν
 ἐστὶν ἀνηρηκότες ἐσόμεθα τὸν ὁρισμόν. οὐ μὴν
 15 ἀντιστρέφει γε τὸ νῦν ῥηθέν· οὐ γὰρ ἱκανὸν πρὸς
 τὸ κατασκευάσαι τὸν ὁρισμόν τὸ δεῖξαι ταῦτόν ὄν.
 πρὸς μέντοι τὸ ἀνασκευάσαι αὐταρκες τὸ δεῖξαι
 ὅτι οὐ ταῦτόν.

Ἴδιον δ' ἐστὶν ὃ μὴ δηλοῖ μὲν τὸ τί ἦν εἶναι, μόνῳ
 δ' ὑπάρχει καὶ ἀντικατηγορεῖται τοῦ πράγματος,
 20 οἷον ἴδιον ἀνθρώπου τὸ γραμματικῆς εἶναι δεκτικόν·
 εἰ γὰρ ἀνθρωπός ἐστι, γραμματικῆς δεκτικός ἐστι,
 καὶ εἰ γραμματικῆς δεκτικός ἐστίν, ἀνθρωπός ἐστιν.
 οὐθεὶς γὰρ ἴδιον λέγει τὸ ἐνδεχόμενον ἄλλῳ ὑπ-
 ἄρχειν, οἷον τὸ καθεύδειν ἀνθρώπῳ, οὐδ' ἂν τύχη
 25 κατὰ τινα χρόνον μόνῳ ὑπάρχον. εἰ δ' ἄρα τι καὶ
 λέγοιτο τῶν τοιούτων ἴδιον, οὐχ ἀπλῶς ἀλλὰ ποτέ
 ἢ πρὸς τι ἴδιον ῥηθήσεται· τὸ μὲν γὰρ ἐκ δεξιῶν
 εἶναι ποτέ ἴδιόν ἐστι, τὸ δὲ δίπουν πρὸς τι ἴδιον
 τυγχάνει λεγόμενον, οἷον τῷ ἀνθρώπῳ πρὸς ἵππον
 καὶ κύνα. ὅτι δὲ τῶν ἐνδεχομένων ἄλλῳ ὑπάρχειν
 30 οὐθὲν ἀντικατηγορεῖται, δῆλον· οὐ γὰρ ἀναγκαῖον,
 εἴ τι καθεύδει, ἀνθρωπον εἶναι.

Γένος δ' ἐστὶ τὸ κατὰ πλείονων καὶ διαφερόντων

TOPICA, I. v

mentioned instances are of this kind. For when we can argue that things are the same or that they are different, we shall by the same method have an abundance of arguments for dealing with definitions also ; for when we have shown that a thing is not the same as another we shall have destroyed the definition. The converse of what we have just said does not, however, hold good ; for it is not enough for the construction of a definition to show that one thing is the same as another ; but, in order to destroy a definition, it is enough to show that it is not the same.

A *property* is something which does not show the essence of a thing but belongs to it alone and is predicated convertibly of it. For example, it is a property of man to be capable of learning grammar ; for if a certain being is a man, he is capable of learning grammar, and if he is capable of learning grammar, he is a man. For no one calls anything a property which can possibly belong to something else ; for example, he does not say that sleep is a property of man, even though at one moment it might happen to belong to him only. If, therefore, any such thing were to be called a property, it will be so called not absolutely but as at a certain time or in a certain relation ; for ' to be on the right-hand side ' is a property at a certain time, and ' biped ' is actually assigned as a property in a certain relation, for example, as a property of man in relation to a horse or a dog. That nothing which can possibly belong to something other than a certain thing is a convertible predicate of that thing is obvious ; for it does not necessarily follow that if anything is sleeping it is a man.

(b) Property.

A *genus* is that which is predicated in the category (c) Genus.

- 102 a τῷ εἶδει ἐν τῷ τί ἐστι κατηγορούμενον. ἐν τῷ τί
ἐστι δὲ κατηγορεῖσθαι τὰ τοιαῦτα λεγέσθω, ὅσα
ἀρμόττει ἀποδοῦναι ἐρωτηθέντα τί ἐστι τὸ προκεί-
35 μενον, καθάπερ ἐπὶ τοῦ ἀνθρώπου ἀρμόττει, ἐρωτη-
θέντα τί ἐστι τὸ προκείμενον, εἰπεῖν ὅτι ζῶον.
γενικὸν δὲ καὶ τὸ πότερον ἐν τῷ αὐτῷ γένει ἄλλο
ἄλλῳ ἢ ἐν ἑτέρῳ. καὶ γὰρ τὸ τοιοῦτον ὑπὸ τὴν
αὐτὴν μέθοδον πίπτει τῷ γένει· διαλεχθέντες γὰρ ὅτι
τὸ ζῶον γένος τοῦ ἀνθρώπου, ὁμοίως δὲ καὶ τοῦ
βοός, διειλεγμένοι ἐσόμεθα ὅτι ἐν τῷ αὐτῷ γένει.
- 102 b ἐὰν δὲ τοῦ μὲν ἑτέρου δείξωμεν ὅτι γένος ἐστί, τοῦ
δὲ ἑτέρου ὅτι οὐκ ἔστι, διειλεγμένοι ἐσόμεθα ὅτι
οὐκ ἐν τῷ αὐτῷ γένει ταῦτ' ἐστίν.

Συμβεβηκὸς δὲ ἐστίν ὁ μηδὲν μὲν τούτων ἐστί,
5 μήτε ὅρος μήτε ἴδιον μήτε γένος, ὑπάρχει δὲ τῷ
πράγματι, καὶ ὁ ἐνδέχεται ὑπάρχειν ὅπως ἐνὶ καὶ
τῷ αὐτῷ καὶ μὴ ὑπάρχειν, οἷον τὸ καθῆσθαι ἐν-
δέχεται ὑπάρχειν τινὶ τῷ αὐτῷ καὶ μὴ ὑπάρχειν.
ὁμοίως δὲ καὶ τὸ λευκόν· τὸ γὰρ αὐτὸ οὐθὲν κωλύει
10 ὅτε μὲν λευκὸν ὅτε δὲ μὴ λευκὸν εἶναι. ἔστι δὲ
τῶν τοῦ συμβεβηκότος ὀρισμῶν ὁ δεύτερος βελ-
τίων· τοῦ μὲν γὰρ πρώτου ῥηθέντος ἀναγκαῖον, εἰ
μέλλει τις συνήσειν, προειδέναί τί ἐστίν ὅρος καὶ
γένος καὶ ἴδιον, ὁ δὲ δεύτερος αὐτοτελής ἐστι πρὸς
τὸ γνωρίζειν τί ποτ' ἐστὶ τὸ λεγόμενον καθ' αὐτό.

15 προσκείσθωσαν δὲ τῷ συμβεβηκότι καὶ αἱ πρὸς
ἄλληλα συγκρίσεις, ὅπως οὖν ἀπὸ τοῦ συμβεβηκότος
λεγόμεναι, οἷον πότερον τὸ καλὸν ἢ τὸ συμφέρον

TOPICA, I. v

of essence of several things which differ in kind. Predicates in the category of essence may be described as such things as are fittingly contained in the reply of one who has been asked "What is the object before you?" For example, in the case of man, if someone is asked what the object before him is, it is fitting for him to say "An animal." The question whether one thing is in the same genus as another thing or in a different one, is also a 'generic' question; for such a question also falls under the same kind of inquiry as the genus. For having argued that 'animal' is the genus of man and likewise also of ox, we shall have argued that they are in the same genus; but if we show that it is the genus of the one but not of the other, we shall have argued that they are not in the same genus.

An *accident* is that which is none of these things—neither definition, nor property, nor genus—but still belongs to the thing. Also it is something which can belong and not belong to any one particular thing; for example, 'a sitting position' can belong or not belong to some one particular thing. This is likewise true of 'whiteness'; for there is nothing to prevent the same thing being at one time white and at another not white. The second of these definitions of accident is the better; for when the first is enunciated, it is necessary, if one is to understand it, to know beforehand what is meant by 'definition' and 'genus' and 'property,' whereas the second suffices of itself to enable us to know what is meant without anything more. We may place also in the category of accident comparisons of things with one another, when they are described in terms derived in any way from accident; for example, the questions "Is the honour-

(d) Accident.

102 b

αἰρετώτερον, καὶ πότερον ὁ κατ' ἀρετὴν ἢ ὁ κατ'
 ἀπόλαυσιν ἡδίων βίος, καὶ εἴ τι ἄλλο παραπλησίως
 τυγχάνει τούτοις λεγόμενον· ἐπὶ πάντων γὰρ τῶν
 20 τοιούτων, ποτέρῳ μᾶλλον τὸ κατηγορούμενον συμ-
 βέβηκεν, ἢ ζήτησις γίνεται. δῆλον δ' ἐξ αὐτῶν
 ὅτι τὸ συμβεβηκὸς οὐθὲν κωλύει ποτὲ καὶ πρὸς τι
 ἴδιον γίνεσθαι, οἷον τὸ καθῆσθαι συμβεβηκὸς ὄν,
 ὅταν τις μόνος κάθηται, τότε ἴδιον ἔσται, μὴ μόνου
 δὲ καθημένου πρὸς τοὺς μὴ καθημένους ἴδιον.
 25 ὥστε καὶ πρὸς τι καὶ ποτὲ οὐθὲν κωλύει τὸ συμ-
 βεβηκὸς ἴδιον γίνεσθαι· ἀπλῶς δ' ἴδιον οὐκ ἔσται.

VI. Μὴ λανθανέτω δ' ἡμᾶς ὅτι τὰ πρὸς τὸ ἴδιον
 καὶ τὸ γένος καὶ τὸ συμβεβηκὸς πάντα καὶ πρὸς
 τοὺς ὁρισμοὺς ἀρμόσει λέγεσθαι. δείξαντες γὰρ
 30 ὅτι οὐ μόνῳ ὑπάρχει τῷ ὑπὸ τὸν ὁρισμόν, ὥσπερ
 καὶ ἐπὶ τοῦ ιδίου, ἢ ὅτι οὐ γένος τὸ ἀποδοθὲν
 ἐν τῷ ὁρισμῷ, ἢ ὅτι οὐχ ὑπάρχει τι τῶν ἐν τῷ
 λόγῳ ῥηθέντων, ὅπερ καὶ ἐπὶ τοῦ συμβεβηκότος
 ἂν ῥηθείη, ἀνηρηκότες ἐσόμεθα τὸν ὁρισμόν· ὥστε
 35 κατὰ τὸν ἔμπροσθεν ἀποδοθέντα λόγον ἅπαντ' ἂν
 εἴη τρόπον τινὰ ὁρικὰ τὰ κατηριθμημένα. ἀλλ' οὐ
 διὰ τοῦτο μίαν ἐπὶ πάντων καθόλου μέθοδον ζητη-
 τέον· οὔτε γὰρ ῥάδιον εὔρεῖν τοῦτ' ἐστίν, εἴ θ'
 εὔρεθείη, παντελῶς ἀσαφὴς καὶ δύσχρηστος ἂν εἴη
 πρὸς τὴν προκειμένην πραγματείαν. ιδίας δὲ καθ'

able or the expedient preferable ? ” and “ Is the life of virtue or the life of enjoyment more pleasant ? ” and any other question which happens to be expressed in a similar kind of way ; for in all such cases the question is to which of the two does the predicate more properly belong as an accident. It is self-evident that nothing prevents the accident from being temporarily or relatively a property ; for example, the position of sitting, though it is an accident, will at the time be a property, when a man is the only person seated, while, if he is not the only person seated, it will be a property in relation to any persons who are not seated. Thus nothing prevents the accident from becoming both a relative and a temporary property, but it will never be a property absolutely.

VI. We must not, however, omit to notice that everything which is applicable to property, genus and accident can be fittingly applied to definitions also. For when we have shown that some attribute does not belong to the subject of the definition only (as we do also in the case of a property), or that what is assigned in the definition is not the true genus of the subject, or that something mentioned in the statement does not belong (as would also be asserted in the case of an accident), we shall have destroyed the definition ; and so, in accordance with the statement made above, all the cases which have been enumerated would be in a sense ‘ definitory.’ But we must not for this reason seek for a single method of inquiry which is generally applicable to all of them ; for it is not easy to discover, and if it were to be discovered, it would be wholly obscure and difficult to apply to our present treatise. If, however, a special method

How far can the predi-
cables be
treated
separately ?

102 b ἕκαστον τῶν διορισθέντων γενῶν ἀποδοθείσης μεθ-
 103 a ὁδοῦ ῥᾶον ἐκ τῶν περὶ ἕκαστον οἰκείων ἢ διέξ-
 οδος τοῦ προκειμένου γένοιτ' ἂν. ὥστε τύπῳ
 μέν, καθάπερ εἴρηται πρότερον, διαιρετέον, τῶν δὲ
 λοιπῶν τὰ μάλισθ' ἐκάστοις οἰκεῖα προσαπτέον,
 ὀρικά τε καὶ γενικὰ προσαγορεύοντας αὐτά. σχε-
 5 δὸν δὲ προσήπται τὰ ῥηθέντα πρὸς ἐκάστοις.

VII. Πρῶτον δὲ πάντων περὶ ταυτοῦ διοριστέον,
 ποσαχῶς λέγεται. δόξειε δ' ἂν τὸ ταῦτόν ὡς τύπῳ
 λαβεῖν τριχῇ διαιρεῖσθαι. ἀριθμῷ γὰρ ἢ εἶδει ἢ
 γένει τὸ ταῦτόν εἰώθαμεν προσαγορεύειν, ἀριθμῷ
 10 μὲν ὧν ὀνόματα πλείω τὸ δὲ πρᾶγμα ἔν, οἷον
 λῶπιον καὶ ἱμάτιον, εἶδει δὲ ὅσα πλείω ὄντα ἀδιά-
 φορα κατὰ τὸ εἶδος ἐστι, καθάπερ ἄνθρωπος ἄν-
 θρώπῳ καὶ ἵππος ἵππῳ· τὰ γὰρ τοιαῦτα τῷ εἶδει
 λέγεται ταῦτά, ὅσα ὑπὸ ταῦτό εἶδος. ὁμοίως δὲ
 καὶ γένει ταῦτά, ὅσα ὑπὸ ταῦτό γένος ἐστίν, οἷον
 15 ἵππος ἀνθρώπῳ. δόξειε δ' ἂν τὸ ἀπὸ τῆς αὐτῆς
 κρήνης ὕδωρ ταῦτόν λεγόμενον ἔχειν τινὰ διαφορὰν
 παρὰ τοὺς εἰρημένους τρόπους· οὐ μὲν ἀλλὰ καὶ
 τὸ τοιοῦτόν γε ἐν τῷ αὐτῷ τετάχθω τοῖς καθ' ἐν
 εἶδος ὅπως οὖν λεγόμενοις. ἅπαντα γὰρ τὰ τοιαῦτα
 συγγενῇ καὶ παραπλήσια ἀλλήλοις ἔοικεν εἶναι.
 20 πᾶν μὲν γὰρ ὕδωρ παντὶ ταῦτόν τῷ εἶδει λέγεται
 διὰ τὸ ἔχειν τινὰ ὁμοιότητα, τὸ δ' ἀπὸ τῆς αὐτῆς
 κρήνης ὕδωρ οὐδενὶ ἄλλῳ διαφέρει ἀλλ' ἢ τῷ
 σφοδροτέραν εἶναι τὴν ὁμοιότητα· διὸ οὐ χωρίζομεν

of inquiry is provided for each of the different classes which we have distinguished, the exposition of the subject before us would be more easily performed on the basis of what is appropriate to each class. And so, as has already been said, we must make broad divisions and fit into them those of the other questions which are most appropriate to each, calling them 'definitory' and 'generic.' The questions to which I referred have now been, for all intents and purposes, assigned to their several classes.

VII. First of all we must distinguish the various meanings of 'the same.' In general, 'sameness' would seem to fall into three divisions; for we usually speak of numerical, specific and generic sameness. There is *numerical* sameness when there is more than one name for the same thing, *e.g.*, 'mantle' and 'cloak.' There is *specific* sameness when there are several things but they do not differ in species, *e.g.*, one man and another man, one horse and another horse; for such things as fall under the same species are said to be specifically the same. Similarly things are *generically* the same when they fall under the same genus, *e.g.*, horse and man. Water from the same fountain described as 'the same water' might seem to have a sameness differing somewhat from the above-mentioned kinds; however, a case of this kind ought also to be placed in the same class as those which are called in any sense the same as belonging to one species. For all such things seem to be akin and similar to one another; for any water is said to be specifically the same as any other water because it has a certain similarity to it, and water from the same fountain differs in no other respect than in its more striking degree of similarity; and so we do not

The various uses of the term 'sameness':

(a) Numerical.

(b) Specific.

(c) Generic.

103 a

αὐτὸ τῶν καθ' ἐν εἶδος ὅπως οὖν λεγομένων. μάλιστα δ' ὁμολογουμένως τὸ ἐν ἀριθμῷ ταῦτόν παρὰ
 25 πᾶσι δοκεῖ λέγεσθαι. εἴωθε δὲ καὶ τοῦτο ἀπο-
 δίδοσθαι πλεοναχῶς, κυριώτατα μὲν καὶ πρώτως
 ὅταν ὀνόματι ἢ ὄρω τὸ ταῦτόν ἀποδοθῇ, καθάπερ
 ἱμάτιον λωπῖω καὶ ζῶον πεζὸν δίπουν ἀνθρώπῳ,
 δεύτερον δ' ὅταν τῷ ἰδίῳ, καθάπερ τὸ ἐπιστήμης
 δεκτικὸν ἀνθρώπῳ καὶ τὸ τῇ φύσει ἄνω φερόμενον
 30 πυρί, τρίτον δ' ὅταν ἀπὸ τοῦ συμβεβηκότος, οἶον
 τὸ καθήμενον ἢ τὸ μουσικὸν Σωκράτει. πάντα γὰρ
 ταῦτα τὸ ἐν ἀριθμῷ βούλεται σημαίνειν. ὅτι δ'
 ἀληθὲς τὸ νῦν ῥηθέν ἐστίν, ἐκ τῶν μεταβαλλόντων
 τὰς προσηγορίας μάλιστα' ἂν τις καταμάθοι. πολ-
 λάκις γὰρ ἐπιτάσσοντες ὀνόματι καλέσαι τινὰ τῶν
 35 καθημένων μεταβάλλομεν, ὅταν τύχῃ μὴ συνιᾷς
 ᾧ τὴν πρόσταξιν ποιούμεθα, ὡς ἀπὸ τοῦ συμβε-
 βηκότος αὐτοῦ μᾶλλον συνήσοντος, καὶ κελεύομεν
 τὸν καθήμενον ἢ διαλεγόμενον καλέσαι πρὸς ἡμᾶς,
 δῆλον ὡς ταῦτόν ὑπολαμβάνοντες κατὰ τε τοῦνομα
 καὶ κατὰ τὸ συμβεβηκὸς σημαίνειν.

103 b

VIII. Τὸ μὲν οὖν ταῦτόν, καθάπερ εἴρηται, τριχῇ
 διηρήσθω. ὅτι δ' ἐκ τῶν πρότερον εἰρημένων οἱ
 λόγοι καὶ διὰ τούτων καὶ πρὸς ταῦτα, μία μὲν

^a But not saying he was seated.

distinguish it from the things called in any sense the same as belonging to one species. The term 'the same' seems to be applied with the most general acceptance of everyone to that which is numerically one. But even this is usually employed in several senses. Its principal and primary sense occurs when sameness is applied to a name or a definition, *e.g.*, when a 'cloak' is said to be the same as a 'mantle,' or when 'a biped pedestrian animal' is said to be the same as a 'man.' A second sense occurs when sameness is applied to a property, *e.g.*, when 'capable of receiving knowledge' is said to be the same as 'man,' and 'that which is naturally carried upwards' is said to be the same as 'fire.' A third sense occurs when the sameness is based on an accident, *e.g.*, when 'that which is seated' or 'that which is musical' is said to be the same as 'Socrates.' All these uses aim at indicating numerical oneness. That what we have just said is true can best be understood by a change of the manner of description; for often when we order someone to summon one of several seated persons, giving his name,^a we change the description when the person to whom we are giving the order does not happen to understand, since he will understand better from some accidental feature; we, therefore, tell him to summon 'the man who is seated' or 'the man who is talking,' obviously conceiving that we are indicating the same thing both when we name it and when we state an accident of it.

VIII. Of 'sameness,' then, as has been said, three senses can be distinguished. Now that arguments start from the above-mentioned elements and proceed through them and lead up to them is proved, in the

Twofold
proof of the
division of
predicables.

103 b

πίστις ἢ διὰ τῆς ἐπαγωγῆς· εἰ γάρ τις ἐπισκοποίη
 ἐκάστην τῶν προτάσεων καὶ τῶν προβλημάτων,
 5 φαίνοιτ' ἂν ἢ ἀπὸ τοῦ ὅρου ἢ ἀπὸ τοῦ ἰδίου ἢ ἀπὸ
 τοῦ γένους ἢ ἀπὸ τοῦ συμβεβηκότος γεγεννημένη.
 ἄλλη δὲ πίστις ἢ διὰ συλλογισμοῦ, ἀνάγκη γὰρ
 πᾶν τὸ περὶ τινος κατηγορούμενον ἥτοι ἀντικατ-
 ηγορεῖσθαι τοῦ πράγματος ἢ μὴ. καὶ εἰ μὲν ἀντι-
 κατηγορεῖται, ὅρος ἢ ἴδιον ἂν εἴη· εἰ μὲν γὰρ
 10 σημαίνει τὸ τί ἦν εἶναι, ὅρος, εἰ δὲ μὴ σημαίνει,
 ἴδιον· τοῦτο γὰρ ἦν ἴδιον, τὸ ἀντικατηγορούμενον
 μὲν, μὴ σημαῖνον δὲ τὸ τί ἦν εἶναι. εἰ δὲ μὴ
 ἀντικατηγορεῖται τοῦ πράγματος, ἥτοι τῶν ἐν τῷ
 ὀρισμῷ τοῦ ὑποκειμένου λεγομένων ἐστὶν ἢ οὐ.
 καὶ εἰ μὲν τῶν ἐν τῷ ὀρισμῷ λεγομένων, γένος
 15 ἢ διαφορὰ ἂν εἴη, ἐπειδὴ ὁ ὀρισμὸς ἐκ γένους καὶ
 διαφορῶν ἐστίν· εἰ δὲ μὴ τῶν ἐν τῷ ὀρισμῷ
 λεγομένων ἐστί, δῆλον ὅτι συμβεβηκὸς ἂν εἴη· τὸ
 γὰρ συμβεβηκὸς ἐλέγετο ὃ μήτε ὅρος μήτε γένος
 μήτε ἴδιόν ἐστιν, ὑπάρχει δὲ τῷ πράγματι.

20 IX. Μετὰ τοῖνυν ταῦτα δεῖ διορίσασθαι τὰ γένη
 τῶν κατηγοριῶν, ἐν οἷς ὑπάρχουσιν αἱ ῥηθεῖσαι
 τέτταρες. ἔστι δὲ ταῦτα τὸν ἀριθμὸν δέκα, τί
 ἐστι, ποσόν, ποιόν, πρὸς τι, ποῦ, ποτέ, κείσθαι,
 ἔχειν, ποιεῖν, πάσχειν. αἰεὶ γὰρ τὸ συμβεβηκὸς
 25 καὶ τὸ γένος καὶ τὸ ἴδιον καὶ ὁ ὀρισμὸς ἐν μιᾷ
 τούτων τῶν κατηγοριῶν ἔσται· πᾶσαι γὰρ αἱ διὰ
 τούτων προτάσεις ἢ τί ἐστὶν ἢ ποιόν ἢ ποσόν ἢ
 τῶν ἄλλων τινὰ κατηγοριῶν σημαίνουσιν. δῆλον

first place, by *induction*. For if one were to examine each separate proposition and problem, it would be clear that it has come into being either from the definition of something or from its property or from its genus or from its accident. Another proof is through *reasoning* ; for necessarily anything which is predicated about something must either be or not be convertible with its subject. If it is convertible, it would be a definition or a property ; for if it indicates the essence, it is a definition, but, if it does not do so, it is a property ; for we saw ^a that this was a property, namely, that which is predicated convertibly but does not indicate the essence. If, however, it is not predicated convertibly with the subject, it either is or is not one of the terms given in the definition of the subject ; and if it is one of the terms in the definition, it must be either the genus or the differentia, since the definition is composed of genus and differentiae. If, however, it is not one of the terms given in the definition, obviously it must be an accident ; for the accident was said ^b to be that which, while it belongs to the subject, is neither a definition nor a genus nor a property.

IX. Next we must define the kinds of categories in which the four above-mentioned predicates are found. They are ten in number : essence, quantity, quality, relation, place, time, position, state, activity, passivity. For the accident, the genus, the property and the definition will always be in one of these categories ; for all propositions made by means of these indicate either essence or quality or quantity or one of the other categories. It is self-evident that he who

The ten Categories and their relation to the predicables.

^a 102 a 18.

^b 102 b 4.

103 b δ' ἐξ αὐτῶν ὅτι ὁ τὸ τί ἐστι σημαίνων ὅτε μὲν οὐσίαν σημαίνει, ὅτε δὲ ποιόν, ὅτε δὲ τῶν ἄλλων τινὰ κατηγοριῶν. ὅταν μὲν γὰρ ἐκκειμένου ἀν-
 30 θρώπου φῇ τὸ ἐκκείμενον ἄνθρωπον εἶναι ἢ ζῶον, τί ἐστι λέγει καὶ οὐσίαν σημαίνει· ὅταν δὲ χρώ-
 ματος λευκοῦ ἐκκειμένου φῇ τὸ ἐκκείμενον λευκὸν εἶναι ἢ χρῶμα, τί ἐστι λέγει καὶ ποιόν σημαίνει. ὁμοίως δὲ καὶ ἐὰν πηχυαίου μεγέθους ἐκκειμένου φῇ τὸ ἐκκείμενον πηχυαῖον εἶναι μέγεθος, τί ἐστιν
 35 ἐρεῖ καὶ ποσὸν σημαίνει. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ἕκαστον γὰρ τῶν τοιούτων, ἐὰν τε αὐτὸ περὶ αὐτοῦ λέγῃται ἐὰν τε τὸ γένος περὶ τούτου, τί ἐστι σημαίνει. ὅταν δὲ περὶ ἐτέρου, οὐ τί ἐστι σημαίνει, ἀλλὰ ποσὸν ἢ ποιόν ἢ τινα τῶν ἄλλων κατηγοριῶν. ὥστε περὶ ὧν μὲν οἱ λόγοι καὶ ἐξ
 104 a ὧν, ταῦτα καὶ τοσαῦτά ἐστι· πῶς δὲ ληψόμεθα καὶ δι' ὧν εὐπορήσομεν, μετὰ ταῦτα λεκτέον.

X. Πρῶτον τοίνυν διωρίσθω, τί ἐστι πρότασις διαλεκτικὴ καὶ τί πρόβλημα διαλεκτικόν. οὐ γὰρ πᾶσαν πρότασιν οὐδὲ πᾶν πρόβλημα διαλεκτικόν
 5 θετέον· οὐδεὶς γὰρ ἂν προτείνειε νοῦν ἔχων τὸ μη-
 δενὶ δοκοῦν, οὐδὲ προβάλοι τὸ πᾶσι φανερόν ἢ τοῖς πλείστοις· τὰ μὲν γὰρ οὐκ ἔχει ἀπορίαν, τὰ δ' οὐδεὶς ἂν θείῃ. ἔστι δὲ πρότασις διαλεκτικὴ ἐρώ-
 τησις ἔνδοξος ἢ πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς
 10 σοφοῖς, καὶ τούτοις ἢ πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς

indicates the essence of something, indicates sometimes a substance, sometimes a quality, and sometimes one of the other categories. For when a man is put before him and he says that what is put before him is a man or an animal, he states an essence and indicates a substance ; but when a white colour is put before him and he says that what is put before him is white or a colour, he states an essence and indicates a quality. Similarly, if a magnitude of a cubit is put before him and he says that what is put before him is a magnitude of a cubit, he will be stating an essence and is indicating a quantity. Similarly with the other kinds of predicates ; for each of such things, both if it be asserted about itself and if its genus be asserted about it, indicates an essence ; but when it is asserted about something else, it does not indicate an essence but a quality or quantity or one of the other categories. Such then is the nature and such is the number of the subjects about which arguments take place and the materials on which they are based. How we shall derive them and by what means we shall obtain a supply of them, must next be stated.

X. In the first place then let us define the nature of a dialectical proposition and a dialectical problem. For not every proposition and every problem can be put down as dialectical ; for no man of sense would put into a proposition that which is no one's opinion, nor into a problem that which is manifest to everyone or to most people ; for the latter raises no question, while the former no one would accept. Now a *dialectical proposition* is a question which accords with the opinion held by everyone or by the majority or by the wise—either all of the wise or the majority or the most

Dialectical
Proposi-
tions.

104 a

μάλιστα γνωρίμοις, μὴ παράδοξος· θείη γὰρ ἂν τις
 τὸ δοκοῦν τοῖς σοφοῖς, ἔαν μὴ ἐναντίον ταῖς τῶν
 πολλῶν δόξαις ᾗ. εἰσὶ δὲ προτάσεις διαλεκτικαὶ
 καὶ τὰ τοῖς ἐνδόξοις ὅμοια, καὶ τὰναντία κατ' ἀντί-
 φασιν τοῖς δοκοῦσιν ἐνδόξοις εἶναι προτεινόμενα,
 15 καὶ ὅσαι δόξαι κατὰ τέχνας εἰσὶ τὰς εὐρημένας. εἰ
 γὰρ ἔνδοξον τὸ τὴν αὐτὴν εἶναι τῶν ἐναντίων ἐπι-
 στήμην, καὶ τὸ αἰσθῆσιν τὴν αὐτὴν εἶναι τῶν ἐν-
 ἀντίων ἔνδοξον ἂν φανείη, καὶ εἰ μίαν ἀριθμῶ
 γραμματικὴν εἶναι, καὶ αὐλητικὴν μίαν, εἰ δὲ πλεί-
 ους γραμματικάς, καὶ αὐλητικάς πλείους· πάντα
 20 γὰρ ὅμοια καὶ συγγενῇ ταῦτ' ἔοικεν εἶναι. ὁμοίως
 δὲ καὶ τὰ τοῖς ἐνδόξοις ἐναντία κατ' ἀντίφασιν προ-
 τεινόμενα ἔνδοξα φανέονται· εἰ γὰρ ἔνδοξον ὅτι δεῖ
 τοὺς φίλους εὖ ποιεῖν, καὶ ὅτι οὐ δεῖ κακῶς ποιεῖν
 ἔνδοξον. ἔστι δ' ἐναντίον μὲν ὅτι δεῖ κακῶς ποιεῖν
 25 τοὺς φίλους, κατ' ἀντίφασιν δὲ ὅτι οὐ δεῖ κακῶς
 ποιεῖν. ὁμοίως δὲ καὶ εἰ δεῖ τοὺς φίλους εὖ ποιεῖν,
 τοὺς ἐχθροὺς οὐ δεῖ. ἔστι δὲ καὶ τοῦτο κατ' ἀντί-
 φασιν τῶν ἐναντίων· τὸ γὰρ ἐναντίον ἐστὶν ὅτι
 δεῖ τοὺς ἐχθροὺς εὖ ποιεῖν. ὡσαύτως δὲ καὶ ἐπὶ
 τῶν ἄλλων. ἔνδοξον δ' ἐν παραβολῇ φανέεται καὶ
 τὸ ἐναντίον περὶ τοῦ ἐναντίου, οἷον εἰ τοὺς φίλους
 30 δεῖ εὖ ποιεῖν, καὶ τοὺς ἐχθροὺς δεῖ κακῶς. φανείη
 296

famous of them—and which is not paradoxical ; for one would accept the opinion of the wise, if it is not opposed to the views of the majority. Views which are similar to received opinions are also dialectical propositions, and so also are propositions made by way of contradicting the contrary of received opinions, and also views which accord with the arts which have been discovered. For if it is a received opinion that the knowledge of contraries is the same, it might seem to be a received opinion that the perception also of contraries is the same ; and if it is a received opinion that there is a single art of grammar, it might seem to be a received opinion that there is also only one art of flute-playing, whereas if it is a received opinion that there is more than one art of grammar, it might seem to be a received opinion that there is also more than one art of flute-playing ; for all these seem to be similar and akin. In like manner, also, propositions made by way of contradicting the contrary of received opinions will seem to be received opinions ; for if it is a received opinion that one ought to do good to one's friends, it will also be a received opinion that one ought not to do them harm. Now that we ought to harm our friends is contrary to the received opinion, and this stated in a contradictory form is that we ought not to harm our friends. Likewise also, if we ought to do good to our friends, we ought not to do good to our enemies ; this also takes the form of a contradiction of contraries, for the contrary is that we ought to do good to our enemies. The same is true of all the other cases. The contrary stated about the contrary in a comparison will also appear to be a received opinion ; for example, if we ought to do good to our friends, we ought also to do harm to our

104 a

δ' ἂν καὶ ἐναντίον τὸ τοὺς φίλους εὖ ποιεῖν τῷ τοὺς
 ἐχθροὺς κακῶς· πότερον δὲ καὶ κατ' ἀλήθειαν
 οὕτως ἔχει ἢ οὐ, ἐν τοῖς ὑπὲρ τῶν ἐναντίων
 λεγομένοις ῥηθήσεται. δῆλον δ' ὅτι καὶ ὅσαι δόξαι
 κατὰ τέχνας εἰσὶ, διαλεκτικαὶ προτάσεις εἰσὶ· θείη
 35 γὰρ ἂν τις τὰ δοκοῦντα τοῖς ὑπὲρ τούτων ἐπεσκεμ-
 μένοις, οἷον περὶ μὲν τῶν ἐν ἱατρικῇ ὡς ὁ ἱατρός,
 περὶ δὲ τῶν ἐν γεωμετρίᾳ ὡς ὁ γεωμέτρης· ὁμοίως
 δὲ καὶ ἐπὶ τῶν ἄλλων.

104 b

XI. Πρόβλημα δ' ἐστὶ διαλεκτικὸν θεώρημα τὸ
 συντεῖνον ἢ πρὸς αἵρεσιν καὶ φυγὴν ἢ πρὸς ἀλή-
 θειαν καὶ γνῶσιν, ἢ αὐτὸ ἢ ὡς συνεργὸν πρὸς τι
 ἕτερον τῶν τοιούτων· περὶ οὗ ἢ οὐδετέρως δοξά-
 ζουσιν ἢ ἐναντίως οἱ πολλοὶ τοῖς σοφοῖς ἢ οἱ
 5 σοφοὶ τοῖς πολλοῖς ἢ ἐκάτεροι αὐτοὶ ἑαυτοῖς. ἔνια
 μὲν γὰρ τῶν προβλημάτων χρήσιμον εἰδέναι πρὸς
 τὸ ἐλέσθαι ἢ φυγεῖν, οἷον πότερον ἢ ἡδονὴ αἰρετὸν
 ἢ οὐ, ἔνια δὲ πρὸς τὸ εἰδέναι μόνον, οἷον πότερον
 ὁ κόσμος αἰδῖος ἢ οὐ, ἔνια δὲ αὐτὰ μὲν καθ' αὐτὰ
 10 πρὸς οὐδέτερον τούτων, συνεργὰ δέ ἐστι πρὸς τινα
 τῶν τοιούτων· πολλὰ γὰρ αὐτὰ μὲν καθ' αὐτὰ οὐ
 βουλόμεθα γνωρίζειν, ἑτέρων δ' ἕνεκα, ὅπως διὰ
 τούτων ἄλλο τι γνωρίσωμεν. ἔστι δὲ προβλή-
 ματα καὶ ὧν ἐναντίοι εἰσὶ συλλογισμοὶ (ἀπορίαν
 γὰρ ἔχει πότερον οὕτως ἔχει ἢ οὐχ οὕτως διὰ τὸ

enemies. To do good to one's friends might also appear to be the contrary of doing harm to one's enemies ; but whether this is really true or not will be dealt with in our discussions of contraries.^a It is also obvious that all opinions which accord with the arts are dialectical propositions ; for one would accept the opinions of those who have examined the subjects in question. For example, on questions of medicine one would think as the doctor thinks and in matters of geometry as the geometrician thinks, and so too with the other arts.

XI. A *dialectical problem* is an investigation leading either to choice and avoidance or to truth and knowledge, either by itself or as an aid to the solution of some other such problem. Its subject is something about which either men have no opinion either way, or most people hold an opinion contrary to that of the wise, or the wise contrary to that of most people, or about which members of each of these classes disagree among themselves. The knowledge of some of these problems is useful for the purpose of choice or avoidance ; for example, whether pleasure is worthy of choice or not. The knowledge of some of these is useful purely for the sake of knowledge, for example, whether the universe is eternal or not. Others, again, are not useful in themselves for either of these purposes but as an aid to the solution of some similar problem ; for there are many things which we do not wish to know for themselves but for other purposes, in order that through them we may obtain knowledge of something else. Problems also occur where reasonings are in conflict (for they involve a doubt whether something is so or not, because there

Dialectical
Problems.

^a 112 b 27 ff.

περὶ ἀμφοτέρων εἶναι λόγους πιθανούς) καὶ περὶ
 15 ὧν λόγον μὴ ἔχομεν ὄντων μεγάλων, χαλεπὸν οἰό-
 μενοι εἶναι τὸ διὰ τί ἀποδοῦναι, οἷον πότερον ὁ
 κόσμος αἰδῖος ἢ οὐ· καὶ γὰρ τὰ τοιαῦτα ζητήσκειν
 ἂν τις.

Τὰ μὲν οὖν προβλήματα καὶ αἱ προτάσεις, καθ-
 ἀπερ εἴρηται, διωρίσθω· θέσις δέ ἐστιν ὑπόληψις
 20 παράδοξος τῶν γνωρίμων τινὸς κατὰ φιλοσοφίαν,
 οἷον ὅτι οὐκ ἔστιν ἀντιλέγειν, καθάπερ ἔφη Ἀντι-
 σθένης, ἢ ὅτι πάντα κινεῖται καθ' Ἡράκλειτον,
 ἢ ὅτι ἐν τὸ ὄν, καθάπερ Μέλισσός φησιν· τὸ γὰρ
 τοῦ τυχόντος ἐναντία ταῖς δόξαις ἀποφνημαμένου
 φροντίζειν εὖηθες. ἢ περὶ ὧν λόγον ἔχομεν ἐναν-
 25 τίων ταῖς δόξαις, οἷον ὅτι οὐ πᾶν τὸ ὄν ἦτοι γενό-
 μενόν ἐστιν ἢ αἰδῖον, καθάπερ οἱ σοφισταὶ φασιν·
 μουσικὸν γὰρ ὄντα γραμματικὸν εἶναι οὔτε γενό-
 μενον οὔτε αἰδῖον ὄντα. τοῦτο γάρ, εἰ καὶ τινι μὴ
 δοκεῖ, δόξειεν ἂν διὰ τὸ λόγον ἔχειν.

Ἔστι μὲν οὖν καὶ ἡ θέσις πρόβλημα· οὐ πᾶν δέ
 30 πρόβλημα θέσις, ἐπειδὴ ἔνια τῶν προβλημάτων
 τοιαῦτ' ἐστὶ περὶ ὧν οὐδετέρως δοξάζομεν. ὅτι δέ
 ἐστὶ καὶ ἡ θέσις πρόβλημα, δηλόν· ἀνάγκη γὰρ ἐκ
 τῶν εἰρημένων ἢ τοὺς πολλοὺς τοῖς σοφοῖς περὶ τῇν
 θέσιν ἀμφισβητεῖν ἢ ὅποτερουσὺν ἑαυτοῖς, ἐπειδὴ
 35 ὑπόληψίς τις παράδοξος ἢ θέσις ἐστίν. σχεδὸν δέ
 νῦν πάντα τὰ διαλεκτικὰ προβλήματα θέσεις κα-
 λοῦνται. διαφερέτω δέ μὴδὲν ὅπως οὖν λεγόμενον·
 οὐ γὰρ ὀνοματοποιῆσαι βουλόμενοι διείλομεν οὕτως
 300

are strong arguments on both sides), and also where, because the questions are so vast, we have no argument to offer, thinking it difficult to assign a reason, for example, whether the universe is eternal or not ; for one might inquire into such questions also.

Let problems, then, and propositions be defined in the manner already stated. A thesis is the conception contrary to general opinion but propounded by someone famous as a philosopher ; for example, "Contradiction is impossible," as Antisthenes said, or the opinion of Heraclitus that " All things are in a state of motion " or " Being is one," as Melissus says ; for to pay any attention when an ordinary person sets forth views which are contrary to received opinions is foolish. Or a thesis may concern matters about which we hold a reasoned view contrary to received opinions ; for example, the view of the sophists that not everything which is has come into being or is eternal ; for a musical man, who is a grammarian, is a grammarian, though he has not come to be so and is not so eternally. This view, even if it is not acceptable to some people, might be accepted on the ground that it is reasonable.

Dialectical
Theses.

A thesis is also a problem ; but not every problem is a thesis, since some problems are such that we hold no opinion about them either way. That a thesis is also a problem is obvious ; for it necessarily follows from what has been already said that either the many are at variance with the wise about a thesis or that one of these two classes is at variance within itself, since a thesis is a conception which is contrary to accepted opinion. Almost all dialectical problems are now called theses. But it need not matter which of the two names is used ; for we distinguished them

105 a αὐτά, ἀλλ' ἵνα μὴ λανθάνωσιν ἡμᾶς τίνες αὐτῶν
τυγχάνουσιν οὕσαι διαφοραί.

Οὐ δεῖ δὲ πᾶν πρόβλημα οὐδὲ πᾶσαν θέσιν ἐπι-
σκοπεῖν, ἀλλ' ἣν ἀπορήσειεν ἄν τις τῶν λόγου
5 δεομένων καὶ μὴ κολάσεως ἢ αἰσθήσεως· οἱ μὲν
γὰρ ἀποροῦντες πότερον δεῖ τοὺς θεοὺς τιμᾶν καὶ
τοὺς γονέας ἀγαπᾶν ἢ οὐ κολάσεως δέονται, οἱ δὲ
πότερον ἢ χιῶν λευκή ἢ οὐ αἰσθήσεως. οὐδὲ δὴ
ῶν σύνεγγυς ἢ ἀπόδειξις, οὐδ' ῶν λίαν πόρρω· τὰ
μὲν γὰρ οὐκ ἔχει ἀπορίαν, τὰ δὲ πλείω ἢ κατὰ
γυμναστικήν.

10 XII. Διωρισμένων δὲ τούτων χρή διελέσθαι πόσα
τῶν λόγων εἶδη τῶν διαλεκτικῶν. ἔστι δὲ τὸ μὲν
ἐπαγωγή, τὸ δὲ συλλογισμός. καὶ συλλογισμός
μὲν τί ἐστιν, εἴρηται πρότερον, ἐπαγωγή δὲ ἢ ἀπὸ
τῶν καθ' ἕκαστον ἐπὶ τὰ καθόλου ἔφοδος, οἷον εἰ
15 ἔστι κυβερνήτης ὁ ἐπιστάμενος κράτιστος καὶ ἡνί-
οχος, καὶ ὅλως ἐστὶν ὁ ἐπιστάμενος περὶ ἕκαστον
ἄριστος. ἔστι δ' ἢ μὲν ἐπαγωγή πιθανώτερον καὶ
σαφέστερον καὶ κατὰ τὴν αἴσθησιν γνωριμώτερον
καὶ τοῖς πολλοῖς κοινόν, ὁ δὲ συλλογισμός βιαστι-
κώτερον καὶ πρὸς τοὺς ἀντιλογικοὺς ἐνεργέστερον.

20 XIII. Τὰ μὲν οὖν γένη περὶ ὧν τε οἱ λόγοι καὶ
ἐξ ὧν, καθάπερ ἔμπροσθεν εἴρηται, διωρίσθω· τὰ
δ' ὄργανα, δι' ὧν εὐπορήσομεν τῶν συλλογισμῶν
[καὶ τῶν ἐπαγωγῶν,]¹ ἐστὶ τέτταρα, ἓν μὲν τὸ
προτάσεις λαβεῖν, δεύτερον δὲ ποσαχῶς ἕκαστον

¹ Omitting καὶ τῶν ἐπαγωγῶν with AB.

thus not from a desire to invent new terms, but that it might not escape us what differences actually exist between them.

It is not necessary to examine every problem and every thesis but only one about which doubt might be felt by the kind of person who requires to be argued with and does not need castigation or lack perception. For those who feel doubt whether or not the gods ought to be honoured and parents loved, need castigation, while those who doubt whether snow is white or not, lack perception. We ought not to discuss subjects the demonstration of which is too ready to hand or too remote ; for the former raise no difficulty, while the latter involve difficulties which are outside the scope of dialectical training.

XII. These definitions having been drawn up, we must distinguish how many kinds of dialectical argument there are. Now there is, firstly, induction, and, secondly, reasoning. What reasoning is has been already stated.^a Induction is the progress from particulars to universals ; for example, " If the skilled pilot is the best pilot and the skilled charioteer the best charioteer, then, in general, the skilled man is the best man in any particular sphere." Induction is more convincing and clear and more easily grasped by sense-perception and is shared by the majority of people, but reasoning is more cogent and more efficacious against argumentative opponents.

XIII. Let the above, then, be the distinctions which we make in the kinds of things with which arguments are concerned and of which they consist. The means by which we shall obtain an abundance of reasonings are four in number : (1) the provision of propositions, (2) the ability to distinguish in how

Induction
and
Reasoning.

THE PRO-
VISION OF
ARGU-
MENTS
(I. 13-
VII. 5).
Four
sources of
Arguments.

105 a

25 λέγεται δύνασθαι διελεῖν, τρίτον τὰς διαφορὰς εὐ-
 ρεῖν, τέταρτον δὲ ἢ τοῦ ὁμοίου σκέψις. ἔστι δὲ
 τρόπον τινὰ καὶ τὰ τρία τούτων προτάσεις· ἔστι
 γὰρ καθ' ἕκαστον αὐτῶν ποιῆσαι πρότασιν, οἷον
 ὅτι αἰρετόν ἐστι τὸ καλὸν ἢ τὸ ἡδὺ ἢ τὸ συμφέρον,
 καὶ ὅτι διαφέρει αἰσθησις ἐπιστήμης τῷ τὴν μὲν
 30 ἀποβαλόντι δυνατόν εἶναι πάλιν λαβεῖν, τὴν δ'
 ἀδύνατον, καὶ ὅτι ὁμοίως ἔχει τὸ ὑγιεινὸν πρὸς
 ὑγίειαν καὶ τὸ εὐεκτικὸν πρὸς εὐεξίαν. ἔστι δ' ἢ
 μὲν πρώτη πρότασις ἀπὸ τοῦ πολλαχῶς λεγομένου,
 ἢ δὲ δευτέρα ἀπὸ τῶν διαφορῶν, ἢ δὲ τρίτη ἀπὸ
 τῶν ὁμοίων.

XIV. Τὰς μὲν οὖν προτάσεις ἐκλεκτέον ὅσαχῶς
 35 διωρίσθη περὶ προτάσεως, ἢ τὰς πάντων δόξας προ-
 χειριζόμενον ἢ τὰς τῶν πλείστων ἢ τὰς τῶν σοφῶν,
 καὶ τούτων ἢ πάντων ἢ τῶν πλείστων ἢ τῶν γνω-
 105 b ριμωτάτων, ἢ τὰς ἐναντίας ταῖς φαινομέναις, καὶ
 ὅσαι δόξαι κατὰ τέχνας εἰσίν. δεῖ δὲ προτείνειν
 καὶ τὰς ἐναντίας ταῖς φαινομέναις ἐνδόξοις κατ'
 ἀντίφασιν, καθάπερ εἴρηται πρότερον. χρήσιμον δὲ
 καὶ τὸ ποιεῖν αὐτὰς ἐν τῷ ἐκλέγειν μὴ μόνον τὰς
 5 οὔσας ἐνδόξους, ἀλλὰ καὶ τὰς ὁμοίας ταύταις, οἷον
 ὅτι τῶν ἐναντίων ἢ αὐτὴ αἰσθησις (καὶ γὰρ ἢ ἐπι-
 στήμη) καὶ ὅτι ὁρῶμεν εἰσδεχόμενοί τι, οὐκ ἐκ-
 πέμποντες· καὶ γὰρ καὶ ἐπὶ τῶν ἄλλων αἰσθήσεων
 οὕτως· ἀκούομέν τε γὰρ εἰσδεχόμενοί τι, οὐκ ἐκ-
 πέμποντες, καὶ γενομέθα ὡσαύτως. ὁμοίως δὲ

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many senses a particular expression is used, (3) the discovery of differences and (4) the investigation of similarities. The last three of these are also in a sense propositions ; for it is possible to make a proposition in accordance with each of them. For example, we can say (a) " An object of choice is the honourable or the pleasant or the expedient," (b) " Sensation differs from knowledge, because it is possible to recover the latter when one has lost it but not the former," and (c) " The healthy stands in the same relation to health as the sound to soundness." The first proposition is derived from the use of a word in several senses, the second from differences, and the third from similarities.

XIV. The number of ways in which the propositions must be selected is the same as the number of distinctions which we have made regarding propositions. One may choose either universal opinions, or those of the majority, or those of the wise—of all of them, or of the majority or of the most famous—or opinions contrary to those which appear to be generally held, and also opinions which are in accord with the arts. Propositions must also be formed from opinions contrary to those which appear to be generally accepted put into a contradictory form, as has been described before.^a Another useful method of forming them is by choosing not only opinions actually received but also opinions which resemble these, for example, " The perception of contraries is the same " (for the knowledge of them is also the same), and " We see by admitting, not by emitting, something " (for this is also true in respect of the other senses) ; for we hear by admitting, not by emitting something, and we taste in the same

How to
secure pro-
positions.

105 b

10 καὶ ἐπὶ τῶν ἄλλων. ἔτι ὅσα ἐπὶ πάντων ἢ τῶν
 πλείστων φαίνεται, ληπτέον ὡς ἀρχὴν καὶ δοκοῦσαν
 θέσιν· τιθέασι γὰρ οἱ μὴ συνορῶντες ἐπὶ τινος οὐχ
 οὕτως ἔχειν.¹ ἐκλέγειν δὲ χρὴ καὶ ἐκ τῶν γεγραμ-
 μένων λόγων, τὰς δὲ διαγραφὰς ποιεῖσθαι περὶ
 15 τοῦ ἢ περὶ ζῶου καὶ περὶ ἀγαθοῦ παντός, ἀρξά-
 μενον ἀπὸ τοῦ τί ἐστιν. παρασημαίνεσθαι δὲ καὶ
 τὰς ἐκάστων δόξας, οἷον ὅτι Ἐμπεδοκλῆς τέτταρα
 ἔφησε τῶν σωμάτων στοιχεῖα εἶναι· θεῖη γὰρ ἂν τις
 τὸ ὑπὸ τινος εἰρημένον ἐνδόξου.

Ἔστι δ' ὡς τύπῳ περιλαβεῖν τῶν προτάσεων καὶ
 20 τῶν προβλημάτων μέρη τρία. αἱ μὲν γὰρ ἠθικαὶ
 προτάσεις εἰσὶν, αἱ δὲ φυσικαί, αἱ δὲ λογικαί.
 ἠθικαὶ μὲν οὖν αἱ τοιαῦται, οἷον πότερον δεῖ τοῖς
 γονεῦσι μᾶλλον ἢ τοῖς νόμοις πειθαρχεῖν, ἐὰν δια-
 φωνῶσιν· λογικαὶ δὲ οἷον πότερον τῶν ἐναντίων ἢ
 25 αὐτὴ ἐπιστήμη ἢ οὐ· φυσικαὶ δὲ οἷον πότερον ὁ
 κόσμος αἰδίδιος ἢ οὐ· ὁμοίως δὲ καὶ τὰ προβλήματα.
 ποῖαι δ' ἕκασται τῶν προειρημένων, ὀρισμῶ μὲν
 οὐκ εὐπετέες ἀποδοῦναι περὶ αὐτῶν, τῇ δὲ διὰ τῆς
 ἐπαγωγῆς συνηθεία πειρατέον γνωρίζειν ἐκάστην
 αὐτῶν, κατὰ τὰ προειρημένα παραδείγματα ἐπι-
 σκοποῦντα.

30 Πρὸς μὲν οὖν φιλοσοφίαν κατ' ἀλήθειαν περὶ
 αὐτῶν πραγματευτέον, διαλεκτικῶς δὲ πρὸς δόξαν.
 ληπτέον δ' ὅτι μάλιστα καθόλου πάσας τὰς προ-
 τάσεις, καὶ τὴν μίαν πολλὰς ποιητέον, οἷον ὅτι τῶν
 ἀντικειμένων ἢ αὐτὴ ἐπιστήμη, εἴθ' ὅτι τῶν ἐναν-

¹ Reading οὕτως ἔχειν with C. ἔχειν is omitted by the other mss.

manner. And so with the other instances. Further, opinions which are apparently true in all or most cases must be taken as a starting-point and an accepted thesis ; for they are admitted by such as do not notice that there is a case in which they are not true. We ought also to select from written disquisitions and make up descriptions of each class of subject, putting them in separate lists, for example, about ' the good ' (or about ' animal life '), dealing with every kind of good, beginning with the essence. We ought also to note in passing the opinion of individuals, for example, that Empedocles said that the elements of bodies are four in number ; for one may accept the statement of some thinker of repute.

To put the matter briefly, there are three classes of propositions and problems. Some are ethical, some physical and some logical propositions. *Ethical* propositions are such propositions as " Should one rather obey parents or the laws, if they are at variance ? " *Logical* propositions are such as the following : " Is knowledge of contraries the same or not ? " *Physical* problems are of the type of " Is the universe eternal or not ? " There are similar classes of problems. The nature of each of the above classes is not easily explained by definition, but we must try to obtain knowledge of each of them by the habitual practice of induction, examining them in the light of the above examples.

For philosophic purposes we must deal with propositions from the point of view of truth, but for purposes of dialectic, with a view to opinion. Propositions must always be taken in their most universal form, and the one should be made into many ; for example, " The knowledge of opposites is the same,"

Ethical,
logical and
physical
proposi-
tions and
problems.

105 b

τίων καὶ ὅτι τῶν πρὸς τι. τὸν αὐτὸν δὲ τρόπον
 35 καὶ ταύτας πάλιν διαιρετέον, ἕως ἂν ἐνδέχῃται δι-
 αίρειν, οἷον ὅτι ἀγαθοῦ καὶ κακοῦ, καὶ λευκοῦ καὶ
 μέλανος, καὶ ψυχροῦ καὶ θερμοῦ. ὁμοίως δὲ καὶ
 ἐπὶ τῶν ἄλλων.

106 a

XV. Περὶ μὲν οὖν προτάσεως ἱκανὰ τὰ προειρη-
 μένα· τὸ δὲ ποσαχῶς, πραγματευτέον μὴ μόνον ὅσα
 λέγεται καθ' ἕτερον τρόπον, ἀλλὰ καὶ τοὺς λόγους
 αὐτῶν πειρατέον ἀποδιδόναι, οἷον μὴ μόνον ὅτι
 5 ἀγαθὸν καθ' ἕτερον μὲν τρόπον λέγεται δικαιοσύνη
 καὶ ἀνδρία, εὐεκτικὸν δὲ καὶ ὑγιεινὸν καθ' ἕτερον,
 ἀλλ' ὅτι καὶ τὰ μὲν τῷ αὐτῷ ποιά τινα εἶναι, τὰ δὲ
 τῷ ποιητικῷ τινος καὶ οὐ τῷ ποιά αὐτά τινα εἶναι.
 ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων.

Πότερον δὲ πολλαχῶς ἢ μοναχῶς τῷ εἶδει λέ-
 10 γεται, διὰ τῶνδε θεωρητέον. πρῶτον μὲν ἐπὶ τοῦ
 ἐναντίου σκοπεῖν εἰ πολλαχῶς λέγεται, ἐάν τε τῷ
 εἶδει ἐάν τε τῷ ὀνόματι διαφωνῇ. ἓνια γὰρ εὐθύς
 καὶ τοῖς ὀνόμασιν ἕτερά ἐστιν, οἷον τῷ ὀξεί ἐν φωνῇ
 μὲν ἐναντίον τὸ βαρὺ, ἐν ὄγκῳ δὲ τὸ ἀμβλύ. δῆλον
 15 οὖν ὅτι τὸ ἐναντίον τῷ ὀξεί πολλαχῶς λέγεται. εἰ
 δὲ τοῦτο, καὶ τὸ ὀξύ· καθ' ἑκάτερον γὰρ ἐκείνων

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then "The knowledge of contraries is the same," and finally, "The knowledge of relative terms is the same." In the same way, those too must be divided again, as long as division is possible, for example, "the knowledge of good and evil," "of black and white," and "of cold and hot is the same"; and so with the other cases.

XV. On the making of propositions what has been said above must suffice. As regards the number of ways in which a term can be used, we must not only deal with those terms which are used in another way but also try to assign their definitions. For example, we must not only say that in one sense 'good' is said to be 'justice' and 'courage,' in another sense 'good' is said to be 'conducive to soundness' and 'conducive to health,' but we must also say that some things are called 'good' because they possess certain qualities in themselves, while other things are good because they are productive of a certain result and not because they possess certain qualities in themselves. And so likewise in the other cases also.

How to detect ambiguity of meaning.

Whether a term is used in one kind of sense only or in many, can be seen by the following method. First, examine the case of its contrary and see if it is used in several senses, whether the difference be one of kind or in the use of a word. For in some cases a difference is immediately apparent in the words used. For example, the contrary of 'sharp' when used of a note is 'flat' ($\beta\alpha\rho\acute{\upsilon}$), when it is used of a material substance, it is 'dull' ($\acute{\alpha}\mu\beta\lambda\acute{\upsilon}$). The contrary of 'sharp,' therefore, obviously has several meanings, and, this being so, so also has 'sharp'; for the contrary will have different mean-

(a) From contraries expressed in different words.

ἕτερον ἔσται τὸ ἐναντίον. οὐ γὰρ τὸ αὐτὸ ὁξὺ
 ἔσται τῷ ἀμβλεῖ καὶ τῷ βαρεῖ ἐναντίον, ἑκατέρω
 δὲ τὸ ὁξὺ ἐναντίον. πάλιν τῷ βαρεῖ ἐν φωνῇ μὲν
 τὸ ὁξὺ ἐναντίον, ἐν ὄγκῳ δὲ τὸ κοῦφον, ὥστε πολ-
 20 λαχῶς τὸ βαρὺ λέγεται, ἐπειδὴ καὶ τὸ ἐναντίον.
 ὁμοίως δὲ καὶ τῷ καλῷ τῷ μὲν ἐπὶ τοῦ ζώου τὸ
 αἰσχρόν, τῷ δ' ἐπὶ τῆς οἰκίας τὸ μοχθηρόν, ὥστε
 ὁμῶννυμον τὸ καλόν.

Ἐπ' ἐνίων δὲ τοῖς μὲν ὀνόμασιν οὐδαμῶς δια-
 φωνεῖ, τῷ δ' εἶδει κατάδηλος ἐν αὐτοῖς εὐθέως ἡ
 25 διαφορὰ ἐστίν, οἷον ἐπὶ τοῦ λευκοῦ καὶ μέλανος.
 φωνῇ γὰρ λευκὴ καὶ μέλαινα λέγεται, ὁμοίως δὲ
 καὶ χρώμα. τοῖς μὲν οὖν ὀνόμασιν οὐδὲν διαφωνεῖ,
 τῷ δ' εἶδει κατάδηλος ἐν αὐτοῖς εὐθέως ἡ διαφορὰ.
 οὐ γὰρ ὁμοίως τό τε χρώμα λευκὸν λέγεται καὶ ἡ
 φωνή. δῆλον δὲ τοῦτο καὶ διὰ τῆς αἰσθήσεως· τῶν
 30 γὰρ αὐτῶν τῷ εἶδει ἡ αὐτὴ αἴσθησις, τὸ δὲ λευκὸν
 τὸ ἐπὶ τῆς φωνῆς καὶ τοῦ χρώματος οὐ τῇ αὐτῇ
 αἰσθήσει κρίνομεν, ἀλλὰ τὸ μὲν ὄψει, τὸ δ' ἀκοῇ.
 ὁμοίως δὲ καὶ τὸ ὁξὺ καὶ τὸ ἀμβλὺ ἐν χυμοῖς καὶ
 ἐν ὄγκοις· ἀλλὰ τὸ μὲν ἀφῇ, τὸ δὲ γεύσει. οὐδὲ
 γὰρ ταῦτα διαφωνεῖ τοῖς ὀνόμασιν, οὗτ' ἐπ' αὐτῶν
 35 οὗτ' ἐπὶ τῶν ἐναντίων· ἀμβλὺ γὰρ καὶ τὸ ἐναντίον
 ἑκατέρω.

Ἐτι εἰ τῷ μὲν ἐστὶ τι ἐναντίον τῷ δ' ἀπλῶς
 μηδέν, οἷον τῇ μὲν ἀπὸ τοῦ πίνειν ἡδονῇ ἡ ἀπὸ τοῦ
 δυσὴν λύπη ἐναντίον, τῇ δ' ἀπὸ τοῦ θεωρεῖν ὅτι

° Lit. 'white' and 'black.'

ings, corresponding to each of those meanings. For 'sharp' will not be the same when it is the contrary of 'blunt' and when it is the contrary of 'flat,' though 'sharp' is the contrary in both cases. Again, the contrary of *βαρύ* ('flat,' 'heavy') applied to a note is 'sharp,' but applied to a material substance it is 'light'; so that *βαρύ* is used in many senses, since its contrary is also so used. Similarly also the contrary of 'beautiful' applied to a living creature is 'ugly,' but applied to a house, 'mean'; so that 'beautiful' is an equivocal term.

Sometimes there is no difference in the terms used but the variation in kind is immediately obvious in their use; for example, in the case of 'clear' and 'dim,'^a for sound is said to be 'clear' and 'dim' and so is colour. Now there is no difference in the terms used, but the variation in kind is immediately obvious in their use; for 'clear' is not used in the same sense as applied to colour and as applied to sound. This is manifest also through sense-perception; for sense-perception of things which are of the same kind is the same, but we do not judge 'clearness' of sound and of colour by the same sense, but the latter by sight and the former by hearing. Similarly with regard to 'sharp' and 'dull' in flavours and in material substances; we judge the latter by touch, the former by taste. Here, too, there is no difference in the terms used—either in the terms themselves or in their contraries; for 'dull' is the contrary of 'sharp' in both its senses.

Furthermore, we must see whether there is a contrary of a term in one sense, but absolutely none in another sense. For example, the pleasure due to drinking has a contrary in the pain due to thirst,

(b) From contraries different in kind.

(c) From the presence or absence of contraries.

106 b ἡ διάμετρος τῇ πλευρᾷ ἀσύμμετρος οὐδέν, ὥστε
 πλεοναχῶς ἢ ἡδονὴ λέγεται. καὶ τῷ μὲν κατὰ τὴν
 διάνοιαν φιλεῖν τὸ μισεῖν ἐναντίον, τῷ δὲ κατὰ τὴν
 σωματικὴν ἐνέργειαν οὐδέν· δηλὸν οὖν ὅτι τὸ φιλεῖν
 ὁμώνυμον. ἔτι ἐπὶ τῶν ἀνὰ μέσον, εἰ τῶν μὲν
 5 ἐστὶ τι ἀνὰ μέσον, τῶν δὲ μηδέν, ἢ εἰ ἀμφοῖν μὲν
 ἐστι, μὴ ταῦτόν δέ, οἷον λευκοῦ καὶ μέλανος ἐν
 χρώμασι μὲν τὸ φαιόν, ἐν φωνῇ δ' οὐδέν, ἢ εἰ ἄρα,
 τὸ σομφόν, καθάπερ τινὲς φασὶ σομφὴν φωνὴν ἀνὰ
 μέσον εἶναι, ὥσθ' ὁμώνυμον τὸ λευκόν, ὁμοίως δὲ
 10 καὶ τὸ μέλαν. ἔτι εἰ τῶν μὲν πλείω τὰ ἀνὰ μέσον,
 τῶν δὲ ἓν, καθάπερ ἐπὶ τοῦ λευκοῦ καὶ μέλανος·
 ἐπὶ μὲν γὰρ τῶν χρωμάτων πολλὰ τὰ ἀνὰ μέσον,
 ἐπὶ δὲ τῆς φωνῆς ἓν τὸ σομφόν.

Πάλιν ἐπὶ τοῦ κατ' ἀντίφασιν ἀντικειμένου σκο-
 πεῖν εἰ πλεοναχῶς λέγεται. εἰ γὰρ τοῦτο πλεονα-
 15 χῶς λέγεται, καὶ τὸ τούτῳ ἀντικείμενον πλεοναχῶς
 ῥηθήσεται, οἷον τὸ μὴ βλέπειν πλεοναχῶς λέγεται,
 ἐν μὲν τὸ μὴ ἔχειν ὄψιν, ἐν δὲ τὸ μὴ ἐνεργεῖν τῇ
 ὄψει. εἰ δὲ τοῦτο πλεοναχῶς, ἀναγκαῖον καὶ τὸ
 βλέπειν πλεοναχῶς λέγεσθαι· ἐκατέρῳ γὰρ τῷ μὴ
 βλέπειν ἀντικείσεται τι, οἷον τῷ μὲν μὴ ἔχειν ὄψιν
 20 τὸ ἔχειν, τῷ δὲ μὴ ἐνεργεῖν τῇ ὄψει τὸ ἐνεργεῖν.

but the pleasure due to the contemplation that the diagonal is incommensurate with the side has no contrary ; so that 'pleasure' is used in more senses than one. Also 'loving,' used of the mental state, has a contrary in 'hating,' but, used of the physical act, it has no contrary ; therefore 'loving' is obviously an equivocal term. Further, with regard to intermediates, you must see whether some meanings of terms and their contraries have intermediates and others none, or whether both have an intermediate but not the same one. For example, in colours the intermediate between 'clear' (white) and 'dim' (black) is 'grey,' but when the terms are used of a note, they have no intermediate, unless it be 'muffled,' as some people say that a muffled note is intermediate. Therefore 'clear' is an equivocal term, as also is 'dim.' You must see also whether some terms have several intermediates, others only one, as in the case of 'clear' and 'dim' ; for when they are used of colour they have many intermediates, but when they are used of a note only one, namely, 'muffled.'

(d) From
inter-
mediates.

Again, with regard to the opposite put in a contradictory form, you must see whether it is used in more senses than one. For if it is used in several senses, then its opposite also will be used in several senses. For example, 'not to see' is used in more than one sense, firstly, 'not to possess sight,' and, secondly, 'not to exercise the faculty of sight' ; and if this has more than one meaning, 'to see' must necessarily also have more than one meaning ; for each meaning of 'not to see' will have an opposite, the opposite of 'not to possess sight' being 'to possess sight,' and the opposite of 'not to exercise the faculty of sight' being 'to exercise the faculty of sight.'

(e) From
contradictory
opposites.

106 b

"Ἐτι ἐπὶ τῶν κατὰ στέρησιν καὶ ἕξιν λεγομένων ἐπισκοπεῖν· εἰ γὰρ θάτερον πλεοναχῶς λέγεται, καὶ τὸ λοιπόν, οἷον εἰ τὸ αἰσθάνεσθαι πλεοναχῶς λέγεται κατὰ τε τὴν ψυχὴν καὶ τὸ σῶμα, καὶ τὸ
 25 ἀναίσθητον εἶναι πλεοναχῶς ῥηθήσεται κατὰ τε τὴν ψυχὴν καὶ τὸ σῶμα. ὅτι δὲ κατὰ στέρησιν καὶ ἕξιν ἀντίκειται τὰ νῦν λεγόμενα, δῆλον, ἐπειδὴ πέφυκεν ἑκατέραν τῶν αἰσθήσεων ἔχειν τὰ ζῶα καὶ κατὰ τὴν ψυχὴν καὶ κατὰ τὸ σῶμα.

"Ἐτι δ' ἐπὶ τῶν πτώσεων ἐπισκεπτέον. εἰ γὰρ
 30 τὸ δικαίως πλεοναχῶς λέγεται, καὶ τὸ δίκαιον πλεοναχῶς ῥηθήσεται· καθ' ἑκάτερον γὰρ τῶν δικαίως ἐστὶ δίκαιον, οἷον εἰ τὸ δικαίως λέγεται τό τε κατὰ τὴν ἑαυτοῦ γνώμην κρίναι καὶ τὸ ὡς δεῖ, ὁμοίως καὶ τὸ δίκαιον. ὡσαύτως δὲ καὶ εἰ τὸ ὑγιεινὸν πλεοναχῶς, καὶ τὸ ὑγιεινῶς πλεοναχῶς
 35 ῥηθήσεται, οἷον εἰ ὑγιεινὸν τὸ μὲν ὑγιείας ποιητικὸν τὸ δὲ φυλακτικὸν τὸ δὲ σημαντικόν, καὶ τὸ ὑγιεινῶς ἢ ποιητικῶς ἢ φυλακτικῶς ἢ σημαντικῶς ῥηθήσεται. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων,
 107 a ὅταν αὐτὸ πλεοναχῶς λέγεται, καὶ ἡ πτώσις ἢ ἀπ' αὐτοῦ πλεοναχῶς ῥηθήσεται, καὶ εἰ ἡ πτώσις, καὶ αὐτό.

Σκοπεῖν δὲ καὶ τὰ γένη τῶν κατὰ τοῦνομα κατηγοριῶν, εἰ ταῦτά ἐστιν ἐπὶ πάντων. εἰ γὰρ
 5 μὴ ταῦτά, δῆλον ὅτι ὁμώνυμον τὸ λεγόμενον, οἷον

^a πτώσις is used of any modification of a word, such as cases and genders of nouns and adjectives, adjectives derived from nouns, adverbs formed from adjectives (as in the examples which Aristotle gives here), and the tenses of verbs.

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Further, you must examine cases where the privation and presence of some state is asserted; for if either of the terms used has several meanings, so also will the other. For example, if 'to have sensation' is used in several senses in connexion both with the soul and with the body, 'lacking sensation' also will be used in several senses in connexion both with the soul and with the body. That the terms under discussion are opposed in respect of the privation and presence of a certain state is obvious, since living creatures naturally possess each kind of sensation, that is to say, as connected both with the soul and with the body.

Further, you must examine the inflected forms of words.^(f) For if 'justly' can be used in several senses, 'just' will also be used in several senses; for there is a meaning of 'just' for each of the meanings of 'justly.' For example, if to judge 'justly' means to judge 'according to one's opinion,' and also to judge 'as one ought,' then 'just' will have the two similar meanings. Likewise if 'healthy' has several meanings, so also will 'healthily'; for example, if 'healthy' means 'producing health' and 'preserving health' and 'denoting health,' then 'healthily' will mean 'in a manner which produces health' or 'in a manner which preserves health' or 'in a manner which denotes health.' Similarly in every other case, when the word itself is used in several senses, the inflexion formed from it will also be used in several senses, and *vice versa*.

You must also examine the kinds of predicates denoted by the word used and see if they are the same in every case; for, if they are not, it is obvious that the word is equivocal. For example, 'good' as

(f) From the privation or presence of states.

(g) From inflected forms of words.

(h) From the kinds of predicates denoted by a word.

107 a

τὸ ἀγαθὸν ἐν ἐδέσματι μὲν τὸ ποιητικὸν ἡδονῆς,
 ἐν ἱατρικῇ δὲ τὸ ποιητικὸν ὑγείας, ἐπὶ δὲ ψυχῆς
 τὸ ποιὰν εἶναι, οἷον σώφρονα ἢ ἀνδρείαν ἢ δικαίαν·
 ὁμοίως δὲ καὶ ἐπὶ ἀνθρώπου. ἐνιαχοῦ δὲ τὸ ποτέ,
 10 οἷον τὸ ἐν τῷ καιρῷ [ἀγαθόν]¹. ἀγαθὸν γὰρ λέγεται
 τὸ ἐν τῷ καιρῷ. πολλάκις δὲ τὸ ποσόν, οἷον ἐπὶ
 τοῦ μετρίου· λέγεται γὰρ καὶ τὸ μέτριον ἀγαθόν.
 ὥστε ὁμώνυμον τὸ ἀγαθόν. ὡσαύτως δὲ καὶ τὸ
 λευκὸν ἐπὶ σώματος μὲν χρῶμα, ἐπὶ δὲ φωνῆς
 τὸ εὐήκοον. παραπλησίως δὲ καὶ τὸ ὀξύ· οὐ γὰρ
 15 ὡσαύτως ἐπὶ πάντων τὸ αὐτὸ λέγεται· φωνὴ μὲν
 γὰρ ὀξεῖα ἢ ταχεῖα, καθάπερ φασὶν οἱ κατὰ τοὺς
 ἀριθμοὺς ἀρμονικοί, γωνία δ' ὀξεῖα ἢ ἐλάσσων
 ὀρθῆς, μάχαιρα δὲ ἢ ὀξυγώνιος.

Σκοπεῖν δὲ καὶ τὰ γένη τῶν ὑπὸ τὸ αὐτὸ ὄνομα,
 εἰ ἕτερα καὶ μὴ ὑπ' ἄλληλα, οἷον ὄνος τό τε ζῶον
 20 καὶ τὸ σκεῦος. ἕτερος γὰρ ὁ κατὰ τοῦνομα λόγος
 αὐτῶν· τὸ μὲν γὰρ ζῶον ποιόν τι ῥηθήσεται,
 τὸ δὲ σκεῦος ποιόν τι. ἐὰν δὲ ὑπ' ἄλληλα τὰ
 γένη ᾗ, οὐκ ἀναγκαῖον ἐτέρους τοὺς λόγους εἶναι.
 οἷον τοῦ κόρακος τὸ ζῶον καὶ τὸ ὄρνεον γένος
 ἐστίν. ὅταν οὖν λέγωμεν τὸν κόρακα ὄρνεον εἶναι,
 25 καὶ ζῶον ποιόν τί φάμεν αὐτὸν εἶναι, ὥστ' ἀμφό-
 τερα τὰ γένη περὶ αὐτοῦ κατηγορεῖται. ὁμοίως
 δὲ καὶ ὅταν ζῶον πτηνὸν δίπουν τὸν κόρακα λέγω-
 μεν, ὄρνεόν φάμεν αὐτὸν εἶναι· καὶ οὕτως οὖν
 ἀμφότερα τὰ γένη κατηγορεῖται κατὰ τοῦ κόρακος,

¹ Omitting the first ἀγαθόν with W. S. Maguinness.

^a i.e. the windlass (Herod. vii. 36 ; [Aristot.] *Mech.* 853 b 12).

applied to food means 'productive of pleasure,' as applied to medicine it means 'productive of health,' as applied to the soul it denotes a certain quality such as 'temperate' or 'brave' or 'just,' and similarly also as applied to man. Sometimes it means what happens at a certain time, for example at the right time; for what happens at the right time is called 'good.' Often too it is applied to quantity, being used, for example, of that which is 'moderate'; for that which is 'moderate,' too, is called 'good.' Thus 'good' is an equivocal term. Similarly too λευκόν ('white,' 'clear') as applied to a body denotes colour, as applied to a note it means 'easily heard.' The case of 'sharp' also is similar, for it does not always bear the same meaning. For a quick note is 'sharp,' as the theorists of rhythmic harmony tell us, and an angle which is less than a right angle is 'sharp' (acute), and a knife with a sharp angle (edge) is 'sharp.'

You must also examine the genera of the things which fall under the same term and see if they are different and not subaltern. For example, ὄνος ('donkey') is both the animal and the machine ^{(i) From an examination of the genera falling under the same term.} ^a; for the definition applied to the word is different in the two cases, since one will be described as a kind of animal, the other as a kind of machine. But if the genera are subaltern, the definitions are not necessarily different. For example, 'animal' is the genus of 'raven,' and so is 'bird.' When, therefore, we say that the raven is a bird, we also say that it is a kind of animal, so that both the genera are predicated of it. Likewise too, when we call the raven 'a flying biped animal,' we are stating that it is a bird, so that in this way too both the genera are

107 a καὶ ὁ λόγος αὐτῶν. ἐπὶ δὲ τῶν μὴ ὑπ' ἄλληλα
 30 γενῶν οὐ συμβαίνει τοῦτο· οὔτε γὰρ ὅταν σκεύος
 λέγωμεν, ζῶον λέγομεν, οὔθ' ὅταν ζῶον, σκεύος.

Σκοπεῖν δὲ μὴ μόνον εἰ τοῦ προκειμένου ἕτερα
 τὰ γένη καὶ μὴ ὑπ' ἄλληλα, ἀλλὰ καὶ ἐπὶ τοῦ
 ἐναντίου· εἰ γὰρ τὸ ἐναντίον πολλαχῶς λέγεται,
 35 δῆλον ὅτι καὶ τὸ προκείμενον.

Χρήσιμον δὲ καὶ τὸ ἐπὶ τὸν ὀρισμὸν ἐπιβλέπειν
 τὸν ἐκ τοῦ συντιθεμένου γινόμενον, οἷον λευκοῦ
 σώματος καὶ λευκῆς φωνῆς· ἀφαιρουμένου γὰρ
 τοῦ ἰδίου τὸν αὐτὸν λόγον δεῖ λείπεσθαι. τοῦτο
 107 b δ' οὐ συμβαίνει ἐπὶ τῶν ὁμωνύμων, οἷον ἐπὶ τῶν
 νῦν εἰρημένων. τὸ μὲν γὰρ ἔσται σῶμα τοιόνδε
 χρῶμα ἔχον, τὸ δὲ φωνὴ εὐήκοος· ἀφαιρεθέντος
 οὖν τοῦ σώματος καὶ τῆς φωνῆς οὐ ταῦτὸν ἐν
 ἑκατέρῳ τὸ λειπόμενον. ἔδει δέ γε, εἴπερ συν-
 5 ὠνυμον ἦν τὸ λευκὸν τὸ ἐφ' ἑκατέρου λεγόμενον.

Πολλάκις δὲ καὶ ἐν αὐτοῖς τοῖς λόγοις λανθάνει
 παρακολουθοῦν τὸ ὁμώνυμον· διὸ καὶ ἐπὶ τῶν
 λόγων σκεπτέον. οἷον ἂν τις τὸ σημαντικὸν καὶ
 τὸ¹ ποιητικὸν ὑγείας τὸ συμμέτρως ἔχον πρὸς
 10 ὑγίειαν φῇ εἶναι, οὐκ ἀποστατέον ἀλλ' ἐπισκεπτέον
 τί τὸ συμμέτρως καθ' ἑκάτερον εἴρηκεν, οἷον εἰ
 τὸ μὲν τὸ τοσοῦτον² εἶναι ὥστε ποιεῖν ὑγίειαν,
 τὸ δὲ τὸ τοιοῦτον οἷον σημαίνειν ποία τις ἢ ἕξις.

¹ Inserting τὸ with C.

² Reading τοσοῦτον with all the best mss.

predicated of the raven, and also their definition. This does not happen in the case of genera which are not subaltern; for when we say a 'machine' we do not mean an 'animal,' nor *vice versa*.

You must also examine not only whether the genera of the term in question are different without being subaltern but also look into the case of its contrary; for if its contrary is used in several senses, obviously the term in question will also be so used. (j) From the contrary of the genus used in several senses.

It is useful also to look at the definition which results from the use of the term in a composite phrase, for example, in λευκὸν σῶμα ('a white body') and λευκὴ φωνή ('a clear note'). For when what is peculiar is taken away, the same meaning ought to be left. But this does not happen when equivocal terms are used, as in the phrases just mentioned; for the former will be 'a body having such and such a colour' the latter 'a note which is easily heard.' If, therefore, 'a body' and 'a note' are taken away, what remains in each phrase is not the same. But it ought to have been the same if the term λευκός in each case had been synonymous. (k) From the definition of a term in a composite phrase.

Often too in the actual definitions the equivocal slips in unnoticed; therefore examination must be made of the definitions also. For example, if someone states that what denotes and what produces health are 'commensurably related to health,' we must not shrink from the task but examine what he has meant by 'commensurably' in each case, for example, whether in the latter case it means that it is 'of the requisite quantity to produce health,' whereas in the former case it means that it is 'of the requisite quality to denote of what kind the state is which is present.' (l) From ambiguity of definition.

107 b

Ἔτι εἰ μὴ συμβλητὰ κατὰ τὸ μᾶλλον ἢ ὁμοίως,
οἷον λευκὴ φωνή καὶ λευκὸν ἱμάτιον καὶ ὀξύς
15 χυμὸς καὶ ὀξεῖα φωνή· ταῦτα γὰρ οὐθ' ὁμοίως
λέγεται λευκὰ ἢ ὀξεῖα, οὔτε μᾶλλον θάτερον. ὥσθ'
ὁμώνυμον τὸ λευκὸν καὶ τὸ ὀξύ. τὸ γὰρ συνώνυμον
πᾶν συμβλητόν· ἢ γὰρ ὁμοίως ῥηθήσεται, ἢ μᾶλλον
θάτερον.

Ἐπεὶ δὲ τῶν ἐτέρων γενῶν καὶ μὴ ὑπ' ἄλληλα
20 ἕτεραι τῷ εἶδει καὶ αἱ διαφοραί, οἷον ζῶον καὶ
ἐπιστήμης (ἕτεραι γὰρ τούτων αἱ διαφοραί),
σκοπεῖν εἰ τὰ ὑπὸ τὸ αὐτὸ ὄνομα ἐτέρων γενῶν
καὶ μὴ ὑπ' ἄλληλα διαφοραί εἰσιν, οἷον τὸ ὀξύ
φωνῆς καὶ ὄγκου· διαφέρει γὰρ φωνὴ φωνῆς τῷ
ὀξεῖα εἶναι, ὁμοίως δὲ καὶ ὄγκος ὄγκου. ὥστε
25 ὁμώνυμον τὸ ὀξύ· ἐτέρων γὰρ γενῶν καὶ οὐχ ὑπ'
ἄλληλα διαφοραί εἰσιν.

Πάλιν εἰ αὐτῶν τῶν ὑπὸ τὸ αὐτὸ ὄνομα ἕτεραι
αἱ διαφοραί, οἷον χρώματος τοῦ τε ἐπὶ τῶν σω-
μάτων καὶ τοῦ ἐν τοῖς μέλεσιν· τοῦ μὲν γὰρ ἐπὶ
30 τῶν σωμάτων διακριτικὸν καὶ συγκριτικὸν ὄψεως,
τοῦ δ' ἐπὶ τῶν μελῶν οὐχ αἱ αὐταὶ διαφοραί.
ὥστε ὁμώνυμον τὸ χρῶμα· τῶν γὰρ αὐτῶν αἱ
αὐταὶ διαφοραί.

Ἔτι ἐπεὶ τὸ εἶδος οὐδενός ἐστι διαφορά, σκοπεῖν

^a Cf. *Met.* 1057 b 8; white is 'penetrative' and black 'compressive.' The definitions are Platonic, cf. *Tim.* 67 D, E.

Further, you must see whether the terms are not comparable in respect of greater or similar degree, for example, a 'clear' (λευκός) note and a 'white' (λευκός) garment, and a 'sharp' flavour and a 'sharp' note. For these things are not said to be λευκός ('white,' 'clear') or 'sharp' in a similar degree or one in a greater degree than the other; and so the terms λευκός and 'sharp' are equivocal. For every synonymous term is comparable; for it will be used either of a similar degree or of a greater degree in one thing than another.

Now since the differentiae of genera which are different but not subaltern are also different in kind, for example, those of 'animal' and 'knowledge' (for the differentiae of these are different), you must see whether the meanings which fall under the same term are differentiae of genera which are different without being subaltern, for example 'sharp' as applied to a note and to a solid substance; for voice differs from voice in 'sharpness' and similarly too one solid substance from another. 'Sharp,' therefore, is an equivocal term; for its meanings are differentiae of genera which are different without being subaltern.

Again, you must see whether the differentiae of the actual meanings which fall under the same term are different, for example, those of colour in bodies and colour in tunes; for the differentiae of colour in bodies are 'penetrative of sight' and 'compressive of sight,'^a but the same differentiae do not hold good of colour in tunes. Therefore colour is an equivocal term; for when things are the same they have the same differentiae.

Further, since the species is never the differentia

(m) From a comparison in respect of degree.

(n) From an examination of the differentiae.

107 b

τῶν ὑπὸ τὸ αὐτὸ ὄνομα εἰ τὸ μὲν εἶδος ἐστὶ τὸ δὲ
 35 διαφορά, οἷον τὸ λευκὸν τὸ μὲν ἐπὶ τοῦ σώματος
 εἶδος χρώματος, τὸ δ' ἐπὶ τῆς φωνῆς διαφορά·
 διαφέρει γὰρ φωνὴ φωνῆς τῷ λευκῇ εἶναι.

XVI. Περὶ μὲν οὖν τοῦ πολλαχῶς διὰ τούτων
 καὶ τῶν τοιούτων σκεπτέον· τὰς δὲ διαφορὰς ἐν
 108 a αὐτοῖς τε τοῖς γένεσι πρὸς ἄλληλα θεωρητέον, οἷον
 τίνι διαφέρει δικαιοσύνη ἀνδρίας καὶ φρόνησις
 σωφροσύνης (ταῦτα γὰρ ἅπαντα ἐκ τοῦ αὐτοῦ
 γένους ἐστίν), καὶ ἐξ ἄλλου πρὸς ἄλλο τῶν μὴ
 πολὺ λίαν διεστηκότων, οἷον τίνι αἴσθησις ἐπι-
 5 στήμης· ἐπὶ μὲν γὰρ τῶν πολὺ διεστηκότων
 κατάδηλοι παντελῶς αἱ διαφοραί.

XVII. Τὴν δὲ ὁμοιότητα σκεπτέον ἐπὶ τε τῶν
 ἐν ἐτέροις γένεσιν, ὡς ἕτερον πρὸς ἕτερόν τι,
 οὕτως ἄλλο πρὸς ἄλλο, οἷον ὡς ἐπιστήμη πρὸς
 10 ἐπιστητόν, οὕτως αἴσθησις πρὸς αἰσθητόν· καὶ ὡς
 ἕτερον ἐν ἐτέρῳ τινί, οὕτως ἄλλο ἐν ἄλλῳ, οἷον
 ὡς ὄψις ἐν ὀφθαλμῷ, νοῦς ἐν ψυχῇ, καὶ ὡς γαλήνη
 ἐν θαλάσσῃ, νηνεμία ἐν ἀέρι. μάλιστα δ' ἐν τοῖς
 πολὺ διεστῶσι γυμνάζεσθαι δεῖ· ῥᾶον γὰρ ἐπὶ τῶν
 λοιπῶν δυνησόμεθα τὰ ὅμοια συννοᾶν. σκεπτέον
 15 δὲ καὶ τὰ ἐν τῷ αὐτῷ γένει ὄντα, εἴ τι ἅπασιν
 ὑπάρχει ταυτόν, οἷον ἀνθρώπῳ καὶ ἵππῳ καὶ κυνί·
 ἢ γὰρ ὑπάρχει τι αὐτοῖς ταυτόν, ταύτῃ ὁμοιά
 ἐστίν.

of anything, you must look whether one of the meanings which fall under the same term is a species and another a differentia, for example, λευκός ('white,' 'clear') when applied to a body is a species of colour, but when applied to a note it is a differentia, for one note differs from another in being clear.

XVI. The number of meanings, then, of a term must be examined by these and similar methods. The differences must be viewed in their relation with one another both in the genera themselves—for example, "In what does justice differ from courage and wisdom from temperance?" (for all these belong to the same genus)—and also from one genus to another, where they are not too widely separated—for example, "In what does sensation differ from knowledge?"—for where the genera are widely separated, the differences are quite obvious.

XVII. Likeness must be examined in things belonging to different genera—as A is to B, so is C to D (for example, 'As knowledge is related to the object of knowledge, so is sensation related to the object of sensation'), and also, as A is in B, so is C in D (for example, 'As sight is in the eye, so is reason in the soul' and 'As is calm in the sea, so is absence of wind in the air'). In particular we must have practice in dealing with genera which are widely separated; for in the other cases we shall be able to detect the similarities more readily. We must examine also things which are in the same genus, to see if there is any attribute belonging to them all which is the same, for example, to a man, a horse and a dog; for they are alike in as far as any attribute which they possess is the same.

How to note differences.

How to note resemblances.

108 a

XVIII. Χρήσιμον δὲ τὸ μὲν ποσαχῶς λέγεται ἐπεσκέφθαι πρὸς τε τὸ σαφές (μᾶλλον γὰρ ἂν τις
 20 εἰδεῖν τί τίθῃσιν, ἐμφανισθέντος ποσαχῶς λέγεται)
 καὶ πρὸς τὸ γίνεσθαι κατ' αὐτὸ τὸ πρᾶγμα καὶ
 μὴ πρὸς τοῦνομα τοὺς συλλογισμούς. ἀδήλου γὰρ
 ὄντος ποσαχῶς λέγεται, ἐνδέχεται μὴ ἐπὶ ταῦτόν
 τόν τε ἀποκρινόμενον καὶ τὸν ἐρωτῶντα φέρειν
 τὴν διάνοιαν· ἐμφανισθέντος δὲ ποσαχῶς λέγεται
 25 καὶ ἐπὶ τί φέρων τίθῃσι, γελοῖος ἂν φαίνοιτο ὁ
 ἐρωτῶν, εἰ μὴ πρὸς τοῦτο τὸν λόγον ποιοῖτο.
 χρήσιμον δὲ καὶ πρὸς τὸ μὴ παραλογισθῆναι καὶ
 πρὸς τὸ παραλογίσασθαι. εἰδότες γὰρ ποσαχῶς
 λέγεται οὐ μὴ παραλογισθῶμεν, ἀλλ' εἰδήσομεν
 ἔαν μὴ πρὸς ταῦτό τὸν λόγον ποιῇται ὁ ἐρωτῶν·
 30 αὐτοὶ τε ἐρωτῶντες δυνησόμεθα παραλογίσασθαι,
 ἔαν μὴ τυγχάνῃ εἰδῶς ὁ ἀποκρινόμενος ποσαχῶς
 λέγεται. τοῦτο δ' οὐκ ἐπὶ πάντων δυνατόν, ἀλλ'
 ὅταν ᾗ τῶν πολλαχῶς λεγομένων τὰ μὲν ἀληθῆ
 τὰ δὲ ψευδῆ. ἔστι δὲ οὐκ οἰκείος ὁ τρόπος οὗτος
 τῆς διαλεκτικῆς· διὸ παντελῶς εὐλαβητέον τοῖς
 35 διαλεκτικοῖς τὸ τοιοῦτον, τὸ πρὸς τοῦνομα διαλέ-
 γεσθαι, ἔαν μή τις ἄλλως ἐξαδυνατῇ περὶ τοῦ
 προκειμένου διαλέγεσθαι.

Τὸ δὲ τὰς διαφορὰς εὐρεῖν χρήσιμον πρὸς τε
 τοὺς συλλογισμούς τοὺς περὶ ταῦτου καὶ ἑτέρου
 108 b καὶ πρὸς τὸ γνωρίζειν τί ἕκαστόν ἐστιν. ὅτι μὲν
 οὖν πρὸς τοὺς συλλογισμούς τοὺς περὶ ταῦτου καὶ

TOPICA, I. XVIII

XVIII. It is useful to have examined the various meanings of a term both with a view to clarity (for a man would know better what he is stating if the various senses in which it can be used had been made clear), and also in order that his reasonings may be directed to the actual thing and not to the name by which it is called. For if the various ways in which a term can be used are not clear, it is possible that the answerer and the questioner are not applying their mind to the same thing; whereas, if it has been made clear what are the various ways in which a term can be used and to which of them the answerer is referring in his statement, the questioner would look absurd if he did not direct his argument to this. It is also useful so that one may not be misled and that one may mislead others by false reasoning. For if we know the various senses in which a term can be used, we shall never be misled by false reasoning, but we shall be aware of it if the questioner fails to direct his argument to the same point, and we shall ourselves, when we are asking questions, be able to mislead the answerer, if he does not happen to know the various meanings of a term. This, however, is not always possible but only when some of the various meanings are true and others false. This kind of argument, however, is not a proper part of dialectic; therefore, dialecticians must be very much on their guard against such verbal discussion, unless it is quite impossible to discuss the subject otherwise.

The discovery of differences is useful both for reasonings about sameness and difference, and also for the recognition of what some particular thing is. Its usefulness for reasonings about sameness and

Utility of
the detec-
tion of am-
biguity.

Utility of
the dis-
covery of
differences.

108 b

ἑτέρου χρήσιμον, δῆλον· εὐρόντες γὰρ διαφορὰν
 τῶν προκειμένων ὅποιαν οὖν δεδειχότες ἐσόμεθα
 ὅτι οὐ ταυτόν· πρὸς δὲ τὸ γνωρίζειν τί ἐστι, διότι
 5 τὸν ἴδιον τῆς οὐσίας ἐκάστου λόγον ταῖς περὶ
 ἑκαστον οἰκείαις διαφοραῖς χωρίζειν εἰώθαμεν.

Ἡ δὲ τοῦ ὁμοίου θεωρία χρήσιμος πρὸς τε τοὺς
 ἐπακτικούς λόγους καὶ πρὸς τοὺς ἐξ ὑποθέσεως
 συλλογισμούς καὶ πρὸς τὴν ἀπόδοσιν τῶν ὁρισμῶν.
 10 πρὸς μὲν οὖν τοὺς ἐπακτικούς λόγους, διότι τῇ
 καθ' ἑκαστα ἐπὶ τῶν ὁμοίων ἐπαγωγῇ τὸ καθόλου
 ἀξιούμεν ἐπάγειν· οὐ γὰρ ῥάδιόν ἐστιν ἐπάγειν
 μὴ εἰδότας τὰ ὅμοια. πρὸς δὲ τοὺς ἐξ ὑποθέσεως
 συλλογισμούς, διότι ἔνδοξόν ἐστιν, ὥς ποτε ἐφ'
 ἐνὸς τῶν ὁμοίων ἔχει, οὕτως καὶ ἐπὶ τῶν λοιπῶν.
 15 ὥστε πρὸς ὃ τι ἂν αὐτῶν εὐπορώμεν διαλέγεσθαι,
 προδιομολογησόμεθα, ὥς ποτε ἐπὶ τούτων ἔχει,
 οὕτω καὶ ἐπὶ τοῦ προκειμένου ἔχειν. δείξαντες
 δὲ ἐκείνο καὶ τὸ προκείμενον ἐξ ὑποθέσεως δεδει-
 χότες ἐσόμεθα· ὑποθέμενοι γάρ, ὥς ποτε ἐπὶ τού-
 των ἔχει, οὕτω καὶ ἐπὶ τοῦ προκειμένου ἔχειν,
 τὴν ἀπόδειξιν πεποιήμεθα. πρὸς δὲ τὴν τῶν
 20 ὁρισμῶν ἀπόδοσιν, διότι δυνάμενοι συνορᾶν τί ἐν
 ἐκάστῳ ταυτόν, οὐκ ἀπορήσομεν εἰς τί δεῖ γένος
 ὀριζομένους τὸ προκείμενον τιθέναι· τῶν γὰρ κοι-
 νῶν τὸ μάλιστα ἐν τῷ τί ἐστι κατηγορούμενον
 326

TOPICA, I. xviii

difference is obvious ; for when we have discovered a difference of some kind or other between the subjects under discussion, we shall have shown that they are not the same. It is useful for recognizing what some particular thing is, because we usually isolate the appropriate description of the essence of a particular thing by means of the differentiae which are peculiar to it.

The consideration of similarity is useful both for inductive arguments and for hypothetical reasoning and also for the assignment of definitions. For inductive reasoning it is useful because we maintain that it is by induction of particulars on the basis of similarities that we infer the universal ; for it is not easy to employ inference if we do not know the points of similarity. It is useful for hypothetical reasoning, because it is an accepted opinion that whatever holds good of one of several similars, holds good also of the rest. Therefore, if we have the proper material for discussing any one of them, we shall secure beforehand an admission that what holds good of other similars also holds good of the subject under discussion, and, having demonstrated the former, we shall have also demonstrated, on the basis of the hypothesis, the subject under discussion ; for we shall have completed our demonstration by the hypothetical assumption that whatever holds good of other similars holds good also of the subject under discussion. It is useful for the assignment of definitions because, if we can see what is identical in each particular case, we shall have no doubt about the genus in which we must place the subject under discussion when we are defining it ; for, of the common predicates, that which falls most definitely

Utility of
the dis-
covery of
similarities.

108 b

γένος ἂν εἴη. ὁμοίως δὲ καὶ ἐν τοῖς πολὺν διεστῶσι
 χρήσιμος πρὸς τοὺς ὁρισμοὺς ἢ τοῦ ὁμοίου θεωρία,
 25 οἷον ὅτι ταῦτόν γαλήνη μὲν ἐν θαλάσσῃ, νηνεμία
 δ' ἐν αἰέρι (ἐκάτερον γὰρ ἡσυχία), καὶ ὅτι στιγμή
 ἐν γραμμῇ καὶ μονὰς ἐν ἀριθμῷ· ἐκάτερον γὰρ
 ἀρχή. ὥστε τὸ κοινὸν ἐπὶ πάντων γένος ἀποδι-
 δόντες δόξομεν οὐκ ἄλλοτρίως ὀρίζεσθαι. σχεδὸν
 δὲ καὶ οἱ ὀριζόμενοι οὕτως εἰώθασιν ἀποδιδόναι·
 30 τήν τε γὰρ μονάδα ἀρχὴν ἀριθμοῦ φασὶν εἶναι καὶ
 τὴν στιγμήν ἀρχὴν γραμμῆς. δῆλον οὖν ὅτι εἰς
 τὸ κοινὸν ἀμφοτέρων γένος τιθέασιν.

Τὰ μὲν οὖν ὄργανα δι' ὧν οἱ συλλογισμοὶ ταύτ'
 ἐστίν· οἱ δὲ τόποι πρὸς οὓς χρήσιμα τὰ λεχθέντα
 οἶδε εἰσίν.

TOPICA, I. XVIII

in the category of essence must be the genus. Likewise also the consideration of similarity is useful for the forming of definitions in dealing with widely separated subjects, for example, the statements that "calm at sea and absence of wind in the air are the same thing" (for each is a state of quiet), and that "a point on a line and a unit in number are the same thing" (for each is a starting-point). Thus, if we assign as the genus that which is common to all the cases, our definition will not be regarded as unsuitable. Those who deal in definitions usually form them on this principle; for they say that the unit is the starting-point of number and the point the starting-point of a line; it is obvious, therefore, that they assign genus to that which is common to both.

Such, then, are the means by which reasonings are carried out. The commonplaces for the application of which the said means are useful are our next subject.

B

108 b 34 I. Ἔστι δὲ τῶν προβλημάτων τὰ μὲν καθόλου
 35 τὰ δ' ἐπὶ μέρους. καθόλου μὲν οὖν οἶον ὅτι πᾶσα
 ἡδονὴ ἀγαθὸν καὶ ὅτι οὐδεμία ἡδονὴ ἀγαθόν, ἐπὶ
 109 a μέρους δὲ οἶον ὅτι ἔστι τις ἡδονὴ ἀγαθὸν καὶ ὅτι
 ἔστι τις ἡδονὴ οὐκ ἀγαθόν. ἔστι δὲ πρὸς ἀμφοτέρα
 τὰ γένη τῶν προβλημάτων κοινὰ τὰ καθόλου
 κατασκευαστικὰ καὶ ἀνασκευαστικά· δείξαντες
 γὰρ ὅτι παντὶ ὑπάρχει, καὶ ὅτι τινὶ ὑπάρχει δε-
 5 δειχότες ἐσόμεθα. ὁμοίως δὲ καὶ ὅτι οὐδενὶ
 ὑπάρχει δείξωμεν, καὶ ὅτι οὐ παντὶ ὑπάρχει δεδει-
 χότες ἐσόμεθα. πρῶτον οὖν περὶ τῶν καθόλου
 ἀνασκευαστικῶν ῥητέον διὰ τε τὸ κοινὰ εἶναι τὰ
 τοιαῦτα πρὸς τὰ καθόλου καὶ τὰ ἐπὶ μέρους, καὶ
 διὰ τὸ μᾶλλον τὰς θέσεις κομίζειν ἐν τῷ ὑπάρχειν
 10 ἢ μή, τοὺς δὲ διαλεγομένους ἀνασκευάζειν. ἔστι
 δὲ χαλεπώτατον τὸ ἀντιστρέφειν τὴν ἀπὸ τοῦ
 συμβεβηκότος οἰκείαν ὀνομασίαν· τὸ γὰρ πῇ καὶ
 μὴ καθόλου ἐπὶ μόνων ἐνδέχεται τῶν συμβεβη-
 κόντων. ἀπὸ μὲν γὰρ τοῦ ὅρου καὶ τοῦ ἰδίου καὶ
 τοῦ γένους ἀναγκαῖον ἀντιστρέφειν, οἶον εἰ ὑπάρχει
 15 τινὶ ζῳῷ πεζῷ δίποδι εἶναι, ἀντιστρέψαντι ἀληθὲς
 ἔσται λέγειν ὅτι ζῶον πεζὸν δίποδον ἐστίν. ὁμοίως

BOOK II

I. SOME problems are universal, others particular. Examples of universal problems are "Every pleasure is good," and "No pleasure is good"; examples of particular problems are "Some pleasure is good," and "Some pleasure is not good." Universally constructive and destructive methods are common to both kinds of problem; for when we have shown that some predicate belongs in all instances, we shall also have shown that it belongs in some particular instance, and, similarly, if we show that it does not belong in any instance, we shall also have shown that it does not belong in every instance. First, then, we must speak of universally destructive methods, because such methods are common both to universal and to particular problems and because people bring forward theses asserting the presence of a predicate rather than its absence, while those who are arguing against them seek to demolish them. It is very difficult to convert an appropriate appellation which is derived from an 'accident'; for only in the case of accidents can something be predicated conditionally and not universally. For conversion must necessarily be based on the definition and the property and the genus. For example, if "to be a biped pedestrian animal is an attribute of A," it will be true to say by conversion that "A is a biped pedestrian animal."

COMMON-
PLACES
ABOUT
PREDICA-
TIONS. (A)
OF ACCI-
DENT.
Problems,
universal
and
particular.

Peculiar
difficulties
of problems
based on
accident.

109 a

δὲ καὶ ἀπὸ τοῦ γένους· εἰ γὰρ ζῶν ὑπάρχει τινὶ εἶναι, ζῶόν ἐστιν. τὰ δ' αὐτὰ καὶ ἐπὶ τοῦ ἰδίου· εἰ γὰρ ὑπάρχει τινὶ γραμματικῆς δεκτικῶ εἶναι, γραμματικῆς δεκτικὸν ἔσται. οὐδὲν γὰρ τούτων
 20 ἐνδέχεται κατὰ τι ὑπάρχειν ἢ μὴ ὑπάρχειν, ἀλλ' ἀπλῶς ἢ ὑπάρχειν ἢ μὴ ὑπάρχειν. ἐπὶ δὲ τῶν συμβεβηκότων οὐδὲν κωλύει κατὰ τι ὑπάρχειν, οἷον λευκότητα ἢ δικαιοσύνην, ὥστε οὐκ ἀπόχρη τὸ δεῖξαι ὅτι ὑπάρχει λευκότης ἢ δικαιοσύνη πρὸς τὸ δεῖξαι ὅτι λευκὸς ἢ δίκαιός ἐστιν· ἔχει γὰρ
 25 ἀμφισβήτησιν ὅτι κατὰ τι λευκὸς ἢ δίκαιός ἐστιν. ὥστ' οὐκ ἀναγκαῖον ἐπὶ τῶν συμβεβηκότων τὸ ἀντιστρέφειν.

Διορίσασθαι δὲ δεῖ καὶ τὰς ἀμαρτίας τὰς ἐν τοῖς προβλήμασιν, ὅτι εἰσὶ διτταί, ἢ τῷ ψεύδεσθαι ἢ τῷ παραβαίνειν τὴν κειμένην λέξιν. οἱ τε γὰρ
 30 ψευδόμενοι καὶ τὸ μὴ ὑπάρχον ὑπάρχειν τινὶ λέγοντες ἀμαρτάνουσι· καὶ οἱ τοῖς ἄλλοτρίοις ὀνόμασι τὰ πράγματα προσαγορεύοντες, οἷον τὴν πλάτανον ἄνθρωπον, παραβαίνουσι τὴν κειμένην ὀνομασίαν.

II. Εἰς μὲν δὴ τόπος τὸ ἐπιβλέπειν εἰ τὸ κατ'
 35 ἄλλον τινὰ τρόπον ὑπάρχον ὡς συμβεβηκὸς ἀποδédωκεν. ἀμαρτάνεται δὲ μάλιστα τοῦτο περὶ τὰ γένη, οἷον εἴ τις τῷ λευκῷ φαίῃ συμβεβηκέναι χρώματι εἶναι· οὐ γὰρ συμβέβηκε τῷ λευκῷ χρώματι εἶναι, ἀλλὰ γένος αὐτοῦ τὸ χρώμά ἐστιν. ἐνδέχεται μὲν οὖν καὶ κατὰ τὴν ὀνομασίαν διορίσαι
 109 b τὸν τιθέμενον, οἷον ὅτι συμβέβηκε τῇ δικαιοσύνῃ

^a i.e. that colour is an accident of white.

TOPICA, II. 1-11

So too if the appellation is derived from genus ; for, if " to be an animal is an attribute of A," then " A is an animal." The same thing occurs in the case of a property ; if " to be receptive of grammar is an attribute of B," then " B will be receptive of grammar." For it is impossible for any of these attributes to belong or not belong in part only ; but they must belong or not belong absolutely. In the case of accidents, however, there is nothing to prevent an attribute belonging in part only (*e.g.*, whiteness or justice), and so it is not enough to show that whiteness or justice is an attribute of a man in order to show that he is white or just ; for it is possible to argue that he is only partly white or just. In the case of accidents, therefore, conversion is not necessarily possible.

We must also define the errors which occur in problems, which are of two kinds, being due either to misrepresentation or to violation of the established use of language. Those who employ misrepresentation and assert that a thing has some attribute which it has not, commit error ; while those who call things by names which do not belong to them (*e.g.*, calling a plane-tree a man) violate the established nomenclature.

II. One commonplace is to look whether your opponent has assigned as an accident something which belongs in some other way. This mistake is usually committed in respect of genera, for example, if someone should say that white happens to be a colour ^a ; for white does not happen to be a colour, but colour is its genus. Possibly, it is true, the man who is making the statement may expressly define the attribute as an accident, saying, for example,

Two common errors.

Various rules regarding problems of Accident.
(a) Proof that what has been assigned as accident is not accident.

109 b

ἀρετῇ εἶναι· πολλάκις δὲ καὶ μὴ διορίσαντι κατὰ-
 δηλον ὅτι τὸ γένος ὡς συμβεβηκὸς ἀποδέδωκεν,
 οἷον εἴ τις τὴν λευκότητα κεχρῶσθαι φήσειεν ἢ
 5 τὴν βάδισιν κινεῖσθαι. ἀπ' οὐδενὸς γὰρ γένους
 παρωνύμως ἢ κατηγορία κατὰ τοῦ εἴδους λέγεται,
 ἀλλὰ πάντα συνωνύμως τὰ γένη τῶν εἰδῶν κατη-
 γορεῖται· καὶ γὰρ τοῦνομα καὶ τὸν λόγον ἐπιδέχεται
 τῶν γενῶν τὰ εἶδη. ὁ οὖν κεχρωσμένον εἶπας τὸ
 λευκὸν οὔτε ὡς γένος ἀποδέδωκεν, ἐπειδὴ παρω-
 10 νύμως εἴρηκεν, οὔθ' ὡς ἴδιον ἢ ὡς ὀρισμόν· ὁ γὰρ
 ὀρισμὸς καὶ τὸ ἴδιον οὐδενὶ ἄλλῳ ὑπάρχει, κέ-
 χρωσται δὲ πολλὰ καὶ τῶν ἄλλων, οἷον ξύλον λίθος
 ἄνθρωπος ἵππος. δῆλον οὖν ὅτι ὡς συμβεβηκὸς
 ἀποδίδωσιν.

"Ἄλλος τὸ ἐπιβλέπειν οἷς ὑπάρχειν ἢ πᾶσιν ἢ
 μηδενὶ εἴρηται, σκοπεῖν δὲ κατ' εἶδη καὶ μὴ ἐν
 15 τοῖς ἀπείροις· ὁδῶ γὰρ μᾶλλον καὶ ἐν ἐλάττωσιν
 ἢ σκέψις. δεῖ δὲ σκοπεῖν καὶ ἄρχεσθαι ἀπὸ τῶν
 πρώτων, εἴτ' ἐφεξῆς ἕως τῶν ἀτόμων, οἷον εἰ τῶν
 ἀντικειμένων τὴν αὐτὴν ἐπιστήμην ἔφησεν εἶναι,
 σκεπτέον εἰ τῶν πρὸς τι καὶ τῶν ἐναντίων καὶ
 τῶν κατὰ στέρησιν καὶ ἕξιν καὶ τῶν κατ' ἀντίφα-
 20 σιν λεγομένων ἢ αὐτὴ ἐπιστήμη· κἂν ἐπὶ τούτων
 μήπω φανερόν ᾗ, πάλιν ταῦτα διαιρετέον μέχρι

^a The meaning of παρωνύμως is explained in *Cat.* 1 a 12 ff.: "Things are named 'derivatively' which derive their name from something else, being given a different word-form, e.g., 'grammarian' from 'grammar' and 'courageous' from 'courage.'" Cf. also Aesch. *Eum.* 8 τὸ Φοῖβης δ' ὄνομ' ἔχει (sc. Φοῖβος) παρώνυμον.

“Justice happens to be a virtue,” but often, even if he does not so define it, it is obvious that he has assigned the genus as an accident, for example, if one were to say that “whiteness is coloured,” or that “walking is motion.” For a predicate taken from a genus is never applied to a species in a derived verbal form,^a but all genera are predicated unequivocally of their species; for the species take the name and the description of their genera. A man, therefore, who speaks of white as ‘coloured’ has not assigned ‘colour’ as a genus, since he has described it by a derived form of the word, nor as a property, nor as a definition; for the definition and the property of a thing belong to nothing but that thing, whereas many other things are ‘coloured,’ for example, a piece of wood, a stone, a man or a horse. It is obvious, therefore, that he is assigning ‘coloured’ as an accident.

Another commonplace rule is to examine instances in which a predicate has been said to belong to all or none of a particular thing, and to look at them according to species and not in their infinite number; for then the examination will be more methodical and in fewer stages. The examination must be carried on and begin from the primary classes and then go on step by step until further division is impossible. For example, if your opponent has said that “the knowledge of opposites is the same,” you must examine whether the knowledge is the same of relative opposites and contraries and predicates based on the privation and presence of certain conditions, and of contradictory predicates. If the matter is not yet clear in the light of these, the process of division must be continued until the

(b) Examination of the subjects of predication.

109 b

τῶν ἀτόμων, οἷον εἰ τῶν δικαίων καὶ ἀδίκων,
 ἢ τοῦ διπλασίου καὶ ἡμίσεος, ἢ τυφλότητος καὶ
 ὄψεως, ἢ τοῦ εἶναι καὶ μὴ εἶναι. ἐὰν γὰρ ἐπὶ
 τινος δειχθῇ ὅτι οὐχ ἡ αὐτή, ἀνηρηκότες ἐσόμεθα
 25 τὸ πρόβλημα· ὁμοίως δὲ καὶ ἐὰν μηδενὶ ὑπάρχη.
 οὗτος δ' ὁ τόπος ἀντιστρέφει πρὸς τὸ ἀνασκευάζειν
 καὶ κατασκευάζειν. ἐὰν γὰρ ἐπὶ πάντων φαίνεται
 διαίρεσιν προενέγκασιν ἢ ἐπὶ πολλῶν, ἀξιωτέον
 καὶ καθόλου τιθέναι ἢ ἔνστασιν φέρειν ἐπὶ τίνος
 οὐχ οὕτως· ἐὰν γὰρ μηδέτερον τούτων ποιῇ,
 ἄτοπος φανείται μὴ τιθεῖς.

30 "Ἄλλος τὸ λόγους ποιεῖν τοῦ τε συμβεβηκότος καὶ
 ᾧ συμβέβηκεν, ἢ ἀμφοτέρων καθ' ἑκάτερον ἢ τοῦ
 ἑτέρου, εἴτα σκοπεῖν εἴ τι μὴ ἀληθὲς ἐν τοῖς λόγοις
 ὥς ἀληθὲς εἴληπται. οἷον εἰ ἔστι θεὸν ἀδικεῖν,
 τί τὸ ἀδικεῖν; εἰ γὰρ τὸ βλάπτειν ἐκουσίως, δῆλον
 ὥς οὐκ ἔστι θεὸν ἀδικεῖσθαι· οὐ γὰρ ἐνδέχεται

35 βλάπτεσθαι τὸν θεόν. καὶ εἰ φθονερός ὁ σπουδαῖος,
 τίς ὁ φθονερός καὶ τίς ὁ φθόνος; εἰ γὰρ ὁ φθόνος
 ἐστὶ λύπη ἐπὶ φαινομένη εὐπραγία τῶν ἐπικεικῶν
 τινός, δῆλον ὅτι ὁ σπουδαῖος οὐ φθονερός· φαῦλος
 γὰρ ἂν εἴη. καὶ εἰ ὁ νεμεσητικὸς φθονερός, τίς

110 a ἑκάτερος αὐτῶν; οὕτω γὰρ καταφανὲς ἔσται
 πότερον ἀληθὲς ἢ ψεῦδος τὸ ῥηθέν, οἷον εἰ φθονερός
 μὲν ὁ λυπούμενος ἐπὶ ταῖς τῶν ἀγαθῶν εὐπραγίαις,
 336

indivisible is reached, for example, until you see if it is true of "just and unjust actions," "the double and the half," "blindness and sight," or "being and not-being." For if it is shown in any instance that the knowledge is not the same, we shall have demolished the problem. Similarly, too, if the predicate does not belong in any instance. This commonplace is convertible both for destructive and for constructive purposes ; for if, after a long process of division, the predicate appears to apply in all or in numerous cases, we must claim that our opponent should admit its universal application or else bring forward an objection and show in what case it does not apply. If he does neither of these things, he will look foolish if he refuses to make the admission.

Another commonplace is to make definitions both of the accident and of that to which it belongs, either of both separately or one of them, and then see if anything untrue has been assumed as true in the definitions. For example, to see if it is possible to wrong a god, you must ask, what does 'wrong' mean? For if it means 'to harm wittingly,' it is obvious that it is impossible for a god to be wronged, for it is impossible for God to be harmed. Again, to see whether the good man is envious, you must ask, who is 'envious' and what is 'envy'? For if 'envy' is pain at the apparent prosperity of an honest man, clearly the good man is not envious ; for then he would be a bad man. Again, to see whether the indignant man is envious, you must ask, what does each of these terms mean? For thus it will be manifest whether the statement is true or false ; for example, if the man is 'envious' who is pained at the prosperity of the good, and the

(c) Definition of the accident and its subject.

110 a

νεμεσητικὸς δ' ὁ λυπούμενος ἐπὶ ταῖς τῶν κακῶν
 εὐπραγίαις, δῆλον ὅτι οὐκ ἂν εἶη φθονερός ὁ
 5 νεμεσητικός. λαμβάνειν δὲ καὶ ἀντὶ τῶν ἐν τοῖς
 λόγοις ὀνομάτων λόγους, καὶ μὴ ἀφίστασθαι ἕως
 ἂν εἰς γνώριμον ἔλθῃ· πολλάκις γὰρ ὅλου μὲν τοῦ
 λόγου ἀποδοθέντος οὕτω δῆλον τὸ ζητούμενον,
 ἀντὶ δέ τινος τῶν ἐν τῷ λόγῳ ὀνομάτων λόγου
 ῥηθέντος κατάδηλον γίνεται.

10 "Ἐτι τὸ πρόβλημα πρότασιν ἑαυτῷ ποιούμενον
 ἐνίστασθαι· ἡ γὰρ ἐνστασις ἔσται ἐπιχείρημα πρὸς
 τὴν θέσιν. ἔστι δ' ὁ τόπος οὗτος σχεδὸν ὁ αὐτὸς
 τῷ ἐπιβλέπειν οἷς ὑπάρχειν ἢ πᾶσιν ἢ μηδενὶ
 εἴρηται· διαφέρει δὲ τῷ τρόπῳ.

"Ἐτι διορίζεσθαι ποῖα δεῖ καλεῖν ὥς οἱ πολλοὶ
 15 καὶ ποῖα οὐ· χρήσιμον γὰρ καὶ πρὸς τὸ κατα-
 σκευάζειν καὶ πρὸς τὸ ἀνασκευάζειν· οἷον ὅτι
 ταῖς μὲν ὀνομασίαις τὰ πράγματα προσαγορευτέον
 καθάπερ οἱ πολλοί, ποῖα δὲ τῶν πραγμάτων ἐστὶ
 τοιαῦτα ἢ οὐ τοιαῦτα, οὐκέτι προσεκτέον τοῖς
 πολλοῖς. οἷον ὑγιεινὸν μὲν ῥητέον τὸ ποιητικὸν
 20 ὑγιείας, ὥς οἱ πολλοὶ λέγουσιν· πότερον δὲ τὸ
 προκείμενον ποιητικὸν ὑγιείας ἢ οὐ, οὐκέτι ὥς
 οἱ πολλοὶ κλητέον ἀλλ' ὥς ὁ ἱατρός.

III. "Ἐτι ἐὰν πολλαχῶς λέγεται, κείμενον δὲ
 ἦ ὥς ὑπάρχει ἢ ὥς οὐχ ὑπάρχει, θάτερον δεικνύει

^a i.e. the objection will enable you to examine the assertion dialectically.

^b Cf. 109 b 13.

TOPICA, II. II-III

indignant man is he who is pained at the prosperity of the wicked, it is obvious that the indignant man could not be envious. One ought also to substitute definitions for the terms used in the definitions and to go on doing this until some familiar term is reached. For often, though the whole definition has been given, the object of our search is not yet clear, but it becomes clear when a definition has been given in place of one of the terms in the definition.

Furthermore, one ought to turn the problem for oneself into a proposition and then raise an objection to it; for an objection will be an argument against a thesis.^a This commonplace rule is almost the same as examining instances in which a predicate has been said to belong to all or none of a particular thing,^b but it differs in method.

Furthermore, you must define what kinds of things should be called as the majority call them, and what should not; for this is useful both for constructive and destructive purposes. For instance, you ought to lay it down that things ought to be described in the language used by the majority, but when it is asked what things are of certain kinds and what are not, you must no longer pay attention to the majority. For example, you must say, as do the majority, that 'healthy' is that which is productive of health; but when it is asked whether the subject under discussion is productive of health or not, you must no longer use the language of the majority, but that of the doctor.

III. Furthermore, if a term is used with more than one meaning and it has been stated that it belongs to or does not belong to something, we ought to

(d) Change of the problem into a proposition.

(e) Definition of what vulgar denominations should be admitted and what rejected.

Rules for dealing with ambiguity.
(a) If the

110 a

25 τῶν πλεοναχῶς λεγομένων, ἐὰν μὴ ἄμφω ἐν-
δέχεται. χρηστέον δ' ἐπὶ τῶν λανθανόντων· ἐὰν
γὰρ μὴ λανθάνῃ πολλαχῶς λεγόμενον, ἐνστήσεται
ὅτι οὐ διείλεκται ὅπερ αὐτὸς ἠπόρει, ἀλλὰ θά-
τερον. οὗτος δ' ὁ τόπος ἀντιστρέφει καὶ πρὸς
τὸ κατασκευάσαι καὶ ἀνασκευάσαι. κατασκευάζειν

30 μὲν γὰρ βουλόμενοι δείξομεν ὅτι θάτερον ὑπάρχει,
ἐὰν μὴ ἄμφω δυνώμεθα· ἀνασκευάζοντες δὲ ὅτι
οὐχ ὑπάρχει θάτερον δείξομεν, ἐὰν μὴ ἄμφω
δυνώμεθα. πλὴν ἀνασκευάζοντι μὲν οὐδὲν δεῖ ἐξ
ὁμολογίας διαλέγεσθαι, οὗτ' εἰ παντὶ οὗτ' εἰ
μηδενὶ ὑπάρχειν εἴρηται· ἐὰν γὰρ δείξωμεν ὅτι
35 οὐχ ὑπάρχει ὁπωσὺν, ἀνηρηκότες ἐσόμεθα τὸ παντὶ
ὑπάρχειν, ὁμοίως δὲ καὶ ἐνὶ δείξωμεν ὑπάρχον,
ἀναιρήσομεν τὸ μηδενὶ ὑπάρχειν. κατασκευάζουσι
δὲ προδιομολογητέον ὅτι εἰ ὁπωσὺν ὑπάρχει παντὶ

110 b

ὑπάρχει, ἂν πιθανὸν ᾗ τὸ ἀξίωμα. οὐ γὰρ ἀπόχρη
πρὸς τὸ δεῖξαι ὅτι παντὶ ὑπάρχει τὸ ἐφ' ἑνὸς
διαλεχθῆναι, οἷον εἰ ἡ τοῦ ἀνθρώπου ψυχὴ ἀθάνα-
τος, διότι ψυχὴ πᾶσα ἀθάνατος, ὥστε προομο-
λογητέον ὅτι εἰ ἡττισοῦν ψυχὴ ἀθάνατος, πᾶσα
β ἀθάνατος. τοῦτο δ' οὐκ ἀεὶ ποιητέον, ἀλλ' ὅταν
μὴ εὐπορῶμεν κοινὸν ἐπὶ πάντων ἓνα λόγον

TOPICA, II. III

demonstrate one of the several meanings if it is impossible to demonstrate both. This method should be used when the variety of meaning is unnoticed ; for, if it is noticed, the opponent will object that the question which he himself raised has not been discussed, but the other meaning. This commonplace is convertible for both constructive and destructive purposes. If we wish to argue constructively, we shall show that the attribute belongs in one of its senses, if we cannot show it belongs in both. For destructive criticism, we shall show that one of its senses does not belong, if we cannot show that both do not do so. In destructive criticism, however, there is no need to argue on the basis of an admission, either if the attribute is stated to belong universally or if it is stated not to belong to anything ; for if we show that there is anything whatsoever to which it does not belong, we shall have destroyed the assertion that it belongs universally, and, similarly, if we can show that it does belong in a single case, we shall demolish the assertion that it does not belong to anything. If, however, we are arguing constructively, we ought to obtain a preliminary admission that, if the attribute belongs to any one thing, it belongs universally, provided the claim is plausible. For it is not enough to argue in a single case in order to show that an attribute belongs universally—to argue, for example, that if the soul of man is immortal, then every soul is immortal. We must, therefore, obtain beforehand an admission that if any soul whatever is immortal, then every soul is immortal. This method must not be employed always, but only when we are not in a position to state a single argument which applies to all cases

ambiguity
of a term
escapes the
opponent,
use the
meaning
best suited
to your
argument.

110 b

εἰπεῖν, καθάπερ ὁ γεωμέτρης ὅτι τὸ τρίγωνον
 δυσὶν ὀρθαῖς ἴσας ἔχει.

Ἐὰν δὲ μὴ λανθάνῃ πολλαχῶς λεγόμενον, διελό-
 μενον ὅσαχῶς λέγεται, καὶ ἀναιρεῖν καὶ κατα-
 10 σκευάζειν. οἷον εἰ τὸ δέον ἐστὶ τὸ συμφέρον
 ἢ τὸ καλόν, πειρατέον ἄμφω κατασκευάζειν ἢ
 ἀναιρεῖν περὶ τοῦ προκειμένου, οἷον ὅτι καλὸν
 καὶ συμφέρον, ἢ ὅτι οὔτε καλὸν οὔτε συμφέρον.
 ἐὰν δὲ μὴ ἐνδέχεται ἀμφοτέρω, θάτερον δεικτέον,
 ἐπισημαινόμενον ὅτι τὸ μὲν τὸ δ' οὔ. ὁ δ' αὐτὸς
 15 λόγος καὶ πλείω ἢ εἰς ἅ διαιρεῖται.

Πάλιν ὅσα μὴ καθ' ὁμωνυμίαν λέγεται πολ-
 λαχῶς, ἀλλὰ κατ' ἄλλον τρόπον, οἷον ἐπιστήμη
 μία πλειόνων ἢ ὡς τοῦ τέλους καὶ τοῦ πρὸς τὸ
 τέλος, οἷον ἰατρικὴ τοῦ ὑγίειαν ποιῆσαι καὶ τοῦ
 20 διαιτῆσαι, ἢ ὡς ἀμφοτέρων τελῶν, καθάπερ τῶν
 ἐναντίων ἢ αὐτῇ λέγεται ἐπιστήμη (οὐδὲν γὰρ
 μᾶλλον τέλος τὸ ἕτερον τοῦ ἑτέρου), ἢ ὡς τοῦ
 καθ' αὐτὸ καὶ τοῦ κατὰ συμβεβηκός, οἷον καθ'
 αὐτὸ μὲν ὅτι τὸ τρίγωνον δυσὶν ὀρθαῖς ἴσας ἔχει,
 κατὰ συμβεβηκός δὲ ὅτι τὸ ἰσόπλευρον· ὅτι γὰρ
 συμβέβηκε τῷ [τριγώνῳ]¹ ἰσοπλεύρῳ τριγώνῳ
 25 εἶναι, κατὰ τοῦτο γνωρίζομεν ὅτι δυσὶν ὀρθαῖς
 ἴσας ἔχει. εἰ οὖν μηδαμῶς ἐνδέχεται τὴν αὐτὴν
 εἶναι πλειόνων ἐπιστήμην, δῆλον ὅτι ὅλως οὐκ

¹ Omitting τριγώνῳ with Buhle.

TOPICA, II. III

alike, as for example, when a geometrician states that the angles of a triangle are equal to two right angles.

If there is no concealing the fact that a term has a variety of meanings, you must distinguish all of them and then proceed to demolish or confirm it. For example, if the 'right' is the 'expedient' or the 'honourable,' we must try to confirm or demolish both of these terms as applied to the subject under discussion, showing that it is honourable and expedient, or that it is neither honourable nor expedient. If it is impossible to show both, we must show one, indicating also that one is true and the other not true. The same argument also holds good when the meanings into which the term can be divided are more than two.

(b) If the ambiguity is obvious, distinguish the meanings of the term which suit the argument.

Again, there is the case of terms which are used in several senses not because they are equivocal but in some other way. Take, for example, "The science of many things is one"; here the things in question may be the ends or the means to an end (*e.g.*, medicine is the science of producing health and of diet), or they may be both of them ends, as the science of contraries is said to be the same (for one contrary is not more an end than the other), or they may be an essential and an accidental attribute—an example of the former being that the angles of a triangle are equal to two right angles, of the latter that this is true of an equilateral triangle; for we know that it is because the equilateral triangle happens to be a triangle that its angles are equal to two right angles. If, therefore, there is no sense in which it is possible for the science of many things to be the same, it is obvious that it is completely impossible that this can

110 b

ἐνδέχεται εἶναι, ἢ εἴ πως ἐνδέχεται, δῆλον ὅτι ἐνδέχεται. διαιρεῖσθαι δὲ ὅσαχῶς χρήσιμον. οἷον ἐὰν βουλώμεθα κατασκευάσαι, τὰ τοιαῦτα προ-
 30 οιστέον ὅσα ἐνδέχεται, καὶ διαιρετέον εἰς ταῦτα μόνον ὅσα καὶ χρήσιμα πρὸς τὸ κατασκευάσαι· ἂν δ' ἀνασκευάσαι, ὅσα μὴ ἐνδέχεται, τὰ δὲ λοι-
 πὰ παραλείπτειν. ποιητέον δὲ <τοῦτο>¹ καὶ ἐπὶ τούτων, ὅταν λανθάνῃ ποσαχῶς λέγεται. καὶ εἶ-
 ναι δὲ τόδε τοῦδε ἢ μὴ εἶναι ἐκ τῶν αὐτῶν τρόπων
 35 κατασκευαστέον, οἷον ἐπιστήμην τήνδε τοῦδε ἢ ὡς τέλους ἢ ὡς τῶν πρὸς τὸ τέλος ἢ ὡς τῶν κατὰ συμβεβηκός, ἢ πάλιν μὴ εἶναί [τι]² κατὰ μηδένα τῶν ῥηθέντων τρόπων. ὁ δ' αὐτὸς λόγος καὶ περὶ ἐπιθυμίας, καὶ ὅσα ἄλλα λέγεται πλειόνων. ἔστι
 111 a γὰρ ἢ ἐπιθυμία τούτου ἢ ὡς τέλους, οἷον ὑγείας, ἢ ὡς τῶν πρὸς τὸ τέλος, οἷον τοῦ φαρμακευθῆναι, ἢ ὡς τοῦ κατὰ συμβεβηκός, καθάπερ ἐπὶ τοῦ οἴνου ὁ φιλόγλυκς οὐχ ὅτι οἶνος ἀλλ' ὅτι γλυκύς ἐστιν. καθ' αὐτὸ μὲν γὰρ τοῦ γλυκέος ἐπιθυμεῖ,
 5 τοῦ δ' οἴνου κατὰ συμβεβηκός· ἐὰν γὰρ αὐστηρὸς ᾖ, οὐκέτι ἐπιθυμεῖ. κατὰ συμβεβηκός οὖν ἐπι-
 θυμεῖ. χρήσιμος δ' ὁ τρόπος οὗτος ἐν τοῖς πρὸς τι· σχεδὸν γὰρ τὰ τοιαῦτα τῶν πρὸς τί ἐστιν.

IV. Ἔτι τὸ μεταλαμβάνειν εἰς τὸ γνωριμώτερον ὄνομα, οἷον ἀντὶ τοῦ ἀκριβοῦς ἐν ὑπολήψει τὸ
 10 σαφές καὶ ἀντὶ τῆς πολυπραγμοσύνης τὴν φιλο-
 πραγμοσύνην· γνωριμωτέρου γὰρ γινομένου τοῦ

¹ Adding τοῦτο. Pacius renders, *in his quoque hoc facien-
 dum est.*

² Omitting τι with C.

TOPICA, II. III-IV

be so, or, if there is some sense in which it is possible, then it is obvious that it is possible. We must distinguish as many senses as will serve our purpose. For example, if we wish to argue constructively, we must bring forward such meanings as are admissible and divide them only into those which are useful for constructive argument ; for destructive criticism, on the other hand, we must bring forward only such as are not admissible and omit the rest. This must also be done when the variety of meanings is unnoticed. The same commonplaces must also be used to confirm that one thing is, or is not, ' of ' another ; for example, that a particular science is ' of ' a particular thing, either as an end, or as a means to an end, or as an accidental circumstance, or, on the other hand, that it is not ' of ' it in any of the above ways. The same holds good of desire and any other terms which are said to be ' of ' more than one thing. For the desire of a particular thing may be the desire of it as an end (*e.g.*, health), or as a means to an end (*e.g.*, taking medicine), or as an accidental circumstance, as in the case of wine the man who likes sweet things desires it not because it is wine but because it is sweet. For his essential desire is for what is sweet, and he only desires wine accidentally ; for, if it is dry, he no longer desires it, and so his desire is accidental. This commonplace is also useful in connexion with relative terms ; for cases of this kind generally have to do with relative terms.

IV. Moreover, there is the commonplace of substituting for a term one that is more familiar, for example, using ' clear ' instead of ' exact ' in speaking of a conception, and ' meddlesomeness ' instead of ' officiousness.' For when the term is rendered more

Various Rules :
(a) Substitute more familiar for less familiar terms.

111 a ῥηθέντος εὐεπιχειρητοτέρα ἢ θέσις. ἔστι δὲ καὶ οὗτος ὁ τόπος πρὸς ἄμφω κοινός, καὶ πρὸς τὸ κατασκευάζειν καὶ ἀνασκευάζειν.

Πρὸς δὲ τὸ δεῖξαι τὰναντία τῷ αὐτῷ ὑπάρχοντα
 15 σκοπεῖν ἐπὶ τοῦ γένους, οἷον ἐὰν βουλώμεθα δεῖξαι ὅτι ἔστι περὶ αἴσθησιν ὀρθότης καὶ ἁμαρτία, τὸ δ' αἰσθάνεσθαι κρίνειν ἐστί, κρίνειν δ' ἔστιν ὀρθῶς καὶ μὴ ὀρθῶς, καὶ περὶ αἴσθησιν ἂν εἴη ὀρθότης καὶ ἁμαρτία. νῦν μὲν οὖν ἐκ τοῦ γένους περὶ τὸ εἶδος ἢ ἀπόδειξις· τὸ γὰρ κρίνειν γένος τοῦ αἰσθά-
 20 νεσθαι· ὁ γὰρ αἰσθανόμενος κρίνει πως. πάλιν δ' ἐκ τοῦ εἶδους τῷ γένει· ὅσα γὰρ τῷ εἶδει ὑπάρχει, καὶ τῷ γένει, οἷον εἰ ἔστιν ἐπιστήμη φαύλη καὶ σπουδαία, καὶ διάθεσις φαύλη καὶ σπουδαία· ἢ γὰρ διάθεσις τῆς ἐπιστήμης γένος. ὁ μὲν οὖν πρότερος τόπος ψευδής ἐστι πρὸς τὸ κατασκευάσαι,
 25 ὁ δὲ δεύτερος ἀληθής. οὐ γὰρ ἀναγκαῖον, ὅσα τῷ γένει ὑπάρχει, καὶ τῷ εἶδει ὑπάρχειν· ζῶον μὲν γάρ ἐστι πτηνὸν καὶ τετράπουν, ἄνθρωπος δ' οὐ. ὅσα δὲ τῷ εἶδει ὑπάρχει, ἀναγκαῖον καὶ τῷ γένει· εἰ γάρ ἐστιν ἄνθρωπος σπουδαῖος, καὶ ζῶόν ἐστι σπουδαῖον. πρὸς δὲ τὸ ἀνασκευάζειν ὁ μὲν
 30 πρότερος ἀληθής, ὁ δὲ ὕστερος ψευδής· ὅσα γὰρ τῷ γένει οὐχ ὑπάρχει, οὐδὲ τῷ εἶδει· ὅσα δὲ τῷ εἶδει μὴ ὑπάρχει, οὐκ ἀναγκαῖον τῷ γένει μὴ ὑπάρχειν.

Ἐπεὶ δ' ἀναγκαῖον, ὧν τὸ γένος κατηγορεῖται,

TOPICA, II. IV

familiar, the thesis is more easily dealt with. This commonplace is common to both processes, the constructive and the destructive.

In order to show that contrary attributes belong to the same thing, we must look at its genus. For example, if we wish to show that there is correctness and error in perception, and if to perceive is to distinguish and distinguishing can be correct or incorrect, then there can be correctness and error in perception also. Here, then, the proof starts from the genus and is concerned with the species, for 'distinguishing' is the genus of 'perceiving,' since he who perceives is distinguishing in a certain way. On the other hand, the proof may start from the species and be concerned with the genus, for all attributes which belong to the species belong also to the genus. For instance, if there is good and bad knowledge, then there also is good and bad disposition; for disposition is the genus of knowledge. The former commonplace is fallacious for constructive argument, but the latter is true. For it is not necessary that all the attributes of the genus should also belong to the species; for 'animal' is winged and quadruped, but 'man' is not. But all the attributes which belong to the species, necessarily belong also to the genus; for if 'man' is good, then 'animal' also is good. On the other hand, for destructive criticism, the former of these arguments is true, the latter fallacious; for all the attributes which do not belong to the genus do not belong to the species either, while all those which fail to belong to the species do not necessarily fail to belong to the genus.

Since of all those things of which the genus is predicated, one of its species must necessarily also

(b) To prove the presence of contraries, examine the genus.

A note on genus and species.

111 a

καὶ τῶν εἰδῶν τι κατηγορεῖσθαι, καὶ ὅσα ἔχει τὸ
 35 γένος ἢ παρωνύμως ἀπὸ τοῦ γένους λέγεται, καὶ
 τῶν εἰδῶν τι ἀναγκαῖον ἔχειν ἢ παρωνύμως ἀπὸ
 τινος τῶν εἰδῶν λέγεσθαι (οἷον εἴ τινος ἐπιστήμη
 κατηγορεῖται, καὶ γραμματικὴ ἢ μουσικὴ ἢ τῶν
 ἄλλων τις ἐπιστημῶν κατηγορηθήσεται, καὶ εἴ τις

111 b

ἔχει ἐπιστήμην ἢ παρωνύμως ἀπὸ τῆς ἐπιστήμης
 λέγεται, καὶ γραμματικὴν ἔξει ἢ μουσικὴν ἢ τινα
 τῶν ἄλλων ἐπιστημῶν ἢ παρωνύμως ἀπὸ τινος
 αὐτῶν ῥηθήσεται, οἷον γραμματικὸς ἢ μουσικός),
 5 εἰ δὲ οὖν τι τεθῇ λεγόμενον ἀπὸ τοῦ γένους ὅπως οὖν,
 οἷον τὴν ψυχὴν κινεῖσθαι, σκοπεῖν εἰ κατὰ τι τῶν
 εἰδῶν τῶν τῆς κινήσεως ἐνδέχεται τὴν ψυχὴν
 κινεῖσθαι, οἷον αὔξεσθαι ἢ φθίρεσθαι ἢ γίνεσθαι
 ἢ ὅσα ἄλλα κινήσεως εἶδη· εἰ γὰρ κατὰ μηδέν,
 δῆλον ὅτι οὐ κινεῖται. οὗτος δ' ὁ τόπος κοινὸς
 πρὸς ἅμφω, πρὸς τε τὸ ἀνασκευάζειν καὶ κατασκευ-
 10 ἀζειν· εἰ γὰρ κατὰ τι τῶν εἰδῶν κινεῖται, δῆλον
 ὅτι κινεῖται, καὶ εἰ κατὰ μηδέν τῶν εἰδῶν κινεῖται,
 δῆλον ὅτι οὐ κινεῖται.

Μὴ εὐποροῦντι δὲ ἐπιχειρήματος πρὸς τὴν θέσιν,
 σκοπεῖν ἐκ τῶν ὀρισμῶν ἢ τῶν ὄντων τοῦ προ-
 κειμένου πράγματος ἢ τῶν δοκούντων, καὶ εἴ
 15 μὴ ἀφ' ἐνὸς ἀλλ' ἀπὸ πλειόνων. ῥᾶον γὰρ ὀρισα-

¹ Reading, with B, καὶ εἰ: κἂν εἰ P: καὶ Bekker.

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be predicated, and since all those things which possess that genus, or derive their description from that genus, must also possess one of its species or derive their description from one of its species—for example, if knowledge is predicated of someone, then grammatical knowledge or musical knowledge or one of the other kinds of knowledge will be predicated of him, and if a man possesses knowledge or if the description which he has is derived from his knowledge, then he will also possess grammatical knowledge or musical knowledge, or one of the other kinds of knowledge, or will derive his description from one of them, being called, for example, a ‘grammarian’ or a ‘musician’—then, if a statement is made which is derived in any way from the genus (for example, that the soul is in motion), you must examine whether it is possible for the soul to be in motion according to any of the species of motion, for example, whether it can increase or decay or come into being or move in any of the other species of motion; for if it cannot move in accordance with any of them, obviously it is not in motion. This commonplace is common to both processes, the destructive and the constructive; for if it moves according to one of the species of motion, obviously it is in motion, and if it does not move in accordance with any of them, obviously it is not in motion.

If you have not a supply of material for arguing against the thesis, you should look for arguments taken from the real or generally accepted definitions of the subject under discussion, and if you cannot argue from one, you must argue from several. For it is easier to attack the subject when you have

(c) Obtain material by examining the definitions of the subject.

111 b

μένοις ἐπιχειρεῖν ἔσται· πρὸς γὰρ τοὺς ὁρισμοὺς
ῥᾶον ἢ ἐπιχείρησις.

Σκοπεῖν δὲ ἐπὶ τοῦ προκειμένου, τίνος ὄντος τὸ
προκείμενόν ἐστιν, ἢ τί ἐστιν ἐξ ἀνάγκης εἰ τὸ
προκείμενον ἔστι, κατασκευάζειν μὲν βουλομένῳ,
20 τίνος ὄντος τὸ προκείμενον ἔσται (ἐὰν γὰρ ἐκείνο
δειχθῇ ὑπάρχον, καὶ τὸ προκείμενον δεδειγμένον
ἔσται), ἀνασκευάζειν δὲ βουλομένῳ, τί ἐστιν εἰ
τὸ προκείμενον ἔστιν· ἐὰν γὰρ δείξωμεν τὸ ἀκό-
λουθον τῷ προκειμένῳ μὴ ὄν, ἀνηρηκότες ἐσόμεθα
τὸ προκείμενον.

Ἔτι ἐπὶ τὸν χρόνον ἐπιβλέπειν, εἴ που διαφωνεῖ,
25 οἷον εἰ τὸ τρεφόμενον ἔφησεν ἐξ ἀνάγκης αὔξεσθαι·
τρέφεται μὲν γὰρ αἰεὶ τὰ ζῶα, αὔξεται δ' οὐκ αἰεὶ.
ὁμοίως δὲ καὶ εἰ τὸ ἐπίστασθαι ἔφησε μεμνηῖσθαι·
τὸ μὲν γὰρ τοῦ παρεληλυθότος χρόνου ἐστί, τὸ
δὲ καὶ τοῦ παρόντος καὶ τοῦ μέλλοντος. ἐπίστασ-
30 θαι μὲν γὰρ λεγόμεθα τὰ παρόντα καὶ τὰ μέλλοντα,
οἷον ὅτι ἔσται ἔκλειψις, μνημονεύειν δ' οὐκ ἐνδέ-
χεται ἀλλ' ἢ τὸ παρεληλυθός.

V. Ἔτι ὁ σοφιστικὸς τρόπος, τὸ ἄγειν εἰς τοι-
οῦτον πρὸς ὃ εὐπορήσομεν ἐπιχειρημάτων. τοῦτο
δ' ἔσται ὅτε μὲν ἀναγκαῖον, ὅτε δὲ φαινόμενον
35 ἀναγκαῖον, ὅτε δ' οὔτε φαινόμενον οὔτ' ἀναγκαῖον.
ἀναγκαῖον μὲν οὖν, ὅταν ἀρνησαμένου τοῦ ἀπο-
κριναμένου τῶν πρὸς τὴν θέσιν τι χρησίμων πρὸς
τοῦτο τοὺς λόγους ποιῇται, τυγχάνη δὲ τοῦτο τῶν
350

made definitions ; for the attack is easier when it is aimed at definitions.

You must examine as regards the subject in hand what it is on the existence of which the existence of the subject depends, or what necessarily exists if the subject exists. For constructive purposes, you must examine what it is on the existence of which the existence of the subject will depend (for if the former has been shown to exist, the subject will have been shown to exist) ; for destructive purposes, we must examine what exists if the subject exists ; for if we show that what is consequent upon the subject does not exist, then we shall have demolished the subject.

Furthermore, you must look into the question of time and see if any discrepancy occurs anywhere, for example, if your opponent has said that that which is nourished necessarily grows ; for animals are always being nourished but are not always growing. Similarly too, if he has said that knowledge is recollection ; for the latter is of the past, the former also of the present and the future. For we are said to know things present and things future (for example, that there will be an eclipse), but it is impossible to remember anything except the past.

V. Furthermore, there is the sophistic method, by which we lead an opponent into the sort of assertion against which we shall have a supply of arguments. This expedient will be sometimes necessary, at others it will only appear necessary, at others it neither is nor appears necessary. It is necessary when, after the answerer has denied some point that is useful for employment against the thesis, the questioner directs his remarks to the support of this point and it happens to be one of the kind about which it is possible to

(d) Consider on what the existence of the subject depends.

(e) The factor of time must be considered.

Rules for extending the argument :
(a) The sophistic method can be used for leading on an opponent to make an assertion which can easily be refuted.

- 111 b τοιούτων ὃν πρὸς ὃ εὐπορεῖν ἔστιν ἐπιχειρημάτων.
- 112 a ὁμοίως δὲ καὶ ὅταν ἐπαγωγὴν πρὸς τι διὰ τοῦ
 κειμένου ποιησάμενος ἀναιρεῖν ἐπιχειρῇ· τούτου
 γὰρ ἀναιρεθέντος καὶ τὸ προκείμενον ἀναιρεῖται.
 φαινόμενον δ' ἀναγκαῖον, ὅταν φαίνεται μὲν
 χρήσιμον καὶ οἰκεῖον τῆς θέσεως, μὴ ἢ δέ, πρὸς
 5 ὃ γίνονται οἱ λόγοι, εἴτε ἀρνησαμένου τοῦ τὸν
 λόγον ὑπέχοντος, εἴτε ἐπαγωγῆς ἐνδόξου διὰ τῆς
 θέσεως πρὸς αὐτὸ γενομένης¹ ἀναιρεῖν ἐπιχειροῖν
 αὐτό. τὸ δὲ λοιπόν, ὅταν μὴτ' ἀναγκαῖον ἢ μῆτε
 φαινόμενον πρὸς ὃ γίνονται οἱ λόγοι, ἄλλως δὲ
 παρεξελέγχεσθαι συμβαίνει τῷ ἀποκρινομένῳ. δεῖ
 10 δ' εὐλαβεῖσθαι τὸν ἔσχατον τῶν ῥηθέντων τρόπων·
 παντελῶς γὰρ ἀπηρτημένος καὶ ἀλλότριος ἔοικεν
 εἶναι τῆς διαλεκτικῆς. διὸ δεῖ καὶ τὸν ἀποκρινό-
 μενον μὴ δυσκολαίνειν, ἀλλὰ τιθέναι τὰ μὴ χρή-
 σιμα πρὸς τὴν θέσιν, ἐπισημαινόμενον ὅσα μὴ
 δοκεῖ, τίθησι δέ. μᾶλλον γὰρ ἀπορεῖν ὥς ἐπὶ τὸ
 15 πολὺ συμβαίνει τοῖς ἐρωτῶσι πάντων τιθεμένων
 αὐτοῖς τῶν τοιούτων, ἐὰν μὴ περαίνωσιν.

Ἔτι πᾶς ὁ εἰρηκῶς ὀτιοῦν τρόπον τινὰ πολλὰ
 εἴρηκεν, ἐπειδὴ πλείω ἐκάστῳ ἐξ ἀνάγκης ἀκό-
 λουθά ἐστιν, οἷον ὁ εἰρηκῶς ἄνθρωπον εἶναι καὶ
 ὅτι ζῶόν ἐστιν εἴρηκε καὶ ὅτι ἔμψυχον καὶ ὅτι
 δίπουν καὶ ὅτι νοῦ καὶ ἐπιστήμης δεκτικόν, ὥστε
 20 ὁποιοῦν ἑνὸς τῶν ἀκολουθῶν ἀναιρεθέντος ἀν-

¹ Reading γενομένης with C: γινομένης Bekker.

have a supply of arguments. It is in like manner necessary also when the questioner, having reached a certain point through induction by means of the view which his opponent has set forth, then attempts to demolish that point; for, if this has been demolished, the view originally set forth is also demolished. It appears necessary, when the point towards which the discussion is tending, appears to be useful and germane to the thesis but is not really so, either when the man who is sustaining an argument has denied the point or if the questioner has reached the point by plausible induction based on the thesis, and then attempts to demolish it. The other case is when the point to which the discussion is tending neither is necessary nor appears to be necessary, and it is the answerer's fate to be defeated on some irrelevant point. We must be on our guard against the last of the above-mentioned methods; for it seems to be completely divorced from and alien to dialectic. Therefore, also, the answerer must not show bad temper but admit such points as cannot usefully be urged against the thesis, indicating anything which he admits though he does not approve of it. For questioners usually only become involved in greater difficulty, when all such admissions are made, if they cannot reach a conclusion.

Furthermore, a man who has made an assertion of any kind whatsoever, has in a way made a number of assertions, because each assertion necessarily involves a number of consequences. For example, he who has said that "X is a man," has also said that X is an animal and a biped and is animate and is receptive of reason and knowledge; so that, if any single one of these consequences is demolished,

(b) An assertion can be demolished, if a consequence of it can be subverted.

112 a

αιρείται καὶ τὸ ἐν ἀρχῇ. εὐλαβεῖσθαι δὲ χρὴ καὶ τὸ χαλεπωτέρου τὴν μετάληψιν ποιεῖσθαι· ἐνίοτε μὲν γὰρ ῥᾶον τὸ ἀκόλουθον ἀνελεῖν, ἐνίοτε δ' αὐτὸ τὸ προκείμενον.

VI. "Οσοις δ' ἀνάγκη θάτερον μόνον ὑπάρχειν, 25 οἷον τῷ ἀνθρώπῳ τὴν νόσον ἢ τὴν ὑγίειαν, εἰς πρὸς θάτερον εὐπορώμεν διαλέγεσθαι ὅτι ὑπάρχει ἢ οὐχ ὑπάρχει, καὶ πρὸς τὸ λοιπὸν εὐπορήσομεν. τοῦτο δ' ἀντιστρέφει πρὸς ἄμφω· δείξαντες μὲν γὰρ ὅτι ὑπάρχει θάτερον, ὅτι οὐχ ὑπάρχει τὸ λοιπὸν δεδειχότες ἐσόμεθα· εἰς δ' ὅτι οὐχ ὑπάρχει 30 δείξωμεν, τὸ λοιπὸν ὅτι ὑπάρχει δεδειχότες ἐσόμεθα. δῆλον οὖν ὅτι πρὸς ἄμφω χρήσιμος ὁ τόπος.

"Ἐτι τὸ ἐπιχειρεῖν μεταφέροντα τοῦνομα ἐπὶ τὸν λόγον, ὡς μάλιστα προσῆκον ἐκλαμβάνειν ἢ ὡς κείται τοῦνομα, οἷον εὐψυχον μὴ τὸν ἀνδρεῖον, 35 καθάπερ νῦν κείται, ἀλλὰ τὸν εὖ τὴν ψυχὴν ἔχοντα, καθάπερ καὶ εὐελπιν τὸν ἀγαθὰ ἐλπίζοντα· ὁμοίως δὲ καὶ εὐδαίμονα, οὗ ἂν ὁ δαίμων ἢ σπουδαῖος, καθάπερ Ξενοκράτης φησὶν εὐδαίμονα εἶναι τὸν τὴν ψυχὴν ἔχοντα σπουδαίαν· ταύτην γὰρ ἐκάστου εἶναι δαίμονα.

112 b "Ἐπεὶ δὲ τῶν πραγμάτων τὰ μὲν ἐξ ἀνάγκης ἐστί, τὰ δ' ὡς ἐπὶ τὸ πολὺ, τὰ δ' ὁπότερ' ἔτυχεν, εἰς τὸ ἐξ ἀνάγκης ὡς ἐπὶ τὸ πολὺ τεθῇ ἢ τὸ ὡς ἐπὶ τὸ πολὺ ἐξ ἀνάγκης, ἢ αὐτὸ ἢ τὸ ἐναντίον τῷ 5 ὡς ἐπὶ τὸ πολὺ, αἰεὶ δίδωσι τόπον ἐπιχειρήματος.

^a As well as one who inspires hope, cf. the English 'young hopeful.'

^b As well as in the meaning of 'possessed of a good fortune' in the sense of wealth.

^c Frag. 81 (Heinze).

the original assertion is also demolished. But we must be on our guard against changing the assertion into something more difficult; for sometimes the consequential assertion, and sometimes the proposition itself, is the easier to demolish.

VI. Where of necessity only one of two predicates must be true (for example, a man must have either disease or health), if we have a supply of material for arguing with regard to one of them that it is present or not, we shall have a supply of material also regarding the other. This rule is convertible for both purposes; for if we have shown that one is present, we shall have shown that the other is not present; if we have shown that one is not present, we shall have shown that the other is present. It is obvious, therefore, that this commonplace is useful for both purposes.

Another method of attack is to refer back a term to its original meaning on the ground that it is more fitting to take it in this sense than in that now established. For example, 'stout-souled' can be used to mean not 'courageous,' which is its established meaning, but it can be applied to a man whose soul is in a good condition; as also the term 'hopeful' can mean a man who hopes for good things^a; and similarly 'fortunate' can be used of one whose fortune is good,^b as Xenocrates^c says "Fortunate is he who has a noble soul"; for his soul is each man's fortune.

Seeing that some things happen of necessity, others usually, others as chance dictates, the assertion that a necessary occurrence is a usual occurrence or that a usual occurrence (or the contrary of a usual occurrence) is a necessary occurrence, always gives

Various observations:

(a) Where only one of two predicates can be true, it is easy to argue about the other.

(b) It can be argued that the original meaning of a word should be preferred to its current meaning.

(c) The usual should not be represented as the necessary and *vice versa*.

εἰν γὰρ τὸ ἐξ ἀνάγκης ὡς ἐπὶ τὸ πολὺ τεθῆ, δῆλον
 ὅτι οὐ παντὶ φησιν ὑπάρχειν, ὑπάρχοντος παντί,
 ὥστε ἡμάρτηκεν· εἰ τε τὸ ὡς ἐπὶ τὸ πολὺ λεγόμενον
 ἐξ ἀνάγκης ἔφησε· παντὶ γάρ φησιν ὑπάρχειν,
 οὐχ ὑπάρχοντος παντί. ὁμοίως δὲ καὶ εἰ
 10 τὸ ἐναντίον τῷ ὡς ἐπὶ τὸ πολὺ ἐξ ἀνάγκης εἴρηκεν·
 αἰεὶ γὰρ ἐπ' ἔλαττον λέγεται τὸ ἐναντίον τῷ ὡς
 ἐπὶ τὸ πολὺ, οἷον εἰ ὡς ἐπὶ τὸ πολὺ φαῦλοι οἱ
 ἄνθρωποι, ἀγαθοὶ ἐπ' ἔλαττον, ὥστ' ἔτι μᾶλλον
 ἡμάρτηκεν, εἰ ἀγαθοὺς ἐξ ἀνάγκης εἴρηκεν. ὡς-
 αὐτως δὲ καὶ εἰ τὸ ὁπότερ' ἔτυχεν ἐξ ἀνάγκης
 15 ἔφησεν ἢ ὡς ἐπὶ τὸ πολὺ· οὔτε γὰρ ἐξ ἀνάγκης
 τὸ ὁπότερ' ἔτυχεν οὔθ' ὡς ἐπὶ τὸ πολὺ. ἐνδέ-
 χεται δέ, κὰν μὴ διορίσας εἴπῃ πότερον ὡς ἐπὶ
 τὸ πολὺ ἢ ἐξ ἀνάγκης εἴρηκεν, ἢ δὲ τὸ πρᾶγμα
 ὡς ἐπὶ τὸ πολὺ, διαλέγεσθαι ὡς ἐξ ἀνάγκης εἰρη-
 κότος αὐτοῦ, οἷον εἰ φαύλους τοὺς ἀποκλήρους
 20 ἔφησεν εἶναι μὴ διορίσας, ὡς ἐξ ἀνάγκης εἰρηκό-
 τος αὐτοῦ διαλέγεσθαι.

"Ἐτι καὶ εἰ αὐτὸ αὐτῷ συμβεβηκὸς ἔθηκεν ὡς
 ἕτερον διὰ τὸ ἕτερον εἶναι ὄνομα, καθάπερ Πρό-
 δικος διηρεῖτο τὰς ἡδονὰς εἰς χαρὰν καὶ τέρψιν
 καὶ εὐφροσύνην· ταῦτα γὰρ πάντα τοῦ αὐτοῦ τῆς
 25 ἡδονῆς ὀνόματά ἐστιν. εἰ οὖν τις τὸ χαίρειν τῷ
 εὐφραίνεσθαι φήσει συμβεβηκέναι, αὐτὸ ἂν αὐτῷ
 φαίῃ συμβεβηκέναι.

an occasion for attack. For if a necessary occurrence is asserted to be a usual occurrence, it is obvious that the man who makes the assertion is stating that a universal attribute is not universal, and therefore he is in error; and the same is true if he has stated that a usual attribute is necessary, for he has stated that it belongs universally when it does not do so. Similarly, if he has asserted that the contrary of what is usual is necessary; for the contrary of a usual attribute is always rather rarely predicated. For example, if men are usually bad, they are rather rarely good, so that he has committed an even greater error if he has said that they are necessarily good. In like manner also, if he has declared that a chance occurrence happens necessarily or usually; for a chance occurrence does not happen either necessarily or usually. Even if he has made his assertion without distinguishing whether it is a usual or a necessary occurrence, and as a matter of fact it is a usual occurrence, it is possible to argue as though he meant that it was a necessary occurrence. For instance, if he has said that disinherited persons are bad, without making any distinction, you can argue as though he has said that they were necessarily bad.

Furthermore, you must see whether your opponent has stated something as an accidental attribute of itself, taking it as something different because it bears a different name, just as Prodicus divided pleasure into joy, delight and merriment; for these are all names for the same thing, namely pleasure. If, therefore, anyone shall assert that joy is an accidental attribute of merriment, he would be saying that it is an accidental attribute of itself.

(d) Terms which are only nominally different should not be stated as accidents of one another.

VII. Ἐπεὶ δὲ τὰ ἐναντία συμπλέκεται μὲν ἀλλήλοις ἐξαχῶς, ἐναντίωσιν δὲ ποιεῖ τετραχῶς συμπλεκόμενα, δεῖ λαμβάνειν τὰ ἐναντία, ὅπως
 30 ἂν χρήσιμον ἦ καὶ ἀναιροῦντι καὶ κατασκευάζοντι. ὅτι μὲν οὖν ἐξαχῶς συμπλέκεται, δῆλον· ἢ γὰρ ἐκάτερον τῶν ἐναντίων ἐκατέρῳ συμπλακῆσεται· τοῦτο δὲ διχῶς, οἷον τὸ τοὺς φίλους εὖ ποιεῖν καὶ τὸ τοὺς ἐχθροὺς κακῶς, ἢ ἀνάπαλιν τὸ τοὺς φίλους κακῶς καὶ τοὺς ἐχθροὺς εὖ. ἢ ὅταν ἄμφω περὶ τοῦ
 35 ἐνός· διχῶς δὲ καὶ τοῦτο, οἷον τὸ τοὺς φίλους εὖ καὶ τὸ τοὺς φίλους κακῶς, ἢ τὸ τοὺς ἐχθροὺς εὖ καὶ τοὺς ἐχθροὺς κακῶς. ἢ τὸ ἐν περὶ ἀμφοτέρων· διχῶς δὲ καὶ τοῦτο, οἷον τὸ τοὺς φίλους εὖ καὶ τὸ τοὺς ἐχθροὺς εὖ, ἢ τοὺς φίλους κακῶς καὶ τοὺς ἐχθροὺς κακῶς.

113 a Αἱ μὲν οὖν πρῶται δύο ῥηθεῖσαι συμπλοκαὶ οὐ ποιοῦσιν ἐναντίωσιν· τὸ γὰρ τοὺς φίλους εὖ ποιεῖν τῷ τοὺς ἐχθροὺς κακῶς οὐκ ἔστιν ἐναντίον· ἀμφοτέρα γὰρ αἰρετὰ καὶ τοῦ αὐτοῦ ἥθους. οὐδὲ τὸ τοὺς φίλους κακῶς τῷ τοὺς ἐχθροὺς εὖ· καὶ γὰρ
 5 ταῦτα ἀμφοτέρα φευκτὰ καὶ τοῦ αὐτοῦ ἥθους. οὐ δοκεῖ δὲ φευκτὸν φευκτῷ ἐναντίον εἶναι, εἰ μὴ τὸ μὲν καθ' ὑπερβολὴν τὸ δὲ κατ' ἔνδειαν λεγόμενον ἦ· ἢ τε γὰρ ὑπερβολὴ τῶν φευκτῶν δοκεῖ εἶναι, ὁμοίως δὲ καὶ ἡ ἔνδεια. τὰ δὲ λοιπὰ πάντα τέτταρα ποιεῖ ἐναντίωσιν. τὸ γὰρ τοὺς
 10 φίλους εὖ ποιεῖν τῷ τοὺς φίλους κακῶς ἐναντίον·

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VII. Seeing that contraries may be combined with one another in six ways, and four of these combinations make a contrariety, we must avail ourselves of contraries in whatever way may be useful both for destructive and for constructive purposes. That there are six kinds of combination is obvious ; for either (a) each of the contrary verbs will be combined with each of the contrary objects, and this in two ways, for example, "to do good to friends and to do harm to enemies," or, conversely, "to do harm to friends and to do good to enemies" ; or (b) both verbs may be used with one object, and this also in two ways, for example, "to do good to friends and to do harm to friends," or, "to do good to enemies and to do harm to enemies" ; or (c) one verb may be used with both objects, and this also in two ways, for example, "to do good to friends and to do good to enemies," or, "to do harm to friends and to do harm to enemies."

Rules drawn from contraries :
(a) Since one proposition may have several contraries, the most suitable must be selected.

The first two of the above combinations do not form a contrariety, for "to do good to friends" is not the contrary of "to do harm to enemies" ; for both these actions are objects of choice and belong to the same character. Nor is "to do harm to friends" the contrary of "to do good to enemies" ; for both these actions are objects of avoidance and belong to the same character, and one object of avoidance is not generally regarded as the contrary of another object of avoidance, unless the one is used to denote excess and the other defect ; for excess is generally regarded as an object of avoidance, and so likewise also is defect. But all the other four combinations form a contrariety ; for "to do good to friends" is the contrary of "to do harm

113 a

ἀπό τε γὰρ ἐναντίου ἡθους ἐστί, καὶ τὸ μὲν αἵρετόν
 τὸ δὲ φευκτόν. ὥσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων·
 καθ' ἐκάστην γὰρ συζυγίαν τὸ μὲν αἵρετόν τὸ δὲ
 φευκτόν, καὶ τὸ μὲν ἐπιεικοῦς ἡθους τὸ δὲ φαύλου.
 δῆλον οὖν ἐκ τῶν εἰρημένων ὅτι τῷ αὐτῷ πλείονα
 15 ἐναντία συμβαίνει γίνεσθαι. τῷ γὰρ τοὺς φίλους
 εὖ ποιεῖν καὶ τὸ τοὺς ἐχθροὺς εὖ ποιεῖν ἐναντίον
 καὶ τὸ τοὺς φίλους κακῶς. ὁμοίως δὲ καὶ τῶν
 ἄλλων ἐκάστω τὸν αὐτὸν τρόπον ἐπισκοποῦσι δύο
 τὰ ἐναντία φανήσεται. λαμβάνειν οὖν τῶν ἐναντίων
 ὁπότερον ἂν ᾗ πρὸς τὴν θέσιν χρήσιμον.

20 "Ἐτι εἰ ἔστι τι ἐναντίον τῷ συμβεβηκότι, σκοπεῖν
 εἰ ὑπάρχει ᾧπερ τὸ συμβεβηκὸς εἴρηται ὑπάρχειν·
 εἰ γὰρ τοῦτο ὑπάρχει, ἐκεῖνο οὐκ ἂν ὑπάρχοι·
 ἀδύνατον γὰρ τὰναντία ἅμα τῷ αὐτῷ ὑπάρχειν.

"Ἡ εἴ τι τοιοῦτον εἴρηται κατὰ τινος, οὗ ὄντος
 25 ἀνάγκη τὰ ἐναντία ὑπάρχειν. οἷον εἰ τὰς ἰδέας ἐν
 ἡμῖν ἔφησεν εἶναι· κινεῖσθαι τε γὰρ καὶ ἡρεμεῖν
 αὐτὰς συμβήσεται, ἔτι δὲ αἰσθητὰς καὶ νοητὰς
 εἶναι. δοκοῦσι γὰρ αἱ ἰδέαι ἡρεμεῖν καὶ νοηταὶ
 εἶναι τοῖς τιθεμένοις ἰδέας εἶναι, ἐν ἡμῖν δὲ οὐσας
 ἀδύνατον ἀκινήτους εἶναι· κινουμένων γὰρ ἡμῶν
 30 ἀναγκαῖον καὶ τὰ ἐν ἡμῖν πάντα συγκινεῖσθαι.
 δῆλον δ' ὅτι καὶ αἰσθηταί, εἴπερ ἐν ἡμῖν εἰσὶ· διὰ

^a ἰδέαι seem to be used here in the Platonic sense.

to friends," for they proceed from contrary characters, and one is an object of choice and the other of avoidance. Similarly, also, with the other combinations; for in each pair one is an object of choice, the other of avoidance; one always belongs to a good character, the other to a bad. It is obvious, therefore, from what has been said that the same thing has in fact more than one contrary. For "to do good to friends" has as its contrary both "to do good to enemies" and "to do harm to friends." In like manner, if we examine them in the same way, it will be apparent that the contraries of each of the others are two in number. We must, therefore, take whichever of the two contraries is useful for dealing with the thesis.

Furthermore, if the accident of anything has a contrary, you must examine whether it belongs to that to which the accident has been said to belong. For, if the former belongs, the latter cannot belong; for it is impossible for two contraries to belong to the same thing at the same time.

(b) The contrary of the accident of anything cannot be predicated of the same thing as is the accident.

Again, you should see if anything has been said regarding something, such that, if it exists, contrary predicates must of necessity belong to the thing, for example, if your opponent has said that "ideas^a exist in us." For, if so, it will follow that they are both in motion and at rest, and, further, that they are objects both of sensation and of thought. For ideas are considered, by those who assert their existence, to be both at rest and objects of thought, but if they exist in us it is impossible for them to be unmoved; for, when we move, everything that is in us must of necessity also move with us. Obviously, also, they are objects of sensation, if indeed they

(c) Nothing which can be predicated of a thing must involve contrary predicates.

113 a

γὰρ τῆς περὶ τὴν ὄψιν αἰσθήσεως τὴν ἐν ἐκάστω μορφῇν γνωρίζομεν.

Πάλιν εἰ κεῖται συμβεβηκὸς ᾧ ἐστὶ τι ἐναντίον, σκοπεῖν εἰ καὶ τοῦ ἐναντίου δεκτικόν, ὅπερ καὶ
 35 τοῦ συμβεβηκότος· τὸ γὰρ αὐτὸ τῶν ἐναντίων δεκτικόν, οἷον εἰ τὸ μῖσος ἔπεσθαι ὀργῇ ἔφησεν,
 113 b εἴη ἂν τὸ μῖσος ἐν τῷ θυμοειδεῖ· ἐκεῖ γὰρ ἡ ὀργή· σκεπτέον οὖν εἰ καὶ τὸ ἐναντίον ἐν τῷ θυμοειδεῖ, ἡ φιλία· εἰ γὰρ μή, ἀλλ' ἐν τῷ ἐπιθυμητικῷ ἐστὶν ἡ φιλία, οὐκ ἂν ἔποιτο μῖσος ὀργῇ. ὁμοίως δὲ καὶ εἰ τὸ ἐπιθυμητικὸν ἀγνοεῖν ἔφησεν. εἴη γὰρ
 5 ἂν καὶ ἐπιστήμης δεκτικόν, εἴπερ καὶ ἀγνοίας· ὅπερ οὐ δοκεῖ, τὸ ἐπιθυμητικὸν δεκτικὸν εἶναι ἐπιστήμης. ἀνασκευάζοντι μὲν οὖν, καθάπερ εἴρηται, χρηστέον· κατασκευάζοντι δέ, ὅτι μὲν ὑπάρχει τὸ συμβεβηκός, οὐ χρήσιμος ὁ τόπος, ὅτι δ' ἐνδέχεται ὑπάρχειν, χρήσιμος. δείξαντες μὲν γὰρ
 10 ὅτι οὐ δεκτικὸν τοῦ ἐναντίου, δεδειχότες ἐσόμεθα ὅτι οὔτε ὑπάρχει τὸ συμβεβηκός οὔτ' ἐνδέχεται ὑπάρξαι· ἐὰν δὲ δείξωμεν ὅτι ὑπάρχει τὸ ἐναντίον ἢ ὅτι δεκτικὸν τοῦ ἐναντίου ἐστίν, οὐδέπω δεδειχότες ἐσόμεθα ὅτι καὶ τὸ συμβεβηκός ὑπάρχει, ἀλλ' ὅτι ἐνδέχεται ὑπάρχειν, ἐπὶ τοσοῦτον μόνον δεδειγμένον ἔσται.

15 VIII. Ἐπεὶ δ' αἱ ἀντιθέσεις τέτταρες, σκοπεῖν ἐκ μὲν τῶν ἀντιφάσεων ἀνάπαλιν ἐκ τῆς ἀκολουθήσεως καὶ ἀναιροῦντι καὶ κατασκευάζοντι, λαμ-

TOPICA, II. VII-VIII

exist in us ; for it is through the sensation connected with sight that we recognize the form which is in each thing.

Again, if an accident which has a contrary is asserted, you must look whether what admits of the accident admits also of its contrary ; for the same thing admits of contraries. For example, if your opponent has said that hatred follows anger, then hatred would be in the spirited faculty ; for anger is in that faculty. You must, therefore, look whether its contrary, namely friendship, is also in the spirited faculty ; for if it is not there but in the appetitive faculty, then hatred cannot follow anger. Similarly, too, if he has declared that the appetitive faculty is ignorant ; for if it were capable of ignorance, it would also be capable of knowledge, and it is not a generally accepted opinion that the appetitive faculty is capable of knowledge. This method, as has been said, should be used in destructive criticism ; but for constructive purposes the commonplace is of no use for proving that an accident belongs, though it is useful for proving that it may possibly belong. For, when we have shown that something does not admit of the contrary, we shall have shown that the accident neither belongs nor can possibly do so ; but if we show that the contrary belongs or that the subject admits of the contrary, we shall not yet have shown that the accident actually belongs, but we shall only have gone as far as to show that it may possibly belong.

VIII. Since there are four kinds of opposition, you must see whether arguments can be derived from the contradictories, taking them in reverse order, for both destructive and constructive purposes, and

(d) That which admits of an accident admits also of its contrary.

Rules based on different kinds of opposition ;
(a) Four kinds of

113 b

βάνειν δ' ἐξ ἐπαγωγῆς, οἷον εἰ ὁ ἄνθρωπος ζῶον, τὸ μὴ ζῶον οὐκ ἄνθρωπος. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ἐνταῦθα γὰρ ἀνάπαλιν ἢ ἀκολουθήσις·
 20 τῷ μὲν γὰρ ἀνθρώπῳ τὸ ζῶον ἔπεται, τῷ δὲ μὴ ἀνθρώπῳ τὸ μὴ ζῶον οὐ, ἀλλ' ἀνάπαλιν τῷ μὴ ζώῳ τὸ οὐκ ἄνθρωπος. ἐπὶ πάντων οὖν τὸ τοιοῦτον ἀξιωτέον, οἷον εἰ τὸ καλὸν ἡδύ, καὶ τὸ μὴ ἡδύ οὐ καλόν· εἰ δὲ μὴ τοῦτο, οὐδ' ἐκείνο. ὁμοίως
 25 δὲ καὶ εἰ τὸ μὴ ἡδύ οὐ καλόν, τὸ καλὸν ἡδύ. δῆλον οὖν ὅτι πρὸς ἄμφω ἀντιστρέφει ἢ κατὰ τὴν ἀντίφασιν ἀκολουθήσις ἀνάπαλιν γινομένη.

Ἐπὶ δὲ τῶν ἐναντίων σκοπεῖν εἰ τῷ ἐναντίῳ τὸ ἐναντίον ἔπεται, ἢ ἐπὶ ταῦτα ἢ ἀνάπαλιν, καὶ ἀναιροῦντι καὶ κατασκευάζοντι· λαμβάνειν δὲ καὶ
 30 τὰ τοιαῦτα ἐξ ἐπαγωγῆς, ἐφ' ὅσον χρήσιμον. ἐπὶ ταῦτα μὲν οὖν ἢ ἀκολουθήσις, οἷον τῇ ἀνδρίᾳ καὶ τῇ δειλίᾳ· τῇ μὲν γὰρ ἀρετῇ ἀκολουθεῖ, τῇ δὲ κακία, καὶ τῇ μὲν ἀκολουθεῖ τὸ αἰρετόν, τῇ δὲ τὸ φευκτόν. ἐπὶ ταῦτα οὖν καὶ ἡ τούτων ἀκολουθήσις· ἐναντίον γὰρ τὸ αἰρετόν τῷ φευκτῷ. ὁμοίως δὲ
 35 καὶ ἐπὶ τῶν ἄλλων. ἀνάπαλιν δὲ ἢ ἀκολουθήσις, οἷον εὐεξία μὲν ἢ ὑγίεια ἀκολουθεῖ, καχεξία δὲ νόσος οὐ, ἀλλὰ νόσῳ καχεξία. δῆλον οὖν ὅτι
 114 a ἀνάπαλιν ἐπὶ τούτων ἢ ἀκολουθήσις. σπάνιον δὲ τὸ ἀνάπαλιν ἐπὶ τῶν ἐναντίων συμβαίνει, ἀλλὰ τοῖς πλείστοις ἐπὶ ταῦτα ἢ ἀκολουθήσις. εἰ οὖν μήτ' ἐπὶ ταῦτα τῷ ἐναντίῳ τὸ ἐναντίον ἀκολουθεῖ
 364

you should obtain them by induction, for example, "If man is an animal, not-animal is not-man," and so with the other cases. For here the order is reversed; for 'animal' follows 'man,' but 'not-animal' does not follow 'not-man,' but, conversely, 'not-man' follows 'not-animal.' In all cases, an axiom must be laid down of the following type, "If the honourable is pleasant, what is not pleasant is not honourable, but, if the latter is not true, then the former is not true either." Similarly, "If what is not pleasant is not honourable, the pleasant is honourable." It is clear, therefore, that the reversed sequence of the terms used in contradiction is convertible for both purposes.

opposition must be used to show that if A follows B, not-B also follows not-A.

You must look with regard to contraries whether contrary follows upon contrary, either directly or in reverse order, both in destructive criticism and in constructive argument, and you should obtain such arguments also by induction as far as may be useful. Now the sequence is direct in the case, for example, of courage and cowardice; for virtue follows the former, vice the latter; and object of choice follows the former, object of avoidance the latter. The sequence, therefore, in the latter case also is direct; for object of choice is contrary to object of avoidance; so too in the other cases also. On the other hand, the sequence is in reverse order in such a case as this: "Health follows upon good condition; but disease does not follow upon bad condition, but bad condition upon disease." It is clear, therefore, that here the sequence is reversed; but reversed sequence is rare in the case of contraries, where the sequence is generally direct. If, then, the contrary does not follow the contrary either directly or in reverse

(b) It must be observed whether the contrary follows the contrary directly or reversely.

μήτε ἀνάπαλιν, δῆλον ὅτι οὐδ' ἐπὶ τῶν ῥηθέντων
 5 ἀκολουθεῖ τὸ ἕτερον τῷ ἐτέρῳ. εἰ δ' ἐπὶ τῶν
 ἐναντίων, καὶ ἐπὶ τῶν ῥηθέντων ἀναγκαῖον τὸ
 ἕτερον τῷ ἐτέρῳ ἀκολουθεῖν.

Ὅμοίως δὲ τοῖς ἐναντίοις καὶ ἐπὶ τῶν στερήσεων
 καὶ ἕξεων σκεπτέον. πλὴν οὐκ ἔστιν ἐπὶ τῶν
 στερήσεων τὸ ἀνάπαλιν, ἀλλ' ἐπὶ ταυτὰ τὴν ἀκο-
 λούθησιν ἀναγκαῖον αἰεὶ γίνεσθαι, καθάπερ ὄψει
 10 μὲν αἰσθησιν, τυφλότητι δ' ἀναισθησίαν. ἀντίκει-
 ται γὰρ ἡ αἰσθησις τῇ ἀναισθησίᾳ ὥς ἕξις καὶ
 στέρησις· τὸ μὲν γὰρ ἕξις αὐτῶν, τὸ δὲ στέρησις
 ἔστιν.

Ὅμοίως δὲ τῇ ἕξει καὶ τῇ στερήσει καὶ ἐπὶ
 τῶν πρὸς τι χρηστέον· ἐπὶ ταυτὰ γὰρ καὶ τούτων
 ἡ ἀκολουθήσις. οἶον εἰ τὸ τριπλάσιον πολλα-
 15 πλάσιον, καὶ τὸ τριτημόριον πολλοστημόριον· λέ-
 γεται γὰρ τὸ μὲν τριπλάσιον πρὸς τὸ τριτημόριον,
 τὸ δὲ πολλαπλάσιον πρὸς τὸ πολλοστημόριον.
 πάλιν εἰ ἡ ἐπιστήμη ὑπόληψις, καὶ τὸ ἐπιστητὸν
 ὑποληπτόν· καὶ εἰ ἡ ὄρασις αἰσθησις, καὶ τὸ
 20 ὁρατὸν αἰσθητόν. ἔνστασις ὅτι οὐκ ἀνάγκη ἐπὶ
 τῶν πρὸς τι τὴν ἀκολουθήσιν γίνεσθαι, καθάπερ
 εἴρηται· τὸ γὰρ αἰσθητὸν ἐπιστητόν ἐστιν, ἡ δ'
 αἰσθησις οὐκ ἐπιστήμη. οὐ μὲν ἀληθὴς γε ἡ
 ἔνστασις δοκεῖ εἶναι· πολλοὶ γὰρ οὐ φασι τῶν
 αἰσθητῶν ἐπιστήμην εἶναι. ἔτι πρὸς τοῦναντίον
 25 οὐχ ἥττον χρήσιμον τὸ ῥηθέν, οἶον ὅτι τὸ αἰσθητὸν
 οὐκ ἔστιν ἐπιστητόν· οὐδὲ γὰρ ἡ αἰσθησις ἐπιστήμη.

IX. Πάλιν ἐπὶ τῶν συστοίχων καὶ ἐπὶ τῶν πτώ-
 σεων, καὶ ἀναιροῦντα καὶ κατασκευάζοντα. λέγε-

^a See note on 106 b 29.

TOPICA, II. VIII-IX

order, it is clear that neither does one of the terms in the statement follow the other ; but if one follows the other in the case of the contraries, one term in the statement must also necessarily follow the other.

Just as you examine contraries, so also you should examine cases of the privation or presence of states, except that in the case of privation the reverse sequence is impossible but the sequence must always of necessity be direct ; for example, sensation must follow sight and absence of sensation must follow blindness. For sensation is opposed to absence of sensation ; for they are a state and a privation, the former being a state, the latter a privation.

(c) Cases of the privation or presence of states must be examined.

You must also deal with relative terms in the same manner as with the privation or presence of states ; for here too the sequence is direct. For example, if three times is a multiple, a third is a fraction ; for three times is described as relative to a third, and a multiple as relative to a fraction. Again, if knowledge is a conceiving, then the knowable is conceivable ; and if sight is a sensation, then the visible is sensible. It may be objected that in the case of relative terms the sequence does not necessarily take place in the manner just described ; for the sensible is knowable, but sensation is not knowledge. The objection, however, is not generally regarded as holding good ; for many people deny that there is a knowledge of sensible things. Further, the above principle is not less useful for proving the contrary, for example, that the sensible is not knowable ; for neither is sensation knowledge.

(d) Relative terms must also be considered.

IX. Again, you must look at the case of the co-ordinates and inflected forms of words^a both in destructive and constructive argument. By 'co-

Various Rules :
(a) What is true of one co-ordinate

114 a

ται δὲ σύστοιχα μὲν τὰ τοιάδε οἷον τὰ δίκαια
καὶ ὁ δίκαιος τῇ δικαιοσύνῃ καὶ τὰ ἀνδρεία καὶ ὁ
ἀνδρεῖος τῇ ἀνδρίᾳ. ὁμοίως δὲ καὶ τὰ ποιητικὰ ἢ
30 φυλακτικὰ σύστοιχα ἐκείνου οὗ ἐστὶ ποιητικὰ ἢ
φυλακτικά, οἷον τὰ ὑγιεινὰ ὑγείας καὶ τὰ εὐεκτικὰ
εὐεξίας. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων.
σύστοιχα μὲν οὖν τὰ τοιαῦτα εἶωθε λέγεσθαι,
πτώσεις δὲ οἷον τὸ δικαίως καὶ ἀνδρεῖως καὶ
ὑγιεινῶς καὶ ὅσα τοῦτον τὸν τρόπον λέγεται.

35 δοκεῖ δὲ καὶ τὰ κατὰ τὰς πτώσεις σύστοιχα εἶναι,
οἷον τὸ μὲν δικαίως τῇ δικαιοσύνῃ, τὸ δὲ ἀνδρεῖως
τῇ ἀνδρίᾳ. σύστοιχα δὲ λέγεται τὰ κατὰ τὴν
αὐτὴν συστοιχίαν ἅπαντα, οἷον δικαιοσύνη, δίκαιος,
δίκαιον, δικαίως. δῆλον οὖν ὅτι ἐνὸς ὁποιοῦν
δειχθέντος τῶν κατὰ τὴν αὐτὴν συστοιχίαν ἀγαθοῦ

114 b ἢ ἐπαινετοῦ καὶ τὰ λοιπὰ πάντα δεδειγμένα ἔσται,
οἷον εἰ ἡ δικαιοσύνη τῶν ἐπαινετῶν, καὶ ὁ δίκαιος
καὶ τὸ δίκαιον καὶ τὸ δικαίως τῶν ἐπαινετῶν.
ῥηθήσεται δὲ τὸ δικαίως καὶ ἐπαινετῶς κατὰ τὴν
5 αὐτὴν πτῶσιν ἀπὸ τοῦ ἐπαινετοῦ, καθάπερ τὸ
δικαίως ἀπὸ τῆς δικαιοσύνης.

Σκοπεῖν δὲ μὴ μόνον ἐπ' αὐτοῦ τοῦ εἰρημένου,
ἀλλὰ καὶ ἐπὶ τοῦ ἐναντίου τὸ ἐναντίον, οἷον ὅτι
τὸ ἀγαθὸν οὐκ ἐξ ἀνάγκης ἡδύ· οὐδὲ γὰρ τὸ κακὸν
λυπηρόν· ἢ εἰ τοῦτο, κακεῖνο. καὶ εἰ ἡ δικαιοσύνη
10 ἐπιστήμη, καὶ ἡ ἀδικία ἄγνοια· καὶ εἰ τὸ δικαίως

TOPICA, II. IX

ordinates' are meant such terms as 'just actions' is true of and 'just man,' which are co-ordinate with 'justice,' another. and 'courageous acts' and 'courageous man,' which are co-ordinate with 'courage.' Similarly also things which create or preserve something are co-ordinate with that of which they are creative or preservative, for example 'healthy things' are co-ordinate with 'health,' and 'things which produce a good condition' are co-ordinate with 'good condition,' and so with the other cases. Such things, then, are usually described as 'co-ordinates'; 'inflected forms' are such words as 'justly,' 'courageously' and 'healthily' and other words formed in this way. Inflected forms are usually regarded also as co-ordinates, for example, 'justly' as a co-ordinate of 'justice' and 'courageously' of 'courage.' All words which are in the same co-ordinate series are called co-ordinates, for example, 'justice,' 'just man,' 'just action' and 'justly.' It is obvious, therefore, that when any one member of the co-ordinate series has been shown to be good or praiseworthy, all the rest will have been shown to be so also. For example, if 'justice' is something praiseworthy, then 'the just man' and 'the just action' and 'justly' will be something praiseworthy. And 'justly' will denote 'praiseworthily,' this being the same inflexion of 'praiseworthy' as 'justly' is of 'justice.'

You must look for the contrary not only in the case of the subject itself which is under discussion, but also in the case of its contrary. For instance, you can say that the good is not necessarily pleasant, for neither is the evil necessarily painful; or, if the latter part is true, so also is the former; and, if justice is knowledge, injustice is ignorance, and, if

(b) It must be observed whether the contrary is predicated also of the contrary.

114 b

ἐπιστημονικῶς καὶ ἐμπείρως, τὸ ἀδίκως ἀγνοούν-
 τως καὶ ἀπείρως. εἰ δὲ ταῦτα μή, οὐδ' ἐκεῖνα,
 καθάπερ ἐπὶ τοῦ νῦν ρηθέντος· μᾶλλον γὰρ ἂν
 φανείη τὸ ἀδίκως ἐμπείρως ἢ ἀπείρως. οὗτος
 δ' ὁ τόπος εἴρηται πρότερον ἐν ταῖς τῶν ἐναντίων
 ἀκολουθήσεσιν· οὐδὲν γὰρ ἄλλο νῦν ἀξιούμεν ἢ
 15 τὸ ἐναντίον τῷ ἐναντίῳ ἀκολουθεῖν.

Ἔτι ἐπὶ τῶν γενέσεων καὶ φθορῶν καὶ ποιη-
 τικῶν καὶ φθαρτικῶν, καὶ ἀναιροῦντι καὶ κατα-
 σκευάζοντι. ὧν γὰρ αἱ γενέσεις τῶν ἀγαθῶν,
 καὶ αὐτὰ ἀγαθά, καὶ εἰ αὐτὰ ἀγαθά, καὶ αἱ γενέσεις·
 20 εἰ δὲ αἱ γενέσεις τῶν κακῶν, καὶ αὐτὰ τῶν κακῶν.
 ἐπὶ δὲ τῶν φθορῶν ἀνάπαλιν· εἰ γὰρ αἱ φθοραὶ
 τῶν ἀγαθῶν, αὐτὰ τῶν κακῶν, εἰ δ' αἱ φθοραὶ τῶν
 κακῶν, αὐτὰ τῶν ἀγαθῶν. ὁ δ' αὐτὸς λόγος καὶ
 ἐπὶ ποιητικῶν καὶ φθαρτικῶν· ὧν μὲν γὰρ τὰ
 ποιητικὰ ἀγαθά, καὶ αὐτὰ τῶν ἀγαθῶν, ὧν δὲ
 τὰ φθαρτικὰ ἀγαθά, αὐτὰ τῶν κακῶν.

25 X. Πάλιν ἐπὶ τῶν ὁμοίων, εἰ ὁμοίως ἔχει, οἶον
 εἰ ἐπιστήμη μία πλειόνων, καὶ δόξα, καὶ εἰ τὸ ὄψιν
 ἔχειν ὁρᾶν, καὶ τὸ ἀκοῆν ἔχειν ἀκούειν. ὁμοίως
 δὲ καὶ ἐπὶ τῶν ἄλλων, καὶ ἐπὶ τῶν ὄντων καὶ τῶν
 δοκούντων. χρήσιμος δ' ὁ τόπος πρὸς ἄμφω.

^a 113 b 27 ff.

TOPICA, II. IX-X

'justly' is 'knowingly' and 'skilfully,' 'unjustly' is 'ignorantly' and 'unskilfully,' but if the latter part is untrue, so is also the former, as in the example above; for 'unjustly' would appear nearer to 'skilfully' than 'unskilfully.' This commonplace has been mentioned above in dealing with the sequence of contraries^a; for at the moment we are not postulating anything more than that contrary follows contrary.

Further, you must examine the generations and corruptions of things and their creative and corruptive agencies, both for destructive and for constructive purposes. For things of which the generations are good things are themselves also good; and if they are themselves good, so also are their generations. If, however, their generations are bad things, they themselves are also bad things. Conversely, in the case of corruptions, if their corruptions are good things, they are themselves bad things, but if their corruptions are bad things, then they themselves are good things. The same argument holds good also of creative and corruptive agencies; for those things of which the creative agencies are good are themselves also good things, while those things of which the corruptive agencies are good are themselves bad things.

X. Again, you must take the case of like things and see if the same is true of them; for example, if one form of knowledge deals with several subjects, so also does one form of opinion, and if to have sight is to see, then also to have hearing is to hear, and so with the other examples both of things which are like and of things that are generally considered to be like. This commonplace is useful for both pur-

(c) The generation and corruption of a thing will show whether it is good or bad.

Rules based on the likeness of things and on variation of degree: (a) What is true of one of like things is also true of the others.

εἰ μὲν γὰρ ἐπὶ τινος τῶν ὁμοίων οὕτως ἔχει, καὶ
 30 ἐπὶ τῶν ἄλλων τῶν ὁμοίων, εἰ δὲ ἐπὶ τινος μὴ,
 οὐδ' ἐπὶ τῶν ἄλλων. σκοπεῖν δὲ καὶ εἰ ἐφ' ἐνὸς
 καὶ εἰ ἐπὶ πολλῶν ὁμοίως ἔχει· ἐνιαχοῦ γὰρ δια-
 φωνεῖ. οἷον εἰ τὸ ἐπίστασθαι διανοεῖσθαι, καὶ
 τὸ πολλὰ ἐπίστασθαι πολλὰ διανοεῖσθαι. τοῦτο
 δ' οὐκ ἀληθές· ἐπίστασθαι μὲν γὰρ ἐνδέχεται
 35 πολλά, διανοεῖσθαι δ' οὔ. εἰ οὖν τοῦτο μὴ, οὐδ'
 ἐκείνο τὸ ἐφ' ἐνός, ὅτι τὸ ἐπίστασθαι διανοεῖσθαι
 ἐστίν.

Ἔτι ἐκ τοῦ μᾶλλον καὶ ἥττον. εἰσὶ δὲ τοῦ
 μᾶλλον καὶ ἥττον τόποι τέσσαρες, εἰς μὲν εἰ
 ἀκολουθεῖ τὸ μᾶλλον τῷ μᾶλλον, οἷον εἰ ἡδονή
 115 a ἀγαθόν, καὶ ἡ μᾶλλον ἡδονή μᾶλλον ἀγαθόν, καὶ
 εἰ τὸ ἀδικεῖν κακόν, καὶ τὸ μᾶλλον ἀδικεῖν μᾶλλον
 κακόν. χρήσιμος δ' οὖν πρὸς ἄμφω ὁ τόπος·
 εἰ μὲν γὰρ ἀκολουθεῖ τῇ τοῦ ὑποκειμένου ἐπιδόσει
 ἡ τοῦ συμβεβηκότος ἐπίδοσις, καθάπερ εἴρηται,
 5 δῆλον ὅτι συμβέβηκεν, εἰ δὲ μὴ ἀκολουθεῖ, οὐ
 συμβέβηκεν. τοῦτο δ' ἐπαγωγῇ ληπτέον. ἄλλος·
 ἐνὸς περὶ δύο λεγομένου, εἰ ᾧ μᾶλλον εἰκὸς ὑπάρ-
 χειν μὴ ὑπάρχει, οὐδ' ᾧ ἥττον, καὶ εἰ ᾧ ἥττον
 εἰκὸς ὑπάρχειν ὑπάρχει, καὶ ᾧ μᾶλλον. πάλιν,

poses ; for if something is true of one of the like things, it is also true of the others, but if it is not true of one of them, it is not true of the others either. You must also see whether conditions are alike in the case of a single thing and a number of things ; for there is sometimes a discrepancy. For example, if to 'know' a thing is to 'think of' a thing, then to 'know many things' is to 'think of many things.' But this is not so ; for it is possible to know many things and not to be thinking of them. If, therefore, the second statement is not true, then the first, which dealt with a single thing, namely, 'to know a thing' is 'to think of a thing,' is not true either.

Moreover you must derive material from the greater and the less degrees. There are four commonplaces connected with the greater and the less degrees. One is to see whether the greater degree follows the greater degree ; for example, if pleasure is good, and greater pleasure is a greater good, and if to commit injustice is an evil, whether to commit a greater injustice is also a greater evil. This commonplace is useful for both purposes ; for, if the increase of the accident follows the increase of the subject, as described above, it is obvious that it is really an accident of the subject, but if it does not follow it, it is not an accident of it. This result must be obtained by induction. Here is another commonplace ; when one predicate is applied to two subjects, then, if it does not belong to the one to which there is the greater likelihood of its belonging, it does not belong either to the one to which it is less likely to belong ; and if it belongs to that to which it is less likely to belong, it belongs also to that to which it is more likely to belong. Again,

(b) Four arguments can be derived from the greater and the less degree.

115 a

δυοῖν περὶ ἐνὸς λεγομένων, εἰ τὸ μᾶλλον ὑπάρχειν
 10 δοκοῦν μὴ ὑπάρχει, οὐδὲ τὸ ἥττον, ἢ εἰ τὸ ἥττον
 δοκοῦν ὑπάρχειν ὑπάρχει, καὶ τὸ μᾶλλον. ἔτι
 δυοῖν περὶ δύο λεγομένων εἰ τὸ θατέρω μᾶλλον
 ὑπάρχειν δοκοῦν μὴ ὑπάρχει, οὐδὲ τὸ λοιπὸν τῷ
 λοιπῷ, ἢ εἰ τὸ ἥττον δοκοῦν τῷ ἐτέρω ὑπάρχειν
 ὑπάρχει, καὶ τὸ λοιπὸν τῷ λοιπῷ.

15 Ἔτι ἐκ τοῦ ὁμοίως ὑπάρχειν ἢ δοκεῖν ὑπάρχειν
 τριχῶς, καθάπερ ἐπὶ τοῦ μᾶλλον ἐπὶ τῶν ὕστερον
 ῥηθέντων τριῶν τόπων ἐλέγετο. εἴτε γὰρ ἓν τι
 δυσὶν ὁμοίως ὑπάρχει ἢ δοκεῖ ὑπάρχειν, εἰ τῷ
 ἐτέρω μὴ ὑπάρχει, οὐδὲ τῷ ἐτέρω, εἰ δὲ θατέρω
 20 ὑπάρχει, καὶ τῷ λοιπῷ· εἴτε δύο τῷ αὐτῷ ὁμοίως,
 εἰ τὸ ἕτερον μὴ ὑπάρχει, οὐδὲ τὸ λοιπόν, εἰ δὲ
 θάτερον, καὶ τὸ λοιπόν. τὸν αὐτὸν δὲ τρόπον
 καὶ εἰ δύο δυσὶν ὁμοίως ὑπάρχει· εἰ γὰρ τὸ ἕτερον
 τῷ ἐτέρω μὴ ὑπάρχει, οὐδὲ τὸ λοιπὸν τῷ λοιπῷ,
 εἰ δὲ ὑπάρχει τὸ ἕτερον τῷ ἐτέρω, καὶ τὸ λοιπὸν
 τῷ λοιπῷ.

if two predicates are applied to one subject, then, if the one which is more generally regarded as belonging to the one subject does not belong, neither does that which is less generally so regarded ; or, if the predicate which is less generally regarded as belonging does belong, then so also does that which is more generally so regarded. Further, when two predicates are applied to two subjects, if the predicate which is more generally regarded as belonging to one of the subjects does not belong, neither does the other predicate belong to the other subject ; or, if the predicate which is less generally regarded as belonging to the one subject does belong, then the other predicate also belongs to the other subject.

Furthermore, you can derive material from the fact that a predicate belongs, or is generally regarded as belonging, in a like degree, in three ways, namely, those described in the last three commonplaces already mentioned in connexion with the greater degree. For, if one predicate belongs, or is generally regarded as belonging, to two subjects in a like degree, then, if it does not belong to the one, it does not belong to the other either, and, if it belongs to the one, it belongs to the other also. Or, if two predicates belong in a like degree to the same subject, if the one does not belong, neither does the other, whereas, if the one does belong, so also does the other. The same thing also happens if two predicates belong in a like degree to two subjects ; for if the one predicate does not belong to the one subject, neither does the other predicate belong to the other subject, while, if the one predicate belongs to the one subject, then the other predicate also belongs to the other subject.

(c) Three arguments can be derived from the like degree.

115 a

25 XI. Ἐκ μὲν οὖν τοῦ μᾶλλον καὶ ἥττον καὶ τοῦ
 ὁμοίως τοσαυταχῶς ἐνδέχεται ἐπιχειρεῖν· ἔτι δ'
 ἐκ τῆς προσθέσεως. εἰς ἕτερον πρὸς ἕτερον προσ-
 τεθὲν ποιῇ ἀγαθὸν ἢ λευκόν, μὴ ὃν πρότερον
 λευκὸν ἢ ἀγαθόν, τὸ προστεθὲν ἔσται λευκὸν ἢ
 ἀγαθόν, οἷόν περ καὶ τὸ ὅλον ποιεῖ. ἔτι εἰ πρὸς τὸ
 30 ὑπάρχον προστεθὲν τι μᾶλλον ποιεῖ τοιοῦτον οἷον
 ὑπῆρχε, καὶ αὐτὸ ἔσται τοιοῦτον. ὁμοίως δὲ καὶ
 ἐπὶ τῶν ἄλλων. χρήσιμος δὲ οὐκ ἐν ἅπασιν ὁ
 τόπος, ἀλλ' ἐν οἷς τὴν τοῦ μᾶλλον ὑπεροχὴν συμ-
 βαίνει γίνεσθαι. οὗτος δὲ ὁ τόπος οὐκ ἀντιστρέφει
 πρὸς τὸ ἀνασκευάζειν. εἰ γὰρ μὴ ποιεῖ τὸ προσ-
 35 τιθέμενον ἀγαθόν, οὐδέπω δῆλον εἰ αὐτὸ μὴ
 115 b ἀγαθόν· τὸ γὰρ ἀγαθὸν κακῶ προστιθέμενον οὐκ
 ἐξ ἀνάγκης ἀγαθὸν τὸ ὅλον ποιεῖ, οὐδὲ λευκὸν
 μέλανι.

Πάλιν εἴ τι μᾶλλον καὶ ἥττον λέγεται, καὶ
 ἀπλῶς ὑπάρχει· τὸ γὰρ μὴ ὃν ἀγαθὸν ἢ λευκὸν
 5 οὐδὲ μᾶλλον ἢ ἥττον ἀγαθὸν ἢ λευκὸν ῥηθήσεται·
 τὸ γὰρ κακὸν οὐδενὸς μᾶλλον ἢ ἥττον ἀγαθόν,
 ἀλλὰ μᾶλλον κακὸν ἢ ἥττον ῥηθήσεται. οὐκ ἀντι-
 στρέφει δ' οὐδ' οὗτος ὁ τόπος πρὸς τὸ ἀνα-
 σκευάσαι· πολλὰ γὰρ τῶν οὐ λεγομένων μᾶλλον
 <καὶ ἥττον>¹ ἀπλῶς ὑπάρχει· ἄνθρωπος γὰρ οὐ
 10 λέγεται μᾶλλον καὶ ἥττον, ἀλλ' οὐ διὰ τοῦτο οὐκ
 ἔστιν ἄνθρωπος.

Τὸν αὐτὸν δὲ τρόπον σκεπτέον καὶ ἐπὶ τοῦ κατὰ

¹ καὶ ἥττον added by Wallies.

XI. Such then are the various ways in which you can argue from the greater and the less and the like degrees. You can, moreover, obtain arguments from the addition of one thing to another. If the addition of one thing to another makes the latter good or white, whereas it was not white or good before, then that which was added will be white or good, *i.e.*, it will have the quality which it also bestows on the whole. Further, if something added to the existing quality of a thing imparts a greater degree of the same existing quality, it will be itself also of that quality. So likewise in the other cases. But this commonplace is not always useful, but only where the result of the addition is that a greater intensification is produced. This commonplace is not convertible for purposes of destructive criticism. For, if that which is added does not make a thing good, it is not yet clear whether it is itself not good ; for good added to evil does not necessarily make the whole good, nor does white added to black necessarily make the whole white.

Further Rules :

(a) How to argue from the result of adding two things together.

Again, if anything is predicated in a greater or less degree, it also belongs absolutely ; for what is not good (or white) will never be said to be good (or white) in a greater or less degree ; for an evil thing will never be described as possessing a greater or less degree of goodness than something else, but only of evil. This commonplace also is not convertible for purposes of destructive criticism ; for many predicates to which we cannot ascribe a greater or a less degree belong absolutely ; for ' man ' cannot be predicated in a greater or less degree, but a man does not on this account cease to be a man.

(b) Anything which is predicated in a greater or less degree belongs absolutely.

In the same manner you must examine predicates (c) What is

τι καὶ ποτέ καὶ ποῦ· εἰ γὰρ κατὰ τι ἐνδέχεται,
 καὶ ἀπλῶς ἐνδέχεται. ὁμοίως δὲ καὶ τὸ ποτέ ἢ
 ποῦ· τὸ γὰρ ἀπλῶς ἀδύνατον οὔτε κατὰ τι οὔτε
 15 ποῦ οὔτε ποτέ ἐνδέχεται. ἔνστασις ὅτι κατὰ τι
 μὲν εἰσι φύσει σπουδαῖοι, οἷον ἐλευθέριοι ἢ σω-
 φρονικοί, ἀπλῶς δὲ οὐκ εἰσὶ φύσει σπουδαῖοι·
 οὐδεὶς γὰρ φύσει φρόνιμος. ὁμοίως δὲ καὶ ποτέ
 μὲν ἐνδέχεται τῶν φθαρτῶν τι μὴ φθαρῆναι,
 ἀπλῶς δ' οὐκ ἐνδέχεται μὴ φθαρῆναι. τὸν αὐτὸν
 20 δὲ τρόπον καὶ ποῦ μὲν συμφέρει τοιαύτῃ διαίτῃ
 χρῆσθαι, οἷον ἐν τοῖς νοσώδεσι τόποις, ἀπλῶς δ'
 οὐ συμφέρει. ἔτι δὲ ποῦ μὲν ἓνα μόνον δυνατόν
 εἶναι, ἀπλῶς δὲ οὐ δυνατόν ἓνα μόνον εἶναι. τὸν
 αὐτὸν δὲ τρόπον καὶ ποῦ μὲν καλὸν τὸν πατέρα
 θύειν, οἷον ἐν Τριβαλλοῖς, ἀπλῶς δ' οὐ καλόν. ἢ
 25 τοῦτο μὲν οὐ ποῦ σημαίνει ἀλλὰ τισίν; οὐδὲν γὰρ
 διαφέρει ὅπου ἂν ᾧσιν· πανταχοῦ γὰρ αὐτοῖς ἔσται
 καλὸν οὔσι Τριβαλλοῖς. πάλιν ποτέ μὲν συμφέρει
 φαρμακεύεσθαι, οἷον ὅταν νοσῇ, ἀπλῶς δ' οὔ. ἢ
 οὐδὲ τοῦτο ποτέ σημαίνει, ἀλλὰ τῷ διακειμένῳ
 πως; οὐδὲν γὰρ διαφέρει ὅποτεοῦν, ἔαν οὕτω
 30 μόνον διακείμενος ᾗ. τὸ δ' ἀπλῶς ἐστὶν ὁ μηδενὸς

which apply only in a certain respect or at a certain time or in a certain place ; for, if a predicate is possible in a certain respect, it is also possible absolutely. The same is true of predicates which are qualified in respect of time and place ; for what is impossible absolutely is not possible in any respect or in any place or at any time. An objection may be raised that in a certain respect men are naturally good, for example, they may be generous or inclined to self-control, but absolutely they are not by nature good, for no one is naturally prudent. Similarly, too, it is possible at a certain time for something which is corruptible not to be corrupted, but it is impossible for it to avoid corruption absolutely. In the same way, too, it is expedient in certain places to adopt a certain diet, *e.g.*, in unhealthy localities, but absolutely it is not expedient. Further, in certain places it is possible for a man to exist alone, but absolutely it is not possible for him to exist alone. In the same way, also, it is honourable in some places to sacrifice one's father, for example amongst the Triballi,^a but absolutely it is not honourable. (Or is a relativity to persons rather than places indicated here ? For it makes no difference where they may be ; for, wherever they are, it will be honourable in their eyes because they are Triballi.) Again, it is expedient at certain times to take drugs, for example, when one is ill ; but it is not expedient absolutely. (Or is a relativity to a certain condition rather than to a certain time indicated here ? For it makes no difference when a man takes the drug, if only he is in a condition which requires it.) Now the 'absolutely' honourable or its contrary, is that

predicated
with a
qualifica-
tion can also
be predi-
cated
absolutely.

^a A Thracian tribe who dwelt near the Danube.

115 b

προστεθέντος ἐρεῖς ὅτι καλόν ἐστιν ἢ τὸ ἐναντίον.
οἶον τὸ τὸν πατέρα θύειν οὐκ ἐρεῖς καλὸν εἶναι,
ἀλλὰ τισὶ καλὸν εἶναι· οὐκ ἄρα ἀπλῶς καλόν.
ἀλλὰ τὸ τοὺς θεοὺς τιμᾶν ἐρεῖς καλὸν οὐδὲν
προστιθείς· ἀπλῶς γὰρ καλόν ἐστιν. ὥστε ὁ ἂν
μηδενὸς προστιθεμένου δοκῇ εἶναι καλὸν ἢ αἰσχρὸν
35 ἢ ἄλλο τι τῶν τοιούτων, ἀπλῶς ῥηθήσεται.

TOPICA, II. XI

which you will say is honourable or its contrary, without any additional qualification. For example, you will not say that to sacrifice one's father is honourable, but that 'in the eyes of some people' it is honourable; it is not, therefore, honourable absolutely. But you will say that to honour the gods is honourable without adding any qualification; for it is honourable absolutely. So whatever is generally regarded as honourable or disgraceful, or anything else of the kind, without any additional qualification, will be called so in an absolute sense.

Γ

116 a 4 I. Πότερον δ' αἰρετώτερον ἢ βέλτιον δυεῖν ἢ
 πλειόνων, ἐκ τῶνδε σκεπτέον. πρῶτον δὲ διωρί-
 5 σθω ὅτι τὴν σκέψιν ποιούμεθα οὐχ ὑπὲρ τῶν πολὺ
 διεστώτων καὶ μεγάλην πρὸς ἄλληλα διαφορὰν
 ἔχόντων (οὐδεὶς γὰρ ἀπορεῖ πότερον ἢ εὐδαιμονία
 ἢ ὁ πλοῦτος αἰρετώτερον) ἀλλ' ὑπὲρ τῶν σύνεγγυς,
 καὶ περὶ ὧν ἀμφισβητοῦμεν ποτέρῳ δεῖ προσ-
 θέσθαι μᾶλλον, διὰ τὸ μηδεμίαν ὁρᾶν τοῦ ἑτέρου
 10 πρὸς τὸ ἕτερον ὑπεροχήν. δῆλον οὖν ἐπὶ τῶν
 τοιούτων ὅτι δειχθείσης ὑπεροχῆς ἢ μιᾶς ἢ πλειό-
 νων συγκαταθήσεται ἡ διάνοια ὅτι τοῦτ' ἐστὶν
 αἰρετώτερον, ὁπότερον τυγχάνει αὐτῶν ὑπερέχον.

Πρῶτον μὲν οὖν τὸ πολυχρονιώτερον ἢ βεβαιό-
 τερον αἰρετώτερον τοῦ ἡττον τοιούτου. καὶ ὁ
 μᾶλλον ἂν ἔλοιτο ὁ φρόνιμος ἢ ὁ ἀγαθὸς ἀνὴρ, ἢ
 15 ὁ νόμος ὁ ὀρθός, ἢ οἱ σπουδαῖοι περὶ ἕκαστα
 αἰρούμενοι ἢ τοιοῦτοί εἰσιν, ἢ οἱ ἐν ἐκάστῳ γένει
 ἐπιστήμονες, ἢ ὅσα οἱ πλείους ἢ πάντες, οἷον ἐν
 ἱατρικῇ ἢ τεκτονικῇ ἃ οἱ πλείους τῶν ἱατρῶν ἢ
 πάντες, ἢ ὅσα ὅλως οἱ πλείους ἢ πάντες ἢ πάντα,
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BOOK III

I. WHICH is more worthy of choice or better of two (or more) things, must be examined in the light of the following considerations. But first a limitation must be laid down that our inquiry does not concern things which are widely separated and show a considerable divergence from one another (for no one is at a loss to decide whether happiness or wealth is more worthy of choice), but it is concerned with things that are closely related and about which we discuss which we ought preferably to support, because we cannot detect any superiority of the one over the other. It is clear, therefore, that, as regards such things, if one or more points of superiority can be shown, the mind will agree that whichever of the two alternatives is actually superior is the more worthy of choice.

In the first place, then, that which is more permanent or constant is more worthy of choice than that which is less so, and also that which the prudent or good man would prefer, or the right law, or those who are excellent in any particular sphere when they make their choice as such, and those who are skilled in some particular subject, or what most of them, or all, would choose, for example, in medicine (or carpentry) what most, or all, doctors would choose, or generally those things which most people or every-

*Rules for
the com-
parative
valuation of
two or more
predicates:*

(a) The more durable and what commends itself to the wise and good is preferable.

20 οἶον τὰγαθόν· πάντα γὰρ τὰγαθοῦ ἐφίεται. δεῖ
 δ' ἄγειν πρὸς ὃ τι ἂν ᾖ ἡ χρήσιμον τὸ ῥηθησόμενον.
 ἔστι δ' ἀπλῶς μὲν βέλτιον καὶ αἰρετώτερον τὸ
 κατὰ τὴν βελτίω ἐπιστήμην, τινὶ δὲ τὸ κατὰ τὴν
 οἰκείαν.

Ἔπειτα δὲ τὸ ὅπερ τόδε τι τοῦ μὴ ἐν γένει,
 οἶον ἡ δικαιοσύνη τοῦ δικαίου· τὸ μὲν γὰρ ἐν γένει
 τῷ ἀγαθῷ, τὸ δ' οὐ, καὶ τὸ μὲν ὅπερ ἀγαθόν, τὸ
 25 δ' οὐ· οὐδὲν γὰρ λέγεται ὅπερ τὸ γένος, ὃ μὴ
 τυγχάνει ἐν τῷ γένει ὄν, οἶον ὁ λευκὸς ἄνθρωπος
 οὐκ ἔστιν ὅπερ χρῶμα. ὁμοίως δὲ καὶ ἐπὶ τῶν
 ἄλλων.

Καὶ τὸ δι' αὐτὸ αἰρετὸν τοῦ δι' ἕτερον αἰρετοῦ
 30 αἰρετώτερον, οἶον τὸ ὑγιαίνειν τοῦ γυμνάζεσθαι·
 τὸ μὲν γὰρ δι' αὐτὸ αἰρετόν, τὸ δὲ δι' ἕτερον.
 καὶ τὸ καθ' αὐτὸ τοῦ κατὰ συμβεβηκός, οἶον τὸ
 τοὺς φίλους δικαίους εἶναι τοῦ τοὺς ἐχθρούς. τὸ
 μὲν γὰρ καθ' αὐτὸ αἰρετόν, τὸ δὲ κατὰ συμ-
 βεβηκός· τὸ γὰρ τοὺς ἐχθρούς δικαίους εἶναι κατὰ
 35 συμβεβηκός αἰρούμεθα, ὅπως μηδὲν ἡμᾶς βλά-
 πτωσιν. ἔστι δὲ τοῦτο ταῦτο τῷ πρὸ τούτου,
 διαφέρει δὲ τῷ τρόπῳ· τὸ μὲν γὰρ τοὺς φίλους
 δικαίους εἶναι δι' αὐτὸ αἰρούμεθα, καὶ εἰ μηδὲν

TOPICA, III. 1

body or all things would choose, for example, the good ; for everything aims at the good. You must direct the future course of the discussion in whatever direction may be advantageous ; but the absolute criterion of what is better and more worthy of choice is the better knowledge, though for the individual it may be his own particular knowledge.

Next, that which is of a certain kind is more worthy of choice than that which is not in the genus of that thing, for example, justice is more worthy of choice than the just man ; for the former is in the genus ' good,' but the latter is not, and the former is that which is called ' good,' but the latter is not. For nothing is called by the name of the genus which does not actually belong to the genus ; for example, the ' white man ' is not a ' colour ' and so likewise in the other cases.

Also, that which is worthy of choice for its own sake is more worthy of choice than that which is so for some other reason ; for example, health is more worthy of choice than exercise, for the former is worthy of choice for its own sake, the latter for the sake of something else. Also, that which is in itself worthy of choice is more worthy of choice than that which is accidentally so ; for example, that one's friends should be just is more worthy of choice than that one's enemies should be so, for the former is worthy of choice in itself, the latter accidentally ; for we choose that our enemies should be just only accidentally, in order that they may not do us harm. This rule is the same as the one which preceded it, but differs in the way in which it is stated ; for that our friends should be just is a thing which we choose for its own sake, even if it is not going to affect us

(b) The genus is preferable to the accident.

(c) What is desirable for its own sake is preferable.

116 a

ἡμῖν μέλλει ἔσεσθαι, κὰν ἐν Ἰνδοῖς ὦσιν· τὸ δὲ τοὺς ἐχθροὺς δι' ἕτερον, ὅπως μηθὲν ἡμᾶς βλάπτωσιν.

116 b

Καὶ τὸ αἷτιον ἀγαθοῦ καθ' αὐτὸ τοῦ κατὰ συμβεβηκὸς αἰτίου, καθάπερ ἡ ἀρετὴ τῆς τύχης (ἡ μὲν γὰρ καθ' αὐτὴν ἡ δὲ κατὰ συμβεβηκὸς αἰτία τῶν ἀγαθῶν) καὶ εἴ τι ἄλλο τοιοῦτον. ὁμοίως δὲ
 5 καὶ ἐπὶ τοῦ ἐναντίου· τὸ γὰρ καθ' αὐτὸ κακοῦ αἷτιον φευκτότερον τοῦ κατὰ συμβεβηκός, οἷον ἡ κακία καὶ ἡ τύχη· τὸ μὲν γὰρ καθ' αὐτὸ κακόν, ἡ δὲ τύχη κατὰ συμβεβηκός.

Καὶ τὸ ἀπλῶς ἀγαθὸν τοῦ τινὲς αἰρετώτερον, οἷον τὸ ὑγιαίνειν τοῦ τέμνεσθαι· τὸ μὲν γὰρ
 10 ἀπλῶς ἀγαθόν, τὸ δὲ τινὲς τῷ δεομένῳ τομῆς. καὶ τὸ φύσει τοῦ μὴ φύσει, οἷον ἡ δικαιοσύνη τοῦ δικαίου· τὸ μὲν γὰρ φύσει, τὸ δ' ἐπίκτητον. καὶ τὸ τῷ βελτίονι καὶ τιμιωτέρῳ ὑπάρχον αἰρετώτερον, οἷον θεῷ ἢ ἀνθρώπῳ καὶ ψυχῇ ἢ σώματι. καὶ τὸ τοῦ βελτίονος ἴδιον βέλτιον ἢ τὸ τοῦ χεί-
 15 ρονος, οἷον τὸ τοῦ θεοῦ ἢ τὸ τοῦ ἀνθρώπου· κατὰ μὲν γὰρ τὰ κοινὰ ἐν ἀμφοτέροις οὐδὲν διαφέρει ἀλλήλων, τοῖς δ' ἰδίῳ τὸ ἕτερον τοῦ ἑτέρου ὑπερέχει. καὶ τὸ ἐν βελτίοισιν ἢ προτέροις ἢ

at all, and even though they may be in India ; but we choose that our enemies should be just for another reason, namely, that they may do us no harm.

Also that which is in itself the cause of good is more worthy of choice than that which is accidentally the cause of good ; for example, virtue is more worthy of choice than luck (for the former is in itself the cause of good things but the latter only accidentally), and so with any other similar case. So also in the contrary case ; for what is in itself the cause of evil is more to be avoided than that which is only accidentally the cause of evil, as in the case of baseness and chance ; for the former is in itself an evil, while chance is only accidentally so.

Also, that which is good absolutely is more worthy of choice than that which is good for an individual, *e.g.*, the enjoyment of health than a surgical operation ; for the former is good absolutely, the latter is good only for an individual, namely, the man who requires an operation. Also, that which is naturally good is more worthy of choice than that which is not so by nature, *e.g.*, justice rather than the just man ; for the former is naturally good, whereas the goodness of the latter is acquired. Also what belongs to that which is better and more highly honoured is more worthy of choice, for example, that which belongs to God than that which belongs to man, and that which belongs to the soul than that which belongs to the body. Also the property of the better is better than that of the worse, for example, the property of God than that of man ; for in those things which are common to both there is no difference between them, but it is in their properties that the one is superior to the other. Also, that is better

(d) What is *per se* the cause of good is preferable to what is accidentally so.

(e) The absolutely and the naturally good are preferable.

(f) What belongs to the better is preferable.

τιμιωτέροις βέλτιον, οἷον ὑγίεια ἰσχύος καὶ κάλλους.
 ἡ μὲν γὰρ ἐν ὑγροῖς καὶ ξηροῖς καὶ θερμοῖς καὶ
 20 ψυχροῖς, ἀπλῶς δ' εἰπεῖν ἐξ ὧν πρώτων συν-
 ἔστηκε τὸ ζῶον, τὰ δ' ἐν τοῖς ὑστέροις· ἡ μὲν γὰρ
 ἰσχύς ἐν τοῖς νεύροις καὶ ὀστοῖς, τὸ δὲ κάλλος τῶν
 μελῶν τις συμμετρία δοκεῖ εἶναι. καὶ τὸ τέλος
 τῶν πρὸς τὸ τέλος αἰρετώτερον δοκεῖ εἶναι, καὶ
 δυοῖν τὸ ἔγγιον τοῦ τέλους. καὶ ὅλως τὸ πρὸς
 25 τὸ τοῦ βίου τέλος αἰρετώτερον μᾶλλον ἢ τὸ πρὸς
 ἄλλο τι, οἷον τὸ πρὸς εὐδαιμονίαν συντεῖνον ἢ τὸ
 πρὸς φρόνησιν. καὶ τὸ δυνατόν τοῦ ἀδυνάτου.
 ἔτι δύο ποιητικῶν, οὗ τὸ τέλος βέλτιον. ποιη-
 τικοῦ δὲ καὶ τέλους ἐκ τοῦ ἀνάλογον, ὅταν πλείονι
 ὑπερέχῃ τὸ τέλος τοῦ τέλους ἢ ἐκείνο τοῦ οἰκείου
 ποιητικοῦ, οἷον εἰ ἡ εὐδαιμονία πλείονι ὑπερέχει
 30 ὑγείας ἢ ὑγίεια ὑγεινοῦ, τὸ ποιητικὸν εὐδαι-
 μονίας βέλτιον ὑγείας. ὅσω γὰρ ἡ εὐδαιμονία
 ὑγείας ὑπερέχει, τοσούτῳ καὶ τὸ ποιητικὸν τὸ
 τῆς εὐδαιμονίας τοῦ ὑγεινοῦ ὑπερέχει. ἡ δὲ
 ὑγίεια τοῦ ὑγεινοῦ ἐλάττονι ὑπερεῖχεν, ὥστε
 πλείονι ὑπερέχει τὸ ποιητικὸν εὐδαιμονίας τοῦ

^a It is difficult to see what is the syntax of the words ποιη-
 τικοῦ δὲ τέλους ἐκ τοῦ ἀνάλογον, but the meaning is clear.

TOPICA, III. 1

which is inherent in things which are better or prior or more highly honoured ; for example, health is better than strength or beauty. For health is inherent in moisture and dryness and in heat and cold, in a word in all the primary elements of which the living creature consists, whereas the others are inherent in secondary constituents ; for strength is generally considered to reside in the sinews and bones, and beauty to be in a certain symmetry of the limbs. Also, the end is usually regarded as more worthy of choice than the means to the end, and of two means that which is nearer to the end. And, to speak generally, the means which has life as its end is more worthy of choice than that which has some other end ; for example, that which tends to happiness is more worthy of choice than that which tends to prudence. Also the practicable is more worthy of choice than the impracticable. Further, of two productive agencies, that of which the end is better is more worthy of choice. We can judge between a productive agency and an end by drawing up a proportion,^a when the superiority of one end over the other is greater than that of the latter over its own productive agency. For example, if happiness has a greater superiority over health than health has over the health-giving, then that which produces happiness is superior to health. For that which produces happiness is superior to the health-giving in the same degree as happiness is superior to health. But health shows less superiority over the health-giving ; therefore that which produces happiness shows greater superiority over the health-giving than

(g) The end is preferable to the means, and the practicable to the impracticable.

Pacius renders, *cum alterum sit effectivum, alterum finis, ex proportione iudicandum est.* Wallies reads ποιητικόν.

116 b

35 ὑγίεινόν ἢ ἡ ὑγίεια τοῦ ὑγίεινόν. δῆλον ἄρα ὅτι αἰρετώτερον τὸ ποιητικὸν εὐδαιμονίας τῆς ὑγείας· τοῦ γὰρ αὐτοῦ πλείονι ὑπερέχει.

Ἔτι τὸ κάλλιον καθ' αὐτὸ καὶ τιμιώτερον καὶ ἐπαινετώτερον, οἷον φιλία πλούτου καὶ δικαιοσύνη ἰσχύος. τὰ μὲν γὰρ καθ' αὐτὰ τῶν τιμίων καὶ
117 a ἐπαινετῶν, τὰ δ' οὐ καθ' αὐτὰ ἀλλὰ δι' ἕτερον· οὐδεὶς γὰρ τιμᾷ τὸν πλοῦτον δι' ἑαυτὸν ἀλλὰ δι' ἕτερον, τὴν δὲ φιλίαν καθ' αὐτό, καὶ εἰ μηδὲν μέλλει ἡμῖν ἕτερον ἀπ' αὐτῆς ἔσεσθαι.

5 II. Ἔτι ὅταν δύο τινὰ ἢ σφόδρα ἀλλήλοις παραπλήσια καὶ μὴ δυνώμεθα ὑπεροχὴν μηδεμίαν συνιδεῖν τοῦ ἑτέρου πρὸς τὸ ἕτερον, ὁρᾶν ἀπὸ τῶν παρεπομένων· ὧ γὰρ ἔπεται μείζον ἀγαθόν, τοῦθ' αἰρετώτερον. ἂν δ' ἢ τὰ ἐπόμενα κακά, ὧ τὸ ἔλαττον ἀκολουθεῖ κακόν, τοῦθ' αἰρετώτερον.

10 ὄντων γὰρ ἀμφοτέρων αἰρετῶν οὐδὲν κωλύει δυσχερές τι παρέπεσθαι. διχῶς δ' ἀπὸ τοῦ ἔπεσθαι ἢ σκέψις· καὶ γὰρ πρότερον καὶ ὕστερον ἔπεται, οἷον τῷ μανθάνοντι τὸ μὲν ἀγνοεῖν πρότερον, τὸ δ' ἐπίστασθαι ὕστερον. βέλτιον δ' ὥς ἐπὶ τὸ πολὺ τὸ ὕστερον ἐπόμενον. λαμβάνειν οὖν
15 τῶν ἐπομένων ὁπότερον ἂν ἢ χρήσιμον.

Ἔτι τὰ πλείω ἀγαθὰ τῶν ἐλαττόνων, ἢ ἀπλῶς, ἢ ὅταν τὰ ἕτερα ἐν τοῖς ἑτέροις ὑπάρχη, τὰ ἐλάττω ἐν τοῖς πλείοσιν. ἔνστασις, εἴ που θάτερον θατέρου

TOPICA, III. I-II

health shows over the health-giving. It is clear, then, that what produces happiness is more worthy of choice than health ; for it shows a greater superiority over the same thing.

Further, that which is in itself more noble and more valued and more praiseworthy is more worthy of choice ; for example, friendship is more worthy of choice than wealth, and justice than strength. For the former in themselves are among things valued and praiseworthy, while the latter are valued and praiseworthy not in themselves but for some other reason ; for no one values wealth for its own sake but for some other reason, but we value friendship for its own sake, even if we are not likely to get anything else from it.

II. Further, when two things are very similar to one another and we cannot detect any superiority in the one over the other, we must judge from their consequences ; for that of which the consequence is a greater good is more worthy of choice, and, if the consequences are evil, that is more worthy of choice which is followed by the lesser evil. For, if both are worthy of choice, there is nothing to prevent some unpleasant secondary consequence. The examination based on consequence takes two forms ; for a consequence can be prior or posterior in time ; for example, for the man who learns, ignorance is prior, knowledge posterior. The posterior consequence is usually better. You should, then, take whichever of the consequences is advantageous.

Further, a greater number of good things is preferable to a lesser number, either absolutely or when the one exists in the other, *i.e.*, the lesser number is included in the greater. An objection may be

(h) What is *per se* more noble, valued and praiseworthy is preferable.

Rules of preference can be based on :
(a) Antecedents and consequences.

(b) Numbers.

117 a

χάριν· οὐδὲν γὰρ αἰρετώτερα τὰ ἄμφω τοῦ ἐνός,
 20 οἷον τὸ ὑγιαίνειν καὶ ἡ ὑγίεια τῆς ὑγιείας,
 ἐπειδὴ τὸ ὑγιαίνειν τῆς ὑγιείας ἔνεκεν αἰρούμεθα.
 καὶ μὴ ἀγαθὰ δὲ ἀγαθῶν οὐδὲν κωλύει εἶναι
 αἰρετώτερα, οἷον εὐδαιμονίαν καὶ ἄλλο τι ὃ μὴ
 ἐστὶν ἀγαθὸν δικαιοσύνης καὶ ἀνδρίας. καὶ ταῦτα
 μεθ' ἡδονῆς μᾶλλον ἢ ἄνευ ἡδονῆς, καὶ ταῦτα
 25 μετ' ἀλυπίας μᾶλλον ἢ μετὰ λύπης.

Καὶ ἕκαστον ἐν ᾧ καιρῷ μείζον δύναται, ἐν
 τούτῳ καὶ αἰρετώτερον, οἷον τὸ ἀλύπως ἐν τῷ
 γήρᾳ μᾶλλον ἢ ἐν τῇ νεότητι· μείζον γὰρ ἐν τῷ
 γήρᾳ δύναται. κατὰ ταῦτα δὲ καὶ ἡ φρόνησις ἐν
 30 τῷ γήρᾳ αἰρετώτερον· οὐδεὶς γὰρ τοὺς νέους
 αἰρεῖται ἡγεμόνας διὰ τὸ μὴ ἀξιοῦν φρονίμους
 εἶναι. ἡ δ' ἀνδρία ἀνάπαλιν· ἐν τῇ νεότητι γὰρ
 ἀναγκαιοτέρα ἢ κατὰ τὴν ἀνδρίαν ἐνέργεια. ὁμοίως
 δὲ καὶ ἡ σωφροσύνη· μᾶλλον γὰρ οἱ νέοι τῶν
 πρεσβυτέρων ὑπὸ τῶν ἐπιθυμιῶν ἐνοχλοῦνται.

35 Καὶ ὃ ἐν παντὶ καιρῷ ἢ ἐν τοῖς πλείστοις χρή-
 σιμώτερον, οἷον δικαιοσύνη καὶ σωφροσύνη ἀν-
 δρίας· αἱ μὲν γὰρ αἰεὶ ἢ δὲ ποτὲ χρησίμη. καὶ
 ὃ πάντων ἐχόντων μηδὲν θατέρου δεόμεθα, ἢ ὃ
 ἐχόντων προσδεόμεθα τοῦ λοιποῦ, καθάπερ ἐπὶ
 δικαιοσύνης καὶ ἀνδρίας· δικαίων μὲν γὰρ πάντων

^a i.e. not both of them good.

made if a case occurs in which one thing is preferred for the sake of another ; for the two things taken together are in no way preferable to the one. For example, to become healthy *plus* health is not preferable to health alone, since we choose to become healthy for the sake of health. Also, there is nothing to prevent even things which are not good ^a from being preferable to things which are good ; for example, happiness *plus* something else which is not good may be preferable to justice *plus* courage. Also, the same things are more worthy of choice when pleasure is added than when it is absent, and when accompanied by freedom from pain than when attended by pain.

Also, everything is preferable at the time when it has greater importance ; for example, freedom from pain in old age is preferable to freedom from pain in youth, for it is more important in old age. And on this principle also prudence is preferable in old age ; for no one chooses young men as leaders, because he does not expect them to be prudent. The converse holds good of courage ; for in youth courageous activity is more necessary. So too with self-control ; for the young are more troubled by their passions than the old.

Also, that is preferable which is more useful on every occasion or on most occasions, for example, justice and self-control are preferable to courage, for the two first are always useful, but courage only sometimes. Also, of two things, that one, the possession of which by all causes us to have no need of the other, is preferable to the one the universal possession of which leaves us still in need of the other. Take, for example, justice and courage ; if

(c) Times
and
seasons.

(d) Self-
sufficiency.

117 b ὄντων οὐδὲν χρήσιμος ἢ ἀνδρία, ἀνδρείων δὲ πάντων ὄντων χρήσιμος ἢ δικαιοσύνη.

Ἔτι ἐκ τῶν φθορῶν καὶ τῶν ἀποβολῶν καὶ τῶν γενέσεων καὶ τῶν λήψεων καὶ τῶν ἐναντίων· ὧν
 5 γὰρ αἱ φθοραὶ φευκτότεραι, αὐτὰ αἰρετώτερα. ὁμοίως δὲ καὶ ἐπὶ τῶν ἀποβολῶν καὶ τῶν ἐναντίων· οὐ γὰρ ἢ ἀποβολὴ ἢ τὸ ἐναντίον φευκτότερον, αὐτὸ αἰρετώτερον. ἐπὶ δὲ τῶν γενέσεων καὶ τῶν λήψεων ἀνάπαλιν· ὧν γὰρ αἱ λήψεις καὶ αἱ γενέσεις αἰρετώτεραι, καὶ αὐτὰ αἰρετώτερα.

10 Ἄλλος τόπος, τὸ ἐγγύτερον τὰγαθοῦ βέλτιον καὶ αἰρετώτερον, καὶ τὸ ὁμοιότερον τὰγαθῷ, οἷον ἢ δικαιοσύνη δικαίου. καὶ τὸ τῷ βελτίονι αὐτοῦ ὁμοιότερον, καθάπερ τὸν Αἴαντα τοῦ Ὀδυσσέως φασὶ βελτίῳ τινὲς εἶναι, διότι ὁμοιότερος τῷ

15 Ἀχιλλεῖ. ἔνστασις τούτου ὅτι οὐκ ἀληθές· οὐδὲν γὰρ κωλύει, μὴ ἢ βέλτιστος ὁ Ἀχιλλεύς, ταύτῃ ὁμοιότερον εἶναι τὸν Αἴαντα, τοῦ ἑτέρου ὄντος μὲν ἀγαθοῦ μὴ ὁμοίου δέ. σκοπεῖν δὲ καὶ εἰ ἐπὶ τὸ γελοιότερον εἶη ὁμοιον, καθάπερ ὁ πίθηκος τῷ ἀνθρώπῳ, τοῦ ἵππου μὴ ὄντος ὁμοίου· οὐ γὰρ κάλλιον ὁ πίθηκος, ὁμοιότερον δὲ τῷ ἀνθρώπῳ.

20 πάλιν ἐπὶ δυοῖν εἰ τὸ μὲν τῷ βελτίονι τὸ δὲ τῷ χείρονι ὁμοιότερον, εἶη ἂν βέλτιον τὸ τῷ βελτίονι ὁμοιότερον. ἔχει δὲ καὶ τοῦτο ἔνστασιν· οὐδὲν γὰρ κωλύει τὸ μὲν τῷ βελτίονι ἡρέμα ὁμοιον εἶναι,

all men were just, there would be no use for courage, but if all men were brave, justice would still be useful.

Further, arguments can be derived from the corruptions, losses, generations, acquisitions and contraries of things ; for things of which the corruption is more to be avoided are themselves preferable. Similarly, too, in the case of losses and contraries ; for that of which the loss or the contrary is more to be avoided is itself preferable. The converse is true of generation and acquisition ; for things of which the acquisition and generation is preferable are themselves preferable.

(e) Corruptions, losses, generations, acquisitions and contraries.

Another commonplace is that what is nearer to the good is better and preferable, and also what is more like the good ; for example, justice is preferable to a just man. Also that is preferable which is more like something better than itself ; for example, some people say that Ajax was a better man than Odysseus, because he was more like Achilles. To this an objection may be raised that it is not true ; for nothing prevents Ajax from being more like Achilles, but not in respect of that in which Achilles was best, while Odysseus might be a good man though not resembling Achilles. We must also see whether the resemblance tends towards the ridiculous, for example, that of a monkey to a man, whereas the horse bears no resemblance ; for the monkey is not more handsome than the horse, although he is more like a man. Again, of two things, if the one is more like that which is better and the other more like that which is worse, then that which is like the better would itself be better. Here also an objection is possible ; for there is no reason why the one should not resemble the better in a slight degree only,

(f) Likeness to some ideal pattern.

117 b

τὸ δὲ τῷ χείρονι σφόδρα, οἷον εἰ ὁ μὲν Αἴας τῷ Ἀχιλλεῖ ἡρέμα, ὁ δ' Ὀδυσσεὺς τῷ Νέστορι σφόδρα. καὶ εἰ τὸ μὲν τῷ βελτίονι ὅμοιον ἐπὶ τὰ χείρω ὅμοιον εἶη, τὸ δὲ τῷ χείρονι ἐπὶ τὰ βελτίω, καθάπερ ἵππος ὄνω καὶ πίθηκος ἀνθρώπῳ.

Ἄλλος, τὸ ἐπιφανέστερον τοῦ ἥττον τοιούτου, καὶ τὸ χαλεπώτερον· μᾶλλον γὰρ ἀγαπῶμεν ἔχοντες 30 ἃ μὴ ἔστι ραδίως λαβεῖν. καὶ τὸ ἰδιαίτερον τοῦ κοινοτέρου. καὶ τὸ τοῖς κακοῖς ἀκοινωνητότερον· αἰρετώτερον γὰρ ᾧ μηδεμία δυσχέρεια ἀκολουθεῖ ἢ ᾧ ἀκολουθεῖ.

Ἔτι εἰ ἀπλῶς τοῦτο τούτου βέλτιον, καὶ τὸ βέλτιστον τῶν ἐν τούτῳ βέλτιον τοῦ ἐν τῷ ἐτέρῳ 35 βελτίστου, οἷον εἰ βέλτιον ἄνθρωπος ἵππου, καὶ ὁ βέλτιστος ἄνθρωπος τοῦ βελτίστου ἵππου βελτίων. καὶ εἰ τὸ βέλτιστον τοῦ βελτίστου βέλτιον, καὶ ἀπλῶς τοῦτο τούτου βέλτιον, οἷον εἰ ὁ βέλτιστος ἄνθρωπος τοῦ βελτίστου ἵππου βελτίων, καὶ ἀπλῶς ἄνθρωπος ἵππου βελτίων.

118 a Ἔτι ὧν ἔστι τοὺς φίλους μετασχεῖν, αἰρετώτερα ἢ ὧν μὴ. καὶ ἃ πρὸς τὸν φίλον πράξαι μᾶλλον βουλόμεθα ἢ ἃ πρὸς τὸν τυχόντα, ταῦτα αἰρετώτερα, οἷον τὸ δικαιοπραγεῖν καὶ εὖ ποιεῖν μᾶλλον 5 ἢ τὸ δοκεῖν· τοὺς γὰρ φίλους εὖ ποιεῖν βουλόμεθα μᾶλλον ἢ δοκεῖν, τοὺς δὲ τυχόντας ἀνάπαλιν.

while the other strongly resembles the worse ; for example, Ajax may slightly resemble Achilles, while Odysseus strongly resembles Nestor. Also, that which resembles the better may resemble it for the worse, while that which resembles the worse may resemble it for the better, as in the likeness of the horse to the donkey and that of a monkey to a man.

Another commonplace is that what is more conspicuous is preferable to what is less conspicuous, also that which is more difficult ; for we value more highly the possession of such things as are not easy to obtain. Also, what is more peculiar to ourselves is preferable to what is more common. We also prefer that which has less communion with evil ; for that which is not accompanied by vexation is preferable to that which is so accompanied.

(g) Various other desirable qualities and criteria.

Further, if A be absolutely better than B, then also the best specimen of A is better than the best specimen of B ; for example, if man is better than horse, then also the best man is better than the best horse. Also, if the best in one class (A) is better than the best in the other class (B), then also A is absolutely better than B ; for example, if the best man is better than the best horse, then also man is better than horse absolutely.

Further, those things in which our friends can share are preferable to those in which they cannot share. Also, things are preferable which we would rather do to a friend than to any chance person. For example, to act justly and to do good are preferable to merely seeming to do so ; for we would rather actually do good to our friends than only seem to do so, whereas the converse is true of our attitude to chance persons.

Καὶ τὰ ἐκ περιουσίας τῶν ἀναγκαίων βελτίω,
 ἐνίοτε δὲ καὶ αἰρετώτερα· βέλτιον γὰρ τοῦ ζῆν
 τὸ εὖ ζῆν, τὸ δὲ εὖ ζῆν ἐστὶν ἐκ περιουσίας, αὐτὸ
 δὲ τὸ ζῆν ἀναγκαῖον. ἐνίοτε δὲ τὰ βελτίω οὐχὶ
 10 καὶ αἰρετώτερα· οὐ γὰρ εἰ βελτίω, ἀναγκαῖον καὶ
 αἰρετώτερα· τὸ γοῦν φιλοσοφεῖν βέλτιον τοῦ
 χρηματίζεσθαι, ἄλλ' οὐχ αἰρετώτερον τῷ ἐνδεεῖ
 τῶν ἀναγκαίων. τὸ δ' ἐκ περιουσίας ἐστίν, ὅταν
 ὑπαρχόντων τῶν ἀναγκαίων ἄλλα τινὰ προσκατα-
 σκευάζεται τις τῶν καλῶν. σχεδὸν δὲ ἴσως
 αἰρετώτερον τὸ ἀναγκαῖόν ἐστι, βέλτιον δὲ τὸ ἐκ
 15 περιουσίας.

Καὶ ὁ μὴ ἔστι παρ' ἄλλον πορίσασθαι ἢ ὁ ἔστι
 καὶ παρ' ἄλλου, οἷον πέπονθεν ἡ δικαιοσύνη πρὸς
 τὴν ἀνδρίαν. καὶ εἰ τόδε μὲν ἄνευ τοῦδε αἰρετόν,
 τόδε δὲ ἄνευ τοῦδε μή, οἷον δύναμις ἄνευ φρονή-
 20 σεως οὐχ αἰρετόν, φρόνησις δ' ἄνευ δυνάμεως
 αἰρετόν. καὶ δυοῖν εἰ θάτερον ἀρνούμεθα, ἵνα τὸ
 λοιπὸν δόξῃ ἡμῖν ὑπάρχειν, ἐκεῖνο αἰρετώτερον
 ὁ βουλόμεθα δοκεῖν ὑπάρχειν, οἷον φιλοπονεῖν
 ἀρνούμεθα, ἵν' εὐφυεῖς εἶναι δόξωμεν.

"Ἐτι οὖ τῇ ἀπουσίᾳ ἡττον ἐπιτιμητέον δυσ-
 25 φοροῦσι, τοῦτο αἰρετώτερον. καὶ οὖ τῇ ἀπουσίᾳ
 μὴ δυσφοροῦντι μᾶλλον ἐπιτιμητέον, τοῦτο αἰρε-
 τώτερον.

III. "Ἐτι τῶν ὑπὸ τὸ αὐτὸ εἶδος τὸ ἔχον τὴν
 398

TOPICA, III. II-III

Also, superfluities are better than bare necessities, and sometimes also preferable. For living a good life is better than merely living ; and a good life is a superfluity, while life itself is a necessity. Sometimes better things are not also preferable ; for it does not follow that, if they are better, they are also preferable. For example, to be a philosopher is better than to make money, but it is not preferable for him who lacks the necessities of life. Superfluity exists, when, being already in possession of the necessities of life, a man tries to procure some noble accessories. We shall perhaps not be far wrong if we say that the necessary is preferable, while the superfluous is better.

Also, that which cannot be procured from another is preferable to that which can also be procured from another ; this, for example, is true of justice as compared with courage. Also A is preferable to B, if A is an object of choice without B, while B is not an object of choice without A ; for example, power is not an object of choice without prudence, but prudence is an object of choice without power. Also, if we deny the possession of one of two things in order that we may seem to possess the other, that one is preferable which we wish to seem to possess ; for example, we deny that we work hard in order that we may be thought gifted.

Furthermore, that is preferable at the absence of which it is less reprehensible to be annoyed ; also that is preferable at whose absence it is more reprehensible not to be annoyed.

III. Furthermore, of the things which fall under the same species, that which possesses the peculiar

*Further
rules for the
comparative*

118 a

οἰκείαν ἀρετὴν τοῦ μὴ ἔχοντος. ἄμφω δ' ἐχόντων
τὸ μᾶλλον ἔχον.

30 "Ἐτι εἰ τὸ μὲν ποιεῖ ἀγαθὸν ἐκείνο ᾧ ἂν παρῇ,
τὸ δὲ μὴ ποιεῖ, τὸ ποιοῦν αἰρετώτερον, καθάπερ
καὶ θερμότερον τὸ θερμαῖνον τοῦ μῆ. εἰ δ' ἄμφω
ποιεῖ, τὸ μᾶλλον ποιοῦν· ἢ εἰ τὸ βέλτιον καὶ
κυριώτερον ποιεῖ ἀγαθόν, οἷον εἰ τὸ μὲν τὴν
ψυχὴν τὸ δὲ τὸ σῶμα.

"Ἐτι ἀπὸ τῶν πτώσεων καὶ τῶν χρήσεων καὶ
35 τῶν πράξεων καὶ τῶν ἔργων, καὶ ταῦτα δὲ ἀπ'
ἐκείνων· ἀκολουθεῖ γὰρ ἀλλήλοις, οἷον εἰ τὸ
δικαίως αἰρετώτερον τοῦ ἀνδρείως, καὶ ἡ δικαιο-
σύνη τῆς ἀνδρίας αἰρετώτερον· καὶ εἰ ἡ δικαιοσύνη
τῆς ἀνδρίας αἰρετώτερον, καὶ τὸ δικαίως τοῦ ἀν-
δρείως. παραπλησίως δὲ καὶ ἐπὶ τῶν ἄλλων.

118 b

"Ἐτι εἴ τινος τοῦ αὐτοῦ τὸ μὲν μείζον ἀγαθόν
ἐστι τὸ δὲ ἔλαττον, αἰρετώτερον τὸ μείζον. ἢ
εἰ μείζονος μείζον θάτερον. ἀλλὰ καὶ εἰ δύο τινα
τινὸς εἴη αἰρετώτερα, τὸ μᾶλλον αἰρετώτερον τοῦ
5 ἥττον αἰρετωτέρου αἰρετώτερον. ἔτι οὗ ἡ ὑπερ-
βολὴ τῆς ὑπερβολῆς αἰρετωτέρα, καὶ αὐτὸ αἰρε-
τώτερον, οἷον φιλία χρημάτων· αἰρετωτέρα γὰρ
ἢ τῆς φιλίας ὑπερβολὴ τῆς τῶν χρημάτων. καὶ
οὗ μᾶλλον ἂν ἔλοιτο αὐτὸς αὐτῷ αἴτιος εἶναι ἢ
οὗ ἕτερον, οἷον τοὺς φίλους τῶν χρημάτων.

^a That is, we must decide whether one thing (*e.g.*, justice) is preferable to another (*e.g.*, courage) by considering how other words containing these ideas are used. These may be adverbs which are πτώσεις (*cf.* 106 b 29, note), or denote action or actual deed; χρήσεις seems to refer to the different usages of a word.

virtue of the species is preferable to that which does not possess it. If both possess it, then that which possesses it in a greater degree is preferable.

valuation of two predicates:
(a) Preference of predicate which (1) possesses the peculiar virtue of the species, or (2) produces the greater good.

Furthermore, if one thing does good to anything in which it is present and another does not, then that which does good is preferable (just as that which warms is warmer than that which does not). If both do good, that which does greater good, or does good to what is better or more important, is preferable, for example, if one thing does good to the soul the other to the body.

Furthermore, we can judge things from their inflected forms, uses, actions and deeds,^a and also *vice versa*; for they follow one another. For example, if 'justly' is preferable to 'courageously,' then 'justice' also is preferable to 'courage'; and if 'justice' is preferable to 'courage,' then 'justly' too is preferable to 'courageously.' And similarly too in the other cases.

(b) Consideration of inflexions and uses of predicates.

Furthermore, if one thing is a greater and the other a lesser good than the same thing, the greater good is preferable; or if one of them is greater than a greater good. Moreover also, if two things were to be preferable to something, that which was preferable to a greater degree would be preferable to that which is preferable to a less degree. Further, if the excess of one thing is preferable to the excess of the other, it is itself also preferable. For example, friendship is preferable to money; for excess of friendship is preferable to excess of money. Also, that of which a man would prefer to be the cause by his own act is preferable to that of which he would wish another to be the cause; for example, friends are preferable to money.

(c) Comparison with some common standard.

118 b

10 Ἔτι ἐκ τῆς προσθέσεως, εἰ τῷ αὐτῷ προστιθέμενόν τι τὸ ὅλον αἰρετώτερον ποιεῖ. εὐλαβεῖσθαι δὲ δεῖ προτείνειν ἐφ' ὧν τῷ μὲν ἐτέρω τῶν προστιθεμένων χρήται τὸ κοινὸν ἢ ἄλλως πως συνεργόν ἐστι, τῷ δὲ λοιπῷ μὴ χρήται μηδὲ συνεργόν ἐστιν, οἷον πρίονα καὶ δρέπανον μετὰ
15 τεκτονικῆς· αἰρετώτερον γὰρ ὁ πρίων συνδυαζόμενος, ἀπλῶς δὲ οὐχ αἰρετώτερον. πάλιν εἰ ἐλάττονι προστεθέν τι τὸ ὅλον μείζον ποιεῖ. ὁμοίως δὲ καὶ ἐκ τῆς ἀφαιρέσεως· οὐ γὰρ ἀφαιρεθέντος ἀπὸ τοῦ αὐτοῦ τὸ λειπόμενον ἔλαττον, ἐκείνο μείζον ἂν εἴη, ὅποτε ἀφαιρεθὲν τὸ λειπόμενον ἔλαττον ποιεῖ.

20 Καὶ εἰ τὸ μὲν δι' αὐτὸ τὸ δὲ διὰ τὴν δόξαν αἰρετόν, οἷον ὑγίεια κάλλους. ὅρος δὲ τοῦ πρὸς δόξαν τὸ μηδενὸς συνειδότος μὴ ἂν σπουδάσαι ὑπάρχειν. καὶ εἰ τὸ μὲν δι' αὐτὸ καὶ διὰ τὴν δόξαν αἰρετόν, τὸ δὲ διὰ θάτερον μόνον. καὶ ὅποτερον μᾶλλον δι' αὐτὸ τίμιον, τοῦτο καὶ βέλτιον
25 καὶ αἰρετώτερον. τιμιώτερον δ' ἂν εἴη καθ' αὐτό, ὃ μηδενὸς ἄλλου μέλλοντος ὑπάρξειν δι' αὐτὸ αἰρούμεθα μᾶλλον.

Ἔτι διελέσθαι ποσαχῶς τὸ αἰρετόν λέγεται καὶ

Furthermore, you can argue by means of an addition, and see if the addition of one predicate to the same thing as that to which another is added makes the whole more worthy of choice. But you must beware of making a proposition in cases where the common term uses, or in some other way co-operates with, one of the things added, but does not use or co-operate with the other. For example, if you were to combine a saw or a sickle with the art of carpentry ; for the saw in conjunction is preferable, but not preferable absolutely. Again, the same is true if something added to a lesser good makes the whole a greater good. So likewise in the case of subtraction also ; for something, the subtraction of which from the same thing as that from which another is subtracted makes the remainder a lesser good, would be a greater good, when its subtraction makes the remainder a lesser good.

(d) Comparison of predicates by adding them to or subtracting them from a known value.

Also, you must consider whether one thing is worthy of choice for its own sake and the other for the impression which it makes on others, for example, health as compared with beauty. That which is worthy of choice for the impression it makes may be defined as that which one would not be eager to possess if no one knew about it. You must also consider whether one thing is worthy of choice for its own sake and also for the impression it makes, and the other for only one of these reasons. Also whichever is more valuable for its own sake, is also better and more worthy of choice. More valuable for its own sake would mean that which we choose by preference for its own sake, when nothing else is likely to result from it.

(e) Comparison of the ground of preference.

Further, you must distinguish the various meanings which ' worthy of choice ' may bear and what are the

τίνων χάριν, οἷον τοῦ συμφέροντος ἢ τοῦ καλοῦ
 ἢ τοῦ ἡδέος· τὸ γὰρ πρὸς ἅπαντα ἢ πρὸς τὰ πλείω
 30 χρήσιμον αἰρετώτερον ἂν ὑπάρχοι τοῦ μὴ ὁμοίως.
 τῶν δ' αὐτῶν ἀμφοτέροις ὑπαρχόντων, ὅποτέρῳ
 μᾶλλον ὑπάρχει σκεπτέον, πότερον ἡδιον ἢ κάλ-
 λιον ἢ συμφερώτερον. πάλιν τὸ τοῦ βελτίονος
 ἔνεκεν αἰρετώτερον, οἷον τὸ ἀρετῆς ἔνεκεν ἢ
 ἡδονῆς. ὁμοίως δὲ καὶ ἐπὶ τῶν φευκτῶν· φευκτό-
 35 τερον γὰρ τὸ μᾶλλον ἐμποδιστικὸν τῶν αἰρετῶν,
 οἷον νόσος αἴσχους· καὶ γὰρ ἡδονῆς καὶ τοῦ σπου-
 δαῖον εἶναι κωλυτικώτερον ἢ νόσος.

Ἔτι ἐκ τοῦ ὁμοίως δεικνύναι φευκτὸν καὶ
 αἰρετὸν τὸ προκείμενον· ἦττον γὰρ αἰρετὸν τὸ
 τοιοῦτον, ὃ καὶ ἔλοιτ' ἂν τις ὁμοίως καὶ φύγοι,
 τοῦ ἐτέρου ὄντος αἰρετοῦ μόνον.

119 a IV. Τὰς μὲν οὖν πρὸς ἄλληλα συγκρίσεις,
 καθάπερ εἴρηται, ποιητέον. οἱ αὐτοὶ δὲ τόποι
 χρήσιμοι καὶ πρὸς τὸ δεικνύναι ὅτι οὖν αἰρετὸν
 ἢ φευκτὸν· ἀφαιρεῖν γὰρ μόνον δεῖ τὴν πρὸς ἕτερον
 ὑπεροχήν. εἰ γὰρ τὸ τιμιώτερον αἰρετώτερον, καὶ
 5 τὸ τίμιον αἰρετόν, καὶ εἰ τὸ χρησιμώτερον αἰρε-
 τώτερον, καὶ τὸ χρήσιμον αἰρετόν. ὁμοίως δὲ
 καὶ ἐπὶ τῶν ἄλλων, ὅσα τοιαύτην ἔχει τὴν σύγ-
 κρισιν. ἐπ' ἐνίων γὰρ εὐθέως κατὰ τὴν πρὸς
 404

TOPICA, III. III-IV

ends in view, such as expediency or honour or pleasure ; for that which is useful for all these ends, or for most of them, would be more worthy of choice than which is not so useful. If the same qualities belong to both of two things, you should examine to which they belong in a greater degree, that is, which is more pleasant or honourable or expedient. Again, that which serves the better purpose is more worthy of choice, for example, that which aims at virtue than that which aims at pleasure. So too with the things which are to be avoided. That is more to be avoided which is more likely to stand in the way of that which is worthy of choice ; for example, disease is more to be avoided than ugliness, for disease is a greater preventive both of pleasure and of goodness.

Further, you can argue by showing that the subject under discussion is equally an object of avoidance and of choice ; for the kind of thing which one would equally choose and avoid is less worthy of choice than an alternative which is worthy of choice only.

IV. Comparisons, then, of things with one another should be made in the manner described. The same commonplaces are useful also for showing that something is simply worthy of choice or avoidance ; for we need only subtract the excess of one thing over the other. For if that which is more valuable is more worthy of choice, then also that which is valuable is worthy of choice, and, if that which is more useful is more worthy of choice, then also that which is useful is worthy of choice ; and so too in the other cases where such comparison is possible. For sometimes, while we are actually comparing two things,

*Adaptation
of the above
rules to
simple pre-
dication of
value.*

ἕτερον σύγκρισιν καὶ ὅτι αἰρετὸν ἐκάτερον ἢ τὸ
 ἕτερον λέγομεν, οἷον ὅταν τὸ μὲν φύσει ἀγαθὸν
 10 τὸ δὲ μὴ φύσει λέγωμεν· τὸ γὰρ φύσει ἀγαθὸν
 δῆλον ὅτι αἰρετόν ἐστιν.

V. Ληπτέον δ' ὅτι μάλιστα καθόλου τοὺς
 τόπους περὶ τοῦ μᾶλλον καὶ τοῦ μείζονος· ληφ-
 θέντες γὰρ οὕτως πρὸς πλείω χρήσιμοι ἂν εἴησαν.
 15 ἔστι δ' αὐτῶν τῶν εἰρημένων ἐνίους καθόλου
 μᾶλλον ποιεῖν μικρὸν παραλλάσσοντα τῇ προσ-
 ηγορίᾳ, οἷον τὸ φύσει τοιοῦτο τοῦ μὴ φύσει
 τοιούτου μᾶλλον τοιοῦτο. καὶ εἰ τὸ μὲν ποιεῖ τὸ
 δὲ μὴ ποιεῖ τὸ ἔχον τοιόνδε ἢ ὧ ἂν ὑπάρχη, μᾶλλον
 τοιοῦτο ὃ ποτε ποιεῖ ἢ ὃ μὴ ποιεῖ. εἰ δ' ἄμφω
 ποιεῖ, τὸ μᾶλλον ποιοῦν τοιοῦτο.

20 "Ἐτι εἰ τοῦ αὐτοῦ τινὸς τὸ μὲν μᾶλλον τὸ δὲ
 ἥττον τοιοῦτο, καὶ εἰ τὸ μὲν τοιούτου μᾶλλον
 τοιοῦτο, τὸ δὲ μὴ τοιούτου <μᾶλλον> τοιοῦτο,¹
 δῆλον ὅτι τὸ πρῶτον μᾶλλον τοιοῦτο. ἔτι ἐκ τῆς
 προσθέσεως, εἰ τῷ αὐτῷ προστιθέμενον τὸ ὅλον
 μᾶλλον ποιεῖ τοιοῦτο, ἢ εἰ τῷ ἥττον τοιούτῳ
 προστιθέμενον τὸ ὅλον μᾶλλον ποιεῖ τοιοῦτο.
 25 ὁμοίως δὲ καὶ ἐκ τῆς ἀφαιρέσεως· οὐ γὰρ ἀφαι-

¹ Reading τοιούτου <μᾶλλον> τοιοῦτο. Pacius renders, *si alterum sit tali re magis tale, alterum non sit tali re tale, manifestum est*, etc.

we immediately assert that each or one of them is worthy of choice, for example, when we say that one thing is naturally good and another not naturally good ; for what is naturally good is obviously worthy of choice.

V. The commonplaces which deal with the more and the greater degree must be taken as generally as possible ; for when they are so taken they would be useful in a larger number of cases. Of the actual instances given above some can be made of more general application by a slight change in the way in which they are worded. We can say, for example, that that which naturally has a certain quality has that quality in a greater degree than that which does not possess it naturally. Also, if one thing does, and another thing does not, create a certain quality in that which possesses it, or in which it is present, then whichever creates it has that quality in a greater degree than that which does not create it ; and, if both create it, then that which creates it in a greater degree, possesses it in a greater degree.

Rules for the comparative predication of accidents in general.

Further, if one thing is of a certain quality in a greater degree and the other in a less degree than the same thing, and also, if one thing possesses a certain quality in a greater degree than some other thing which possesses it, and the other does not, it is obvious that the former in each case possesses the quality in a greater degree. Further, you must see, as a result of addition, whether something added to the same thing makes the whole of a certain quality in a greater degree, or whether, being added to something which possesses the quality in a less degree, it gives the whole that quality in a greater degree. And, similarly, if subtraction is used ; for

119 a

ρεθέντος τὸ λειπόμενον ἦττον τοιοῦτο, αὐτὸ μᾶλλον τοιοῦτο. καὶ τὰ τοῖς ἐναντίοις ἀμιγέστερα μᾶλλον τοιαῦτα, οἷον λευκότερον τὸ τῷ μέλανι ἀμιγέστερον. ἔτι παρὰ τὰ εἰρημένα πρότερον, τὸ μᾶλλον ἐπιδε-
 30 χόμενον τὸν οἰκείον τοῦ προκειμένου λόγον, οἷον εἰ τοῦ λευκοῦ ἐστὶ λόγος χρῶμα διακριτικὸν ὅψεως, λευκότερον ὃ ἐστὶ μᾶλλον χρῶμα διακρι-
 τικὸν ὅψεως.

VI. Ἄν δ' ἐπὶ μέρους καὶ μὴ καθόλου τὸ πρό-
 βλημα τεθῇ, πρῶτον μὲν οἱ εἰρημένοι καθόλου
 κατασκευαστικοὶ ἢ ἀνασκευαστικοὶ τόποι πάντες
 85 χρήσιμοι. καθόλου γὰρ ἀναιροῦντες ἢ κατασκευά-
 ζοντες καὶ ἐπὶ μέρους δείκνυμεν· εἰ γὰρ παντὶ
 ὑπάρχει, καὶ τινί, καὶ εἰ μηδενί, οὐδὲ τινί. μάλιστα
 δ' ἐπίκαιροι καὶ κοινοὶ τῶν τόπων οἳ τ' ἐκ τῶν
 ἀντικειμένων καὶ τῶν συστοίχων καὶ τῶν πτώσεων·
 ὁμοίως γὰρ ἔνδοξον τὸ ἀξιῶσαι, εἰ πᾶσα ἡδονὴ
 ἀγαθόν, καὶ λύπην πᾶσαν εἶναι κακόν, τῷ εἴ τις
 119 b ἡδονὴ ἀγαθόν, καὶ λύπην εἶναί τινα κακόν. ἔτι
 εἴ τις αἰσθησις μὴ ἐστὶ δύναμις, καὶ ἀναισθησία
 τις οὐκ ἔστιν ἀδυναμία. καὶ εἴ τι ὑποληπτὸν
 ἐπιστητόν, καὶ ὑπόληψίς τις ἐπιστήμη. πάλιν εἴ
 5 τι τῶν ἀδίκων ἀγαθόν, καὶ τῶν δικαίων τι κακόν·
 καὶ εἴ τι τῶν δικαίως κακόν, καὶ τῶν ἀδίκως τι

TOPICA, III. v-vi

that the subtraction of which makes the remainder less of a certain quality, itself possesses more of that quality. Also things possess qualities in a greater degree which have less admixture of the contraries of those qualities; for example, a thing is whiter which has less admixture of black. Further, besides what has already been said, a thing possesses a quality in a greater degree when it admits of the particular definition of the subject in question to a greater degree; for example, if the definition of 'white' is 'a colour which penetrates the vision,' that is whiter which is in a greater degree a colour which penetrates the vision.

VI. If the problem is put in a particular and not in a universal way, in the first place the general commonplaces mentioned above as applicable in constructive and destructive argument are all of them useful. For, when we destroy or construct something universally, we also display it in particular; for if something belongs to all, it also belongs to a particular one, and if it belongs to none, neither does it belong to a particular one. Those commonplaces are especially convenient and widely applicable which are based on opposites and co-ordinates and inflexions; for the claim that if all pleasure is good, then all pain is evil, meets with the same general acceptance as the claim that if some pleasure is good, then some pain is evil. Further, if some kind of perception is not a capacity, then some absence of perception is not an incapacity. Also, if something conceivable is knowable, then some conception is knowledge. Again, if something which is unjust is good, then something which is just is bad; and if something which can be done justly is bad, something

*Particular
predica-
tions:*

(a) Adop-
tion of the
previous
rules.

(1) Rules
based on
opposites,
co-ordinates
and
inflexions.

ἀγαθόν. καὶ εἴ τι τῶν ἡδέων φευκτόν, ἡδονή
 τις φευκτόν. κατὰ ταῦτά δὲ καὶ εἴ τι τῶν ἡδέων
 ὠφέλιμον, ἡδονή τις ὠφέλιμον. καὶ ἐπὶ τῶν
 φθαρτικῶν δὲ καὶ τῶν γενέσεων καὶ φθορῶν
 ὡσαύτως. εἰ γάρ τι φθαρτικὸν ἡδονῆς ἢ ἐπιστήμης
 10 ὃν ἀγαθόν ἐστιν, εἴη ἂν τις ἡδονὴ ἢ ἐπιστήμη τῶν
 κακῶν. ὁμοίως δὲ καὶ εἰ φθορά τις ἐπιστήμης
 τῶν ἀγαθῶν ἢ ἡ γένεσις τῶν κακῶν, ἔσται τις
 ἐπιστήμη τῶν κακῶν, οἷον εἰ τὸ ἐπιλανθάνεσθαι
 ἃ τις αἰσχυρὰ ἔπραξε τῶν ἀγαθῶν ἢ τὸ ἀναμι-
 μνήσκεσθαι τῶν κακῶν, εἴη ἂν τὸ ἐπίστασθαι ἃ
 15 τις αἰσχυρὰ ἔπραξε τῶν κακῶν. ὡσαύτως δὲ
 καὶ ἐπὶ τῶν ἄλλων· ἐν ἅπασιν γὰρ ὁμοίως τὸ
 ἔνδοξον.

Ἔτι ἐκ τοῦ μᾶλλον καὶ ἥττον καὶ ὁμοίως. εἰ
 γὰρ μᾶλλον μὲν τῶν ἐξ ἄλλου γένους τι τοιοῦτο
 ἐκείνων δὲ μηδέν ἐστιν, οὐδ' ἂν τὸ εἰρημένον εἴη
 20 τοιοῦτον, οἷον εἰ μᾶλλον μὲν ἐπιστήμη τις ἀγαθόν
 ἢ ἡδονή, μηδεμία δ' ἐπιστήμη ἀγαθόν, οὐδ' ἂν
 ἡδονὴ εἴη. καὶ ἐκ τοῦ ὁμοίως δὲ καὶ ἥττον
 ὡσαύτως· ἔσται γὰρ καὶ ἀναιρεῖν καὶ κατασκευά-
 ζειν, πλὴν ἐκ μὲν τοῦ ὁμοίως ἀμφοτέρω, ἐκ δὲ
 τοῦ ἥττον κατασκευάζειν μόνον, ἀνασκευάζειν δὲ

which can be done unjustly is good. Also, if some pleasant thing is to be avoided, pleasure is sometimes to be avoided. On the same principle, too, if a pleasant thing is sometimes beneficial, pleasure is sometimes beneficial. Similarly with regard to destructive agencies and the processes of generation and destruction. For, if something which is destructive of pleasure or knowledge is good, pleasure or knowledge would sometimes be an evil thing. Similarly, too, if the destruction of knowledge is sometimes a good thing or the production of it an evil thing, knowledge will be sometimes an evil thing; for example, if the forgetting of someone's disgraceful deeds is a good thing or the remembrance of them a bad thing, the knowledge of the disgraceful things which he has done would be an evil thing. Similarly, too, in the other cases; for in all of them the generally accepted opinion is formed in the same manner.

Further, arguments can be derived from the greater and the less and the like degree. If something in another genus has some quality in a greater degree than the object under discussion and none of the members of that genus possesses that quality, then neither could the object under discussion possess it; for example, if some kind of knowledge were good in a greater degree than pleasure, while no kind of knowledge is good, then neither would pleasure be good. We can argue in a similar way from the like and the less degrees; for it will be possible to argue thus both destructively and constructively, except that both processes can be based on the like degree, but the less degree can be used for constructive purposes only and not for destructive

(2) Rules based on the greater, the less and the like degree.

119 b

οὔ. εἰ γὰρ ὁμοίως δύναμεις τις ἀγαθὸν καὶ ἐπι-
 25 στήμη, ἔστι δέ τις δύναμις ἀγαθόν, καὶ ἐπιστήμη
 ἐστίν. εἰ δὲ μηδεμία δύναμις, οὐδ' ἐπιστήμη. εἰ
 δ' ἦττον δύναμεις τις ἀγαθὸν ἢ ἐπιστήμη, ἔστι δέ
 τις δύναμις ἀγαθόν, καὶ ἐπιστήμη. εἰ δὲ μηδεμία
 δύναμις ἀγαθόν, οὐκ ἀνάγκη καὶ ἐπιστήμην μη-
 δεμίαν εἶναι ἀγαθόν. δῆλον οὖν ὅτι κατασκευάζειν
 30 μόνον ἐκ τοῦ ἦττον ἔστιν.

Οὐ μόνον δ' ἐξ ἄλλου γένους ἔστιν ἀνασκευάζειν,
 ἀλλὰ καὶ ἐκ τοῦ αὐτοῦ λαμβάνοντι τὸ μάλιστα
 τοιοῦτον, οἷον εἰ κείται ἐπιστήμη τις ἀγαθόν,
 δειχθείη δ' ὅτι φρόνησις οὐκ ἀγαθόν, οὐδ' ἄλλη
 35 οὐδεμία ἔσται, ἐπεὶ οὐδ' ἡ μάλιστα δοκοῦσα. ἔτι
 ἐξ ὑποθέσεως, ὁμοίως ἀξιώσαντα, εἰ ἐνί, καὶ
 πᾶσιν ὑπάρχειν ἢ μὴ ὑπάρχειν, οἷον εἰ ἡ τοῦ
 ἀνθρώπου ψυχὴ ἀθάνατος, καὶ τὰς ἄλλας, εἰ δ'
 αὕτη μὴ, μηδὲ τὰς ἄλλας. εἰ μὲν οὖν ὑπάρχειν
 τινὶ κείται, δεικτέον ὅτι οὐχ ὑπάρχει τινί· ἀκο-
 λουθήσει γὰρ διὰ τὴν ὑπόθεσιν τὸ μηδενὶ ὑπάρχειν.
 120 a εἰ δέ τινι μὴ ὑπάρχον κείται, δεικτέον ὅτι ὑπάρχει
 τινί· καὶ γὰρ οὕτως ἀκολουθήσει τὸ πᾶσιν ὑπάρχειν.
 δῆλον δ' ἐστὶν ὅτι ὁ ὑποτιθέμενος ποιεῖ τὸ πρό-
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purposes. For if a certain capacity is good in a like degree to knowledge, and a certain capacity is good, then knowledge is also good ; but if no capacity is good, knowledge is not good either. On the other hand, if a certain capacity is good in a less degree than knowledge, and a certain capacity is good, then so also is knowledge ; but if no capacity is good, it does not necessarily follow that no knowledge is good either. It is clear, therefore, that arguments from the less degree can only be used for constructive purposes.

It is possible to destroy an opinion not only by means of another genus but also by means of the same genus by taking an extreme case ; for example, if it were to be laid down that a certain kind of knowledge is good, and it were to be shown that prudence is not good, then no other kind of knowledge will be good, since not even that kind of knowledge is good which is generally reputed to be so. Further, you can argue by means of a hypothesis, claiming that if some attribute belongs or does not belong to one member of the genus, it also belongs or does not belong in a like degree to all ; for example, that, if the soul of man is immortal, all other souls are also immortal, but if it is not, then neither are the other souls. If, therefore, it is laid down that an attribute belongs to some member of the genus, you must show that there is some member to which it does not belong ; for it will follow in accordance with the hypothesis that it belongs to no member of the genus. But, if it is laid down that it does not belong to any member, it must be shown that there is a member to which it belongs ; for thus it will follow that it belongs to all the members of the genus. Now it is clear that he who makes the

(b) Destructive argument can be drawn not only from another genus but also from the same genus.

βλημα καθόλου ἐπὶ μέρους τεθέν· τὸν γὰρ ἐπὶ μέρους ὁμολογοῦντα καθόλου ἀξιοῖ ὁμολογεῖν, 5 ἐπειδή, εἰ ἐνί, καὶ πᾶσιν ὁμοίως ἀξιοῖ ὑπάρχειν.

Ἀδιορίστου μὲν οὖν ὄντος τοῦ προβλήματος μοναχῶς ἀνασκευάζειν ἐνδέχεται, οἷον εἰ ἔφησεν ἡδονὴν ἀγαθὸν εἶναι ἢ μὴ ἀγαθόν, καὶ μηδὲν ἄλλο προσδιώρισεν. εἰ μὲν γάρ τινα ἔφησεν ἡδονὴν ἀγαθὸν εἶναι, δεικτέον καθόλου ὅτι οὐδεμία, εἰ 10 μέλλει ἀναιρεῖσθαι τὸ προκείμενον. ὁμοίως δὲ καὶ εἰ τινα ἔφησεν ἡδονὴν μὴ εἶναι ἀγαθόν, δεικτέον καθόλου ὅτι πᾶσα ἄλλως δ' οὐκ ἐνδέχεται ἀναιρεῖν. ἐὰν γὰρ δείξωμεν ὅτι ἐστὶ τις ἡδονὴ οὐκ ἀγαθὸν ἢ ἀγαθόν, οὕτω ἀναιρεῖται τὸ προκείμενον. δῆλον οὖν ὅτι ἀναιρεῖν μὲν μοναχῶς ἐνδέ- 15 χεται, κατασκευάζειν δὲ διχῶς· ἂν τε γὰρ καθόλου δείξωμεν ὅτι πᾶσα ἡδονὴ ἀγαθόν, ἂν τε ὅτι ἐστὶ τις ἡδονὴ ἀγαθόν, δεδειγμένον ἔσται τὸ προκείμενον. ὁμοίως δὲ καὶ δέη διαλεχθῆναι ὅτι ἐστὶ τις ἡδονὴ οὐκ ἀγαθόν, ἐὰν δείξωμεν ὅτι οὐδεμία ἀγαθὸν ἢ ὅτι τις οὐκ ἀγαθόν, διειλεγμένοι ἐσόμεθα 20 ἀμφοτέρως, καὶ καθόλου καὶ ἐπὶ μέρους, ὅτι ἐστὶ τις ἡδονὴ οὐκ ἀγαθόν. διωρισμένης δὲ τῆς θέσεως οὔσης, διχῶς ἀναιρεῖν ἔσται, οἷον εἰ τεθείη τινὲ μὲν ὑπάρχειν ἡδονῇ ἀγαθῷ εἶναι, τινὲ δ' οὐχ ὑπάρχειν· εἴτε γὰρ πᾶσα δειχθείη ἡδονὴ ἀγαθόν

hypothesis makes the problem universal, though it is posited in a particular form ; for he demands that the maker of a particular admission should make a universal admission, since he demands that, if an attribute belongs in a particular case, it belongs in like manner to all.

When the problem is indefinite, there is only one way of demolishing a statement, for example, if someone has said that pleasure is good or is not good, and has added nothing by way of definition. If he meant that a certain pleasure is good, it must be shown universally that no pleasure is good, if the proposition is to be destroyed. Similarly, if he meant that some particular pleasure is not good, it must be shown universally that every pleasure is good ; it is impossible to destroy the proposition in any other way. For if we show that a particular pleasure is not good or is good, the proposition is not yet destroyed. It is clear, then, that there is only one method of destruction but two of construction ; for the proposition will have been demonstrated both if we show universally that all pleasure is good, and also if we show that some particular pleasure is good. Similarly, when one has to argue that a particular pleasure is not good, if we show that no pleasure is good or that a particular pleasure is not good, we shall have argued in two ways, universally and particularly, that a particular pleasure is not good. On the other hand, when the thesis is definite, it will be possible to destroy it by two methods, for example, if it be laid down that it is the attribute of some particular pleasure to be good, but not of another ; for whether it be shown that all pleasure is good or that none is good, the

(c) The effect of the definiteness and indefiniteness of the problem on proof and disproof.

120 a

εἴτε μηδεμία, ἀνηρημένον ἔσται τὸ προκείμενον.
 25 εἰ δὲ μίαν ἡδονὴν μόνην ἀγαθὸν ἔθηκεν εἶναι,
 τριχῶς ἐνδέχεται ἀναιρεῖν· δείξαντες γὰρ ὅτι πᾶσα
 ἢ ὅτι οὐδεμία ἢ ὅτι πλείους μιᾶς ἀγαθόν, ἀνηρη-
 κότες ἐσόμεθα τὸ προκείμενον. ἐπὶ πλείον δὲ τῆς
 θέσεως διορισθείσης, οἶον ὅτι ἡ φρόνησις μόνη
 τῶν ἀρετῶν ἐπιστήμη, τετραχῶς ἔστιν ἀναιρεῖν·
 δειχθέντος γὰρ ὅτι πᾶσα ἀρετὴ ἐπιστήμη ἢ ὅτι
 30 οὐδεμία ἢ ὅτι καὶ ἄλλη τις, οἶον ἡ δικαιοσύνη,
 ἢ ὅτι αὐτὴ ἡ φρόνησις οὐκ ἐπιστήμη, ἀνηρημένον
 ἔσται τὸ προκείμενον.

Χρήσιμον δὲ καὶ τὸ ἐπιβλέπειν ἐπὶ τὰ καθ'
 ἕκαστα, ἐν οἷς ὑπάρχειν τι ἢ μὴ εἶρηται, καθάπερ
 ἐν τοῖς καθόλου προβλήμασιν. ἔτι δ' ἐν τοῖς
 35 γένεσιν ἐπιβλεπτόν, διαιροῦντα κατ' εἶδη μέχρι
 τῶν ἀτόμων, καθὰ προεῖρηται· ἂν τε γὰρ παντὶ
 φαίνεται ὑπάρχον ἂν τε μηδενί, πολλὰ προενέγ-
 καντι ἀξιωτέον καθόλου ὁμολογεῖν ἢ φέρειν ἐν-
 στασιν ἐπὶ τίνος οὐχ οὕτως. ἔτι ἐφ' ὧν ἔστιν ἡ
 εἶδει ἢ ἀριθμῷ διορίσαι τὸ συμβεβηκός, σκεπτόν
 120 b εἰ μηδὲν τούτων ὑπάρχει, οἶον ὅτι ὁ χρόνος οὐ
 κινεῖται οὐδ' ἐστὶ κίνησις, καταριθμησάμενον πόσα
 εἶδη κινήσεως· εἰ γὰρ μηδὲν τούτων ὑπάρχει τῷ
 χρόνῳ, δῆλον ὅτι οὐ κινεῖται οὐδ' ἐστὶ κίνησις.

proposition will have been destroyed. If, however, our opponent has stated that one pleasure alone is good, it is possible to destroy the proposition in three ways; for if we show that all pleasure, or no pleasure, or more than one pleasure, is good, we shall have destroyed the proposition. If the thesis is still more strictly defined—for example, that prudence alone of the virtues is knowledge—four ways of destroying it are possible; for if it has been shown that all virtue is knowledge, or that no virtue is knowledge, or that some other virtue (for example, justice) is knowledge, or that prudence itself is not knowledge, the proposition will have been destroyed.

It is useful to look at particular instances where it has been stated that some attribute belongs or does not belong, as in the case of universal problems. Further, you must look within the genera, dividing them according to their species until you reach the indivisible, as has already been described.^a For whether the attribute is shown to be present in all or in none, you should, after bringing forward numerous cases, claim that your contention should be admitted universally or else an objection should be made stating in what instance it does not hold good. Further, where it is possible to define the accident either by species or by number, you must see whether none of them belongs, showing, for example, that time does not move and that it is not a form of motion, by enumerating all the different kinds of motion; for if none of these belongs to time, it is clear that it does not move and is not a form of motion. Similarly, too, you can

(d) Various further rules.

^a 109 b 15.

120 b

ὁμοίως δὲ καὶ ὅτι ἡ ψυχὴ οὐκ ἀριθμός, διελόμενον
 ὅτι πᾶς ἀριθμὸς ἢ περιττὸς ἢ ἄρτιος· εἰ γὰρ ἡ
 5 ψυχὴ μήτε περιττὸν μήτε ἄρτιον, δῆλον ὅτι οὐκ
 ἀριθμός.

Πρὸς μὲν οὖν τὸ συμβεβηκὸς διὰ τῶν τοιούτων
 καὶ οὕτως ἐπιχειρητέον.

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show that the soul is not a number by distinguishing all numbers as either odd or even ; for if the soul is neither odd nor even, clearly it is not a number.

As regards accident, then, such are the means and such the methods which you should employ.

Δ

120 b 12 I. Μετὰ δὲ ταῦτα περὶ τῶν πρὸς τὸ γένος καὶ
τὸ ἴδιον ἐπισκεπτέον. ἔστι δὲ ταῦτα στοιχεῖα τῶν
πρὸς τοὺς ὄρους· περὶ αὐτῶν δὲ τούτων ὀλιγάκις
15 αἱ σκέψεις γίνονται τοῖς διαλεγομένοις. ἂν δὴ
τεθῇ γένος τινὸς τῶν ὄντων, πρῶτον μὲν ἐπι-
βλέπειν ἐπὶ πάντα τὰ συγγενῇ τῷ λεχθέντι, εἴ
τινος μὴ κατηγορεῖται, καθάπερ ἐπὶ τοῦ συμ-
βεβηκότος, οἷον εἰ τῆς ἡδονῆς τὰγαθὸν γένος
κεῖται, εἴ τις ἡδονὴ μὴ ἀγαθόν· εἰ γὰρ τοῦτο,
δῆλον ὅτι οὐ γένος τὰγαθὸν τῆς ἡδονῆς· τὸ γὰρ
20 γένος κατὰ πάντων τῶν ὑπὸ τὸ αὐτὸ εἶδος κατ-
ηγορεῖται. εἴτα εἰ μὴ ἐν τῷ τί ἐστι κατηγορεῖται,
ἀλλ' ὡς συμβεβηκός, καθάπερ τὸ λευκὸν τῆς
χιόνος, ἢ ψυχῆς τὸ κινούμενον ὑφ' αὐτοῦ. οὔτε
γὰρ ἡ χιὼν ὅπερ λευκόν, διόπερ οὐ γένος τὸ λευκόν
τῆς χιόνος, οὔθ' ἡ ψυχὴ ὅπερ κινούμενον· συμ-
25 βέβηκε δ' αὐτῇ κινεῖσθαι, καθάπερ καὶ τῷ ζῳῳ
πολλάκις βαδίζειν τε καὶ βαδίζοντι εἶναι. ἔτι τὸ
κινούμενον οὐ τί ἐστίν, ἀλλὰ τι ποιοῦν ἢ πάσχον
σημαίνειν ἔοικεν. ὁμοίως δὲ καὶ τὸ λευκόν· οὐ
420

BOOK IV

I. THE next questions which we must examine are those which relate to genus and property. These are elements in questions relating to definitions, but in themselves are seldom the subject of inquiries by disputants. If, then, a genus is asserted of something which exists, you must first examine all the things which are related to the subject in question and see whether it fails to be predicated of one of them, as was done in the case of the accident. For example, when it is stated that 'good' is a genus of pleasure, you must see whether some particular pleasure is not good; for, if so, clearly 'good' is not the genus of pleasure, for the genus is predicated of everything which falls under the same species. Next, you must see whether it is predicated, not in the category of essence, but as an accident, as 'white' is predicated of 'snow' or 'self-moved' of the soul. For neither is 'snow' 'that which is white,'^a and therefore 'white' is not the genus of snow, nor is the 'soul' 'that which moves'; for it is an accident that it moves, just as it is often an accident of an animal that it walks or is walking. Further, 'moving' does not seem to signify the essence of a thing but that it does something or has something done to it. Similarly also 'white'; for it does not signify the

(B) OF
GENUS
(BOOK IV).
*Various
rules:*

(a) The
genus must
include all
members of
the same
species as
that of
which it is
predicated.

^a *i.e.* a species of white.

120 b γὰρ τί ἐστὶν ἡ χιών, ἀλλὰ ποιὸν τι δηλοῖ. ὥστ' οὐδέτερον αὐτῶν ἐν τῷ τί ἐστι κατηγορεῖται.

30 Μάλιστα δ' ἐπὶ τὸν τοῦ συμβεβηκότος ὀρισμὸν ἐπιβλέπειν, εἰ ἐφαρμόττει ἐπὶ τὸ ῥηθὲν γένος, οἶον καὶ τὰ νῦν εἰρημμένα. ἐνδέχεται γὰρ κινεῖν τι αὐτὸ ἑαυτὸ καὶ μή, ὁμοίως δὲ καὶ λευκὸν εἶναι καὶ μή. ὥστ' οὐδέτερον αὐτῶν γένος ἀλλὰ συμβεβηκός, ἐπειδὴ συμβεβηκός ἐλέγομεν ὃ ἐνδέχεται
35 ὑπάρχειν τινὶ καὶ μή.

Ἔτι εἰ μὴ ἐν τῇ αὐτῇ διαιρέσει τὸ γένος καὶ τὸ εἶδος, ἀλλὰ τὸ μὲν οὐσία τὸ δὲ ποιόν, ἢ τὸ μὲν πρὸς τι τὸ δὲ ποιόν, οἶον ἢ μὲν χιών καὶ ὁ κύκνος οὐσία, τὸ δὲ λευκὸν οὐκ οὐσία ἀλλὰ ποιόν, ὥστ' οὐ γένος τὸ λευκὸν τῆς χιόνος οὐδὲ τοῦ κύκνου.

121 a πάλιν ἢ μὲν ἐπιστήμη τῶν πρὸς τι, τὸ δ' ἀγαθὸν καὶ τὸ καλὸν ποιόν, ὥστ' οὐ γένος τὸ ἀγαθὸν ἢ τὸ καλὸν τῆς ἐπιστήμης· τὰ γὰρ τῶν πρὸς τι γένη καὶ αὐτὰ τῶν πρὸς τι δεῖ εἶναι, καθάπερ ἐπὶ τοῦ
5 διπλασίου· καὶ γὰρ τὸ πολλαπλάσιον, ὃν γένος τοῦ διπλασίου, καὶ αὐτὸ τῶν πρὸς τί ἐστὶν. καθόλου δ' εἶπεῖν, ὑπὸ τὴν αὐτὴν διαίρεσιν δεῖ τὸ γένος τῷ εἶδει εἶναι· εἰ γὰρ τὸ εἶδος οὐσία, καὶ τὸ γένος, καὶ εἰ ποιὸν τὸ εἶδος, καὶ τὸ γένος ποιόν τι, οἶον εἰ τὸ λευκὸν ποιόν τι, καὶ τὸ χρῶμα. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

10 Πάλιν εἰ ἀνάγκη ἢ ἐνδέχεται τοῦ τεθέντος ἐν τῷ γένει μετέχειν τὸ γένος. ὅρος δὲ τοῦ μετέχειν

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essence of snow, but its possession of a certain quality. So neither 'white' nor 'moving' is predicated in the category of essence.

You should look particularly at the definition of the accident and see whether it fits the asserted genus, as, for example, in the instances just mentioned. For it is possible for a thing to be and not to be self-moved, and similarly for it to be and not to be white; so that neither attribute is a genus but both are accidents, since we said^a that an accident is something which can and also can not belong to something.

(b) Accident is distinguished from genus by being an attribute which can belong or not belong.

Further, you must see whether the genus and the species are not in the same division, but the one is a substance and the other a quality, or the one is a relative and the other a quality, as, for example, 'snow' and 'swan' are substance, but 'white' is not a substance but a quality; so that 'white' is not the genus of 'snow' or of 'swan.' Again, 'knowledge' is a relative, whereas 'good' and 'noble' are qualities, so that 'good' and 'noble' are not genera of knowledge. For the genera of relatives must themselves be relatives, as is true of 'double'; for 'multiple,' which is the genus of 'double,' is itself also a relative. To put the matter generally, the genus must fall under the same division as the species; for, if the species is a substance, so also is the genus, and if the species is a quality, the genus also is a quality; for example, if white is a quality, so also is colour. Similarly also with the other instances.

(c) The genus and the species must fall in the same category.

Again, you must see whether it is necessary or possible for the genus to partake of that which has been placed in the genus. (The definition of

(d) Species partake of genera, but not genera of species.

121 a

τὸ ἐπιδέχεσθαι τὸν τοῦ μετεχομένου λόγον. δῆλον οὖν ὅτι τὰ μὲν εἶδη μετέχει τῶν γενῶν, τὰ δὲ γένη τῶν εἰδῶν οὐ· τὸ μὲν γὰρ εἶδος ἐπιδέχεται τὸν τοῦ γένους λόγον, τὸ δὲ γένος τὸν τοῦ εἶδους οὐ.
 15 σκεπτέον οὖν εἰ μετέχει ἢ ἐνδέχεται μετέχειν τοῦ εἶδους τὸ ἀποδοθὲν γένος, οἷον εἴ τις τοῦ ὄντος ἢ τοῦ ἐνὸς γένος τι ἀποδοίῃ· συμβήσεται γὰρ μετέχειν τὸ γένος τοῦ εἶδους· κατὰ πάντων γὰρ τῶν ὄντων τὸ ὄν καὶ τὸ ἐν κατηγορεῖται, ὥστε καὶ ὁ λόγος αὐτῶν.

20 Ἔτι εἰ κατὰ τινος τὸ ἀποδοθὲν εἶδος ἀληθεύεται, τὸ δὲ γένος μὴ, οἷον εἰ τὸ ὄν ἢ τὸ ἐπιστητὸν τοῦ δοξαστοῦ γένος τεθείη. κατὰ γὰρ τοῦ μὴ ὄντος τὸ δοξαστὸν κατηγορηθήσεται· πολλὰ γὰρ τῶν μὴ ὄντων δοξαστά. ὅτι δὲ τὸ ὄν ἢ τὸ ἐπιστητὸν οὐ κατηγορεῖται κατὰ τοῦ μὴ ὄντος, δῆλον. ὥστ'
 25 οὐ γένος τὸ ὄν οὐδὲ τὸ ἐπιστητὸν τοῦ δοξαστοῦ· καθ' ὧν γὰρ τὸ εἶδος κατηγορεῖται, καὶ τὸ γένος δεῖ κατηγορεῖσθαι.

Πάλιν εἰ μηδενὸς τῶν εἰδῶν ἐνδέχεται μετέχειν τὸ τεθὲν ἐν τῷ γένει· ἀδύνατον γὰρ τοῦ γένους μετέχειν μηδενὸς τῶν εἰδῶν μετέχον, ἂν μὴ τι
 30 τῶν κατὰ τὴν πρώτην διαίρεσιν εἰδῶν ᾗ· ταῦτα δὲ τοῦ γένους μόνον μετέχει. ἂν οὖν ἡ κίνησις γένος τῆς ἡδονῆς τεθῇ, σκεπτέον εἰ μήτε φορὰ μήτ' ἀλλοίωσις ἢ ἡδονὴ μήτε τῶν λοιπῶν τῶν

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'partaking' is 'admitting the definition of that which is partaken.') It is obvious, therefore, that the species partake of the genera, whereas the genera do not partake of the species ; for the species admits the definition of the genus, whereas the genus does not admit the definition of the species. You must, therefore, look and see whether the genus assigned partakes, or can partake of the species ; for example, if one were to assign something as the genus of 'being' or of 'oneness,' for the result will be that the genus partakes of the species, for 'being' and 'oneness' are predicated of everything which exists, and therefore so is their definition also.

Further, you must look whether there is any case in which the species assigned is true but the genus is not true, for example, if 'being' or 'knowable' were given as the genus of 'conjectural.' For 'conjectural' will be predicated of that which does not exist ; for many things which do not exist are subjects of conjecture. But it is obvious that 'being' and 'knowable' are not predicated of that which does not exist. And so neither 'being' nor 'knowable' is the genus of 'conjectural' ; for of things of which the species is predicated, the genus also must be predicated.

(e) If the species is predicated, the genus also will be predicated.

Again, you must see whether that which is placed in the genus cannot possibly partake of any of its species ; for it is impossible for it to partake of the genus if it does not partake of any of its species, unless it is one of the species obtained at the first division, which do partake of the genus only. If, therefore, 'motion' is laid down as the genus of pleasure, you must examine whether pleasure is neither locomotion nor alteration nor any of the

(f) A predicate cannot partake of the genus if it partakes of none of its species.

121 a

ἀποδοθεισῶν κινήσεων μηδεμία· δῆλον γὰρ ὅτι οὐδενὸς ἂν τῶν εἰδῶν μετέχοι· ὥστ' οὐδὲ τοῦ γένους, ἐπειδὴ ἀναγκαῖόν ἐστι τὸ τοῦ γένους
 35 μετέχον καὶ τῶν εἰδῶν τινὸς μετέχειν· ὥστ' οὐκ ἂν εἷη εἶδος ἢ ἡδονὴ κινήσεως, οὐδὲ τῶν ἀτόμων οὐδέν¹ τῶν ὑπὸ τὸ γένος² τὸ τῆς κινήσεως ὄντων. καὶ γὰρ τὰ ἅτομα μετέχει τοῦ γένους καὶ τοῦ εἶδους, οἷον ὁ τις ἄνθρωπος καὶ ἀνθρώπου μετέχει καὶ ζῶον.

121 b

Ἔτι εἰ ἐπὶ πλέον λέγεται τοῦ γένους τὸ ἐν τῷ γένει τεθέν, οἷον τὸ δοξαστὸν τοῦ ὄντος· καὶ γὰρ τὸ ὄν καὶ τὸ μὴ ὄν δοξαστόν, ὥστ' οὐκ ἂν εἷη τὸ δοξαστὸν εἶδος τοῦ ὄντος· ἐπὶ πλέον γὰρ αἰεὶ τὸ γένος τοῦ εἶδους λέγεται. πάλιν εἰ ἐπ' ἴσων τὸ
 5 εἶδος καὶ τὸ γένος λέγεται, οἷον εἰ τῶν πᾶσιν ἐπομένων τὸ μὲν εἶδος τὸ δὲ γένος τεθείη, καθάπερ τὸ ὄν καὶ τὸ ἔν· παντὶ γὰρ τὸ ὄν καὶ τὸ ἔν, ὥστ' οὐδέτερον οὐδετέρου γένος, ἐπειδὴ ἐπ' ἴσων λέγεται. ὁμοίως δὲ καὶ εἰ τὸ πρῶτον καὶ ἡ ἀρχὴ ὑπ'³ ἄλληλα τεθείη· ἢ τε γὰρ ἀρχὴ πρῶτον καὶ τὸ
 10 πρῶτον ἀρχή, ὥστ' ἢ ἀμφοτέρω τὰ εἰρημμένα ταυτὸν ἐστὶν ἢ οὐδέτερον οὐδετέρου γένος. στοιχείον δὲ πρὸς ἅπαντα τὰ τοιαῦτα τὸ ἐπὶ πλέον τὸ γένος ἢ τὸ εἶδος καὶ τὴν διαφορὰν λέγεσθαι· ἐπ' ἔλαττον γὰρ καὶ ἡ διαφορὰ τοῦ γένους λέγεται.

¹ Reading οὐδέν with Wallies for οὐδὲ.

² γένος W. S. Maguinness, εἶδος codd.

³ Reading ὑπ' with Waitz for ἐπ'.

^a εἶδος, 'species,' which the mss. read here, is quite contrary to the argument, which requires γένος, 'genus.'

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other generally assigned modes of motion ; for, then, obviously it would not partake of any of the species, and, therefore, cannot partake of the genus either, since that which partakes of the genus must necessarily partake of one of the species also. So pleasure cannot be a species of motion nor any of the individual things which fall under the genus ^a of motion. For the individuals also partake of the genus and of the species ; for example, the individual man partakes both of ' man ' and ' animal.'

Further, you must see whether that which is placed in the genus has a wider application than the genus as, for example, ' an object of conjecture ' is wider than ' being ' ; for both that which is and that which is not are objects of conjecture, so that ' object of conjecture ' could not be a species of ' being ' ; for the genus is always applied more widely than the species. Again, you must see whether the species and its genus are applied to an equal number of things ; for example, if, of the attributes which accompany everything, one were to be put down as a species and the other as a genus, for example, ' being ' and ' oneness ' ; for everything possesses ' being ' and ' oneness,' so that neither is the genus of the other, since they are applied to an equal number of things. Similarly, too, if the ' first ' and the ' beginning ' were to be placed one under the other ; for the ' beginning ' is ' first ' and the ' first ' is a ' beginning,' so that either the two terms are identical or neither is the genus of the other. In all such cases the basic principle is that the genus has a wider application than the species and its differentia ; for the differentia also has a narrower application than the genus.

(g) The genus has a wider application than the species.

121 b

15 Ὅρᾶν δὲ καὶ εἴ τινας τῶν ἀδιαφόρων εἶδει μὴ
 ἔστι τὸ εἰρημένον γένος ἢ μὴ δόξειεν ἄν, κατα-
 σκευάζοντι δέ, εἰ ἔστι τινός. ταῦτόν γὰρ πάντων
 τῶν ἀδιαφόρων εἶδει γένος. ἄν οὖν ἐνὸς δειχθῇ,
 δῆλον ὅτι πάντων, καὶ ἐνὸς μὴ, δῆλον ὅτι οὐδενός,
 οἷον εἴ τις ἀτόμους τιθέμενος γραμμὰς τὸ ἀδι-
 20 αῖρετον γένος αὐτῶν φήσειεν εἶναι. τῶν γὰρ διαί-
 ρεσιν ἔχουσῶν γραμμῶν οὐκ ἔστι τὸ εἰρημένον
 γένος, ἀδιαφόρων οὐσῶν κατὰ τὸ εἶδος· ἀδιάφοροι
 γὰρ ἀλλήλαις κατὰ τὸ εἶδος αἰ εὐθείαι γραμμαὶ
 πᾶσαι.

II. Σκοπεῖν δὲ καὶ εἴ τι ἄλλο γένος ἔστι τοῦ
 25 ἀποδοθέντος εἶδους, ὃ μῆτε περιέχει τὸ ἀποδοθὲν
 γένος μὴθ' ὑπ' ἐκεῖνό ἐστιν, οἷον εἴ τις τῆς δικαιο-
 σύνης τὴν ἐπιστήμην θείη γένος. ἔστι γὰρ καὶ
 ἡ ἀρετὴ γένος, καὶ οὐδέτερον τῶν γενῶν τὸ λοιπὸν
 περιέχει, ὥστ' οὐκ ἂν εἴη ἡ ἐπιστήμη γένος τῆς
 δικαιοσύνης· δοκεῖ γάρ, ὅταν ἓν εἶδος ὑπὸ δύο
 30 γένη ᾗ, τὸ ἕτερον ὑπὸ τοῦ ἐτέρου περιέχεσθαι.
 ἔχει δ' ἀπορίαν ἐπ' ἐνίων τὸ τοιοῦτο. δοκεῖ γὰρ
 ἐνίοις ἡ φρόνησις ἀρετὴ τε καὶ ἐπιστήμη εἶναι,
 καὶ οὐδέτερον τῶν γενῶν ὑπ' οὐδετέρου περι-
 ἔχεσθαι· οὐ μὴν ὑπὸ πάντων γε συγχωρεῖται τὴν
 φρόνησιν ἐπιστήμην εἶναι. εἰ δ' οὖν τις συγ-
 35 χωροίη τὸ λεγόμενον ἀληθὲς εἶναι, ἀλλὰ τό γε
 ὑπ' ἄλληλα ἢ ὑπὸ ταῦτό ἄμφω γίνεσθαι τὰ τοῦ
 αὐτοῦ γένη τῶν ἀναγκαίων δόξειεν ἄν εἶναι,
 καθάπερ καὶ ἐπὶ τῆς ἀρετῆς καὶ τῆς ἐπιστήμης

TOPICA, IV. 1-11

You must also see whether the genus stated is inapplicable, or would be generally held to be inapplicable, to something which is not specifically different from the thing under discussion ; or, if you are arguing constructively, whether it *is* applicable. For the genus of all things which are not specifically different is the same. If, therefore, it is shown to be the genus of one, obviously it is the genus also of all, and if it is shown not to be the genus of one, obviously it is not the genus of any, for example, if anyone positing 'indivisible lines' were to assert that 'the indivisible' is their genus. For the genus stated is inapplicable to divisible lines, which in species do not differ from indivisible lines ; for all straight lines show no difference from one another in species.

(h) The genus of things not specifically different is the same.

II. You must also examine whether there is any other genus of the species assigned which neither includes the genus assigned nor falls under it, for example, if someone were to lay down that knowledge is the genus of justice. For virtue is also its genus and neither of the genera includes the other, so that knowledge could not be the genus of justice ; for it is generally held that, when one species falls under two genera, the one is included in the other. But such a principle sometimes involves a difficulty. For, in the view of some people, prudence is both virtue and knowledge and neither of its genera is included in the other ; it is not, however, universally agreed that prudence is knowledge. If, therefore, one were to agree that this statement is true, it would nevertheless be generally held as necessary that the genera of the same thing must at least be subaltern either the one to the other or both of them to the same thing. This happens in the case

(i) When one species falls under two genera, the one is embraced by the other.

121 b

συμβαίνει· ἄμφω γὰρ ὑπὸ τὸ αὐτὸ γένος ἐστίν·
 ἑκάτερον γὰρ αὐτῶν ἕξις καὶ διάθεσις ἐστίν.
 σκεπτέον οὖν εἰ μηδέτερον ὑπάρχει τῷ ἀποδοθέντι
 122 a γένει. εἰ γὰρ μήθ' ὑπ' ἄλληλά ἐστι τὰ γένη μήθ'

ὑπὸ ταὐτὸν ἄμφω, οὐκ ἂν εἴη τὸ ἀποδοθὲν γένος.
 Σκοπεῖν δὲ δεῖ καὶ τὸ γένος τοῦ ἀποδοθέντος
 γένους, καὶ οὕτως αἰεὶ τὸ ἐπάνω γένος, εἰ πάντα
 5 κατηγορεῖται τοῦ εἵδους καὶ εἰ ἐν τῷ τί ἐστι
 κατηγορεῖται· πάντα γὰρ τὰ ἐπάνω γένη κατ-
 ηγορεῖσθαι δεῖ τοῦ εἵδους ἐν τῷ τί ἐστίν. εἰ οὖν
 που διαφωνεῖ, δῆλον ὅτι οὐ γένος τὸ ἀποδοθέν.
 πάλιν εἰ μετέχει τὸ γένος τοῦ εἵδους, ἢ αὐτὸ ἢ
 τῶν ἐπάνω τι γενῶν· οὐδενὸς γὰρ τῶν ὑποκάτω
 10 τὸ ἐπάνω μετέχει. ἀνασκευάζοντι μὲν οὖν καθ-
 ἄπερ εἴρηται χρηστότεον· κατασκευάζοντι δέ, ὁμο-
 λογουμένου μὲν ὑπάρχειν τῷ εἶδει τοῦ ῥηθέντος
 γένους, ὅτι δ' ὥς γένος ὑπάρχει ἀμφισβητουμένου,
 ἀπόχρη τὸ δεῖξαί τι τῶν ἐπάνω γενῶν ἐν τῷ τί
 ἐστι τοῦ εἵδους κατηγορούμενον. ἐνὸς γὰρ ἐν τῷ
 τί ἐστι κατηγορουμένου, πάντα καὶ τὰ ἐπάνω
 15 τούτου καὶ τὰ ὑποκάτω, ἂν περ κατηγορῇται τοῦ
 εἵδους, ἐν τῷ τί ἐστι κατηγορηθήσεται· ὥστε
 καὶ τὸ ἀποδοθὲν γένος ἐν τῷ τί ἐστι κατηγορεῖται.
 ὅτι δ' ἐνὸς ἐν τῷ τί ἐστι κατηγορουμένου πάντα
 τὰ λοιπά, ἂν περ κατηγορῇται, ἐν τῷ τί ἐστι
 κατηγορηθήσεται, δι' ἐπαγωγῆς ληπτέον. εἰ δ'
 20 ἀπλῶς ὑπάρχειν ἀμφισβητεῖται τὸ ἀποδοθὲν γένος,

TOPICA, IV. II

of virtue and knowledge, for both of them fall under the same genus, each of them being a state and a disposition. You must, therefore, examine whether neither of these things belongs to the genus assigned ; for, if the genera are subaltern neither the one to the other nor both of them to the same thing, then what was assigned could not be the real genus.

You must also examine the genus of the assigned genus and so in succession the genus next above, and see if they are all predicated of the species and predicated in the category of essence ; for all the higher genera must be predicated of the species in the category of essence. If, then, there is a discrepancy anywhere, it is clear that what was assigned is not the genus. Again, you must see whether the genus itself, or one of its higher genera, partakes of the species ; for the higher genus does not partake of any of the lower. For destructive purposes, then, you must employ the above method ; for constructive purposes, if the asserted genus is admitted to belong to the species but it is a matter of dispute whether it belongs as a genus, then it is enough to show that one of its higher genera is predicated of the species in the category of essence. For, if one genus is predicated in the category of essence, all of them, both higher and lower than this one, if they *are* predicated of the species, will be predicated in the category of essence ; so that the genus assigned is also predicated in the category of essence. The fact that, if one genus is predicated in the category of essence, all the rest, if they *are* predicated, will be predicated in the category of essence, must be obtained by induction. But, if it is disputed whether the assigned genus belongs at all, it is not enough

(j) All higher genera must be predicated of the species in the category of essence.

122 a

οὐκ ἀπόχρη τὸ δεῖξαι τῶν ἐπάνω τι γενῶν ἐν τῷ
 τί ἐστι τοῦ εἶδους κατηγορούμενον. οἷον εἴ τις
 τῆς βαδίσσεως γένος ἀπέδωκε τὴν φοράν, οὐκ
 ἀπόχρη τὸ δεῖξαι διότι κίνησίς ἐστιν ἡ βάδις
 πρὸς τὸ δεῖξαι ὅτι φορά ἐστιν, ἐπειδὴ καὶ ἄλλαι
 25 κινήσεις εἰσὶν, ἀλλὰ προσδεικτέον ὅτι οὐδενὸς
 μετέχει ἡ βάδις τῶν κατὰ τὴν αὐτὴν διαίρεσιν
 εἰ μὴ τῆς φορᾶς. ἀνάγκη γὰρ τὸ τοῦ γένους
 μετέχον καὶ τῶν εἰδῶν τινὸς μετέχειν τῶν κατὰ
 τὴν πρώτην διαίρεσιν. εἰ οὖν ἡ βάδις μήτ'
 αὐξήσεως μήτε μειώσεως μήτε τῶν ἄλλων κινή-
 σεων μετέχει, δῆλον ὅτι τῆς φορᾶς ἂν μετέχοι,
 30 ὥστ' εἶη ἂν γένος ἡ φορά τῆς βαδίσσεως.

Πάλιν ἐφ' ὧν τὸ εἶδος τὸ τεθὲν ὡς γένος κατ-
 ηγορεῖται, σκοπεῖν εἰ καὶ τὸ ἀποδοθὲν γένος ἐν τῷ
 τί ἐστιν αὐτῶν τούτων κατηγορεῖται ὥνπερ τὸ
 εἶδος, ὁμοίως δὲ καὶ εἰ τὰ ἐπάνω τοῦ γένους
 35 πάντα. εἰ γάρ που διαφωνεῖ, δῆλον ὅτι οὐ γένος
 τὸ ἀποδοθὲν· εἰ γὰρ ἦν γένος, ἅπαντ' ἂν καὶ τὰ
 ἐπάνω τούτου καὶ αὐτὸ τοῦτο ἐν τῷ τί ἐστι κατ-
 ηγορεῖτο, ὥνπερ καὶ τὸ εἶδος ἐν τῷ τί ἐστι
 κατηγορεῖται. ἀνασκευάζοντι μὲν οὖν χρήσιμον, εἰ
 μὴ κατηγορεῖται τὸ γένος ἐν τῷ τί ἐστιν ὥνπερ
 καὶ τὸ εἶδος κατηγορεῖται· κατασκευάζοντι δ', εἰ
 122 b κατηγορεῖται ἐν τῷ τί ἐστι, χρήσιμον. συμβήσεται
 γὰρ τὸ γένος καὶ τὸ εἶδος τοῦ αὐτοῦ ἐν τῷ τί ἐστι

to show that one of the higher genera is predicated in the category of essence. For example, if someone has assigned 'impulsion' as the genus of 'walking,' it is not enough to show that walking is 'motion' in order to show that it is 'impulsion,' since there are other forms of motion also; but it must be further shown that walking partakes of none of the other forces of motion which result from the same division except 'impulsion.' For that which partakes of the genus must necessarily also partake of one of the species resulting from the first division of it. If, therefore, walking partakes neither of increase or decrease nor of any of the other kinds of motion, obviously it would partake of impulsion, so that impulsion would be the genus of walking.

Again, in cases where the species asserted is predicated as genus, you must look and see whether that which is assigned as genus is also predicated in the category of essence of the very things of which the species is predicated, and likewise, whether the same is also true of all the genera higher than this genus. For, if there is any discrepancy anywhere, obviously what has been assigned is not the genus; for, if it were genus, all the genera higher than it and this genus itself would be predicated in the category of essence of all those things of which the species also is predicated in the category of essence. For destructive criticism, then, it is useful to see whether the genus is not predicated in the category of essence of those things of which the species is also predicated. For constructive purposes, on the other hand, it is useful to see whether it *is* predicated in the category of essence; for then the result will be that the genus and the species are predicated of the

(k) The genus is predicated in the category of essence of those things of which the species is predicated.

κατηγορεῖσθαι, ὥστε τὸ αὐτὸ ὑπὸ δύο γένη γίνεται.
 ἀναγκαῖον οὖν ὑπ' ἄλληλα τὰ γένη εἶναι. ἂν οὖν
 5 δειχθῇ, ὃ βουλόμεθα γένος κατασκευάσαι, μὴ ὄν
 ὑπὸ τὸ εἶδος, δῆλον ὅτι τὸ εἶδος ὑπὸ τοῦτ' ἂν εἴη,
 ὥστε δεδειγμένον ἂν εἴη ὅτι γένος τοῦτο.

Σκοπεῖν δὲ καὶ τοὺς λόγους τῶν γενῶν, εἰ ἐφαρ-
 μόττουσιν ἐπὶ τε τὸ ἀποδοθὲν εἶδος καὶ τὰ μετ-
 έχοντα τοῦ εἶδους. ἀνάγκη γὰρ τοὺς τῶν γενῶν
 10 λόγους κατηγορεῖσθαι τοῦ εἶδους καὶ τῶν μετ-
 έχόντων τοῦ εἶδους· εἰ οὖν που διαφωνεῖ, δῆλον
 ὅτι οὐ γένος τὸ ἀποδοθέν.

Πάλιν εἰ τὴν διαφορὰν ὡς γένος ἀπέδωκεν,
 οἶον εἰ τὸ ἀθάνατον γένος θεοῦ. διαφορὰ γὰρ ἐστὶ
 ζώου τὸ ἀθάνατον, ἐπειδὴ τῶν ζώων τὰ μὲν θνητὰ
 15 τὰ δ' ἀθάνατα. δῆλον οὖν ὅτι διημάρτηται· οὐ-
 δενὸς γὰρ ἡ διαφορὰ γένος ἐστίν. ὅτι δὲ τοῦτ'
 ἀληθές, δῆλον· οὐδεμία γὰρ διαφορὰ σημαίνει τί
 ἐστίν, ἀλλὰ μᾶλλον ποιόν τι, καθάπερ τὸ πεζὸν
 καὶ τὸ δίπουν.

Καὶ εἰ τὴν διαφορὰν εἰς τὸ γένος ἔθηκεν, οἶον
 τὸ περιττὸν ὅπερ ἀριθμὸν. διαφορὰ γὰρ ἀριθμοῦ
 20 τὸ περιττὸν, οὐκ εἶδός ἐστιν. οὐδὲ δοκεῖ μετέχειν
 ἢ διαφορὰ τοῦ γένους· πᾶν γὰρ τὸ μετέχον τοῦ
 γένους ἢ εἶδος ἢ ἄτομόν ἐστιν, ἢ δὲ διαφορὰ οὔτε
 εἶδος οὔτε ἄτομόν ἐστιν. δῆλον οὖν ὅτι οὐ μετέχει
 434

TOPICA, IV. 11

same thing in the category of essence, so that the same object falls under two genera; the genera, therefore, must necessarily fall one under the other, and so, if it has been shown that what we wish to establish as a genus does not fall under the species, it is obvious that the species would fall under it, so that it would have been shown that it is the genus.

You must also examine the definitions of the genera to see if they fit both the species assigned and the things which partake of the species. For the definitions of the genera must also be predicated of the species and of the things which partake of the species. If, therefore, there is a discrepancy anywhere, it is obvious that what has been assigned is not the genus.

(l) The definitions of the genera must suit the species and the things which partake of it.

Again, you must see whether your opponent has assigned the differentia as the genus, for example, 'immortal' as the genus of 'God.' For 'immortal' is a differentia of 'living creature'; for some living creatures are mortal and some immortal. It is, therefore, obvious that an error has been committed; for the differentia is never the genus of anything. This is clearly true; for no differentia indicates the essence, but rather some quality, such as 'pedestrian' and 'biped.'

(m) The differentia must not be assigned as genus.

Also, you must see whether he has put the differentia inside the genus, for example, whether he has given 'odd' as a 'number,' for 'odd' is a differentia of number, not a species. Nor is the differentia generally held to partake of the genus; for everything which partakes of the genus is either a species or an individual, but the differentia is neither a species nor an individual. It is obvious, therefore, that the differentia does not partake of

(n) The differentia must not be placed within the genus.

122 b

τοῦ γένους ἢ διαφορά, ὥστ' οὐδὲ τὸ περιττὸν εἶδος ἂν εἴη ἀλλὰ διαφορά, ἐπειδὴ οὐ μετέχει τοῦ γένους.

- 25 Ἔτι εἰ τὸ γένος εἰς τὸ εἶδος ἔθηκεν, οἶον τὴν ἄψιν ὅπερ συνοχὴν ἢ τὴν μίξιν ὅπερ κρᾶσιν, ἢ ὡς Πλάτων ὀρίζεται φορὰν τὴν κατὰ τόπον κίνησιν. οὐ γὰρ ἀναγκαῖον τὴν ἄψιν συνοχὴν εἶναι, ἀλλ' ἀνάπαλιν τὴν συνοχὴν ἄψιν. οὐ γὰρ πᾶν τὸ
- 30 ἀπτόμενον συνεχεται, ἀλλὰ τὸ συνεχόμενον ἄπτεται. ὁμοίως δὲ καὶ ἐπὶ τῶν λοιπῶν. οὔτε γὰρ ἢ μίξις ἅπαντα κρᾶσις (ἢ γὰρ τῶν ξηρῶν μίξις οὐκ ἔστι κρᾶσις) οὔθ' ἢ κατὰ τόπον μεταβολὴ πᾶσα φορά. ἢ γὰρ βάδισις οὐ δοκεῖ φορὰ εἶναι. σχεδὸν γὰρ ἢ φορὰ ἐπὶ τῶν ἀκουσίως τόπον ἐκ τόπου
- 35 μεταβαλλόντων λέγεται, καθάπερ ἐπὶ τῶν ἀψύχων συμβαίνει. δῆλον δ' ὅτι καὶ ἐπὶ πλέον λέγεται τὸ εἶδος τοῦ γένους ἐν τοῖς ἀποδοθείσι, δέον ἀνάπαλιν γίνεσθαι.

- Πάλιν εἰ τὴν διαφορὰν εἰς τὸ εἶδος ἔθηκεν, οἶον τὸ ἀθάνατον ὅπερ θεόν. συμβήσεται γὰρ [ἐπ' ἴσης ἢ]¹ ἐπὶ πλείον τὸ εἶδος λέγεσθαι. αἰεὶ γὰρ ἢ
- 123 a διαφορὰ ἐπ' ἴσης ἢ ἐπὶ πλείον τοῦ εἶδους λέγεται. ἔτι εἰ τὸ γένος εἰς τὴν διαφορὰν, οἶον τὸ χρῶμα ὅπερ συγκριτικὸν ἢ τὸν ἀριθμὸν ὅπερ περιττόν. καὶ εἰ τὸ γένος ὡς διαφορὰν εἶπεν. ἐγχωρεῖ γάρ

¹ Omitting ἐπ' ἴσης ἢ with Strache.

TOPICA, IV. II

the genus ; so that 'odd' too cannot be a species but must be a differentia, since it does not partake of the genus.

Further, you must see whether your opponent has placed the genus inside the species, taking, for example, 'contact' as 'conjunction' or 'mixture' as 'fusion,' or, according to Plato's definition,^a 'locomotion' as 'impulsion.' For 'contact' is not necessarily 'conjunction,' but the converse is true namely, that 'conjunction' is 'contact'; for what is in contact is not always conjoined, but that which is conjoined is always in contact. Similarly also with the other instances; for 'mixture' is not always 'fusion' (for the mixture of dry substances is not fusion) nor is 'locomotion' always 'impulsion.' For walking is not generally held to be 'impulsion'; for 'impulsion' is generally used of objects which change their position involuntarily, as happens to inanimate things. It is obvious, also, that the species is used in a wider sense than the genus in the above examples, whereas the converse ought to be true.

Again, you must see whether he has placed the differentia within the species, for example, if he has taken 'immortal' as what 'God' is. For this will result in the species being used in a greater number of cases; for it is the differentia which is always used in an equal number of cases or in a greater number of cases than the species. Again, you must see whether he has put the genus within the differentia; for example, if he has taken 'colour' as that which is 'compressive' ^b or 'number' as 'odd.' You must also see if he has stated the genus as the differentia; for it is possible to produce a thesis of this kind also,

(o) The genus must not be placed within the species.

(p) The differentia must not be placed within the species nor the genus within the differentia.

^a *Theaet.* 181 D 5.

^b *Cf.* 107 b 30 and note.

123 a

τινα καὶ τοιαύτην κομίσαι θέσιν, οἷον κράσεως τὴν
 5 μίξιν διαφορὰν ἢ φορᾶς τὴν κατὰ τόπον μεταβολήν.
 σκεπτέον δὲ πάντα τὰ τοιαῦτα διὰ τῶν αὐτῶν.
 ἐπικοινωνοῦσι γὰρ οἱ τόποι· ἐπὶ πλεόν τε γὰρ τὸ
 γένος τῆς διαφορᾶς δεῖ λέγεσθαι, καὶ μὴ μετέχειν
 τῆς διαφορᾶς. οὕτω δ' ἀποδοθέντος οὐδέτερον
 τῶν εἰρημένων δυνατόν συμβαίνειν· ἐπ' ἑλαττόν
 10 τε γὰρ ῥηθήσεται, καὶ μεθέξει τὸ γένος τῆς
 διαφορᾶς.

Πάλιν εἰ μηδεμία διαφορὰ κατηγορεῖται τῶν τοῦ
 γένους κατὰ τοῦ ἀποδοθέντος εἶδους, οὐδὲ τὸ
 γένος κατηγορηθήσεται, οἷον ψυχῆς οὔτε τὸ πε-
 ριττὸν οὔτε τὸ ἄρτιον κατηγορεῖται, ὥστ' οὐδ'
 ἀριθμός. ἔτι εἰ πρότερον φύσει τὸ εἶδος καὶ
 15 συναναιρεῖ τὸ γένος· δοκεῖ γὰρ τὸ ἐναντίον. ἔτι
 εἰ ἐνδέχεται ἀπολιπεῖν τὸ εἰρημένον γένος ἢ τὴν
 διαφορὰν, οἷον ψυχὴν τὸ κινεῖσθαι ἢ δόξαν τὸ
 ἀληθὲς καὶ ψεῦδος, οὐκ ἂν εἴη τῶν εἰρημένων
 οὐδέτερον γένος οὐδὲ διαφορὰ· δοκεῖ γὰρ τὸ γένος
 καὶ ἡ διαφορὰ παρακολουθεῖν, ἕως ἂν ἡ τὸ εἶδος.
 20 III. Σκοπεῖν δὲ καὶ εἰ τὸ ἐν τῷ γένει κείμενον
 μετέχει τινὸς ἐναντίου τῷ γένει ἢ εἰ ἐνδέχεται
 μετέχειν· τὸ γὰρ αὐτὸ τῶν ἐναντίων ἅμα μεθέξει,
 ἐπειδὴ τὸ μὲν γένος οὐδέποτ' ἀπολείπει, μετέχει
 δὲ καὶ τοῦναντίου ἢ ἐνδέχεται μετέχειν. ἔτι εἰ
 τινος κοινωνεῖ τὸ εἶδος, ὃ ἀδύνατον ὅλως ὑπάρχειν
 25 τοῖς ὑπὸ τὸ γένος. οἷον εἰ ἡ ψυχὴ τῆς ζωῆς

^a Cf. *Met.* 1059 b 30 ff.

TOPICA, IV. II-III

for example, making 'mixture' the differentia of 'fusion' or 'locomotion' of 'impulsion.' All such cases must be examined by the same methods (for the commonplaces are inter-related); for the genus must both be used in a wider sense than its differentia and not partake of its differentia. But, if the genus is assigned as differentia, neither of the above conditions can occur; for the genus will be used in a narrower sense and will partake of the differentia.

Again, if no differentia belonging to the genus is predicated of the species assigned, neither will the genus be predicated of it; for example, neither 'odd' nor 'even' is predicated of 'soul,' and so 'number' is not predicated of it either. Further, you must see whether the species is prior by nature and destroys the genus along with itself^a; for the contrary view is generally held. Further, if it is possible for the genus stated or its differentia to be separated from the species, for example, 'motion' from the 'soul' or 'truth and falsehood' from 'opinion,' then neither of the said terms would be the genus or its differentia; for it is generally held that the genus and its differentia attend the species as long as it exists.

III. You must also see whether what is placed in the genus partakes, or could possibly partake, of something contrary to the genus; for then the same thing will partake of contraries at the same time, since the genus never leaves it, and it also partakes, or can possibly partake, of its contrary. Further, you must see whether the species participates in anything which cannot by any possibility belong to anything which falls under the genus. For example, if the soul participates in life, and it is impossible

(q) If no differentia of the genus is predicated of the species, the genus cannot be predicated of it.

(r) The genus is prior to the species.

(s) The genus and its differentia accompany the species.

(t) What is placed in the genus cannot partake of anything contrary to the genus.

123 a

κοινωνεῖ, τῶν δ' ἀριθμῶν μηδένα δυνατὸν ζῆν, οὐκ ἂν εἴη εἶδος ἀριθμοῦ ἢ ψυχῆ.

Σκεπτέον δὲ καὶ εἰ ὁμώνυμον τὸ εἶδος τῷ γένει, στοιχείοις χρώμενον τοῖς εἰρημένοις πρὸς τὸ ὁμώνυμον· συνώνυμον γὰρ τὸ γένος καὶ τὸ εἶδος.

- 30 Ἐπεὶ δὲ παντὸς γένους εἶδη πλείω, σκοπεῖν εἰ μὴ ἐνδέχεται ἕτερον εἶδος εἶναι τοῦ εἰρημένου γένους· εἰ γὰρ μή ἐστι, δῆλον ὅτι οὐκ ἂν εἴη ὅλως γένος τὸ εἰρημένον.

Σκοπεῖν δὲ καὶ εἰ τὸ μεταφορᾷ λεγόμενον ὡς γένος ἀποδέδωκεν, οἷον τὴν σωφροσύνην συμφω-
35 νίαν· πᾶν γὰρ γένος κυρίως κατὰ τῶν εἰδῶν κατηγορεῖται, ἢ δὲ συμφωνία κατὰ τῆς σωφροσύνης οὐ κυρίως ἀλλὰ μεταφορᾷ· πᾶσα γὰρ συμφωνία ἐν φθόγοις.

- 123 b Ἔτι ἂν ἡ ἐναντίον τι τῷ εἶδει, σκοπεῖν. ἔστι δὲ πλεοναχῶς ἢ σκέψις, πρῶτον μὲν εἰ ἐν τῷ αὐτῷ γένει καὶ τὸ ἐναντίον, μὴ ὄντος ἐναντίου τῷ γένει· δεῖ γὰρ τὰ ἐναντία ἐν τῷ αὐτῷ γένει εἶναι,
5 ἂν μηδὲν ἐναντίον τῷ γένει ᾗ. ὄντος δ' ἐναντίου τῷ γένει, σκοπεῖν εἰ τὸ ἐναντίον ἐν τῷ ἐναντίῳ· ἀνάγκη γὰρ τὸ ἐναντίον ἐν τῷ ἐναντίῳ εἶναι, ἄνπερ ἡ ἐναντίον τι τῷ γένει. φανερόν δὲ τούτων ἕκαστον διὰ τῆς ἐπαγωγῆς. πάλιν εἰ ὅλως ἐν μηδενὶ γένει τὸ τῷ εἶδει ἐναντίον, ἀλλ' αὐτὸ γένος,
10 οἷον τὰγαθόν· εἰ γὰρ τοῦτο μὴ ἐν γένει, οὐδὲ τὸ ἐναντίον τούτου ἐν γένει ἔσται, ἀλλ' αὐτὸ γένος,

TOPICA, IV. III

for any number to live, the soul could not be a species of number.

You must also see whether the species is used equivocally of the genus, employing the principles already laid down for dealing with the equivocals ^a ; for the genus and the species are synonymous.

Since of every genus there are always several species, you must see whether it is impossible for there to be another species of the genus stated ; for if there is none, it is obvious that what has been stated could not be a genus at all.

You must also see whether your opponent has assigned as a genus a term used metaphorically, speaking, for example, of ' temperance ' as a ' harmony ' ; for every genus is predicated of its species in its proper sense, but ' harmony ' is predicated of temperance not in its proper sense but metaphorically ; for a harmony consists always of sounds.

Further, you must examine any contrary that there may be of the species. This examination may take several forms, the first being to see whether the contrary also exists in the same genus, the genus itself having no contrary ; for contraries must of necessity be in the same genus, if there is no contrary to the genus. If, however, there is a contrary to the genus, you must see whether the contrary of the species is in the contrary genus ; for the contrary species must necessarily be in the contrary genus if the genus has a contrary. Each of these points is made clear by induction. Again, you must see whether the contrary of the species is not found in any genus at all, but is itself a genus, for example, ' good ' ; for if this is not found in any genus, neither will its contrary be found in any genus, but will itself

(u) The species must not be used equivocally of the genus.

(v) A genus cannot exist of only one species.

(w) The use of metaphorical language is misleading.

Rules drawn from :
(a) Contraries.

καθάπερ ἐπὶ τοῦ ἀγαθοῦ καὶ τοῦ κακοῦ συμβαίνει·
οὐδέτερον γὰρ τούτων ἐν γένει, ἀλλ' ἐκάτερον
αὐτῶν γένος. ἔτι εἰ ἐναντίον τινὶ καὶ τὸ γένος
καὶ τὸ εἶδος, καὶ τῶν μὲν ἔστι τι μεταξύ, τῶν δὲ
15 μή. εἰ γὰρ τῶν γενῶν ἔστι τι μεταξύ, καὶ τῶν
εἰδῶν, καὶ εἰ τῶν εἰδῶν, καὶ τῶν γενῶν, καθάπερ
ἐπ' ἀρετῆς καὶ κακίας καὶ δικαιοσύνης καὶ ἀδι-
κίας· ἐκατέρων γὰρ ἔστι τι μεταξύ. ἔνστασις
τούτου ὅτι ὑγείας καὶ νόσου οὐδὲν μεταξύ, κακοῦ
δὲ καὶ ἀγαθοῦ. ἢ εἰ ἔστι μὲν τι ἀμφοῖν ἀνὰ μέσον,
καὶ τῶν εἰδῶν καὶ τῶν γενῶν, μὴ ὁμοίως δέ, ἀλλὰ
20 τῶν μὲν κατὰ ἀπόφασιν τῶν δ' ὡς ὑποκείμενον.
ἔνδοξον γὰρ τὸ ὁμοίως ἀμφοῖν, καθάπερ ἐπ' ἀρετῆς
καὶ κακίας καὶ δικαιοσύνης καὶ ἀδικίας· ἀμφοῖν
γὰρ κατὰ ἀπόφασιν τὰ ἀνὰ μέσον. ἔτι ὅταν μὴ
ἦ ἐναντίον τῷ γένει, σκοπεῖν μὴ μόνον εἰ τὸ ἐναν-
25 τίον ἐν τῷ αὐτῷ γένει, ἀλλὰ καὶ τὸ ἀνὰ μέσον· ἐν
ῶ γὰρ τὰ ἄκρα, καὶ τὰ ἀνὰ μέσον, οἷον ἐπὶ λευκοῦ
καὶ μέλανος· τὸ γὰρ χρῶμα γένος τούτων τε καὶ
τῶν ἀνὰ μέσον χρωμάτων ἀπάντων. ἔνστασις ὅτι
ἢ μὲν ἔνδεια καὶ ὑπερβολὴ ἐν τῷ αὐτῷ γένει (ἐν
τῷ κακῷ γὰρ ἄμφω), τὸ δὲ μέτριον ἀνὰ μέσον ὃν
30 τούτων οὐκ ἐν τῷ κακῷ ἀλλ' ἐν τῷ ἀγαθῷ. σκο-
πεῖν δὲ καὶ εἰ τὸ μὲν γένος ἐναντίον τινί, τὸ δὲ

TOPICA, IV. III

be a genus, as happens with 'good' and 'evil'; for neither of them is found in a genus, but each of them is a genus. Further, you must see whether both genus and species are contrary to something, and whether there is an intermediate between one pair of contraries but not between the other. For, if there is an intermediate between the genera, there will also be one between the species, and, if between the species, likewise also between the genera, as in the case of virtue and vice and justice and injustice; for each pair has an intermediate. (It may be objected here that there is no intermediate between health and disease as there is between evil and good.) Or, again, you must see whether, though there is an intermediate between both pairs, that is, between the species and between the genera, yet not in a similar way, but in one case negatively and in the others as a subject. For it is generally held that the intermediate is of a similar kind in both cases, as happens with virtue and vice, and justice and injustice; for between both of these pairs the intermediates are purely negative. Further, when there is no contrary to the genus, you must see not only whether the contrary is in the same genus, but whether the intermediate is so also; for the intermediates are in the same genus as the extremes, in the case, for example, of black and white, for colour is the genus of both of these and of all the intermediate colours. (It may be objected that 'defect' and 'excess' are in the same genus—for both are in the genus of 'evil'—whereas 'what is moderate,' which is intermediate between them, is not in the genus of 'evil,' but in that of 'good.') You must also see whether, whereas the genus is contrary to

123 b

εἶδος μηδενί. εἰ γὰρ τὸ γένος ἐναντίον τινί, καὶ τὸ εἶδος, καθάπερ ἀρετὴ κακία καὶ δικαιοσύνη ἀδικία. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων σκοποῦντι φανερόν ἂν δόξειεν εἶναι τὸ τοιοῦτον. ἔνστασις
 35 ἐπὶ τῆς ὑγείας καὶ νόσου· ἀπλῶς μὲν γὰρ πᾶσα ὑγίεια νόσῳ ἐναντίον, ἢ δέ τις νόσος εἶδος ὃν νόσου οὐδενὶ ἐναντίον, οἷον ὁ πυρετὸς καὶ ἡ ὀφθαλμία καὶ τῶν ἄλλων ἕκαστον.

124 a Ἀναιροῦντι μὲν οὖν τοσαυταχῶς ἐπισκεπτέον·

εἰ γὰρ μὴ ὑπάρχει τὰ εἰρημένα, δῆλον ὅτι οὐ γένος τὸ ἀποδοθέν· κατασκευάζοντι δὲ τριχῶς, πρῶτον μὲν εἰ τὸ ἐναντίον τῷ εἶδει ἐν τῷ εἰρημένῳ γένει,
 5 μὴ ὄντος ἐναντίου τῷ γένει· εἰ γὰρ τὸ ἐναντίον ἐν τούτῳ, δῆλον ὅτι καὶ τὸ προκείμενον. ἔτι εἰ τὸ ἀνὰ μέσον ἐν τῷ εἰρημένῳ γένει· ἐν ᾧ γὰρ τὸ ἀνὰ μέσον, καὶ τὰ ἄκρα. πάλιν ἂν ἢ ἐναντίον τι τῷ γένει, σκοπεῖν εἰ καὶ τὸ ἐναντίον ἐν τῷ ἐναντίῳ· ἂν γὰρ ἢ, δῆλον ὅτι καὶ τὸ προκείμενον ἐν τῷ προκειμένῳ.

10 Πάλιν ἐπὶ τῶν πτώσεων καὶ ἐπὶ τῶν συστοίχων, εἰ ὁμοίως ἀκολουθοῦσι, καὶ ἀναιροῦντι καὶ κατασκευάζοντι. ἅμα γὰρ ἐνὶ καὶ πᾶσιν ὑπάρχει ἢ οὐχ ὑπάρχει, οἷον εἰ ἡ δικαιοσύνη ἐπιστήμη τις,

TOPICA, IV. III

something, the species is not contrary to anything ; for, if the genus is contrary to something, so also is the species, as virtue is the contrary of vice, and justice of injustice. Similarly, if one examines the other cases also, such a view would appear evident. (There is an objection with regard to health and disease ; for health, generally speaking, is always contrary to disease, yet a particular disease, which is a species of disease, for example, a fever or ophthalmia or any other specific disease, is not the contrary of anything.)

Such then are the various inquiries which should be made when one is seeking to demolish an opinion ; for, if the conditions mentioned above are not present, it is clear that what has been assigned is not the genus. For constructive argument, on the other hand, there are three methods of procedure. Firstly, you must see whether the contrary of the species is found in the genus named when there is no contrary to the genus ; for, if the contrary is found in it, obviously the proposed species is also found there. Further, you must see whether the intermediate is found in the genus named ; for the extremes are found in the same genus as the intermediates. Again, if there is a contrary to the genus, you must see whether the contrary species is also found in the contrary genus ; for, if it is, clearly the proposed species is also found in the proposed genus.

Again, you must take the inflexions and the co-ordinates and see if they follow similarly, both in destructive and constructive argument. For whatever belongs or does not belong to one, at the same time belongs or does not belong to all ; for example, if justice is a kind of knowledge, then also, ' justly '

(The use of
contraries
in con-
structive
argument.)

(b) In-
flexions
and co-
ordinates.

καὶ τὸ δικαίως ἐπιστημόνως καὶ ὁ δίκαιος ἐπιστή-
μων· εἰ δὲ τούτων τι μὴ, οὐδὲ τῶν λοιπῶν οὐδέν.

- 15 IV. Πάλιν ἐπὶ τῶν ὁμοίως ἔχόντων πρὸς ἄλληλα,
οἷον τὸ ἡδὺ ὁμοίως ἔχει πρὸς τὴν ἡδονὴν καὶ τὸ
ὠφέλιμον πρὸς τ'ἀγαθόν· ἐκάτερον γὰρ ἐκατέρου
ποιητικόν. εἰ οὖν ἐστὶν ἡ ἡδονὴ ὅπερ ἀγαθόν,
καὶ τὸ ἡδὺ ὅπερ ὠφέλιμον ἔσται· δῆλον γὰρ ὅτι
20 ἀγαθοῦ ἂν εἴη ποιητικόν, ἐπειδὴ ἡ ἡδονὴ ἀγαθόν.
ὡσαύτως δὲ καὶ ἐπὶ τῶν γενέσεων καὶ φθορῶν,
οἷον εἰ τὸ οἰκοδομεῖν ἐνεργεῖν, τὸ ὠκοδομηκέναι
ἐνηργηκέναι, καὶ εἰ τὸ μαρθάνειν ἀναμιμνήσκεισθαι,
καὶ τὸ μεμαθηκέναι ἀναμνησθαι, καὶ εἰ τὸ
διαλύεσθαι φθείρεσθαι, τὸ διαλελύσθαι ἐφθάρθαι
25 καὶ ἡ διάλυσις φθορά τις. καὶ ἐπὶ τῶν γενητικῶν
δὲ καὶ φθαρτικῶν ὡσαύτως, καὶ ἐπὶ τῶν δυνά-
μεων καὶ χρήσεων, καὶ ὅλως καθ' ὅποιαν οὖν
ὁμοιότητα καὶ ἀναιροῦντι καὶ κατασκευάζοντι
σκεπτέον, καθάπερ ἐπὶ τῆς γενέσεως καὶ φθορᾶς
ἐλέγομεν. εἰ γὰρ τὸ φθαρτικὸν διαλυτικόν, καὶ
τὸ φθείρεσθαι διαλύεσθαι· καὶ εἰ τὸ γενητικόν
30 ποιητικόν, τὸ γίνεσθαι ποιεῖσθαι καὶ ἡ γένεσις
ποίησις. ὁμοίως δὲ καὶ ἐπὶ τῶν δυνάμεων καὶ
χρήσεων· εἰ γὰρ ἡ δύναμις διάθεσις, καὶ τὸ δύ-
νασθαι διακεῖσθαι, καὶ εἴ τινος ἡ χρήσις ἐνέργεια,
τὸ χρῆσθαι ἐνεργεῖν καὶ τὸ κεχρῆσθαι ἐνηργηκέναι.
35 Ἄν δὲ στέρησις ἢ τὸ ἀντικείμενον τῷ εἶδει,
διχῶς ἔστιν ἀνελεῖν, πρῶτον μὲν εἰ ἐν τῷ ἀπο-

TOPICA, IV. III-IV

is 'knowingly,' and 'the just man' is 'the man of knowledge'; but if one of these things is not true, none of the rest is true either.

IV. Again, you must take things which stand in a similar relation to one another. For example, the pleasant stands in the same relation to pleasure as the beneficial to the good; for in each case the one is productive of the other. If, therefore, pleasure is what is good, then the pleasant will be what is beneficial; for it is clear that it would be productive of good, since pleasure is a good. So likewise with the processes of generation and destruction; if, for example, to build is to be active, to have built is to have been active, and, if to learn is to remember, to have learnt is to have remembered, and, if to be dissolved is to be destroyed, to have been dissolved is to have been destroyed, and dissolution is a kind of destruction. You must deal in the same way with the agents of generation and destruction and with the capacities and uses of things, and, in short, both in destructive and constructive argument, you must make your examination in the light of any possible likeness, as we stated in dealing with generation and destruction. For, if what is destructive is dissolvent, then to be destroyed is to be dissolved; and if what is generative is productive, then to be generated is to be produced, and generation is production. So, also, with capacities and uses; if capacity is a disposition, then to be capable of something is to be disposed to it, and, if the use of something is an activity, then to use is to be active, and to have used is to have been active.

If the opposite of the species is a privation, we can demolish an argument in two ways, firstly, by seeing

(c) Similarity of relation.

(d) Generation and destruction.

(e) Capacities and uses of things.

(f) Opposition between states

124 a

δοθέντι γένει τὸ ἀντικείμενον· ἢ γὰρ ἀπλῶς ἐν οὐδενὶ γένει τῷ αὐτῷ ἢ στέρησις, ἢ οὐκ ἐν τῷ ἐσχάτῳ, οἷον εἰ ἢ ὄψις ἐν ἐσχάτῳ γένει τῇ αἰσθήσει, ἢ τυφλότης οὐκ ἔσται αἴσθησις. δεύτερον

124 b

δ' εἰ καὶ τῷ γένει καὶ τῷ εἶδει ἀντίκειται στέρησις, μὴ ἔστι δὲ τὸ ἀντικείμενον ἐν τῷ ἀντικειμένῳ, οὐδ' ἂν τὸ ἀποδοθὲν ἐν τῷ ἀποδοθέντι εἴη. ἀναιροῦντι μὲν οὖν καθάπερ εἴρηται χρηστέον, κατασκευάζοντι δὲ μοναχῶς· εἰ γὰρ τὸ ἀντικείμενον
5 ἐν τῷ ἀντικειμένῳ, καὶ τὸ προκείμενον ἐν τῷ προκειμένῳ ἂν εἴη, οἷον εἰ ἢ τυφλότης ἀναισθησίαις, ἢ ὄψις αἰσθησίαις τις.

Πάλιν ἐπὶ τῶν ἀποφάσεων σκοπεῖν ἀνάπαλιν, καθάπερ ἐπὶ τοῦ συμβεβηκότος ἐλέγετο, οἷον εἰ τὸ ἡδὺ ὅπερ ἀγαθόν, τὸ μὴ ἀγαθὸν οὐχ ἡδύ. εἰ
10 γὰρ μὴ οὕτως ἔχοι, εἴη ἂν τι καὶ οὐκ ἀγαθὸν ἡδύ. ἀδύνατον δέ, εἴπερ τὸ ἀγαθὸν γένος τοῦ ἡδέος, εἶναί τι μὴ ἀγαθὸν ἡδύ· ὦν γὰρ τὸ γένος μὴ κατηγορεῖται, οὐδὲ τῶν εἰδῶν οὐδέν. καὶ κατασκευάζοντι δὲ ὡσαύτως σκεπτέον· εἰ γὰρ τὸ μὴ ἀγαθὸν οὐχ ἡδύ, τὸ ἡδὺ ἀγαθόν, ὥστε γένος τὸ ἀγαθὸν τοῦ ἡδέος.

15 Ἐὰν δ' ἢ πρὸς τι τὸ εἶδος, σκοπεῖν εἰ καὶ τὸ γένος πρὸς τι· εἰ γὰρ τὸ εἶδος τῶν πρὸς τι, καὶ τὸ γένος, καθάπερ ἐπὶ τοῦ διπλασίου καὶ πολλαπλασίου· ἐκάτερον γὰρ τῶν πρὸς τι. εἰ δὲ τὸ

^a 113 b 15 ff.

TOPICA, IV. IV

whether the opposite is found in the genus assigned ; and their privations.
 for either the privation is not found anywhere at all in the same genus or not in the ultimate genus ; for example, if sight is found in sensation as the ultimate genus, blindness will not be a sensation. Secondly, if a privation is opposed both to the genus and to the species, but the opposite of the species is not found in the opposite of the genus, then neither can the species assigned be in the genus assigned. For destructive criticism, then, you should use the above two methods ; but for constructive argument there is only one method. If the opposite species is found in the opposite genus, then the proposed species would be found in the proposed genus ; for example, if blindness is a kind of insensibility, then sight is a kind of sensation.

Again, you must take the negations and examine them, reversing the order of the terms, as was described in dealing with the accident ^(g) *Contradictory oppositions.* ; for example, if the pleasant is what is good, what is not good is not pleasant, for otherwise something not good would also be pleasant. Now it is impossible, if good is the genus of pleasant, that anything not good would be pleasant ; for, where the genus is not predicated, neither can any of the species be predicated. For constructive argument a similar examination must be made ; for, if what is not good is not pleasant, the pleasant is good, and so ' good ' is the genus of ' pleasant.'

If the species is a relative term, you must see ^(h) *Relative oppositions.* whether the genus is also a relative term ; for, if the species is a relative term, so also is the genus, for example, ' double ' and ' multiple ' ; for each is a relative term. If, however, the genus is a rela-

γένος τῶν πρὸς τι, οὐκ ἀνάγκη καὶ τὸ εἶδος· ἡ
 μὲν γὰρ ἐπιστήμη τῶν πρὸς τι, ἡ δὲ γραμματικὴ
 20 οὐ. ἢ οὐδὲ τὸ πρότερον ῥηθὲν ἀληθὲς ἂν δόξειεν·
 ἡ γὰρ ἀρετὴ ὅπερ καλὸν καὶ ὅπερ ἀγαθόν, καὶ ἡ
 μὲν ἀρετὴ τῶν πρὸς τι, τὸ δ' ἀγαθὸν καὶ τὸ καλὸν
 οὐ τῶν πρὸς τι ἀλλὰ ποιά.

Πάλιν εἰ μὴ πρὸς ταῦτ' λέγεται τὸ εἶδος καθ'
 αὐτό τε καὶ κατὰ τὸ γένος, οἷον εἰ τὸ διπλάσιον
 25 ἡμίσεος λέγεται διπλάσιον, καὶ τὸ πολλαπλάσιον
 ἡμίσεος δεῖ λέγεσθαι. εἰ δὲ μή, οὐκ ἂν εἴη τὸ
 πολλαπλάσιον γένος τοῦ διπλασίου.

Ἔτι εἰ μὴ πρὸς ταῦτ' κατὰ τε τὸ γένος λέγεται
 καὶ κατὰ πάντα τὰ τοῦ γένους γένη. εἰ γὰρ τὸ
 30 διπλάσιον ἡμίσεος πολλαπλάσιόν ἐστι, καὶ τὸ
 ὑπερέχον ἡμίσεος ῥηθήσεται, καὶ ἀπλῶς κατὰ
 πάντα τὰ ἐπάνω γένη πρὸς τὸ ἥμισυ ῥηθήσεται.
 ἔνστασις ὅτι οὐκ ἀνάγκη καθ' αὐτὸ καὶ κατὰ τὸ
 γένος πρὸς ταῦτ' λέγεσθαι· ἡ γὰρ ἐπιστήμη ἐπι-
 στητοῦ λέγεται, ἕξις δὲ καὶ διάθεσις οὐκ ἐπιστητοῦ
 ἀλλὰ ψυχῆς.

35 Πάλιν εἰ ὡσαύτως λέγεται τὸ γένος καὶ τὸ εἶδος
 κατὰ τὰς πτώσεις, οἷον εἰ τινὶ ἢ τινὸς ἢ ὁσαχῶς
 ἄλλως. ὥς γὰρ τὸ εἶδος, καὶ τὸ γένος, καθάπερ
 ἐπὶ τοῦ διπλασίου καὶ τῶν ἐπάνω· τινὸς γὰρ καὶ
 450

TOPICA, IV. iv

tive term, it does not necessarily follow that the species is so also ; for 'knowledge' is a relative term, but 'grammar' is not. Or, possibly, it might be held that not even the first assertion is true ; for 'virtue' is something 'honourable' and something 'good,' and yet, though 'virtue' is a relative term, 'good' and 'honourable' are not relative terms but qualities.

Again, you must see whether the species is not being used in the same relation both *per se* and in respect of the genus. For example, if 'double' is used in the sense of double of a half, then also 'multiple' ought to be used in the sense of multiple of a half ; otherwise 'multiple' would not be the genus of 'double.'

Again, you must see whether the species is not being used in the same relation in respect of the genus and in respect of all the genera of the genus. For if the double is a multiple of the half, that which is 'in excess of' will also be used of the half, and in general it will be used in respect of all the higher genera in relation to the half. (An objection may be raised that a term is not necessarily referred to the same thing when it is used *per se* and when it is used in respect of the genus ; for 'knowledge' is said to be of the 'knowable,' but is a 'state' or 'disposition' not of the 'knowable' but of the 'soul').

Again, you must see whether the genus and species are used in the same manner in respect of the inflexions which follow them, for example, as pertaining 'to' something, or predicated as being 'of' something, or in the other possible ways. For, as the species is predicated, so also is the genus, as, for example, in the case of the double and its higher

(i) In-
flexions

124 b

τὸ διπλάσιον καὶ τὸ πολλαπλάσιον. ὁμοίως δὲ
 125 a καὶ ἐπὶ τῆς ἐπιστήμης· τινὸς γὰρ καὶ αὐτὴ καὶ
 τὰ γένη, οἷον ἢ τε διάθεσις καὶ ἢ ἕξις. ἔνστασις
 ὅτι ἐνιαχοῦ οὐχ οὕτως· τὸ μὲν γὰρ διάφορον καὶ
 τὸ ἐναντίον τινί, τὸ δ' ἕτερον, γένος ὃν τούτων,
 οὐ τινὶ ἀλλὰ τινός· ἕτερον γὰρ τινος λέγεται.

5 Πάλιν εἰ ὁμοίως τὰ πρὸς τι κατὰ τὰς πτώσεις
 λεγόμενα μὴ ὁμοίως ἀντιστρέφει, καθάπερ ἐπὶ
 τοῦ διπλασίου καὶ τοῦ πολλαπλασίου. ἐκάτερον
 γὰρ τούτων τινὸς καὶ αὐτὸ καὶ κατὰ τὴν ἀντι-
 στροφὴν λέγεται· τινὸς γὰρ καὶ τὸ ἥμισυ καὶ τὸ
 πολλοστημόριον. ὡσαύτως δὲ καὶ ἐπὶ τῆς ἐπι-
 10 στήμης καὶ τῆς ὑπολήψεως· αὗται γὰρ τινος,
 καὶ ἀντιστρέφει ὁμοίως τό τε ἐπιστητὸν καὶ τὸ
 ὑποληπτὸν τινί. εἰ οὖν ἐπὶ τινων μὴ ὁμοίως
 ἀντιστρέφει, δῆλον ὅτι οὐ γένος θάτερον θατέρου.

Πάλιν εἰ μὴ πρὸς ἴσα τὸ εἶδος καὶ τὸ γένος
 15 λέγεται. ὁμοίως γὰρ καὶ ἰσαχῶς ἐκάτερον δοκεῖ
 λέγεσθαι, καθάπερ ἐπὶ τῆς δωρεᾶς καὶ τῆς δόσεως.
 ἢ τε γὰρ δωρεὰ τινὸς ἢ τινὶ λέγεται, καὶ ἢ δόσις
 τινὸς καὶ τινί. ἔστι δὲ ἢ δόσις γένος τῆς δωρεᾶς·
 ἢ γὰρ δωρεὰ δόσις ἐστὶν ἀναπόδοτος. ἐπ' ἐνίων
 δ' οὐ συμβαίνει πρὸς ἴσα λέγεσθαι· τὸ μὲν γὰρ
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genera ; for both the double and the multiple are predicated 'of' something. Similarly, too, in the case of 'knowledge' ; for both 'knowledge' itself and its genera, for example, 'disposition' and 'state,' are said to be 'of' something. It may be objected that sometimes this is not true ; for we say 'alien *to*' and 'contrary *to*,' but when we use 'different,' which is a genus of these terms, we add '*from*,' not '*to*' ; for we say 'different *from*.'

Again, you must see whether terms which are used in the same manner in respect of the inflexions which follow them do not take the same cases when they are converted, as is the case with 'double' and 'multiple' ; for each of these is said to be '*of*' something both in its original and in its converted form ; for one thing is both 'a half of' and 'a fraction of' something else. Likewise with 'knowledge' and 'conception' ; for these are followed by the genitive, and in the converted form 'knowable' and 'conceivable' are both alike followed by the dative. If, therefore, in any instance the converted forms do not take the same case, clearly the one is not the genus of the other.

Again, you must see whether the relative applica-
 tion of the species and of the genus extends to an
 equal number of things ; for it is generally held that
 the relative application of each is similar and co-
 extensive as in the case of 'gift' and 'giving.'
 For we speak of a gift *of* something or *to* someone,
 and of a giving *of* something and *to* someone ; and
 'giving' is the genus of 'gift,' for a 'gift' is a
 'giving which needs no giving in return.' But some-
 times the relative applications do not extend to an
 equal number of things ; for double is double *of*

(j) Equality
 of content
 of species
 and genus.

125 a

20 διπλάσιον τινὸς διπλάσιον, τὸ δ' ὑπερέχον καὶ τὸ
 μείζον τινὸς καὶ τινί· πᾶν γὰρ τὸ ὑπερέχον καὶ
 τὸ μείζον τινὶ ὑπερέχει καὶ τινὸς ὑπερέχει. ὥστ'
 οὐ γένη τὰ εἰρημένα τοῦ διπλασίου, ἐπειδὴ οὐ
 πρὸς ἴσα τῷ εἶδει λέγεται. ἢ οὐ καθόλου ἀληθὲς
 τὸ πρὸς ἴσα τὸ εἶδος καὶ τὸ γένος λέγεσθαι.

25 Ὅρᾶν δὲ καὶ εἰ τοῦ ἀντικειμένου τὸ ἀντικείμενον
 γένος, οἷον εἰ τοῦ διπλασίου τὸ πολλαπλάσιον καὶ
 τοῦ ἡμίσεος τὸ πολλοστημόριον· δεῖ γὰρ τὸ ἀντι-
 κείμενον τοῦ ἀντικειμένου γένος εἶναι. εἰ οὖν τις
 θεῖη τὴν ἐπιστήμην ὅπερ αἰσθῆσιν, δεήσει καὶ τὸ
 ἐπιστητὸν ὅπερ αἰσθητὸν εἶναι. οὐκ ἔστι δέ· οὐ
 30 γὰρ πᾶν τὸ ἐπιστητὸν αἰσθητόν· καὶ γὰρ τῶν
 νοητῶν ἔνια ἐπιστητά. ὥστ' οὐ γένος τὸ αἰσθητὸν
 τοῦ ἐπιστητοῦ. εἰ δὲ τοῦτο μή, οὐδ' αἰσθησις
 ἐπιστήμης.

Ἐπεὶ δὲ τῶν πρὸς τι λεγομένων τὰ μὲν ἐξ
 ἀνάγκης ἐν ἐκείνοις ἢ περὶ ἐκεῖνά ἐστι πρὸς ᾧ
 35 ποτε τυγχάνει λεγόμενα, οἷον ἢ διάθεσις καὶ ἢ
 ἕξις καὶ ἢ συμμετρία (ἐν ἄλλῳ γὰρ οὐδενὶ δυνατόν
 ὑπάρχειν τὰ εἰρημένα ἢ ἐν ἐκείνοις πρὸς ᾧ λέγεται),
 τὰ δ' οὐκ ἀνάγκη μὲν ἐν ἐκείνοις ὑπάρχειν πρὸς

TOPICA, IV. iv

something, but we speak of 'in excess' (or 'greater') 'of' (or 'than') something else; and 'in' something; for what is 'in excess' (or 'greater') is always in excess *in* something as well as in excess *of* something.^a So the above terms are not the genera of 'double,' since their relative application is not co-extensive with that of the species. Or perhaps it is not universally true that the relative application of the species and the genus extends to an equal number of things.

You must also see whether the opposite of the genus is the genus of the opposite of the species, for example, whether, if 'multiple' is the genus of 'double,' 'fraction' is also the genus of 'half'; for the opposite of the genus must be the genus of the opposite species. If, therefore, someone were to lay it down that knowledge is a kind of sense-perception, then also the object of knowledge will necessarily be a kind of object of sense-perception. But this is not so; for not every object of knowledge is an object of sensation, for some of the objects of intelligence are objects of knowledge. And so 'object of sensation' is not the genus of 'object of knowledge'; and, if this is true, neither is 'sensation' the genus of 'knowledge.'

Since of relative terms (a) some are necessarily found in, or employed about, those things in relation to which they happen at any time to be employed, for example, 'disposition,' 'state' and 'proportion' (for these terms cannot possibly exist anywhere else except in the things in relation to which they are employed), and (b) others do not necessarily exist in

(k) The opposite of the genus is the genus of the opposite of the species.

(l) The misuse of certain relative terms.

^a For the cases used with the verb *ὑπερέχειν* cf. Plato, *Tim.* 24 D πάντων . . . ὑπερέχει μέγεθος καὶ ἀρετῇ.

125 a

ἃ ποτε λέγεται, ἐνδέχεται δέ (οἷον εἰ ἐπιστητὸν ἢ ψυχὴ· οὐδὲν γὰρ κωλύει τὴν αὐτῆς ἐπιστήμην ἔχειν τὴν ψυχὴν, οὐκ ἀναγκαῖον δέ· δυνατὸν γὰρ

125 b

καὶ ἐν ἄλλῳ ὑπάρχειν τὴν αὐτὴν ταύτην), τὰ δ' ἀπλῶς οὐκ ἐνδέχεται ἐν ἐκείνοις ὑπάρχειν πρὸς ἃ ποτε τυγχάνει λεγόμενα (οἷον τὸ ἐναντίον ἐν τῷ ἐναντίῳ οὐδὲ τὴν ἐπιστήμην ἐν τῷ ἐπιστητῷ, ἐὰν μὴ τυγχάνῃ τὸ ἐπιστητὸν ψυχὴ ἢ ἄνθρωπος ὄν).

5 σκοπεῖν οὖν χρή, ἐάν τις εἰς γένος θῇ τὸ τοιοῦτον, <εἰ>¹ εἰς τὸ μὴ τοιοῦτον, οἷον εἰ τὴν μνήμην μονὴν ἐπιστήμης εἶπεν. πᾶσα γὰρ μονὴ ἐν τῷ μένοντι καὶ περὶ ἐκεῖνο, ὥστε καὶ ἡ τῆς ἐπιστήμης μονὴ ἐν τῇ ἐπιστήμῃ. ἡ μνήμη ἄρα ἐν τῇ ἐπιστήμῃ, ἐπειδὴ μονὴ τῆς ἐπιστήμης ἐστίν. τοῦτο δ' οὐκ
10 ἐνδέχεται· μνήμη γὰρ πᾶσα ἐν ψυχῇ. ἔστι δ' ὁ εἰρημένος τόπος καὶ πρὸς τὸ συμβεβηκὸς κοινός· οὐδὲν γὰρ διαφέρει τῆς μνήμης γένος τὴν μονὴν εἰπεῖν ἢ συμβεβηκέναι φάσκειν αὐτῇ τοῦτο· εἰ γὰρ ὅπως οὖν ἐστὶν ἡ μνήμη μονὴ ἐπιστήμης, ὁ αὐτὸς ἀρμόσει περὶ αὐτῆς λόγος.

15 V. Πάλιν εἰ τὴν ἕξιν εἰς τὴν ἐνέργειαν ἔθηκεν ἢ τὴν ἐνέργειαν εἰς τὴν ἕξιν, οἷον τὴν αἰσθησιν κίνησιν διὰ σώματος· ἡ μὲν γὰρ αἰσθησις ἕξις, ἡ δὲ κίνησις ἐνέργεια. ὁμοίως δὲ καὶ εἰ τὴν μνήμην

¹ εἰ added by W. S. Maguinness.

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those things in relation to which they are employed at any particular time, though they *may* so exist (for example, if the soul be called an 'object of knowledge'; for there is nothing to prevent the soul from having knowledge of itself, though it does not *necessarily* possess it, for it is possible for this same knowledge to exist elsewhere), and (c) others simply cannot exist in those things in relation to which they happen to be employed at any particular time, for example, the contrary cannot exist in the contrary nor knowledge in the object of knowledge, unless the object of knowledge happens to be a soul or a man. If, therefore, someone places a term of a certain kind within a genus, you must look and see whether he has placed it within a genus which is not of that kind, for example, if it has been stated that 'memory' is the 'permanency of knowledge.' For 'permanency' always exists in, and is concerned with, that which is permanent, so that the permanency of knowledge also exists in knowledge. Memory, then, exists in knowledge, since it is the permanency of knowledge; but this is impossible, for memory always exists in the soul. The above commonplace is common also to accident; for it makes no difference whether we say that permanency is the genus of memory or call it accidental to it; for, if memory is in any way the permanency of knowledge, the same argument about it will be applicable.

V. Again, you must see whether your opponent has placed a 'state' in the genus of 'activity' or an 'activity' in the genus of 'state,' for example, calling 'sensation' 'movement through the body'; for sensation is a 'state' while movement is an 'activity.' Likewise, too, if he has made 'memory' and 'state' and

Some common errors in predication:

(a) Confusion of 'state' and 'activity', and 'state' and 'capacity.'

125 b ἔξιν καθεκτικὴν ὑπολήψεως εἶπεν· οὐδεμία γὰρ μνήμη ἔξιν, ἀλλὰ μᾶλλον ἐνέργεια.

- 20 Διαμαρτάνουσι δὲ καὶ οἱ τὴν ἔξιν εἰς τὴν ἀκολουθοῦσαν δύναμιν τάττοντες, οἷον τὴν πραότητα ἐγκράτειαν ὀργῆς καὶ τὴν ἀνδρίαν καὶ τὴν δικαιοσύνην φόβων καὶ κερδῶν· ἀνδρείος μὲν γὰρ καὶ πρᾶος ὁ ἀπαθὴς λέγεται, ἐγκρατὴς δ' ὁ πάσχων καὶ μὴ ἀγόμενος. ἴσως μὲν οὖν ἀκολουθεῖ δύναμις
- 25 ἐκατέρῳ τοιαύτῃ, ὥστ' εἰ πάθοι, μὴ ἄγεσθαι ἀλλὰ κρατεῖν· οὐ μὴν τοῦτό γ' ἐστὶ τῷ μὲν ἀνδρείῳ τῷ δὲ πρᾶῳ εἶναι, ἀλλὰ τὸ ὅλως μὴ πάσχειν ὑπὸ τῶν τοιούτων μηδέν.

- Ἐνίστε δὲ καὶ τὸ παρακολουθοῦν ὅπως οὖν ὡς γένος τιθέασιν, οἷον τὴν λύπην τῆς ὀργῆς καὶ τὴν
- 30 ὑπόληψιν τῆς πίστεως. ἄμφω γὰρ τὰ εἰρημένα παρακολουθεῖ μὲν τρόπον τινὰ τοῖς ἀποδοθεῖσιν εἶδεσιν, οὐδέτερον δ' αὐτῶν γένος ἐστίν· ὁ μὲν γὰρ ὀργιζόμενος λυπεῖται προτέρας ἐν αὐτῷ τῆς λύπης γενομένης· οὐ γὰρ ἡ ὀργὴ τῆς λύπης, ἀλλ' ἡ λύπη τῆς ὀργῆς αἰτία, ὥσθ' ἀπλῶς ἡ ὀργὴ οὐκ
- 35 ἐστὶ λύπη. κατὰ ταῦτα δ' οὐδ' ἡ πίστις ὑπόληψις· ἐνδέχεται γὰρ τὴν αὐτὴν ὑπόληψιν καὶ μὴ πιστεύοντα ἔχειν. οὐκ ἐνδέχεται δ', εἴπερ εἶδος ἡ πίστις ὑπολήψεως· οὐ γὰρ ἐνδέχεται τὸ αὐτὸ ἔτι διαμένειν, ἄνπερ ἐκ τοῦ εἶδους ὅλως μεταβάλη, καθάπερ οὐδὲ τὸ αὐτὸ ζῶον ὅτε μὲν ἄνθρωπον
- 40 εἶναι ὅτε δὲ μή. ἂν δέ τις φῇ ἐξ ἀνάγκης τὸν
- 126 a ὑπολαμβάνοντα καὶ πιστεύειν, ἐπ' ἴσον ἢ ὑπό-

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' a state which can retain a conception ' ; for memory is never a ' state ' but rather an ' activity.'

They also err who range a ' state ' in the ' capacity ' which accompanies it, for example, making ' mildness ' ' the controlling of anger,' and ' courage ' and ' justice ' ' the controlling of fears ' and of ' gains ' respectively ; for ' courageous ' and ' mild ' are used of one who is free from passion, whereas a ' self-controlled ' man is one who is subject to passion but is not carried away by it. Now, perhaps each of the former is attended by a capacity of such a kind that, if he is subjected to a passion, he is not carried away by it but can control it ; this, however, is not to be ' courageous ' in the one case and ' mild ' in the other, but to be absolutely free from any such passion.

Sometimes also, people put down as genus that which is in any manner attendant on the species, making, for example, ' pain ' the genus of ' anger ' and ' conception ' the genus of ' belief ' ; for both in a sense are attendant on the species assigned, but neither of them is its genus. For when the angry man is pained, the pain has been produced in him before he is angry ; for the anger is not the cause of the pain but the pain of the anger ; so that anger simply is not pain. On this principle neither is belief conception ; for it is possible to have the same conception even without believing in it, whereas this is impossible if belief is a species of conception. For it is impossible for a thing still to remain the same if it is entirely removed from its species, just as neither can the same animal be a man at one time and not at another. But if anyone asserts that the man who has a conception must necessarily also believe in it, then conception and belief will be used

(b) Mistaken assumption that what is consequent upon species is genus.

ληψις καὶ ἡ πίστις ῥηθήσεται, ὥστ' οὐδ' ἂν οὕτως εἴη γένος· ἐπὶ πλέον γὰρ δεῖ λέγεσθαι τὸ γένος.

Ὅρᾶν δὲ καὶ εἰ ἐν τινι τῷ αὐτῷ πέφυκεν ἄμφω γίνεσθαι· ἐν ᾧ γὰρ τὸ εἶδος, καὶ τὸ γένος, οἶον
 5 ἐν ᾧ τὸ λευκόν, καὶ τὸ χρῶμα, καὶ ἐν ᾧ γραμματική, καὶ ἐπιστήμη. ἐὰν οὖν τις τὴν αἰσχύνην φόβον εἴπη ἢ τὴν ὀργὴν λύπην, οὐ συμβήσεται ἐν τῷ αὐτῷ τὸ εἶδος καὶ τὸ γένος ὑπάρχειν· ἡ μὲν γὰρ αἰσχύνη ἐν τῷ λογιστικῷ, ὁ δὲ φόβος ἐν τῷ θυμοειδεῖ, καὶ ἡ μὲν λύπη ἐν τῷ ἐπιθυμητικῷ
 10 (ἐν τούτῳ γὰρ καὶ ἡ ἡδονή), ἡ δὲ ὀργὴ ἐν τῷ θυμοειδεῖ, ὥστ' οὐ γένη τὰ ἀποδοθέντα, ἐπειδὴ οὐκ ἐν τῷ αὐτῷ τοῖς εἶδεσι πέφυκε γίνεσθαι. ὁμοίως δὲ καὶ εἰ ἡ φιλία ἐν τῷ ἐπιθυμητικῷ, οὐκ ἂν εἴη βούλησις τις· πᾶσα γὰρ βούλησις ἐν τῷ λογιστικῷ. χρήσιμος δ' ὁ τόπος καὶ πρὸς τὸ
 15 συμβεβηκός· ἐν τῷ αὐτῷ γὰρ τὸ συμβεβηκὸς καὶ ᾧ συμβέβηκεν, ὥστ' ἂν μὴ ἐν τῷ αὐτῷ φαίνεται, δῆλον ὅτι οὐ συμβέβηκεν.

Πάλιν εἰ κατὰ τι τὸ εἶδος τοῦ εἰρημένου γένους μετέχει· οὐ δοκεῖ γὰρ κατὰ τι μετέχεσθαι τὸ γένος· οὐ γάρ ἐστιν ὁ ἄνθρωπος κατὰ τι ζῶον, οὐδ' ἡ
 20 γραμματικὴ κατὰ τι ἐπιστήμη· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. σκοπεῖν οὖν εἰ ἐπὶ τινων κατὰ τι μετέχεται τὸ γένος, οἶον εἰ τὸ ζῶον ὅπερ αἰσθητὸν
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to cover the same ground, so that not even so could the one be the genus of the other, since the genus must cover a wider field of predication.

You must also see whether it is the nature of both to come into being in some one and the same thing ; for where the species is, there also is the genus ; for example, where there is 'whiteness,' there is also 'colour,' and, where there is the 'science of grammar,' there is also 'knowledge.' If, therefore, anyone says that 'shame' is 'fear' or that 'anger' is 'pain,' the result will be that the species and the genus do not exist in the same thing ; for shame exists in the 'reasoning' faculty of the soul, fear in the 'spirited' faculty, and 'pain' in the 'appetitive' faculty (for pleasure is also in this), anger in the 'spirited' faculty, so that the terms assigned are not genera, since it is not their nature to come into being in the same thing as the species. Similarly, too, if 'friendship' is in the 'appetitive' faculty, it cannot be a kind of 'wish' ; for a 'wish' is always in the 'reasoning' faculty. This commonplace is also useful in dealing with the accident ; for the accident and that of which it is an accident are both in the same thing, so that, if they do not appear in the same thing, it is obviously not a case of accident.

Again, you must see whether the species partakes only partially of the genus assigned ; for it is generally held that genus is not partially imparted ; for a man is not merely partially an animal nor is the science of grammar partially knowledge, and so likewise in the other instances. You must examine, therefore, whether in some cases the genus is only partially imparted, for example, if 'animal' has been described as an 'object of sensation' or an 'object

(c) Erroneous assumption of things which fall under different faculties as genus and species.

(d) Error of making the species partake only partially of the genus.

126 a

ἢ ὁρατὸν εἶρηται. κατὰ τι γὰρ αἰσθητὸν ἢ ὁρατὸν
 τὸ ζῶον· κατὰ τὸ σῶμα γὰρ αἰσθητὸν καὶ ὁρατόν,
 κατὰ δὲ τὴν ψυχὴν οὐ, ὥστ' οὐκ ἂν εἴη γένος τὸ
 25 ὁρατὸν καὶ τὸ αἰσθητὸν τοῦ ζώου.

Λανθάνουσι δ' ἐνίοτε καὶ τὸ ὅλον εἰς τὸ μέρος
 τιθέντες, οἷον τὸ ζῶον σῶμα ἔμφυχον. οὐδαμῶς
 δὲ τὸ μέρος τοῦ ὅλου κατηγορεῖται, ὥστ' οὐκ ἂν
 εἴη τὸ σῶμα γένος τοῦ ζώου, ἐπειδὴ μέρος ἐστίν.

30 'Ορᾶν δὲ καὶ εἴ τι τῶν ψεκτῶν ἢ φευκτῶν εἰς
 δύναμιν ἢ τὸ δυνατόν ἔθηκεν, οἷον τὸν σοφιστὴν
 ἢ διάβολον ἢ κλέπτην τὸν δυνάμενον λάθρα ἀλλότρια
 κλέπτειν.¹ οὐδεὶς γὰρ τῶν εἰρημένων τῷ δυνατός
 εἶναί τι τούτων τοιοῦτος λέγεται· δύναται μὲν
 35 γὰρ καὶ ὁ θεὸς καὶ ὁ σπουδαῖος τὰ φαῦλα δρᾶν,
 ἀλλ' οὐκ εἰσὶ τοιοῦτοι· πάντες γὰρ οἱ φαῦλοι κατὰ
 προαίρεσιν λέγονται. ἔτι πᾶσα δύναμις τῶν
 αἵρετῶν· καὶ γὰρ αἱ τῶν φαύλων δυνάμεις αἵρεταί,
 διὸ καὶ τὸν θεὸν καὶ τὸν σπουδαῖον ἔχειν φαμέν
 αὐτάς· δυνατοὺς γὰρ εἶναι τὰ φαῦλα πράσσειν.
 126 b ὥστ' οὐδενὸς ἂν εἴη ψεκτοῦ γένος ἢ δυνάμεις. εἰ
 δὲ μή, συμβήσεται τῶν ψεκτῶν τι αἵρετὸν εἶναι·
 ἔσται γάρ τις δύναμις ψεκτή.

Καὶ εἴ τι τῶν δι' αὐτὸ τιμίων ἢ αἵρετῶν εἰς
 5 δύναμιν ἢ τὸ δυνατόν ἢ τὸ ποιητικὸν ἔθηκεν. πᾶσα

¹ Reading with AB δυνάμενον λάθρα ἀλλότρια κλέπτειν.

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of sight.' For an animal is only in part an object of sensation or of sight ; for it is an object of sensation and sight as regards its body but not as regards its soul ; so that 'object of sight' and 'object of sensation' cannot be the genus of 'animal.'

Sometimes too people unobservedly put the whole within the part, describing, for example, 'animal' as 'animated body.' But the part is not in any way predicable of the whole, so that 'body' cannot be the genus of 'animal,' for it is a part only.

You must also see whether your opponent has put anything blameworthy or to be avoided in the category of 'capacity' or 'capable,' for example, in his definition of a sophist or a slanderer, or a thief whom he describes as capable of secretly stealing the good of others. For none of the above is described by his particular name because he is 'capable' in one of these respects ; for even God and the good man are capable of doing bad deeds, but God and man are not of that character ; for the wicked are always so called because of their deliberate choice of evil. Furthermore, a capacity is always among the things worthy of choice, for even capacities for evil are worthy of choice ; and so we say that God and the good man possess them, for we say that they are capable of doing evil. Therefore capacity cannot be the genus of anything blameworthy ; otherwise the result will be that something blameworthy is an object of choice, for there will be a kind of capacity which is blameworthy.

You must also see whether he has placed anything which is in itself valuable or worthy of choice in the category of 'capacity' or 'the capable' or 'the productive.' For every capacity and everything

(e) Error of taking part of the species as genus.

(f) Error of referring what is blameworthy to a capacity.

(g) Placing in the category of capacity what is in itself desirable.

γὰρ δύναμις καὶ πᾶν τὸ δυνατόν ἢ τὸ ποιητικὸν δι' ἄλλο αἰρετόν.

Ἡ εἴ τι τῶν ἐν δύο γένεσιν ἢ πλείοσιν εἰς θάτερον ἔθηκεν. ἔνια γὰρ οὐκ ἔστιν εἰς ἐν γένος θεῖναι, οἷον τὸν φένακα καὶ τὸν διάβολον· οὔτε
 10 γὰρ ὁ προαιρούμενος ἀδυνατῶν δέ, οὔθ' ὁ δυνάμενος μὴ προαιρούμενος δὲ διάβολος ἢ φέναξ, ἀλλ' ὁ ἄμφω ταῦτα ἔχων. ὥστ' οὐ θετέον εἰς ἐν γένος ἀλλ' εἰς ἀμφοτέρα τὰ εἰρημένα.

Ἐτι ἐνίετε ἀνάπαλιν τὸ μὲν γένος ὡς διαφορὰν τὴν δὲ διαφορὰν ὡς γένος ἀποδιδύασιν, οἷον τὴν
 15 ἔκπληξιν ὑπερβολὴν θαυμασιότητος καὶ τὴν πίστιν σφοδρότητα ὑπολήψεως. οὔτε γὰρ ἡ ὑπερβολὴ οὔθ' ἡ σφοδρότης γένος, ἀλλὰ διαφορά· δοκεῖ γὰρ ἡ ἔκπληξις θαυμασιότης εἶναι ὑπερβάλλουσα καὶ ἡ πίστις ὑπόληψις σφοδρά, ὥστε γένος ἡ θαυμασιότης καὶ ἡ ὑπόληψις, ἡ δ' ὑπερβολὴ καὶ ἡ σφο-
 20 δρότης διαφορά. ἔτι εἴ τις τὴν ὑπερβολὴν καὶ σφοδρότητα ὡς γένος ἀποδώσει, τὰ ἄψυχα πιστεύσει καὶ ἐκπλαγήσεται. ἡ γὰρ ἐκάστου σφοδρότης καὶ ὑπερβολὴ πάρεστιν ἐκείνῳ οὗ ἐστὶ σφοδρότης καὶ ὑπερβολή. εἰ οὖν ἡ ἔκπληξις ὑπερβολὴ ἐστὶ θαυμασιότητος, παρέσται τῇ θαυ-
 25 μασιότητι ἡ ἔκπληξις, ὥστ' ἡ θαυμασιότης ἐκπλαγήσεται. ὁμοίως δὲ καὶ ἡ πίστις παρέσται τῇ ὑπολήψει, εἴπερ σφοδρότης ὑπολήψεώς ἐστιν, ὥστε ἡ ὑπόληψις πιστεύσει. ἔτι συμβήσεται τῷ
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capable or productive is worthy of choice for the sake of something else.

Or again, you must see whether he has placed something which falls under two or more genera in one of them only. For there are some things which cannot be placed in one genus only, for example, the 'imposter' and the 'slanderer.' For neither is he who possesses the inclination but not the ability, nor he who possesses the ability but not the inclination, a slanderer or an imposter, but he who has the ability and the inclination. He must, therefore, be placed not in one genus only but in both the above genera.

(h) Placing in only one genus that which falls under several genera.

Moreover, by a process of inversion, people sometimes assign genus as differentia and differentia as genus, calling, for example, 'amazement' an 'excess of astonishment' and 'belief' an 'intensification of opinion.' For 'excess' and 'intensification' are not the genus but the differentia; for amazement is generally regarded as excessive astonishment and belief as intensified opinion, so that astonishment and opinion are the genus, while excess and intensification are the differentia. Further, if excess and intensification are to be assigned as genus, inanimate things will believe and be amazed. For the intensification and excess of any particular thing are present in that of which they are the intensification and excess. If, therefore, amazement is an excess of astonishment, the amazement will be present in the astonishment, so that the astonishment will be amazed. Similarly also the belief will be present in the opinion, since it is the intensification of the opinion; and so the opinion will believe. Further, the result of making an assertion of this kind will

(i) Error of assigning genus as differentia and vice versa.

οὕτως ἀποδιδόντι σφοδρότητα σφοδρὰν λέγειν καὶ
 ὑπερβολὴν ὑπερβάλλουσιν. ἔστι γὰρ πίστις σφο-
 30 δρά· εἰ οὖν ἡ πίστις σφοδρότης ἐστί, σφοδρότης
 ἂν εἴη σφοδρά. ὁμοίως δὲ καὶ ἔκπληξις ἐστὶν
 ὑπερβάλλουσα· εἰ οὖν ἡ ἔκπληξις ὑπερβολή ἐστίν,
 ὑπερβολὴ ἂν εἴη ὑπερβάλλουσα. οὐ δοκεῖ δ'
 οὐδέτερον τούτων, ὥσπερ οὐδ' ἐπιστήμη ἐπιστήμον¹
 οὐδὲ κίνησις κινούμενον.

Ἐνίοτε δὲ διαμαρτάνουσι καὶ τὸ πάθος εἰς γένος
 35 τὸ πεπονθὸς τιθέντες, οἷον ὅσοι τὴν ἀθανασίαν
 ζωὴν αἰδιὸν φασὶν εἶναι· πάθος γάρ τι ζωῆς ἢ
 σύμπτωμα ἢ ἀθανασία ἔοικεν εἶναι. ὅτι δ' ἀληθές
 τὸ λεγόμενον, δῆλον ἂν γένοιτο, εἴ τις συγχωρήσειεν
 ἐκ θνητοῦ τινὰ ἀθάνατον γίνεσθαι· οὐδεὶς γὰρ φήσει
 ἑτέραν αὐτὸν ζωὴν λαμβάνειν, ἀλλὰ σύμπτωμά τι
 127 a ἢ πάθος αὐτῇ ταύτῃ παραγενέσθαι. ὥστ' οὐ γένος
 ἢ ζωὴ τῆς ἀθανασίας.

Πάλιν εἰ τοῦ πάθους, οὐ ἐστὶ πάθος, ἐκείνο γένος
 φασὶν εἶναι, οἷον τὸ πνεῦμα ἀέρα κινούμενον.
 5 μᾶλλον γὰρ κίνησις ἀέρος τὸ πνεῦμα· ὁ γὰρ αὐτὸς
 ἀῆρ διαμένει, ὅταν τε κινῆται καὶ ὅταν μένη. ὥστ'
 οὐκ ἔστιν ὅλως ἀῆρ τὸ πνεῦμα· ἦν γὰρ ἂν καὶ
 μὴ κινουμένου τοῦ ἀέρος πνεῦμα, εἴπερ ὁ αὐτὸς
 ἀῆρ διαμένει ὥσπερ ἦν πνεῦμα. ὁμοίως δὲ καὶ
 ἐπὶ τῶν ἄλλων τῶν τοιούτων. εἰ δ' ἄρα καὶ ἐπὶ
 10 τούτου δεῖ συγχωρήσαι ὅτι ἀῆρ ἐστὶ κινούμενος
 τὸ πνεῦμα, ἀλλ' οὐτι κατὰ πάντων τὸ τοιοῦτον
 ἀποδεκτέον καθ' ὧν μὴ ἀληθεύεται τὸ γένος, ἀλλ'
 ἐφ' ὅσων ἀληθῶς κατηγορεῖται τὸ ἀποδοθὲν γένος.
 ἐπ' ἐνίων γὰρ οὐ δοκεῖ ἀληθεύεσθαι, οἷον ἐπὶ τοῦ

¹ Reading ἐπιστήμον with C.

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be to call intensification intensified and excess excessive. For belief is intensified ; if, therefore, belief is intensification, intensification would be intensified. Similarly, too, amazement is excessive ; if, therefore, amazement is excess, excess would be excessive. But neither of these things accords with current belief any more than that knowledge is a knowing thing or motion a moving thing.

Sometimes too, people err in placing an affection in that which has been affected, as its genus, for example, those who say that immortality is everlasting life ; for immortality seems to be an affection or accidental property of life. That this description is true would be clearly seen if one were to concede that a man can become immortal after having been mortal ; for no one will say that he is taking on another life, but that an accidental property or affection is added to life as it is. Life, therefore, is not the genus of immortality.

Again, you must see whether they are asserting that the genus of an affection is that of which it is an affection, for example, when they say that the wind is ' air in motion.' For wind is rather ' motion of air,' for the same air remains both when it is in motion and when it is at rest. And so wind is not air at all ; otherwise there would be wind even when the air was not in motion, since the same air which was wind still remains. Similarly, too, in the other cases of this kind. But if after all we must in this case concede that the wind is air in motion, yet we ought not to accept such a statement with regard to everything of which the genus is not truly asserted but only where the genus assigned is truly predicated. For in some cases, for example ' mud'

(j) Error of making the thing affected the genus of the affection.

(k) Error of making the object affected the genus of the affection.

127 a

πηλοῦ καὶ τῆς χιόνος. τὴν μὲν γὰρ χιόνα φασὶν
 15 ὕδωρ εἶναι πεπηγός, τὸν δὲ πηλὸν γῆν ὑγρῷ
 πεφυραμένην· ἔστι δ' οὐθ' ἢ χιὼν ὕδωρ οὐθ' ὁ
 πηλὸς γῆ, ὥστ' οὐκ ἂν εἴη γένος οὐδέτερον τῶν
 ἀποδοθέντων· δεῖ γὰρ τὸ γένος ἀληθεύεσθαι αἰεὶ
 κατὰ τῶν εἰδῶν. ὁμοίως δ' οὐδ' ὁ οἶνός ἐστιν
 ὕδωρ σεσηπός, καθάπερ Ἐμπεδοκλῆς φησὶ σαπὲν
 ἐν ξύλῳ ὕδωρ· ἀπλῶς γὰρ οὐκ ἔστιν ὕδωρ.

20 VI. Ἐτι εἰ ὅλως τὸ ἀποδοθὲν μηδενός ἐστι
 γένος· δηλὸν γὰρ ὡς οὐδὲ τοῦ λεχθέντος. σκοπεῖν
 δ' ἐκ τοῦ μηδὲν διαφέρειν εἶδει τὰ μετέχοντα τοῦ
 ἀποδοθέντος γένους, οἶον τὰ λευκά· οὐδὲν γὰρ
 διαφέρει τῷ εἶδει ταῦτ' ἀλλήλων. παντὸς δὲ
 γένους ἐστὶ τὰ εἶδη διάφορα, ὥστ' οὐκ ἂν εἴη τὸ
 25 λευκὸν γένος οὐδενός.

Πάλιν εἰ τὸ πᾶσιν ἀκολουθοῦν γένος ἢ διαφορὰν
 εἶπεν. πλείω γὰρ τὰ πᾶσιν ἐπόμενα, οἶον τὸ
 ὄν καὶ τὸ ἐν τῶν πᾶσιν ἐπομένων ἐστίν. εἰ οὖν
 τὸ ὄν γένος ἀπέδωκε, δηλὸν ὅτι πάντων ἂν εἴη
 30 γένος, ἐπειδὴ κατηγορεῖται αὐτῶν· κατ' οὐδενός
 γὰρ τὸ γένος ἄλλ' ἢ κατὰ τῶν εἰδῶν κατηγορεῖται.
 ὥστε καὶ τὸ ἐν εἶδος ἂν εἴη τοῦ ὄντος. συμβαίνει
 οὖν κατὰ πάντων, ὧν τὸ γένος κατηγορεῖται, καὶ
 τὸ εἶδος κατηγορεῖσθαι, ἐπειδὴ τὸ ὄν καὶ τὸ ἐν

and 'snow,' it does not seem to be truly asserted. For they describes now as 'congealed water,' and mud as 'earth mingled with moisture'; but neither is snow water nor mud earth, so that neither of the terms assigned could be the genus; for the genus must always be truly asserted of every species. Similarly, neither is wine 'putrefied water,' as Empedocles speaks of 'water putrefied in wood'^a; for it simply is not water at all.

VI. Furthermore, you must see whether the term assigned is not the genus of anything at all; for then obviously it is not the genus of the species named. You must make your examination on the basis of an absence of any difference in species between the things which partake of the genus assigned, for example, white objects; for these do not differ at all from one another specifically, whereas the species of a genus are always different from one another; so that 'white' could not be the genus of anything.

Again, you must see whether your opponent has asserted that some attribute which accompanies everything is genus or differentia. For there are several attributes which accompany everything; 'being,' for example, and 'oneness' are among the attributes which accompany everything. If, then, he has assigned 'being' as a genus, obviously it would be the genus of everything, since it is predicated of everything; for the genus is not predicated of anything except its species. Hence 'oneness' too would be a species of 'being.' It results, therefore, that the species also is predicated of everything of which the genus is predicated, since 'being' and 'oneness' are predicated of absolutely everything,

Various Rules:

(a) The proposed genus must contain subject species.

(b) An attribute which is universally present cannot be taken as genus or differentia.

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κατὰ πάντων ἀπλῶς κατηγορεῖται, δέον ἐπ' ἑλατ-
 35 τον τὸ εἶδος κατηγορεῖσθαι. εἰ δὲ τὸ πᾶσιν
 ἐπόμενον διαφορὰν εἶπε, δῆλον ὅτι ἐπ' ἴσον ἢ ἐπὶ
 πλεόν ἢ διαφορὰ τοῦ γένους ῥηθήσεται. εἰ μὲν
 γὰρ καὶ τὸ γένος τῶν πᾶσιν ἐπομένων, ἐπ' ἴσον,
 εἰ δὲ μὴ πᾶσιν ἔπεται τὸ γένος, ἐπὶ πλεόν ἢ
 διαφορὰ λέγοιτ' ἂν αὐτοῦ.

127 b

Ἔτι εἰ ἐν ὑποκειμένῳ τῷ εἶδει τὸ ἀποδοθὲν
 γένος λέγεται, καθάπερ τὸ λευκὸν ἐπὶ τῆς χιόνος,
 ὥστε δῆλον ὅτι οὐκ ἂν εἴη γένος· καθ' ὑποκειμένου
 γὰρ τοῦ εἶδους μόνον τὸ γένος λέγεται.

5 Σκοπεῖν δὲ καὶ εἰ μὴ συνώνυμον τὸ γένος τῷ
 εἶδει· κατὰ πάντων γὰρ τῶν εἰδῶν συνωνύμως τὸ
 γένος κατηγορεῖται.

Ἔτι ὅταν ὄντος καὶ τῷ εἶδει καὶ τῷ γένει
 ἐναντίου τὸ βέλτιον τῶν ἐναντίων εἰς τὸ χεῖρον
 10 γένος θῇ· συμβήσεται γὰρ τὸ λοιπὸν ἐν τῷ λοιπῷ
 εἶναι, ἐπειδὴ τὰναντία ἐν τοῖς ἐναντίοις γένεσιν,
 ὥστε τὸ βέλτιον ἐν τῷ χείρονι ἔσται καὶ τὸ χεῖρον
 ἐν τῷ βελτίονι· δοκεῖ δὲ τοῦ βελτίονος καὶ τὸ
 γένος βέλτιον εἶναι. καὶ εἰ τοῦ αὐτοῦ εἶδους
 ὁμοίως πρὸς ἄμφω ἔχοντος εἰς τὸ χεῖρον καὶ μὴ
 15 εἰς τὸ βέλτιον γένος ἔθηκεν, οἷον τὴν ψυχὴν ὅπερ
 κίνησιν ἢ κινούμενον. ὁμοίως γὰρ ἢ αὕτῃ στατικῇ

whereas the species ought to be less widely predicated. If, however, he has asserted that the attribute which accompanies everything is a differentia, it is obvious that the differentia will be predicated to an extent equal to, or greater than, the genus. For if the genus also is one of the attributes which accompany everything, the differentia would be predicated to an equal extent, but, if the genus does not accompany everything, to a greater extent than the genus.

Furthermore, you must see whether the genus assigned is said to be inherent in the subject species as 'white' is in the case of snow, so that it is obvious that it cannot be the genus; for the genus is only predicated of the subject species.

(c) The genus cannot be inherent in the subject species.

You must also see whether the genus is not synonymous with the species; for the genus is always predicated of the species synonymously.

(d) The genus and the species are predicated synonymously.

Further, there is the case when, both the species and the genus having a contrary, your opponent places the better of the contrary species in the worse genus; for this will result in the other species being placed in the other genus, since contraries are found in contrary genera, so that the better species will be found in the worse genus and the worse species in the better genus, whereas it is generally held that the genus of the better species is also better. You must also see whether, when the same species is similarly related to both, your opponent has placed it in the worse and not in the better genus, saying, for example, that the 'soul' is 'a kind of motion' or 'a moving thing.' For the same soul is generally regarded as being in like manner a principle of rest and a principle of motion;

(e) The better of two contraries must not be assigned to the worse genus.

127 b

καὶ κινητικὴ δοκεῖ εἶναι, ὥστ' εἰ βέλτιον ἢ στάσις,
εἰς τοῦτο ἔδει τὸ γένος θεῖναι.

Ἔτι ἐκ τοῦ μᾶλλον καὶ ἥττον, ἀνασκευάζοντι
μέν, εἰ τὸ γένος δέχεται τὸ μᾶλλον, τὸ δ' εἶδος
20 μὴ δέχεται μήτ' αὐτὸ μήτε τὸ κατ' ἐκείνο λεγόμενον.
οἷον εἰ ἡ ἀρετὴ δέχεται τὸ μᾶλλον, καὶ ἡ
δικαιοσύνη καὶ ὁ δίκαιος· λέγεται γὰρ δικαιότερος
ἕτερος ἑτέρου. εἰ οὖν τὸ μὲν ἀποδοθὲν γένος τὸ
μᾶλλον δέχεται, τὸ δ' εἶδος μὴ δέχεται μήτ' αὐτὸ
μήτε τὸ κατ' ἐκείνο λεγόμενον, οὐκ ἂν εἴη γένος
25 τὸ ἀποδοθὲν.

Πάλιν εἰ τὸ μᾶλλον δοκοῦν ἢ ὁμοίως μὴ ἐστὶ
γένος, δῆλον ὅτι οὐδὲ τὸ ἀποδοθὲν. χρήσιμος δ'
ὁ τόπος ἐπὶ τῶν τοιούτων μάλιστα ἐφ' ὧν πλείω
φαίνεται τοῦ εἵδους ἐν τῷ τί ἐστὶ κατηγορούμενα,
30 καὶ μὴ διώριστα, μηδ' ἔχομεν εἰπεῖν ποῖον αὐτῶν
γένος, οἷον τῆς ὀργῆς καὶ ἡ λύπη καὶ ἡ ὑπόληψις
ὀλιγωρίας ἐν τῷ τί ἐστὶ κατηγορεῖσθαι δοκεῖ.
λυπεῖται τε γὰρ ὁ ὀργιζόμενος καὶ ὑπολαμβάνει
ὀλιγωρεῖσθαι. ἡ αὐτὴ δὲ σκέψις καὶ ἐπὶ τοῦ εἵδους
πρὸς ἄλλο τι συγκρίνοντι· εἰ γὰρ τὸ μᾶλλον ἢ τὸ
35 ὁμοίως δοκοῦν εἶναι ἐν τῷ ἀποδοθέντι γένει μὴ
ἐστὶν ἐν τῷ γένει, δῆλον ὅτι οὐδὲ τὸ ἀποδοθὲν εἶδος
εἴη ἂν ἐν τῷ γένει.

Ἀναιροῦντι μὲν οὖν καθάπερ εἴρηται χρηστέον·
κατασκευάζοντι δέ, εἰ μὲν ἐπιδέχεται τὸ μᾶλλον
128 a τό τε ἀποδοθὲν γένος καὶ τὸ εἶδος, οὐ χρήσιμος

so that, if rest is better, it ought to have been placed in this as its genus.

Further, you must argue from the greater and less degrees. For destructive criticism, you should see whether the genus admits of the greater degree, while neither the species itself nor anything which is named after it does so. For example, if virtue admits of the greater degree, 'justice' and 'the just man' do so also; for one man is called 'more just' than another. If, therefore, the genus assigned admits of the greater degree but neither the species itself nor anything which is named after it admits of it, the term assigned cannot be the genus.

(f) Arguments from the greater or less and equal degrees.

(1) In destructive criticism.

Again, if what is more generally or equally generally held to be the genus is not the genus, obviously neither is the term assigned the genus. This commonplace is useful especially when several things are clearly predicable of the species in the category of essence and no distinction has been made between them and we cannot say which of them is genus. For example, both 'pain' and the 'conception of contempt' are generally regarded as predicates of 'anger' in the category of essence; for the angry man both feels pain and conceives that he is contemned. The same inquiry is also applicable in the case of the species by means of a comparison with some other species; for, if what is more generally or equally generally held to be in the assigned genus is not present in the genus, obviously neither could the species assigned be present in the genus.

In destructive criticism, then, the above method should be employed; but for constructive purposes the commonplace of seeing whether both the assigned genus and the species admit of the greater

(2) In constructive argument.

ὁ τόπος· οὐδέν γὰρ κωλύει ἀμφοτέρων ἐπιδεχο-
 μένων μὴ εἶναι θάτερον θατέρου γένος. τό τε
 γὰρ καλὸν καὶ τὸ λευκὸν ἐπιδέχεται τὸ μᾶλλον,
 καὶ οὐδέτερον οὐδετέρου γένος. ἡ δὲ τῶν γενῶν
 5 καὶ τῶν εἰδῶν πρὸς ἄλληλα σύγκρισις χρήσιμος,
 οἷον εἰ ὁμοίως τόδε καὶ τόδε γένος, εἰ θάτερον
 γένος, καὶ θάτερον. ὁμοίως δὲ καὶ εἰ τὸ ἥττον
 καὶ τὸ μᾶλλον, οἷον εἰ τῆς ἐγκρατείας μᾶλλον ἢ
 δύναμις ἢ ἡ ἀρετὴ γένος, ἢ δ' ἀρετὴ γένος, καὶ
 ἡ δύναμις. τὰ δ' αὐτὰ καὶ ἐπὶ τοῦ εἴδους ἀρμόσει
 10 λέγεσθαι. εἰ γὰρ ὁμοίως τόδε καὶ τόδε τοῦ προ-
 κειμένου εἶδος, εἰ θάτερον εἶδος, καὶ τὸ λοιπόν·
 καὶ εἰ τὸ ἥττον δοκοῦν εἶδός ἐστι, καὶ τὸ μᾶλλον.

Ἔτι πρὸς τὸ κατασκευάζειν σκεπτέον εἰ καθ'
 ὧν ἀπεδόθη τὸ γένος, ἐν τῷ τί ἐστι κατηγορεῖται,
 15 μὴ ὄντος ἐνὸς τοῦ ἀποδοθέντος εἴδους, ἀλλὰ
 πλειόνων καὶ διαφόρων· δηλὸν γὰρ ὅτι γένος ἔσται.
 εἰ δ' ἐν τὸ ἀποδοθὲν εἶδός ἐστι, σκοπεῖν εἰ καὶ
 κατ' ἄλλων εἰδῶν τὸ γένος ἐν τῷ τί ἐστι κατη-
 γορεῖται· πάλιν γὰρ συμβήσεται κατὰ πλειόνων
 καὶ διαφόρων αὐτὸ κατηγορεῖσθαι.

20 Ἐπεὶ δὲ δοκεῖ τισὶ καὶ ἡ διαφορὰ ἐν τῷ τί ἐστι
 τῶν εἰδῶν κατηγορεῖσθαι, χωριστέον τὸ γένος

degree is of no use ; for, even though they both admit of it, there is nothing to prevent one not being the genus of the other. For both ' beautiful ' and ' white ' admit of the greater degree, and neither is the genus of the other. The comparison, however, of the genera and the species with one another is useful ; for example, if A and B have equal claim to be regarded as genera, then, if one is a genus, so also is the other. Similarly, too, if the less degree is a genus, so also is the greater degree ; for example, if ' capacity ' has more claim than ' virtue ' to be considered the genus of ' self control,' and ' virtue ' is the genus, so also is ' capacity.' The same considerations will be suitably applied also to the species. For if A and B have equal claim to be regarded as species of the proposed genus, then, if one is a species, so also is the other ; also, if that which is less generally held to be a species, is a species, so also is that which is more generally held to be so.

Further, for constructive purposes, you must examine whether the genus has been predicated in the category of essence of those things to which it has been assigned, in the case where the species assigned is not a single species but there are several different species ; for then it will obviously be the genus. If, however, the species assigned is a single species, you must examine whether the genus is predicated in the category of essence of other species also ; for then, again, the result will be that it is predicated of several different species.

Since some people hold that the differentia also is predicated of the species in the category of essence, the genus must be distinguished from the

(g) The genus must be predicated in the category of essence.

(h) Method of distinguishing genus and differentia

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ἀπὸ τῆς διαφορᾶς χρώμενον τοῖς εἰρημένοις
στοιχείοις, πρῶτον μὲν ὅτι τὸ γένος ἐπὶ πλεόν
λέγεται τῆς διαφορᾶς· εἴθ' ὅτι κατὰ τὴν τοῦ τί
ἐστὶν ἀπόδοσιν μᾶλλον ἀρμόττει τὸ γένος ἢ τὴν
25 διαφορὰν εἰπεῖν· ὁ γὰρ ζῶον εἶπας τὸν ἄνθρωπον
μᾶλλον δηλοῖ τί ἐστὶν ὁ ἄνθρωπος ἢ ὁ πεζόν· καὶ
ὅτι ἡ μὲν διαφορὰ ποιότητα τοῦ γένους ἀεὶ ση-
μαίνει, τὸ δὲ γένος τῆς διαφορᾶς οὐ· ὁ μὲν γὰρ
εἶπας πεζὸν ποιόν τι ζῶον λέγει, ὁ δὲ ζῶον εἶπας
οὐ λέγει ποιόν τι πεζόν.

30 Τὴν μὲν οὖν διαφορὰν ἀπὸ τοῦ γένους οὕτω
χωριστέον. ἐπεὶ δὲ δοκεῖ <εἶ>¹ τὸ μουσικόν, ἢ
μουσικόν ἐστὶν, ἐπιστήμὸν τί ἐστι² καὶ ἡ μουσικὴ
ἐπιστήμη τις εἶναι, καὶ εἰ τὸ βαδίζον τῷ βαδίζειν
κινεῖται, ἡ βάδις κίνησις τις εἶναι, σκοπεῖν ἐν
ᾧ ἂν γένει βούλῃ τι κατασκευάσαι, τὸν εἰρημένον
35 τρόπον, οἷον εἰ τὴν ἐπιστήμην ὅπερ πίστιν, εἰ ὁ
ἐπιστάμενος ἢ ἐπίσταται πιστεύει· δῆλον γὰρ ὅτι
ἡ ἐπιστήμη πίστις ἂν τις εἴη. τὸν αὐτὸν δὲ τρόπον
καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων.

Ἔτι ἐπεὶ τὸ παρεπόμενόν τινι ἀεὶ καὶ μὴ ἀντι-
στρέφον χαλεπὸν χωρίσαι τοῦ μὴ γένος εἶναι, ἂν
128 b τόδε μὲν τῷδ' ἔπεται παντί, τόδε δὲ τῷδε μὴ
παντί, οἷον τῇ νηνεμία ἢ ἡρεμία καὶ τῷ ἀριθμῷ

¹ εἶ add. Imelmann.² Reading τί ἐστι for τι εἶναι with Imelmann.

differentia by the use of the elementary principles already mentioned, namely, (1) that the genus is more widely predicated than the differentia ; (2) that, in assigning the essence, it is more appropriate to state the genus than the differentia ; for he who describes ' man ' as an ' animal ' indicates his essence better than he who describes him as ' pedestrian ' ; and (3) that the differentia always indicates a quality of the genus, whereas the genus does not describe a quality of the differentia ; for he who uses the term ' pedestrian ' describes a certain kind of animal, but he who uses the term ' animal ' does not describe a certain kind of ' pedestrian.'

This, then, is how the differentia must be distinguished from the genus. Now, since it is generally held that, if that which is musical, in as much as it is musical, possesses a certain kind of knowledge, then also ' music ' is a kind of ' knowledge,' and that if that which walks moves by walking, then ' walking ' is a kind of ' motion '—you should examine on the principle described above any genus in which you wish to confirm the presence of something ; for example, if you wish to confirm that ' knowledge ' is a kind of ' belief,' you must see whether the man who knows, in as much as he knows, believes ; for then it is obvious that knowledge would be a kind of belief. And you must use the same method in the other cases of this kind.

Practical
examples.

Further, since it is difficult to distinguish that which always accompanies a thing and is not convertible with it and to show that it is not its genus—if A always accompanies B whereas B does not always accompany A ; for example, ' rest ' always accompanies ' calm,' and ' divisibility ' accompanies

τὸ διαιρετόν, ἀνάπαλιν δ' οὐ (τὸ γὰρ διαιρετόν οὐ
 πᾶν ἀριθμός, οὐδ' ἡ ἡρεμία νηνεμία), αὐτὸν μὲν
 χρῆσθαι ὡς γένους ὄντος τοῦ ἀεὶ ἀκολουθοῦντος,
 5 ὅταν μὴ ἀντιστρέφῃ θάτερον, ἄλλου δὲ προτεί-
 νοντος μὴ ἐπὶ πάντων ὑπακούειν. ἔνστασις δ'
 αὐτοῦ ὅτι τὸ μὴ ὄν ἔπεται παντὶ τῷ γινομένῳ
 (τὸ γὰρ γινόμενον οὐκ ἔστι) καὶ οὐκ ἀντιστρέφει
 (οὐ γὰρ πᾶν τὸ μὴ ὄν γίνεται), ἀλλ' ὅμως οὐκ
 ἔστι γένος τὸ μὴ ὄν τοῦ γινομένου· ἀπλῶς γὰρ
 οὐκ ἔστι τοῦ μὴ ὄντος εἶδη.

10 Περὶ μὲν οὖν τοῦ γένους, καθάπερ εἴρηται,
 μετιτέον.

'number,' but the converse is not true (for the divisible is not always a number, nor is rest always a calm)—you should yourself deal with the matter on the principle that what always accompanies a thing is the genus whenever the other is not convertible with it ; but, when someone else makes the proposition, you should not admit it in every case. To this it may be objected that 'not-being' always accompanies 'that which is coming into being' (for that which is coming into being does not exist) and is not convertible with it (for what does not exist is not always coming into being), but that, nevertheless, 'not-being' is not the genus of 'that which is coming into being,' for 'not-being' has no species at all.

Such, then, are the methods which must be followed in dealing with genus.

Ε

128 b 14 I. Πότερον δ' ἴδιον ἢ οὐκ ἴδιόν ἐστι τὸ εἰρημένον,
15 διὰ τῶνδε σκεπτέον.

Ἀποδίδεται δὲ τὸ ἴδιον ἢ καθ' αὐτὸ καὶ αἰεὶ ἢ
πρὸς ἕτερον καὶ ποτέ, οἷον καθ' αὐτὸ μὲν ἀνθρώ-
που τὸ ζῶον ἡμερον φύσει, πρὸς ἕτερον δὲ οἷον
ψυχῆς πρὸς σῶμα, ὅτι τὸ μὲν προστακτικὸν τὸ
δ' ὑπηρετικὸν ἐστίν, αἰεὶ δὲ οἷον θεοῦ τὸ ζῶον
20 ἀθάνατον, ποτέ δ' οἷον τοῦ τινὸς ἀνθρώπου τὸ
περιπατεῖν ἐν τῷ γυμνασίῳ.

Ἔστι δὲ τὸ πρὸς ἕτερον ἴδιον ἀποδιδόμενον ἢ
δύο προβλήματα ἢ τέτταρα. ἐὰν μὲν γὰρ τοῦ μὲν
ἀποδῶ τοῦ δ' ἀρνήσῃται ταῦτ' οὗτο, δύο μόνον
προβλήματα γίνονται, καθάπερ τὸ ἀνθρώπου πρὸς
25 ἵππον ἴδιον ὅτι δίπουν ἐστίν. καὶ γὰρ ὅτι ἄνθρωπος
οὐ δίπουν ἐστίν ἐπιχειροῖ τις ἄν, καὶ ὅτι ὁ ἵππος
δίπουν· ἀμφοτέρως δ' ἂν κινοῖ τὸ ἴδιον. ἐὰν δ'
ἐκατέρου ἐκάτερον ἀποδῶ καὶ ἐκατέρου ἀπαρνηθῇ,
τέτταρα προβλήματα ἔσται, καθάπερ τὸ ἀνθρώπου
30 ἴδιον πρὸς ἵππον, ὅτι τὸ μὲν δίπουν τὸ δὲ τετρά-
πουν ἐστίν. καὶ γὰρ ὅτι ἄνθρωπος οὐ δίπουν
καὶ ὅτι τετράπουν πέφυκεν ἔστιν ἐπιχειρεῖν, καὶ
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BOOK V

I. WHETHER the attribute assigned is a *property* or not must be examined on the following principles :

Property is assigned either *essentially and permanently* or *relatively and temporarily*. For example, it is an essential property of man to be 'by nature a civilized animal.' A relative property may be exemplified by the relation of the soul to the body, namely, that the former gives orders and the latter obeys. An example of a permanent property is that of God as 'an immortal living being,' of a temporary property that of a particular man as 'walking about in a gymnasium.'

(C) OF
PRO-
PERTY
(BOOK V).
The four
kinds of
property.

The assignment of a property relatively produces either two or four problems. If the disputant assigns it to one thing and denies it of another, two problems only arise ; for example, when it is stated as the property of a man in relation to a horse that he is a biped. For someone might argue that man is not a biped and that a horse is a biped ; by both these statements he would seek to remove the property. But if he assigns one of two attributes to each of two things and denies it of the other, there will be four problems ; for example, when he says that the property of a man in relation to a horse is that one is a biped and the other a quadruped. For then it is possible to argue that man is not a biped and that it is his nature to be

διότι ὁ ἵππος δίπουν καὶ διότι οὐ τετράπουν οἶόν τ' ἐπιχειρεῖν. ὅπως δ' οὖν δειχθέντος ἀναιρεῖται τὸ προκείμενον.

Ἔστι δὲ τὸ μὲν καθ' αὐτὸ ἴδιον ὁ πρὸς ἅπαντα
 35 ἀποδίδεται καὶ παντὸς χωρίζει, καθάπερ ἀνθρώπου τὸ ζῶον θνητὸν ἐπιστήμης δεκτικόν. τὸ δὲ πρὸς ἕτερον ὁ μὴ ἀπὸ παντὸς ἀλλ' ἀπὸ τινος τακτοῦ διορίζει, καθάπερ ἀρετῆς πρὸς ἐπιστήμην, ὅτι τὸ μὲν ἐν πλείοσι, τὸ δ' ἐν λογιστικῷ μόνον καὶ τοῖς ἔχουσι λογιστικὸν πέφυκε γίνεσθαι. τὸ δ' αἰεὶ ὁ
 129 a κατὰ πάντα χρόνον ἀληθεύεται καὶ μηδέποτε ἀπολείπεται, καθάπερ τοῦ ζώου τὸ ἐκ ψυχῆς καὶ σώματος συγκείμενον. τὸ δὲ ποτὲ ὁ κατὰ τινα χρόνον ἀληθεύεται καὶ μὴ ἐξ ἀνάγκης αἰεὶ παρέπε-
 5 ται, καθάπερ τοῦ τινὸς ἀνθρώπου τὸ περιπατεῖν ἐν ἀγορᾷ.

Ἔστι δὲ τὸ πρὸς ἄλλο ἴδιον ἀποδοῦναι τὸ διαφορὰν εἰπεῖν ἢ ἐν ᾗ πασι καὶ αἰεὶ ἢ ὥς ἐπὶ τὸ πολὺ καὶ ἐν τοῖς πλείστοις, οἷον ἐν ᾗ πασι μὲν καὶ αἰεὶ, καθάπερ τὸ ἀνθρώπου ἴδιον πρὸς ἵππον
 10 ὅτι δίπουν· ἄνθρωπος μὲν γὰρ καὶ αἰεὶ καὶ πᾶς ἐστὶ δίπους, ἵππος δ' οὐδεὶς ἐστὶ δίπους οὐδέποτε. ὥς ἐπὶ τὸ πολὺ δὲ καὶ ἐν τοῖς πλείστοις, καθάπερ τὸ λογιστικοῦ ἴδιον πρὸς ἐπιθυμητικὸν καὶ θυμικὸν τῷ τὸ μὲν προστάττειν τὸ δ' ὑπηρετεῖν· οὔτε γὰρ
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a quadruped, and it is also open to him to argue that the horse is a biped and that it is not a quadruped. If he can prove any one of these statements, the proposed attribute is destroyed.

An *essential* property is one which is assigned to something in contrast to everything else and sets a thing apart from everything else, for example, the property of man as 'a mortal living creature receptive of knowledge.' A *relative* property is one which distinguishes a thing not from everything else but from some specified thing; for example, the property of virtue in relation to knowledge is that it is the nature of the former to come into being in a number of faculties, of the latter to come into being in the reasoning faculty only and in creatures possessing that faculty. A *permanent* property is one which is true at all times and never fails; for example, that of a living creature that it is 'composed of soul and body.' A *temporary* property is one which is true at a particular time and is not always a necessary accompaniment, for example, that of a particular man as 'walking about in the market-place.'

To assign a property to something relatively to something else is to assert a difference between them either universally and permanently or usually and in the majority of cases. As an example of a universal and permanent difference we may take the property of man in relation to a horse, that he is a biped; for man is always and in every case a biped, whereas no horse is ever a biped. A difference which is found usually and in most cases is exemplified in the property possessed by the reasoning faculty in relation to the appetitive and spirited faculty, namely, that the former commands while the latter serves; for

129 a

τὸ λογιστικὸν πάντοτε προστάττει, ἀλλ' ἐνίοτε
καὶ προστάττεται, οὔτε τὸ ἐπιθυμητικὸν καὶ θυ-
15 μικὸν ἀεὶ προστάττεται, ἀλλὰ καὶ προστάττει
ποτέ, ὅταν ἢ μοχθηρὰ ἢ ψυχὴ τοῦ ἀνθρώπου.

Τῶν δ' ἰδίων ἐστὶ λογικὰ μάλιστα τά τε καθ'
αὐτὰ καὶ ἀεὶ καὶ τὰ πρὸς ἕτερον. τὸ μὲν γὰρ πρὸς
ἕτερον ἴδιον πλείω προβλήματα ἐστὶ, καθάπερ
20 εἴπομεν καὶ πρότερον· ἢ γὰρ δύο ἢ τέτταρα ἐξ
ἀνάγκης γίνονται τὰ προβλήματα· πλείους οὖν οἱ
λόγοι γίνονται πρὸς ταῦτα. τὸ δὲ καθ' αὐτὸ καὶ
τὸ ἀεὶ πρὸς πολλὰ ἐστὶν ἐπιχειρεῖν ἢ πρὸς πλείους
χρόνους παρατηρεῖν, τὸ μὲν καθ' αὐτὸ πρὸς πολλὰ·
πρὸς ἕκαστον γὰρ τῶν ὄντων δεῖ ὑπάρχειν αὐτῷ
25 τὸ ἴδιον, ὥστ' εἰ μὴ πρὸς ἅπαντα χωρίζεται, οὐκ
ἂν εἶη καλῶς ἀποδοστέον τὸ ἴδιον. τὸ δ' ἀεὶ
πρὸς πολλοὺς χρόνους τηρεῖν· κἂν γὰρ εἰ μὴ
ὑπάρχει κἂν εἰ μὴ ὑπῆρξε κἂν εἰ μὴ ὑπάρξει, οὐκ
ἔσται ἴδιον. τὸ δὲ ποτέ οὐκ ἐν ἄλλοις ἢ πρὸς τὸν
νῦν λεγόμενον χρόνον ἐπισκοποῦμεν· οὐκ οὐκ εἰσὶ
30 λόγοι πρὸς αὐτὸ πολλοί. λογικὸν δὲ τοῦτ' ἐστὶ
πρόβλημα πρὸς ὃ λόγοι γένοιντ' ἂν καὶ συχνοὶ
καὶ καλοί.

Τὸ μὲν οὖν πρὸς ἕτερον ἴδιον ῥηθὲν ἐκ τῶν περὶ
τὸ συμβεβηκὸς τόπων ἐπισκεπτέον ἐστίν, εἰ τῷ
μὲν συμβέβηκε τῷ δὲ μὴ συμβέβηκεν· περὶ δὲ
35 τῶν ἀεὶ καὶ τῶν καθ' αὐτὸ διὰ τῶνδε θεωρητέον.

^a See 128 b 22 ff.

neither does the reasoning faculty always command but is also sometimes commanded, nor is the appetitive and spirited faculty always commanded but also sometimes commands, when a man's soul is depraved.

Of properties those which are most suitable for arguments are the essential and the permanent and the relative. For a relative property, as we have already said,^a produces several problems; for the problems which arise are necessarily either two or four in number and, therefore, the arguments which arise in connexion with them are several. The essential and the permanent can be discussed in relation to a number of things and can be observed in relation to several periods of time. The essential can be discussed in contrast with a number of things; for the property must necessarily belong to it as contrasted with everything else that exists, and so, if the subject is not set apart by it in relation to everything else, the property cannot have been duly assigned. The permanent must be observed in relation to many periods of time; for if it does not at present exist, or, if it has not existed in the past, or if it is not going to exist in the future, it will not be a property at all. On the other hand, we examine the temporary only in relation to what we call present time; there are not, therefore, many arguments about it, whereas a problem suitable for argument is one about which numerous good arguments may arise.

Suitability of each of the four kinds of property for discussion:

What, then, has been called a relative property must be examined by means of the commonplaces about accident, to see whether it has happened to one thing but not to another; but permanent and essential properties must be viewed on the principles which now follow.

129 b Π. Πρῶτον μὲν εἰ μὴ καλῶς ἀποδέδοται τὸ ἴδιον ἢ καλῶς. τοῦ δὲ μὴ καλῶς ἢ καλῶς ἐστὶν ἓν μὲν, εἰ μὴ διὰ γνωριμωτέρων ἢ γνωριμωτέρων κείται τὸ ἴδιον, ἀνασκευάζοντα μὲν εἰ μὴ διὰ
 5 γνωριμωτέρων, κατασκευάζοντα δὲ εἰ διὰ γνωριμωτέρων. τοῦ δὲ μὴ διὰ γνωριμωτέρων ἐστὶ τὸ μὲν, εἰ ὅλως ἀγνωστότερόν ἐστι τὸ ἴδιον ὃ ἀποδίδωσι τούτου οὗ τὸ ἴδιον εἴρηκεν· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. γνώσεως γὰρ ἔνεκα τὸ ἴδιον ποιούμεθα· διὰ γνωριμωτέρων οὖν ἀποδοτέον· οὕτω γὰρ ἔσται κατανοεῖν ἱκανῶς μᾶλλον. οἷον
 10 ἐπεὶ ὁ θεὸς πυρὸς ἴδιον εἶναι τὸ ὁμοιότατον ψυχῇ ἀγνωστοτέρῳ κέχρηται τοῦ πυρὸς τῇ ψυχῇ (μᾶλλον γὰρ ἴσμεν τί ἐστι πῦρ ἢ ψυχή), οὐκ ἂν εἴη καλῶς κείμενον ἴδιον πυρὸς τὸ ὁμοιότατον ψυχῇ. τὸ δ', εἰ μὴ γνωριμωτέρον ἐστι τόδε τῷδ' ὑπάρχον. δεῖ γὰρ μὴ μόνον εἶναι γνωριμώτερον τοῦ πράγ-
 15 ματος, ἀλλὰ καὶ ὅτι τῷδ' ὑπάρχει¹ γνωριμώτερον ὑπάρχειν.² ὁ γὰρ μὴ εἰδὼς εἰ τῷδ' ὑπάρχει, οὐδ' εἰ τῷδ' ὑπάρχει μόνῳ γνωριεῖ, ὥσθ' ὁποτέρου τούτων συμβάντος ἀσαφὲς γίνεται τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς πυρὸς ἴδιον τὸ ἐν ᾧ πρώτῳ ψυχῇ

¹ Reading ὑπάρχει with Wallies.

² Reading ὑπάρχειν with Wallies.

II. First, you must see whether the property has been rightly or wrongly assigned. One criterion of the rightness or wrongness of its assignment is to see whether the property is stated in terms which are less comprehensible or more comprehensible—in destructive criticism whether they are less comprehensible, in constructive argument whether they are more so. To prove that the terms are less comprehensible, one method is to see whether in general the property which your opponent assigns is less comprehensible than the subject of which he has stated it to be the property; for then the property will not have been rightly stated. For it is for the sake of comprehension that we introduce the property; therefore it must be assigned in more comprehensible terms, for it will thus be possible to understand it more adequately. For example, a man who has asserted that it is a property of 'fire' 'to be very like the soul,' in using the term 'soul' has employed something which is less comprehensible than fire (for we know better what 'fire' is than what 'soul' is), and so it would not be a correct statement of the property of fire to say that it is 'very like the soul.' Another method is to see whether the property is not more comprehensibly attributed to the subject; for not only ought the property to be more comprehensible than the subject, but it ought to be more comprehensible that it is attributed to the subject. For anyone who does not know whether it is an attribute of the subject, will also not know whether it is the attribute of that subject alone, so that, whichever of these two things occurs, the property becomes a matter of obscurity. For example, a man who has stated that it is a property of 'fire'

Methods of testing whether a property has been correctly assigned:
 (a) The property must be more evident than its subject.

πέφυκεν εἶναι ἀγνωστοτέρῳ κέχρηται τοῦ πυρὸς
 20 τῷ εἰ ἐν τούτῳ ὑπάρχει ψυχὴ καὶ εἰ ἐν πρώτῳ
 ὑπάρχει, οὐκ ἂν εἴη καλῶς κείμενον ἴδιον πυρὸς
 τὸ ἐν ᾧ πρώτῳ ψυχὴ πέφυκεν εἶναι. κατασκευά-
 ζοντα δὲ εἰ διὰ γνωριμωτέρων κείται τὸ ἴδιον, καὶ
 εἰ διὰ γνωριμωτέρων καθ' ἑκάτερον τῶν τρόπων.
 ἔσται γὰρ καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον.
 25 τῶν γὰρ κατασκευαστικῶν τρόπων τοῦ καλῶς οἱ
 μὲν κατὰ τοῦτο μόνον οἱ δ' ἀπλῶς δείξουσιν ὅτι
 καλῶς. οἷον ἐπεὶ ὁ εἶπας ζῶου ἴδιον τὸ αἰσθησιν
 ἔχειν διὰ γνωριμωτέρων καὶ γνωριμώτερον ἀπο-
 δέδωκε τὸ ἴδιον καθ' ἑκάτερον τῶν τρόπων, εἴη
 ἂν καλῶς ἀποδοδεκόμενον κατὰ τοῦτο τοῦ ζώου
 ἴδιον τὸ αἰσθησιν ἔχειν.
 30 Ἐπειτ' ἀνασκευάζοντα μὲν εἴ τι τῶν ὀνομάτων
 τῶν ἐν τῷ ἰδίῳ ἀποδοδεκόμενων πλεοναχῶς λέγεται
 ἢ καὶ ὅλος ὁ λόγος πλείω σημαίνει· οὐ γὰρ ἔσται
 καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ τὸ αἰσθάνεσθαι
 πλείω σημαίνει, ἐν μὲν τὸ αἰσθησιν ἔχειν ἐν δὲ τὸ
 35 αἰσθήσει χρῆσθαι, οὐκ ἂν εἴη τοῦ ζώου ἴδιον καλῶς
 130 a κείμενον τὸ αἰσθάνεσθαι πεφυκός. διὰ τοῦτο δ'
 οὐ χρηστότεον ἐστὶν οὗτ' ὀνόματι πλεοναχῶς λεγο-

to be 'that in which the soul by nature primarily exists' has brought in a consideration which is less comprehensible than fire, by raising the question whether the soul exists in it and whether it exists in it primarily; and so it could not have been rightly asserted as a property of fire that it is 'that in which the soul by nature primarily exists.' For constructive argument, on the other hand, you must see whether the property is stated in terms which are more comprehensible and whether they are more comprehensible in each of the two ways. For then the property will have been correctly stated in this respect; for of the commonplaces used to support the correctness of the assignment, some will show that it is correctly assigned in this respect only, others that it is correctly assigned absolutely. For example, the man who has asserted as the property of a 'living creature' that it is 'possessed of sensation' has both employed more comprehensible terms and made the property more comprehensible in each of the two ways; and so to be 'possessed of sensation' would in this respect have been correctly assigned as a property of 'living creature.'

In the next place, for destructive argument, you must see whether any of the terms assigned in the property is employed in several senses, or whether the whole expression also has more than one signification; for if so, the property will not have been correctly stated. For example, since 'to be sentient' signifies more than one thing, namely, (a) 'to be possessed of sensation' and (b) 'to exercise sensation,' 'to be by nature sentient' would not be correctly assigned as a property of 'living creature.' Therefore, one must not use as signifying property either a word or an

(b) The assignment of a property is subverted: (1) If the term used has several significations.

- μένω οὔτε λόγῳ τῷ τὸ ἴδιον σημαίνοντι, διότι τὸ
 πλεοναχῶς λεγόμενον ἀσαφές ποιεῖ τὸ ῥηθέν,
 ἀποροῦντος τοῦ μέλλοντος ἐπιχειρεῖν πότερον λέγει
 5 τῶν πλεοναχῶς λεγομένων· τὸ γὰρ ἴδιον τοῦ
 μαθεῖν χάριν ἀποδίδεται. ἔτι δὲ πρὸς τούτοις
 ἀναγκαῖόν ἐστιν ἔλεγχόν τινα γίνεσθαι τοῖς οὕτως
 ἀποδιδούσι τὸ ἴδιον, ὅταν ἐπὶ τοῦ διαφωνοῦντός
 τις ποιῇ τὸν συλλογισμόν τοῦ πλεοναχῶς λεγομένου.
 κατασκευάζοντα δὲ εἰ μὴ πλείω σημαίνει μήτε
 10 τῶν ὀνομάτων μηδὲν μήθ' ὅλος ὁ λόγος· ἔσται
 γὰρ καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον. οἶον
 ἐπεὶ οὔτε τὸ σῶμα πολλὰ δηλοῖ οὔτε τὸ εὐκίνη-
 τότατον εἰς τὸν ἄνω τόπον οὔτε τὸ σύνολον τὸ ἐκ
 τούτων συντιθέμενον, εἴη ἂν καλῶς κείμενον κατὰ
 τοῦτο πυρὸς ἴδιον σῶμα τὸ εὐκίνητότατον εἰς
 τὸν ἄνω τόπον.
- 15 "Ἐπειτ' ἀνασκευάζοντα μὲν εἰ πλεοναχῶς λέ-
 γεται τοῦτο οὗ τὸ ἴδιον ἀποδίδωσι, μὴ διώρισται
 δὲ τὸ τίνος αὐτῶν ἴδιον τίθησιν· οὐ γὰρ ἔσται
 καλῶς ἀποδεδομένον τὸ ἴδιον. δι' ἧς δ' αἰτίας,
 οὐκ ἄδηλόν ἐστιν ἐκ τῶν πρότερον εἰρημένων·
 τὰ γὰρ αὐτὰ συμβαίνειν ἀναγκαῖόν ἐστιν. οἶον
 20 ἐπεὶ τὸ ἐπίστασθαι τοῦτο πολλὰ σημαίνει (τὸ μὲν
 γὰρ ἐπιστήμην ἔχειν αὐτό, τὸ δ' ἐπιστήμη χρῆσθαι
 αὐτό, τὸ δ' ἐπιστήμην εἶναι αὐτοῦ, τὸ δ' ἐπιστήμη
 χρῆσθαι αὐτοῦ), οὐκ ἂν εἴη τοῦ ἐπίστασθαι τοῦτο

expression which is used with several meanings, because anything which has several meanings renders the statement obscure, since he who is about to argue is doubtful which of the various meanings his opponent is using ; for the property is assigned in order to promote understanding. Further, besides this, an opportunity is necessarily offered to refute those who assign the property in this way, by basing one's syllogism on the irrelevant meaning of a term used in several senses. In constructive argument, on the other hand, you must see whether any of the terms or the expression as a whole does not bear more than one meaning ; for the property will then be correctly asserted in this respect. For example, since neither ' body,' nor ' that which most easily moves upwards,' nor the whole expression made up by putting the two terms together has more than one meaning, it would be correct in this respect to assert that it is a property of fire that it is ' the body which most easily moves upwards.'

In the next place, for destructive criticism, you must see whether the term to which your opponent is assigning the property is used in several senses but no distinction has been made as to which of them it is whose property he asserts it to be ; for then the property will not have been correctly assigned. The reason for this is quite obvious from what has already been said ; for the results must necessarily be the same. For example, since ' knowledge of this ' signifies several different things—for it means (*a*) that it has knowledge, (*b*) that it uses knowledge, (*c*) that there is knowledge of it and (*d*) that there is use of the knowledge of it—no property of ' knowledge of this ' could be correctly assigned unless it has been

(2) If there is a multifarious predication of the subject.

130 a

καλῶς ἴδιον ἀποδεδομένον μὴ διορισθέντος τοῦ
 τίνος τίθησιν αὐτῶν τὸ ἴδιον. κατασκευάζοντα
 25 δὲ εἰ μὴ λέγεται πολλαχῶς τοῦτο οὐ τὸ ἴδιον
 τίθησιν, ἀλλ' ἔστιν ἓν καὶ ἀπλοῦν· ἔσται γὰρ
 καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ
 ἄνθρωπος λέγεται ἓν, εἴη ἂν καλῶς κείμενον κατὰ
 τοῦ ἀνθρώπου ἴδιον τὸ ζῶον ἡμερον φύσει.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ πλεονάκεις εἴρηται
 30 τὸ αὐτὸ ἐν τῷ ἰδίῳ. πολλάκις γὰρ λανθάνουσι
 τοῦτο ποιοῦντες καὶ ἐν τοῖς ἰδίοις, καθάπερ καὶ
 ἐν τοῖς ὅροις. οὐκ ἔσται δὲ καλῶς κείμενον τὸ
 τοῦτο πεπονθὸς ἴδιον· ταραττει γὰρ τὸν ἀκούοντα
 πλεονάκεις λεχθέν· ἀσαφὲς οὖν ἀναγκαῖόν ἐστι γίνε-
 σθαι, καὶ πρὸς τούτοις ἀδολεσχεῖν δοκοῦσιν.
 35 ἔσται δὲ συμπίπτον τὸ πλεονάκεις εἰπεῖν τὸ αὐτὸ
 κατὰ δύο τρόπους, καθ' ἓνα μὲν ὅταν ὀνομάσῃ
 πλεονάκεις τὸ αὐτό, καθάπερ εἴ τις ἴδιον ἀποδοίῃ
 πυρὸς σῶμα τὸ λεπτότατον τῶν σωμάτων (οὗτος
 γὰρ πλεονάκεις εἴρηκε τὸ σῶμα), δεύτερον δ' ἂν
 τις μεταλαμβάνῃ τοὺς λόγους ἀντὶ τῶν ὀνομάτων,

130 b καθάπερ εἴ τις ἀποδοίῃ γῆς ἴδιον οὐσία ἢ μάλιστα
 κατὰ φύσιν φερομένη τῶν σωμάτων εἰς τὸν κάτω
 τόπον, ἔπειτα μεταλάβοι ἀντὶ τῶν σωμάτων τὸ
 οὐσιῶν τοιωνδί· ἐν γὰρ καὶ ταυτόν ἐστι σῶμα
 καὶ οὐσία τοιαδί. ἔσται γὰρ οὗτος τὸ οὐσία
 5 πλεονάκεις εἰρηκῶς, ὥστ' οὐδέτερον ἂν εἴη καλῶς
 κείμενον τῶν ἰδίων. κατασκευάζοντα δὲ εἰ μηδενὶ
 χρῆται πλεονάκεις ὀνόματι τῷ αὐτῷ· ἔσται γὰρ

definitely stated of which of these meanings the property is being asserted. For constructive argument one must see if that of which one is stating the property does not bear several meanings, but is one and single ; for then the property will be correctly stated in this respect. For example, since ' man ' is used in only one sense, ' animal by nature civilized ' would be correctly stated as a property in the case of ' man.'

Next, for destructive criticism, you must see whether the same term has been used more than once in describing the property ; for, without it being noticed, people often do this in describing properties, just as they do in definitions also. A property to which this has occurred will not be correctly stated ; for frequent repetition confuses the hearer, and this necessarily causes obscurity, and, besides, an impression of nonsense is created. Repetition will be likely to occur in two ways ; firstly, when a man uses the same word more than once—for example, when he assigns to ' fire ' the property of being ' the body which is lightest of bodies ' (for he has used the word body more than once)— ; secondly, when he puts definitions in place of words ; for instance if he were to assign to ' earth ' the property of being ' the substance which most of all bodies tends by its nature to be carried downwards ' and were then to replace ' bodies ' by ' substances of a certain kind ' ; for ' body ' and ' substance of a certain kind ' are one and the same thing. He will thus have repeated the term ' substance,' and so neither of the properties would be correctly stated. For constructive argument, on the other hand, one must see whether he avoids using the same term more than once ; for

(3) If the same term is used more than once in describing the property.

κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ ἴδιον. οἷον
 ἐπεὶ ὁ εἶπας ἀνθρώπου ἴδιον ζῶον ἐπιστήμης
 δεκτικὸν οὐ κέχρηται τῷ αὐτῷ πολλάκις ὀνόματι,
 10 εἴη ἂν κατὰ τοῦτο καλῶς ἀποδεδομένον τοῦ ἀν-
 θρώπου τὸ ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τοιοῦτόν τι ἀπο-
 δέδωκεν ἐν τῷ ἰδίῳ ὄνομα, ὃ πᾶσιν ὑπάρχει. ἀ-
 χρεῖον γὰρ ἔσται τὸ μὴ χωρίζον ἀπὸ τινων, τὸ δ'
 ἐν τοῖς ἰδίοις λεγόμενον χωρίζειν δεῖ, καθάπερ
 15 καὶ τὰ ἐν τοῖς ὅροις· οὐκ οὐκ ἔσται καλῶς κείμενον
 τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ἐπιστήμης ἴδιον ὑπό-
 ληψιν ἀμετάπειστον ὑπὸ λόγου, ἐν ᾧ, τοιούτῳ
 τινὶ κέχρηται ἐν τῷ ἰδίῳ τῷ ἐνὶ ᾧ πᾶσιν ὑπάρχει,
 οὐκ ἂν εἴη καλῶς κείμενον τὸ τῆς ἐπιστήμης
 ἴδιον. κατασκευάζοντα δὲ εἰ μηδενὶ κέχρηται
 κοινῷ, ἀλλ' ἀπὸ τινος χωρίζοντι· ἔσται γὰρ καλῶς
 20 κείμενον κατὰ τοῦτο τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας
 ζῶον ἴδιον τὸ ψυχὴν ἔχειν οὐδενὶ κέχρηται κοινῷ,
 εἴη ἂν κατὰ τοῦτο καλῶς κείμενον ζῶον ἴδιον τὸ
 ψυχὴν ἔχειν.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ πλείω ἴδια ἀπο-
 δίδωσι τοῦ αὐτοῦ, μὴ διορίσας ὅτι πλείω τίθησιν·
 25 οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. καθάπερ

then the property will have been correctly assigned in this respect. For example, he who has stated as a property of man that he is 'a living creature receptive of knowledge' has not used the same word more than once, and so the property of man would be in this respect correctly assigned.

Next, for destructive criticism, you must see whether he has assigned in the property any term which has a universal application, (for anything which does not distinguish the subject from any other things will be useless, but what is stated in properties, like what is stated in definitions, must make a distinction) and so the property will not be correctly assigned. For example, he who has laid down as a property of 'knowledge' that it is 'a conception which cannot be changed by argument, because it is one,' has made use in the property of a term, namely, the 'one,' of such a kind as to be universally applicable, and so the property of knowledge cannot have been correctly assigned. For constructive purposes, on the other hand, you must see if he has used, not a common term, but one which distinguishes the subject from something else; for then the property will have been correctly assigned in this respect. For example, he who has said that 'the possession of a soul' is a property of 'living creature' has not used any common term, and so 'the possession of a soul' would in this respect be correctly assigned as a property of 'living creature.'

Next, for destructive criticism, see whether your opponent assigns more than one property to the same thing without definitely stating that he is laying down more than one; for then the property will not have been correctly stated. For, just as in definitions

(4) If the term assigned has universal application.

(5) If many properties are assigned to the same thing without distinction.

130 b

γὰρ οὐδ' ἐν τοῖς ὅροις δεῖ παρὰ τὸν δηλοῦντα λόγον
 τὴν οὐσίαν προσκεῖσθαι τι πλεόν, οὕτως οὐδ' ἐν
 τοῖς ἰδίῳ παρὰ τὸν ποιοῦντα λόγον ἴδιον τὸ ῥηθὲν
 οὐδὲν προσαποδοτέον· ἀχρεῖον γὰρ γίνεται τὸ
 τοιοῦτον. οἷον ἐπεὶ ὁ εἶπας ἴδιον πυρὸς σῶμα τὸ
 30 λεπτότατον καὶ κουφότατον πλείω ἀποδέδωκεν
 ἴδια (ἐκάτερον γὰρ κατὰ μόνου τοῦ πυρὸς ἀληθές
 ἐστὶν εἰπεῖν), οὐκ ἂν εἴη καλῶς κείμενον ἴδιον
 πυρὸς σῶμα τὸ λεπτότατον καὶ κουφότατον.
 κατασκευάζοντα δ' εἰ μὴ πλείω τοῦ αὐτοῦ τὰ
 ἴδια ἀποδέδωκεν, ἀλλ' ἐν· ἔσται γὰρ κατὰ τοῦτο
 35 καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας ὑγροῦ
 ἴδιον σῶμα τὸ εἰς ἅπαν σχῆμα ἀγόμενον ἐν ἀπο-
 δέδωκε τὸ ἴδιον ἀλλ' οὐ πλείω, εἴη ἂν κατὰ τοῦτο
 καλῶς κείμενον τὸ τοῦ ὑγροῦ ἴδιον.

III. Ἐπειτ' ἀνασκευάζοντα μὲν εἰ αὐτῷ προσ-
 κέχρηται οὗ τὸ ἴδιον ἀποδίδωσιν, ἢ τῶν αὐτοῦ
 131 a τινί· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. τοῦ
 γὰρ μαθεῖν χάριν ἀποδίδεται τὸ ἴδιον· αὐτὸ μὲν
 οὖν αὐτῷ ὁμοίως ἄγνωστόν ἐστι, τὸ δέ τι τῶν
 αὐτοῦ ὕστερον· οὐκ οὐν ἐστὶ γνωριμώτερον. ὥστ'
 οὐ γίνεται διὰ τούτων μᾶλλον τι μαθεῖν. οἷον
 5 ἐπεὶ ὁ εἶπας ζώου ἴδιον οὐσίαν ἥς εἰδός ἐστιν

also nothing more ought to be added beyond the expression which shows the essence, so too in properties nothing ought to be assigned beyond the expression which makes up the property which is asserted ; for such a proceeding proves useless. For example, a man who has said that it is a property of ' fire ' to be ' the most subtle and lightest body ' has assigned more than one property (for it is true to predicate each of these terms of fire alone), and so ' the most subtle and lightest body ' would not be correctly stated as a property of fire. For constructive argument, on the other hand, you must see if the properties which your opponent has assigned to the same thing are not several but he has assigned only one ; for then the property will be correctly stated in this respect. For example, a man who has said that it is a property of ' liquid ' to be ' a body which can be induced to assume any shape ' has assigned one thing and not more than one as its property, and so the property of liquid would in this respect be correctly stated.

III. Next, for destructive criticism, you must see whether he has introduced either the actual subject whose property he is rendering or something belonging to it ; for then the property will not be correctly stated. For the property is assigned to promote understanding ; the subject, then, itself is as incomprehensible as ever, while anything that belongs to it is posterior to it and, therefore, not more comprehensible, and so the result of this method is not to understand the subject any better. For example, he who has said that it is a property of ' living creature ' to be ' a substance of which man is a species ' has introduced something which belongs

(6) If the actual subject is contained in the assigned property.

131 a

ἄνθρωπος τινὶ προσκέχρηται τῶν τούτου, οὐκ ἂν
 εἷη καλῶς κείμενον τὸ ἴδιον. κατασκευάζοντα δὲ
 εἰ μήτε αὐτῷ μήτε τῶν αὐτοῦ μηδενὶ χρήται.
 ἔσται γὰρ καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον.
 οἶον ἐπεὶ ὁ θεὸς ζώου ἴδιον τὸ ἐκ ψυχῆς καὶ σώ-
 ματος συγκείμενον οὔτε αὐτῷ οὔτε τῶν αὐτοῦ
 10 οὐδενὶ προσκέχρηται, εἷη ἂν καλῶς κατὰ τοῦτο
 ἀποδοδεκόμενον τὸ τοῦ ζώου ἴδιον.

Τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων σκεπτέον
 ἐστὶ τῶν μὴ ποιούντων ἢ ποιούντων γνωριμώτερον,
 ἀνασκευάζοντα μὲν εἴ τιμι προσκέχρηται ἢ ἀντι-
 15 κειμένῳ ἢ ὅλως ἅμα τῇ φύσει ἢ ὑστέρω τινί· οὐ
 γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. τὸ μὲν γὰρ
 ἀντικείμενον ἅμα τῇ φύσει, τὸ δ' ἅμα τῇ φύσει
 καὶ τὸ ὕστερον οὐ ποιεῖ γνωριμώτερον. οἶον ἐπεὶ
 ὁ εἶπας ἀγαθοῦ ἴδιον ὁ κακῷ μάλιστ' ἀντίκειται,
 τῷ ἀντικειμένῳ προσκέχρηται τοῦ ἀγαθοῦ, οὐκ
 20 ἂν εἷη τοῦ ἀγαθοῦ καλῶς ἀποδοδεκόμενον τὸ ἴδιον.
 κατασκευάζοντα δὲ εἰ μηδενὶ προσκέχρηται μήτ'
 ἀντικειμένῳ μήτε ὅλως ἅμα τῇ φύσει μήθ' ὑστέρω·
 ἔσται γὰρ κατὰ τοῦτο καλῶς ἀποδοδεκόμενον τὸ
 ἴδιον. οἶον ἐπεὶ ὁ θεὸς ἐπιστήμης ἴδιον ὑπόληψιν
 τὴν πιστοτάτην οὐδενὶ προσκέχρηται οὔτ' ἀντι-
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to 'living creature,' and so the property cannot be correctly stated. For constructive purposes you must see whether he avoids introducing either the subject itself or anything belonging to it; for then the property will be correctly stated in this respect. For example, he who has stated that it is a property of 'living creature' to be 'composed of soul and body' has not introduced the subject itself nor anything which belongs to it, and so the property of living creature would in this respect have been correctly assigned.

In the same manner inquiry must be made regarding the other terms which do or do not make the subject more comprehensible. For destructive criticism, you must see whether your opponent has introduced anything either opposite to the subject or, in general, naturally simultaneous with it or posterior to it; for then the property will not be correctly stated. For the opposite of a thing is naturally simultaneous with it, and what is naturally simultaneous and what is posterior to a thing do not make it more comprehensible. For example, he who has said that it is a property of 'good' to be 'that which is most opposed to bad' has introduced the opposite of 'good,' and so the property of 'good' could not have been correctly assigned. For constructive argument, on the other hand, you must see whether he has avoided introducing anything which is either opposite to the subject, or naturally simultaneous with it, or posterior to it; for then the property will have been correctly assigned in this respect. For example, he who has stated that it is a property of 'knowledge' to be 'the most trustworthy conception' has not introduced anything either opposite

(7) If the opposite of the subject, or something less clear than it, is assigned as a property.

131 a

25 κειμένῳ οὐθ' ἅμα τῇ φύσει οὐθ' ὑστέρω, εἴη ἂν κατὰ τοῦτο καλῶς κείμενον τὸ τῆς ἐπιστήμης ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ μὴ αἰεὶ παρ-
επόμενον ἴδιον ἀποδέδωκεν, ἀλλὰ τοῦτο ὃ γίνεται
ποτε μὴ ἴδιον· οὐ γὰρ ἔσται καλῶς εἰρημένον τὸ
30 ἴδιον. οὐτε γὰρ ἐφ' ᾧ καταλαμβάνομεν ὑπάρχον
αὐτό, κατὰ τούτου καὶ τοῦνομα ἐξ ἀνάγκης ἀλη-
θεύεται· οὐτ' ἐφ' ᾧ καταλαμβάνεται μὴ ὑπάρχον,
κατὰ τούτου ἐξ ἀνάγκης οὐ ῥηθήσεται τοῦνομα.
ἔτι δὲ πρὸς τούτοις οὐδ' ὅτε ἀποδέδωκε τὸ ἴδιον,
ἔσται φανερόν εἰ ὑπάρχει, εἴπερ τοιοῦτόν ἐστιν
35 οἶον ἀπολείπειν. οὐκ οὐν ἔσται σαφές τὸ ἴδιον· οἶον
ἐπεὶ ὁ θεὸς ζώον ἴδιον τὸ κινεῖσθαι ποτε καὶ ἐστά-
ναι τοιοῦτον ἀποδέδωκε τὸ ἴδιον ὃ οὐ γίνεται ποτε
ἴδιον, οὐκ ἂν εἴη καλῶς κείμενον τὸ ἴδιον. κατα-
σκευάζοντα δὲ εἰ τὸ ἐξ ἀνάγκης αἰεὶ ὄν ἴδιον ἀπο-
131 b δέδωκεν· ἔσται γὰρ καλῶς κείμενον τὸ ἴδιον
κατὰ τοῦτο. οἶον ἐπεὶ ὁ θεὸς ἀρετῆς ἴδιον ὃ τὸν
ἔχοντα ποιεῖ σπουδαῖον τὸ αἰεὶ παρεπόμενον ἴδιον
ἀποδέδωκεν, εἴη ἂν κατὰ τοῦτο καλῶς ἀποδεδο-
μένον τὸ τῆς ἀρετῆς ἴδιον.

5 Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ νῦν ἴδιον
ἀποδιδούς μὴ διωρίσατο ὅτι τὸ νῦν ἴδιον ἀπο-
δίδωσιν· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον.

to the subject, or naturally simultaneous with it, or posterior to it, and so the property of knowledge will be correctly stated in this respect.

Next, for destructive criticism, you must see whether he has assigned as a property something which does not always accompany the subject but sometimes ceases to be a property ; for then the property will not have been correctly asserted. For neither is the name of the subject necessarily true of that to which we find that the property belongs, nor will it necessarily not be applied to that to which we find that the property does not belong. Further, besides this, even when he has assigned the property, it will not be clear whether it belongs, since it is of such a kind as to fail ; and so the property will not be clear. For example, he who has stated that it is a property of 'living creature' 'sometimes to move and sometimes to stand still' has assigned the kind of property which is sometimes not a property ; and so the property would not be correctly stated. For constructive argument, on the other hand, you must see if he has assigned what must of necessity always be a property ; for then the property will be correctly stated in this respect. For example, he who has stated that it is a property of 'virtue' to be 'that which makes its possessor good' has assigned as a property that which always accompanies its subject, and so the property of virtue would have been correctly assigned in this respect.

Next, for destructive criticism, you must see whether, in assigning what is a property at the moment, he has omitted to state definitely that he is assigning what is a property at the moment ; for then the property will not be correctly stated. For,

(8) If the property assigned does not always accompany the subject.

(9) If the assigner of a present property does not distinguish the time.

131 b

πρῶτον μὲν γὰρ τὸ παρὰ τὸ ἔθος γινόμενον ἅπαν
διορισμοῦ προσδεῖται· εἰώθασι δ' ὡς ἐπὶ τὸ πολὺ
πάντες τὸ αἰὲ παρακολουθοῦν ἴδιον ἀποδιδόναι.

- 10 δεύτερον δὲ ἄδηλός ἐστιν ὁ μὴ διορισάμενος εἰ
τὸ νῦν ἴδιον ἐβούλετο θεῖναι· οὐκ οὖν δοτέον ἐστὶν
ἐπιτιμήσεως σκῆψιν. οἷον ἐπεὶ ὁ θέμενος τοῦ τι-
νὸς ἀνθρώπου ἴδιον τὸ καθῆσθαι μετὰ τινος τὸ νῦν
ἴδιον τίθησιν, οὐκ ἂν εἴη καλῶς τὸ ἴδιον ἀποδε-
δωκώς, εἴπερ μὴ διορισάμενος εἶπεν. κατασκευά-
15 ζοντα δ' εἰ τὸ νῦν ἴδιον ἀποδιδούς διορισάμενος
ἔθηκεν ὅτι τὸ νῦν ἴδιον τίθησιν· ἔσται γὰρ καλῶς
κείμενον κατὰ τοῦτο τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας
τοῦ τινὸς ἀνθρώπου ἴδιον τὸ περιπατεῖν νῦν δια-
στειλάμενος ἔθηκε τοῦτο, καλῶς ἂν εἴη κείμενον
τὸ ἴδιον.

- Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τοιοῦτο ἀποδέδωκε
20 τὸ ἴδιον, ὃ φανερόν μὴ ἐστὶν ἄλλως ὑπάρχον ἢ
αἰσθήσει· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον.
ἅπαν γὰρ τὸ αἰσθητὸν ἔξω γινόμενον τῆς αἰσθήσεως
ἄδηλον γίνεται· ἀφανὲς γάρ ἐστιν εἰ ἔτι ὑπάρχει,
διὰ τὸ τῇ αἰσθήσει μόνον γνωρίζεσθαι. ἔσται δ'
ἀληθὲς τοῦτο ἐπὶ τῶν μὴ ἐξ ἀνάγκης αἰὲ παρακο-
25 λουθούντων. οἷον ἐπεὶ ὁ θέμενος ἡλίου ἴδιον ἄστρον
φερόμενον ὑπὲρ γῆς τὸ λαμπρότατον τοιοῦτω
κέχρηται ἐν τῷ ἰδίῳ τῷ ὑπὲρ γῆς φέρεσθαι, ὃ τῇ

in the first place, any departure from custom needs to be definitely indicated, and men are usually accustomed to assign as property that which always accompanies the subject. Secondly, anyone who has not definitely laid down whether it was his intention to state what is a property at the moment, is obscure ; no pretext, therefore, should be given for criticism. For example, he who has stated that it is a property of a certain man to be sitting with someone, states what is a property at the moment, and so he would not have assigned the property correctly, since he spoke without any definite indication. For constructive argument, you must see whether, in assigning what is a property at the moment, he stated definitely that he was laying down what was a property *at the moment* ; for then the property will be correctly stated in this respect. For instance, he who has said that it is a property of a particular man to be walking about *at the moment*, has made this distinction in his statement, and so the property would be correctly stated.

Next, for destructive criticism, you should see whether the property which he has assigned is of such a kind that its presence is manifest only to sensation ; for then the property will not be correctly stated. For every object of sensation, when it passes outside the range of sensation, becomes obscure ; for it is not clear whether it still exists, because it is comprehended only by sensation. This will be true of such attributes as do not necessarily and always attend upon the subject. For example, he who has stated that it is a property of the sun to be ' the brightest star that moves above the earth ' has employed in the property something of a kind which

(10) If the property assigned is evident only to the senses.

131 b

αἰσθήσει γνωρίζεται, οὐκ ἂν εἴη καλῶς τὸ τοῦ ἡλίου
 ἀποδοδομένον ἴδιον· ἄδηλον γὰρ ἔσται, ὅταν δῦν
 30 ὁ ἥλιος, εἰ φέρεται ὑπὲρ γῆς, διὰ τὸ τὴν αἰσθησιν
 τότε ἀπολείπειν ἡμᾶς. κατασκευάζοντα δ' εἰ
 τοιοῦτον ἀποδέδωκε τὸ ἴδιον, ὃ μὴ τῇ αἰσθήσει
 φανερόν ἐστιν ἢ ὃ αἰσθητὸν ὄν ἐξ ἀνάγκης ὑπάρχον
 δῆλόν ἐστιν· ἔσται γὰρ κατὰ τοῦτο καλῶς κείμενον
 τὸ ἴδιον. οἷον ἐπεὶ ὁ θέμενος ἐπιφανείας ἴδιον ὃ
 πρῶτον κέχρωσται αἰσθητῷ μὲν τινι προσκέχρηται
 35 τῷ κεχρῶσθαι, τοιούτῳ δ' ὃ φανερόν ἐστιν ὑπάρ-
 χον αἰεί, εἴη ἂν κατὰ τοῦτο καλῶς ἀποδοδομένον
 τὸ τῆς ἐπιφανείας ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸν ὅρον ὡς ἴδιον
 ἀποδέδωκεν· οὐ γὰρ ἔσται καλῶς κείμενον τὸ
 132 a ἴδιον· οὐ γὰρ δεῖ δηλοῦν τὸ τί ἦν εἶναι τὸ ἴδιον.
 οἷον ἐπεὶ ὁ εἶπας ἀνθρώπου ἴδιον ζῶον πεζὸν
 δίπουν τὸ τί ἦν εἶναι σημαῖνον ἀποδέδωκε τοῦ
 ἀνθρώπου ἴδιον, οὐκ ἂν εἴη τὸ τοῦ ἀνθρώπου ἴδιον
 καλῶς ἀποδοδομένον. κατασκευάζοντα δὲ εἰ ἀντι-
 5 κατηγορούμενον μὲν ἀποδέδωκε τὸ ἴδιον, μὴ τὸ
 τί ἦν εἶναι δὲ δηλοῦν. ἔσται γὰρ κατὰ τοῦτο
 καλῶς ἀποδοδομένον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς
 ἀνθρώπου ἴδιον ζῶον ἡμέρον φύσει ἀντικατηγο-
 ρούμενον μὲν ἀποδέδωκε τὸ ἴδιον, οὐ τὸ τί ἦν

is comprehensible only by sensation, namely, 'moving above the earth'; and so the property of the sun would not have been correctly assigned, for it will not be manifest, when the sun sets, whether it is still moving above the earth, because sensation then fails us. For constructive argument, on the other hand, you must see whether the property which he has assigned is such that it is not manifest to the sensation, or, being sensible, obviously belongs of necessity to the subject; for then the property will be in this respect correctly stated. For example, he who has stated that it is a property of 'surface' to be 'that which is the first thing to be coloured,' has employed a sensible attribute, namely 'to be coloured,' but an attribute which obviously is always present, and so the property of 'surface' will in this respect have been correctly assigned.

Next, for destructive criticism, you must see whether he has assigned the definition as a property; for then the property will not be correctly stated, for the property ought not to show the essence. For example, he who has said that it is a property of man to be 'a pedestrian biped animal' has assigned as a property of man that which signifies his essence, and so the man's property will not have been correctly assigned. For constructive argument, on the other hand, you must see whether he has assigned as the property a predicate which is convertible with the subject but does not signify the essence; for then the property will have been correctly assigned in this respect. For example, he who has stated that it is a property of man to be 'by nature a civilized animal' has assigned a property which is convertible with the subject but does not signify the essence; and so the

(11) If what is assigned as a property is the definition.

εἶναι δὲ δηλοῦν, εἴη ἂν κατὰ τοῦτο καλῶς ἀποδοδόμενον τὸ ἴδιον τοῦ ἀνθρώπου.

- 10 "Ἐπειτ' ἀνασκευάζοντα μὲν εἰ μὴ εἰς τὸ τί ἐστι θεῖς¹ ἀποδέδωκε τὸ ἴδιον. δεῖ γὰρ τῶν ἰδίων, καθάπερ καὶ τῶν ὄρων, τὸ πρῶτον ἀποδίδοσθαι γένος, ἔπειθ' οὕτως ἤδη προσάπτεσθαι τὰ λοιπά, καὶ χωρίζειν. ὥστε τὸ μὴ τοῦτον τὸν τρόπον κείμενον ἴδιον οὐκ ἂν εἴη καλῶς ἀποδοδόμενον.
- 15 οἷον ἐπεὶ ὁ εἶπας ζῶου ἴδιον τὸ ψυχὴν ἔχειν οὐκ ἔθηκεν εἰς τὸ τί ἐστι τὸ ζῶον, οὐκ ἂν εἴη καλῶς κείμενον τὸ τοῦ ζῶου ἴδιον. κατασκευάζοντα δὲ εἴ τις εἰς τὸ τί ἐστι θεῖς οὐ τὸ ἴδιον ἀποδίδωσι, τὰ λοιπὰ προσάπτει· ἔσται γὰρ κατὰ τοῦτο καλῶς ἀποδοδόμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεῖς ἀνθρώπου
- 20 ἴδιον ζῶον ἐπιστήμης δεκτικὸν εἰς τὸ τί ἐστι θεῖς ἀπέδωκε τὸ ἴδιον, εἴη ἂν κατὰ τοῦτο καλῶς κείμενον τὸ ἴδιον τοῦ ἀνθρώπου.

IV. Πότερον μὲν οὖν καλῶς ἢ οὐ καλῶς ἀποδέδοται τὸ ἴδιον, διὰ τῶνδε σκεπτέον. πότερον δ' ἰδιόν ἐστιν ὅλως τὸ εἰρημένον ἢ οὐκ ἴδιον, ἐκ

25 τῶνδε θεωρητέον. οἱ γὰρ ἀπλῶς κατασκευάζοντες τὸ ἴδιον ὅτι καλῶς κείται τόποι οἱ αὐτοὶ ἔσονται τοῖς ἴδιον ὅλως ποιοῦσιν· ἐν ἐκείνοις οὖν ῥηθήσονται.

¹ Reading ἐστι θεῖς with Dennison for ἐστιν ὁ θεῖς.

^a i.e. from other members of the same genus.

property of man will have been correctly assigned in this respect.

Next, for destructive criticism, you must see whether he has assigned the property without placing the subject in its essence ; for in properties, as in definitions, the first term to be assigned ought to be the genus, and then, and not till then, the other terms should be added and should distinguish the subject.^a The property, therefore, which is not stated in this manner will not have been correctly assigned. For example, he who has said that it is a property of ' living creature ' ' to possess a soul ' has not placed ' living creature ' in its essence, and so the property of ' living creature ' would not be correctly stated. For constructive argument, on the other hand, you must see if he has placed the subject, whose property he is assigning, in its essence and then adds the other terms ; for then the property will have been correctly assigned in this respect. For example, he who has stated as a property of ' man ' that he is ' a living creature receptive of knowledge ' has placed the subject in its essence and then assigned the property, and so the property of ' man ' would be correctly stated in this respect.

(12) If the property is assigned without mentioning the essence of the subject.

IV. It is by these methods, then, that examination should be made to see whether the property has been correctly or incorrectly assigned. Whether that which is asserted to be a property is really a property or not a property at all, must be considered on the following principles ; for the commonplaces which confirm absolutely that the property is correctly stated will be the same as those which make it a property at all, and will, therefore, be included in the statement of them.

Rules for testing whether a term belongs as a property at all :

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Πρῶτον μὲν οὖν ἀνασκευάζοντα ἐπιβλέπειν ἐφ'
 ἕκαστον οὐ τὸ ἴδιον ἀποδέδωκεν, [οἶον] εἰ μηδενὶ
 ὑπάρχει, ἢ εἰ μὴ κατὰ τοῦτο ἀληθεύεται, ἢ εἰ μὴ
 30 ἔστιν ἴδιον ἑκάστου αὐτῶν κατ' ἐκεῖνο οὐ τὸ ἴδιον
 ἀποδέδωκεν· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι
 ἴδιον. οἶον ἐπεὶ κατὰ τοῦ γεωμετρικοῦ οὐκ ἀλη-
 θεύεται τὸ ἀνεξαπάτητον εἶναι ὑπὸ λόγου (ἀπα-
 τᾶται γὰρ ὁ γεωμετρικὸς ἐν τῷ ψευδογραφεῖσθαι),
 οὐκ ἂν εἴη τοῦ ἐπιστήμονος ἴδιον τὸ μὴ ἀπατᾶσθαι
 35 ὑπὸ λόγου. κατασκευάζοντα δ' εἰ κατὰ παντὸς
 ἀληθεύεται καὶ κατὰ τοῦτ' ἀληθεύεται· ἔσται γὰρ
 ἴδιον τὸ κείμενον <μὴ> εἶναι¹ ἴδιον. οἶον ἐπεὶ τὸ
 132 b ζῶον ἐπιστήμης δεκτικὸν κατὰ παντὸς ἀνθρώπου
 ἀληθεύεται καὶ ἡ ἄνθρωπος, εἴη ἂν ἀνθρώπου ἴδιον
 τὸ ζῶον ἐπιστήμης δεκτικόν. ἔστι δ' ὁ τόπος
 οὗτος ἀνασκευάζοντι μὲν, εἰ μὴ καθ' οὐ τοῦνομα,
 5 καὶ ὁ λόγος ἀληθεύεται, καὶ εἰ μὴ καθ' οὐ ὁ λόγος,
 καὶ τοῦνομα ἀληθεύεται· κατασκευάζοντι δέ, εἰ
 καθ' οὐ τοῦνομα, καὶ ὁ λόγος, καὶ εἰ καθ' οὐ ὁ
 λόγος, καὶ τοῦνομα κατηγορεῖται.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ μὴ καθ' οὐ τοῦ-
 νομα, καὶ ὁ λόγος, καὶ εἰ μὴ καθ' οὐ ὁ λόγος, καὶ

¹ Reading <μὴ> εἶναι with Pacius, Waitz and Strache.

^a i.e. that given in the property.

^b i.e. that of the subject.

First of all, then, for destructive criticism, you must look at each subject of which he has assigned the property, and see whether it does not belong to any of them, or whether it is not true in the particular respect in question, or whether it is not a property of each of them as regards that of which he has assigned the property ; for then that which is stated to be a property will not be a property. For example, seeing that it is not true to say about a geometrician that he is ' not liable to be deceived by argument ' (for he is deceived when a false figure is drawn), it could not be a property of a scientific man ' not to be deceived by argument.' For constructive purposes, on the other hand, you must see whether the property is true in every case and in the particular respect in question ; for then what is stated not to be a property will be a property. For example, seeing that ' a living creature receptive of knowledge ' is a true description of every man and true *qua* man, it would be a property of man to be ' a living creature receptive of knowledge.' The object of this commonplace is, for destructive criticism, to see whether the description ^a is untrue of that of which the name ^b is true, and whether the name is untrue of that of which the description is true ; on the other hand, in constructive argument, the object is to see whether the description also is predicated of that of which the name is predicated, and whether the name also is predicated of that of which the description is predicated.

Next, for destructive criticism, you must see whether the description is not asserted of that of which the name is asserted, and if the name is not asserted of that of which the description is asserted ;

It is not a property (a) if it does not concur with each individual.

(b) If the description is not asserted of that of which the

10 τοῦνομα λέγεται· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον
 ἴδιον εἶναι. οἷον ἐπεὶ τὸ μὲν ζῶον ἐπιστήμης
 μετέχον ἀληθεύεται κατὰ τοῦ θεοῦ, ὃ δ' ἄνθρωπος
 οὐ κατηγορεῖται, οὐκ ἂν εἴη τοῦ ἀνθρώπου ἴδιον
 ζῶον ἐπιστήμης μετέχον. κατασκευάζοντα δὲ εἰ
 καθ' οὗ ὁ λόγος, καὶ τοῦνομα κατηγορεῖται, καὶ
 15 καθ' οὗ τοῦνομα, καὶ ὁ λόγος κατηγορεῖται· ἔσται
 γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ
 καθ' οὗ τὸ ψυχὴν ἔχειν, τὸ ζῶον ἀληθεύεται, καὶ
 καθ' οὗ τὸ ζῶον, τὸ ψυχὴν ἔχειν, εἴη ἂν τὸ ψυχὴν
 ἔχειν τοῦ ζώου ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ ὑποκείμενον
 20 ἴδιον ἀπέδωκε τοῦ ἐν τῷ ὑποκειμένῳ λεγομένου·
 οὐ γὰρ ἔσται ἴδιον τὸ κείμενον ἴδιον. οἷον ἐπεὶ
 ὁ ἀποδοὺς ἴδιον τοῦ λεπτομερεστάτου σώματος τὸ
 πῦρ τὸ ὑποκείμενον ἀποδέδωκε τοῦ κατηγορου-
 μένου ἴδιον, οὐκ ἂν εἴη τὸ πῦρ σώματος τοῦ
 λεπτομερεστάτου ἴδιον. διὰ τοῦτο δ' οὐκ ἔσται
 25 τὸ ὑποκείμενον τοῦ ἐν τῷ ὑποκειμένῳ ἴδιον, ὅτι
 τὸ αὐτὸ πλειόνων ἔσται καὶ διαφόρων τῷ εἶδει
 ἴδιον. τῷ γὰρ αὐτῷ πλείω τινὰ διάφορα τῷ
 εἶδει ὑπάρχει κατὰ μόνου λεγόμενα, ὧν ἔσται
 πάντων ἴδιον τὸ ὑποκείμενον, ἐάν τις οὕτω τιθῇται
 τὸ ἴδιον. κατασκευάζοντα δ' εἰ τὸ ἐν τῷ ὑπο-

for then the property which is stated will not be a property. For example, since a 'living creature which partakes of knowledge' is true of 'God' but 'man' is not predicated of 'God,' a 'living creature which partakes of knowledge' would not be a property of man. For constructive argument, on the other hand, you must see whether the name also is predicated of that of which the description is predicated, and whether the description also is predicated of that of which the name is predicated; for then that which is asserted not to be a property will be a property. For example, since 'living creature' is true of that of which 'possessing a soul' is true, and 'possessing a soul' is true of that of which 'living creature' is true, 'possessing a soul' would be a property of 'living being.'

name is
asserted,
and *vice*
versa.

Next, for destructive criticism, you must see whether he has assigned the subject as a property of that which is said to be 'in the subject'; for then what is stated to be a property will not be a property. For example, he who has assigned 'fire' as a property of 'the body consisting of the most subtle particles,' has assigned the subject as a property of its predicate, and so 'fire' could not be a property of 'the body consisting of the most subtle particles.' The subject will not be a property of that which is in the subject for this reason, namely, that the same thing will then be the property of a number of specifically different things. For a number of specifically different things belong to the same thing, being asserted to belong to it alone, of all of which the subject will be a property, if one states the property in this manner. For constructive argument, on the other hand, you must see whether he assigned what

(c) If the
subject is
assigned as
the pro-
perty.

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30 κειμένῳ ἀπέδωκεν ἴδιον τοῦ ὑποκειμένου. ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον, ἐάνπερ κατὰ μόνων κατηγορῆται, ὧν εἴρηται τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας γῆς ἴδιον σῶμα τὸ βαρύτατον τῷ εἶδει τοῦ ὑποκειμένου ἀπέδωκε τὸ ἴδιον κατὰ μόνου λεγόμενον τοῦ πράγματος, καὶ ὥς τὸ ἴδιον κατηγορεῖται, εἴη ἂν τὸ τῆς γῆς ἴδιον ὀρθῶς κείμενον.

35 "Ἐπειτ' ἀνασκευάζοντα μὲν εἰ κατὰ μέθεξιν ἀπέδωκε τὸ ἴδιον· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον
133 a εἶναι ἴδιον. τὸ γὰρ κατὰ μέθεξιν ὑπάρχον εἰς τὸ τί ἦν εἶναι συμβάλλεται· εἴη δ' ἂν τὸ τοιοῦτο διαφορά τις κατὰ τινος ἐνὸς εἶδους λεγομένη. οἷον ἐπεὶ ὁ εἶπας ἀνθρώπου ἴδιον τὸ πεζὸν δίπουν κατὰ μέθεξιν ἀπέδωκε τὸ ἴδιον, οὐκ ἂν εἴη τάν-
5 θρώπου ἴδιον τὸ πεζὸν δίπουν. κατασκευάζοντα δὲ εἰ μὴ κατὰ μέθεξιν ἀπέδωκε τὸ ἴδιον, μηδὲ τὸ τί ἦν εἶναι δηλοῦν, ἀντικατηγορουμένου τοῦ πράγματος· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ὁ θεὸς ζώου ἴδιον τὸ αἰσθάνεσθαι πεφυκὸς οὔτε κατὰ μέθεξιν ἀπέδωκεν ἴδιον οὔτε τὸ τί ἦν
10 εἶναι δηλοῦν, ἀντικατηγορουμένου τοῦ πράγματος, εἴη ἂν ζώου ἴδιον τὸ αἰσθάνεσθαι πεφυκός.

"Ἐπειτ' ἀνασκευάζοντα μὲν εἰ μὴ ἐνδέχεται ἅμα

is in the subject as a property of the subject ; for then what is stated not to be a property will be a property, if it is predicated only of those things of which it has been asserted to be the property. For example, he who has said that it is a property of ' earth ' to be ' specifically the heaviest body ' has assigned as a property of the subject something which is asserted of that thing alone, and it is predicated as the property ; and so the property of ' earth ' would be correctly stated.

Next, for destructive criticism, you must see whether he assigned the property as something of which the subject partakes ; for then that which is stated to be a property will not be a property. For that which belongs because the subject partakes of it is a contribution to its essence, and, as such, would be a differentia attributed to some one species. For example, he who has said that it is a property of ' man ' to be a ' pedestrian biped ' has assigned the property as something of which the subject partakes, and so ' pedestrian biped ' could not be a property of ' man.' For constructive argument, on the other hand, you must see whether he has failed to assign the property as something of which the subject partakes, or as showing the essence, the subject being convertible ; for then what is stated not to be a property will be a property. For example, he who has stated that it is a property of ' living creature ' to be ' naturally possessed of sensation ' has assigned a property neither as partaken of by the subject nor as showing its essence, the subject being convertible ; and so to be ' naturally possessed of sensation ' would be a property of ' living creature.'

(d) If that is assigned as a property which belongs to the subject as a differentia.

(e) If that is assigned

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ὑπάρχειν τὸ ἴδιον, ἀλλ' ἢ ὕστερον ἢ πρότερον ἢ
 οὐ τοῦνομα· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι
 15 ἴδιον, ἢ οὐδέποτε ἢ οὐκ αἰεί. οἷον ἐπεὶ ἐνδέχεται
 καὶ πρότερόν τι ὑπάρξαι καὶ ὕστερον τὸ βαδίζειν
 διὰ τῆς ἀγορᾶς ἢ τὸ ἄνθρωπος, οὐκ ἂν εἴη τὸ
 βαδίζειν διὰ τῆς ἀγορᾶς τοῦ ἀνθρώπου ἴδιον, ἢ
 οὐδέποτ' ἢ οὐκ αἰεί. κατασκευάζοντα δὲ εἰ ἅμα
 ἐξ ἀνάγκης αἰεί ὑπάρχει, μήτε ὅρος ὃν μήτε δια-
 20 φορά· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον.
 οἷον ἐπεὶ τὸ ζῶον ἐπιστήμης δεκτικὸν ἅμα ἐξ
 ἀνάγκης αἰεί ὑπάρχει καὶ τὸ ἄνθρωπος, οὔτε δια-
 φορὰ ὃν οὔθ' ὅρος, εἴη ἂν τὸ ζῶον ἐπιστήμης
 δεκτικὸν τοῦ ἀνθρώπου ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τῶν αὐτῶν, ἢ
 25 ταῦτά ἐστι, μὴ ἐστι τὸ αὐτὸ ἴδιον· οὐ γὰρ ἔσται
 ἴδιον τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ οὐκ ἔστι
 διωκτοῦ τὸ φαίνεσθαί τισιν ἀγαθὸν ἴδιον, οὐδ' ἂν
 αἵρετοῦ εἴη ἴδιον τὸ φαίνεσθαί τισιν ἀγαθόν·
 ταῦτόν γάρ ἐστι τὸ διωκτὸν καὶ τὸ αἵρετόν.
 κατασκευάζοντα δ' εἰ τοῦ αὐτοῦ, ἢ ταυτό ἐστι,
 30 ταὐτὸ ἴδιον· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι

whether the property cannot possibly belong simultaneously but must belong as something posterior or prior to that to which the name belongs ; for then that which is stated to be a property will not be a property, that is to say, it will be either never or not always a property. For example, since it is possible for ' walking through the market-place ' to be an attribute of something as both prior and posterior to the attribute ' man,' ' walking through the market-place ' could not be a property of ' man,' that is to say, it would be either never or not always a property. For constructive argument you must see whether the property always belongs of necessity simultaneously, being neither a definition nor a differentia ; for then what is stated not to be a property will be a property. For example, ' animal receptive of knowledge ' always belongs of necessity simultaneously with ' man ' and is neither a differentia nor a definition, and so ' animal receptive of knowledge ' would be a property of ' man.'

as a property which is prior or posterior to the subject.

Next, for destructive criticism, you must see whether the same thing fails to be a property of things which are the same as the subject, in so far as they are the same ; for then what is stated to be a property will not be a property. For example, since it is not a property of an ' object of pursuit ' to ' appear good to certain people,' neither could it be a property of an ' object of choice ' to ' appear good to certain people ' ; for ' object of pursuit ' and ' object of choice ' are the same thing. For constructive argument, on the other hand, you must see whether the same thing is a property of something which is the same as the subject, in so far as it is the same ; for then what is stated not to be a property will be a property. For

(f) If the same thing fails to be the property of the same things, in so far as they are the same.

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ἴδιον. οἶον ἐπεὶ ἀνθρώπου, ἥ ἀνθρωπός ἐστι, λέγεται ἴδιον τὸ τριμερῇ ψυχῇ ἔχειν, καὶ βροτοῦ, ἥ βροτός ἐστιν, εἴη ἂν ἴδιον τὸ τριμερῇ ψυχῇ ἔχειν. χρήσιμος δ' ὁ τόπος οὗτος καὶ ἐπὶ τοῦ συμβεβηκότος· τοῖς γὰρ αὐτοῖς, ἥ ταυτά ἐστι, ταυτὰ δεῖ ὑπάρχειν ἢ μὴ ὑπάρχειν.

35 Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τῶν αὐτῶν τῷ εἶδει μὴ ταυτὸν ἀεὶ τῷ εἶδει τὸ ἴδιόν ἐστιν· οὐδὲ γὰρ

133 b τοῦ εἰρημένου ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. οἶον ἐπεὶ ταυτὸν ἐστι τῷ εἶδει ἀνθρωπος καὶ ἵππος, οὐκ ἀεὶ δὲ τοῦ ἵππου ἐστὶν ἴδιον τὸ ἐστάναι ὑφ' αὐτοῦ, οὐκ ἂν εἴη τοῦ ἀνθρώπου ἴδιον τὸ κινεῖσθαι ὑφ' αὐτοῦ· ταυτὸν γὰρ ἐστι τῷ εἶδει τὸ
5 κινεῖσθαι καὶ ἐστάναι ὑφ' αὐτοῦ, ἥ ζῶον δ' ἐστὶν ἐκάτερον αὐτῶν συμβέβηκεν.¹ κατασκευάζοντα δ' εἰ τῶν αὐτῶν τῷ εἶδει ταυτὸν ἀεὶ τὸ ἴδιον· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἶον ἐπεὶ ἀνθρώπου ἐστὶν ἴδιον τὸ εἶναι πεζὸν δίπουν, καὶ ὄρνιθος ἂν εἴη ἴδιον τὸ εἶναι πτηνὸν δίπουν· ἐκά-
10 τερον γὰρ τούτων ἐστὶ ταυτὸν τῷ εἶδει, ἥ τὰ μὲν ὡς ὑπὸ τὸ αὐτὸ γένος ἐστὶν εἶδη, ὑπὸ τὸ ζῶον ὄντα, τὰ δὲ ὡς γένους διαφοραί, τοῦ ζώου. οὗτος δ' ὁ τόπος ψευδής ἐστιν, ὅταν τὸ μὲν ἕτερον τῶν λεχθέντων ἐνὶ τινὶ μόνῳ ὑπάρχῃ εἶδει, τὸ δ' ἕτερον πολλοῖς, καθάπερ τὸ πεζὸν τετράπουν.

15 Ἐπεὶ δὲ τὸ ταυτὸν καὶ τὸ ἕτερον πολλαχῶς

¹ ἥ ζῶον <δ'> ἐστὶν ἐκάτερον αὐτῶν συμβέβηκεν, Strache-Wallies.

^a Plato, *Republic* iv. 435 b ff.

^b i.e. there are many pedestrian quadrupeds besides the horse, but man is the only pedestrian biped.

example, since it is said to be a property of 'man,' *qua* man, 'to possess a tripartite soul,' ^a it would also be a property of 'mortal,' *qua* mortal, 'to possess a tripartite soul.' This commonplace is useful also in dealing with an accident; for the same things must necessarily belong or not belong to the same things in so far as they are the same.

Next, for destructive criticism you must see whether the property of things which are the same in kind are not always the same in kind; for then neither will that which is stated to be a property be a property of the proposed subject. For example, since man and horse are the same in kind and it is not always a property of a horse to stand still of his own accord, neither could it be a property of a man to move of his own accord, since to stand still and to move of one's own accord are the same in kind and have occurred in as much as each of them is an animal. For constructive argument, on the other hand, you must see whether the property of things which are the same in kind is always the same; for then what is stated not to be a property will be a property. For example, since it is a property of 'man' to be a 'pedestrian biped,' it would also be a property of 'bird' to be a 'winged biped'; for each of these is the same in kind, in as much as 'man' and 'bird' are the same, being species falling under the same genus, namely 'animal,' while 'pedestrian' and 'winged' are the same, being differentiae of the genus, namely 'animal.' This commonplace is misleading when one of the properties mentioned belongs to one species only, while the other belongs to many, as, for instance, 'pedestrian quadruped.' ^b

Now, since 'same' and 'different' have several

(g) If the property of things which are specifically the same is not always specifically the same.

(h) If what is the pro-

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λέγεται, ἔργον ἐστὶ σοφιστικῶς λαμβάνοντι ἐνὸς ἀποδοῦναι καὶ μόνου τινὸς τὸ ἴδιον. τὸ γὰρ ὑπάρχον τινὶ ᾧ συμβέβηκέ τι, καὶ τῷ συμβεβηκότι ὑπάρξει λαμβανομένῳ μετὰ τοῦ ᾧ συμβέβηκεν, οἷον τὸ ὑπάρχον ἀνθρώπῳ καὶ λευκῷ ἀνθρώπῳ
 20 ὑπάρξει, ἂν ᾗ λευκὸς ἄνθρωπος, καὶ τὸ λευκῷ δὲ ἀνθρώπῳ ὑπάρχον καὶ ἀνθρώπῳ ὑπάρξει. διαβάλλοι δ' ἂν τις τὰ πολλὰ τῶν ἰδίων, τὸ ὑποκείμενον ἄλλο μὲν καθ' αὐτὸ ποιῶν ἄλλο δὲ μετὰ τοῦ συμβεβηκότος, οἷον ἄλλο μὲν ἄνθρωπον εἶναι
 25 λέγων ἄλλο δὲ λευκὸν ἄνθρωπον, ἔτι δὲ ἕτερον ποιῶν τὴν ἕξιν καὶ τὸ κατὰ τὴν ἕξιν λεγόμενον. τὸ γὰρ τῇ ἕξει ὑπάρχον καὶ τῷ κατὰ τὴν ἕξιν λεγομένῳ ὑπάρξει, καὶ τὸ τῷ κατὰ τὴν ἕξιν λεγομένῳ ὑπάρχον καὶ τῇ ἕξει ὑπάρξει. οἷον ἐπεὶ ὁ ἐπιστήμων κατὰ τὴν ἐπιστήμην λέγεται διακεῖ-
 30 σθαι, οὐκ ἂν εἴη τῆς ἐπιστήμης ἴδιον τὸ ἀμετάπειστον ὑπὸ λόγου· καὶ γὰρ ὁ ἐπιστήμων ἔσται ἀμετάπειστος ὑπὸ λόγου. κατασκευάζοντα δὲ ῥητέον ὅτι οὐκ ἔστιν ἕτερον ἀπλῶς τὸ ᾧ συμβέβηκε καὶ τὸ συμβεβηκὸς μετὰ τοῦ ᾧ συμβέβηκε λαμβανόμενον, ἀλλ' ἄλλο λέγεται τῷ ἕτερον εἶναι αὐτοῖς τὸ εἶναι· οὐ ταῦτόν γάρ ἐστιν ἀνθρώπῳ τε
 35 τὸ εἶναι ἀνθρώπῳ καὶ λευκῷ ἀνθρώπῳ τὸ εἶναι ἀνθρώπῳ λευκῷ. ἔτι δὲ θεωρητέον ἐστὶ παρὰ τὰς
 134 a πτώσεις, λέγοντα διότι οὐθ' ὁ ἐπιστήμων ἔσται τὸ ἀμετάπειστον ὑπὸ λόγου ἀλλ' ὁ ἀμετάπειστος ὑπὸ λόγου, οὐθ' ἡ ἐπιστήμη τὸ ἀμετάπειστον ὑπὸ

meanings, it is a difficult task with a sophistical opponent to assign the property of some one thing taken by itself. For that which belongs to something to which an accident is attached will also belong to the accident taken with the subject to which it is attached. For example, what belongs to 'man' will also belong to 'white man,' if there is a white man, and what belongs to 'white man' will also belong to 'man.' One might, therefore, misrepresent the majority of properties by making the subject one thing when taken by itself and another thing when taken with its accident, saying, for example, that 'man' is one thing and 'white man' another thing, and, further, by making a difference between the state and that which is described in the terms of the state. For that which belongs to the state will belong also to that which is described in the terms of the state, and that which belongs to what is described in the terms of the state will belong also to the state. For example, since the condition of a scientist is described in the terms of his science, it cannot be a property of 'science' to be 'proof against the persuasion of argument,' for then the scientist also will be 'proof against the persuasion of argument.' For constructive purposes you should say that that to which the accident belongs is not absolutely different from the accident taken with that to which it is accidental, but is called 'other than it' because their kind of being is different; for it is not the same thing for a 'man' to be a 'man' and for a 'white man' to be a 'white man.' Further, you should look at the inflexions, maintaining that the scientist is not 'that which' but 'he who' is proof against the persuasion of argument, while Science is

property of the
subject
alone is not
the property
when joined
to an acci-
dent and
vice versa.

- λόγου ἄλλ' ἢ ἀμετάπειστος ὑπὸ λόγου· πρὸς γὰρ τὸν πάντως ἐνιστάμενον πάντως ἀντιτακτέον ἐστίν.
- 5 V. "Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ φύσει ὑπάρχον βουλόμενος ἀποδοῦναι τοῦτον τὸν τρόπον τίθησι τῇ λέξει, ὥστε τὸ ἀεὶ ὑπάρχον σημαίνει· δόξειε γὰρ ἂν κινεῖσθαι τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ ὁ εἶπας ἀνθρώπου ἴδιον τὸ δίπουν βούλεται μὲν τὸ φύσει ὑπάρχον ἀποδιδόναι, σημαίνει
- 10 δὲ τῇ λέξει τὸ ἀεὶ ὑπάρχον, οὐκ ἂν εἴη ἀνθρώπου ἴδιον τὸ δίπουν· οὐ γὰρ πᾶς ἄνθρωπός ἐστι δύο πόδας ἔχων. κατασκευάζοντα δ' εἰ βούλεται τὸ φύσει ὑπάρχον ἴδιον ἀποδιδόναι καὶ τῇ λέξει τοῦτον τὸν τρόπον σημαίνει· οὐ γὰρ κινήσεται κατὰ τοῦτο τὸ ἴδιον. οἷον ἐπεὶ ὁ ἀνθρώπου ἴδιον ἀπο-
- 15 διδούς τὸ ζῶον ἐπιστήμης δεκτικὸν καὶ βούλεται καὶ τῇ λέξει σημαίνει τὸ φύσει ὑπάρχον ἴδιον, οὐκ ἂν κινοῖτο κατὰ τοῦτο, ὥς οὐκ ἔστιν ἀνθρώπου ἴδιον τὸ ζῶον ἐπιστήμης δεκτικόν.

"Ἐτι ὅσα λέγεται ὡς κατ' ἄλλο τι πρῶτον ἢ ὡς πρῶτον αὐτό, ἔργον ἐστὶν ἀποδοῦναι τῶν τοιούτων

20 τὸ ἴδιον· ἐὰν μὲν γὰρ τοῦ κατ' ἄλλο τι ἴδιον ἀποδῶς, καὶ κατὰ τοῦ πρώτου ἀληθεύσεται, ἐὰν δὲ τοῦ πρώτου θῆς, καὶ τοῦ κατ' ἄλλο κατηγο-

^a Scientist being masculine and Science feminine in Greek.

not 'that which' but 'she who' ^a is proof against the persuasion of argument; for against the man who uses every kind of objection, you should use every kind of opposition.

V. Next, for destructive criticism, you should see whether your opponent, while he intends to assign to the subject an attribute which naturally belongs, expresses himself in such language as to signify one which always belongs; for then that which is stated to be a property would seem to be subverted. For example, he who has said that 'biped' is a property of man intends to assign an attribute which belongs by nature, but, by the language which he uses, signifies an attribute which always belongs; and so 'biped' could not be a property of man, since every man is not in possession of two feet. For constructive purposes, on the other hand, you must see whether he intends to assign as a property that which belongs by nature and signifies this by the language which he uses; for then the property will not be subverted in this respect. For example, he who assigns as a property of man that he is 'an animal receptive of knowledge' both has the intention and succeeds in signifying by his language the property which belongs by nature, and so 'an animal receptive of knowledge' cannot be subverted in this respect on the ground that it is not a property of man.

Further, it is a difficult task to assign the property of such things as are described primarily in the terms of something else or primarily in themselves; for if you assign a property of that which is described in the terms of something else, it will be true also of that which is primary; whereas if you state it of something which is primary, it will also be predicated of

Various rules for subverting a proposition:
(a) Observe whether an attribute which belongs naturally is assigned as always belonging.

[Note on the difficulty of rendering things which are called as they are primarily after something else,

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ρηθήσεται. οἷον ἐὰν μὲν τις ἐπιφανείας ἴδιον ἀποδῶ τὸ κεχρῶσθαι, καὶ κατὰ σώματος ἀληθεύεται τὸ κεχρῶσθαι, ἐὰν δὲ σώματος, καὶ
 25 κατ' ἐπιφανείας κατηγορηθήσεται. ὥστε οὐ καθ' οὗ ὁ λόγος, καὶ τοῦνομα ἀληθεύεται.

Συμβαίνει δ' ἐν ἐνίοις τῶν ἰδίων ὡς ἐπὶ τὸ πολὺ γίνεσθαι τινα ἀμαρτίαν παρὰ τὸ μὴ διορίζεσθαι πῶς καὶ τίνων τίθησι τὸ ἴδιον. ἅπαντες γὰρ ἐπιχειροῦσιν ἀποδιδόναι τὸ ἴδιον ἢ τὸ φύσει ὑπάρ-
 30 χον, καθάπερ ἀνθρώπου τὸ δίπουν, ἢ τὸ ὑπάρχον, καθάπερ ἀνθρώπου τινὸς τὸ τέτταρας δακτύλους ἔχειν, ἢ εἶδει, καθάπερ πυρὸς τὸ λεπτομερέστατον, ἢ ἀπλῶς, καθάπερ ζώου τὸ ζῆν, ἢ κατ' ἄλλο, καθάπερ ψυχῆς τὸ φρόνιμον, ἢ ὡς τὸ πρῶτον, καθάπερ λογιστικοῦ τὸ φρόνιμον, ἢ ὡς τῷ
 35 ἔχειν, καθάπερ ἐπιστήμονος τὸ ἀμετάπειστον ὑπὸ λόγου (οὐδὲν γὰρ ἕτερον ἢ τῷ ἔχειν τι ἔσται ἀ-
 134 b μετάπειστος ὑπὸ λόγου), ἢ τῷ ἔχεσθαι, καθάπερ ἐπιστήμης τὸ ἀμετάπειστον ὑπὸ λόγου, ἢ τῷ μετέχεσθαι, καθάπερ ζώου τὸ αἰσθάνεσθαι (αἰσθάνεται μὲν γὰρ καὶ ἄλλο τι, οἷον ἄνθρωπος, ἀλλὰ μετέχων¹ ἤδη τούτου² αἰσθάνεται), ἢ τῷ μετέχειν,
 5 καθάπερ τοῦ τινὸς ζώου τὸ ζῆν. μὴ προσθεῖς μὲν οὖν τὸ φύσει ἀμαρτάνει, διότι ἐνδέχεται τὸ φύσει ὑπάρχον μὴ ὑπάρχειν ἐκείνῳ ᾧ φύσει

¹ Reading μετέχων for μετέχον.

² Reading τούτου for τοῦτο.

^a i.e. 'surface' will not be applicable to everything which can be described as 'coloured,' since a body is coloured but is not a surface. 'Body' will not be applicable to everything which can be described as 'coloured,' since a surface is coloured but is not a body.

that which is described in the terms of something else. For example, if one assigns 'coloured' as a property of 'surface,' 'coloured' will also be true of 'body,' but if one assigns it as a property of 'body,' it will also be predicated of 'surface,' so that the name also will not be true of that of which the description is true.^a

or primarily
in them-
selves.]

With some properties it usually happens that an error arises from lack of a definite statement how and of what the property is stated. For everyone attempts to assign as the property of a thing either that which belongs by nature, as 'biped' belongs to man, or that which actually belongs, as 'possessing four fingers' belongs to a particular man, or specifically, as 'consisting of the most subtle particles' belongs to 'fire,' or absolutely, as 'life' belongs to 'living creature,' or in virtue of something else, as 'prudence' belongs to the 'soul,' or primarily, as 'prudence' belongs to the 'faculty of reason,' or owing to something being in a certain state, as 'proof against the persuasion of argument' belongs to the 'scientist' (for it is only because he is in a certain state that he will be 'proof against the persuasion of argument'), or because it is a state possessed by something, as 'proof against the persuasion of argument' belongs to 'science,' or because it is partaken of, as 'sensation' belongs to 'living creature' (for something else also possesses sensation, *e.g.* 'man,' but he does so because he already partakes of 'living creature'), or because it partakes of something, as 'life' belongs to a particular 'living creature.' A man, therefore, errs if he does not add the words 'by nature,' for it is possible for that which belongs by nature not actually to belong to that to

(b) Observe whether the manner and subject of the property are accurately defined.

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ὑπάρχει, καθάπερ ἀνθρώπῳ τὸ δύο πόδας ἔχειν.
 μὴ διορίσας δ' ὅτι τὸ ὑπάρχον ἀποδίδωσιν, ὅτι
 οὐκ ἔσται τοιοῦτον οἶον νῦν ὑπάρχει ἐκείνῳ,¹ καθά-
 10 περ τὸ τέτταρας δακτύλους ἔχειν τὸν ἄνθρωπον.
 μὴ δηλώσας δὲ διότι ὡς πρῶτον ἢ ὡς κατ' ἄλλο
 τίθησιν, ὅτι οὐ καθ' οὗ ὁ λόγος, καὶ τοῦνομα ἀλη-
 θεύσεται, καθάπερ τὸ κεχρῶσθαι, εἴτε τῆς ἐπι-
 φανείας εἴτε τοῦ σώματος ἀποδοθὲν ἴδιον. μὴ
 προείπας δὲ διότι ἢ τῷ ἔχειν ἢ τῷ ἔχεσθαι τὸ
 15 ἴδιον ἀποδέδωκε, διότι οὐκ ἔσται ἴδιον· ὑπάρξει
 γάρ, ἐὰν μὲν τῷ ἔχεσθαι ἀποδιδῷ τὸ ἴδιον, τῷ
 ἔχοντι, ἐὰν δὲ τῷ ἔχοντι, τῷ ἐχομένῳ, καθάπερ
 τὸ ἀμετάπειστον ὑπὸ λόγου τῆς ἐπιστήμης ἢ τοῦ
 ἐπιστήμονος τεθὲν ἴδιον. μὴ προσσημήνας δὲ τῷ
 μετέχειν ἢ τῷ μετέχεσθαι, ὅτι καὶ ἄλλοις τισὶν
 20 ὑπάρξει τὸ ἴδιον· ἐὰν μὲν γὰρ τῷ μετέχεσθαι
 ἀποδῷ, τοῖς μετέχουσιν, ἐὰν δὲ τῷ μετέχειν,
 τοῖς μετεχομένοις, καθάπερ εἰ τοῦ τινὸς ζώου ἢ
 τοῦ ζώου τιθείη τὸ ζῆν ἴδιον. μὴ διαστείλας δὲ
 τὸ τῷ εἶδει, ὅτι ἐνὶ μόνῳ ὑπάρξει τῶν ὑπὸ τοῦτο

¹ Reading ἐκείνῳ for ἐκείνο with Waitz.

which it belongs by nature ; for example, it belongs to man by nature to possess two feet. He also errs if he does not state definitely that he is assigning what actually belongs, because it will not always belong, as it now does, to that particular subject, for example, the man's possession of four fingers. He also errs if he has not made it clear that he is stating it as being primary or as being called as it is in virtue of something else, because then the name also will not be true of that of which the description is true, for example ' coloured ' whether assigned as a property of ' surface ' or of ' body.' He also errs if he has not stated beforehand that he has assigned the property because something is in a certain state or because it is possessed by something as a state ; for then it will not be a property. For if he assigns the property as a state possessed by something, it will belong to that which possesses the state, while, if he assigns it to the possessor of the state, it will belong to the state which is possessed, as ' proof against the persuasion of argument ' when assigned as a property of ' science ' or of the ' scientist.' He also errs if he has not signified in addition that he assigns the property because the subject partakes of, or is partaken of by, something, since then the property will belong to some other things also. For if he assigns it because it is partaken of, it will belong to the things which partake of it, while if he assigns it because the subject partakes of it, it will belong to the things partaken of, for example, if ' life ' be stated to be a property of a particular ' living creature ' or merely of ' living creature.' He also errs if he has not distinguished the property as belonging specifically, because then it will belong to one only of those things which come

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ὄντων οὐ τὸ ἴδιον τίθησι· τὸ γὰρ καθ' ὑπερβολὴν
 25 ἐνὶ μόνῳ ὑπάρχει, καθάπερ τοῦ πυρὸς τὸ κουφό-
 τατον. ἐνίοτε δὲ καὶ τὸ τῷ εἶδει προσθεῖς δι-
 ήμαρτεν. δεήσει γὰρ ἐν εἶδος εἶναι τῶν λεχθέντων
 ὅταν τὸ τῷ εἶδει προστεθῇ· τοῦτο δ' ἐπ' ἐνίων οὐ
 συμπίπτει, καθάπερ οὐδ' ἐπὶ τοῦ πυρός. οὐ γάρ
 ἐστὶν ἐν εἶδος τοῦ πυρός· ἕτερον γάρ ἐστι τῷ εἶδει
 30 ἄνθραξ καὶ φλόξ καὶ φῶς, ἕκαστον αὐτῶν πῦρ ὄν.
 διὰ τοῦτο δ' οὐ δεῖ, ὅταν τὸ τῷ¹ εἶδει προστεθῇ,
 ἕτερον εἶναι εἶδος τοῦ λεχθέντος, ὅτι τοῖς μὲν μάλ-
 λον τοῖς δ' ἦττον ὑπάρξει τὸ λεχθὲν ἴδιον, καθάπερ
 ἐπὶ τοῦ πυρὸς τὸ λεπτομερέστατον· λεπτομερέ-
 στερον γάρ ἐστι τὸ φῶς τοῦ ἄνθρακος καὶ τῆς
 φλογός. τοῦτο δ' οὐ δεῖ γίνεσθαι, ὅταν μὴ καὶ
 35 τὸ ὄνομα μᾶλλον κατηγορηῖται, καθ' οὐ ὁ λόγος
 μᾶλλον ἀληθεύεται· εἰ δὲ μή, οὐκ ἔσται, καθ' οὐ
 135 a ὁ λόγος μᾶλλον, καὶ τοῦνομα μᾶλλον. ἔτι δὲ πρὸς
 τούτοις ταῦτόν εἶναι συμβήσεται τὸ ἴδιον τοῦ τε
 ἀπλῶς καὶ τοῦ μάλιστα ὄντος ἐν τῷ ἀπλῶς τοιού-
 του,² καθάπερ ἐπὶ τοῦ πυρὸς ἔχει τὸ λεπτομερέ-
 στατον· καὶ γὰρ τοῦ φωτὸς ἔσται ταῦτό τοῦτο
 5 ἴδιον· λεπτομερέστατον γάρ ἐστι τὸ φῶς. ἄλλου
 μὲν οὖν οὕτως ἀποδιδόντος τὸ ἴδιον ἐπιχειρητέον,
 αὐτῷ δ' οὐ δοτέον ἐστὶ ταύτην τὴν ἔνστασιν, ἀλλ'
 εὐθὺς τιθέμενον τὸ ἴδιον διοριστέον ὃν τρόπον τί-
 θησι τὸ ἴδιον.

¹ Reading τὸ τῷ with D.² Reading τοιούτου with AB.

under the term of which he is stating the property ; for the superlative degree belongs to one only of them, for example, 'lightest' when used of 'fire.' Sometimes also he has erred even when he has added the word 'specifically' ; for the things mentioned will have to be of one species when 'specifically' is added ; but this does not occur in some cases, for example, in the case of 'fire.' For there is not one species only of fire, since a burning coal, a flame and light are different in species, though each of them is 'fire.' It is necessary when 'specifically' is added that there should not be a species other than that stated, for the reason that the property mentioned will belong to some things in a greater and to others in a less degree, for example 'consisting of the subtlest particles' as applied to 'fire' ; for light consists of subtler particles than a burning coal or a flame. But this ought not to occur unless the name is predicated in a greater degree of that of which the description is true to a greater degree ; otherwise the name will not be truer when applied to that of which the description is truer. Further, besides this, the same thing will happen to be the property both of that which possesses it absolutely and of that which possesses it in the highest degree in that which possesses it absolutely, as in the case of 'consisting of the subtlest particles' when used of 'fire' ; for this same thing will be a property of 'light,' for 'light' 'consists of the subtlest particles.' If, therefore, someone else assigns the property in this manner, one ought to argue against it, but one ought not oneself to give an opening for this objection, but one ought to define in what manner one is stating the property immediately when one is stating it.

- Ἐπειτ' ἀνασκευάζοντα μὲν εἰ αὐτὸ αὐτοῦ ἴδιον
 10 ἔθηκεν· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον.
 αὐτὸ γὰρ αὐτοῦ¹ πᾶν τὸ εἶναι δηλοῖ, τὸ δὲ τὸ εἶναι
 δηλοῦν οὐκ ἴδιον ἀλλ' ὅρος ἐστίν. οἷον ἐπεὶ ὁ
 εἷπας καλοῦ τὸ πρέπον ἴδιον εἶναι αὐτὸ ἑαυτοῦ
 ἴδιον ἀπέδωκε (ταῦτόν γὰρ ἐστὶ τὸ καλὸν καὶ
 πρέπον), οὐκ ἂν εἴη τὸ πρέπον τοῦ καλοῦ ἴδιον.
 15 κατασκευάζοντα δὲ εἰ μὴ αὐτὸ μὲν αὐτοῦ ἴδιον
 ἀπέδωκεν, ἀντικατηγορούμενον δ' ἔθηκεν· ἔσται
 γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ
 ὁ θεὸς ζώου ἴδιον τὸ οὐσία ἔμφυχος οὐκ αὐτὸ μὲν
 αὐτοῦ ἴδιον ἔθηκεν, ἀντικατηγορούμενον δ' ἀπο-
 δέδωκεν, εἴη ἂν ἴδιον τοῦ ζώου τὸ οὐσία ἔμφυχος.
 20 Ἐπειτ' ἐπὶ τῶν ὁμοιομερῶν σκεπτέον ἐστὶν
 ἀνασκευάζοντα μὲν εἰ τὸ τοῦ συνόλου ἴδιον μὴ
 ἀληθεύεται κατὰ τοῦ μέρους, ἢ εἰ τὸ τοῦ μέρους
 μὴ λέγεται κατὰ τοῦ σύμπαντος· οὐ γὰρ ἔσται
 ἴδιον τὸ κείμενον ἴδιον εἶναι. συμβαίνει δ' ἐπ'
 ἐνίων τοῦτο γίνεσθαι· ἀποδοίη γὰρ ἂν τις ἐπὶ τῶν
 25 ὁμοιομερῶν ἴδιον ἐνίετε μὲν ἐπὶ τὸ σύμπαν βλέψας,
 ἐνίετε δ' ἐπὶ τὸ κατὰ μέρος λεγόμενον αὐτὸς αὐτὸν
 ἐπιστήσας· ἔσται δ' οὐδέτερον ὀρθῶς ἀποδοδο-
 μένον. οἷον ἐπὶ μὲν τοῦ σύμπαντος, ἐπεὶ ὁ εἷπας

¹ Reading αὐτοῦ for αὐτῶ.

Next, for destructive criticism, you must see whether your opponent has stated a thing itself as a property of itself; for then what is stated to be a property will not be a property. For a thing itself always shows its own essence, and that which shows the essence is not a property but a definition. For example, a man who has said that 'decorous' is a property of 'beautiful' has assigned the thing itself as its own property (for 'beautiful' and 'decorous' are the same thing), and so 'decorous' cannot be a property of 'beautiful.' For constructive argument you must see whether, though he has not assigned the thing itself as a property of itself, he has nevertheless stated a convertible predicate; for then what has been stated not to be the property will be the property. For example, a man who has stated that 'animate substance' is a property of 'living creature,' though he has not stated that the thing itself is a property of itself, has nevertheless assigned a convertible predicate, and so 'animate substance' would be a property of 'living creature.'

(c) Observe whether the thing itself is assigned as its own property.

Next, in dealing with things which have like parts, for destructive criticism you must see whether the property of the whole is untrue of the part or if the property of the part is not predicated of the whole; for then what is stated to be a property will not be a property. This may happen in some cases; for a man might, in dealing with things which have like parts, assign a property sometimes looking at the whole and sometimes directing his attention to what is predicated of a part; and so in neither case will the property have been correctly assigned. For example, in the case of the whole, the man who has said that it is a property of 'sea' to be 'the greatest

(d) Observe whether, in things which consist of similar parts, the property of the whole is untrue of the parts, or that of the parts not predicated of the whole.

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θαλάττης ἴδιον τὸ πλείστον ὕδωρ ἀλμυρὸν ὁμοιο-
μεροῦς μὲν τινος ἔθηκε τὸ ἴδιον, τοιοῦτον δ' ἀπ-
30 ἔδωκεν ὁ οὐκ ἀληθεύεται κατὰ τοῦ μέρους (οὐ γάρ
ἐστὶν ἢ τίς θάλαττα τὸ πλείστον ὕδωρ ἀλμυρόν),
οὐκ ἂν εἴη τῆς θαλάττης ἴδιον τὸ πλείστον ὕδωρ
ἀλμυρόν. ἐπὶ δὲ τοῦ μέρους, οἷον ἐπεὶ ὁ θεὸς
ἀέρος ἴδιον τὸ ἀναπνευστὸν ὁμοιομεροῦς μὲν τινος
εἶρηκε τὸ ἴδιον, τοιοῦτον δ' ἀπέδωκεν ὁ κατὰ τοῦ

35 τινὸς ἀέρος ἀληθεύεται, κατὰ δὲ τοῦ σύμπαντος
οὐ λέγεται (οὐ γάρ ἐστὶν ὁ σύμπας ἀναπνευστός),

135 b οὐκ ἂν εἴη τοῦ ἀέρος ἴδιον τὸ ἀναπνευστόν. κατα-
σκευάζοντα δὲ εἰ ἀληθεύεται μὲν καθ' ἐκάστου
τῶν ὁμοιομερῶν, ἔστι δ' ἴδιον αὐτῶν κατὰ τὸ
σύμπαν· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον.
οἷον ἐπεὶ ἀληθεύεται κατὰ πάσης γῆς¹ τὸ κάτω
5 φέρεσθαι κατὰ φύσιν, ἔστι δὲ τοῦτο ἴδιον καὶ τῆς
τινὸς γῆς κατὰ τὴν γῆν, εἴη ἂν τῆς γῆς ἴδιον τὸ
κάτω φέρεσθαι κατὰ φύσιν.

VI. Ἐπειτ' ἐκ τῶν ἀντικειμένων σκεπτέον ἐστὶ
πρῶτον μὲν ἐκ τῶν ἐναντίων ἀνασκευάζοντα μὲν
εἰ τοῦ ἐναντίου μὴ ἐστὶ τὸ ἐναντίον ἴδιον· οὐδὲ
10 γὰρ τοῦ ἐναντίου ἔσται τὸ ἐναντίον ἴδιον. οἷον
ἐπεὶ ἐναντίον ἐστὶ δικαιοσύνη μὲν ἀδικία, τῷ
βελτίστῳ δὲ τὸ χεῖριστον, οὐκ ἔστι δὲ τῆς δι-
καιοσύνης ἴδιον τὸ βέλτιστον, οὐκ ἂν εἴη τῆς
ἀδικίας ἴδιον τὸ χεῖριστον. κατασκευάζοντα δὲ εἰ

¹ Omitting τῆς before γῆς with Waitz.

mass of salt-water ' has stated the property of something which has like parts, but he has assigned an attribute of such a kind that it is not true of the part (for a particular sea is not ' the greatest mass of salt-water '), and so ' the greatest mass of salt-water ' could not be a property of ' sea.' So too in the case of the part ; for example, the man who has stated that ' respirable ' is a property of ' air ' has asserted the property of something which has like parts, but has assigned an attribute of such a kind that it is true of some air but is not predicable of the whole (for the whole air is not respirable), and so ' respirable ' could not be a property of the air. For constructive argument, on the other hand, you must see whether, while it is true of each of the things which have like parts, it is a property of them taken as a whole ; for then what is stated not to be a property will be a property. For example, while it is true of all earth that it is carried naturally downwards, and this is also a property of a certain portion of earth as forming part of ' the earth,' it would be a property of ' earth ' ' to be carried naturally downwards.'

VI. Next, you must examine on the basis of opposites and, in the first place, of *contraries* and, for destructive criticism, see whether the contrary of the term fails to be a property of the contrary subject ; for then neither will the contrary of the former be a property of the contrary of the latter. For example, since injustice is contrary to justice, and the greatest evil is contrary to the greatest good, but it is not a property of ' justice ' to be ' the greatest good,' then the ' greatest evil ' would not be a property of ' injustice.' For constructive argument, on the other hand, you must see whether the contrary is a pro-

*Rules
drawn from
different
modes of
opposition :*
(1) *Contrary
op-
position.*

35 b

τοῦ ἐναντίου τὸ ἐναντίον ἴδιόν ἐστιν· καὶ γὰρ τοῦ
ἐναντίου τὸ ἐναντίον ἴδιον ἔσται. οἷον ἐπεὶ ἐναντίον
15 ἐστὶν ἀγαθῷ μὲν κακόν, αἵρετῷ δὲ φευκτόν, ἔστι
δὲ τοῦ ἀγαθοῦ ἴδιον τὸ αἵρετόν, εἴη ἂν κακοῦ ἴδιον
τὸ φευκτόν.

Δεύτερον δ' ἐκ τῶν πρὸς τι ἀνασκευάζοντα μὲν
εἰ τὸ πρὸς τι τοῦ πρὸς τι μὴ ἐστὶν ἴδιον· οὐδὲ γὰρ
τὸ πρὸς τι τοῦ πρὸς τι ἔσται ἴδιον. οἷον ἐπεὶ
20 λέγεται διπλάσιον μὲν πρὸς ἡμισυ, ὑπερέχον δὲ
πρὸς ὑπερεχόμενον, οὐκ ἔστι δὲ τοῦ διπλασίου
τὸ ὑπερέχον ἴδιον, οὐκ ἂν εἴη τοῦ ἡμίσεος τὸ
ὑπερεχόμενον ἴδιον. κατασκευάζοντα δὲ εἰ τοῦ
πρὸς τι τὸ πρὸς τί ἐστὶν ἴδιον· καὶ γὰρ τοῦ πρὸς
τι τὸ πρὸς τι ἔσται ἴδιον. οἷον ἐπεὶ λέγεται τὸ
25 μὲν διπλάσιον πρὸς τὸ ἡμισυ, τὸ δὲ δύο πρὸς ἓν
〈πρὸς τὸ ἓν πρὸς δύο〉,¹ ἔστι δὲ τοῦ διπλασίου ἴδιον
τὸ ὡς δύο πρὸς ἓν, εἴη ἂν τοῦ ἡμίσεος ἴδιον τὸ ὡς
ἓν πρὸς δύο.

Τρίτον ἀνασκευάζοντα μὲν εἰ τῆς ἕξεως τὸ καθ'
ἕξιν λεγόμενον μὴ ἐστὶν ἴδιον· οὐδὲ γὰρ τῆς στερή-
σεως τὸ κατὰ στέρησιν λεγόμενον ἔσται ἴδιον. καὶ
30 εἰ δὲ τῆς στερήσεως τὸ κατὰ στέρησιν λεγόμενον
μὴ ἐστὶν ἴδιον, οὐδὲ τῆς ἕξεως τὸ κατὰ τὴν ἕξιν

¹ Reading with Strache-Wallies τὸ δὲ δύο πρὸς ἓν 〈πρὸς τὸ ἓν
πρὸς δύο〉, ἔστι.

perty of the contrary ; for then the contrary too of the former will be a property of the contrary of the latter. For example, since 'evil' is contrary to 'good' and 'object of avoidance' contrary to 'object of choice,' and 'object of choice' is a property of 'good,' 'object of avoidance' would be a property of 'evil.'

Secondly, you must examine on the basis of *relative opposites*, and see, for destructive criticism, whether one correlative of the term fails to be the property of the correlatives of the subject ; for then neither will the correlative of the former be a property of the correlative of the latter. For example, 'double' is described as relative to 'half,' and 'exceeding' to 'exceeded,' but 'exceeding' is not a property of 'double,' and so 'exceeded' could not be a property of 'half.' For constructive argument on the other hand you must see whether the correlative of the property is a property of the correlative of the subject ; for then too the correlative of the former will be a property of the correlative of the latter. For example, 'double' is described as relative to 'half,' and the proportion 2 : 1 as relative to the proportion 1 : 2, and it is a property of 'double' to be in the proportion of 2 : 1 ; it would, therefore, be a property of 'half' to be in the proportion of 1 : 2.

Thirdly, for destructive criticism, you must see whether what is described in the terms of a state (A) is not a property of the state (B), for then neither will what is described in the terms of the privation (of A) be a property of the privation (of B). Also, if what is described in the terms of a privation (of A) is not a property of the privation (of B), neither will what is described in the terms of the state (A) be a

(2) Relative opposition.

(3) The opposition of a state and its privation.

135 b

λεγόμενον ἴδιον ἔσται. οἷον ἐπεὶ οὐ λέγεται τῆς κωφότητος ἴδιον τὸ ἀναισθησίαν εἶναι, οὐδ' ἂν τῆς ἀκούσεως εἶη ἴδιον τὸ αἰσθῆσιν εἶναι. κατασκευάζοντα δὲ εἰ τὸ καθ' ἕξιν λεγόμενον ἐστι τῆς

35 ἕξεως ἴδιον· καὶ γὰρ τῆς στερήσεως τὸ κατὰ στέρησιν λεγόμενον ἔσται ἴδιον. καὶ εἰ τῆς στερήσεως τὸ κατὰ στέρησιν λεγόμενον ἐστὶν ἴδιον,

136 a καὶ τῆς ἕξεως τὸ καθ' ἕξιν λεγόμενον ἔσται ἴδιον. οἷον ἐπεὶ τῆς ὄψεώς ἐστὶν ἴδιον τὸ βλέπειν, καθὸ ἔχομεν ὄψιν, εἶη ἂν τῆς τυφλότητος ἴδιον τὸ μὴ βλέπειν, καθὸ οὐκ ἔχομεν ὄψιν πεφυκότες ἔχειν.

5 Ἐπειτα ἐκ τῶν φάσεων καὶ τῶν ἀποφάσεων, πρῶτον μὲν ἐξ αὐτῶν τῶν κατηγορουμένων. ἔστι δ' ὁ τόπος οὗτος χρήσιμος ἀνασκευάζοντι μόνον. οἷον εἰ ἡ φάσις ἢ τὸ κατὰ τὴν φάσιν λεγόμενον αὐτοῦ ἰδιόν ἐστιν· οὐ γὰρ ἔσται αὐτοῦ ἡ ἀπόφασις οὐδὲ τὸ κατὰ τὴν ἀπόφασιν λεγόμενον ἴδιον. καὶ

10 εἰ δ' ἡ ἀπόφασις ἢ τὸ κατὰ τὴν ἀπόφασιν λεγόμενον ἐστὶν αὐτοῦ ἴδιον, οὐκ ἔσται ἡ φάσις οὐδὲ τὸ κατὰ τὴν φάσιν λεγόμενον ἴδιον· οἷον ἐπεὶ τοῦ ζώου ἐστὶν ἴδιον τὸ ἐμψυχον, οὐκ ἂν εἶη τοῦ ζώου ἴδιον τὸ οὐκ ἐμψυχον.

Δεύτερον δ' ἐκ τῶν κατηγορουμένων ἢ μὴ 15 κατηγορουμένων, καὶ καθ' ὧν κατηγορεῖται ἢ μὴ κατηγορεῖται, ἀνασκευάζοντα μὲν εἰ ἡ φάσις τῆς

^a It is not a property of deafness, because it can also be predicated of, for example, blindness.

property of the state (B). For example, since 'absence of sensation' is not predicated as a property of deafness,^a neither would 'sensation' be a property of 'hearing.' For constructive argument, on the other hand, you must see whether what is described in the terms of a state (A) is a property of the state (B); for then what is described in the terms of a privation (of A) will be a property of the privation (of B). And, again, if what is described in the terms of a privation (of A) is a property of the privation (of B), then, too, what is described in the term of the state (A) will be a property of the state (B). For example, since 'to see' is a property of 'vision,' in as far as we possess 'vision,' 'inability to see' would be a property of 'blindness,' in as much as we do not possess vision, though it is our nature to possess it.

Next, you must argue from affirmations and negation, and first from the predicates themselves. This commonplace is useful only for destructive criticism. For example, you must see whether the affirmation or the attribute predicated affirmatively is a property of the subject; for then neither the negation nor the attribute predicated negatively will be a property of the subject. Also, if the negation or the attribute predicated negatively is a property of the subject, then neither the affirmation nor the attribute predicated affirmatively will be a property of the subject. For example, since 'animate' is a property of 'living creature,' 'not animate' could not be a property of it.

Secondly, you must argue from the things which are predicated or not predicated and from the subjects of which they are or are not predicated, and, for destructive criticism, see whether the affirmative

(4) Contradictory opposition applied to predicates only.

(5) Contradictory opposition applied both to predicates

φάσεως μή ἐστιν ἴδιον· οὐδὲ γὰρ ἡ ἀπόφασις τῆς
 ἀποφάσεως ἔσται ἴδιον. καὶ εἰ δ' ἡ ἀπόφασις
 τῆς ἀποφάσεως μή ἐστιν ἴδιον, οὐδ' ἡ φάσις τῆς
 φάσεως ἔσται ἴδιον. οἷον ἐπεὶ οὐκ ἔστι τοῦ ἀν-
 20 θρώπου ἴδιον τὸ ζῶον, οὐδ' ἂν τοῦ μὴ ἀνθρώ-
 που εἴη ἴδιον τὸ μὴ ζῶον. καὶ εἰ δὲ τοῦ μὴ
 ἀνθρώπου φαίνεται μὴ ἴδιον τὸ μὴ ζῶον, οὐδὲ τοῦ
 ἀνθρώπου ἔσται ἴδιον τὸ ζῶον. κατασκευάζοντα δ'
 εἰ τῆς φάσεως ἡ φάσις ἐστὶν ἴδιον· καὶ γὰρ τῆς
 ἀποφάσεως ἡ ἀπόφασις ἔσται ἴδιον. καὶ εἰ δὲ
 25 τῆς ἀποφάσεως ἡ ἀπόφασις ἐστὶν ἴδιον, καὶ ἡ
 φάσις τῆς φάσεως ἔσται ἴδιον. οἷον ἐπεὶ τοῦ μὴ
 ζώου ἴδιόν ἐστι τὸ μὴ ζῆν, εἴη ἂν τοῦ ζώου ἴδιον
 τὸ ζῆν· καὶ εἰ δὲ τοῦ ζώου φαίνεται ἴδιον τὸ ζῆν,
 καὶ τοῦ μὴ ζώου φανεῖται ἴδιον τὸ μὴ ζῆν.

Τρίτον δὲ ἐξ αὐτῶν τῶν ὑποκειμένων ἀνασκευ-
 30 άζοντα μὲν εἰ τὸ ἀποδοδεομένον ἴδιον τῆς φάσεως
 ἐστὶν ἴδιον· οὐ γὰρ ἔσται τὸ αὐτὸ καὶ τῆς ἀπο-
 φάσεως ἴδιον. καὶ εἰ δὲ τῆς ἀποφάσεως ἴδιον τὸ
 ἀποδοθέν, οὐκ ἔσται τῆς φάσεως ἴδιον. οἷον ἐπεὶ
 τοῦ ζώου ἴδιον τὸ ἐμφυχον, οὐκ ἂν εἴη τοῦ μὴ
 ζώου ἴδιον τὸ ἐμφυχον. κατασκευάζοντα δὲ εἰ τὸ

predicate is not a property of the affirmative subject ; and sub-
 for then neither will the negative predicate be a pro-
 perty of the negative subject. Also if the negative pre-
 predicate fails to be a property of the negative subject,
 neither will the affirmative predicate be a property
 of the affirmative subject. For example, since ' living
 creature ' is not a property of ' man,' neither could
 ' not-living-creature ' be a property of ' not-man.'
 Again, if ' not-living-creature ' appears not to be a
 property of ' not-man,' neither will ' living creature '
 be a property of ' man.' For constructive argument,
 on the other hand, you must see whether the affirma-
 tive predicate is a property of the affirmative subject ;
 for then, too, the negative predicate will be a pro-
 perty of the negative subject. And if the negative
 predicate is a property of the negative subject, the
 affirmative predicate also will be a property of the
 affirmative subject. For example, since ' not to live '
 is a property of a ' not-living-creature,' ' to live '
 would be a property of ' living-creature,' and, if ' to
 live ' appears to be a property of ' living-creature,'
 ' not-to-live ' will appear to be a property of ' not-
 living-creature.'

Thirdly, you must argue from the subjects them-
 selves and, for destructive criticism, see whether the
 property assigned is a property of the affirmative
 subject ; for then the same thing will not be a pro-
 perty of the negative subject also. And if the pro-
 perty assigned is a property of the negative subject,
 it will not be a property of the affirmative subject.
 For example, since ' animate ' is a property of ' living-
 creature,' ' animate ' could not be a property of ' not-
 living-creature.' For constructive argument, you
 must see whether the property assigned fails to be a

(6) Con-
 tradictory
 opposition
 applied to
 subjects
 only.

136 a

- 35 ἀποδοθὲν μὴ τῆς φάσεως ἴδιον· (εἰ γὰρ μὴ τῆς φάσεως, ἴδιον)¹ εἴη ἂν τῆς ἀποφάσεως. οὗτος δ' ὁ τόπος ψευδῆς ἐστίν· φάσις γὰρ ἀποφάσεως καὶ ἀπόφασις φάσεως οὐκ ἐστίν ἴδιον. φάσις μὲν
136 b γὰρ ἀποφάσει οὐδ' ὅλως ὑπάρχει, ἀπόφασις δὲ φάσει ὑπάρχει μὲν, οὐχ ὥς ἴδιον δὲ ὑπάρχει.

Ἐπειτα δ' ἐκ τῶν ἀντιδιηρημένων ἀνασκευάζοντα μὲν εἰ τῶν ἀντιδιηρημένων μηδὲν μηδενὸς τῶν
5 λοιπῶν ἀντιδιηρημένων ἐστίν ἴδιον· οὐδὲ γὰρ τὸ κείμενον ἔσται ἴδιον τούτου οὐ κείται ἴδιον. οἷον ἐπεὶ ζῶον αἰσθητὸν οὐδενὸς τῶν ἄλλων² ζώων ἐστίν ἴδιον, οὐκ ἂν εἴη τὸ ζῶον νοητὸν τοῦ θεοῦ ἴδιον. κατασκευάζοντα δ' εἰ τῶν λοιπῶν τῶν ἀντιδιηρημένων ὅτιοῦν ἐστίν ἴδιον τούτων ἐκάστου
10 τῶν ἀντιδιηρημένων· καὶ γὰρ τὸ λοιπὸν ἔσται τούτου ἴδιον, οὐ κείται μὴ εἶναι ἴδιον. οἷον ἐπεὶ φρονήσεως ἐστίν ἴδιον τὸ καθ' αὐτὸ πεφυκέναι λογιστικοῦ ἀρετὴν εἶναι, καὶ τῶν ἄλλων ἀρετῶν οὕτως ἐκάστης λαμβανομένης, εἴη ἂν σωφροσύνης ἴδιον τὸ καθ' αὐτὸ πεφυκέναι ἐπιθυμητικοῦ ἀρετὴν εἶναι.

- 15 VII. Ἐπειτ' ἐκ τῶν πτώσεων, ἀνασκευάζοντα μὲν εἰ ἡ πτώσις τῆς πτώσεως μὴ ἐστίν ἴδιον· οὐδὲ γὰρ ἡ πτώσις τῆς πτώσεως ἔσται ἴδιον. οἷον

¹ εἰ γὰρ μὴ τῆς φάσεως, ἴδιον add. Wallies.

² Omitting θνητῶν with B²DP.

^a A B C D are members of one division which have corresponding predicates *a b c d*. If any one of *b, c* or *d* is a property of any one of B, C or D other than that to which it corresponds, then *a* cannot be a property of A.

^b It has been alleged that *a* is not a property of A; but, if *b, c* and *d* are properties respectively of B, C and D, then *a* must be a property of A.

property of the affirmative subject ; for, if it is not a property of the affirmative subject, it would be a property of the negative subject. But this commonplace is misleading ; for an affirmative term is not a property of a negative subject, nor a negative term of a positive subject ; for an affirmative term does not belong to a negative subject at all, while a negative term does belong to an affirmative subject, but not as a property.

Next, you can take the opposite members of corresponding divisions and see, for destructive criticism, whether no member of one division is a property of any opposite member of the other division ; for then neither will the term stated be a property of that of which it is stated to be a property.^a For example, since 'sensible living creature' is a property of none of the other living creatures, 'intelligible living creature' could not be a property of God. For constructive argument, on the other hand, you must see whether any one of the other opposite members is a property of each of the opposite members ; for then the remaining one too will be a property of that of which it has been stated not to be a property.^b For example, since it is a property of 'prudence' to be 'in itself naturally the virtue of the reasoning faculty,' then, if each of the other virtues is treated similarly, it would be the property of 'temperance' to be 'in itself naturally the virtue of the appetitive faculty.'

*Rules
drawn from
the co-
ordinate
members of
a division.*

VII. Next, you can take the inflexions and see, for destructive criticism, whether one inflexion fails to be a property of another inflexion ; for then neither will one changed inflexion be a property of the other changed inflexion. For example, since

*Rules
drawn (a)
from in-
flections.*

ἐπεὶ οὐκ ἔστι τοῦ δικαίως ἴδιον τὸ καλῶς, οὐδ' ἂν τοῦ δικαίου εἴη ἴδιον τὸ καλόν. κατασκευάζοντα δὲ εἰ ἡ πτώσις τῆς πτώσεως ἐστὶν ἴδιον· καὶ γὰρ
 20 ἡ πτώσις τῆς πτώσεως ἔσται ἴδιον. οἷον ἐπεὶ τοῦ ἀνθρώπου ἐστὶν ἴδιον τὸ πεζὸν δίπουν, καὶ τῷ ἀνθρώπῳ εἴη ἂν ἴδιον τὸ πεζῷ δίποδι λέγεσθαι. οὐ μόνον δ' ἐπ' αὐτοῦ τοῦ εἰρημένου κατὰ τὰς πτώσεις ἐστὶ σκεπτέον, ἀλλὰ καὶ ἐπὶ τῶν ἀντικειμένων, καθάπερ καὶ ἐπὶ τῶν πρότερον τόπων
 25 εἴρηται, ἀνασκευάζοντα μὲν εἰ ἡ τοῦ ἀντικειμένου πτώσις μὴ ἐστὶν ἴδιον τῆς τοῦ ἀντικειμένου πτώσεως· οὐδὲ γὰρ ἡ τοῦ ἀντικειμένου πτώσις ἔσται ἴδιον τῆς τοῦ ἀντικειμένου πτώσεως. οἷον ἐπεὶ οὐκ ἔστι τοῦ δικαίως ἴδιον τὸ ἀγαθῶς, οὐδ' ἂν τοῦ ἀδίκως εἴη ἴδιον τὸ κακῶς. κατασκευάζοντα δὲ εἰ ἡ τοῦ ἀντικειμένου πτώσις ἐστὶν ἴδιον τῆς
 30 τοῦ ἀντικειμένου πτώσεως· καὶ γὰρ ἡ τοῦ ἀντικειμένου πτώσις ἔσται ἴδιον τῆς τοῦ ἀντικειμένου πτώσεως. οἷον ἐπεὶ τοῦ ἀγαθοῦ ἐστὶν ἴδιον τὸ βέλτιστον, καὶ τοῦ κακοῦ ἂν εἴη ἴδιον τὸ χείριστον.
 "Ἐπειτ' ἐκ τῶν ὁμοίως ἐχόντων, ἀνασκευάζοντα
 35 μὲν εἰ τὸ ὁμοίως ἔχον τοῦ ὁμοίως ἔχοντος μὴ ἐστὶν ἴδιον· οὐδὲ γὰρ τὸ ὁμοίως ἔχον τοῦ ὁμοίως ἔχοντος ἔσται ἴδιον. οἷον ἐπεὶ ὁμοίως ἔχει ὁ οἰκοδόμος πρὸς τὸ ποιεῖν οἰκίαν καὶ ὁ ἰατρός πρὸς

^a The datives here used cannot be satisfactorily rendered in English. They can be expressed in Latin; Pacius renders: '*homini proprium est dici pedestri bipedi.*'

^b Cf. 114 b 6 ff.

'honourably' is not a property of 'justly,' neither could 'honourable' be a property of 'just.' For constructive argument, you must see whether one inflexion is a property of the other inflexion ; for then one changed inflexion will be a property of the other changed inflexion. For example, since 'pedestrian biped' is a property of 'man,' the description 'of pedestrian biped' would be the property 'of man.'^a You must examine the inflexions not only in the actual term assigned but also in its opposites, as has been said in the earlier commonplaces also,^b and, for destructive criticism, see whether the inflexion of one opposite fails to be a property of the inflexion of the other opposite ; for then neither will the changed inflexion of one opposite be a property of the changed inflexion of the other opposite. For example, since 'well' is not a property of 'justly,' neither could 'badly' be a property of 'unjustly.' For constructive argument, you must see whether the inflexion of one opposite is a property of the inflexion of the other opposite ; for then the changed inflexion of one opposite will be also a property of the changed inflexion of the other opposite. For example, since 'best' is a property of 'the good,' 'worst' also would be a property of 'the bad.'

Next, you must argue from things which stand in a similar relation, and, for destructive criticism, see whether an attribute which is similarly related fails to be a property of the similarly related subject ; for then neither will that which is related like the former be a property of that which is related like the latter. For example, since the builder stands in a similar relation for the production of a house to that in which the doctor stands for the production of

(b) From relations like the relation asserted to be a property.

136 b

τὸ ποιεῖν ὑγίειαν, οὐκ ἔστι δὲ ἰατροῦ ἴδιον τὸ ποι-
 137 a εἶν ὑγίειαν, οὐκ ἂν εἴη οἰκοδόμου ἴδιον τὸ ποιεῖν
 οἰκίαν. κατασκευάζοντα δὲ εἰ τὸ ὁμοίως ἔχον τοῦ
 ὁμοίως ἔχοντός ἐστιν ἴδιον· καὶ γὰρ τὸ ὁμοίως
 ἔχον τοῦ ὁμοίως ἔχοντος ἔσται ἴδιον. οἷον ἐπεὶ
 ὁμοίως ἔχει ἰατρός τε πρὸς τὸ ποιητικὸς ὑγείας
 5 εἶναι καὶ γυμναστῆς πρὸς τὸ ποιητικὸς εὐεξίας, ἔστι
 δ' ἴδιον γυμναστοῦ τὸ ποιητικὸν εἶναι εὐεξίας, εἴη
 ἂν ἴδιον ἰατροῦ τὸ ποιητικὸν εἶναι ὑγείας.

Ἔπειτ' ἐκ τῶν ὡσαύτως ἐχόντων, ἀνασκευάζοντα
 μὲν εἰ τὸ ὡσαύτως ἔχον τοῦ ὡσαύτως ἔχοντος μὴ
 10 ἔστιν ἴδιον· οὐδὲ γὰρ τὸ ὡσαύτως ἔχον τοῦ ὡσαύ-
 τως ἔχοντος ἔσται ἴδιον. εἰ δ' ἔστι τοῦ ὡσαύτως
 ἔχοντος τὸ ὡσαύτως ἔχον ἴδιον, τούτου οὐκ ἔσται
 ἴδιον οὐ κείται εἶναι ἴδιον. οἷον ἐπεὶ ὡσαύτως
 ἔχει φρόνησις πρὸς τὸ καλὸν καὶ τὸ αἰσχροὺν τῷ
 ἐπιστήμῃ ἐκατέρου αὐτῶν εἶναι, οὐκ ἔστι δ' ἴδιον
 15 φρονήσεως τὸ ἐπιστήμην εἶναι καλοῦ, οὐκ ἂν εἴη
 ἴδιον φρονήσεως τὸ ἐπιστήμην εἶναι αἰσχροῦ. εἰ
 δ' ἔστιν ἴδιον φρονήσεως τὸ ἐπιστήμην εἶναι κα-
 λοῦ, οὐκ ἂν εἴη ἴδιον αὐτῆς τὸ ἐπιστήμην εἶναι
 αἰσχροῦ· ἀδύνατον γὰρ εἶναι τὸ αὐτὸ πλείονων ἴδιον.
 κατασκευάζοντι δὲ οὐδὲν οὗτος ὁ τόπος ἐστὶ χρή-
 20 σιμος· τὸ γὰρ ὡσαύτως ἔχον ἔν πρὸς πλείω συγ-
 κρίνεται.

^a Let *a* and *b* be identically related to *A* ; if *A* is not a property of *a*, neither will it be a property of *b*.

^b If *A* is a property of *a*, it cannot be a property of *b*, because the same thing cannot be a property of more than one subject.

health, but it is not a property of a doctor to produce health, it would not be a property of a builder to produce a house. For constructive argument, you must see whether a similarly related attribute is a property of the similarly related subject ; for then an attribute which is related like the former will be a property of a subject which is related like the latter. For example, since a doctor stands in a similar relation as productive of health to that in which a trainer stands as productive of good condition, and it is a property of the trainer to be productive of good condition, it would be a property of the doctor to be productive of health.

Next, you must argue from things which stand in identical relations and see, for destructive criticism, whether what is identically related to two things fails to be a property of one of these things, for then it will not be the property of the other either ^a ; but if what is identically related to two things is a property of one of them, it will not be a property of that of which it is stated to be a property.^b For example, since prudence is identically related to the honourable and the disgraceful, since it is a knowledge of each of them, and it is not a property of prudence to be a knowledge of the honourable, it would not be a property of prudence to be a knowledge of the disgraceful. But if a knowledge of the honourable is a property of prudence, a knowledge of the disgraceful could not be a property of prudence ; for it is impossible for the same thing to be a property of more than one thing. For constructive argument this commonplace is of no use ; for what is identically related is one thing brought into comparison with more than one thing.

(c) From identity of relations between the property and two subjects.

137 a

"Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ κατὰ τὸ εἶναι
 λεγόμενον μή ἐστι τοῦ κατὰ τὸ εἶναι λεγομένου
 ἴδιον· οὐδὲ γὰρ τὸ φθείρεσθαι τοῦ κατὰ τὸ φθεί-
 ρεσθαι, οὐδὲ τὸ γίνεσθαι τοῦ κατὰ τὸ γίνεσθαι
 λεγομένου ἔσται ἴδιον. οἷον ἐπεὶ οὐκ ἔστιν ἀν-
 25 θρώπου ἴδιον τὸ εἶναι ζῶον, οὐδ' ἂν τοῦ ἀνθρώπου
 γίνεσθαι εἴη ἴδιον τὸ γίνεσθαι ζῶον· οὐδ' ἂν τοῦ
 ἀνθρώπου φθείρεσθαι εἴη ἴδιον τὸ φθείρεσθαι ζῶον.
 τὸν αὐτὸν δὲ τρόπον ληπτέον ἐστὶ καὶ ἐκ τοῦ
 γίνεσθαι πρὸς τὸ εἶναι καὶ φθείρεσθαι καὶ ἐκ τοῦ
 φθείρεσθαι πρὸς τὸ εἶναι καὶ πρὸς τὸ γίνεσθαι,
 30 καθάπερ εἴρηται νῦν ἐκ τοῦ εἶναι πρὸς τὸ γίνεσθαι
 καὶ φθείρεσθαι. κατασκευάζοντα δὲ εἰ τοῦ κατὰ
 τὸ εἶναι τεταγμένου ἐστὶ τὸ κατ' αὐτὸ τεταγμένον
 ἴδιον· καὶ γὰρ τοῦ κατὰ τὸ γίνεσθαι λεγομένου
 ἔσται τὸ κατὰ τὸ γίνεσθαι λεγόμενον ἴδιον καὶ
 τοῦ κατὰ τὸ φθείρεσθαι τὸ κατὰ τοῦτο ἀποδιδό-
 35 μενον. οἷον ἐπεὶ τοῦ ἀνθρώπου ἐστὶν ἴδιον τὸ
 εἶναι βροτόν, καὶ τοῦ γίνεσθαι ἀνθρώπου εἴη ἂν
 ἴδιον τὸ γίνεσθαι βροτόν καὶ τοῦ φθείρεσθαι
 ἀνθρώπου τὸ φθείρεσθαι βροτόν. τὸν αὐτὸν δὲ
 137 b τρόπον ληπτέον ἐστὶ καὶ ἐκ τοῦ γίνεσθαι καὶ
 φθείρεσθαι πρὸς τε τὸ εἶναι καὶ πρὸς τὰ ἐξ αὐτῶν,
 καθάπερ καὶ ἀνασκευάζοντι εἴρηται.

"Ἐπειτ' ἐπιβλέπειν ἐπὶ τὴν ἰδέαν τοῦ κειμένου,

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Next, for destructive criticism, you must see whether the predicate which is said 'to be' is *not* a property of the subject which is said 'to be'; for then neither will the predicate which is said 'to be destroyed' be a property of the subject which is said 'to be destroyed,' nor will the predicate which is said 'to be becoming' be a property of the subject which is said 'to be becoming.' For example, since it is not the property of man to be an animal, neither could 'becoming an animal' be a property of 'becoming a man'; nor could the 'destruction of an animal' be a property of the 'destruction of a man.' In the same way you must make the assumption from 'becoming' to 'being' and 'being destroyed,' and from 'being destroyed' to 'being' and 'becoming,' by the process of argument just described from 'being' to 'becoming' and 'being destroyed.' For constructive argument, on the other hand, you must see whether the predicate which is laid down as 'being' is a property of the subject laid down as 'being'; for then also the predicate which is described as 'becoming' will be a property of the subject which is described as 'becoming,' and the predicate assigned in virtue of destruction will be a property of the subject which is said to 'be destroyed.' For example, since it is a property of man to be mortal, 'becoming mortal' would be a property of 'becoming a man,' and the 'destruction of a mortal' would be a property of the 'destruction of a man.' In the same way you must make the assumption also from 'becoming' and 'being destroyed' to 'being' and to the other consequences which are derived from them, as was described for destructive criticism.

Next you must look at the idea of that which is (d) From the processes of coming into being and destruction.
(e) From reference of

ἀνασκευάζοντα μὲν εἰ τῇ ἰδέᾳ μὴ ὑπάρχει, ἢ εἰ
 5 μὴ κατὰ τοῦτο καθ' ὃ λέγεται τοῦτο οὐ τὸ ἴδιον
 ἀπεδόθη· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι
 ἴδιον. οἷον ἐπεὶ αὐτοανθρώπῳ οὐχ ὑπάρχει τὸ
 ἡρεμεῖν, ἢ ἀνθρωπός ἐστιν, ἀλλ' ἢ ἰδέα, οὐκ ἂν
 εἶη ἀνθρώπου ἴδιον τὸ ἡρεμεῖν. κατασκευάζοντα
 δὲ εἰ τῇ ἰδέᾳ ὑπάρχει, καὶ κατὰ τοῦτο ὑπάρχει,
 10 ἢ λέγεται κατ' αὐτοῦ ἐκεῖνο οὐ κεῖται μὴ εἶναι
 ἴδιον· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον.
 οἷον ἐπεὶ ὑπάρχει τῷ αὐτοζῳῷ τὸ ἐκ ψυχῆς καὶ
 σώματος συγκεῖσθαι, καὶ ἢ ζῶον αὐτῷ ὑπάρχει
 τοῦτο, εἶη ἂν ζῶου ἴδιον τὸ ἐκ ψυχῆς καὶ σώματος
 συγκεῖσθαι.

VIII. Ἐπειτα ἐκ τοῦ μᾶλλον καὶ ἥττον, πρῶτον
 15 μὲν ἀνασκευάζοντα εἰ τὸ μᾶλλον τοῦ μᾶλλον μὴ
 ἐστιν ἴδιον· οὐδὲ γὰρ τὸ ἥττον τοῦ ἥττον ἔσται
 ἴδιον, οὐδὲ τὸ ἥκιστα τοῦ ἥκιστα, οὐδὲ τὸ μάλιστα
 τοῦ μάλιστα, οὐδὲ τὸ ἀπλῶς τοῦ ἀπλῶς. οἷον ἐπεὶ
 οὐκ ἔστι τὸ μᾶλλον κεχρῶσθαι τοῦ μᾶλλον σώ-
 ματος ἴδιον, οὐδὲ τὸ ἥττον κεχρῶσθαι τοῦ ἥττον
 20 σώματος εἶη ἂν ἴδιον, οὐδὲ τὸ κεχρῶσθαι σώματος
 ὅλως. κατασκευάζοντα δὲ εἰ τὸ μᾶλλον τοῦ
 μᾶλλον ἐστιν ἴδιον· καὶ γὰρ τὸ ἥττον τοῦ ἥττον

stated, and, for destructive criticism, see whether the property fails to belong to the idea, or whether it fails to belong in virtue of that which causes that of which the property was assigned to be so described; for then what was stated to be a property will not be a property. For example, since 'being at rest' does not belong to 'man-himself' as 'man' but as 'idea,' 'to be at rest' could not be a property of 'man.' For constructive argument, you must see whether the property belongs to the idea and belongs to it in virtue of this, namely, in as much as that is predicated of it of which it is stated not to be a property; for then what was stated to be a property will not be a property. For example, since it belongs to 'animal-itself' to be composed of soul and body and it belongs to it as animal, to be composed of soul and body would be a property of 'animal.'

the property asserted to the 'idea' of the subject.

VIII. Next, you can argue from the greater and less degrees and, first of all, for destructive criticism, see whether the greater degree of the predicate fails to be a property of the greater degree of subject; for then neither will the less degree of the predicate be a property of the less degree of the subject, nor the least degree of the least degree, nor the greatest degree of the greatest degree, nor the predicate simply of the subject simply. For example, since to be more coloured is not a property of what is more a body, neither would to be less coloured be a property of what is less a body, nor would colour be a property of body at all. For constructive argument, on the other hand, you must see whether a greater degree of the predicate is a property of a greater degree of the subject; for then a less degree of the predicate will be a property of a less degree of

Rules drawn (a) from the greater and less degrees.

137 b

ἔσται ἴδιον, καὶ τὸ ἥκιστα τοῦ ἥκιστα, καὶ τὸ
 μάλιστα τοῦ μάλιστα, καὶ τὸ ἀπλῶς τοῦ ἀπλῶς.
 οἷον ἐπεὶ τοῦ μᾶλλον ζῶντος τὸ μᾶλλον αἰσθά-
 25 νεσθαί ἐστιν ἴδιον, καὶ τοῦ ἥττον ζῶντος τὸ ἥττον
 αἰσθάνεσθαι εἶη ἂν ἴδιον, καὶ τοῦ μάλιστα δὲ τὸ
 μάλιστα, καὶ τοῦ ἥκιστα τὸ ἥκιστα, καὶ τοῦ
 ἀπλῶς τὸ ἀπλῶς.

Καὶ ἐκ τοῦ ἀπλῶς δὲ πρὸς ταῦτα σκεπτέον
 ἐστὶν ἀνασκευάζοντα μὲν εἰ τὸ ἀπλῶς τοῦ ἀπλῶς
 30 μὴ ἐστὶν ἴδιον· οὐδὲ γὰρ τὸ μᾶλλον τοῦ μᾶλλον,
 οὐδὲ τὸ ἥττον τοῦ ἥττον, οὐδὲ τὸ μάλιστα τοῦ
 μάλιστα, οὐδὲ τὸ ἥκιστα τοῦ ἥκιστα ἔσται ἴδιον.
 οἷον ἐπεὶ οὐκ ἔστι τοῦ ἀνθρώπου τὸ σπουδαῖον
 ἴδιον, οὐδ' ἂν τοῦ μᾶλλον ἀνθρώπου τὸ μᾶλλον
 σπουδαῖον ἴδιον εἶη. κατασκευάζοντα δὲ εἰ τὸ
 35 ἀπλῶς τοῦ ἀπλῶς ἐστὶν ἴδιον· καὶ γὰρ τὸ μᾶλλον
 τοῦ μᾶλλον καὶ τὸ ἥττον τοῦ ἥττον καὶ τὸ ἥκιστα
 τοῦ ἥκιστα καὶ τὸ μάλιστα τοῦ μάλιστα ἔσται
 ἴδιον. οἷον ἐπεὶ τοῦ πυρός ἐστιν ἴδιον τὸ ἄνω
 138^a φέρεσθαι κατὰ φύσιν, καὶ τοῦ μᾶλλον πυρὸς εἶη
 ἂν ἴδιον τὸ μᾶλλον ἄνω φέρεσθαι κατὰ φύσιν.
 τὸν αὐτὸν δὲ τρόπον σκεπτέον ἐστὶ καὶ ἐκ τῶν
 ἄλλων πρὸς ἅπαντα ταῦτα.

Δεύτερον δ' ἀνασκευάζοντα μὲν εἰ τὸ μᾶλλον
 5 τοῦ μᾶλλον μὴ ἐστὶν ἴδιον· οὐδὲ γὰρ τὸ ἥττον τοῦ

^a i.e. the more, the less, etc.

the subject, and the least degree of the least degree and the greatest degree of the greatest degree, and the predicate simply of the subject simply. For example, since a higher degree of sensation is a property of a higher degree of living thing, a lower degree of sensation would be a property of a lower degree of living thing, and the highest degree of the highest degree, and the lowest degree of the lowest degree, and sensation simply of living thing simply.

Next, you can argue from the simple predication to these same kinds of predication,^a and, for destructive criticism, see whether the predicate simply is not a property of the subject simply ; for then neither will the greater degree of the predicate be a property of the greater degree of the subject, nor the less degree of the less degree, nor the greatest degree of the greatest degree, nor the least degree of the least degree. For example, since ' virtuous ' is not a property of ' man,' ' more virtuous ' could not be a property of ' more-man.' For constructive argument, on the other hand, you must see whether the predicate simply is a property of the subject simply ; for then also the greater degree of the predicate will be a property of the greater degree of the subject, and the less degree of the less degree, and the least degree of the least degree, and the greatest degree of the greatest degree. For example, since it is a property of ' fire ' ' to be carried naturally upwards,' it would be a property of ' a greater degree of fire ' ' to be carried naturally upwards to a greater degree.' In the same manner also one must examine these things from the point of view of the other degrees also.

Secondly, for destructive argument, you must see whether the more fails to be a property of the more ;

ἦττον ἔσται ἴδιον. οἶον ἐπεὶ μᾶλλον ἔστιν ἴδιον
 ζῶον τὸ αἰσθάνεσθαι ἢ ἀνθρώπου τὸ ἐπίστασθαι,
 οὐκ ἔστι δὲ ζῶον ἴδιον τὸ αἰσθάνεσθαι, οὐκ ἂν
 εἴη ἀνθρώπου ἴδιον τὸ ἐπίστασθαι. κατασκευά-
 ζοντα δ' εἰ τὸ ἦττον τοῦ ἦττόν ἐστιν ἴδιον· καὶ
 10 γὰρ τὸ μᾶλλον τοῦ μᾶλλον ἔσται ἴδιον. οἶον ἐπεὶ
 ἦττόν ἐστιν ἴδιον ἀνθρώπου τὸ ἡμερον φύσει ἢ
 ζῶον τὸ ζῆν, ἔστι δ' ἀνθρώπου ἴδιον τὸ ἡμερον
 φύσει, εἴη ἂν ζῶον ἴδιον τὸ ζῆν.

Τρίτον δ' ἀνασκευάζοντα μὲν εἰ οὐ μᾶλλον ἔστιν
 ἴδιον, μή ἐστιν ἴδιον· οὐδὲ γὰρ οὐ ἦττόν ἐστιν ἴδιον,
 15 ἔσται τούτου ἴδιον. εἰ δ' ἐκείνου ἔστιν ἴδιον, οὐκ
 ἔσται τούτου ἴδιον. οἶον ἐπεὶ τὸ κεχρῶσθαι μᾶλ-
 λον τῆς ἐπιφανείας ἢ τοῦ σώματος ἔστιν ἴδιον,
 οὐκ ἔστι δὲ τῆς ἐπιφανείας ἴδιον, οὐκ ἂν εἴη τοῦ
 σώματος ἴδιον τὸ κεχρῶσθαι. εἰ δ' ἐστὶ τῆς
 ἐπιφανείας ἴδιον, οὐκ ἂν εἴη τοῦ σώματος ἴδιον.
 20 κατασκευάζοντι δὲ ὁ τόπος οὗτος οὐκ ἔστι χρήσι-
 μος· ἀδύνατον γάρ ἐστι ταὐτὸ πλειόνων ἴδιον εἶναι.

Τέταρτον δ' ἀνασκευάζοντα μὲν εἰ τὸ μᾶλλον
 αὐτοῦ ἴδιον μή ἐστιν ἴδιον· οὐδὲ γὰρ τὸ ἦττον
 αὐτοῦ ἴδιον ἔσται ἴδιον. οἶον ἐπεὶ μᾶλλον ἔστι
 25 τοῦ ζῶου ἴδιον τὸ αἰσθητὸν ἢ τὸ μεριστόν, οὐκ
 ἔστι δὲ τοῦ ζῶου τὸ αἰσθητὸν ἴδιον, οὐκ ἂν εἴη
 τοῦ ζῶου τὸ μεριστόν ἴδιον. κατασκευάζοντα δὲ
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for then neither will the less be a property of the less. For example, since 'perceiving' is more a property of 'animal' than 'knowing' is a property of 'man,' and 'perceiving' is not a property of 'animal,' 'knowing' would not be a property of 'man.' For constructive argument, on the other hand, you must see whether the less is a property of the less, for then the more will also be a property of the more. For example, since 'to be naturally civilized' is less a property of 'man' than 'living' is a property of 'animal,' and it is a property of 'man,' 'to be naturally civilized,' 'living' would be a property of 'animal.'

Thirdly, for destructive criticism, you must see whether a predicate fails to be a property of that of which it is to a greater degree a property ; for then neither will it be a property of that of which it is to a less degree a property ; and if it is a property of the former, it will not be a property of the latter. For example, since 'to be coloured' is to a greater degree a property of 'surface' than of 'body,' and it is not a property of 'surface,' 'to be coloured' could not be a property of 'body' ; and if it is a property of 'surface,' it could not be a property of 'body.' This commonplace is of no use for constructive argument ; for the same thing cannot possibly be a property of more than one thing.

Fourthly, for destructive criticism, you must see whether what is to a greater degree a property of the subject fails to be its property ; for then neither will what is to a less degree a property be its property. For example, since 'sensible' is to a greater degree a property of 'animal' than 'divisible,' and 'sensible' is not a property of 'animal,' 'divisible' could not be a property of 'animal.' For constructive argu

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εἰ τὸ ἡττον αὐτοῦ ὄν ἴδιον ἔστιν ἴδιον· καὶ γὰρ τὸ μᾶλλον αὐτοῦ ὄν ἴδιον ἔσται ἴδιον. οἷον ἐπεὶ ἡττόν ἐστιν ἴδιον ζώου τὸ αἰσθάνεσθαι ἢ τὸ ζῆν, ἔστι δὲ τοῦ ζώου τὸ αἰσθάνεσθαι ἴδιον, εἴη ἂν τοῦ ζώου τὸ ζῆν ἴδιον.

30 Ἐπειτ' ἐκ τῶν ὁμοίως ὑπαρχόντων πρῶτον μὲν ἀνασκευάζοντα εἰ τὸ ὁμοίως ὄν ἴδιον μὴ ἐστιν ἴδιον τούτου οὗ ὁμοίως ἐστὶν ἴδιον· οὐδὲ γὰρ τὸ ὁμοίως ὄν ἴδιον ἔσται ἴδιον τούτου οὗ ὁμοίως ἐστὶν ἴδιον. οἷον ἐπεὶ ὁμοίως ἐστὶν ἴδιον ἐπιθυμητικοῦ τὸ ἐπιθυμεῖν καὶ λογιστικοῦ τὸ λογίζεσθαι, οὐκ
35 ἔστι δ' ἴδιον ἐπιθυμητικοῦ τὸ ἐπιθυμεῖν, οὐκ ἂν εἴη ἴδιον λογιστικοῦ τὸ λογίζεσθαι. κατασκευάζοντα δὲ εἰ τὸ ὁμοίως ὄν ἴδιον ἔστι τούτου ἴδιον οὗ ὁμοίως ἐστὶν ἴδιον· ἔσται γὰρ καὶ τὸ ὁμοίως ὄν

138 b ἴδιον τούτου ἴδιον οὗ ὁμοίως ἐστὶν ἴδιον. οἷον ἐπεὶ ὁμοίως ἐστὶν ἴδιον λογιστικοῦ τὸ πρῶτον φρόνιμον καὶ ἐπιθυμητικοῦ τὸ πρῶτον σῶφρον, ἔστι δὲ τοῦ λογιστικοῦ ἴδιον τὸ πρῶτον φρόνιμον,
5 εἴη ἂν τοῦ ἐπιθυμητικοῦ ἴδιον τὸ πρῶτον σῶφρον.

Δεύτερον δ' ἀνασκευάζοντα μὲν εἰ τὸ ὁμοίως ὄν ἴδιον μὴ ἐστιν ἴδιον αὐτοῦ· οὐδὲ γὰρ τὸ ὁμοίως

ment you must see whether what is to a less degree a property of the subject is a property ; for then what is to a greater degree a property will be a property. For example, since 'sensation' is to a less degree a property of 'animal' than 'life,' and 'sensation' is a property of 'animal,' 'life' would be a property of 'animal.'

Next, you can argue from attributes which belong in an equal degree and first, for destructive criticism, see whether what is to an equal degree a property fails to be a property of that which is an equal degree a property ; for then neither will what is a property in an equal degree be a property of that of which it is in an equal degree a property. For example, since 'appetite' is a property of 'the appetitive faculty' in a degree equal to that in which 'reason' is a property of the 'reasoning faculty,' and 'appetitive' is not a property of the 'appetitive faculty,' 'reason' could not be a property of the 'reasoning faculty.' For constructive argument, you must see whether what is in an equal degree a property is a property of that of which it is in an equal degree a property ; for then also what is to an equal degree a property will be a property of that of which it is in an equal degree a property. For example, since 'primary wisdom' is a property of the 'reasoning faculty' in a degree equal to that in which 'primary temperance' is a property of the 'appetitive faculty,' and 'primary wisdom' is a property of the 'reasoning faculty,' 'primary temperance' would be a property of the 'appetitive faculty.'

Secondly, for destructive criticism, you must see whether what is in an equal degree a property of a subject fails to be a property of it ; for then neither will

(b) *From a comparison of an attribute-relation which resembles the alleged property-relation (1) between a different attribute and a different subject.*

(2) *Between the subject of the alleged property and a different attribute.*

ὃν ἴδιον ἔσται ἴδιον αὐτοῦ. οἷον ἐπεὶ ὁμοίως ἐστὶν ἴδιον ἀνθρώπου τὸ ὁρᾶν καὶ τὸ ἀκούειν, οὐκ ἔστι
 10 δ' ἀνθρώπου ἴδιον τὸ ὁρᾶν, οὐκ ἂν εἴη ἀνθρώπου ἴδιον τὸ ἀκούειν. κατασκευάζοντα δὲ εἰ τὸ ὁμοίως αὐτοῦ ὃν ἴδιον ἔστιν ἴδιον· καὶ γὰρ τὸ ὁμοίως αὐτοῦ ὃν ἴδιον ἔσται ἴδιον. οἷον ἐπεὶ ὁμοίως ἐστὶν ἴδιον ψυχῆς τὸ μέρος αὐτῆς ἐπιθυμητικὸν εἶναι καὶ λογιστικὸν πρῶτου, ἔστι δὲ ψυχῆς ἴδιον τὸ μέρος αὐτῆς εἶναι ἐπιθυμητικὸν πρῶτου, εἴη ἂν
 15 ἴδιον ψυχῆς τὸ μέρος αὐτῆς εἶναι λογιστικὸν πρῶτου.

Τρίτον δ' ἀνασκευάζοντα μὲν εἰ οὐ ὁμοίως ἐστὶν ἴδιον, μὴ ἔστιν ἴδιον· οὐδὲ γὰρ οὐ ὁμοίως ἐστὶν ἴδιον, ἔσται ἴδιον. εἰ δ' ἐκείνου ἐστὶν ἴδιον, οὐκ ἔσται θατέρου ἴδιον. οἷον ἐπεὶ ὁμοίως ἐστὶν ἴδιον τὸ καίειν φλογὸς καὶ ἄνθρακος, οὐκ ἔστι δ' ἴδιον
 20 φλογὸς τὸ καίειν, οὐκ ἂν εἴη ἴδιον ἄνθρακος τὸ καίειν. εἰ δ' ἐστὶ φλογὸς ἴδιον, οὐκ ἂν εἴη ἄνθρακος ἴδιον. κατασκευάζοντι δὲ οὐδὲν οὗτος ὁ τόπος ἐστὶ χρήσιμος.

Διαφέρει δ' ὁ ἐκ τῶν ὁμοίως ἐχόντων τοῦ ἐκ τῶν ὁμοίως ὑπαρχόντων, ὅτι τὸ μὲν κατ' ἀνα-

what is in an equal degree a property be a property of it. For example, since 'sight' and 'hearing' are in an equal degree properties of 'man,' and 'sight' is not a property of 'man,' neither could 'hearing' be a property of 'man.' For constructive argument you must see whether what is in an equal degree a property of the subject is a property; for then what is in an equal degree a property will be a property. For example, since it is a property of 'soul,' as something primary, for part of it to be 'appetitive' in a degree equal to that in which part of it is part 'reasoning,' and it is a property of 'soul,' as something primary, for part of it to be 'appetitive,' it would be a property of 'soul,' as something primary, for part of it to be 'reasoning.'

Thirdly, for destructive criticism, you must see whether it is *not* a property of that of which it is in an equal degree a property; for then neither will it be a property of that of which it is in an equal degree a property; and, if it is a property of the former, it will not be a property of the latter. For example, since 'to cause burning' is in an equal degree a property of 'flame' and of 'live-coal,' and 'to cause burning' is not a property of 'flame,' 'to cause burning' could not be a property of 'live-coal'; and if it *is* a property of 'flame,' it could not be a property of 'live-coal.' For constructive argument, however, this commonplace is of no use.

The commonplace based on things which stand in a similar relation ^a differs from that based on things which belong in an equal degree,^b because the former case is derived by analogy and not from a considera-

^a See 136 b 33 ff.

^b See 138 a 30 ff.

(3) *Between the alleged property and a different subject.*

138 b

25 λογίαν λαμβάνεται, οὐκ ἐπὶ τοῦ ὑπάρχειν τι θεωρούμενον, τὸ δ' ἐκ τοῦ ὑπάρχειν τι συγκρίνεται.

IX. Ἐπειτ' ἀνασκευάζοντα μὲν εἰ δυνάμει τὸ ἴδιον ἀποδιδούς καὶ πρὸς μὴ ὄν ἀποδέδωκε τὸ ἴδιον τῇ δυνάμει, μὴ ἐνδεχομένης τῆς δυνάμεως
30 ὑπάρχειν τῷ μὴ ὄντι· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ ὁ εἶπας ἀέρος ἴδιον τὸ ἀναπνευστὸν τῇ δυνάμει μὲν ἀπέδωκε τὸ ἴδιον (τὸ γὰρ τοιοῦτον οἷον ἀναπνεῖσθαι ἀναπνευστόν ἐστιν), ἀποδέδωκε δὲ καὶ πρὸς τὸ μὴ ὄν τὸ ἴδιον· καὶ γὰρ μὴ ὄντος ζώου, οἷον ἀναπνεῖν πέφυκε τὸ αέρα, ἐνδέχεται αέρα εἶναι· οὐ μέντοι μὴ ὄντος
35 ζώου δυνατόν ἐστιν ἀναπνεῖν· ὥστ' οὐδ' ἀέρος ἔσται ἴδιον τὸ τοιοῦτον οἷον ἀναπνεῖσθαι, τότε ὅτε ζῶον οὐκ ἔσται τοιοῦτον οἷον ἀναπνεῖν. οὐκ ἂν οὖν εἴη ἀέρος ἴδιον τὸ ἀναπνευστόν.

139 a

Κατασκευάζοντα δὲ εἰ τῇ δυνάμει ἀποδιδούς τὸ ἴδιον ἢ πρὸς ὄν ἀποδίδωσι τὸ ἴδιον ἢ πρὸς μὴ ὄν, ἐνδεχομένης τῆς δυνάμεως τῷ μὴ ὄντι ὑπάρχειν· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον
5 ἐπεὶ ὁ ἀποδιδούς ἴδιον τοῦ ὄντος τὸ δυνατόν παθεῖν ἢ ποιῆσαι, δυνάμει ἀποδιδούς τὸ ἴδιον, πρὸς ὄν ἀπέδωκε τὸ ἴδιον· ὅτε γὰρ ὄν ἐστι, καὶ δυνατόν
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tion about some attribute belonging, while the latter involves a comparison based on the fact that some attribute belongs.

IX. Next, for destructive criticism, you must see whether, in assigning the property potentially, your opponent has also through the potentiality assigned the property in relation to something which does not exist, since the potentiality cannot possibly belong to something which does not exist; for then what is stated to be a property will not be a property. For example, the man who has said that 'respirable' is a property of 'air' has, on the one hand, assigned the property in virtue of a potentiality (for that is 'respirable' which is of such a kind as to be respired), while, on the other hand, he has also assigned the property in relation to what does not exist. For air can exist even if no animal exists of such a kind as to respire it; but it is impossible to respire it, if no animal exists. And so it will not be a property of air to be such as to be respired at a time when no animal will exist of such a kind as to respire it. Therefore 'respirable' could not be a property of air.

For constructive argument, you must see whether in assigning the property potentially he assigns the property in relation either to something which exists or to something which does not exist, when the potentiality can belong to what does exist; for then what is stated not to be a property will be a property. For example, he who assigns 'able to affect, or be affected by, something' as a property of 'being,' by assigning the property potentially, has assigned it in relation to what exists (for, when 'being' exists, it will also be 'able to be affected by, or to affect

Two further rules: (a) A property is subverted when assigned potentially to something which does not exist, and confirmed vice versa.

παθεῖν τι ἢ ποιῆσαι ἔσται· ὥστε εἴη ἂν ἴδιον τοῦ ὄντος τὸ δυνατόν παθεῖν ἢ ποιῆσαι.

- Ἐπειτ' ἀνασκευάζοντα μὲν εἰ ὑπερβολῇ τέθεικε
 10 τὸ ἴδιον· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον.
 συμβαίνει γὰρ τοῖς οὕτως ἀποδιδούσι τὸ ἴδιον οὐ
 καθ' οὗ τὸν λόγον τοῦνομα ἀληθεύεσθαι· φθαρέντος
 γὰρ τοῦ πράγματος οὐδὲν ἦττον ἔσται ὁ λόγος·
 τῶν γὰρ ὄντων τινὲ μάλιστα ὑπάρχει. οἷον εἴ
 τις ἀποδοίῃ τοῦ πυρὸς ἴδιον σῶμα τὸ κουφότατον·
 15 φθαρέντος γὰρ τοῦ πυρὸς ἔσται τι τῶν σωμάτων
 ὃ κουφότατον ἔσται, ὥστ' οὐκ ἂν εἴη τοῦ πυρὸς
 ἴδιον σῶμα τὸ κουφότατον. κατασκευάζοντα δὲ
 εἰ μὴ ὑπερβολῇ τέθεικε τὸ ἴδιον· ἔσται γὰρ κατὰ
 τοῦτο καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς
 ἀνθρώπου ἴδιον ζῶον ἡμερον φύσει οὐχ ὑπερβολῇ
 20 ἀποδέδωκε τὸ ἴδιον, εἴη ἂν κατὰ τοῦτο καλῶς
 κείμενον τὸ ἴδιον.

something else '), and so to be 'able to be affected by, or to affect, something else' would be a property of 'being.'

Next, for destructive criticism, you must see whether he has stated the property in a superlative degree; for then what is stated to be a property will not be a property. For the result of stating the property in this manner is that the name is not true of that of which the description is true; for, if the thing itself has perished, the description will none the less exist, for it belongs in the greatest degree to something which exists. For example, if one were to assign as a property of 'fire' that it is 'the lightest of bodies'; for, though the fire has perished, there will still be some body which will be the lightest; and so 'the lightest body' could not be a property of 'fire.' For constructive argument, on the other hand, you must see whether he failed to state the property in a superlative degree; for then the property will be correctly stated in this respect. For example, since he who has stated that it is a property of 'man' that he is 'by nature a civilized animal,' has not assigned the property in a superlative degree, the property would be correctly stated in this respect.

(b) A property is subverted if stated in the superlative.

Z

139 a 24 I. Τῆς δὲ περὶ τοὺς ὄρους πραγματείας μέρος
 25 πέντε ἐστίν. ἥ γὰρ ὅτι ὅλως οὐκ ἀληθὲς εἰπεῖν,
 καθ' οὗ τοῦνομα, καὶ τὸν λόγον (δεῖ γὰρ τὸν τοῦ
 ἀνθρώπου ὄρισμὸν κατὰ παντὸς ἀνθρώπου ἀλη-
 θεύεσθαι), ἥ ὅτι ὄντος γένους οὐκ ἔθηκεν εἰς τὸ
 γένος ἥ οὐκ εἰς τὸ οἰκεῖον γένος ἔθηκεν (δεῖ γὰρ
 τὸν ὀριζόμενον εἰς τὸ γένος θέντα τὰς διαφορὰς
 30 προσάπτειν· μάλιστα γὰρ τῶν ἐν τῷ ὀρισμῷ τὸ
 γένος δοκεῖ τὴν τοῦ ὀριζομένου οὐσίαν σημαίνειν),
 ἥ ὅτι οὐκ ἴδιος ὁ λόγος (δεῖ γὰρ τὸν ὄρισμὸν ἴδιον
 εἶναι, καθάπερ καὶ πρότερον εἴρηται), ἥ εἰ πάντα
 τὰ εἰρημένα πεποιηκῶς μὴ ὥρισται μὴδ' εἴρηκε
 τὸ τί ἦν εἶναι τῷ ὀριζομένῳ. λοιπὸν δὲ παρὰ τὰ
 35 εἰρημένα, εἰ ὥρισται μὲν, μὴ καλῶς δ' ὥρισται.
 Εἰ μὲν οὖν μὴ ἀληθεύεται, καθ' οὗ τοῦνομα, καὶ
 ὁ λόγος, ἐκ τῶν πρὸς τὸ συμβεβηκὸς τόπων
 ἐπισκεπτέον. καὶ γὰρ ἐκεῖ, πότερον ἀληθὲς ἥ οὐκ
 139 b ἀληθές, πᾶσα ἡ σκέψις γίνεται· ὅταν μὲν γὰρ ὅτι

^a Sc. in order to overthrow a definition.

^b 101 b 19.

BOOK VI

I. Of the discussion of definitions there are five parts. You must prove ^a either (1) that it is quite untrue to use the description also about the subject to which the name is given (for the definition of 'man' must be true of every man); or (2) that, though the subject has a genus, your opponent has not put it into its genus or has not put it into its proper genus (for he who defines must put the subject into its genus and then add the differentiae; for, more than any of the other component parts of a definition, the genus is generally regarded as indicating the essence of the subject of the definition); or (3) that the description is not peculiar to the subject (for the definition must be peculiar, as has been already remarked ^b); or (4) that, although he has satisfied all the above requirements, he has not given a definition, that is, he has not stated the essence of the subject which he is defining. Apart from the above conditions, (5) it still remains to see whether, although he has given a definition, he has failed to give a correct definition.

(D) OF
DEFINITION
(BOOKS
VI AND
VII).
General
division of
problems
dealing with
definition,
some of
which have
been
already
treated.

The question whether the description is not also true about the subject to which the name is given must be examined on the basis of the commonplaces relating to accident. For there also the question always asked is, 'Is it true or not?' For, when we are

ὑπάρχει τὸ συμβεβηκὸς διαλεγόμεθα, ὅτι ἀληθὲς λέγομεν, ὅταν δ' ὅτι οὐχ ὑπάρχει, ὅτι οὐκ ἀληθές. εἰ δὲ μὴ ἐν τῷ οἰκείῳ γένει ἔθηκεν, ἢ εἰ μὴ ἴδιος ὁ ἀποδοθεὶς λόγος, ἐκ τῶν πρὸς τὸ γένος
5 καὶ τὸ ἴδιον ῥηθέντων τόπων ἐπισκεπτέον.

Λοιπὸν δ', εἰ μὴ ὥρισται ἢ εἰ μὴ καλῶς ὥρισται, πῶς μετιτέον, εἰπεῖν. πρῶτον μὲν οὖν ἐπισκεπτέον εἰ μὴ καλῶς ὥρισται. ῥᾶον γὰρ ὅτιοῦν ποιῆσαι ἢ καλῶς ποιῆσαι. δῆλον οὖν ὅτι ἡ ἀμαρτία περὶ
10 τοῦτο πλείων, ἐπειδὴ ἐργωδέστερον, ὥσθ' ἢ ἐπιχείρησις ῥᾶων ἢ περὶ τοῦτο ἢ ἡ περὶ ἐκείνο γίνε-
νεται.

Ἔστι δὲ τοῦ μὴ καλῶς μέρη δύο, ἐν μὲν τὸ ἀσαφεῖ τῇ ἐρμηνείᾳ κεχρῆσθαι (δεῖ γὰρ τὸν ὀριζόμενον ὡς ἐνδέχεται σαφεστάτῃ τῇ ἐρμηνείᾳ
15 κεχρῆσθαι, ἐπειδὴ τοῦ γνωρίσαι χάριν ἀποδίδοται ὁ ὀρισμός), δεύτερον δ', εἰ ἐπὶ πλείον εἴρηκε τὸν λόγον τοῦ δέοντος· πᾶν γὰρ τὸ προσκείμενον ἐν τῷ ὀρισμῷ περιέρχον. πάλιν δ' ἐκάτερον τῶν εἰρη-
μένων εἰς πλείω μέρη διείληπται.

II. Εἰς μὲν οὖν τόπος τοῦ ἀσαφῶς, εἰ ὁμώνυμόν
20 ἐστὶ τινι τὸ εἰρημένον, οἷον ὅτι ἡ γένεσις ἀγωγή
εἰς οὐσίαν ἢ ὅτι ἡ ὑγίεια συμμετρία θερμῶν καὶ ψυχρῶν. ὁμώνυμος γὰρ ἡ ἀγωγή καὶ ἡ συμμετρία·
ἄδηλον οὖν ὁπότερον βούλεται λέγειν τῶν δηλου-
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TOPICA, VI. I-II

arguing that the accident belongs, we assert that it is true ; when we are arguing that it does not belong, we assert that it is untrue. If your opponent has failed to put the subject in its proper genus, or if the description assigned is not peculiar to the subject, we must make our inquiry on the basis of the commonplaces relating to genus and property already mentioned.

It remains to state how we ought to proceed to inquire whether the subject has not been defined or whether it has been incorrectly defined. First, then, we must examine whether it has been incorrectly defined ; for it is easier to do anything, no matter what, than to do it correctly. It is obvious, then, that error is more frequent in the latter task (for it is more laborious), and so the attack is made more easily in the latter than in the former case.

Incorrectness in definition falls under two headings: The first is the use of obscure language (for the framer of a definition ought to use the clearest possible language, since the definition is assigned in order to make the subject known). The second is whether he has used a description which is unnecessarily long ; for anything additional is superfluous in a definition. Each of these two headings is divided into several parts.

II. One commonplace regarding obscurity is that you should see whether what is stated is equivocal with something else, as, for example, in the statement that ' coming-to-be is a channel towards being ' or that ' health is a balancing of hot and cold.' The words ' channel ' and ' balancing ' are equivocal ; it is, therefore, obscure which of the significations of a word which has more than one meaning the dis-

How to
avoid
obscurity.

μένων ὑπὸ τοῦ πλεοναχῶς λεγομένου. ὁμοίως δὲ καὶ εἰ τοῦ ὀριζομένου πλεοναχῶς λεγομένου μὴ
 25 διελὼν εἶπεν· ἄδηλον γὰρ ὁποτέρου τὸν ὅρον ἀποδédωκεν, ἐνδέχεται τε συκοφαντεῖν ὥς οὐκ ἐφαρμόττοντος τοῦ λόγου ἐπὶ πάντα ὧν τὸν ὀρισμὸν ἀποδédωκεν. μάλιστα δ' ἐνδέχεται τὸ τοιοῦτον ποιεῖν λανθανούσης τῆς ὁμωνυμίας. ἐνδέχεται δὲ καὶ διελόμενον αὐτόν, ποσαχῶς λέγεται τὸ ἐν τῷ
 30 ὀρισμῷ ἀποδοθέν, συλλογισμὸν ποιῆσαι· εἰ γὰρ κατὰ μηδένα τῶν τρόπων ἱκανῶς εἴρηται, δηλὸν ὅτι οὐκ ἂν ὠρισμένος εἴη κατὰ τρόπον.

"Ἄλλος, εἰ κατὰ μεταφορὰν εἴρηκεν, οἷον εἰ τὴν ἐπιστήμην ἀμετάπτωτον ἢ τὴν γῆν τιθήνην ἢ τὴν σωφροσύνην συμφωνίαν. πᾶν γὰρ ἀσαφές τὸ
 35 κατὰ μεταφορὰν λεγόμενον. ἐνδέχεται δὲ τὸν κατὰ μεταφορὰν¹ εἰπόντα συκοφαντεῖν ὥς κυρίως εἰρηκότα· οὐ γὰρ ἐφαρμόσει ὁ λεχθεὶς ὅρος, οἷον ἐπὶ τῆς σωφροσύνης· πᾶσα γὰρ συμφωνία ἐν φθόγοις. ἔτι εἰ γένος ἢ συμφωνία τῆς σωφρο-
 140 a σύνης, ἐν δύο γένεσιν ἔσται ταῦτόν οὐ περιέχουσιν ἄλληλα· οὔτε γὰρ ἡ συμφωνία τὴν ἀρετὴν οὔθ' ἡ ἀρετὴ τὴν συμφωνίαν περιέχει.

"Ἐτι εἰ μὴ κειμένοις ὀνόμασι χρῆται, οἷον Πλάτων ὄφρυόσκιον τὸν ὀφθαλμόν, ἢ τὸ φαλάγγιον
 5 σηψιδακές, ἢ τὸν μυελὸν ὀστεογενές· πᾶν γὰρ ἀσαφές τὸ μὴ εἰωθός.

"Ἐνια δ' οὔτε καθ' ὁμωνυμίαν οὔτε κατὰ μετα-

¹ Reading τὸν κατὰ μεταφορὰν with P.

^a Presumably the reference is to Plato Comicus, since these words do not occur in the extant works of the philosopher.

putant wishes to convey. Similarly, too, if he has made a statement, when the subject which is being defined bears several senses, without distinguishing them ; for then it is uncertain of which sense he has given the definition, and it is possible to make a quibbling objection on the ground that the description does not fit everything of which he has given the definition. Such a proceeding is especially possible if the equivocation is not detected. Again, it is open to his opponent himself to distinguish the various meanings of the subject rendered in the definition and argue accordingly ; for, if the description is not adequate in respect of any of the various senses, obviously he cannot have given a proper description.

Another commonplace is to see whether he has spoken metaphorically, as, for example, if he has described knowledge as 'unshakeable,' or the earth as a 'nurse,' or temperance as a 'harmony' ; for metaphorical expressions are always obscure. Also, it is possible to quibble against one who has spoken metaphorically, representing him as having used the word in its proper sense ; for then the definition given will not fit, as in the case of 'temperance,' for 'harmony' is always used of sounds. Further, if harmony is the genus of temperance, the same thing will be found in two genera neither of which includes the other ; for neither does harmony include virtue, nor virtue harmony.

Further, you must see if he uses terms of which the use is not well established, as Plato ^a calls the eye 'brow-shaded' or the poison-spider 'bite-mortifying,' or 'marrow' as 'bone-begotten' ; for unusual words are always obscure.

Words are sometimes used neither equivocally, nor

φορὰν οὐτε κυρίως εἴρηται, οἷον ὁ νόμος μέτρον
 ἢ εἰκὼν τῶν φύσει δικαίων. ἔστι δὲ τὰ τοιαῦτα
 χεῖρω τῆς μεταφορᾶς· ἢ μὲν γὰρ μεταφορὰ ποιεῖ
 10 πως γνῶριμον τὸ σημαινόμενον διὰ τὴν ὁμοιότητα·
 πάντες γὰρ οἱ μεταφέροντες κατὰ τινα ὁμοιότητα
 μεταφέρουσιν· τὸ δὲ τοιοῦτον οὐ ποιεῖ γνῶριμον·
 οὐτε γὰρ ἡ ὁμοιότης ὑπάρχει, καθ' ἣν μέτρον ἢ
 εἰκὼν ὁ νόμος ἐστίν, οὐτε κυρίως εἴωθε λέγεσθαι.
 ὥστε εἰ μὲν κυρίως μέτρον ἢ εἰκόνα τὸν νόμον
 15 φησὶν εἶναι, ψεύδεται· εἰκὼν γὰρ ἐστὶν οὗ ἡ γένεσις
 διὰ μιμήσεως, τοῦτο δ' οὐχ ὑπάρχει τῷ νόμῳ·
 εἰ δὲ μὴ κυρίως, δῆλον ὅτι ἀσαφῶς εἴρηκε καὶ
 χεῖρον ὁποιοῦν τῶν κατὰ μεταφορὰν λεγομέ-
 νων.

Ἔτι εἰ μὴ δῆλος ὁ τοῦ ἐναντίου λόγος ἐκ τοῦ
 λεχθέντος· οἱ γὰρ καλῶς ἀποδοδομένοι καὶ τοὺς
 20 ἐναντίους προσσημαίνουν· ἢ εἰ καθ' αὐτὸν
 λεχθεὶς μὴ φανερὸς εἴη τίνος ἐστὶν ὁρισμός, ἀλλὰ
 καθάπερ τὰ τῶν ἀρχαίων γραφῶν, εἰ μὴ τις
 ἐπιγράψαι, οὐκ ἐγνωρίζετο τί ἐστὶν ἕκαστον.

III. Εἰ μὲν οὖν μὴ σαφῶς, ἐκ τῶν τοιούτων
 ἐστὶν ἐπισκεπτέον. εἰ δ' ἐπὶ πλεῖον εἴρηκε τὸν
 25 ὅρον, πρῶτον μὲν σκοπεῖν εἴ τι κατέχρηται ὁ πᾶσιν
 ὑπάρχει, ἢ ὅλως τοῖς οὖσιν ἢ τοῖς ὑπὸ ταῦτό γένος

metaphorically, nor in their proper sense ; for example, the law is said to be the 'measure' or 'image' of things naturally just. Such phrases are worse than metaphors ; for a metaphor in a way adds to our knowledge of what is indicated on account of the similarity, for those who use metaphors always do so on account of some similarity. But the kind of phrase of which we are speaking does not add to our knowledge ; for no similarity exists in virtue of which the law is a 'measure' or an 'image,' nor is the law usually described by these words in their proper sense. So, if anyone says that the law is a 'measure' or an 'image' in the proper sense of these words, he is lying ; for an image is something whose coming into being is due to imitation, and this does not apply to the law. If, however, he is not using the word in its proper sense, obviously he has spoken obscurely, and with worse effect than any kind of metaphorical language.

Further, you must see whether the definition of the contrary fails to be clear from the description given ; for correctly assigned definitions also indicate their contraries. Or, again, you must see whether, when it is stated by itself, it fails to show clearly what it is that it defines, just as in the works of the early painters, unless they were inscribed, it was impossible to recognize what each figure represented.

III. If, then, the definition is not clearly rendered, it should be examined by the methods described above. If, however, he has stated the definition in too many words, you must first see if he has made use of any attribute universally applicable, that is, either generally to existing things, or to things which fall under the same genus as the subject of the defini-

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avoid
redundancy.

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τῷ ὀρίζομένῳ· ἐπὶ πλεῖον γὰρ εἰρῆσθαι ἀναγκαῖον
 τοῦτο. δεῖ γὰρ τὸ μὲν γένος ἀπὸ τῶν ἄλλων
 χωρίζειν, τὴν δὲ διαφορὰν ἀπὸ τινος τῶν ἐν τῷ
 αὐτῷ γένει. τὸ μὲν οὖν πᾶσιν ὑπάρχον ἀπλῶς
 30 ἀπ' οὐδενὸς χωρίζει, τὸ δὲ τοῖς ὑπὸ ταῦτο γένος
 πᾶσιν ὑπάρχον οὐ χωρίζει ἀπὸ τῶν ἐν ταύτῳ γένει,
 ὥστε μάταιον τὸ τοιοῦτον προσκείμενον.

Ἡ εἰ ἔστι μὲν ἴδιον τὸ προσκείμενον, ἀφαιρε-
 θέντος δὲ τούτου καὶ ὁ λοιπὸς λόγος ἴδιός ἐστι
 35 καὶ δηλοῖ τὴν οὐσίαν. οἷον ἐν τῷ τοῦ ἀνθρώπου
 λόγῳ τὸ ἐπιστήμης δεκτικὸν προστεθὲν περιέρχον·
 καὶ γὰρ ἀφαιρεθέντος τούτου ὁ λοιπὸς λόγος
 ἴδιος καὶ δηλοῖ τὴν οὐσίαν. ἀπλῶς δ' εἰπεῖν,
 140 b ἅπαν περιέρχον οὐ ἀφαιρεθέντος τὸ λοιπὸν δῆλον
 ποιεῖ τὸ ὀρίζομενον. τοιοῦτος δὲ καὶ ὁ τῆς ψυχῆς
 ὅρος, εἰ ἀριθμὸς αὐτὸς αὐτὸν κινῶν ἐστίν· καὶ γὰρ
 τὸ αὐτὸ αὐτὸ κινῶν ψυχὴ, καθάπερ Πλάτων
 5 ὥριται. ἢ ἴδιον μὲν ἐστὶ τὸ εἰρημένον, οὐ δηλοῖ
 δὲ τὴν οὐσίαν ἀφαιρεθέντος τοῦ ἀριθμοῦ. ποτέρως
 μὲν οὖν ἔχει, χαλεπὸν διασαφῆσαι· χρηστέον δ'
 ἐπὶ πάντων τῶν τοιούτων πρὸς τὸ συμφέρον.
 οἷον ὅτι ὁ τοῦ φλέγματος ὅρος ὑγρὸν πρῶτον
 ἀπὸ τροφῆς ἄπεπτον. ἐν γὰρ τὸ πρῶτον, οὐ
 πολλά, ὥστε περιέρχον τὸ ἄπεπτον προσκείμενον·
 10 καὶ γὰρ τούτου ἀφαιρεθέντος ὁ λοιπὸς ἔσται ἴδιος
 λόγος· οὐ γὰρ ἐνδέχεται ἀπὸ τῆς τροφῆς καὶ τοῦτο

^a Xenocrates, fr. 60 (Heinze) ; *de Anim.* 404 b 29.

tion ; for then there must necessarily be redundancy in the statement. For the genus ought to separate the subject from all other things, and the differentia from something in the same genus. Now what is universally applicable does not separate the subject from anything at all, and what belongs to everything which falls under the same genus does not separate it from the other things which fall under the same genus ; and so such an addition has no point.

Or, again, you must see whether, though the addition is peculiar to the subject, yet its removal still leaves the rest of the description peculiar to the subject and demonstrates the essence. For example, in the description of ' man ' the addition of ' receptive of knowledge ' is superfluous ; for, if it is removed, the rest of the description is still peculiar and demonstrates the essence. In a word, anything is superfluous the removal of which leaves a clear statement of the subject of the definition. The definition of the soul, if stated as a ' number moving itself,'^a is a case in point ; for the soul is ' that which moves itself,' according to Plato's definition.^b Or, perhaps, the statement, though it is peculiar to the subject, does not demonstrate the essence if the word ' number ' is removed. Which of the two statements is true, it is difficult to determine ; but in all such cases our procedure must be guided by expediency. For example, take the definition of phlegm as ' the first unconcocted moisture from food.' Here that which is ' first ' is one and not many, so that the addition of ' unconcocted ' is superfluous ; for, if it is removed, the rest of the description will be peculiar to the subject ; for it is not possible for both phlegm and

^b *Phaedr.* 245 E.

καὶ ἄλλο τι πρῶτον εἶναι. ἢ οὐχ ἀπλῶς πρῶτον ἀπὸ τροφῆς τὸ φλέγμα, ἀλλὰ τῶν ἀπέπτων πρῶτον, ὥστε προσθετέον τὸ ἄπεπτον· ἐκείνως μὲν γὰρ ῥηθέντος οὐκ ἀληθὴς ὁ λόγος, εἴπερ μὴ πάντων
15 πρῶτόν ἐστιν.

Ἔτι εἴ τι τῶν ἐν τῷ λόγῳ μὴ πᾶσιν ὑπάρχει τοῖς ὑπὸ ταὐτὸ εἶδος· ὁ γὰρ τοιοῦτος χεῖρον ὠρισταί τῶν χρωμένων ὁ πᾶσιν ὑπάρχει τοῖς οὖσιν. ἐκείνως μὲν γὰρ ἂν ὁ λοιπὸς ἴδιος ἢ λόγος,
20 καὶ ὁ πᾶς ἴδιος ἔσται· ἀπλῶς γὰρ πρὸς τὸ ἴδιον ὁτουοῦν προστεθέντος ἀληθοῦς ὅλος ἴδιος γίνεται. εἰ δέ τι τῶν ἐν τῷ λόγῳ μὴ πᾶσιν ὑπάρχει τοῖς ὑπὸ ταὐτὸ εἶδος, ἀδύνατον ὅλον τὸν λόγον ἴδιον εἶναι· οὐ γὰρ ἀντικατηγορηθήσεται τοῦ πράγματος. οἷον τὸ ζῶον πεζὸν δίπουν τετράπηχυ· ὁ γὰρ
25 τοιοῦτος λόγος οὐκ ἀντικατηγορεῖται τοῦ πράγματος διὰ τὸ μὴ πᾶσιν ὑπάρχειν τοῖς ὑπὸ ταὐτὸν εἶδος τὸ τετράπηχυ.

Πάλιν εἰ ταὐτὸν πλεονάκεις εἴρηκεν, οἷον τὴν ἐπιθυμίαν ὄρεξιν ἡδέος εἰπών· πᾶσα γὰρ ἐπιθυμία ἡδέος ἐστίν, ὥστε καὶ τὸ ταὐτὸν τῇ ἐπιθυμίας ἡδέος ἔσται.
30 γίνεται οὖν ὅρος τῆς ἐπιθυμίας ὄρεξις ἡδέος ἡδέος· οὐδὲν γὰρ διαφέρει ἐπιθυμίαν εἰπεῖν ἢ ὄρεξιν ἡδέος, ὥσθ' ἐκάτερον αὐτῶν ἡδέος ἔσται. ἢ
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something else as well to be the first thing produced from food. Or, possibly, phlegm is not the first thing produced from food, but only the first of things unconcocted, so that the word 'unconcocted' must be added; for according to the other statement the description is untrue unless phlegm is the first product of all.

Moreover, you must see whether anything in the description fails to belong to everything which falls under the same species; for a definition of this kind is worse than one which employs an attribute which is universally applicable. For, in that case, if the rest of the description is peculiar to the subject, the whole definition too will be peculiar; for, without exception, if anything at all which is true is added to what is peculiar, the whole becomes peculiar. If, on the other hand, anything in the description does not belong to everything which falls under the same species, the description as a whole cannot be peculiar; for it will not be predicated convertibly with the subject. Take, for example, the definition 'pedestrian biped animal four cubits high'; such a description is not predicated convertibly with the subject, because 'four cubits high' does not belong to everything which falls under the same species.

Again, you must see whether he has said the same thing more than once, as, for example, if he declares that 'desire' is an 'appetite for the pleasant'; for all 'desire' is 'for the pleasant,' so that what is the same as desire will also be 'for the pleasant.' The result then is a definition of 'desire' as 'an appetite-for-the-pleasant for the pleasant'; for there is no difference between saying 'desire' and 'appetite for the pleasant,' so that both will be 'for the pleasant.'

- τοῦτο μὲν οὐδὲν ἄτοπον· καὶ γὰρ ὁ ἄνθρωπος δι-
 πουν ἐστίν, ὥστε καὶ τὸ ταῦτόν τῳ ἀνθρώπῳ δίπουν
 ἔσται. ἔστι δὲ ταῦτόν τῳ ἀνθρώπῳ ζῶον πε-
 ζὸν δίπουν, ὥστε ζῶον πεζὸν δίπουν δίπουν ἐστίν.
- 35 ἀλλ' οὐ διὰ τοῦτο ἄτοπὸν τι συμβαίνει· οὐ γὰρ
 κατὰ ζώου πεζοῦ τὸ δίπουν κατηγορεῖται (οὕτω
 μὲν γὰρ ἂν δις περὶ τοῦ αὐτοῦ τὸ δίπουν ἂν κατ-
- 141 a ηγοροῖτο), ἀλλὰ περὶ ζώου πεζοῦ δίποδος τὸ
 δίπουν λέγεται, ὥστε ἅπαξ μόνον τὸ δίπουν
 κατηγορεῖται. ὁμοίως δὲ καὶ ἐπὶ τῆς ἐπιθυμίας·
 οὐ γὰρ κατὰ τῆς ὀρέξεως τὸ ἡδέος εἶναι κατ-
 ηγορεῖται, ἀλλὰ κατὰ τοῦ σύμπαντος, ὥστε ἅπαξ
- 5 καὶ ἐνταῦθα ἡ κατηγορία γίνεται. οὐκ ἔστι δὲ
 τὸ δις φθέγγασθαι ταῦτόν ὄνομα τῶν ἀτόπων,
 ἀλλὰ τὸ πλεονάκεις περὶ τινος τὸ αὐτὸ κατηγο-
 ρῆσαι, οἷον ὡς Ξενοκράτης τὴν φρόνησιν ὀρι-
 στικὴν καὶ θεωρητικὴν τῶν ὄντων φησὶν εἶναι. ἡ
 γὰρ ὀριστικὴ θεωρητικὴ τίς ἐστίν, ὥστε δις τὸ
 αὐτὸ λέγει προσθεὶς πάλιν καὶ θεωρητικὴν.
- 10 ὁμοίως δὲ καὶ ὅσοι τὴν κατάψυξιν στέρησιν τοῦ
 κατὰ φύσιν θερμοῦ φασὶν εἶναι· πᾶσα γὰρ στέρησις
 ἐστὶ τοῦ κατὰ φύσιν ὑπάρχοντος, ὥστε περίεργον
 τὸ προσθεῖναι τοῦ κατὰ φύσιν, ἀλλ' ἱκανὸν ἦν
 εἰπεῖν στέρησιν θερμοῦ, ἐπειδὴ αὕτη ἡ στέρησις
 γνώριμον ποιεῖ ὅτι τοῦ κατὰ φύσιν λέγεται.
- 15 Πάλιν εἰ τοῦ καθόλου εἰρημένου προσθεῖη καὶ
 ἐπὶ μέρους, οἷον εἰ τὴν ἐπιείκειαν ἐλάττωσιν τῶν
 συμφερόντων καὶ δικαίων· τὸ γὰρ δίκαιον συμ-
 φέρον τι, ὥστε περιέχεται ἐν τῳ συμφέροντι.

Or, perhaps, there is no absurdity here. Take the statement, 'man is a biped'; then, what is the same as man will be a 'biped'; but 'pedestrian biped animal' is the same as man, and, therefore, 'pedestrian biped animal' is a 'biped.' But no absurdity really arises here; for 'biped' is not *predicated* of 'pedestrian animal' (for then 'biped' would be predicated twice of the same thing), but 'biped' is used in the description of 'pedestrian biped animal,' so that 'biped' is *predicated* only once. So likewise with 'desire' too; for that it is 'for the pleasant' is predicated not of appetite but of the whole phrase,^a and so here too the predication occurs only once. The absurdity consists not in uttering the same word twice but in *predicating* the same thing more than once of anything; for example, when Xenocrates says that prudence is 'definitive and contemplative of things which exist'; for what is 'definitive' is in a way 'contemplative,' so that when he adds 'and contemplative' he is saying the same things twice. So, too, with those who say that 'cooling' is a 'privation of natural heat'; for all privation is a privation of that which is natural, so that it is superfluous to add 'natural,' but it would be enough to say 'privation of heat,' since the term 'privation' itself makes it known that the heat referred to is 'natural.'

Again, you must see whether, after a universal has been stated, he adds a particular as well, for example, if he has said that 'equity is a diminution of the expedient and the just'; for the just is something expedient, so that it is included in the expedient.

^a *i.e.* of the phrase 'appetite for the pleasant.' If we predicate 'is for the pleasant' of this, only the second 'for the pleasant' is in the predicate.

141 a

περιττὸν οὖν τὸ δίκαιον, ὥστε καθόλου εἴπας ἐπὶ
 μέρους προσέθηκεν. καὶ εἰ τὴν ἰατρικὴν ἐπι-
 20 στήμην τῶν ὑγιεινῶν ζώῳ καὶ ἀνθρώπῳ, ἢ τὸν
 νόμον εἰκόνα τῶν φύσει καλῶν καὶ δικαίων· τὸ
 γὰρ δίκαιον καλὸν τι, ὥστε πλεονάκεις τὸ αὐτὸ
 λέγει.

IV. Πότερον μὲν οὖν καλῶς ἢ οὐ καλῶς, διὰ
 τούτων καὶ τῶν τοιούτων ἐπισκεπτέον· πότερον
 25 δ' εἴρηκε καὶ ὥρισται τὸ τί ἦν εἶναι ἢ οὐχί, ἐκ
 τῶνδε.

Πρῶτον μὲν εἰ μὴ διὰ προτέρων καὶ γνωρι-
 μωτέρων πεποιήται τὸν ὀρισμόν. ἐπεὶ γὰρ ὁ
 ὅρος ἀποδίδεται τοῦ γνωρίσαι χάριν τὸ λεχθέν,
 γνωρίζομεν δ' οὐκ ἐκ τῶν τυχόντων ἀλλ' ἐκ τῶν
 προτέρων καὶ γνωριμωτέρων, καθάπερ ἐν ταῖς
 30 ἀποδείξεσιν (οὕτω γὰρ πᾶσα διδασκαλία καὶ
 μάθησις ἔχει), φανερόν ὅτι ὁ μὴ διὰ τοιούτων
 ὀριζόμενος οὐχ ὥρισται. εἰ δὲ μή, πλείους ἔσονται
 τοῦ αὐτοῦ ὀρισμοί. δῆλον γὰρ ὅτι καὶ ὁ διὰ
 προτέρων καὶ γνωριμωτέρων βέλτιον ὥρισται,
 ὥστε ἀμφοτέρω ἀν εἴησαν ὅροι τοῦ αὐτοῦ. τὸ
 35 δὲ τοιούτον οὐ δοκεῖ· ἐκάστῳ γὰρ τῶν ὄντων ἓν
 ἐστὶ τὸ εἶναι ὅπερ ἐστίν· ὥστ' εἰ πλείους ἔσονται
 τοῦ αὐτοῦ ὀρισμοί, ταῦτ' ἔσται τῷ ὀριζομένῳ
 τὸ εἶναι ὅπερ καθ' ἑκάτερον τῶν ὀρισμῶν δηλοῦται,
 141 b ταῦτα δ' οὐ ταῦτά ἐστιν, ἐπειδὴ οἱ ὀρισμοὶ ἕτεροι.

'The just' is, therefore, superfluous, and so after stating the universal he has added the particular. So too in the definition of 'medicine' as 'knowledge of things healthful for animal and man,' or 'law' as 'the image of things naturally noble and just'; for the just is something noble, so that he is saying the same thing more than once.

IV. Whether your opponent has made a correct or an incorrect definition should be examined by these and similar methods; but whether he has stated and defined the essence or not, should be examined in the following manner:

First, you must see whether he has failed to make the definition by means of prior and more intelligible terms. For the object in assigning the definition is to make known the meaning of the subject, and we make things known by using, not any chance terms, but those which are prior and more intelligible, as we do in demonstrations (for this is true of every kind of teaching and learning); it is, therefore, obvious that the man who does not define by means of such terms has not defined at all. With any other method, there will be more than one definition of the same thing; for clearly he who has used terms which are prior and more intelligible has given another and a better definition, so that both would be definitions of the same thing. But this is not the view generally held; for everything that is has one single essence, and so, if there is to be more than one definition of the same thing, the essence, which is demonstrated in accordance with each of the definitions, will be the same for the framer of the definition; but the demonstrations of it are not the same since the definitions are different. It is, therefore, obvious

Rules for testing whether the alleged definition really defines the essence:

The terms of a definition should be prior and more intelligible.

δῆλον οὖν ὅτι οὐχ ὥρισται ὁ μὴ διὰ προτέρων
καὶ γνωριμωτέρων ὀρισάμενος.

Τὸ μὲν οὖν μὴ διὰ γνωριμωτέρων εἰρῆσθαι τὸν
ὅρον διχῶς ἔστιν ἐκλαβεῖν· ἢ γὰρ εἰ ἀπλῶς ἐξ
5 ἀγνωστοτέρων ἢ εἰ ἡμῖν ἀγνωστοτέρων· ἐνδέχεται
γὰρ ἀμφοτέρως. ἀπλῶς μὲν οὖν γνωριμώτερον
τὸ πρότερον τοῦ ὑστέρου, οἷον στιγμῇ γραμμῆς
καὶ γραμμῇ ἐπιπέδου καὶ ἐπίπεδον στερεοῦ, καθ-
άπερ καὶ μονὰς ἀριθμοῦ· πρότερον γὰρ καὶ ἀρχὴ
παντὸς ἀριθμοῦ. ὁμοίως δὲ καὶ στοιχείον συλ-
10 λαβῆς. ἡμῖν δ' ἀνάπαλιν ἐνίοτε συμβαίνει· μάλιστα
γὰρ τὸ στερεὸν ὑπὸ τὴν αἴσθησιν πίπτει, τὸ δ'
ἐπίπεδον μᾶλλον τῆς γραμμῆς, γραμμὴ δὲ σημείου
μᾶλλον. οἱ πολλοὶ γὰρ τὰ τοιαῦτα προγνωρί-
ζουσιν· τὰ μὲν γὰρ τῆς τυχούσης τὰ δ' ἀκριβοῦς
καὶ περιττῆς διανοίας καταμαθεῖν ἐστίν.

15 Ἀπλῶς μὲν οὖν βέλτιον τὸ διὰ τῶν πρότερον τὰ
ὑστερα πειρᾶσθαι γνωρίζειν· ἐπιστημονικώτερον
γὰρ τὸ τοιοῦτόν ἐστιν. οὐ μὴν ἀλλὰ πρὸς τοὺς
ἀδυνατοῦντας γνωρίζειν διὰ τῶν τοιούτων ἀναγ-
καῖον ἴσως διὰ τῶν ἐκείνοις γνωρίμων ποιεῖσθαι
τὸν λόγον. εἰσὶ δὲ τῶν τοιούτων ὀρισμῶν ὃ τε
20 τῆς στιγμῆς καὶ ὁ τῆς γραμμῆς καὶ ὁ τοῦ ἐπι-
πέδου· πάντες γὰρ διὰ τῶν ὑστέρων τὰ πρότερα
δηλοῦσιν· τὸ μὲν γὰρ γραμμῆς, τὸ δ' ἐπιπέδου,
τὸ δὲ στερεοῦ φασὶ πέρασ εἶναι. οὐ δεῖ δὲ λανθά-
νειν ὅτι τοὺς οὕτως ὀριζομένους οὐκ ἐνδέχεται τὸ

that anyone who has not framed his definition by means of prior and more intelligible terms has not given a definition.

That the definition has not been stated in more intelligible terms can be taken in two senses, namely, that it is composed either of terms which are less intelligible absolutely or of terms which are less intelligible to us ; for both meanings are possible. Thus absolutely the prior is more intelligible than the posterior ; for example, a point is more intelligible than a line, a line than a plane, and a plane than a solid, just as also a unit is more intelligible than a number, since it is prior to and the starting-point of all number. Similarly a letter is more intelligible than a syllable. To us, however, the converse sometimes happens ; for a solid falls most under our perception, and a plane more than a line, and a line more than a point. For most people recognize such things as solids and planes before they recognize lines and points ; for the former can be grasped by an ordinary understanding, the latter only by one which is accurate and superior.

How to detect the failure to use more intelligible terms of definition.

Absolutely, then, it is better to aim at knowledge of the posterior by means of what is prior ; for such a method is more scientific. Nevertheless, for the benefit of those who are incapable of acquiring knowledge by such means, it is perhaps necessary to frame the description by means of terms which are intelligible to them. Among definitions of this kind are those of the point, the line and the plane ; for all these demonstrate the prior by means of the posterior—the point being called the limit of the line, the line that of the plane, and the plane that of the solid. We must not, however, fail to notice that it is impossible

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- τί ἦν εἶναι τῷ ὀρίζομένῳ δηλοῦν, ἐὰν μὴ τυγχάνῃ
 25 ταῦτόν ἡμῖν τε γνωριμώτερον καὶ ἀπλῶς γνωρι-
 μώτερον, εἴπερ δεῖ μὲν διὰ τοῦ γένους καὶ τῶν
 διαφορῶν ὀρίζεσθαι τὸν καλῶς ὀριζόμενον, ταῦτα
 δὲ τῶν ἀπλῶς γνωριμωτέρων καὶ προτέρων τοῦ
 εἶδους ἐστίν. συναναιρεῖ γὰρ τὸ γένος καὶ ἡ
 διαφορὰ τὸ εἶδος, ὥστε πρότερα ταῦτα τοῦ εἶδους.
 30 ἔστι δὲ καὶ γνωριμώτερα· τοῦ μὲν γὰρ εἶδους
 γνωριζομένου ἀνάγκη καὶ τὸ γένος καὶ τὴν δια-
 φορὰν γνωρίζεσθαι (ὁ γὰρ ἄνθρωπον γνωρίζων
 καὶ ζῶον καὶ πεζὸν γνωρίζει), τοῦ δὲ γένους ἢ
 τῆς διαφορᾶς γνωριζομένης οὐκ ἀνάγκη καὶ τὸ
 εἶδος γνωρίζεσθαι, ὥστε ἀγνωστότερον τὸ εἶδος.
 ἔτι τοῖς κατ' ἀλήθειαν τοὺς τοιούτους ὀρισμοὺς
 35 φάσκουσιν εἶναι, τοὺς ἐκ τῶν ἐκάστῳ γνωρίμων,
 πολλοὺς τοῦ αὐτοῦ συμβήσεται λέγειν ὀρισμοὺς
 εἶναι· ἕτερα γὰρ ἑτέροις καὶ οὐ ταῦτὰ πᾶσι τυγ-
 χάνει γνωριμώτερα ὄντα, ὥστε πρὸς ἕκαστον
 142 a ἕτερος ἂν εἴη ὀρισμὸς ἀποδοτέος, εἴπερ ἐκ τῶν
 ἐκάστοις γνωριμωτέρων τὸν ὀρισμὸν ποιεῖσθαι
 χρή. ἔτι τοῖς αὐτοῖς ἄλλοτ' ἄλλα μᾶλλον γνώριμα,
 ἐξ ἀρχῆς μὲν τὰ αἰσθητά, ἀκριβεστέροις δὲ γινο-
 5 μένοις ἀνάπαλιν, ὥστ' οὐδὲ πρὸς τὸν αὐτὸν αἰεὶ
 ὁ αὐτὸς ὀρισμὸς ἀποδοτέος τοῖς διὰ τῶν ἐκάστοις
 γνωριμωτέρων τὸν ὀρισμὸν φάσκουσιν ἀποδοτέον
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for those who define in this way to show the essence of the subject of their definition, unless it so happens that the same thing is both more intelligible to us and also more intelligible absolutely ; for the framer of a good definition must define by means of the genus and the differentiae, and these are among the things which are more intelligible absolutely than the species and prior to it ; for the genus and the differentia cancel the species and therefore are prior to it. They are also more intelligible ; for, if the species is known, both the genus and the differentia must also be known (for he who has knowledge of ' man ' has also knowledge of ' animal ' and ' pedestrian '). On the other hand, if the genus and the differentia are known, it does not necessarily follow that the species is also known ; the species, therefore, is less intelligible. Furthermore, those who declare that such definitions, namely, those which are based on what is known to individual persons, accord with the truth, will, as a result, have to say that there are many definitions of the same thing ; for different things are more intelligible to different people, and not the same things equally intelligible to all ; and so a different definition would have to be given to each individual, if the definition has to be framed as the basis of what is more intelligible to each of them. Furthermore, to the same persons different things are more intelligible at different times—first of all the objects of sense-perception, and then, when their knowledge becomes more accurate, the converse occurs ; and so neither would the same definition always have to be given to the same person by those who say that a definition ought to be given by means of what is more intelligible to each individual. It

- εἶναι. δῆλον οὖν ὅτι οὐχ ὀριστέον διὰ τῶν τοιούτων, ἀλλὰ διὰ τῶν ἀπλῶς γνωριμωτέρων· μόνως γὰρ ἂν οὕτως εἰς καὶ ὁ αὐτὸς ὀρισμὸς αἰεὶ γίνοιτο. ἴσως δὲ καὶ τὸ ἀπλῶς γνώριμον οὐ τὸ πᾶσι
- 10 γνώριμόν ἐστιν, ἀλλὰ τὸ τοῖς εὖ διακειμένοις τὴν διάνοιαν, καθάπερ καὶ τὸ ἀπλῶς ὑγιεινὸν τὸ τοῖς εὖ ἔχουσι τὸ σῶμα. δεῖ μὲν οὖν ἕκαστα τῶν τοιούτων ἐξακριβοῦν, χρῆσθαι δὲ διαλεγομένους πρὸς τὸ συμφέρον. μάλιστα δ' ὁμολογουμένως ἀναιρεῖν ἐνδέχεται τὸν ὀρισμόν, ἔαν μὴτ' ἐκ τῶν
- 15 ἀπλῶς γνωριμωτέρων μὴτ' ἐκ τῶν ἡμῖν τυγχάνῃ τὸν λόγον πεποιημένους.

Εἰς μὲν οὖν τρόπος τοῦ μὴ διὰ γνωριμωτέρων ἐστὶ τὸ διὰ τῶν ὑστέρων τὰ πρότερα δηλοῦν, καθάπερ πρότερον εἶπαμεν· ἄλλος, εἰ τοῦ ἐν ἡρεμίᾳ καὶ τοῦ ὠρισμένου διὰ τοῦ ἀορίστου καὶ

20 τοῦ ἐν κινήσει ἀποδέδοται ὁ λόγος· πρότερον γὰρ τὸ μένον καὶ τὸ ὠρισμένον τοῦ ἀορίστου καὶ ἐν κινήσει ὄντος.

Τοῦ δὲ μὴ ἐκ προτέρων τρεῖς εἰσὶ τρόποι, πρῶτος μὲν εἰ διὰ τοῦ ἀντικειμένου τὸ ἀντικείμενον ὥριται, οἷον διὰ τοῦ κακοῦ τὸ ἀγαθόν· ἅμα γὰρ

25 τῇ φύσει τὰ ἀντικείμενα. ἐνίοις δὲ καὶ ἡ αὐτὴ ἐπιστήμη ἀμφοτέρων δοκεῖ εἶναι, ὥστ' οὐδὲ γνωριμώτερον τὸ ἕτερον τοῦ ἑτέρου. δεῖ δὲ μὴ λανθάνειν ὅτι ἔνια ἴσως οὐκ ἔστιν ὀρίσασθαι ἄλλως, οἷον τὸ διπλάσιον ἄνευ τοῦ ἡμίσεος, καὶ ὅσα καθ' αὐτὰ πρὸς τι λέγεται· πᾶσι γὰρ τοῖς

is obvious, therefore, that definitions ought not to be made by means of terms of this kind but by means of those which are more intelligible absolutely ; for only thus could one and the same definition be always produced. Perhaps, also, what is intelligible absolutely is what is intelligible not to everyone but only to those who are intellectually in a sound condition, just as also what is healthy absolutely is what is healthy to those who are physically in a sound condition. All such points must be accurately observed and used in discussion as circumstances demand. But the subversion of a definition is most generally admitted to be possible, if the definer happens to have framed his description neither from what is more intelligible absolutely nor from what is more intelligible to us.

One way, then, of not defining by means of more intelligible terms is to demonstrate the prior by means of the posterior, as we said before.^a Another way consists in having rendered the description of what is at rest and definite by means of what is indefinite and in motion ; for what stays still and is definite is prior to what is indefinite and in motion.

There are three ways of failing to define by means of prior terms. (a) The first is when an opposite has been defined by means of its opposite, for example, good by means of evil ; for opposites are naturally simultaneous. In the view of some people, too, there is the same knowledge of both, so that the one is not more intelligible than the other. We must not, however, fail to notice that it is perhaps impossible to define some things in any other way. We cannot, for example, define the double without the half, and the same is true also of things which are described as

How to
detect the
failure to
use prior
terms of
definition.

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τοιούτοις ταῦτόν τὸ εἶναι τῷ πρὸς τί πως ἔχειν,
 30 ὥστ' ἀδύνατον ἄνευ θατέρου θάτερον γνωρίζειν,
 διόπερ ἀναγκαῖον ἐν τῷ τοῦ ἑτέρου λόγῳ συμ-
 περιειληφθαι καὶ θάτερον. γνωρίζειν μὲν οὖν
 δεῖ τὰ τοιαῦτα πάντα, χρῆσθαι δ' αὐτοῖς ὡς ἂν
 δοκῇ συμφέρειν.

Ἄλλος, εἰ αὐτῷ κέχρηται τῷ ὀριζομένῳ. λαν-
 35 θάνει δ', ὅταν μὴ αὐτῷ τῷ τοῦ ὀριζομένου ὀνόματι
 142 b χρήσῃται, οἷον εἰ τὸν ἥλιον ἄστρον ἡμεροφανὲς
 ὠρίσατο· ὁ γὰρ ἡμέρα χρώμενος ἡλίῳ χρήται. δεῖ
 δ' ὅπως φωραθῇ τὰ τοιαῦτα μεταλαμβάνειν ἀντὶ
 τοῦ ὀνόματος τὸν λόγον, οἷον ὅτι ἡμέρα ἡλίου
 φορὰ ὑπὲρ γῆς ἐστίν· δηλὸν γὰρ ὅτι ὁ τὴν φορὰν
 5 ἡλίου ὑπὲρ γῆς εἰρηκῶς τὸν ἥλιον εἴρηκεν, ὥστε
 κέχρηται τῷ ἡλίῳ ὁ τῇ ἡμέρᾳ χρησάμενος.

Πάλιν εἰ τῷ ἀντιδιηρημένῳ τὸ ἀντιδιηρημένον
 ὠρίζεται, οἷον περιττὸν τὸ μονάδι μείζον ἀρτίου.
 ἅμα γὰρ τῇ φύσει τὰ ἐκ τοῦ αὐτοῦ γένους ἀντιδι-
 10 ηρημένα, τὸ δὲ περιττὸν καὶ ἄρτιον ἀντιδιήρηται·
 ἅμφω γὰρ ἀριθμοῦ διαφοραί.

Ὅμοίως δὲ καὶ εἰ διὰ τῶν ὑποκάτω τὸ ἐπάνω
 ὠρίζεται, οἷον ἄρτιον ἀριθμὸν τὸν δίχα διαιρούμενον

^a See 136 b 3 ff.

in themselves relative ; for in all such things their being is the same as a certain relation in which they stand to something, so that it is impossible to recognize the one without the other and, therefore, necessary that the one should also be included in the description of the other. We must, therefore, take cognizance of all such facts and make use of them as seems expedient.

(b) Another way is when the term which is being defined is used in the definition itself. This passes unobserved when the actual name of the object which is being defined is not employed, for example, if one has defined the sun as ' a star appearing by day ' ; for in introducing the day one introduces the sun. For the detection of this kind of practice we must substitute the description for the name, saying, for example, that ' day ' is ' the passage of the sun over the earth ' ; for it is obvious that a man who has spoken of ' the passage of the sun over the earth ' has spoken of ' the sun,' so he who has introduced ' the day ' has introduced ' the sun.'

(c) Again, you must see whether your opponent has defined one of the opposite members of corresponding divisions ^a by means of another, for example, if he has defined ' an odd number ' as ' one which is greater by a unit than an even number.' For the opposite numbers of corresponding divisions taken from the same genus are by nature simultaneous, and ' odd ' and ' even ' are opposite members of corresponding divisions, for both are differentiae of number.

(d) Similarly also, you must see whether he has defined a superior by means of subordinates, for example, if he has defined an ' even number ' as ' a number divisible into two parts ' or ' the good ' as ' a

ἢ τὸ ἀγαθὸν ἔξιν ἀρετῆς· τό τε γὰρ δίχα ἀπὸ τῶν δύο εἴληπται, ἀρτίων ὄντων, καὶ ἡ ἀρετὴ ἀγα-
 15 θόν τί ἐστίν, ὥσθ' ὑποκάτω ταῦτα ἐκείνων ἐστίν.
 ἔτι δ' ἀνάγκη τὸν τῷ ὑποκάτω χρώμενον καὶ αὐ-
 τῷ χρῆσθαι. ὁ τε γὰρ τῇ ἀρετῇ χρώμενος χρῆται
 τῷ ἀγαθῷ, ἐπειδὴ ἀγαθόν τι ἡ ἀρετή· ὁμοίως
 δὲ καὶ ὁ τῷ δίχα χρώμενος τῷ ἀρτίῳ χρῆται,
 ἐπειδὴ εἰς δύο διηρῆσθαι σημαίνει τὸ δίχα, τὰ δὲ
 δύο ἄρτιά ἐστιν.

20 V. Καθόλου μὲν οὖν εἰπεῖν εἰς ἐστὶ τόπος τὸ μὴ
 διὰ προτέρων καὶ γνωριμωτέρων ποιήσασθαι τὸν
 λόγον, μέρη δ' αὐτοῦ τὰ εἰρημένα. δεύτερος, εἰ
 ἐν γένει τοῦ πράγματος ὄντος μὴ κεῖται ἐν γένει.
 ἐν ἅπασιν δὲ τὸ τοιοῦτον ἀμάρτημά ἐστιν, ἐν οἷς οὐ
 πρόκειται τοῦ λόγου τὸ τί ἐστίν, οἷον ὁ τοῦ σώ-
 25 ματος ὁρισμός, τὸ ἔχον τρεῖς διαστάσεις, ἢ εἴ-
 τις τὸν ἄνθρωπον ὀρίσαιοτο τὸ ἐπιστάμενον ἀριθμεῖν.
 οὐ γὰρ εἴρηται τί ὃν τρεῖς ἔχει διαστάσεις ἢ τί ὃν
 ἐπίσταται ἀριθμεῖν· τὸ δὲ γένος βούλεται τὸ τί
 ἐστὶ σημαίνειν, καὶ πρῶτον ὑποτίθεται τῶν ἐν τῷ
 ὁρισμῷ λεγομένων.

30 Ἔτι εἰ πρὸς πλείω λεγομένου τοῦ ὀριζομένου
 μὴ πρὸς πάντα ἀποδέδωκεν, οἷον εἰ τὴν γραμ-
 ματικὴν ἐπιστήμην τοῦ γράψαι τὸ ὑπαγορευθέν·
 προσδεῖται γὰρ ὅτι καὶ τοῦ ἀναγνῶναι· οὐδὲν γὰρ
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state of virtue.' For the expression 'into two parts' is taken from 'two,' which is an even number, and virtue is a kind of good ; so that the former terms are subordinate to the latter. Further, in introducing the subordinate term, one is obliged to introduce the term itself also ; for he who introduces the term 'virtue' introduces 'the good,' since virtue is a kind of good ; and similarly, too, he who introduces the phrase 'into two parts' introduces 'even,' for division 'into two parts' signifies division by two, and two is an even number.

V. Speaking generally, then, one commonplace concerns the failure to frame the description by means of prior and more intelligible terms, and the above are the divisions into which it falls. A second commonplace is to see whether, though the subject of the definition falls under a genus, it has not been placed in a genus. This kind of error always occurs in cases where the essence is not put first in the description, for example, in the definition of 'body' as 'that which has three dimensions,' or the definition of 'man,' if it were to be given as 'that which knows how to count.' For no statement has been given what it is that has three dimensions or what it is that knows how to count ; whereas the genus aims at signifying what it is and is the first thing to be laid down in the description contained in the definition.

Furthermore, you must see whether, though the term which is being defined applies to a number of things, your opponent has failed to apply it to all of them ; for example, if he has defined 'grammar' as 'the knowledge of writing from dictation' ; for he ought to add that it is also the knowledge of reading.

Rules as to the use of genus in definition :

(a) Observe whether the genus is omitted.

(b) Observe whether the definition is applied to everything which comes under the subject of the definition.

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μᾶλλον τοῦ γράψαι ἢ τοῦ ἀναγνῶναι ἀποδοὺς ὤρι-
 σται, ὥστ' οὐδέτερος, ἀλλ' ὁ ἄμφω ταῦτ' εἰπών,
 35 ἐπειδὴ πλείους οὐκ ἐνδέχεται ταύτου ὀρισμοὺς
 143 a εἶναι. ἐπ' ἐνίων μὲν οὖν κατ' ἀλήθειαν ἔχει καθ-
 ἄπερ εἴρηται, ἐπ' ἐνίων δ' οὐ, οἷον ἐφ' ὅσων μὴ
 καθ' αὐτὸ πρὸς ἄμφω λέγεται, καθάπερ ἰατρικὴ
 τοῦ νόσον καὶ ὑγίειαν ποιῆσαι· τοῦ μὲν γὰρ καθ'
 αὐτὴν λέγεται, τοῦ δὲ κατὰ συμβεβηκός· ἀπλῶς
 5 γὰρ ἀλλότριον τῆς ἰατρικῆς τὸ νόσον ποιεῖν. ὥστ'
 οὐδὲν μᾶλλον ὤρισται ὁ πρὸς ἄμφω ἀποδοὺς τοῦ
 πρὸς θάτερον, ἀλλ' ἴσως καὶ χεῖρον, ἐπειδὴ καὶ
 τῶν λοιπῶν ὅστισοῦν δυνατός ἐστι νόσον ποιῆσαι.

Ἔτι εἰ μὴ πρὸς τὸ βέλτιον ἀλλὰ πρὸς τὸ χεῖρον
 10 ἀποδέδωκε, πλειόνων ὄντων πρὸς ἃ λέγεται τὸ
 ὀριζόμενον· πᾶσα γὰρ ἐπιστήμη καὶ δύναμις τοῦ
 βελτίστου δοκεῖ εἶναι.

Πάλιν εἰ μὴ κείται ἐν τῷ οἰκείῳ γένει τὸ λεχθέν,
 σκοπεῖν ἐκ τῶν περὶ τὰ γένη στοιχείων, καθάπερ
 πρότερον εἴρηται.

* 15 Ἔτι εἰ ὑπερβαίνων¹ λέγει τὰ γένη, οἷον ὁ τὴν
 δικαιουσύνην ἕξιν ἰσότητος ποιητικὴν ἢ διανεμη-
 τικὴν τοῦ ἴσου. ὑπερβαίνει γὰρ οὕτως ὀριζόμενος

¹ Bekker's ὑπερβαίνειν a misprint for ὑπερβαίνων.

For in describing it as ' a knowledge of writing ' he has no more given a definition than he who has called it ' a knowledge of reading,' so that neither of them has given a definition, but only he who makes both these statements, since there cannot be more than one definition of the same thing. In some cases, to be sure, the above statement accords with the truth but not in others, for example, where the term is not essentially applicable to both things, for instance in the definition of medicine as concerned with the production of disease and health. For it is said to do the latter essentially, the former only accidentally, since it is absolutely foreign to medicine to produce disease. So he who has described medicine in reference to both health and disease has given no better a definition than he who has done so in reference to one of them only ; nay, he has perhaps even given a worse definition, since anyone else who is not a doctor is capable of producing disease.

Furthermore, when there are more things than one to which the term which is being defined is applicable, you must see whether he has assigned it in reference not to the better but to the worse ; for every kind of knowledge and capacity is generally regarded as concerned with the best.

Again, if the term which has been described is not placed in its appropriate genus, you must examine it according to the elementary rules regarding genera, as has been said above.^a

Furthermore, you must see whether in his description he passes over the genera, for example, when he defines justice as ' a state productive of equality,' or ' distributive of what is equal ' ; for by such a defini-

(c) Observe whether the subject of the definition is referred not to the better but to the worse.

(d) Observe whether the genus is not rightly constituted.

(e) Observe whether there is a failure to put the subject in

^a 139 b 3.

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τὴν ἀρετὴν. ἀπολιπὼν οὖν τὸ τῆς δικαιοσύνης
γένος οὐ λέγει τὸ τί ἦν εἶναι· ἡ γὰρ οὐσία ἐκάστω
μετὰ τοῦ γένους. ἔστι δὲ τοῦτο ταῦτόν τῳ μὴ εἰς
20 τὸ ἐγγυτάτῳ γένος θεῖναι· ὁ γὰρ εἰς τὸ ἐγγυτάτῳ
θεῖς πάντα τὰ ἐπάνω εἴρηκεν, ἐπειδὴ πάντα
τὰ ἐπάνω γένῃ τῶν ὑποκάτω κατηγορεῖται. ὥστ'
ἢ εἰς τὸ ἐγγυτάτῳ γένος θετέον, ἢ πάσας τὰς
διαφορὰς τῳ ἐπάνω γένει προσαπτέον, δι' ὧν
ὀρίζεται τὸ ἐγγυτάτῳ γένος. οὕτω γὰρ οὐδὲν
25 ἂν εἴη παραλελοιπώς, ἀλλ' ἂντ' ὀνόματος λόγῳ
εἰρηκώς ἂν εἴη τὸ ὑποκάτω γένος. ὁ δ' αὐτὸ μό-
νον τὸ ἐπάνω γένος εἶπας οὐ λέγει καὶ τὸ ὑπο-
κάτω γένος· ὁ γὰρ φυτὸν εἶπας οὐ λέγει δένδρον.

VI. Πάλιν ἐπὶ τῶν διαφορῶν ὁμοίως σκεπτέον
30 εἰ καὶ τὰς διαφορὰς εἶπε τὰς τοῦ γένους. εἰ γὰρ
μὴ ταῖς τοῦ πράγματος ἰδίαις ὥρισται διαφοραῖς,
ἢ καὶ παντελῶς τοιοῦτον εἴρηκεν ὁ μηδενὸς ἐνδέ-
χεται διαφορὰν εἶναι, οἷον τὸ ζῶον ἢ τὴν οὐσίαν,
δῆλον ὅτι οὐχ ὥρισται· οὐδενὸς γὰρ διαφοραὶ τὰ
εἰρημένα. ὁρᾶν δὲ καὶ εἰ ἔστιν ἀντιδιηρημένον
35 τι τῇ εἰρημένῃ διαφορᾷ. εἰ γὰρ μή ἐστι, δῆλον
ὅτι οὐκ ἂν εἴη ἡ εἰρημένη τοῦ γένους διαφορά·

143 b πᾶν γὰρ γένος ταῖς ἀντιδιηρημέναις διαφοραῖς
διαιρεῖται, καθάπερ τὸ ζῶον τῳ πεζῷ καὶ τῳ
πτηνῷ καὶ τῳ ἐνύδρῳ καὶ τῳ δίποδι. ἢ εἰ ἔστι
μὲν ἡ ἀντιδιηρημένη διαφορά, μὴ ἀληθεύεται δὲ
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tion he passes over virtue, and so by omitting the genus of justice he fails to state its essence ; for the essence of a thing involves its genus. This amounts to the same thing as not putting the subject into its nearest genus ; for he who has put it into the nearest genus has stated all the higher genera, since all the higher genera are predicated of the lower. Either, therefore, it ought to put into the nearest genus, or else all the differentiae, through which the nearest genus is defined, ought to be added to the higher genus. By so doing he would not have omitted anything, but would have stated the lower genus instead of mentioning the name. But he who has merely stated the higher genus by itself does not state the lower genus also ; for he who calls a thing a ' plant ' does not call it a ' tree.'

its nearest genus.

VI. Again, you must, in like manner, consider, as regards differentiae, whether he has stated the differentiae too as those of the genus. For, if he has not framed his definition by means of the differentiae peculiar to the subject, or else has stated something such as cannot possibly be a differentia of anything at all (for example ' animal ' or ' substance '), it is obvious that he has not given a definition ; for the above terms are not differentiae of anything. Also you must see whether there is an opposite member of a division corresponding to the differentia stated ; for, if not, obviously the differentia stated could not be a differentia of the genus ; for every genus is distinguished by differentiae which are the opposite members of a corresponding division, for example, ' animal ' by the terms ' pedestrian,' ' winged,' ' aquatic ' and ' biped.' Or else you must see whether the corresponding differentia exists but is not true of the

Rules as to the use of differentiae in definition :

(a) The ratio of difference must be considered.

κατὰ τοῦ γένους. δῆλον γὰρ ὅτι οὐδετέρα ἂν εἴη
 5 τοῦ γένους διαφορά· πᾶσαι γὰρ αἱ ἀντιδιηρημένα
 διαφοραὶ ἀληθεύονται κατὰ τοῦ οἰκείου γένους.
 ὁμοίως δὲ καὶ εἰ ἀληθεύεται μὲν, μὴ ποιεῖ δὲ
 προστιθεμένη τῷ γένει εἶδος. δῆλον γὰρ ὅτι οὐκ
 ἂν εἴη αὕτη εἰδοποιὸς διαφορά τοῦ γένους· πᾶσα
 γὰρ εἰδοποιὸς διαφορά μετὰ τοῦ γένους εἶδος
 10 ποιεῖ. εἰ δ' αὕτη μὴ ἐστὶ διαφορά, οὐδ' ἡ λεχθεῖσα,
 ἐπεὶ ταύτη ἀντιδιήρηται.

Ἔτι ἐὰν ἀποφάσκει διαιρῇ τὸ γένος, καθάπερ οἱ
 τὴν γραμμὴν ὀριζόμενοι μῆκος ἀπλατὲς εἶναι.
 οὐδὲν γὰρ ἄλλο σημαίνει ἢ ὅτι οὐκ ἔχει πλάτος.
 συμβήσεται οὖν τὸ γένος μετέχειν τοῦ εἶδους·
 15 πᾶν γὰρ μῆκος ἢ ἀπλατὲς ἢ πλάτος ἔχον ἐστίν,
 ἐπεὶ κατὰ παντὸς ἢ ἡ κατάφασις ἢ ἡ ἀπόφασις
 ἀληθεύεται, ὥστε καὶ τὸ γένος τῆς γραμμῆς μῆκος
 ὃν ἢ ἀπλατὲς ἢ πλάτος ἔχον ἐστὶν. μῆκος δ'
 ἀπλατὲς εἶδους ἐστὶ λόγος, ὁμοίως δὲ καὶ μῆκος
 πλάτος ἔχον· τὸ γὰρ ἀπλατὲς καὶ πλάτος ἔχον
 20 διαφοραὶ εἰσιν, ἐκ δὲ τῆς διαφορᾶς καὶ τοῦ γένους
 ὁ τοῦ εἶδους ἐστὶ λόγος, ὥστε τὸ γένος ἐπιδέχοιτ'
 ἂν τὸν τοῦ εἶδους λόγον. ὁμοίως δὲ καὶ τὸν τῆς
 διαφορᾶς, ἐπειδὴ ἡ ἑτέρα τῶν εἰρημένων διαφορῶν
 ἐξ ἀνάγκης κατηγορεῖται τοῦ γένους. ἐστὶ δ'
 ὁ εἰρημένος τόπος χρήσιμος πρὸς τοὺς τιθεμένους
 25 ἰδέας εἶναι. εἰ γὰρ ἐστὶν αὐτὸ μῆκος, πῶς κατ-
 ηγορηθήσεται κατὰ τοῦ γένους ὅτι πλάτος ἔχον
 ἐστὶν ἢ ἀπλατὲς ἐστὶν; δεῖ γὰρ κατὰ παντὸς
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genus ; for then obviously neither of them could be a differentia of the genus ; for all the corresponding differentiae are true of the proper genus. In like manner, too, you must see whether, though it is true, yet its addition to the genus does not make a species. For then it is obvious that this could not be a specific differentia of the genus ; for a specific differentia, combined with the genus, always makes a species. But, if this is not a differentia, neither is the one which has been stated, since it is an opposite member of a division corresponding with this.

Furthermore, you must see whether he divides the genus by means of a negation, as do those who define ' line ' as ' length without breadth ' ; for this simply signifies that it has not breadth. The result, therefore, will be that the genus partakes of its species ; for, since either the affirmation or the negation is true of everything, length must always either be without breadth or possess breadth, and so the genus of ' line,' which is ' length,' will also either be without breadth or possess breadth. But ' length without breadth ' is a description of a species, as similarly also is ' length with breadth ' ; for ' without breadth ' and ' with breadth ' are differentiae, and the description of the species is made up of the differentia and the genus ; and so the genus would admit of the description of the species. Similarly, too, it would admit of the description of the differentia, since one of the above differentiae is necessarily predicated of the genus. The above commonplace is useful in dealing with those who assert that ' ideas ' exist ; for, if absolute length exists, how is it to be predicated of the genus that it is possessed of breadth or that it is without breadth ? For one of these two state-

(b) Observe whether the genus is divided by negation.

μήκους τὸ ἕτερον αὐτῶν ἀληθεύεσθαι, εἴπερ κατὰ τοῦ γένους ἀληθεύεσθαι μέλλει. τοῦτο δ' οὐ συμβαίνει· ἔστι γὰρ ἀπλατῇ καὶ πλάτος ἔχοντα μήκη.
 30 ὥστε πρὸς ἐκείνους μόνους χρήσιμος ὁ τόπος, οἱ πᾶν¹ γένος ἐν ἀριθμῷ φασὶν εἶναι. τοῦτο δὲ ποιοῦσιν οἱ τὰς ἰδέας τιθέμενοι· αὐτὸ γὰρ μῆκος καὶ αὐτὸ ζῶον γένος φασὶν εἶναι.

Ἴσως δ' ἐπ' ἐνίων ἀναγκαῖον καὶ ἀποφάσει χρῆσθαι τὸν ὀριζόμενον, οἷον ἐπὶ τῶν στερήσεων·
 35 τυφλὸν γὰρ ἔστι τὸ μὴ ἔχον ὄψιν, ὅτε πέφυκεν ἔχειν. διαφέρει δ' οὐδὲν ἀποφάσει διελεῖν τὸ γένος, ἢ τοιαύτῃ καταφάσει ἢ ἀπόφασιν ἀναγκαῖον ἀντιδιαρεῖσθαι, οἷον εἰ μῆκος πλάτος ἔχον ὠρι-
 144 a σται· τῷ γὰρ πλάτος ἔχοντι τὸ μὴ ἔχον πλάτος ἀντιδιήρηται, ἄλλο δ' οὐδέν, ὥστε ἀποφάσει πάλιν διαιρεῖται τὸ γένος.

5 Πάλιν εἰ τὸ εἶδος ὡς διαφορὰν ἀπέδωκε, καθάπερ οἱ τὸν προπηλακισμόν ὕβριν μετὰ χλευασίας ὀριζόμενοι· ἢ γὰρ χλευασία ὕβρις τις, ὥστ' οὐ διαφορὰ ἀλλ' εἶδος ἢ χλευασία.

Ἔτι εἰ τὸ γένος ὡς διαφορὰν εἴρηκεν, οἷον τὴν
 10 ἀρετὴν ἔξιν ἀγαθὴν ἢ σπουδαίαν· γένος γὰρ τἀγαθὸν τῆς ἀρετῆς ἐστίν. ἢ οὐ γένος τἀγαθόν, ἀλλὰ διαφορά, εἴπερ ἀληθὲς ὅτι οὐκ ἐνδέχεται ταῦτόν ἐν δύο γένεσιν εἶναι μὴ περιέχουσιν ἄλληλα. οὔτε γὰρ τἀγαθὸν τὴν ἔξιν περιέχει οὔθ'

¹ Reading πᾶν with AB for τὸ.

ments must be true of every length, if it is going to be true of the genus. This, however, does not happen; for there are lengths without breadth and lengths possessing breadth. This commonplace, therefore, is useful only in dealing with those who say that every genus is numerically one; and this is what those do who assert the existence of 'ideas'; for they say that absolute length and absolute animal are the genus.

Perhaps in some cases the definer must necessarily use negation, for example, in defining privations. For 'blind' is that which does not possess sight when it is its nature to possess it. But there is no difference between dividing the genus by means of a negation and by means of such an affirmation as must necessarily have a negation in the opposite member of a corresponding division, for example, when a definition has been given as 'length possessing breadth'; for the opposite member of the corresponding division to that which possesses breadth is that which does not possess breadth, and nothing else, so that again the genus is divided by a negation.

[Note on an exceptional case.]

Again, you must see whether he has assigned the species as a differentia, as do those who define 'contumely' as 'insolence combined with scoffing'; for scoffing is a kind of insolence, and so scoffing is not a differentia but a species.

(c) Observe whether the species or the genus is assigned as a differentia.

Moreover, you must see whether he has stated the genus as a differentia, saying, for example, that 'virtue is a good or worthy state'; for 'good' is the genus of 'virtue.' Or perhaps 'good' is not the genus but the differentia, if indeed it is true that it is impossible for the same thing to be in two genera one of which does not include the other; for 'good' does not include 'state,' nor does 'state' include

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ἡ ἕξις τὰγαθόν· οὐ γὰρ πᾶσα ἕξις ἀγαθόν, οὐδὲ
 15 πᾶν ἀγαθόν ἕξις, ὥστ' οὐκ ἂν εἴη γένη ἀμφότερα.
 εἰ οὖν ἡ ἕξις τῆς ἀρετῆς γένος, δῆλον ὅτι τὰγαθόν
 οὐ γένος, ἀλλὰ μᾶλλον διαφορά. ἔτι ἡ μὲν ἕξις
 τί ἐστι σημαίνει ἡ ἀρετή, τὸ δ' ἀγαθόν οὐ τί ἐστιν
 ἀλλὰ ποιόν· δοκεῖ δ' ἡ διαφορά ποιόν τι σημαίνειν.
 20 Ὅρᾶν δὲ καὶ εἰ μὴ ποιόν τι ἀλλὰ τόδε σημαίνει
 ἡ ἀποδοθεῖσα διαφορά· δοκεῖ γὰρ ποιόν τι πᾶσα
 διαφορά δηλοῦν.

Σκοπεῖν δὲ καὶ εἰ κατὰ συμβεβηκὸς ὑπάρχει τῷ
 ὀριζομένῳ ἡ διαφορά. οὐδεμία γὰρ διαφορά τῶν
 25 κατὰ συμβεβηκὸς ὑπαρχόντων ἐστί, καθάπερ οὐδὲ
 τὸ γένος· οὐ γὰρ ἐνδέχεται τὴν διαφοράν ὑπάρχειν
 τινὶ καὶ μὴ ὑπάρχειν.

Ἔτι εἰ κατηγορεῖται τοῦ γένους ἡ διαφορά ἢ
 τὸ εἶδος ἢ τῶν κάτωθέν τι τοῦ εἶδους, οὐκ ἂν εἴη
 30 ὠρισμένος· οὐδὲν γὰρ τῶν εἰρημένων ἐνδέχεται τοῦ
 γένους κατηγορεῖσθαι, ἐπειδὴ τὸ γένος ἐπὶ πλείστον
 πάντων λέγεται. πάλιν εἰ κατηγορεῖται τὸ γένος
 τῆς διαφορᾶς· οὐ γὰρ κατὰ τῆς διαφορᾶς, ἀλλὰ
 καθ' ὧν ἡ διαφορά, τὸ γένος δοκεῖ κατηγορεῖσθαι,
 οἷον τὸ ζῶον κατὰ τοῦ ἀνθρώπου καὶ τοῦ βοῦς
 35 καὶ τῶν ἄλλων πεζῶν ζώων, οὐκ αὐτῆς τῆς δια-
 φορᾶς τῆς κατὰ τοῦ εἶδους λεγομένης. εἰ γὰρ
 καθ' ἐκάστης τῶν διαφορῶν τὸ ζῶον κατηγορη-
 θήσεται, πολλὰ ζῶα τοῦ εἶδους ἂν κατηγοροῖτο·
 144 b αἱ γὰρ διαφοραὶ τοῦ εἶδους κατηγοροῦνται. ἔτι

'good,' for not every 'state' is 'good' nor every 'good' a 'state.' They could not, therefore, both be genera, and so, if 'state' is the genus of virtue, obviously 'good' is not its genus but rather a differentia. Furthermore, a 'state' indicates the essence of virtue, whereas 'good' indicates not the essence but a quality; and it is generally held that it is the differentia which indicates a quality.

You must also see whether the differentia assigned indicates not a quality but a particular thing; for it is generally held that the differentia always signifies a quality. (d) Observe whether the differentia signifies a particular thing, or has the notion of an accident.

You must also consider whether the differentia belongs accidentally to the subject of the definition. For no differentia is of the number of things which belong accidentally, as neither is the genus; for it is impossible for the differentia to belong to something and also not to belong.

Furthermore, if the differentia or the species or anything that falls under the species is predicated of the genus, the definer cannot have given a definition; for none of the above can be predicated of the genus, since the genus has the widest field of all. Again, you must see whether the genus is predicated of the differentia; for it is generally held that the genus is predicated, not of the differentia, but of the things of which the differentia is predicated. For example, 'animal' is predicated of 'man' and of 'ox' and of the other pedestrian animals, not of the differentia itself, which is predicated of the species. For, if 'animal' is going to be predicated of each of the differentiae, a number of animals would be predicated of the species; for the differentiae are predicated of the species. Further, all differentiae (e) Observe whether differentia or species be predicated of genus or genus of differentia, or species of differentia.

διαφοραὶ πᾶσαι ἢ εἶδη ἢ ἄτομα ἔσται, εἴπερ ζῶα·
ἕκαστον γὰρ τῶν ζῶων ἢ εἰδός ἐστίν ἢ ἄτομον.

Ὅμοίως δὲ σκεπτέον καὶ εἰ τὸ εἶδος ἢ τῶν
5 ὑποκάτω τι τοῦ εἶδους τῆς διαφορᾶς κατηγορεῖται·
ἀδύνατον γάρ, ἐπειδὴ ἐπὶ πλεόν ἢ διαφορὰ τῶν
εἰδῶν λέγεται. ἔτι συμβήσεται τὴν διαφορὰν εἶ-
δος εἶναι, εἴπερ κατηγορεῖται τι αὐτῆς τῶν εἰδῶν·
εἰ γὰρ κατηγορεῖται ἄνθρωπος, δῆλον ὅτι ἡ δια-
φορὰ ἄνθρωπος ἐστίν. πάλιν εἰ μὴ πρότερον ἢ
10 διαφορὰ τοῦ εἶδους· τοῦ μὲν γὰρ γένους ὕστερον,
τοῦ δ' εἶδους πρότερον τὴν διαφορὰν δεῖ εἶναι.

Σκοπεῖν δὲ καὶ εἰ ἐτέρου γένους ἢ ῥηθεῖσα δια-
φορὰ μὴ περιεχομένου μηδὲ περιέχοντος. οὐ
δοκεῖ γὰρ ἡ αὐτὴ διαφορὰ δύο γενῶν εἶναι μὴ
15 περιεχόντων ἄλληλα. εἰ δὲ μή, συμβήσεται καὶ
εἶδος τὸ αὐτὸ ἐν δύο γένεσιν εἶναι μὴ περιέχουσιν
ἄλληλα· ἐπιφέρει γὰρ ἐκάστη τῶν διαφορῶν τὸ
οἰκεῖον γένος, καθάπερ τὸ πεζὸν καὶ τὸ δίπουν
τὸ ζῶον συνεπιφέρει. ὥστε εἰ καθ' οὗ ἡ διαφορά,
καὶ τῶν γενῶν ἐκάτερον, δῆλον [οὖν] ὅτι τὸ εἶδος
20 ἐν δύο γένεσιν οὐ περιέχουσιν ἄλληλα. ἢ οὐκ
ἀδύνατον τὴν αὐτὴν διαφορὰν δύο γενῶν εἶναι
μὴ περιεχόντων ἄλληλα, ἀλλὰ προσθετέον μηδ'
ἄμφω ὑπὸ ταυτὸν ὄντων. τὸ γὰρ πεζὸν ζῶον
καὶ τὸ πτηνὸν ζῶον γένη ἐστίν οὐ περιέχοντα
ἄλληλα, καὶ ἀμφοτέρων αὐτῶν ἐστὶ τὸ δίπουν
25 διαφορά. ὥστε προσθετέον ὅτι μηδ' ὑπὸ ταυτὸ

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will be either species or individuals, if they are animals ; for each animal is either a species or an individual.

In like manner you must consider also whether the species or any of the things which come under the species is predicated of the differentia ; for this is impossible, since the differentia is used over a wider field than the species. Furthermore, if any of the species is predicated of it, the result will be that the differentia is a species ; for if ' man ' is predicated, obviously the differentia is man. Again, you must see whether the differentia fails to be prior to the species ; for the differentia ought to be posterior to the genus but prior to the species.

You must consider also whether the differentia stated is of a different genus, neither contained by nor containing it. For it is generally held that the same differentia cannot attach to two genera neither of which contains the other ; otherwise it will result that the same species also is in two genera neither of which includes the other ; for each of the differentiae involves its own genus, for example ' pedestrian ' and ' winged ' involve ' animal.' If, therefore, each of the genera, too, is predicated of that of which the differentia is predicated, it is obvious that the species falls under two genera neither of which contains the other. Or, perhaps, it is not impossible that the same differentia should belong to two genera neither of which contains the other, and we ought to add ' if they do not fall under the same genus.' For ' pedestrian animal ' and ' winged animal ' are genera neither of which contains the other, and ' biped ' is a differentia of both of them, so that ' if they do not fall under the same genus ' ought to be added ;

(f) Observe whether the same differentia belongs to another genus.

144 b

ὄντων ἄμφω· ταῦτα γὰρ ἄμφω ὑπὸ τὸ ζῶόν ἐστιν.
 δῆλον δὲ καὶ ὅτι οὐκ ἀνάγκη τὴν διαφορὰν πᾶν
 τὸ οἰκεῖον ἐπιφέρειν γένος, ἐπειδὴ ἐνδέχεται τὴν
 αὐτὴν δύο γενῶν εἶναι μὴ περιεχόντων ἄλληλα·
 ἀλλὰ τὸ ἕτερον μόνον ἀνάγκη συνεπιφέρειν καὶ
 30 τὰ ἐπάνω τούτου, καθάπερ τὸ δίπουν τὸ πτηνὸν
 ἢ τὸ πεζὸν συνεπιφέρει ζῶον.

Ὅρᾶν δὲ καὶ εἰ τὸ ἔν τινι διαφορὰν ἀποδέδωκεν
 οὐσίας· οὐ δοκεῖ γὰρ διαφέρειν οὐσία οὐσίας τῷ
 ποῦ εἶναι. διὸ καὶ τοῖς τῷ πεζῷ καὶ τῷ ἐνύδρῳ
 διαιροῦσι τὸ ζῶον ἐπιτιμῶσιν ὡς τὸ πεζὸν καὶ
 35 τὸ ἐνυδρον ποῦ σημαῖνον. ἢ ἐπὶ μὲν τούτων οὐκ
 ὀρθῶς ἐπιτιμῶσιν· οὐ γὰρ ἔν τινι οὐδὲ ποῦ σημαίνει
 τὸ ἐνυδρον, ἀλλὰ ποιόν τι· καὶ γὰρ ἂν ᾗ ἐν τῷ
 ξηρῷ, ὁμοίως ἐνυδρον· ὁμοίως δὲ τὸ χερσαῖον,
 145 a καὶ ἐν ὑγρῷ, χερσαῖον ἀλλ' οὐκ ἐνυδρον ἔσται.
 ἀλλ' ὅμως ἐάν ποτε σημαίνῃ τὸ ἔν τινι ἢ διαφορά,
 δῆλον ὅτι διημαρτηκῶς ἔσται.

Πάλιν εἰ τὸ πάθος διαφορὰν ἀποδέδωκεν. πᾶν
 γὰρ πάθος μᾶλλον γινόμενον ἐξίστησι τῆς οὐσίας,
 5 ἢ δὲ διαφορὰ οὐ τοιοῦτον· μᾶλλον γὰρ σώζειν
 δοκεῖ ἢ διαφορὰ οὗ ἐστὶ διαφορά, καὶ ἀπλῶς
 ἀδύνατον εἶναι ἄνευ τῆς οἰκείας διαφορᾶς ἕκαστον·
 πεζοῦ γὰρ μὴ ὄντος οὐκ ἔσται ἄνθρωπος. ἀπλῶς
 δ' εἰπεῖν, καθ' ὅσα ἀλλοιοῦνται τὸ ἔχον, οὐδὲν
 598

for they both fall under 'animal.' It is obvious also that, since it is possible for the same differentia to attach to two genera neither of which contains the other, it does not necessarily follow that the differentia involves every appropriate genus, but it need only involve one or other of them and the genera which are higher than it, as 'biped' involves 'winged animal' or 'walking animal.'

You must also see whether the definer has assigned existence 'in' something as a differentia of the essence ; for it is generally held that one essence does not differ from another in respect of locality. Hence arises the criticism of those who divide animals by the term 'pedestrian' and 'aquatic,' on the ground that 'pedestrian' and 'aquatic' signify locality. Or perhaps the criticism is not justified ; for 'aquatic' does not signify existence 'in' something nor locality, but a certain quality ; for even though it be on dry land, an aquatic animal is equally aquatic, and likewise the land animal, even though it be in the water, will still be a land and not an aquatic animal. But, for all that, if ever the differentia signifies existence 'in' something, obviously he will have committed a serious error.

(g) Observe whether locality or an affection is assigned as the differentia of the essence.

Again, you must see whether he has assigned an affection as a differentia ; for every affection, if it is intensified, causes a departure from the essence, whereas a differentia is not of this kind. For it is generally held that the differentia tends rather to preserve that of which it is the differentia and that it is absolutely impossible for an individual thing to exist without its appropriate differentia ; for if 'pedestrian' does not exist, 'man' will not exist. To put the matter generally, nothing in respect of

τούτων διαφορά ἐκείνου· ἅπαντα γὰρ τὰ τοιαῦτα
 10 μᾶλλον γινόμενα ἐξίστησι τῆς οὐσίας. ὥστ' εἴ
 τινα τοιαύτην διαφοράν ἀπέδωκεν, ἡμάρτηκεν·
 ἀπλῶς γὰρ οὐκ ἀλλοιούμεθα κατὰ τὰς διαφοράς.

Καὶ εἴ τινος τῶν πρὸς τι μὴ πρὸς ἄλλο τὴν
 διαφοράν ἀποδέδωκεν· τῶν γὰρ πρὸς τι καὶ αἱ δια-
 15 φοραὶ πρὸς τι, καθάπερ καὶ τῆς ἐπιστήμης· θεω-
 ρητικὴ γὰρ καὶ πρακτικὴ καὶ ποιητικὴ λέγεται,
 ἕκαστον δὲ τούτων πρὸς τι σημαίνει· θεωρητικὴ
 γὰρ τινος καὶ ποιητικὴ τινος καὶ πρακτικὴ.

Σκοπεῖν δὲ καὶ εἰ πρὸς ὃ πέφυκεν ἕκαστον τῶν
 20 πρὸς τι ἀποδίδωσιν ὁ ὀριζόμενος. ἐνίοις μὲν γὰρ
 πρὸς ὃ πέφυκεν ἕκαστον τῶν πρὸς τι μόνον ἔστι
 χρῆσθαι, πρὸς ἄλλο δ' οὐδέν, ἐνίοις δὲ καὶ πρὸς
 ἄλλο, οἷον τῇ ὄψει πρὸς τὸ ἰδεῖν μόνον, τῇ δὲ
 στλεγγίδι καὶ ἀρύσαιτό τις· ἀλλ' ὅμως εἴ τις
 ὀρίσαιο τὴν στλεγγίδα ὄργανον πρὸς τὸ ἀρύειν,
 25 ἡμάρτηκεν· οὐ γὰρ πρὸς τοῦτο πέφυκεν. ὅρος
 δὲ τοῦ πρὸς ὃ πέφυκεν, ἐφ' ὃ ἂν χρήσαιτο ὁ
 φρόνιμος ἢ φρόνιμος, καὶ ἡ περὶ ἕκαστον οἰκεία
 ἐπιστήμη.

Ἡ εἰ μὴ τοῦ πρώτου ἀπέδωκεν, ὅταν τυγχάνῃ
 πρὸς πλείω λεγόμενον, οἷον τὴν φρόνησιν ἀρετὴν

which its possessor undergoes alteration is a differentia of its possessor ; for all things of this kind, if they are intensified, cause a departure from the essence. If, therefore, the definer has assigned any differentia of this kind, he has made a mistake ; for we undergo absolutely no alteration in respect of our differentiae.

You must also see whether he has failed to assign the differentia of a relative term as relative to something else ; for the differentiae of relative terms are also relative, for example, those of knowledge. For it is said to be theoretical, practical and creative, and each of these terms signifies a relation ; for it theorizes about something or creates something or does something.

(h) Observe whether the differentia of relatives fails to be relative, and whether the relation is apt.

You must also see whether the definer assigns each relative term relatively to that for which it is naturally adapted ; for some things can be used for that for which each of them is naturally adapted and for nothing else, while other things can be used also for some other purpose ; for example, sight can only be used for seeing, whereas one can use a strigil for drawing off liquid.^a Nevertheless if a man should define a strigil as an instrument for drawing off liquid, he has made a mistake ; for this is not its natural purpose. The definition of the natural purpose of an object is ' that for which the prudent man, in virtue of his prudence, and the science which is appropriate to the object would employ it.'

Or, again, you must see whether, when a term happens to be applied in several relations, he has failed to assign it in its primary relation ; for example,

(i) Observe whether the definition is assigned in its primary relation.

^a In Aristoph. *Thesm.* 556 the word is actually used of an instrument for drawing off wine from a cask.

145 a

30 ἀνθρώπου ἢ ψυχῆς καὶ μὴ τοῦ λογιστικοῦ· πρώτου γὰρ τοῦ λογιστικοῦ ἀρετὴ ἢ φρόνησις· κατὰ γὰρ τοῦτο καὶ ἡ ψυχὴ καὶ ὁ ἄνθρωπος φρονεῖν λέγεται.

Ἔτι εἰ μὴ δεκτικὸν ἐστὶν οὐ εἴρηται τὸ ὠρισμένον πάθος ἢ¹ διάθεσις ἢ ὁτιοῦν ἄλλο, ἡμάρτηκεν.

35 πᾶσα γὰρ διάθεσις καὶ πᾶν πάθος ἐν ἐκείνῳ πέφυκε γίνεσθαι οὐ ἐστὶ διάθεσις ἢ πάθος, καθάπερ καὶ ἡ ἐπιστήμη ἐν ψυχῇ διάθεσις οὕσα ψυχῆς. ἐνίοτε δὲ διαμαρτάνουσιν ἐν τοῖς τοιούτοις, οἷον

145 b ὅσοι λέγουσιν ὅτι ὕπνος ἐστὶν ἀδυναμία αἰσθήσεως, καὶ ἡ ἀπορία ἰσότης ἐναντίων λογισμῶν, καὶ ἡ ἀλγηδὼν διάστασις τῶν συμφύτων μερῶν μετὰ βίας· οὐτε γὰρ ὁ ὕπνος ὑπάρχει τῇ αἰσθήσει, ἔδει δ', εἶπερ ἀδυναμία αἰσθήσεώς ἐστιν. ὁμοίως δ' 5 οὐδ' ἡ ἀπορία ὑπάρχει τοῖς ἐναντίοις λογισμοῖς, οὐδ' ἡ ἀλγηδὼν τοῖς συμφύτοις μέρεσιν· ἀλγήσει γὰρ τὰ ἄψυχα, εἶπερ ἀλγηδὼν αὐτοῖς παρέσται. τοιοῦτος δὲ καὶ ὁ τῆς ὑγείας ὀρισμός, εἶπερ συμμετρία θερμῶν καὶ ψυχρῶν ἐστίν· ἀνάγκη γὰρ ὑγιαίνειν τὰ θερμὰ καὶ ψυχρά· ἡ γὰρ ἐκάστου 10 συμμετρία ἐν ἐκείνοις ὑπάρχει ὧν ἐστὶ συμμετρία, ὥσθ' ἡ ὑγίεια ὑπάρχει αὖν αὐτοῖς. ἔτι τὸ ποιούμενον εἰς τὸ ποιητικὸν ἢ ἀνάπαλιν συμβαίνει τιθέναι τοῖς οὕτως ὀριζομένοις. οὐ γὰρ ἐστὶν ἀλγηδὼν ἢ διάστασις τῶν συμφύτων μερῶν, ἀλλὰ ποιητικὸν ἀλγηδόνης· οὐδ' ἡ ἀδυναμία τῆς αἰ- 15 σθήσεως ὕπνος, ἀλλὰ ποιητικὸν θάτερον θατέρου·

¹ Deleting ἢ after ἢ.

if he has defined 'wisdom' as the virtue of 'man' or of the 'soul' and not of the 'reasoning faculty'; for wisdom is primarily the virtue of the reasoning faculty, for it is in respect of this that both 'soul' and 'man' are said to be wise.

Moreover, he has made a mistake, if that of which the term which has been defined has been said to be an affection or disposition or whatever else it may be, does not admit of it. For every disposition and every affection naturally comes into being in that of which it is a disposition or affection, for example, knowledge in the soul, since it is a disposition of soul. But sometimes people make mistakes in such matters, for example, those who say that 'sleep' is 'impotence of sensation' and 'perplexity' an 'equality of contrary reasonings,' and 'pain' a 'separation of conjoined parts accompanied by violence.' For neither is sleep an attribute of sensation, though it ought to be if it is an impotence of sensation. Similarly neither is perplexity an attribute of contrary reasonings nor pain an attribute of conjoined parts; for, if it were so, inanimate things will be in pain, since pain will be present in them. Of like character is the definition of 'health,' if it is stated to be a 'balance of things hot and cold'; for then things hot and cold must have health; for the balance of anything exists in those things of which it is the balance, and so health would exist in them. Moreover, the result produced by those who frame definitions in this way is to put the effect in place of the cause and vice versa. For the separation of the conjoined parts is not pain, but a cause of pain, and impotence of sensation is not sleep, but one is the cause of the other; for either we go to sleep owing to impotence

(j) Observe whether the affection affects that which it is defined as affecting.

145 b

ἤτοι γὰρ διὰ τὴν ἀδυναμίαν ὑπνοῦμεν, ἢ διὰ τὸν ὕπνον ἀδυνατοῦμεν. ὁμοίως δὲ καὶ τῆς ἀπορίας δόξειεν ἂν ποιητικὸν εἶναι ἢ τῶν ἐναντίων ἰσότης λογισμῶν· ὅταν γὰρ ἐπ' ἀμφοτέρα λογιζομένοις ἡμῖν ὁμοίως ἅπαντα φαίνεται καθ' ἑκάτερον
20 γίνεσθαι, ἀποροῦμεν ὁπότερον πράξωμεν.

Ἔτι κατὰ τοὺς χρόνους πάντας ἐπισκοπεῖν εἴ
που διαφωνεῖ, οἷον εἰ τὸ ἀθάνατον ὠρίσατο ζῶον
ἄφθαρτον νῦν εἶναι· τὸ γὰρ νῦν ἄφθαρτον ζῶον
νῦν ἀθάνατον ἔσται. ἢ ἐπὶ μὲν τούτου οὐ συμ-
25 βαίνει· ἀμφίβολον γὰρ τὸ νῦν ἄφθαρτον εἶναι· ἢ
γὰρ ὅτι οὐκ ἔφθαρται νῦν σημαίνει, ἢ ὅτι οὐ δυ-
νατὸν φθαρῆναι νῦν, ἢ ὅτι τοιοῦτόν ἐστι νῦν οἷον
μηδέποτε φθαρῆναι. ὅταν οὖν λέγωμεν ὅτι ἄφθαρ-
τον νῦν ἐστὶ ζῶον, τοῦτο λέγομεν ὅτι νῦν τοιοῦτόν
ἐστὶ ζῶον οἷον μηδέποτε φθαρῆναι. τοῦτο δὲ τῷ
ἀθανάτῳ τὸ αὐτὸ ἦν, ὥστ' οὐ συμβαίνει νῦν
30 αὐτὸ ἀθάνατον εἶναι. ἀλλ' ὅμως ἂν συμβαίνει τὸ
μὲν κατὰ τὸν λόγον ἀποδοθὲν ὑπάρχειν νῦν ἢ
πρότερον, τὸ δὲ κατὰ τοῦνομα μὴ ὑπάρχειν, οὐκ
ἂν εἴη ταυτόν. χρηστέον οὖν τῷ τόπῳ καθάπερ
εἴρηται.

VII. Σκεπτέον δὲ καὶ εἰ καθ' ἕτερόν τι μᾶλλον
35 λέγεται τὸ ὀρισθὲν ἢ κατὰ τὸν ἀποδοθέντα λόγον,
οἷον εἰ ἡ δικαιοσύνη δύναμις τοῦ ἴσου διανεμητική.

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of sensation, or we lose the power of sensation owing to sleep. Similarly, too, it would be generally held that the equality of contrary reasonings is a cause of perplexity ; for, when we are reasoning on both sides of a question and everything appears to have equal weight on either side, we are perplexed which of the two courses we are to adopt.

Furthermore, you must consider all the possible periods of time and look for any discrepancy. Take, for example, the definition of ' immortal ' as ' a living creature at present immune from destruction ' ; for a living creature ' at present ' immune from destruction will be ' at present ' immortal. Or, possibly, it does not follow in this case ; for ' at present immune from destruction ' is ambiguous, since it can mean either that it has not been destroyed at present, or that it cannot be destroyed at present, or that it is at present such as never to be destroyed. When, therefore, we say that a living creature is at present immune from destruction, we mean that it is at present a living creature such as never to be destroyed ; and this is the same as saying that it is immortal, so that it does not follow that it is immortal only at present. But, nevertheless, if that which is assigned in the description happens to belong only in the present or in the past, whereas that which is expressed by the name does not so belong, they could not be the same thing. The commonplace, therefore, ought to be employed as described above.

VII. You should also consider whether the term defined is rather applied in virtue of something other than what is expressed in the description assigned. Take, for example, the definition of ' justice ' as ' a capacity for distributing what is equal ' ; for a just

(k) Observe whether the ratio of time concurs with the subject of definition.

Various ways of testing a definition :
(a) Is there any better definition ?

145 b

δίκαιος γὰρ μᾶλλον ὁ προαιρούμενος τὸ ἴσον
 146 a διανεῖμαι τοῦ δυναμένου, ὥστ' οὐκ ἂν εἴη ἡ δι-
 καιοσύνη δύναμις τοῦ ἴσου διανεμητική· καὶ γὰρ
 δίκαιος εἴη ἂν μάλιστα ὁ δυνάμενος μάλιστα τὸ
 ἴσον διανεῖμαι.

"Ἐτι εἰ τὸ μὲν πρᾶγμα δέχεται τὸ μᾶλλον, τὸ
 δὲ κατὰ τὸν λόγον ἀποδοθὲν μὴ δέχεται, ἢ ἀνά-
 5 παλιν τὸ μὲν κατὰ τὸν λόγον ἀποδοθὲν δέχεται,
 τὸ δὲ πρᾶγμα μὴ. δεῖ γὰρ ἀμφοτέρα δέχεσθαι ἢ
 μηδέτερον, εἴπερ δὴ ταυτόν ἐστι τὸ κατὰ τὸν
 λόγον ἀποδοθὲν τῷ πράγματι. ἔτι εἰ δέχεται
 μὲν ἀμφοτέρα τὸ μᾶλλον, μὴ ἅμα δὲ τὴν ἐπίδοσιν
 ἀμφοτέρα λαμβάνει, οἷον εἰ ὁ ἔρως ἐπιθυμία
 10 συνουσίας ἐστίν· ὁ γὰρ μᾶλλον ἐρῶν οὐ μᾶλλον
 ἐπιθυμεῖ τῆς συνουσίας, ὥστ' οὐχ ἅμα ἀμφοτέρα
 τὸ μᾶλλον ἐπιδέχεται· ἔδει δέ γε, εἴπερ ταυτόν
 ἦν.

"Ἐτι εἰ δύο τινῶν προτεθέντων, καθ' οὗ τὸ
 πρᾶγμα μᾶλλον λέγεται, τὸ κατὰ τὸν λόγον ἦττον
 15 λέγεται, οἷον εἰ τὸ πῦρ ἐστὶ σῶμα τὸ λεπτομερέ-
 στατον· πῦρ μὲν γὰρ μᾶλλον ἢ φλόξ ἐστὶ τοῦ
 φωτός, σῶμα δὲ τὸ λεπτομερέστατον ἦττον ἢ¹
 φλόξ τοῦ φωτός· ἔδει δ' ἀμφοτέρα μᾶλλον τῷ αὐτῷ
 ὑπάρχειν, εἴπερ ταῦτα ἦν. πάλιν εἰ τὸ μὲν ὁμοίως

¹ Reading <ἢ> φλόξ.

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man is rather he who deliberately chooses to distribute what is equal than he who has the capacity for doing so : so that justice could not be a capacity for distributing what is equal; for then a man would be most just who has the greatest capacity for distributing what is equal.

Furthermore, you must see whether the subject of the definition admits of a greater degree, whereas that which is assigned by the terms of the description does not ; or, on the contrary, whether that which is assigned by the terms of the description admits of a greater degree, whereas what is assigned by the terms of the definition does not. For either both must admit of it or neither, if that which is assigned by the terms of the description is the same as the subject of the definition. Further, you must see whether both admit of a greater degree while both do not experience the increase at the same time. The definition of ' love ' as ' a desire for sexual intercourse ' is a case in point ; for he who is more in love has not more desire for intercourse, so that both feelings do not admit of a greater degree at the same time, whereas they should do so if they were the same thing.

(b) Does the definition admit of degrees while its subject does not ?

Furthermore, when alternatives are proposed, you must see whether, where the subject of the definition applies in a greater degree, what is assigned by the definition applies in a less degree. Take, for example, the definition of ' fire ' as ' a body consisting of the most subtle parts ' ; for ' fire ' is ' flame ' rather than ' light,' on the other hand ' the body consisting of the most subtle parts ' is less ' flame ' than ' light,' whereas both ought to belong in a greater degree to the same thing, if they were the same. Again,

(c) In the case of alternatives where the subject of the definition is more applicable, is its content less so ?

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ἀμφοτέροις ὑπάρχει τοῖς προτεθείσι, τὸ δ' ἕτερον
20 μὴ ὁμοίως ἀμφοτέροις, ἀλλὰ τῷ ἑτέρῳ μᾶλλον.

Ἔτι ἐὰν πρὸς δύο τὸν ὀρισμὸν ἀποδῶ καθ' ἑκά-
τερον, οἷον τὸ καλὸν τὸ δι' ὄψεως ἢ τὸ δι' ἀκοῆς
ἡδύ, καὶ τὸ ὄν τὸ δυνατόν παθεῖν ἢ ποιῆσαι· ἅμα
γὰρ ταῦτόν καλόν τε καὶ οὐ καλὸν ἔσται, ὁμοίως
25 δὲ καὶ ὄν τε καὶ οὐκ ὄν. τὸ γὰρ δι' ἀκοῆς ἡδὺ
ταῦτόν τῷ καλῷ ἔσται, ὥστε τὸ μὴ ἡδὺ δι' ἀκοῆς
τῷ μὴ καλῷ ταυτόν· τοῖς γὰρ αὐτοῖς καὶ τὰ
ἀντικείμενα ταῦτά, ἀντίκειται δὲ τῷ μὲν καλῷ
τὸ οὐ καλόν, τῷ δὲ δι' ἀκοῆς ἡδεῖ τὸ οὐχ ἡδὺ δι'
ἀκοῆς. δῆλον οὖν ὅτι ταῦτόν τὸ οὐχ ἡδὺ δι' ἀκοῆς
30 τῷ οὐ καλῷ. εἰ οὖν τι ἐστὶ δι' ὄψεως μὲν ἡδὺ
δι' ἀκοῆς δὲ μὴ, καλόν τε καὶ οὐ καλὸν ἔσται.
ὁμοίως δὲ δείξομεν καὶ διότι ταῦτόν ὄν τε καὶ οὐκ
ὄν ἐστιν.

Ἔτι καὶ τῶν γενῶν καὶ τῶν διαφορῶν καὶ τῶν
ἄλλων ἀπάντων τῶν ἐν τοῖς ὀρισμοῖς ἀποδιδομέ-
35 νων λόγους ἀντὶ τῶν ὀνομάτων ποιοῦντα σκοπεῖν
εἴ τι διαφωνεῖ.

VIII. Ἐὰν δ' ἢ πρὸς τι τὸ ὀριζόμενον ἢ καθ'
αὐτὸ ἢ κατὰ τὸ γένος, σκοπεῖν εἰ μὴ εἴρηται ἐν
146 b τῷ ὀρισμῷ πρὸς ὃ λέγεται ἢ αὐτὸ ἢ κατὰ τὸ
γένος, οἷον εἰ τὴν ἐπιστήμην ὠρίσατο ὑπόληψιν
ἀμετάπειστον ἢ τὴν βούλησιν ὄρεξιν ἄλυπον. παν-
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you must see whether one belongs similarly to the terms proposed, while the other does not belong similarly to both, but in a greater degree to one of them.

Furthermore, you must see if he renders the definition in relation to two things separately, for example when he defines 'the beautiful' as 'what is pleasant to the sight or to the hearing,' or 'the existent' as 'what is capable of being affected or of affecting something else'; for then the same thing will be both beautiful and not beautiful, and likewise also both existent and non-existent. For 'pleasant to the hearing' will be the same as 'beautiful,' and so 'not pleasant to the hearing' will be the same as 'not beautiful'; for the opposites of identical things too are identical, and 'not beautiful' is the opposite of 'beautiful,' while 'not pleasant to the hearing' is the opposite of 'pleasant to the hearing.' Obviously, therefore, 'not pleasant to the hearing' is the same as 'not beautiful.' If, therefore, a thing is pleasant to the sight but not to the hearing, it will be both beautiful and not beautiful. And, similarly, we shall show also that the same thing is both existent and non-existent.

Furthermore, you should frame descriptions of both the genera and the differentiae and everything else assigned in the definitions to take the place of the names and see whether there is any discrepancy.

VIII. If what is being defined is relative, either in itself or in its genus, you must examine whether there has been a failure in the definition to mention to what it is relative, either in itself or in its genus; for example, if the definer has defined 'knowledge' as an 'incontrovertible conception,' or 'wish' as a

(d) Is the definition rendered in relation to two things taken separately?

(e) Is there any discrepancy of genera and differentiae?

Rules for testing the definition of a relative term:

(a) If the subject of the definition is rela-

τὸς γὰρ τοῦ πρὸς τι ἢ οὐσία πρὸς ἕτερον, ἐπειδὴ
ταὐτὸν ἦν ἐκάστω τῶν πρὸς τι τὸ εἶναι ὅπερ
5 τὸ πρὸς τί πως ἔχειν. ἔδει οὖν τὴν ἐπιστήμην εἰ-
πεῖν ὑπόληψιν ἐπιστητοῦ καὶ τὴν βούλησιν ὄρεξιν
ἀγαθοῦ. ὁμοίως δὲ καὶ εἰ τὴν γραμματικὴν
ώρίσατο ἐπιστήμην γραμμάτων· ἔδει γὰρ ἢ πρὸς
ὃ αὐτὸ λέγεται ἢ πρὸς ὃ ποτε τὸ γένος ἐν τῷ
διορισμῷ ἀποδίδοσθαι. ἢ εἰ πρὸς τι εἰρημένον
10 μὴ πρὸς τὸ τέλος ἀποδέδοται. τέλος δ' ἐν ἐκάστω
τὸ βέλτιστον ἢ οὐ χάριν τᾶλλα. ῥητέον δὴ ἢ τὸ
βέλτιστον ἢ τὸ ἔσχατον, οἷον τὴν ἐπιθυμίαν οὐχ
ἡδέος ἀλλ' ἡδονῆς· ταύτης γὰρ χάριν καὶ τὸ ἡδὺ
αἰρούμεθα.

Σκοπεῖν δὲ καὶ εἰ γένεσις ἐστὶ πρὸς ὃ ἀπο-
δέδωκεν ἢ ἐνέργεια· οὐδὲν γὰρ τῶν τοιούτων
15 τέλος· μᾶλλον γὰρ τὸ ἐνηργηκεῖν καὶ γεγενῆσθαι
τέλος ἢ τὸ γίνεσθαι καὶ ἐνεργεῖν. ἢ οὐκ ἐπὶ
πάντων ἀληθὲς τὸ τοιοῦτον· σχεδὸν γὰρ οἱ πλεῖστοι
ἡδεσθαι μᾶλλον βούλονται ἢ πεπαῦσθαι ἡδόμενοι,
ὥστε τὸ ἐνεργεῖν μᾶλλον τέλος ἂν ποιοῦντο τοῦ
ἐνηργηκεῖν.

20 Πάλιν ἐπ' ἐνίων εἰ μὴ διώρικε τοῦ πόσου ἢ
ποίου ἢ ποῦ ἢ κατὰ τὰς ἄλλας διαφοράς, οἷον
φιλότιμος ὁ ποίας καὶ ὁ πόσης ὀρεγόμενος τιμῆς·

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‘painless desire.’ For the essence of anything that is relative is relative to something, since the being of every relative term is the same as the being in some relation to something. He ought, therefore, to have described knowledge as ‘conception of an object of knowledge,’ and wish as ‘desire of the good.’ Similarly, also, if he has defined ‘grammar’ as a ‘knowledge of letters,’ whereas either that to which the term itself is relative or that to whichsoever its genus is relative ought to have been assigned in the definition. Or, again, you ought to see whether a term mentioned in relation to something has not been assigned in relation to its end; for the end in any particular case is that which is best or that for the sake of which all else exists. What is best, then, or ultimate should be stated; for example, desire should be described as not for the pleasant but for pleasure, for it is for the sake of pleasure that we also choose what is pleasant.

You must also examine whether that in relation to which he has assigned the term is a coming-into-being or an activity; for none of such things is an end, for to have completed an activity or a coming-into-being is an end rather than the actual coming-into-being and activity. Or, possibly, such a statement is not invariably true; for almost everyone wishes to be delighted rather than to have ceased to be delighted, so that people apparently would account the actual activity as an end rather than the completion of it.

Again, cases occur in which you must see whether he has failed to define the quantity or quality or place, or the other differentiae which are involved, for example, what is the quality and quantity of the honour which he desires that makes a man ambitious;

tive, is it stated to what it is relative?

(b) Is any relation to coming-into-being or activity stated?

(c) Is there any failure to define quantity or quality or place?

πάντες γὰρ ὀρέγονται τιμῆς, ὥστ' οὐκ ἀπόχρη
 φιλότιμον εἰπεῖν τὸν ὀρεγόμενον τιμῆς, ἀλλὰ
 προσθετέον τὰς εἰρημένας διαφοράς. ὁμοίως δὲ
 25 καὶ φιλοχρήματος ὁ πόσων ὀρεγόμενος χρημάτων
 ἢ ἀκρατῆς ὁ περὶ ποίας ἡδονάς· οὐ γὰρ ὁ ὑφ'
 οἰασποτοῦν ἡδονῆς κρατούμενος ἀκρατῆς λέγεται,
 ἀλλ' ὁ ὑπὸ τινος. ἢ πάλιν, ὡς ὀρίζονται τὴν νύκτα
 σκιὰν γῆς, ἢ τὸν σεισμόν κίνησιν γῆς, ἢ τὸ νέφος
 πύκνωσιν ἀέρος, ἢ τὸ πνεῦμα κίνησιν ἀέρος·
 30 προσθετέον γὰρ πόσου καὶ ποίου καὶ ὑπὸ τίνος.
 ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων·
 ἀπολείπων γὰρ διαφορὰν ἡντινοῦν οὐ λέγει τὸ τί
 ἦν εἶναι. δεῖ δ' αἰεὶ πρὸς τὸ ἐνδεές ἐπιχειρεῖν· οὐ
 γὰρ ὅπως οὖν γῆς κινηθείσης οὐδ' ὅπως οὖν σει-
 σμός ἔσται, ὁμοίως δ' οὐδ' ἀέρος ὅπως οὖν οὐδ'
 35 ὅπως οὖν κινηθέντος πνεῦμα.

Ἔτι ἐπὶ τῶν ὀρέξεων εἰ μὴ πρόσκειται τὸ
 φαινόμενον, καὶ ἐφ' ὅσων ἄλλων ἀρμόττει, οἷον
 147 a ὅτι ἢ βούλησις ὄρεξις ἀγαθοῦ, ἢ δ' ἐπιθυμία
 ὄρεξις ἡδέος, ἀλλὰ μὴ φαινομένου ἀγαθοῦ ἢ ἡδέος.
 πολλάκις γὰρ λανθάνει τοὺς ὀρεγομένους ὃ τι
 ἀγαθὸν ἢ ἡδύ ἐστιν, ὥστ' οὐκ ἀναγκαῖον ἀγαθὸν
 ἢ ἡδύ εἶναι, ἀλλὰ φαινόμενον μόνον. ἔδει οὖν
 5 οὕτω καὶ τὴν ἀπόδοσιν ποιήσασθαι. ἐὰν δὲ καὶ
 ἀποδῶ τὸ εἰρημένον, ἐπὶ τὰ εἶδη ἀκτέον τὸν τιθέ-
 μενον ιδέας εἶναι· οὐ γάρ ἐστιν ιδέα φαινομένου

for all men desire honour, and so it is not enough to say that the man who desires honour is ambitious, but the above-mentioned differentiae must be added. Similarly, too, we must state what quantity of money which he desires makes a man avaricious and what quality of pleasures which he desires makes a man incontinent ; for a man is not called incontinent who is the slave of any kind of pleasure whatsoever, but only if he is the slave of a particular kind. Or, again, when people define 'night' as 'a shadow over the earth,' or an 'earthquake' as 'movement of the earth,' or 'a cloud' as 'condensation of air,' or 'wind' as 'movement of the air,' the quality and quantity and cause must be added. And, similarly, in all cases of this kind ; for the omission of any differentia whatever involves a failure to state the essence. One should always deal with the deficiency ; for an earthquake will not result from *any* kind or *any* extent whatsoever of movement of the earth, nor a wind from *any* kind or extent whatsoever of movement of the air.

Furthermore, in dealing with desires, and in any other case where it is fitting, you must see whether there is a failure to add the qualification 'apparent,' for example in the definitions 'wish is a desire for the good,' or 'appetite is a desire for the pleasant' instead of 'the apparently good or pleasant.' For often those who feel desire fail to perceive what is good or pleasant, so that the object of their desire is not necessarily good or pleasant, but only apparently so. One ought, therefore, to have assigned the definition with this qualification. He, however, who asserts the existence of 'ideas,' if he *does* assign the above qualification, must be confronted with his 'ideas' ; for there can be no 'idea' of what is only

(d) In the definition of appetites, is the object of desire qualified as 'apparent'?

οὐδενός, τὸ δ' εἶδος πρὸς τὸ εἶδος δοκεῖ λέγεσθαι, οἷον αὐτὴ ἐπιθυμία αὐτοῦ ἡδέος καὶ αὐτὴ βούλησις αὐτοῦ ἀγαθοῦ. οὐκ ἔστιν οὖν φαινομένου ἀγαθοῦ
 10 οὐδὲ φαινομένου ἡδέος· ἄτοπον γὰρ τὸ εἶναι αὐτὸ φαινόμενον ἀγαθὸν ἢ ἡδύ.

IX. "Ἐτι ἐὰν μὲν ἦ τῆς ἕξεως ὁ ὀρισμός, σκοπεῖν ἐπὶ τοῦ ἔχοντος, ἐὰν δὲ τοῦ ἔχοντος, ἐπὶ τῆς ἕξεως· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων. οἷον
 15 εἰ τὸ ἡδὺ ὅπερ ὠφέλιμον, καὶ ὁ ἡδόμενος ὠφελούμενος. καθόλου δ' εἰπεῖν, ἐν τοῖς τοιούτοις ὀρισμοῖς τρόπον τινὰ πλείω ἐνὸς συμβαίνει τὸν ὀριζόμενον ὀρίζεσθαι· ὁ γὰρ τὴν ἐπιστήμην ὀριζόμενος τρόπον τινὰ καὶ τὴν ἄγνοιαν ὀρίζεται, ὁμοίως δὲ καὶ τὸ ἐπιστήμον καὶ τὸ ἀνεπιστήμον
 20 καὶ τὸ ἐπίστασθαι καὶ τὸ ἀγνοεῖν· τοῦ γὰρ πρώτου δήλου γενομένου τρόπον τινὰ καὶ τὰ λοιπὰ δῆλα γίνονται. σκεπτέον οὖν ἐπὶ πάντων τῶν τοιούτων μή τι διαφωνῇ, στοιχείοις χρώμενον τοῖς ἐκ τῶν ἐναντίων καὶ τῶν συστοίχων.

"Ἐτι ἐπὶ τῶν πρὸς τι σκοπεῖν εἰ πρὸς ὃ τὸ γένος ἀποδίδεται, τὸ εἶδος πρὸς ἐκεῖνό τι ἀποδίδεται, οἷον
 25 εἰ ἡ ὑπόληψις πρὸς ὑποληπτόν, ἢ τις ὑπόληψις πρὸς <τὸ>¹ τὶ ὑποληπτόν, καὶ εἰ τὸ πολλαπλάσιον πρὸς τὸ πολλοστημόριον, τὸ τὶ πολλαπλάσιον πρὸς

apparent, but an 'idea' is generally held to be used in relation to another 'idea.' For example, absolute appetite is for the absolutely pleasant, and absolute wish for the absolutely good, and so they are not for the apparently good or the apparently pleasant, for it is absurd to suppose that an absolutely-apparently-good or pleasant can exist.

IX. Furthermore, if the definition is of the state of anything, you must examine the possessor of the state, or, if the definition is of the possessor of the state, you must examine the state, and so likewise in all such cases. For example, if the pleasant is what is beneficial, he who feels pleasure is benefited. To put the matter generally, in definitions of this kind it happens that the framer of the definition in a way defines more than one thing; for he who defines knowledge in a way defines ignorance also, and likewise also what possesses and what does not possess knowledge, and what it is to know and to be ignorant. For when the first of these things is clear, the rest also in a way become clear also. You must be careful then in all such cases that there is no discrepancy, using the elementary principles derived from contraries and corresponding terms.

Furthermore, in dealing with relatives, you must examine whether the species is assigned as relative to a species of that to which the genus is assigned as relative. For example, if 'conception' is relative to 'object of conception,' you must see whether a particular conception is assigned relative to a particular object of conception, and, if a multiple is relative to a fraction, whether a particular multiple is assigned

*Rules for
defining
(a) a state.*

*(b) A rela-
tive term.*

¹ τὸ added by Wallies.

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τὸ τὶ πολλοστημόριον· εἰ γὰρ μὴ οὕτως ἀποδίδεται, δῆλον ὅτι ἡμάρτηται.

‘Ορᾶν δὲ καὶ εἰ τοῦ ἀντικειμένου ὁ ἀντικείμενος
 30 λόγος, οἷον τοῦ ἡμίσεος ὁ ἀντικείμενος τῷ τοῦ
 διπλασίου· εἰ γὰρ διπλάσιον τὸ ἴσῳ ὑπερέχον,
 ἡμῖς τὸ ἴσῳ ὑπερεχόμενον. καὶ ἐπὶ τῶν ἐναντίων
 δ’ ὡσαύτως. ὁ γὰρ ἐναντίος τοῦ ἐναντίου λόγος
 ἔσται κατὰ μίαν τινὰ συμπλοκὴν τῶν ἐναντίων,
 οἷον εἰ ὠφέλιμον τὸ ποιητικὸν ἀγαθοῦ, βλαβερὸν
 35 τὸ ποιητικὸν κακοῦ ἢ τὸ φθαρτικὸν ἀγαθοῦ· θά-
 147 b τερον γὰρ τούτων ἀναγκαῖον ἐναντίον εἶναι τῷ ἐξ
 ἀρχῆς ῥηθέντι. εἰ οὖν μηδέτερον ἐναντίον τῷ ἐξ ἀρ-
 χῆς ῥηθέντι, δῆλον ὅτι οὐδέτερος ἂν εἴη τῶν ὕστε-
 ρον ἀποδοθέντων τοῦ ἐναντίου λόγος, ὥστ’ οὐδ’
 ἐξ ἀρχῆς ἀποδοθεὶς ὀρθῶς ἀποδέδοται. ἐπεὶ δ’
 5 ἓν τῶν ἐναντίων στερήσει θατέρου λέγεται,—
 οἷον ἢ ἀνισότης στέρησις ἰσότητος δοκεῖ εἶναι
 (ἄνισα γὰρ τὰ μὴ ἴσα λέγεται),—δῆλον ὅτι τὸ μὲν
 κατὰ στέρησιν λεγόμενον ἐναντίον ἀναγκαῖον ὀρί-
 ζεσθαι διὰ θατέρου, τὸ δὲ λοιπὸν οὐκέτι διὰ τοῦ
 κατὰ στέρησιν λεγομένου· συμβαίνοι γὰρ ἂν
 ἐκάτερον δι’ ἐκατέρου γνωρίζεσθαι. ἐπισκεπτέον
 10 οὖν ἐν τοῖς ἐναντίοις τὴν τοιαύτην ἁμαρτίαν, οἷον
 εἴ τις ὀρίσαιτο τὴν ἰσότητα εἶναι τὸ ἐναντίον ἀν-
 ισότητι· διὰ γὰρ τοῦ κατὰ στέρησιν λεγομένου

as relative to a particular fraction ; for if it has not to be so assigned, obviously a mistake has been made.

You must also see whether the opposite of the description describes the opposite of the term, for example, whether the opposite of the description of 'double' is the description of 'half'; for if 'double' is 'that which exceeds by an equal amount,' 'half' is 'that which is exceeded by an equal amount.' So likewise in the case of contraries also; for the description which is contrary according to one of the modes of conjunction of contraries will describe the contrary term. For example, if 'beneficial' is 'productive of good,' 'harmful' is 'productive of evil' or 'destructive of good'; for one of these must necessarily be the contrary of the original term. If, then, neither of them is the contrary of the original term, obviously neither of the descriptions assigned later could be the description of the contrary of that term, and so neither has the description originally assigned been assigned correctly. Now since some contraries derive their names from the privation of another contrary—for example, inequality is generally regarded as a privation of equality, for things which are not equal are called 'unequal'—it is obvious that the contrary whose name takes the form of a privation must necessarily be defined by means of the other contrary, but the other contrary cannot then be defined by means of the contrary whose name takes the form of a privation; for then the result would be that each was known through the other. We must, therefore, be on our guard against this mistake in dealing with contraries, for example, if one were to define equality as the contrary of inequality; for he is defining by

(c) *Opposites
and con-
traries.*

ὀρίζεται. ἔτι τὸν οὕτως ὀριζόμενον ἀναγκαῖον
 αὐτῷ τῷ ὀριζομένῳ χρῆσθαι. δῆλον δὲ τοῦτο,
 εἰ μὴ μεταληφθῇ ἀντὶ τοῦ ὀνόματος ὁ λόγος· εἰπεῖν
 15 γὰρ ἢ ἀνισότητα οὐδὲν διαφέρει ἢ στέρησιν ἰσό-
 τητος. ἔσται οὖν ἡ ἰσότης τὸ ἐναντίον στέρησει
 ἰσότητος, ὥστ' αὐτῷ ἂν εἴη κεχρημένος. ἂν δὲ
 μηδέτερον τῶν ἐναντίων κατὰ στέρησιν λέγεται,
 ἀποδοθῇ δ' ὁ λόγος ὁμοίως, οἷον ἀγαθὸν τὸ ἐναν-
 τίων κακῷ, δῆλον ὅτι κακὸν τὸ ἐναντίον ἀγαθῷ
 20 ἔσται (τῶν γὰρ οὕτως ἐναντίων ὁμοίως ὁ λόγος
 ἀποδοτέος), ὥστε πάλιν αὐτῷ τῷ ὀριζομένῳ συμ-
 βαίνει χρῆσθαι· ἐνυπάρχει γὰρ ἐν τῷ τοῦ κακοῦ
 λόγῳ τὸ ἀγαθόν. ὥστ' εἰ ἀγαθὸν ἔστι τὸ κακῷ
 ἐναντίον, τὸ δὲ κακὸν οὐδὲν διαφέρει ἢ τὸ τῷ
 ἀγαθῷ ἐναντίον, ἔσται ἀγαθὸν τὸ ἐναντίον τῷ τοῦ
 25 ἀγαθοῦ ἐναντίῳ. δῆλον οὖν ὅτι αὐτῷ κέχρηται.

Ἔτι εἰ τὸ κατὰ στέρησιν λεγόμενον ἀποδιδούς
 μὴ ἀποδέδωκεν οὐ ἔστι στέρησις, οἷον τῆς ἕξεως
 ἢ τοῦ ἐναντίου ἢ ὅτου οὖν ἔστιν ἡ στέρησις· καὶ
 εἰ μὴ ἐν ᾧ πέφυκε γίνεσθαι προσέθηκεν, ἢ ἀπλῶς
 30 ἢ ἐν ᾧ πρῶτῳ πέφυκε γίνεσθαι, οἷον εἰ τὴν ἄγνοιαν
 εἰπὼν στέρησιν μὴ ἐπιστήμης στέρησιν εἶπεν, ἢ
 μὴ προσέθηκεν ἐν ᾧ πέφυκε γίνεσθαι, ἢ προσθεῖς

means of a term which takes the form of a privation. Moreover, he who defines in this way must necessarily employ the very term which he is defining ; and this becomes obvious if the description is substituted for the name ; for it makes no difference whether we say 'inequality' or 'privation of equality.' Equality, therefore, will be 'the contrary of the privation of equality,' so that he would have used the actual term. If, however, neither of the contraries is named in the form of a privation but the description is assigned in the same manner, for example in the definition of 'good' as 'the contrary of evil,' it is obvious that 'evil' will be 'the contrary of good' (for the description of things which are contrary in this way must be assigned in a similar manner), and so the result again is that he uses the actual term which is being defined ; for 'good' is inherent in the description of 'evil.' If, then, 'good' is 'the contrary of evil,' and 'evil' is indistinguishable from 'the contrary of good,' 'good' will be 'the contrary of the contrary of good' ; it is obvious, therefore, that he has made use of the actual term.

Furthermore, you must see whether, in assigning a term named in the form of a privation, he has failed to assign that of which it is a privation, for example, the state, or the contrary, or whatever else it is of which it is the privation ; and also whether he has failed to add what it is in which it naturally comes into being absolutely or in which it naturally comes into being primarily ; for example, if, in calling 'ignorance' a privation, he has failed to call it a privation of 'knowledge,' or has failed to add what it is in which it naturally comes into being, or, though he has added this, has not assigned that in which it

(d) Privations.

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μὴ ἐν ᾧ πρώτῳ ἀπέδωκεν, οἷον ὅτι οὐκ ἐν τῷ
 λογιστικῷ ἀλλ' ἐν ἀνθρώπῳ ἢ ψυχῇ· ἐὰν γὰρ ὅτιον
 τούτων μὴ ποιήσῃ, ἡμάρτηκεν. ὁμοίως δὲ καὶ εἰ
 35 τὴν τυφλότητα μὴ ὀψεως στέρησιν ἐν ὀφθαλμῷ
 148 a εἶπεν· δεῖ γὰρ τὸν καλῶς ἀποδιδόντα τὸ τί ἐστι,
 καὶ τίνος ἐστὶν ἢ στέρησις ἀποδοῦναι καὶ τί ἐστι
 τὸ ἐστερημένον.

Ὅρᾶν δὲ καὶ εἰ μὴ λεγομένου κατὰ στέρησιν
 στερήσει ὠρίσατο, οἷον καὶ ἐπὶ τῆς ἀγνοίας δόξειεν
 5 ἂν ὑπάρχειν ἢ τοιαύτῃ ἀμαρτία τοῖς μὴ κατ'
 ἀπόφασιν τὴν ἀγνοίαν λέγουσιν. τὸ γὰρ μὴ ἔχον
 ἐπιστήμην οὐ δοκεῖ ἀγνοεῖν, ἀλλὰ μᾶλλον τὸ
 διηπατημένον, διὸ οὔτε τὰ ἄψυχα οὔτε τὰ παῖδιά
 φαμέν ἀγνοεῖν, ὥστ' οὐ κατὰ στέρησιν ἐπιστήμης
 ἢ ἀγνοία λέγεται.

10 X. Ἔτι εἰ <ἐπὶ>¹ τῶν ὁμοίων τοῦ ὀνόματος πτώ-
 σεων αἱ ὅμοιαι τοῦ λόγου πτώσεις ἐφαρμόττουσιν,
 οἷον εἰ ὠφέλιμον τὸ ποιητικὸν ὑγείας, ὠφελίμως
 τὸ ποιητικῶς ὑγείας καὶ ὠφεληκὸς τὸ πεποιη-
 κὸς ὑγίειαν.

Σκοπεῖν δὲ καὶ ἐπὶ τὴν ἰδέαν εἰ ἐφαρμόσει ὁ
 15 λεχθεὶς ὅρος. ἐπ' ἐνίων γὰρ οὐ συμβαίνει, οἷον
 ὡς Πλάτων ὀρίζεται τὸ θνητὸν προσάπτων ἐν
 τοῖς τῶν ζώων ὀρισμοῖς· ἢ γὰρ ἰδέα οὐκ ἔσται
 θνητή, οἷον αὐτοάνθρωπος, ὥστ' οὐκ ἐφαρμόσει
 ὁ λόγος ἐπὶ τὴν ἰδέαν. ἀπλῶς δ' οἷς πρόσκειται
 τὸ ποιητικὸν ἢ παθητικόν, ἀνάγκη διαφωνεῖν

¹ ἐπὶ add. Wallies.

naturally comes in being primarily, assigning it, for example, to 'man' or 'the soul' instead of to 'the reasoning faculty'; for if he has failed to do any of these things, he has made a mistake. Similarly, also, if he has failed to call 'blindness' 'a privation of sight in *the eye*'; for he who is stating the essence correctly must state both what it is of which there is privation and what it is which is deprived.

You must also see whether, when a term is not used as a privation, he has defined it as a privation. For example, a mistake of this kind would be generally held to be committed in the case of 'ignorance' by those who do not use ignorance as a merely negative term. For what is regarded as ignorant is not that which does not possess knowledge but rather that which is deceived. Therefore we do not speak of inanimate things or children as 'ignorant,' and so 'ignorance' is not used for a mere privation of knowledge.

X. Furthermore, you must see whether the similar inflexions in the description apply to the similar inflexions of the term; for example, whether, if 'beneficial' means 'productive of health,' 'beneficially' means 'in a manner productive of health' and 'having benefited' means 'having produced health.'

You must also consider whether the definition given will fit the 'idea' also. In some cases this does not occur, for example, when Plato in his definitions of living creatures inserts the term 'mortal' in his definition; for the 'idea,' for example 'absolute man,' will not be mortal, so that the definition will not fit the 'idea.' Also, where the terms 'capable of affecting' or 'of being affected by' are added, there is necessarily an absolute discrepancy between

(e) Privations drawn (a) wrongly so called.

Rules drawn (a) from like inflexions.

(b) From reference of the definition to the idea of the term defined.

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20 ἐπὶ τῆς ἰδέας τὸν ὅρον· ἀπαθείς γὰρ καὶ ἀκίνητοι δοκοῦσιν αἱ ἰδέαι τοῖς λέγουσιν ἰδέας εἶναι. πρὸς δὲ τούτους καὶ οἱ τοιοῦτοι λόγοι χρήσιμοι.

Ἔτι εἰ τῶν καθ' ὁμωνυμίαν λεγομένων ἓνα λόγον ἀπάντων κοινὸν ἀπέδωκεν. συνώνυμα γὰρ
25 ὧν εἷς ὁ κατὰ τοῦνομα λόγος, ὥστ' οὐδενὸς τῶν ὑπὸ τοῦνομα ὁ ἀποδοθεὶς ὅρος, εἰ δὴ ὁμοίως ἐπὶ πᾶν τὸ ὁμώνυμον ἐφαρμόττει. πέπονθε δὲ τοῦτο καὶ ὁ Διονυσίου τῆς ζωῆς ὅρος, εἴπερ ἐστὶ κίνησις γένους θρεπτοῦ σύμφυτος παρακολουθοῦσα· οὐδὲν γὰρ μᾶλλον τοῦτο τοῖς ζώοις ἢ τοῖς φυτοῖς ὑπάρχει·

30 ἢ δὲ ζωῇ οὐ καθ' ἓν εἶδος δοκεῖ λέγεσθαι, ἀλλ' ἑτέρα μὲν τοῖς ζώοις ἑτέρα δὲ τοῖς φυτοῖς ὑπάρχειν. ἐνδέχεται μὲν οὖν καὶ κατὰ προαίρεσιν οὕτως ἀποδοῦναι τὸν ὅρον ὡς συνωνύμου καὶ καθ' ἓν εἶδος πάσης τῆς ζωῆς λεγομένης· οὐδὲν δὲ κωλύει καὶ συνορῶντα τὴν ὁμωνυμίαν, καὶ θατέρου βου-
35 λόμενον τὸν ὀρισμὸν ἀποδοῦναι, λαθεῖν μὴ ἴδιον ἀλλὰ κοινὸν ἀμφοῖν λόγον ἀποδόντα. ἀλλ' οὐδὲν ἦττον, εἰ ὁποτέρωσοῦν πεποίηκεν, ἡμάρτηκεν.

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ἐπεὶ δ' ἓνα λανθάνει τῶν ὁμωνύμων, ἐρωτῶντι μὲν ὡς συνωνύμοις χρηστέον (οὐ γὰρ ἐφαρμόσει ὁ θατέρου ὅρος ἐπὶ θάτερον, ὥστε δόξει οὐχ ὠρίσθαι κατὰ τρόπον· δεῖ γὰρ ἐπὶ πᾶν τὸ συν-
ώνυμον ἐφαρμόττειν), αὐτῷ δ' ἀποκρινομένῳ διαι-
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TOPICA, VI. x

the definition and the 'idea'; for 'ideas,' in the view of those who hold that they exist, are not liable to any affection or to motion. In dealing with such persons such arguments, amongst others, are useful.

Furthermore, you must see whether he has given one common description of terms used equivocally. For terms of which the description corresponding with the name is one and the same, are synonymous, and so, if the definition assigned fits the equivocal term equally well in all its senses, it cannot apply to any one of the meanings which fall under the name. This is the defect of Dionysius' definition of 'life,' which he describes as 'innate and accompanying movement of an organism nourished by food'; for this applies not less to plants than to animals, whereas it is generally held that the term 'life' is not used of one kind of thing only, but that there is one life of animals and another of plants. It is possible, however, also deliberately to assign the definition in this way on the ground that life as a whole is a synonymous term and applied to one kind of thing only; but there is no reason why a man, though he both sees the equivocation and wishes to assign the definition of one meaning only, should yet unconsciously assign a description which is not peculiar to one of two meaning but common to both. Nevertheless, whichever of these two courses he has adopted, he is equally in error. Since equivocal terms sometimes pass unnoticed, you should, when you are questioning, treat them as synonymous (for the definition of one meaning will not fit the other, so that the definition will be generally regarded as incorrect, for it ought to fit every instance of the synonymous term); on the other hand, you yourself, when answering, ought to

*Rules for
testing the
definition of
equivocal
terms.*

ρετέον. ἐπεὶ δ' ἔνιοι τῶν ἀποκρινομένων τὸ μὲν
 5 συνώνυμον ὁμώνυμόν φασιν εἶναι, ὅταν μὴ ἐφαρ-
 μότητι ἐπὶ πᾶν ὁ ἀποδοθεὶς λόγος, τὸ δ' ὁμώνυμον
 συνώνυμον, ἐὰν ἐπ' ἄμφω ἐφαρμότητι, προδιομο-
 λογητέον ὑπὲρ τῶν τοιούτων ἢ προσυλλογιστέον
 ὅτι ὁμώνυμον ἢ συνώνυμον, ὁπότερον ἂν ᾗ· μᾶλλον
 10 γὰρ συγχωροῦσιν οὐ προορῶντες τὸ συμβησό-
 μενον. ἂν δὲ μὴ γενομένης ὁμολογίας φῇ τις τὸ
 συνώνυμον ὁμώνυμον εἶναι διὰ τὸ μὴ ἐφαρμότητειν
 καὶ ἐπὶ τοῦτο τὸν ἀποδοθέντα λόγον, σκοπεῖν εἰ
 ὁ τούτου λόγος ἐφαρμότητι καὶ ἐπὶ τὰ λοιπά·
 δῆλον γὰρ ὅτι συνώνυμον ἂν εἴη τοῖς λοιποῖς. εἰ
 δὲ μή, πλείους ἔσονται ὀρίσμοι τῶν λοιπῶν· δύο
 15 γὰρ οἱ κατὰ τοῦνομα λόγοι ἐφαρμότητους ἐπ'
 αὐτά, ὃ τε πρότερον ἀποδοθεὶς καὶ ὁ ὕστερον·
 πάλιν εἴ τις ὀρισάμενος τῶν πολλαχῶς τι λεγο-
 μένων, καὶ τοῦ λόγου μὴ ἐφαρμότητοντος ἐπὶ
 πάντα, ὅτι μὲν ὁμώνυμον μὴ λέγοι, τὸ δ' ὄνομα
 μὴ φαίη ἐπὶ πάντα ἐφαρμότητειν, ὅτι οὐδ' ὁ λόγος,
 20 ῥητέον πρὸς τὸν τοιοῦτον ὅτι τῇ μὲν ὀνομασίᾳ δεῖ
 χρῆσθαι τῇ παραδεδομένη καὶ παρεπομένη καὶ μὴ
 κινεῖν τὰ τοιαῦτα, ἔνια δ' οὐ λεκτέον ὁμοίως τοῖς
 πολλοῖς.

XI. Ἐὰν δὲ τῶν συμπεπλεγμένων τινὸς ἀπο-
 δοθῇ ὅρος, σκοπεῖν ἀφαιροῦντα τὸν θατέρου τῶν
 25 συμπεπλεγμένων λόγον, εἰ καὶ ὁ λοιπὸς τοῦ λοι-

distinguish the various meanings. Since some answerers call a term 'equivocal' which is really synonymous whenever the description assigned does not fit all its meanings, and call a term 'synonymous' which is really equivocal if the description fits both meanings, you must obtain a previous agreement on such points or else prove in advance that the term is 'equivocal' or 'synonymous,' whichever it may be ; for people concur more readily when they do not foresee what will be the result. If, on the other hand, when there has been no agreement, a man declares that a synonymous term is equivocal because the description assigned does not fit a particular meaning of it, you must see whether the description of this meaning fits the other meanings also ; for then it is obvious that it must be synonymous with the other meanings. If this is not so, there will be more than one definition of the other meanings; for there are two descriptions applied to the term which fit them, namely, the one originally assigned and the one subsequently assigned. Again, if a man were to define a term used in several meanings, and then, when the description did not fit all the meanings, were not to say that it is equivocal but were to assert that the term does not fit all the meanings just because the description does not fit them either, you must say to such a person that, though sometimes one ought not to use the same language as the multitude, yet one ought to employ the traditional and received terminology and not disturb things of that kind.

XI. If a definition has been given of some complex term, you must take away the description of one part of the complex and see whether the remainder of the definition is a description of the remainder of it ;

*Rules for
the defini-
tion of a
complex
term :*

(a) Does the

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ποῦ· εἰ γὰρ μή, δῆλον ὅτι οὐδ' ὁ ὅλος τοῦ ὅλου.
οἶον εἰ ὠρίσατο γραμμὴν πεπερασμένην εὐθείαν
πέρας ἐπιπέδου ἔχοντος πέρατα, οὐ τὸ μέσον
ἐπιπροσθεῖ τοῖς πέρασιν, εἰ τῆς πεπερασμένης
γραμμῆς ὁ λόγος ἐστὶ πέρας ἐπιπέδου ἔχοντος
30 πέρατα, τοῦ εὐθέος δεῖ εἶναι τὸ λοιπόν, οὐ τὸ
μέσον ἐπιπροσθεῖ τοῖς πέρασιν. ἀλλ' ἡ ἄπειρος
οὔτε μέσον οὔτε πέρατα ἔχει, εὐθεία δ' ἐστίν,
ὥστ' οὐκ ἔστιν ὁ λοιπὸς τοῦ λοιποῦ λόγος.

Ἔτι εἰ συνθέτου ὄντος τοῦ ὀριζομένου ισόκωλος
ὁ λόγος ἀπεδόθη τῷ ὀριζομένῳ. ισόκωλος δέ
35 λέγεται ὁ λόγος εἶναι, ὅταν ὅσαπερ ἂν ᾖ τὰ συγ-
κείμενα, τοσαῦτα καὶ ἐν τῷ λόγῳ ὀνόματα καὶ
ρήματα ᾖ. ἀνάγκη γὰρ αὐτῶν τῶν¹ ὀνομάτων ἐν
τοῖς τοιούτοις μεταλλαγὴν γίνεσθαι, ἢ πάντων ἢ
149 a τινῶν, ἐπειδὴ οὐδὲν πλείω νῦν ἢ πρότερον ὀνόματα
εἴρηται· δεῖ δὲ τὸν ὀριζόμενον λόγον ἀντὶ τῶν
ὀνομάτων ἀποδοῦναι, μάλιστα μὲν πάντων, εἰ δέ
μή, τῶν πλείστων. οὕτω γὰρ καὶ ἐπὶ τῶν ἀπλῶν
ὁ τοῦνομα μεταλαβὼν ὠρισμένος ἂν εἴη, οἶον ἀντὶ
λωπίου ἱμάτιον.

5 Ἔτι δὲ μείζων ἁμαρτία, εἰ καὶ ἀγνωστοτέρων
ὀνομάτων τὴν μετάληψιν ἐποίησατο, οἶον ἀντὶ
ἀνθρώπου λευκοῦ βροτὸν ἀργόν· οὔτε γὰρ ὠρिσται
ἡττόν τε σαφὲς οὕτω ῥηθέν.

Σκοπεῖν δὲ καὶ ἐν τῇ μεταλλαγῇ τῶν ὀνομάτων

¹ Reading αὐτῶν τῶν with BC.

if not, it is obvious that neither does the whole definition describe the whole complex. Suppose, for example, someone has defined a 'finite straight line' as the 'limit of a finite plane, such that its centre is directly between its extremities'; if the description of a 'finite line' is the 'limit of a finite plane,' the remainder, namely, 'such that its centre is directly between its extremities' ought to be the description of 'straight.' But an infinite line has neither extremities nor a centre and is nevertheless straight, so that the remaining part of the definition does not describe the remainder of the term.

Furthermore, when that which is being defined is compound, you must see whether the description assigned possesses the same number of members as that which is being defined. The description is said to contain the same number of members when the nouns and verbs in the description are equal in number to the component parts of the subject of the definition. For in such cases there must be a change of all or some of the terms themselves, since no more terms are used now than before, whereas he who is giving a definition must assign a description in place of all the terms, if possible, or, failing this, of most of them. For on that principle, in dealing with simple terms also, he who has simply changed the name would have given a definition, for example, if he substituted 'cloak' for 'mantle.'

The error is still greater if what is substituted consists of terms which are even less intelligible, for example, 'gleaming mortal' in place of 'white man'; for it forms no definition and is less intelligible when stated in this way.

You must also consider whether in the change of

definition
describe
the whole
complex ?

(b) Does the
definition
consist of as
many parts
as the com-
plex which
is its sub-
ject ?

(c) Are the
terms used
more
obscure ?

(d) Are

εἰ οὐ ταῦτόν ἐστι σημαίνει, οἷον ὁ τὴν θεωρητικὴν
 10 ἐπιστήμην ὑπόληψιν θεωρητικὴν εἰπών. ἡ γὰρ
 ὑπόληψις τῇ ἐπιστήμῃ οὐ ταῦτόν, δεῖ δέ γε, εἴπερ
 μέλλει καὶ τὸ ὅλον ταῦτόν εἶναι· τὸ μὲν γὰρ θεω-
 ρητικὸν κοινὸν ἐν ἀμφοτέροις τοῖς λόγοις ἐστί,
 τὸ δὲ λοιπὸν διάφορον.

Ἔτι εἰ θατέρου τῶν ὀνομάτων τὴν μετάληψιν
 15 ποιούμενος μὴ τῆς διαφορᾶς ἀλλὰ τοῦ γένους τὴν
 μεταλλαγὴν ἐποιήσατο, καθάπερ ἐπὶ τοῦ ἀρτίως
 ῥηθέντος. ἀγνωστότερον γὰρ ἡ θεωρητικὴ τῆς
 ἐπιστήμης· τὸ μὲν γὰρ γένος, τὸ δὲ διαφορά,
 πάντων δὲ γνωριμώτατον τὸ γένος· ὥστ' οὐ τοῦ
 γένους ἀλλὰ τῆς διαφορᾶς ἔδει τὴν μετάληψιν
 20 ποιήσασθαι, ἐπειδὴ ἀγνωστότερόν ἐστιν. ἡ τοῦτο
 μὲν γελοῖον τὸ ἐπιτίμημα· οὐδὲν γὰρ κωλύει τὴν
 μὲν διαφορὰν τῷ γνωριμωτάτῳ ὀνόματι εἰρηῆσθαι,
 τὸ δὲ γένος μὴ· οὕτω δ' ἐχόντων δῆλον ὅτι τοῦ
 γένους καὶ οὐ τῆς διαφορᾶς κατὰ τοῦνομα καὶ τὴν
 μετάληψιν ποιητέον. εἰ δὲ μὴ ὄνομα ἀντ' ὀνό-
 25 ματος ἀλλὰ λόγον ἀντ' ὀνόματος μεταλαμβάνει,
 δῆλον ὅτι τῆς διαφορᾶς μᾶλλον ἢ τοῦ γένους
 ὀρισμὸν ἀποδοτέον, ἐπειδὴ τοῦ γνωρίσαι χάριν
 ὁ ὀρισμὸς ἀποδίδεται· ἦττον γὰρ ἡ διαφορὰ τοῦ
 γένους γνώριμον.

XII. Εἰ δὲ τῆς διαφορᾶς τὸν ὅρον ἀποδέδωκε,
 30 σκοπεῖν εἰ καὶ ἄλλου τινὸς κοινὸς ὁ ἀποδοθεὶς
 ὅρος, οἷον ὅταν περιττὸν ἀριθμὸν ἀριθμὸν μέσον
 ἔχοντα εἴπη, ἐπιδιοριστέον τὸ πῶς μέσον ἔχοντα.
 ὁ μὲν γὰρ ἀριθμὸς κοινὸς ἐν ἀμφοτέροις τοῖς
 λόγοις ὑπάρχει, τοῦ δὲ περιττοῦ μετείληπται ὁ

terms the significance is no longer the same, for example, when 'speculative knowledge' is called 'speculative conception.' For 'conception' is not the same as 'knowledge,' and yet it ought to be the same if the whole phrase too is to be the same ; for, while 'speculative' is common to both phrases, the remainder is different.

new terms employed which have not the same significance ?

Furthermore, you must see whether, in the substitution of one of the terms, the change is made not of the differentia but of the genus, as in the example just given. For 'speculative' is less familiar than 'knowledge' ; for the latter is a genus, the former a differentia, and the genus is always the most intelligible of all terms. The substitution ought, therefore, to have taken place not in the genus but in the differentia, since the latter is less intelligible. Or, possibly, this criticism is ridiculous ; for there is no reason why the differentia rather than the genus should be described by the most familiar term, and, if so, obviously the change ought to be made in the term expressing not the differentia but the genus. But if it is a question of substituting not term for term but phrase for term, obviously a definition should be given of the differentia rather than of the genus, since a definition is given to make something intelligible ; for the differentia is less intelligible than the genus.

(e) Does the change of a term involve a change of genus ?

XII. If the definer has given the definition of the differentia, you must see whether the definition given is common to something else also. For example, when an odd number is described as a 'number which has a middle,' a further definition must be given to show in what sense it has a middle ; for the word 'number' is common to both expressions, but the

Further rules for testing definitions :
(a) When the definition of a differentia is assigned, is it common to some-

149 a

λόγος. ἔχει δὲ καὶ γραμμὴ καὶ σῶμα μέσον, οὐ
 35 περιττὰ ὄντα. ὥστ' οὐκ ἂν εἴη ὁρισμὸς οὗτος
 τοῦ περιττοῦ. εἰ δὲ πολλαχῶς λέγεται τὸ μέσον
 ἔχον, διοριστέον τὸ πῶς μέσον ἔχον. ὥστ' ἢ ἐπι-
 τίμησις ἔσται, ἢ συλλογισμὸς ὅτι οὐχ ὥρισταί.

Πάλιν εἰ οὗ μὲν τὸν λόγον ἀποδίδωσι τῶν ὄντων
 ἐστί, τὸ δ' ὑπὸ τὸν λόγον μὴ τῶν ὄντων, οἷον εἰ
 149 b τὸ λευκὸν ὠρίσατο χρώμα πυρὶ μεμιγμένον· ἀδύ-
 νατον γὰρ τὸ ἀσώματον μεμίχθαι σώματι, ὥστ' οὐκ
 ἂν εἴη χρώμα πυρὶ μεμιγμένον· λευκὸν δ' ἔστιν.

Ἔτι ὅσοι μὴ διαιροῦσιν ἐν τοῖς πρὸς τι πρὸς ὃ
 5 λέγεται, ἀλλ' ἐν πλείοσι περιλαβόντες εἶπαν, ἢ
 ὅλως ἢ ἐπὶ τι ψεύδονται, οἷον εἴ τις τὴν ἱατρικὴν
 ἐπιστήμην ὄντος εἶπεν. εἰ μὲν γὰρ μηδενὸς τῶν
 ὄντων ἢ ἱατρικὴ ἐπιστήμη, δῆλον ὅτι ὅλως ἔψευ-
 σται, εἰ δὲ τινὸς μὲν τινὸς δὲ μή, ἐπὶ τι ἔψευσται·
 δεῖ γὰρ παντός, εἴπερ καθ' αὐτὸ καὶ μὴ κατὰ
 10 συμβεβηκὸς ὄντος εἶναι λέγεται, καθάπερ ἐπὶ
 τῶν ἄλλων ἔχει τῶν πρὸς τι· πᾶν γὰρ ἐπιστητὸν
 πρὸς ἐπιστήμην λέγεται. ὁμοίως δὲ καὶ ἐπὶ τῶν
 ἄλλων, ἐπειδὴ ἀντιστρέφει πάντα τὰ πρὸς τι.
 ἔτι εἴπερ ὃ μὴ καθ' αὐτὸ ἀλλὰ κατὰ συμβεβηκὸς
 τὴν ἀπόδοσιν ποιούμενος ὀρθῶς ἀποδίδωσιν, οὐ
 15 πρὸς ἐν ἀλλὰ πρὸς πλείω ἕκαστον ἂν τῶν πρὸς
 630

new expression has been substituted for 'odd.' Now a line and a body also have a middle, though they are not 'odd,' so that this could not be a definition of 'odd.' But if the expression 'having a middle' is used in several senses, the sense in which 'having a middle' is used must be defined. This will either result in the destructive criticism of the definition or prove that no definition has been given.

Again, you must see whether the term of which he is giving the description has a real existence, whereas what is given in the description has not. An example of this is the definition of 'white' as 'colour mixed with fire'; for it is impossible for that which is without body to be mixed with a body, so that 'colour' 'mixed with fire' could not exist, whereas 'white' does exist.

Furthermore, those who, in dealing with relative terms, fail to distinguish what it is to which the subject is related, but, in describing it, include it amongst a number of things, are either wholly or partly in error; for example, if one described 'medicine' as a 'science of reality.' For, if medicine is not a science of anything real, he is wholly wrong, but, if it is a science of something which is real but not of something else which is real, he is partly wrong; for it ought to be a science of all reality, if it is described as being a science of reality essentially and not accidentally (as is true of all the other relative terms); for every 'object of science' is used in relation to science. So likewise with the other relative terms, since they are all convertible. Furthermore, if he who gives an account of anything not as it really is but as it is accidentally, is giving a correct account, every relative term would be employed in

thing else
also?

(b) Is the
subject to
be defined
existent,
but the
description
non-
existent?

(c) When a
relation is
defined, is
that to
which the
subject is
related too
wide in
extent?

τι λέγοιτο. οὐδὲν γὰρ κωλύει τὸ αὐτὸ καὶ ὄν καὶ
 λευκὸν καὶ ἀγαθὸν εἶναι, ὥστε πρὸς ὁποιοιοῦν
 τούτων ἀποδιδούς ὀρθῶς ἂν εἴη ἀποδιδούς, εἴπερ
 ὁ κατὰ συμβεβηκὸς ἀποδιδούς ὀρθῶς ἀποδίδωσιν.
 ἔτι δ' ἀδύνατον τὸν τοιοῦτον λόγον ἴδιον τοῦ
 20 ἀποδοθέντος εἶναι· οὐ γὰρ μόνον ἡ ἰατρικὴ ἀλλὰ
 καὶ τῶν ἄλλων ἐπιστημῶν αἱ πολλαὶ πρὸς ὃν λέ-
 γονται, ὥσθ' ἐκάστη ὄντος ἐπιστήμη ἔσται. δῆλον
 οὖν ὅτι ὁ τοιοῦτος οὐδεμιᾶς ἐστὶν ἐπιστήμης ὀρι-
 σμός· ἴδιον γὰρ καὶ οὐ κοινὸν δεῖ τὸν ὀρισμὸν
 εἶναι.

Ἐνίστε δ' ὀρίζονται οὐ τὸ πρᾶγμα, ἀλλὰ τὸ
 25 πρᾶγμα εὔ ἔχον ἢ τετελεσμένον. τοιοῦτος δ' ὁ
 τοῦ ῥήτορος καὶ ὁ τοῦ κλέπτου ὅρος, εἴπερ ἐστὶ
 ῥήτωρ μὲν ὁ δυνάμενος τὸ ἐν ἐκάστῳ πιθανὸν
 θεωρεῖν καὶ μηδὲν παραλείπειν, κλέπτῃ δ' ὁ λάθρα
 λαμβάνων· δῆλον γὰρ ὅτι τοιοῦτος ὢν ἐκάτερος
 ὁ μὲν ἀγαθὸς ῥήτωρ ὁ δ' ἀγαθὸς κλέπτῃς ἔσται·
 30 οὐ γὰρ ὁ λάθρα λαμβάνων ἀλλ' ὁ βουλόμενος
 λάθρα λαμβάνειν κλέπτῃς ἐστίν.

Πάλιν εἰ τὸ δι' αὐτὸ αἵρετόν ὥς ποιητικὸν ἢ
 πρακτικὸν ἢ ὅπως οὖν δι' ἄλλο αἵρετόν ἀποδέδωκεν,
 οἷον τὴν δικαιοσύνην νόμων σωστικὴν εἰπὼν ἢ
 τὴν σοφίαν ποιητικὴν εὐδαιμονίας· τὸ γὰρ ποιη-
 35 τικὸν ἢ σωστικὸν τῶν δι' ἄλλο αἵρετῶν. ἢ οὐδὲν
 μὲν κωλύει τὸ δι' αὐτὸ αἵρετόν καὶ δι' ἄλλο εἶναι

relation not to one thing but to many things. For there is nothing to prevent the same thing being both real and white and good ; so that, if to give an account of a thing as it is accidentally is the correct method, one would be giving a correct account if one gave it in relation to any one of these. Furthermore, it is impossible for such a description to be peculiar to that of which the account has been given ; for not only medicine but most of the sciences also are employed in relation to something real, so that each of them will be a science of reality. Obviously, therefore, such a definition is not a definition of any science ; for the definition ought to be peculiar to one thing, not common to many.

Sometimes men define not the thing, but the thing in a good and perfect state. Examples of this are the definitions of an ' orator ' as ' he who can see what is a plausible argument on any occasion and omit nothing,' and of a ' thief ' as ' he who takes something by stealth ' ; for obviously, if they each act thus, the former will be a good orator, the latter a good thief ; for it is not he who actually takes something by stealth, but he who wishes to do so, that is really a thief.

Again, you must see whether the definer has represented what is worthy of choice for its own sake as being so because it produces or effects something or for some other reason, describing, for example, ' justice ' as ' preservative of the laws ' or ' wisdom ' as ' productive of happiness ' ; for what is preservative or productive is among the things which are worthy of choice for the sake of something else. Or, possibly,

(d) Is the definition not that of the subject as it is, but of a perfect form of it ?

(e) Is what is eligible *per se* defined as if it were eligible *propter aliud* ?

149 b

αἰρετόν, οὐ μὴν ἀλλ' οὐδὲν ἦττον ἡμάρτηκεν ὁ οὕτως ὀρισάμενος τὸ δι' αὐτὸ αἰρετόν· ἐκάστου γὰρ τὸ βέλτιστον ἐν τῇ οὐσίᾳ μάλιστα, βέλτιον δὲ τὸ δι' αὐτὸ αἰρετόν εἶναι τοῦ δι' ἕτερον, ὥστε τοῦτο καὶ τὸν ὀρισμὸν ἔδει μᾶλλον σημαίνειν.

150 a

XIII. Σκοπεῖν δὲ καὶ εἴ τινος ὀρισμὸν ἀποδιδούς τάδε ἢ τὸ ἐκ τούτων ἢ τόδε μετὰ τοῦδε ὠρίσατο. εἰ μὲν γὰρ τάδε, συμβήσεται ἀμφοῖν καὶ μηδετέρῳ ὑπάρχειν, οἷον εἰ τὴν δικαιοσύνην σωφροσύνην καὶ ἀνδρίαν ὠρίσατο· δύο γὰρ ὄντων
 5 εἰ ἂν ἐκάτερος θάτερον ἔχῃ, ἀμφοτέρω δίκαιοι ἔσονται καὶ οὐδέτερος, ἐπειδὴ ἀμφοτέρω μὲν ἔχουσι δικαιοσύνην, ἐκάτερος δ' οὐκ ἔχει. εἰ δὲ μήπω τὸ εἰρημένον σφόδρα ἄτοπον διὰ τὸ καὶ ἐπ' ἄλλων συμβαίνειν τὸ τοιοῦτον (οὐδὲν γὰρ κωλύει ἀμφοτέρους ἔχειν μὴν μηδετέρου ἔχοντος), ἀλλ'
 10 οὖν τό γε τάναντία ὑπάρχειν αὐτοῖς παντελῶς ἄτοπον ἂν δόξειεν εἶναι. συμβήσεται δὲ τοῦτο, εἰ ὁ μὲν αὐτῶν σωφροσύνην καὶ δειλίαν ἔχῃ, ὁ δὲ ἀνδρίαν καὶ ἀκολασίαν· ἄμφω γὰρ δικαιοσύνην καὶ ἀδικίαν ἔξουσιν. εἰ γὰρ ἡ δικαιοσύνη σωφροσύνη καὶ ἀνδρία ἐστίν, ἡ ἀδικία δειλία καὶ ἀκο-
 15 λασία ἔσται. ὅλως τε ὅσα ἔστιν ἐπιχειρεῖν ὅτι οὐ ταυτόν ἐστι τὰ μέρη καὶ τὸ ὅλον, πάντα χρήσιμα πρὸς τὸ νῦν εἰρημένον· ἔοικε γὰρ ὁ οὕτως ὀριζόμενος

other reason ; but he who has thus defined what is worthy of choice for its own sake has nevertheless made a mistake ; for what is best in any particular thing is what is most inherent in its essence, and what is worthy of choice for its own sake is better than what is worthy of choice for some other reason, and it is this, therefore, which the definition ought to have signified.

XIII. You must also examine whether the definer in giving a definition of anything has defined it as either (1) 'A and B,' or (2) 'made up of A and B,' or (3) 'A plus B.' (1) If he defines it as 'A and B,' the result will be that it applies to both and neither, for example, if he has defined 'justice' as 'temperance and courage.' For if there are two persons each of whom has one of these qualities, the two together will be 'just,' but neither singly so, since both together they possess justice but each taken singly does not do so. If the above statement is not utterly ridiculous at first sight owing to the fact that this sort of thing occurs in other instances (*e.g.* there is nothing to prevent two persons together possessing a mina, though neither singly possesses it), yet at any rate it would be generally regarded as totally absurd that they should have contrary qualities ; and this will happen if one of them has temperance and cowardice, and the other justice and incontinence, for taken together they will have justice and injustice ; for, if justice is temperance and courage, injustice will be cowardice and incontinence. To speak generally, all the arguments that can be used to prove that the whole and its parts are not the same are useful for countering the statement made just now ; for he who defines in this manner appears to state that the

*How to deal with definitions which take the following forms :
(a) X is 'A and B.'*

τὰ μέρη τῷ ὅλῳ ταῦτὰ φάσκειν εἶναι. μάλιστα
 δ' οἰκεῖοι γίνονται οἱ λόγοι, ἐφ' ὅσων κατάδηλός
 ἐστὶν ἢ τῶν μερῶν σύνθεσις, καθάπερ ἐπ' οἰκίας
 20 καὶ τῶν ἄλλων τῶν τοιούτων· δῆλον γὰρ ὅτι τῶν
 μερῶν ὄντων οὐδὲν κωλύει τὸ ὅλον μὴ εἶναι, ὥστ'
 οὐ ταῦτόν τὰ μέρη τῷ ὅλῳ.

Εἰ δὲ μὴ ταῦτα ἀλλὰ τὸ ἐκ τούτων ἔφησεν εἶναι
 τὸ ὀριζόμενον, πρῶτον μὲν ἐπισκοπεῖν εἰ μὴ
 πέφυκεν ἐν γίνεσθαι ἐκ τῶν εἰρημένων· ἔνια γὰρ
 25 οὕτως ἔχει πρὸς ἀλλήλα ὥστε μηδὲν ἐξ αὐτῶν
 γίνεσθαι, οἷον γραμμὴ καὶ ἀριθμός. ἔτι εἰ τὸ μὲν
 ὠρισμένον ἐν ἐνί τινι πέφυκε τῷ πρώτῳ γίνεσθαι,
 ἐξ ὧν δ' ἔφησεν αὐτὸ εἶναι, μὴ ἐν ἐνὶ τῷ πρώτῳ,
 ἀλλ' ἐκάτερον ἐν ἐκατέρῳ· δῆλον γὰρ ὅτι οὐκ ἂν
 εἶη ἐκ τούτων ἐκεῖνο· ἐν οἷς γὰρ τὰ μέρη, καὶ τὸ
 30 ὅλον ἀνάγκη ὑπάρχειν, ὥστ' οὐκ ἐν ἐνὶ τὸ ὅλον
 πρώτῳ, ἀλλ' ἐν πλείοσιν. εἰ δὲ καὶ τὰ μέρη καὶ
 τὸ ὅλον ἐν ἐνί τινι πρώτῳ, σκοπεῖν εἰ μὴ ἐν τῷ
 αὐτῷ ἀλλ' ἐν ἐτέρῳ τὸ ὅλον καὶ ἐν ἐτέρῳ τὰ μέρη.
 πάλιν εἰ τῷ ὅλῳ συμφθεύρεται τὰ μέρη· ἀνάπαλιν
 γὰρ δεῖ συμβαίνειν, τῶν μερῶν φθαρέντων φθει-
 35 ρεσθαι τὸ ὅλον· τοῦ δ' ὅλου φθαρέντος οὐκ ἀνα-
 γκαῖον καὶ τὰ μέρη ἐφθάρθαι. ἢ εἰ τὸ μὲν ὅλον
 ἀγαθὸν ἢ κακόν, τὰ δὲ μηδέτερα, ἢ ἀνάπαλιν τὰ

parts are the same as the whole. But these arguments are specially appropriate when the process of compounding the parts is obvious, as in a house and all other such things ; for here it is obvious that, though the parts exist, there is no reason why the whole should not be non-existent, and so the parts are not the same as the whole.

(2) If, however, he has asserted that that which is being defined is not ' A and B ' but ' made up of A and B,' you must first of all consider whether it is unnatural for a single product to come into being from the said component parts ; for some things are so constituted in relation to one another that nothing can come into being from them, for example, a line and a number. Moreover, you must see whether what has been defined naturally comes into being primarily in some single thing, whereas those things which, according to his account, produce it, do not come into being primarily in any single thing but each in a different thing. For then obviously it could not come into being from these things ; for the whole must necessarily exist in those things in which the parts exist, so that the whole does not exist primarily in one thing only but in many. If, however, both the parts and the whole exist primarily in some single thing, you must see whether they exist in the same thing and not the whole in one thing and the parts in another. Again, you must see whether the parts perish when the whole perishes ; for the converse ought to happen, namely, that the whole perishes when the parts do so, and it does not necessarily follow that the parts also have perished when the whole has perished. Or, again, you must see whether the whole is good or bad, and the parts neither, or,

(b) *X is
'made up
of A and B.'*

150 a

μὲν ἀγαθὰ ἢ κακά, τὸ δ' ὅλον μηδέτερον· οὔτε γὰρ

150 b ἐκ μηδετέρου δυνατὸν ἢ ἀγαθὸν τι ἢ κακὸν γενέσθαι,

οὔτ' ἐκ κακῶν ἢ ἀγαθῶν μηδέτερον. ἢ εἰ μᾶλλον
μὲν θάτερον ἀγαθὸν ἢ θάτερον κακόν, τὸ δ' ἐκ
τούτων μὴ μᾶλλον ἀγαθὸν ἢ κακόν, οἷον εἰ ἡ
ἀναίδεια ἐξ ἀνδρίας καὶ ψευδοῦς δόξης. μᾶλλον

5 γὰρ ἀγαθὸν ἢ ἀνδρία ἢ κακὸν ἢ ψευδῆς δόξα· ἔδει
οὖν καὶ τὸ ἐκ τούτων ἀκολουθεῖν τῷ μᾶλλον,
καὶ εἶναι ἢ ἀπλῶς ἀγαθὸν ἢ μᾶλλον ἀγαθὸν ἢ
κακόν. ἢ τοῦτο μὲν οὐκ ἀναγκαῖον, ἐὰν μὴ ἐκά-
τερον ἢ καθ' αὐτὸ ἀγαθὸν ἢ κακόν· πολλὰ γὰρ
τῶν ποιητικῶν καθ' αὐτὰ μὲν οὐκ ἔστιν ἀγαθὰ,

10 μιχθέντα δέ, ἢ ἀνάπαλιν, ἐκάτερον μὲν ἀγαθόν, μι-
χθέντα δὲ κακὸν ἢ οὐδέτερον. μάλιστα δὲ κατα-
φανές τὸ νῦν ῥηθὲν ἐπὶ τῶν ὑγιεινῶν καὶ νοσωδῶν·
ἔνια γὰρ τῶν φαρμάκων οὕτως ἔχει ὥσθ' ἐκάτε-
ρον μὲν εἶναι ἀγαθόν, ἐὰν δ' ἄμφω δοθῇ μιχθέντα,
κακόν.

Πάλιν εἰ ἐκ βελτίονος καὶ χείρονος ὃν μὴ ἔστι
15 τὸ ὅλον τοῦ μὲν βελτίονος χείρον, τοῦ δὲ χείρονος
βέλτιον. ἢ οὐδὲ τοῦτ' ἀναγκαῖον, ἐὰν μὴ καθ'
αὐτὰ ἢ τὰ ἐξ ὧν σύγκειται ἀγαθὰ, ἀλλ' οὐδὲν
κωλύει τὸ ὅλον μὴ γίνεσθαι ἀγαθόν, καθάπερ ἐπὶ
τῶν ἀρτίως ῥηθέντων.

"Ἐτι εἰ συνώνυμον τὸ ὅλον θατέρῳ· οὐ δεῖ γάρ,
20 καθάπερ οὐδ' ἐπὶ τῶν συλλαβῶν· οὐδενὶ γὰρ τῶν
στοιχείων ἐξ ὧν σύγκειται ἡ συλλαβὴ συνώνυμός
ἔστιν.

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conversely, whether the parts are good or bad and the whole neither ; for it is impossible that anything either good or bad should come into being from something which is neither, or anything which is neither from things which are good or bad. Or, again, you must see whether the one thing has more good in it than the other has evil, and yet the product of the two has not more good in it than evil, as, for example, in the definition of ' shamelessness ' as ' made up of courage and false opinion.' For courage has more good in it than false opinion has evil, and so their product ought to maintain this excess and be either good absolutely or good rather than bad. Or, perhaps this does not necessarily follow, unless each is in itself good or bad ; for many of the things which produce effects are not good in themselves but only when mingled together, or, conversely, are good separately but either good or neither good nor bad when mingled together. The state of affairs just described is best seen in things which produce health and disease ; for some drugs are so constituted as each separately to be good whereas they are bad if given in a mixture.

Again, you must see whether the whole, when it is made up of a better and a worse, fails to be worse than the better and better than the worse. Perhaps this too does not necessarily follow, unless the component parts are themselves good ; but there is nothing to prevent the whole being good, as in the cases just mentioned.

Furthermore, you must see whether the whole is synonymous with one of the parts ; for it ought not to be so, any more than occurs in the case of syllables, for the syllable is not synonymous with any of the letters of which it is composed.

Ἔτι εἰ μὴ εἴρηκε τὸν τρόπον τῆς συνθέσεως.
οὐ γὰρ αὐταρκες πρὸς τὸ γνωρίσαι τὸ εἰπεῖν ἐκ
τούτων· οὐ γὰρ τὸ ἐκ τούτων, ἀλλὰ τὸ οὕτως ἐκ
25 τούτων ἐκάστου τῶν συνθέτων ἢ οὐσία, καθάπερ
ἐπ' οἰκίας· οὐ γὰρ ἂν ὁπωσοῦν συντεθῇ ταῦτα,
οἰκία ἐστίν.

Εἰ δὲ τόδε μετὰ τοῦδε ἀποδέδωκε, πρῶτον μὲν
ῥητέον ὅτι τόδε μετὰ τοῦδε ἢ τοῖσδε ταῦτὸν ἢ
τῷ ἐκ τῶνδε· ὁ γὰρ λέγων μέλι μεθ' ὕδατος ἦτοι
30 μέλι καὶ ὕδωρ λέγει ἢ τὸ ἐκ μέλιτος καὶ ὕδατος,
ὥστ' εἶναι ὁποτέρω τῶν εἰρημένων ταῦτὸν ὁμο-
λογήσῃ εἶναι τὸ τόδε μετὰ τοῦδε, ταῦτὰ ἀρμόσει
λέγειν ἅπερ πρὸς ἐκάτερον τούτων ἔμπροσθεν
εἴρηται. ἔτι διελόμενον ὁσαχῶς λέγεται ἕτερον
μεθ' ἐτέρου, σκοπεῖν εἰ μηδαμῶς τόδε μετὰ τοῦδε.
35 οἶον εἰ λέγεται ἕτερον μεθ' ἐτέρου ἢ ὥς ἔν τινι
ταύτῳ δεκτικῷ, καθάπερ ἢ δικαιοσύνη καὶ ἢ
ἀνδρία ἐν ψυχῇ, ἢ ἐν τόπῳ τῷ αὐτῷ ἢ ἐν χρόνῳ
τῷ αὐτῷ, μηδαμῶς δ' ἀληθὲς τὸ εἰρημένον ἐπὶ
τούτων, δῆλον ὅτι οὐδενὸς ἂν εἴη ὁ ἀποδοθεὶς
151 a ὁρισμός, ἐπειδὴ οὐδαμῶς τόδε μετὰ τοῦδέ ἐστιν.
εἰ δὲ τῶν διαιρεθέντων ἀληθὲς τὸ ἐν ταύτῳ χρόνῳ
ἐκάτερον ὑπάρχειν, σκοπεῖν εἰ ἐνδέχεται μὴ πρὸς
ταῦτὸν λέγεσθαι ἐκάτερον. οἶον εἰ τὴν ἀνδρίαν
ὠρίσατο τόλμαν μετὰ διανοίας ὀρθῆς· ἐνδέχεται
640

Furthermore, you must see whether he has omitted to state the method of their composition ; for merely to say that something is made up of this and that is not enough to make the matter clear. For the essence of each compound is not merely that it is made up of this and that, but that it is made up of this and that compounded in a particular way, as in the case of a house ; for this and that material put together anyhow does not constitute a house.

(3) If he has given a definition of something in the form of ' A plus B,' the first thing that must be stated is that ' A plus B ' is equivalent to either ' A and B ' or ' made up of A and B.' For he who speaks of ' honey plus water ' means either ' honey and water ' or else something ' made up of honey and water.' If, therefore, he admits that ' A plus B ' is the same as either of the above, it will be relevant to use the same arguments as have been employed before against each of them. Furthermore, you must distinguish the various senses in which something is said to be ' plus ' something else, and see whether it is impossible for A to be in any sense ' plus B.' For example, if it means that A is plus B in the sense either that they are contained in an identical receptacle (like justice and courage in the soul), or in the same place or time, whereas the sense assigned is in no way true of A and B, it is obvious that the definition given could not apply to anything, since in no possible way can A be ' plus B.' If, however, among the various senses which we have distinguished, it is true that A and B each exist at the same time, you must look whether it is possible that each is used in a different relation. Suppose, for example, that ' daring plus right opinion ' has been given as the definition of ' courage ';

(c) X is ' A
plus B.'

151 a

- 5 γὰρ τόλμαν μὲν ἔχειν τοῦ ἀποστερεῖν, ὀρθὴν δὲ
 διάνοιαν περὶ τὰ ὑγιεινά· ἀλλ' οὐδέπω ἀνδρεῖος
 ὁ ἐν τῷ αὐτῷ χρόνῳ τόδε μετὰ τοῦδε ἔχων. ἔτι
 εἰ καὶ πρὸς ταῦτόν ἄμφω λέγεται, οἷον πρὸς τὰ
 ἱατρικά· οὐδὲν γὰρ κωλύει καὶ τόλμαν καὶ ὀρθὴν
 διάνοιαν ἔχειν πρὸς τὰ ἱατρικά· ἀλλ' ὅμως οὐδ'
 10 οὗτος ἀνδρεῖος ὁ τόδε μετὰ τοῦδε ἔχων. οὔτε
 γὰρ πρὸς ἕτερον αὐτῶν ἐκάτερον δεῖ λέγεσθαι οὔτε
 πρὸς ταῦτόν τὸ τυχόν, ἀλλὰ πρὸς τὸ τῆς ἀνδρίας
 τέλος, οἷον πρὸς τοὺς πολεμικοὺς κινδύνους ἢ εἴ
 τι μᾶλλον τούτου τέλος.

Ἔνια δὲ τῶν οὕτως ἀποδιδομένων οὐδαμῶς
 15 ὑπὸ τὴν εἰρημένην πίπτει διαίρεσιν, οἷον εἰ ἡ
 ὀργὴ λύπη μεθ' ὑπολήψεως τοῦ ὀλιγωρεῖσθαι.
 ὅτι γὰρ διὰ τὴν ὑπόληψιν τὴν τοιαύτην ἡ λύπη
 γίνεται, τοῦτο βούλεται δηλοῦν· τὸ δὲ διὰ τόδε
 γίνεσθαι τι οὐκ ἔστι ταῦτόν τῳ μετὰ τούτου τόδ'
 εἶναι κατ' οὐδένα τῶν εἰρημένων τρόπων.

- 20 XIV. Πάλιν εἰ τὴν τούτων σύνθεσιν εἴρηκε τὸ
 ὅλον, οἷον τῆς ψυχῆς καὶ τοῦ σώματος σύνθεσιν
 ζῶον, πρῶτον μὲν σκοπεῖν εἰ μὴ εἴρηκε ποία
 σύνθεσις, καθάπερ εἰ σάρκα ὀριζόμενος ἢ ὀστοῦν
 τὴν πυρὸς καὶ γῆς καὶ ἀέρος εἶπε σύνθεσιν. οὐ
 γὰρ ἀπόχρη τὸ σύνθεσιν εἰπεῖν, ἀλλὰ καὶ ποία
 25 τις προσδιοριστέον· οὐ γὰρ ὅπως οὖν συντεθέντων
 τούτων σὰρξ γίνεται, ἀλλ' οὕτωςι μὲν συντεθέντων
 σὰρξ, οὕτωςι δ' ὀστοῦν. ἔοικε δ' οὐδ' εἶναι τὸ

it is possible for a man to show daring in committing robbery, and right opinion about matters of health, but he who possesses the former plus the latter at the same time is far from being courageous. Moreover, even if both are used in the same relation, for example, in matters of health (for there is no reason why a man should not show both daring and right opinion in matters of health), yet, for all that, the man who possesses the one plus the other is not 'brave.' For each must be related neither to some different object nor to some chance object which is identical, but to the true function of courage, for example, facing the dangers of war or anything which is a still more characteristic function of courage.

Some of the definitions given in this manner do not fall under the above division at all, for example, that of 'anger' as 'pain plus an idea that one is slighted.' For the purpose of the definition is to show that the pain is caused by an idea of this kind; but to say that it is 'caused by' a thing is not the same as saying that it is 'plus' that thing in any of the senses mentioned.

XIV. Again, if he has described the whole as a composition of such and such things, for example, a 'living creature' as a 'composition of soul and body,' you must, first of all, see whether he has failed to state the kind of composition, as, for example, in the definition of 'flesh' or 'bone' as a 'composition of fire, earth and air.' For it is not enough to speak of composition, but the kind of composition must be further defined; for flesh is not formed of these components put together anyhow, but there is one form of composition for flesh and another for bone. Now it seems likely that neither of the said substances

Various rules:
(a) When something has been defined as a compound whole, insist on a statement of the nature of the composition.

151 a

παράπαν συνθέσει ταὐτὸν οὐδέτερον τῶν εἰρη-
 μένων· συνθέσει μὲν γὰρ πάσῃ διάλυσιν ἐναντίον,
 τῶν δ' εἰρημένων οὐδετέρῳ οὐδέν. ἔτι εἰ ὁμοίως
 30 πιθανὸν πᾶν τὸ σύνθετον σύνθεσιν εἶναι ἢ μηδέν,
 τῶν δὲ ζώων ἕκαστον σύνθετον ὃν μὴ ἔστι σύν-
 θεσις, οὐδὲ τῶν ἄλλων οὐδὲν τῶν συνθέτων
 σύνθεσις ἂν εἴη.

Πάλιν εἰ ὁμοίως ἔν τινι πέφυκεν ὑπάρχειν
 τᾶναντία, ὥρισται δὲ διὰ θατέρου, δηλὸν ὅτι οὐχ
 ὥρισται. εἰ δὲ μὴ, πλείους τοῦ αὐτοῦ συμβήσεται
 35 ὀρισμοὺς εἶναι· τί γὰρ μᾶλλον ὁ διὰ τούτου ἢ ὁ
 διὰ τοῦ ἑτέρου ὀρισάμενος εἴρηκεν, ἐπειδὴ ὁμοίως
 ἀμφοτέρα πέφυκε γίνεσθαι ἐν αὐτῷ; τοιοῦτος δ'
 151 b ὁ τῆς ψυχῆς ὅρος, εἰ ἔστιν οὐσία ἐπιστήμης
 δεκτική· ὁμοίως γὰρ καὶ ἀγνοίας ἐστὶ δεκτική.

Δεῖ δὲ καὶ εἰ μὴ πρὸς ὅλον ἔχη τις ἐπιχειρεῖν
 τὸν ὀρισμὸν διὰ τὸ μὴ γνώριμον εἶναι τὸ ὅλον,
 5 πρὸς τῶν μερῶν τι ἐπιχειρεῖν, εἰ μὴ ἢ γνώριμον
 καὶ μὴ καλῶς ἀποδοδομένον φαίνεται· τοῦ γὰρ
 μέρους ἀναιρεθέντος καὶ ὁ πᾶς ὀρισμὸς ἀναιρεῖται.
 ὅσοι τ' ἀσαφεῖς τῶν ὀρισμῶν, συνδιорθώσαντα
 καὶ συσχηματίσαντα πρὸς τὸ δηλοῦν τι καὶ ἔχειν
 ἐπιχείρημα, οὕτως ἐπισκοπεῖν· ἀναγκαῖον γὰρ τῷ
 10 ἀποκρινομένῳ ἢ δέχεσθαι τὸ ἐκλαμβανόμενον ὑπὸ
 τοῦ ἐρωτῶντος, ἢ αὐτὸν διασαφῆσαι τί ποτε
 τυγχάνει τὸ δηλούμενον ὑπὸ τοῦ λόγου. ἔτι καθ-
 ἄπερ ἐν ταῖς ἐκκλησίαις νόμον εἰώθασιν ἐπισφέ-
 ρειν, καὶ ἢ βελτίων ὁ ἐπεισφερόμενος, ἀναιροῦσι
 τὸν ἔμπροσθεν, οὕτω καὶ ἐπὶ τῶν ὀρισμῶν ποιητέον

is at all the same as a 'composition'; for every 'composition' has as its contrary a 'decomposition,' and neither flesh nor bone has a contrary. Further, if it is probable that every compound alike is a composition or else that none is so, and every living creature, though it is a compound, is not a composition, then neither could any other compound be a composition.

Again, if it is natural for contraries to have an equal existence in a thing, and it has been defined by means of one of them, clearly it has not really been defined; for else the result will be that there is more than one definition of the same thing. For in what respect has he who has given a definition by means of one contrary described it better than he who has defined by means of the other, since both are equally likely to occur in it? The definition of 'soul' as 'substance receptive of knowledge' is a case in point; for it is equally also receptive of ignorance.

Also, even though one cannot attack the definition as a whole, because one is not familiar with it as a whole, yet one ought to attack a part of it, if one is familiar with that part and it has obviously been incorrectly assigned; for if part is subverted, the whole definition is subverted also. When definitions are obscure, you should correct and remodel them so as to make some part clear and have something to attack, and then make your examination; for the answerer must either accept the interpretation suggested by the questioner or himself make clear what is indicated by the description. Furthermore, just as in public assemblies it is customary to introduce a new law and, if the newly introduced law is better, to abrogate the old one, so one ought to deal with

(b) Observe whether that which has been defined by one contrary is capable of both.

(c) If you cannot attack the definition as whole, attack part of it, or emend it.

151 b

15 καὶ αὐτὸν ὁρισμὸν ἕτερον οἰστέον· ἐὰν γὰρ φαίνεται
 βελτίων καὶ μᾶλλον δηλῶν τὸ ὀριζόμενον, δηλὸν
 ὅτι ἀνηρημένος ἔσται ὁ κείμενος, ἐπειδὴ οὐκ εἰσὶ
 πλείους τοῦ αὐτοῦ ὁρισμοί.

Πρὸς ἅπαντας δὲ τοὺς ὁρισμοὺς οὐκ ἐλάχιστον
 στοιχεῖον τὸ πρὸς ἑαυτὸν εὐστόχως ὀρίσασθαι τὸ
 20 προκείμενον ἢ καλῶς εἰρημένον ὅρον ἀναλαβεῖν·
 ἀνάγκη γάρ, ὥσπερ πρὸς παράδειγμα θεώμενον,
 τό τ' ἐλλείπον ὧν προσῆκεν ἔχειν τὸν ὁρισμὸν
 καὶ τὸ προσκείμενον περιέργως καθορᾶν, ὥστε
 μᾶλλον ἐπιχειρημάτων εὐπορεῖν.

Τὰ μὲν οὖν περὶ τοὺς ὁρισμοὺς ἐπὶ τοσοῦτον
 εἰρήσθω.

definitions, too, and oneself bring forward another one ; for, if it is obviously a better definition and gives a better indication of the object defined, clearly the definition already laid down will have been subverted, since there is never more than one definition of the same thing.

In dealing with any definition, it is a most important elementary principle to make a shrewd guess in one's own mind at the definition of the object before one or else to take over some happily expressed definition. For it necessarily follows that, with a model, as it were, before one, one can see anything that is lacking which the definition ought to contain and any needless addition, and thus be better provided in the points for attack.

(d) It is advantageous to make a definition of one's own.

Let so much, therefore, suffice for our treatment of definitions.

Η

- 151 b 28 I. Πότερον δὲ ταῦτόν ἢ ἕτερον κατὰ τὸν κυριώ-
 τατον τῶν ῥηθέντων περὶ ταύτου τρόπων (ἐλέγετο
 30 δὲ κυριώτατα ταῦτόν τὸ τῷ ἀριθμῷ ἔν) σκοπεῖν
 ἔκ τε τῶν πτώσεων καὶ τῶν συστοίχων καὶ τῶν
 ἀντικειμένων. εἰ γὰρ ἡ δικαιοσύνη ταῦτόν τῇ
 ἀνδρίᾳ, καὶ ὁ δίκαιος τῷ ἀνδρείῳ καὶ τὸ δικαίως
 τῷ ἀνδρείως. ὁμοίως δὲ καὶ ἐπὶ τῶν ἀντικειμένων.
 εἰ γὰρ τάδε ταῦτά, καὶ τὰ ἀντικείμενα τούτοις
 35 ταῦτά καθ' ὅποιαν οὖν τῶν λεγομένων ἀντιθέσεων.
 οὐδὲν γὰρ διαφέρει τὸ τούτῳ ἢ τούτῳ ἀντικείμενον
 λαβεῖν, ἐπειδὴ ταῦτόν ἐστιν. πάλιν ἐκ τῶν ποιη-
 152 a τικῶν καὶ φθαρτικῶν καὶ γενέσεως καὶ φθορῶν
 καὶ ὅλως τῶν ὁμοίως ἐχόντων πρὸς ἑκάτερον.
 ὅσα γὰρ ἀπλῶς ταῦτά, καὶ αἱ γενέσεις αὐτῶν
 καὶ αἱ φθοραὶ αἱ αὐταί, καὶ τὰ ποιητικὰ καὶ
 φθαρτικά.
- 5 Σκοπεῖν δὲ καὶ ὧν θάτερον μάλιστα λέγεται
 ὁτιοῦν, εἰ καὶ θάτερον τῶν αὐτῶν τούτων κατὰ
 τὸ αὐτὸ μάλιστα λέγεται, καθάπερ Ξενοκράτης
 648

BOOK VII

I. WHETHER things are 'the same' or 'different' in the strictest verbal sense of the term 'same'—and we said ^a that sameness in its strictest sense is numerical oneness—should be examined from the point of view of their inflexions and co-ordinates and opposites. For if justice is the same as courage, then also the just man is the same as the courageous, and 'justly' the same as 'courageously.' So likewise with opposites also; for, if two things are the same, their opposites, in accordance with any of the so-called oppositions, are also the same. For it makes no difference whether one takes the opposite of the one or of the other, since they are the same. Again, an examination should be made from the point of view of the agents of their production or destruction and their coming-into-being and destruction, and generally, of anything which stands in a similar relation to each of them; for, when things are absolutely the same, their coming-into-being and destruction are also the same and so are the agents of their production and destruction.

Rules for dealing with things which are said to be 'the same':
(a) Identity can be proved by looking at their inflexions, co-ordinates and opposites; also at the agents of their production and destruction.

You must also examine, when one of two things is said to be something in a superlative degree, whether the other of these same things also attains a superlative degree in the same respect. For

(b) When one of two same things is said to have some quality in a superlative

^a 103 a 23.

τὸν εὐδαίμονα βίον καὶ τὸν σπουδαῖον ἀποδείκνυσι
 τὸν αὐτόν, ἐπειδὴ πάντων τῶν βίων αἰρετώτατος
 ὁ σπουδαῖος καὶ ὁ εὐδαίμων· ἐν γὰρ τὸ αἰρετώτα-
 10 τον καὶ μέγιστον. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων
 τῶν τοιούτων. δεῖ δ' ἐκάτερον ἐν ἀριθμῷ εἶναι
 τὸ λεγόμενον μέγιστον ἢ αἰρετώτατον. εἰ δὲ μή,
 οὐκ ἔσται δεδειγμένον ὅτι ταῦτόν· οὐ γὰρ ἀναγ-
 καῖον, εἰ ἀνδρειότατοι τῶν Ἑλλήνων Πελοποννήσιοι
 καὶ Λακεδαιμόνιοι, τοὺς αὐτοὺς εἶναι Πελο-
 15 ποννησίους Λακεδαιμονίους, ἐπειδὴ οὐχ εἰς ἀριθμῷ
 Πελοποννήσιος οὐδὲ Λακεδαιμόνιος. ἀλλὰ περι-
 ἔχεσθαι μὲν τὸν ἕτερον ὑπὸ τοῦ ἑτέρου ἀναγκαῖον,
 καθάπερ οἱ Λακεδαιμόνιοι ὑπὸ τῶν Πελοποννη-
 σίων. εἰ δὲ μή, συμβήσεται ἀλλήλων εἶναι
 βελτίους, ἂν μὴ περιέχωνται οἱ ἕτεροι ὑπὸ τῶν
 20 ἑτέρων. ἀναγκαῖον γὰρ τοὺς Πελοποννησίους βελ-
 τίους εἶναι τῶν Λακεδαιμονίων, εἴπερ μὴ περι-
 ἔχονται οἱ ἕτεροι ὑπὸ τῶν ἑτέρων· πάντων γὰρ
 τῶν λοιπῶν εἰσὶ βελτίους. ὁμοίως δὲ καὶ τοὺς Λα-
 κεδαιμονίους ἀνάγκη βελτίους εἶναι τῶν Πελο-
 ποννησίων· καὶ γὰρ καὶ οὗτοι πάντων τῶν λοιπῶν
 25 εἰσὶ βελτίους. ὥστε ἀλλήλων βελτίους γίνονται.
 δηλὸν οὖν ὅτι ἐν ἀριθμῷ δεῖ εἶναι τὸ βέλτιστον
 καὶ μέγιστον λεγόμενον, εἰ μέλλει ὅτι ταῦτόν
 ἀποδείκνυσθαι. διὸ καὶ Ξενοκράτης οὐκ ἀπο-
 δείκνυσιν· οὐ γὰρ εἰς ἀριθμῷ ὁ εὐδαίμων οὐδ' ὁ
 σπουδαῖος βίος, ὥστ' οὐκ ἀναγκαῖον τὸν αὐτόν
 εἶναι, διότι ἄμφω αἰρετώτατοι, ἀλλὰ τὸν ἕτερον
 30 ὑπὸ τὸν ἕτερον.

^a Fr. 82 (Heinze).

instance, Xenocrates ^a tries to show that the happy life and the good life are the same, since of all lives the good life and the happy life are most worthy of choice ; for only one thing can be characterized as ' the most worthy of choice ' and ' the greatest.' So likewise with all other such things also. But each of two things which is described as ' greatest ' or ' most worthy of choice ' must be numerically one, otherwise it will not have been shown that they are the same ; for it does not necessarily follow that, if the Peloponnesians and the Lacedaemonians are the bravest of the Greeks, the Peloponnesians are the same as the Lacedaemonians, since neither ' Peloponnesian ' nor ' Lacedaemonian ' is a numerically single thing ; but it merely follows that the one group must be included in the other, just as the Lacedaemonians are included in the Peloponnesians. Otherwise, if one group is not included in the other, the result will be that each is better than the other. For it necessarily follows that the Peloponnesians are better than the Lacedaemonians, if the one group is not included in the other ; for they are both better than any-one else. Similarly, too, the Lacedaemonians must be better than the Peloponnesians ; for they also are better than anyone else. Thus they are each better than the other. It is obvious, therefore, that what is described as ' best ' and ' greatest ' must be numerically one if it is going to be shown to be ' the same ' as something else. For this reason, too, Xenocrates does not prove his contention ; for neither the happy life nor the good life is numerically one, so that they are not necessarily the same because they are both most worthy of choice, but only that one must fall under the other.

degree, or
whether
this is true
of the other.

Πάλιν σκοπεῖν εἰ ᾧ θάτερον ταυτόν, καὶ θάτερον·
εἰ γὰρ μὴ ἀμφότερα τῷ αὐτῷ ταυτά, δηλὸν ὅτι
οὐδ' ἀλλήλοις.

"Ετι ἐκ τῶν τούτοις συμβεβηκότων, καὶ οἷς
ταῦτα συμβέβηκεν, ἐπισκοπεῖν· ὅσα γὰρ θατέρω
35 συμβέβηκε, καὶ θατέρω δεῖ συμβεβηκέναι, καὶ
οἷς θάτερον αὐτῶν συμβέβηκε, καὶ θάτερον δεῖ
συμβεβηκέναι. εἰ δέ τι τούτων διαφωνεῖ, δηλὸν
ὅτι οὐ ταυτά.

Ὅρᾶν δὲ καὶ εἰ μὴ ἐν ἐνὶ γένει κατηγορίας
ἀμφότερα, ἀλλὰ τὸ μὲν ποιὸν τὸ δὲ ποσὸν ἢ πρὸς
152 b τι δηλοῖ. πάλιν εἰ τὸ γένος ἐκατέρου μὴ ταυτόν,
ἀλλὰ τὸ μὲν ἀγαθὸν τὸ δὲ κακόν, ἢ τὸ μὲν ἀρετὴ
τὸ δ' ἐπιστήμη. ἢ εἰ τὸ μὲν γένος ταυτόν, αἱ
διαφοραὶ δὲ μὴ αἱ αὐταὶ ἐκατέρου κατηγοροῦνται,
ἀλλὰ τοῦ μὲν ὅτι θεωρητικὴ ἐπιστήμη, τοῦ δ'
5 ὅτι πρακτικὴ. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

"Ετι ἐκ τοῦ μᾶλλον, εἰ τὸ μὲν δέχεται τὸ μᾶλλον
τὸ δὲ μή, ἢ εἰ ἄμφω μὲν δέχεται, μὴ ἅμα δέ,
καθάπερ ὁ μᾶλλον ἐρῶν οὐ μᾶλλον ἐπιθυμεῖ τῆς
συνουσίας, ὥστ' οὐ ταυτόν ἔρως καὶ ἐπιθυμία
συνουσίας.

10 "Ετι ἐκ τῆς προσθέσεως, εἰ τῷ αὐτῷ ἐκάτερον
προστιθέμενον μὴ ποιεῖ τὸ ὅλον ταυτόν. ἢ εἰ τοῦ
αὐτοῦ ἀφ' ἐκατέρου ἀφαιρεθέντος τὸ λοιπὸν ἔτε-
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Again, you must see whether, when the one of two things is the same as a third thing, the other is also the same as it ; for, if they are not the same as the same thing, obviously they are not the same as one another either.

(c) See whether each of two same things is the same as a third thing.

Furthermore, you must examine them from the point of view of their accidents or of the things of which they are accidents ; for any accident of the one must also be an accident of the other, and, if the one of them is an accident of something else, so must the other be also. For, if there is any discrepancy on these points, obviously they are not the same.

(d) Observe whether their accidents are the same.

You must also see whether they fail both to fall in the same class of predicates, but one signifies a quality, the other a quantity or a relation ; again, whether the genus of each fails to be the same, the one being ' good ' and the other ' evil,' or the one ' virtue ' and the other ' knowledge ' ; or whether, though the genus is the same, the differentiae predicated of either of them are not the same, that of one being ' speculative ' and that of the other ' practical ' knowledge. And so likewise with the other instances.

(e) See whether both are in the same category and genus, and have the same differentiae.

Furthermore, from the point of view of the greater degree, you must see whether the one admits of the greater degree while the other does not, or whether both admit of it but not at the same time ; for example, he who is more in love has not a greater desire for intercourse, and so love and the desire for intercourse are not the same thing.

(f) See whether both simultaneously increase and diminish.

Furthermore, you must note the result of an addition and see whether each added to the same thing fails to produce the same whole ; or whether the subtraction of the same thing from each leaves the remainder different. Suppose, for example, someone

(g) Observe the effect of an addition on each of them.

ρον, οἷον εἰ διπλάσιον ἡμίσεος καὶ πολλαπλάσιον ἡμίσεος ταῦτόν ἔφησεν εἶναι. ἀφαιρεθέντος γὰρ ἀφ' ἑκατέρου τοῦ ἡμίσεος τὰ λοιπὰ ταῦτόν ἔδει
 15 δηλοῦν, οὐ δηλοῖ δέ· τὸ γὰρ διπλάσιον καὶ πολλαπλάσιον οὐ ταῦτόν δηλοῖ.

Σκοπεῖν δὲ μὴ μόνον εἰ ἤδη τι συμβαίνει ἀδύνατον διὰ τῆς θέσεως, ἀλλὰ καὶ εἰ δυνατόν ἐξ ὑποθέσεως ὑπάρξει, καθάπερ τοῖς τὸ κενὸν καὶ
 20 τὸ πλήρες ἀέρος ταῦτόν φάσκουσιν. δηλὸν γὰρ ὅτι ἐὰν ἐξέλθῃ ὁ ἀήρ, κενὸν μὲν οὐχ ᾔσسون ἀλλὰ μᾶλλον ἔσται, πλήρες δ' ἀέρος οὐκέτι ἔσται. ὥστε ὑποτεθέντος τινὸς εἴτε ψευδοῦς εἴτ' ἀληθοῦς (οὐδὲν γὰρ διαφέρει) τὸ μὲν ἕτερον ἀναιρεῖται αὐτῶν, τὸ δ' ἕτερον οὔ. ὥστ' οὐ ταῦτόν.

25 Καθόλου δ' εἰπεῖν, ἐκ τῶν ὅπως οὖν ἑκατέρου κατηγορουμένων, καὶ ὧν ταῦτα κατηγορεῖται, σκοπεῖν εἴ που διαφωνεῖ· ὅσα γὰρ θατέρου κατηγορεῖται, καὶ θατέρου κατηγορεῖσθαι δεῖ, καὶ ὧν θάτερον κατηγορεῖται, καὶ θάτερον κατηγορεῖσθαι δεῖ.

30 "Ετι ἐπεὶ πολλαχῶς ταῦτόν λέγεται, σκοπεῖν εἰ καὶ καθ' ἕτερόν τινα τρόπον ταῦτά ἐστιν· τὰ γὰρ εἶδει ἢ γένει ταῦτὰ ἢ οὐκ ἀνάγκῃ ἢ οὐκ ἐνδέχεται ἀριθμῶ ταῦτὰ εἶναι, ἐπισκοποῦμεν δὲ πότερον οὕτω ταῦτὰ ἢ οὐχ οὕτως.

"Ετι εἰ δυνατόν θάτερον ἄνευ θατέρου εἶναι· οὐ
 35 γὰρ ἂν εἴη ταῦτόν.

has stated that a 'double of a half' and a 'multiple of a half' are the same thing; then, if 'of a half' has been subtracted from each, the remainders ought to signify the same thing, which they do not; for 'double' and 'multiple' do not signify the same thing.

You must also look not only whether some impossibility immediately follows from the statement that two things are the same, but also whether it can result from a supposition, as, for example, when it is asserted that 'empty' and 'full of air' are the same thing. For it is obvious that, if the air has been expelled, the space will not be less but more empty, though it will be no longer full of air. So by a supposition, whether false or true (for it makes no difference), one of the two terms is subverted, while the other is not; and so they cannot be the same.

(h) Observe whether, as the result of a supposition, one of two same things is subverted, but not the other.

To speak generally, you should look at every possible predicate of each of the two terms and at the things of which they are predicated and see whether there is any discrepancy anywhere; for anything which is predicated of the one ought also to be predicated of the other, and of anything of which the one is a predicate the other also ought to be a predicate.

(i) Observe whether the same things may be predicated of both.

Furthermore, since 'sameness' is used in several senses, you should look whether things are the same in some different way also; for things which are the same specifically or generically are not necessarily the same or cannot possibly be the same numerically, and we examine whether they are or are not the same in this sense.

(j) Observe whether they are the same generically or specifically, but not numerically.

Furthermore, you must see whether the one can exist without the other; for then they cannot be the same.

152 b

II. Οἱ μὲν οὖν πρὸς ταὐτὸν τόποι τοσοῦτοι λέγονται. δῆλον δ' ἐκ τῶν εἰρημένων ὅτι ἅπαντες οἱ πρὸς ταὐτὸν ἀνασκευαστικοὶ τόποι καὶ πρὸς ὅρον χρήσιμοι, καθάπερ ἔμπροσθεν εἴρηται· εἰ γὰρ μὴ ταὐτὸν δηλοῖ τό τ' ὄνομα καὶ ὁ λόγος,
 153 a δῆλον ὅτι οὐκ ἂν εἴη ὁρισμός ὁ ἀποδοθεὶς λόγος. τῶν δὲ κατασκευαστικῶν τρόπων οὐδεὶς χρήσιμος πρὸς ὅρον· οὐ γὰρ ἀπόχρη δεῖξαι ταὐτὸν τὸ ὑπὸ τὸν λόγον καὶ τοῦνομα πρὸς τὸ κατασκευάσαι ὅτι
 5 ὁρισμός, ἀλλὰ καὶ τὰ ἄλλα πάντα δεῖ ἔχειν τὰ παρηγγελμένα τὸν ὁρισμόν.

III. Ἀναιρεῖν μὲν οὖν ὅρον οὕτως καὶ διὰ τούτων αἰεὶ πειρατέον· ἔαν δὲ κατασκευάζειν βουλόμεθα, πρῶτον μὲν εἰδέναι δεῖ ὅτι οὐδεὶς ἢ ὀλίγοι τῶν διαλεγομένων ὅρον συλλογίζονται, ἀλλὰ πάντες ἀρχὴν τὸ τοιοῦτον λαμβάνουσιν, οἷον οἱ τε περὶ
 10 γεωμετρίαν καὶ ἀριθμοὺς καὶ τὰς ἄλλας τὰς τοιαύτας μαθήσεις· εἴθ' ὅτι δι' ἀκριβείας μὲν ἄλλης ἐστὶ πραγματείας ἀποδοῦναι καὶ τί ἐστὶν ὅρος καὶ πῶς ὀρίζεσθαι δεῖ, νῦν δ' ὅσον ἰκανὸν πρὸς τὴν παροῦσαν χρεῖαν, ὥστε τοσοῦτον μόνον λεκτέον ὅτι δυνατόν γενέσθαι ὁρισμοῦ καὶ τοῦ τι
 15 ἦν εἶναι συλλογισμόν. εἰ γὰρ ἐστὶν ὅρος λόγος ὁ τὸ τί ἦν εἶναι τῷ πράγματι δηλῶν, καὶ δεῖ τὰ ἐν τῷ ὅρῳ κατηγορούμενα καὶ ἐν τῷ τί ἐστὶ τοῦ πράγματος μόνον κατηγορεῖσθαι, κατηγορεῖται δ' ἐν τῷ τί ἐστὶ τὰ γένη καὶ αἱ διαφοραί, φανερόν ὥς

^a 102 a 11.^b 139 a 24 ff.^c *An. Post.* II. iii-xiii.

II. These, then, are the various commonplaces relating to 'sameness.' It is obvious from what has been said that all the destructive commonplaces dealing with sameness are also useful for dealing with definition, as has already been remarked ^a ; for, if the term and the description do not signify the same thing, it is obvious that the description assigned cannot be a definition. On the other hand, none of the constructive commonplaces are useful for definition ; for it is not enough to show that the content of the description and the term are the same in order to establish that the description is a definition, but the definition must possess also all the other characteristics which have been laid down.^b

III. In this way and by these methods we must always try to destroy a definition ; but, if we wish to construct one, in the first place, we must realize that few if any of those who hold discussions reason out a definition, but all take as their starting-point some such assumption as those take who deal with geometry and numbers and all other such studies. Secondly, we must realize that it belongs to another inquiry ^c to lay down accurately both what a definition is and how we must frame it, and that for the moment we need only go as far as is requisite for our present task and, therefore, we only need state that it is possible that there should be reasoning about a definition and the essence of a thing. For if a definition is a description which indicates the essence of a thing, and the predicates in the definition ought also to be the only ones to be predicated of the thing in the category of essence (and the genera and differentiae are predicated in the category of essence), it is obvious that, if one were to assume that A and

The rules given in the last chapter are useful for subverting but not for confirming a definition.

Rules for establishing a definition :
(a) Method of confirming a definition.

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εἴ τις λάβοι ταῦτα μόνα¹ ἐν τῷ τί ἐστι τοῦ πράγ-
 20 ματος κατηγορεῖσθαι,² ὁ ταῦτα ἔχων λόγος ὅρος
 ἐξ ἀνάγκης ἂν εἴη· οὐ γὰρ ἐνδέχεται ἕτερον εἶναι
 ὅρον, ἐπειδὴ οὐδὲν ἕτερον ἐν τῷ τί ἐστι τοῦ πράγ-
 ματος κατηγορεῖται.

Ὅτι μὲν οὖν ἐγχωρεῖ συλλογισμόν ὅρου γενέσθαι,
 φανερόν· ἐκ τίνων δὲ δεῖ κατασκευάζειν, διώρισται
 25 μὲν ἐν ἐτέροις ἀκριβέστερον, πρὸς δὲ τὴν προκει-
 μένην μέθοδον οἱ αὐτοὶ τόποι χρήσιμοι. σκεπτέον
 γὰρ ἐπὶ τῶν ἐναντίων καὶ τῶν ἄλλων τῶν ἀντικει-
 μένων, καὶ ὅλους τοὺς λόγους καὶ κατὰ μέρος
 ἐπισκοποῦντα· εἰ γὰρ ὁ ἀντικείμενος τοῦ ἀντικει-
 μένου, καὶ τὸν εἰρημένον τοῦ προκειμένου ἀνάγκη
 30 εἶναι. ἐπεὶ δὲ τῶν ἐναντίων πλείους συμπλοκαί,
 ληπτέον τῶν ἐναντίων, ὁποίου ἂν μάλιστα φανῇ
 ὁ ἐναντίος ὀρισμός. ὅλους μὲν οὖν τοὺς λόγους
 καθάπερ εἴρηται σκεπτέον, κατὰ μέρος δ' ὧδε.
 πρῶτον μὲν οὖν ὅτι τὸ ἀποδοθὲν γένος ὀρθῶς
 ἀποδέδοται. εἰ γὰρ τὸ ἐναντίον ἐν τῷ ἐναντίῳ,
 35 τὸ δὲ προκείμενον μὴ ἐστὶν ἐν τῷ αὐτῷ, δῆλον
 ὅτι ἐν τῷ ἐναντίῳ ἂν εἴη, ἐπειδὴ ἀνάγκη τὰ ἐναντία
 ἐν τῷ αὐτῷ ἢ ἐν τοῖς ἐναντίοις γένεσιν εἶναι. καὶ
 τὰς διαφορὰς δὲ τὰς ἐναντίας τῶν ἐναντίων ἀξιου-
 μεν κατηγορεῖσθαι, καθάπερ λευκοῦ καὶ μέλανος·
 153 b τὸ μὲν γὰρ διακριτικὸν τὸ δὲ συγκριτικὸν ὅψεως.
 ὥστ' εἰ τοῦ ἐναντίου αἱ ἐναντίαι κατηγοροῦνται,
 τοῦ προκειμένου αἱ ἀποδοθεῖσαι κατηγοροῦντ' ἂν.

¹ Reading μόνα with Wallies for μόνον.

² Deleting ὅτι before ὁ ταῦτα.

B were the only attributes predicated of the thing in the category of essence, then the description containing A and B would necessarily be a definition; for nothing else can possibly be a definition, since nothing else is a predicate of the thing in the category of essence.

It is clear, then, that it is possible to reason about a definition. Of what materials definitions should be constructed has been determined more precisely elsewhere,^a but the same commonplaces are useful for the inquiry now before us. You must look at the contraries and the other opposites, examining the descriptions both as wholes and in detail; for if the opposite description is a definition of the opposite term, the description given must necessarily be a definition of the term under consideration. Since, however, there are several possible conjunctions of the contraries, you must choose from among the contraries the one whose contrary definition is most plain. The descriptions, then, as a whole must be examined in the manner described, and in detail in the following manner. First of all, you must see that the genus assigned has been assigned correctly. For, if the contrary is placed in the contrary genus, and the term under consideration is not in the same genus, it is obvious that it would be in the contrary genus, since contraries must necessarily be in the same genus or in contrary genera. Also, we hold that the contrary differentiae should be predicated of contraries, as, for example, of black and white; for the one tends to penetrate, the one to compress, the vision. So, if contrary differentiae are predicated of the contrary term, the differentiae assigned would be predicated of the term under consideration. Since,

(b) Method of eliciting genus and differentia from a contrary and so constructing a definition from the definition of the contrary.

ὥστ' ἐπεὶ καὶ τὸ γένος καὶ αἱ διαφοραὶ ὀρθῶς
 ἀποδέδονται, δηλὸν ὅτι ὁρισμὸς ἂν εἴη ὁ ἀπο-
 5 δοθείς. ἢ οὐκ ἀναγκαῖον τῶν ἐναντίων τὰς ἐναν-
 τίας διαφορὰς κατηγορεῖσθαι, ἂν μὴ ἐν τῷ αὐτῷ
 γένει ἢ τὰ ἐναντία· ὦν δὲ τὰ γένη ἐναντία, οὐδὲν
 κωλύει τὴν αὐτὴν διαφορὰν κατ' ἀμφοῖν λέγεσθαι,
 οἷον κατὰ δικαιοσύνης καὶ ἀδικίας· τὸ μὲν γὰρ
 ἀρετὴ τὸ δὲ κακία ψυχῆς, ὥστε τὸ ψυχῆς διαφορὰ
 10 ἐν ἀμφοῖν λέγεται, ἐπειδὴ καὶ σώματός ἐστι ἀρε-
 τὴ καὶ κακία. ἀλλ' οὖν τοῦτό γ' ἀληθές, ὅτι
 τῶν ἐναντίων ἢ ἐναντίαι ἢ αἱ αὐταὶ διαφοραὶ
 εἰσιν. εἰ οὖν τοῦ ἐναντίου ἢ ἐναντία κατηγορεῖται,
 τούτου δὲ μή, δηλὸν ὅτι ἢ εἰρημνένη τούτου ἂν
 κατηγοροῖτο. καθόλου δ' εἰπεῖν, ἐπεὶ ὁ ὁρισμὸς
 15 ἐστὶν ἐκ γένους καὶ διαφορῶν, ἂν ὁ τοῦ ἐναντίου
 ὁρισμὸς φανερός ἢ, καὶ ὁ τοῦ προκειμένου ὁρισμὸς
 φανερός ἔσται. ἐπεὶ γὰρ τὸ ἐναντίον ἐν τῷ αὐτῷ
 γένει ἢ ἐν τῷ ἐναντίῳ, ὁμοίως δὲ καὶ αἱ διαφοραὶ
 ἢ ἐναντίαι τῶν ἐναντίων ἢ αἱ αὐταὶ κατηγοροῦνται,
 δηλὸν ὅτι τοῦ προκειμένου ἥτοι τὸ αὐτὸ γένος ἂν
 20 κατηγοροῖτο ὅπερ καὶ τοῦ ἐναντίου, αἱ δὲ διαφοραὶ
 ἐναντίαι, ἢ ἅπασαι ἢ τινές, αἱ δὲ λοιπαὶ αἱ αὐταί·
 ἢ ἀνάπαλιν αἱ μὲν διαφοραὶ αἱ αὐταὶ τὰ δὲ γένη
 ἐναντία· ἢ ἄμφω ἐναντία, καὶ τὰ γένη καὶ αἱ δια-
 φοραί. ἀμφοτέρω γὰρ ταῦτα εἶναι οὐκ ἐνδέχεται·
 εἰ δὲ μή, ὁ αὐτὸς ὁρισμὸς τῶν ἐναντίων ἔσται.
 25 "Ἐτι ἐκ τῶν πτώσεων καὶ τῶν συστοίχων·

therefore, both the genus and the differentiae have been correctly assigned, it is obvious that the description assigned would be a definition. But, possibly, it does not necessarily follow that the contrary differentiae are predicated of contraries, unless the contraries are in the same genus; but where the genera are contrary, there is no reason why the same differentia should not be predicated of both, for example, of justice and injustice, for the one is a virtue and the other a vice, of the soul; and so 'of the soul' is employed as a differentia in both cases, since there is a virtue and a vice of the body also. This, however, at any rate is true, that the differentiae of contraries are either contrary or the same. If, therefore, the contrary differentia is predicated of the contrary term and not of the term in question, it is obvious that the stated differentia would be predicated of the latter. To put the matter generally, since the definition is composed of genus and differentia, if the definition of the contrary is clear, the definition also of the term under consideration will be clear also. For, since the contrary is either in the same or in the contrary genus, and likewise too the differentiae predicated of contraries are either contrary or the same, obviously either (a) the same genus would be predicated of the term under consideration as of its contrary, whereas the differentiae are either all contrary or else some of them contrary and the rest the same, or, (b) conversely the differentiae are the same and the genera contrary, or (c) both the genera and the differentiae are contrary. For it is not possible that both should be the same; otherwise contraries will have the same definition.

Furthermore, you must judge from inflexions and (c) Employ-

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ἀνάγκη γὰρ ἀκολουθεῖν τὰ γένη τοῖς γένεσι καὶ τοὺς ὄρους τοῖς ὅροις. οἷον εἰ ἡ λήθη ἐστὶν ἀποβολὴ ἐπιστήμης, καὶ τὸ ἐπιλανθάνεσθαι ἀποβάλλειν ἐπιστήμην ἔσται καὶ τὸ ἐπιλελῆσθαι ἀποβεβληκέναι ἐπιστήμην. ἐνὸς οὖν ὁποιοῦν τῶν εἰρη-
 30 μένων ὁμολογηθέντος ἀνάγκη καὶ τὰ λοιπὰ ὁμολογεῖσθαι. ὁμοίως δὲ καὶ εἰ ἡ φθορὰ διάλυσις οὐσίας, καὶ τὸ φθείρεσθαι διαλύεσθαι οὐσίαν καὶ τὸ φθαρτικῶς διαλυτικῶς, εἴ τε τὸ φθαρτικὸν διαλυτικὸν οὐσίας, καὶ ἡ φθορὰ διάλυσις οὐσίας. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ὥσθ' ἐνὸς ὁποιοῦν
 35 ληφθέντος καὶ τὰ λοιπὰ πάντα ὁμολογεῖται.

Καὶ ἐκ τῶν ὁμοίως δ' ἐχόντων πρὸς ἄλληλα. εἰ γὰρ τὸ ὑγιεινὸν ποιητικὸν ὑγιείας, καὶ τὸ εὐεκτικὸν ποιητικὸν εὐεξίας ἔσται καὶ τὸ ὠφέλιμον
 154 a ποιητικὸν ἀγαθοῦ. ὁμοίως γὰρ ἕκαστον τῶν εἰρημένων πρὸς τὸ οἰκεῖον τέλος ἔχει, ὥστ' εἰ ἐνὸς αὐτῶν ὁ ὁρισμὸς ἐστὶ τὸ ποιητικὸν εἶναι τοῦ τέλους, καὶ τῶν λοιπῶν ἐκάστου οὗτος ἂν εἴη ὁρισμὸς.

Ἔτι ἐκ τοῦ μᾶλλον καὶ τοῦ ὁμοίως, ὅσαχῶς
 5 ἐνδέχεται κατασκευάσαι δύο πρὸς δύο συγκρίνοντα, οἷον εἰ μᾶλλον ὅδε τοῦδε ἢ ὅδε τοῦδε ὁρισμός, ὁ δὲ ἥττον ὁρισμός, καὶ ὁ μᾶλλον. καὶ εἰ ὁμοίως ὅδε τοῦδε καὶ ὅδε τοῦδε, εἰ ὁ ἕτερος τοῦ ἑτέρου,
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co-ordinates ; for here genus must follow genus and definition follow definition. For example, if ' forgetfulness ' is ' a loss of knowledge,' ' to forget ' is ' to lose knowledge,' and ' to have forgotten ' is ' to have lost knowledge.' If, therefore, any one of these things is admitted, the rest also must necessarily also be admitted. Similarly, too, if ' destruction ' is ' a dissolution of essence,' then ' to be destroyed ' is ' to have one's essence dissolved,' and ' destructively ' means ' in such a way as to dissolve the essence ' ; and if ' destructive ' means ' tending to destroy the essence,' ' destruction ' is ' the dissolution of the essence.' So likewise with the other inflexions ; if any one of them is assumed, all the others also are admitted.

You must also judge from things which are related in the same way to one another. For if ' healthy ' means ' productive of health,' ' invigorating ' also will mean ' productive of vigour ' and ' beneficial ' will mean ' productive of good.' For each of the above is similarly related to its own particular end, so that, if the definition of one of them is that it is ' productive of ' its end, this would also be the definition of each of the others.

Furthermore, you must judge from the greater and the similar degrees, in all the various ways in which it is possible to be constructive by comparing two things with two other things. For example, if one thing is to a greater degree the definition of another than something else is of something else, and the latter is a definition, then so also is the former. Also, if one thing is a definition of another and something else a definition of something else in a similar degree, if the latter is a definition of

ment of inflexions and co-ordinates for the construction of a definition.

(d) Argument from things which stand in similar relation.

(e) Formation of a definition by the comparison of other definitions.

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καὶ ὁ λοιπὸς τοῦ λοιποῦ. ἐνὸς δ' ὀρισμοῦ πρὸς
 δύο συγκρινομένου, ἢ δύο ὀρισμῶν πρὸς ἓνα,
 10 οὐδὲν χρήσιμος ἢ ἐκ τοῦ μᾶλλον ἐπίσκεψις· οὔτε
 γὰρ ἓνα δυοῖν οὔτε δύο τοῦ αὐτοῦ ὅρους δυνατόν
 ἐστὶν εἶναι.

IV. Εἰσι δὲ καὶ ἐπικαιρότατοι τῶν τόπων οἱ
 τε νῦν εἰρημένοι καὶ οἱ ἐκ τῶν συστοίχων καὶ οἱ
 ἐκ τῶν πτώσεων. διὸ καὶ δεῖ μάλιστα κατέχειν
 15 καὶ προχείρους ἔχειν τούτους· χρησιμώτατοι γὰρ
 πρὸς πλείστα. καὶ τῶν ἄλλων δὲ τοὺς μάλιστα
 κοινούς· οὔτοι γὰρ ἐνεργότατοι τῶν λοιπῶν, οἷον
 τὸ τ' ἐπιβλέπειν ἐπὶ τὰ¹ καθ' ἕκαστα, καὶ ἐπὶ τῶν
 εἰδῶν σκοπεῖν εἰ ἐφαρμόττει ὁ λόγος, ἐπειδὴ
 συνώνυμον τὸ εἶδος. ἔστι δὲ χρήσιμον τὸ τοιοῦτον
 20 πρὸς τοὺς τιθεμένους ιδέας εἶναι, καθάπερ πρότερον
 εἴρηται. ἔτι εἰ μεταφέρων εἴρηκε τοῦνομα, ἢ
 αὐτὸ αὐτοῦ κατηγόρηκεν ὡς ἕτερον. καὶ εἴ τις
 ἄλλος κοινὸς καὶ ἐνεργὸς τῶν τόπων ἐστί, τούτῳ
 χρηστέον.

V. Ὅτι δὲ χαλεπώτερον κατασκευάζειν ἢ ἀνα-
 σκευάζειν ὅρον, ἐκ τῶν μετὰ ταῦτα ῥηθησομένων
 25 φανερόν. καὶ γὰρ ἰδεῖν αὐτὸν καὶ λαβεῖν παρὰ
 τῶν ἐρωτωμένων τὰς τοιαύτας προτάσεις οὐκ
 εὐπετές, οἷον ὅτι τῶν ἐν τῷ ἀποδοθέντι λόγῳ
 τὸ μὲν γένος τὸ δὲ διαφορά, καὶ ὅτι ἐν τῷ τί ἐστί
 τὸ γένος καὶ αἱ διαφοραὶ κατηγοροῦνται. ἀνευ
 δὲ τούτων ἀδύνατον ὀρισμοῦ γένεσθαι συλλογισμόν·
 30 εἰ γάρ τινα καὶ ἄλλα ἐν τῷ τί ἐστί τοῦ πράγματος

¹ τὸ in Bekker's text is a misprint for τὰ.

the latter, then the former is also a definition of the former. The examination on the basis of the greater degree is of no use when one definition is compared with two things or two definitions with one thing; for there cannot possibly be one definition of two things or two definitions of the same thing.

IV. The most convenient of the commonplaces are those just mentioned and those based on co-ordinates and inflexions. It is, therefore, particularly necessary to grasp these and have them ready for use; for they are most often useful. Of the rest you must employ those which are most widely applicable (for they are the most efficacious of the remainder), for example, the consideration of individual cases and the examination of the species to see whether the description fits; for the species is synonymous with its members. Such a procedure is useful against those who assume the existence of 'ideas,' as has been said before.^a Further, you must see whether a term has been used metaphorically or has been predicated of itself as though it were something different. Also any other commonplace ought to be used if it is widely applicable and efficacious.

[Note on what are the most useful common-places.]

V. That it is more difficult to construct than to destroy a definition is obvious for reasons which are to be next set forth. For oneself to discern, and to secure from those who are being questioned, the sort of premisses which one requires is far from easy, for example, that the constituent parts of the description given are, firstly, genus and, secondly, differentia, and that the genus and differentiae are predicated in the category of essence. But without these premisses it is impossible to reason out a definition; for, if other things also are predicated of the thing

[Notes on the construction and destruction of definitions and their component parts. (a) Definitions are more easily destroyed than constructed.]

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κατηγορεῖται, ἄδηλον πότερον ὁ ῥηθεὶς ἢ ἕτερος αὐτοῦ ὀρισμός ἐστιν, ἐπειδὴ ὀρισμός ἐστι λόγος ὁ τὸ τί ἦν εἶναι σημαίνων. δῆλον δὲ καὶ ἐκ τῶνδε. ῥᾶον γὰρ ἐν συμπεράνασθαι ἢ πολλά. ἀναιροῦντι μὲν οὖν ἀπόχρη πρὸς ἐν¹ διαλεγῆναι (ἐν γὰρ ὅποι-
 35 ονοῦν ἀνασκευάσαντες ἀνηρηκότες ἐσόμεθα τὸν ὄρον), κατασκευάζοντι δὲ πάντα ἀνάγκη συμβιβάζειν ὅτι ὑπάρχει τὰ ἐν τῷ ὄρῳ. ἔτι κατασκευάζοντι μὲν καθόλου οἰστέον συλλογισμόν· δεῖ γὰρ
 154 b κατὰ παντὸς οὗ τοῦνομα κατηγορεῖσθαι τὸν ὄρον, καὶ ἔτι πρὸς τούτοις ἀντιστρέφειν, εἰ μέλλει ἴδιος εἶναι ὁ ἀποδοθεὶς ὄρος. ἀνασκευάζοντα δ' οὐκέτι ἀνάγκη δεῖξαι τὸ καθόλου· ἀπόχρη γὰρ τὸ δεῖξαι
 5 ὅτι οὐκ ἀληθεύεται περὶ τινὸς τῶν ὑπὸ τοῦνομα ὁ λόγος. εἴ τε καὶ καθόλου δέοι ἀνασκευάσαι, οὐδ' ὥς τὸ ἀντιστρέφειν ἀναγκαῖον ἐπὶ τοῦ ἀνασκευάζειν· ἀπόχρη γὰρ ἀνασκευάζοντι καθόλου τὸ δεῖξαι ὅτι κατὰ τινὸς ὦν τοῦνομα κατηγορεῖται ὁ λόγος οὐ κατηγορεῖται. τὸ δ' ἀνάπαλιν οὐκ ἀναγκαῖον πρὸς τὸ δεῖξαι, ὅτι καθ' ὦν ὁ λόγος
 10 μὴ κατηγορεῖται τοῦνομα κατηγορεῖται. ἔτι εἰ καὶ παντὶ ὑπάρχει τῷ ὑπὸ τοῦνομα, μὴ μόνῳ δέ, ἀνηρημένος γίνεται ὁ ὀρισμός.

Ὅμοίως δὲ καὶ περὶ τὸ ἴδιον καὶ τὸ γένος ἔχει· ἐν ἀμφοτέροις γὰρ ἀνασκευάζειν ἢ κατασκευάζειν
 15 ῥᾶον. περὶ μὲν οὖν τοῦ ἰδίου φανερόν ἐκ τῶν

¹ Reading ἐν with C.

in the category of essence, it is obscure whether the description given or some other description is the definition of the thing ; for a definition is a description which signifies the essence of a thing. This is also clear from the following considerations. It is easier to come to one conclusion than to many ; when, therefore, one is destroying a definition, it is enough to argue against a single point (for, if we have destroyed any one point whatsoever, we shall have destroyed the definition), but for constructive purposes it is necessary to establish that everything in the definition is applicable. Further, for constructive purposes, reasoning of universal application must be adduced ; for the definition must be predicated of everything of which the term is predicated, and, besides this, it must be convertible, if the definition assigned is to be peculiar to the subject. On the other hand, for destructive purposes, it is no longer necessary to prove universality ; for it is enough to show that the description is untrue of some one thing which falls under the term. Also, if it were necessary to destroy the definition universally, even so there is no need for the proposition to be convertible in order to destroy it ; for it is enough, for its destruction universally, to show that the description is not predicated of any one of things of which the term is predicated ; and the converse of this is not necessary in order to show that the term is predicated of those things of which the description is not predicated. Furthermore, if it belongs to everything which falls under the term, but not to it alone, the definition is destroyed.

A similar thing happens also in respect of the property and the genus ; for in both cases to destroy is easier than to confirm. The case of the property is

(b) The same is true of property and genus.

- εἰρημένων· ὥς γὰρ ἐπὶ τὸ πολὺ ἐν συμπλοκῇ τὸ ἴδιον ἀποδίδεται, ὥστ' ἀνασκευάζειν μὲν ἔστιν ἐν ἀνελόντα, κατασκευάζοντι δὲ ἀνάγκη πάντα συλλογίζεσθαι. σχεδὸν δὲ καὶ τὰ λοιπὰ πάντα, ὅσα πρὸς τὸν ὀρισμὸν, καὶ πρὸς τὸ ἴδιον ἀρμόσει
- 20 λέγεσθαι· παντί τε γὰρ δεῖ τῷ ὑπὸ τοῦνομα τὸν κατασκευάζοντα δεικνύναι ὅτι ὑπάρχει, ἀνασκευάζοντι δ' ἀπόχρη ἐνὶ δεῖξαι μὴ ὑπάρχον· εἴ τε καὶ παντί ὑπάρχει, μὴ μόνῳ δέ, καὶ οὕτως ἀνεσκευασμένον γίνεται, καθάπερ ἐπὶ τοῦ ὀρισμοῦ λέγεται. περὶ δὲ τοῦ γένους, ὅτι κατασκευάζειν
- 25 μὲν ἀνάγκη μοναχῶς παντί δείξαντα ὑπάρχειν, ἀνασκευάζοντι δὲ διχῶς· καὶ γὰρ εἰ μηδενὶ καὶ εἰ τινὶ δέδεικται μὴ ὑπάρχον, ἀνῆρηται τὸ ἐν ἀρχῇ. ἔτι κατασκευάζοντι μὲν οὐκ ἀπόχρη ὅτι ὑπάρχει δεῖξαι, ἀλλὰ καὶ διότι ὥς γένος ὑπάρχει δεικτέον· ἀνασκευάζοντι δ' ἱκανὸν τὸ δεῖξαι μὴ ὑπάρχον ἢ τινὶ
- 30 ἢ παντί. ἔοικε δ', ὥσπερ καὶ ἐν τοῖς ἄλλοις τὸ διαφθεῖραι τοῦ ποιῆσαι ῥᾶον, οὕτω καὶ ἐπὶ τούτων τὸ ἀνασκευάσαι τοῦ κατασκευάσαι.

Ἐπὶ δὲ τοῦ συμβεβηκότος τὸ μὲν καθόλου ῥᾶον ἀνασκευάζειν ἢ κατασκευάζειν· κατασκευάζοντι μὲν

35 γὰρ δεικτέον ὅτι παντί, ἀνασκευάζοντι δ' ἀπόχρη ἐνὶ δεῖξαι μὴ ὑπάρχον. τὸ δ' ἐπὶ μέρους ἀνάπαλιν ῥᾶον κατασκευάσαι ἢ ἀνασκευάσαι· κατασκευά-

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clear from what has been said ; for the property is usually assigned in a complex expression, so that it is possible to destroy it by demolishing one element in it, whereas in confirming it is necessary to establish all the elements by reasoning. Also, almost all the other things which can be said of the definition can be fittingly said of the property also ; for he who is confirming a property must show that it belongs to everything which falls under the term, whereas it is enough for destructive purposes to show that it fails to belong to one of them. Also, even if it belongs to every one of them but not exclusively, in these circumstances too the property is demolished, as was observed^a about definition. As regards the genus, it is clear that there is only one course for you to follow when confirming it, namely, to show that it belongs in every case, whereas for demolishing it there are two possible courses ; for the original assumption is destroyed both if it has been shown never to belong and also if it has been shown not to belong in a particular case. Further, in confirming a genus, it is not enough to show that it belongs, but you must also show that it belongs as a genus, whereas, in demolishing it, it suffices to show that it fails to belong either in a particular case or in every case. Indeed it looks as if just as in everything else to destroy is easier than to create, so also here to demolish is easier than to confirm.

In the case of the accident it is easier to demolish than confirm the universal ; for, to confirm it, you must show that it belongs in every case, but to demolish it, it is enough to show that it does not belong in a particular instance. The particular, on the contrary, is easier to confirm than to demolish ;

(c) Accident is more easily destroyed if it is universal, more easily confirmed if it is particular.

155 a ζονται μὲν γὰρ ἀπόχρη δείξαι τινὲ ὑπάρχον, ἀνα-
σκευάζοντι δὲ δεικτέον ὅτι οὐδενὶ ὑπάρχει.

Φανερόν δὲ καὶ διότι πάντων ῥᾶστον ὅρον ἀνα-
σκευάσαι· πλείστα γὰρ ἐν αὐτῷ τὰ δεδομένα
5 πολλῶν εἰρημένων, ἐκ δὲ τῶν πλειόνων θάπτον
γίνεται συλλογισμός. εἰκὸς γὰρ ἐν τοῖς πολλοῖς
μᾶλλον ἢ ἐν τοῖς ὀλίγοις ἀμάρτημα γίνεσθαι. ἔτι
πρὸς μὲν ὅρον ἐνδέχεται καὶ διὰ τῶν ἄλλων ἐπι-
χειρεῖν· εἴτε γὰρ μὴ ἴδιος ὁ λόγος, εἴτε μὴ γένος
τὸ ἀποδοθέν, εἴτε μὴ ὑπάρχει τι τῶν ἐν τῷ λόγῳ,
10 ἀνήρημένος γίνεται ὁ ὀρισμός· πρὸς δὲ τᾶλλα οὔτε
τὰ ἐκ τῶν ὅρων οὔτε τᾶλλα ἐνδέχεται πάντ' ἐπι-
χειρεῖν· μόνα γὰρ τὰ πρὸς τὸ συμβεβηκὸς κοινὰ
πάντων τῶν εἰρημένων ἐστίν. ὑπάρχειν μὲν γὰρ
δεῖ ἕκαστον τῶν εἰρημένων· εἰ δὲ μὴ ὡς ἴδιον
ὑπάρχει τὸ γένος, οὐδέπω ἀνήρηται τὸ γένος.
15 ὁμοίως δὲ καὶ τὸ ἴδιον οὐκ ἀναγκαῖον ὡς γένος,
οὐδὲ τὸ συμβεβηκὸς ὡς γένος ἢ ἴδιον, ἀλλ' ὑπάρ-
χειν μόνον. ὥστ' οὐ δυνατόν ἐκ τῶν ἐτέρων πρὸς
τὰ ἕτερα ἐπιχειρεῖν ἀλλ' ἢ ἐπὶ τοῦ ὀρισμοῦ. δῆλον
οὖν ὅτι ῥᾶστον πάντων ὅρον ἀναιρεῖν, κατασκευά-
ζειν δὲ χαλεπώτατον· ἐκεῖνά τε γὰρ δεῖ πάντα
20 συλλογίσασθαι (καὶ γὰρ ὅτι ὑπάρχει τὰ εἰρημένα
καὶ ὅτι γένος τὸ ἀποδοθέν καὶ ὅτι ἴδιος ὁ λόγος),
καὶ ἔτι παρὰ ταῦτα, ὅτι δηλοῖ τὸ τί ἦν εἶναι ὁ
λόγος, καὶ τοῦτο καλῶς δεῖ πεποιηκέναι.

^a i.e. genus, property and accident.

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for, to confirm it, it is enough to show that it belongs in one instance, but, to demolish it, you must show that it never belongs.

It is clear also that a definition is the easiest of all things to destroy ; for, since it contains many assertions, the opportunities which it offers are very numerous, and the more abundant the material, the more quickly can reasoning set to work ; for it is more likely that error should occur when the material is copious than when it is scanty. Moreover, it is possible also to attack a definition by means of the other attributes ^a ; for if the description is not peculiar, or if that which is assigned is not genus, or if something in the description does not belong, the definition is demolished. On the other hand, against the others it is impossible to argue with all the material derived from definitions nor can the rest of the others be used ; for only those which relate to accident are common to all the said attributes. For each of the said attributes must belong to the subject, but, if the genus does not belong as a property, the genus is not yet destroyed. Similarly, too, the property does not necessarily belong as a genus, nor the accident as a genus or a property, but they may merely belong. It is, therefore, impossible to use one set against the other except where definition is concerned. It is obvious, then, that a definition is the easiest of all things to destroy but the most difficult to confirm ; for one has to establish all the other points by reasoning (namely, that the attributes asserted belong, and that what has been assigned is a true genus, and that the description is peculiar), and, besides this, that the description shows the essence of the thing ; and this must be done properly.

(d) Definition is of all things the most easy to destroy, the most difficult to confirm.

Τῶν δ' ἄλλων τὸ ἴδιον μάλιστα τοιοῦτον· ἀν-
 αρεῖν μὲν γὰρ ῥᾶον διὰ τὸ ἐκ πολλῶν ὥς ἐπὶ
 25 τὸ πολὺ, κατασκευάζειν δὲ χαλεπώτατον, ὅτι τε
 πολλὰ δεῖ συμβιβᾶσαι, καὶ πρὸς τούτῳ ὅτι μόνῳ
 ὑπάρχει καὶ ἀντικατηγορεῖται τοῦ πράγματος.

Ῥᾶστον δὲ πάντων κατασκευάσαι τὸ συμβεβηκός·
 ἐν μὲν γὰρ τοῖς ἄλλοις οὐ μόνον ὑπάρχον, ἀλλὰ
 30 καὶ ὅτι οὕτως ὑπάρχει, δεικτέον· ἐπὶ δὲ τοῦ συμ-
 βεβηκότος, ὅτι ὑπάρχει μόνον, ἱκανὸν δεῖξαι.
 ἀνασκευάζειν δὲ χαλεπώτατον τὸ συμβεβηκός, ὅτι
 ἐλάχιστα ἐν αὐτῷ δέδοται· οὐ γὰρ προσσημαίνει
 ἐν τῷ συμβεβηκότι πῶς ὑπάρχει, ὥστ' ἐπὶ μὲν
 τῶν ἄλλων διχῶς ἔστιν ἀνελεῖν, ἢ δείξαντα ὅτι
 35 οὐχ ὑπάρχει ἢ ὅτι οὐχ οὕτως ὑπάρχει, ἐπὶ δὲ τοῦ
 συμβεβηκότος οὐκ ἔστιν ἀνελεῖν ἀλλ' ἢ δείξαντα
 ὅτι οὐχ ὑπάρχει.

Οἱ μὲν οὖν τόποι δι' ὧν εὐπορήσομεν πρὸς ἑκα-
 στα τῶν προβλημάτων ἐπιχειρεῖν, σχεδὸν ἱκανῶς
 ἐξηρίθμηνται.

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Of the rest, the property most merely resembles the definition: for it is easier to destroy, because it is usually composed of a number of terms, and most difficult to confirm, because a number of points must be brought together, and, besides this, because it belongs to the subject alone and is predicated convertibly with it.

(e) Property is the next easiest to destroy.

The accident is the easiest thing of all to confirm; for in the other cases it must be shown not only that the attribute belongs but also that it belongs in a particular way, whereas in the case of the accident it is enough to show only that it belongs. On the other hand, the accident is most difficult to destroy, because it offers the fewest opportunities; for in stating an accident one does not add any indication of the manner in which it belongs, so that in the other cases it is possible to destroy the statement in two ways, by showing either that it does not belong or that it does not belong in a particular way, but in the case of the accident it is impossible to destroy it except by showing that it does not belong.

(f) Accident is the most difficult to destroy and the easiest to confirm.]

The commonplaces which will provide us with abundant means of attacking each kind of problem have now been more or less adequately enumerated.

155 b 3 I. Μετὰ δὲ ταῦτα περὶ τάξεως, καὶ πῶς δεῖ
 ἐρωτᾶν, λεκτέον. δεῖ δὲ πρῶτον μὲν ἐρωτηματίζειν
 5 μέλλοντα τὸν τόπον εὑρεῖν ὅθεν ἐπιχειρητέον,
 δεύτερον δὲ ἐρωτηματίσαι καὶ τάξαι καθ' ἕκαστα
 πρὸς ἑαυτόν, τὸ δὲ λοιπὸν καὶ τρίτον εἰπεῖν ταῦτα
 ἤδη πρὸς ἕτερον. μέχρι μὲν οὖν τοῦ εὑρεῖν τὸν
 τόπον ὁμοίως τοῦ φιλοσόφου καὶ τοῦ διαλεκτικοῦ
 ἡ σκέψις, τὸ δ' ἤδη ταῦτα τάττειν καὶ ἐρωτη-
 10 ματίζειν ἴδιον τοῦ διαλεκτικοῦ· πρὸς ἕτερον γὰρ
 πᾶν τὸ τοιοῦτον, τῷ δὲ φιλοσόφῳ καὶ ζητοῦντι
 καθ' ἑαυτόν οὐδὲν μέλει, εἰ μὴ ἀληθὴ μὲν ἦ καὶ
 γνῶριμα δι' ὧν ὁ συλλογισμός, μὴ θῆ δ' αὐτὰ ὁ
 ἀποκρινόμενος διὰ τὸ σύνεγγυς εἶναι τοῦ ἐξ ἀρχῆς
 καὶ προορᾶν τὸ συμβησόμενον· ἀλλ' ἴσως κἄν
 15 σπουδάσειεν ὅτι μάλιστα γνῶριμα καὶ σύνεγγυς
 εἶναι τὰ ἀξιώματα· ἐκ τούτων γὰρ οἱ ἐπιστη-
 μονικοὶ συλλογισμοί.

Τοὺς μὲν οὖν τόπους ὅθεν δεῖ λαμβάνειν, εἴρηται
 πρότερον· περὶ τάξεως δὲ καὶ τοῦ ἐρωτηματίσαι
 λεκτέον διελόμενον τὰς προτάσεις, ὅσαι ληπτέαι

^a Bks. II-VII.

BOOK VIII

I. NEXT we must speak about arrangement and the way to ask questions. He who is about to ask questions must, first of all, choose the ground from which he must make his attack ; secondly, he must formulate his questions and arrange them separately in his own mind ; thirdly and lastly, he must go on to address them to another person. As far as the choice of ground goes, the philosopher and the dialectician are making a similar inquiry, but the subsequent arrangement of material and the framing of questions are the peculiar province of the dialectician ; for such a proceeding always involves a relation with another party. On the other hand, the philosopher and individual seeker does not care if, though the premisses by means of which his reasoning proceeds are true and familiar, the answerer refuses to admit them because they are too close to the point of departure and he foresees what will result from his admission ; indeed the philosopher may perhaps even be eager that his axioms should be as familiar and as near to his starting-point as possible ; for it is of this material that scientific reasonings are constructed.

The sources from which the commonplaces should be derived have already been stated.^a We must now deal with arrangement and the framing of questions, after having first distinguished the premisses which

THE
PRACTICE
OF DIA-
LECTICS
(BOOK
VIII) :
Introduc-
tion.

[Comparison between
the philo-
sopher and
the dia-
lectician.]

HOW TO
FORMULATE
QUESTIONS
(chapters
1-3) :

20 παρὰ τὰς ἀναγκαίαις. ἀναγκαῖαι δὲ λέγονται δι' ὧν ὁ συλλογισμὸς γίνεται. αἱ δὲ παρὰ ταύτας λαμβανόμεναι τέτταρές εἰσιν· ἡ γὰρ ἐπαγωγῆς χάριν τοῦ δοθῆναι τὸ καθόλου, ἡ εἰς ὄγκον τοῦ λόγου, ἡ πρὸς κρύψιν τοῦ συμπεράσματος, ἡ πρὸς τὸ σαφέστερον εἶναι τὸν λόγον. παρὰ δὲ ταύτας
 25 οὐδεμίαν ληπτέον πρότασιν, ἀλλὰ διὰ τούτων αὔξειν καὶ ἐρωτηματίζειν πειρατέον. εἰσὶ δ' αἱ πρὸς κρύψιν ἀγῶνος χάριν· ἀλλ' ἐπειδὴ πᾶσα ἡ τοιαύτη πραγματεία πρὸς ἕτερόν ἐστιν, ἀνάγκη καὶ ταύταις χρῆσθαι.

Τὰς μὲν οὖν ἀναγκαίαις, δι' ὧν ὁ συλλογισμὸς,
 30 οὐκ εὐθὺς αὐτὰς¹ προτατέον, ἀλλ' ἀποστατέον ὅτι ἀπωτάτω,² οἷον μὴ τῶν ἐναντίων ἀξιοῦντα τὴν αὐτὴν ἐπιστήμην, ἂν τοῦτο βούληται λαβεῖν, ἀλλὰ τῶν ἀντικειμένων· τεθέντος γὰρ τούτου, καὶ ὅτι τῶν ἐναντίων ἡ αὐτὴ συλλογιεῖται, ἐπειδὴ ἀντικείμενα τὰ ἐναντία. ἂν δὲ μὴ τιθῇ, δι' ἐπαγωγῆς
 35 ληπτέον, προτείνοντα ἐπὶ τῶν κατὰ μέρος ἐναντίων. ἡ γὰρ διὰ συλλογισμοῦ ἡ δι' ἐπαγωγῆς τὰς ἀναγκαίαις ληπτέον, ἡ τὰς μὲν ἐπαγωγῇ τὰς δὲ συλλογισμῷ, ὅσαι δὲ λῖαν προφανεῖς εἰσὶ, καὶ αὐτὰς προτείνοντα· ἀδηλότερόν τε γὰρ αἰεὶ ἐν τῇ ἀπο-
 156 a στάσει καὶ τῇ ἐπαγωγῇ τὸ συμβησόμενον, καὶ ἅμα

¹ Inserting αὐτὰς with AB.

have to be obtained, other than those which are necessary. What are called necessary premises are those by means of which reasoning proceeds. Those which are obtained other than these fall into four classes ; they are used either (1) for the sake of induction, so that the universal may be granted, or (2) to add weight to the argument, or (3) to conceal the conclusion, or (4) to give greater clearness to the argument. Besides these no other premiss needs to be provided, but by means of them we must try to amplify and frame our questions. Those which are used for concealment are for contentious purposes ; but, since this kind of proceeding is always directed against another party, these also must be employed.

The necessary premisses, then, by means of which reasoning proceeds, ought not to be advanced immediately in their original form, but you must keep as far away from them as you can ; for example, if you wish to establish that the knowledge of contraries is the same, you should make the claim not for contraries but for opposites ; for, if this is granted, you will then argue that the knowledge of contraries is also the same, since contraries are opposites. If, on the other hand, the answerer refuses to admit this, you should then establish it by induction, making a proposition dealing with particular contraries. For you must secure the necessary premisses either by reasoning or by induction, or else partly by induction and partly by reasoning, though you can advance in their original form any premisses which are clear beyond all doubt ; for the conclusion which will follow is always less obvious when it is still far off and being reached by induction, and at the same time,

(a) Necessary and other premisses.

How to employ necessary premisses.

² Reading ἀπωτάτω for ἀνωτάτω.

τὸ αὐτὰς τὰς χρησίμους προτείνειν καὶ μὴ δυνά-
 μενον ἐκείνως λαβεῖν ἔτοιμον. τὰς δὲ παρὰ
 ταύτας εἰρημένας ληπτέον μὲν τούτων χάριν,
 5 ἐκάστη δ' ὧδε χρηστέον, ἐπάγοντα μὲν ἀπὸ τῶν
 καθ' ἕκαστον ἐπὶ τὸ καθόλου καὶ τῶν γνωρίμων
 ἐπὶ τὰ ἄγνωστα· γνώριμα δὲ μᾶλλον τὰ κατὰ τὴν
 αἴσθησιν, ἢ ἀπλῶς ἢ τοῖς πολλοῖς. κρύπτοντα
 δὲ προσυλλογίζεσθαι δι' ὧν ὁ συλλογισμὸς τοῦ
 ἐξ ἀρχῆς μέλλει γίνεσθαι, καὶ ταῦτα ὡς πλείστα.
 10 εἷη δ' ἂν τοῦτο, εἴ τις μὴ μόνον τὰς ἀναγκαίας
 ἀλλὰ καὶ τῶν πρὸς ταύτας χρησίμων τινὰ συλ-
 λογίζοιτο. ἔτι τὰ συμπεράσματα μὴ λέγειν,
 ἀλλ' ὕστερον ἀθρόα συλλογίζεσθαι· οὕτω γὰρ ἂν
 πορρωτάτω ἀποστήσειε τῆς ἐξ ἀρχῆς θέσεως.
 καθόλου δ' εἰπεῖν, οὕτω δεῖ ἐρωτᾶν τὸν κρυπτικῶς
 πυνθανόμενον, ὥστ' ἠρωτημένου τοῦ παντὸς λόγου
 15 καὶ εἰπόντος τὸ συμπέρασμα ζητεῖσθαι τὸ διὰ
 τί. τοῦτο δ' ἔσται μάλιστα διὰ τοῦ λεχθέντος
 ἔμπροσθεν τρόπου· μόνου γὰρ τοῦ ἐσχάτου ῥηθέν-
 τος συμπεράσματος ἄδηλον πῶς συμβαίνει, διὰ
 τὸ μὴ προορᾶν τὸν ἀποκρινόμενον ἐκ τίνων
 συμβαίνει, μὴ διαρθρωθέντων τῶν πρότερον συλ-
 20 λογισμῶν. ἥκιστα δ' ἂν διαρθροῖτο ὁ συλλογι-
 σμὸς τοῦ συμπεράσματος μὴ τὰ τούτου λήμματα
 ἡμῶν τιθέντων, ἀλλ' ἐκεῖνα ὑφ' ὧν ὁ συλλογισμὸς
 γίνεται.

if you cannot establish the requisite premisses in the above manner, it is still feasible to advance them in their original form. The premisses, other than these, already mentioned, must be established for the sake of the latter, and must each be used as follows, namely, by induction from the particulars to the universal and from the known to the unknown; and the objects of sense-perception are better known absolutely or at any rate to most people. For the concealment of your conclusion, you should establish by previous reasonings the premisses through which the reasoning of your original proposition is to proceed, and they should be as numerous as possible. This would best be achieved if one were to establish by reasoning not only the necessary premisses but also some of those which are requisite for obtaining them. Further, you should not state the conclusions, but establish them by reasoning all at the same time at a later stage; for them you would keep the answerer as far as possible from the original proposition. To put the matter generally, he who wishes to conceal his purpose while eliciting answers should frame his questions in such a way that, when the whole argument has been the subject of questions and he has stated the conclusion, it should still be asked "Why is it so?" This will be best achieved by following the above method; for, if only the final conclusion is stated, it is not clear how it comes about, because the answerer cannot foresee the basis on which it rests, because the preliminary reasonings have not formed an organic whole, and the reasoning-out of the conclusion would least form an organic whole, if we set forth not the admitted premisses but only those by which the reasoning proceeds.

How to employ premisses other than necessary
(1) *For inductions.*

(2) *For concealing one's conclusion:*

a. Postpone the statement of your conclusion.

Χρήσιμον δὲ καὶ τὸ μὴ συνεχῇ τὰ ἀξιώματα
 λαμβάνειν ἐξ ὧν οἱ συλλογισμοί, ἀλλ' ἐναλλάξ τὸ
 25 πρὸς ἕτερον καὶ ἕτερον συμπέρασμα· τιθεμένων
 γὰρ τῶν οἰκείων παρ' ἄλληλα μᾶλλον τὸ συμ-
 βησόμενον ἐξ αὐτῶν προφανές.

Χρῇ δὲ καὶ ὀρισμῷ λαμβάνειν, ἐφ' ὧν ἐνδέχεται,
 τὴν καθόλου πρότασιν, μὴ ἐπ' αὐτῶν ἀλλ' ἐπὶ
 τῶν συστοίχων· παραλογίζονται γὰρ ἑαυτούς, ὅταν
 30 ἐπὶ συστοίχου ληφθῇ ὁ ὀρισμός, ὡς οὐ τὸ καθόλου
 συγχωροῦντες, οἷον εἰ δέοι λαβεῖν ὅτι ὁ ὀργι-
 ζόμενος ὀρέγεται τιμωρίας διὰ φαινομένην ὀλι-
 γωρίαν, ληφθεῖη δ' ἡ ὀργὴ ὅρεξις εἶναι τιμωρίας
 διὰ φαινομένην ὀλιγωρίαν· δῆλον γὰρ ὅτι τούτου
 ληφθέντος ἔχοιμεν ἂν καθόλου ὃ προαιρούμεθα.
 35 τοῖς δ' ἐπ' αὐτῶν προτείνουνσι πολλάκις ἀνανεύειν
 συμβαίνει τὸν ἀποκρινόμενον διὰ τὸ μᾶλλον ἔχειν
 ἐπ' αὐτοῦ τὴν ἔνστασιν, οἷον ὅτι ὁ ὀργιζόμενος
 οὐκ ὀρέγεται τιμωρίας· τοῖς γὰρ γονεῦσιν ὀργι-
 ζόμεθα μὲν, οὐκ ὀρεγόμεθα δὲ τιμωρίας. ἴσως
 μὲν οὖν οὐκ ἀληθὴς ἡ ἔνστασις· παρ' ἐνίων γὰρ
 156 b ἰκανὴ τιμωρία τὸ λυπῆσαι μόνον καὶ ποιῆσαι
 μεταμέλεσθαι· οὐ μὴν ἀλλ' ἔχει τι πιθανὸν πρὸς
 τὸ μὴ δοκεῖν ἀλόγως ἀρνεῖσθαι τὸ προτεινόμενον.
 ἐπὶ δὲ τοῦ τῆς ὀργῆς ὀρισμοῦ οὐχ ὁμοίως ῥᾶδιόν
 ἐστὶν εὐρεῖν ἔνστασιν.

It is also a useful practice not to establish the admitted propositions on which the reasonings are based in their natural order but to alternate one which leads to one conclusion with another which leads to another conclusion ; for, if those which are closely related are set side by side with one another, the conclusion which will result from them is more clearly foreseen.

b. Vary the order in which you establish the various arguments.

You should also, whenever possible, establish the universal premiss in the form of a definition relating not to the actual terms in question but to co-ordinates of them ; for people let themselves be deceived when a definition is established dealing with a co-ordinate, imagining that they are not making the admission universally. This would happen, for example, if it were necessary to establish that the angry man is desirous of revenge for a fancied slight, and it were to be established that anger is a desire for revenge for a fancied slight ; for, obviously, if this were established, we should have the universal admission which we require. On the other hand, it often happens, when people make propositions dealing with the actual term, that the answerer refuses his assent, because he objects more readily when the actual term is used, saying, for example, that the angry man is not desirous of revenge, for though we become angry with our parents, yet we are not desirous of revenge. Possibly, the objection is not a true one ; for with some people merely to cause pain and induce repentance is sufficient revenge. However, it tends to create an impression that the denial of the proposition is not unreasonable. But as regards the definition of anger it is not so easy to find an objection as in some other cases.

c. Establish a universal premiss by a definition relating to a co-ordinate of the actual term.

"Ἐτι τὸ προτείνειν μὴ ὥς δι' αὐτὸ ἄλλ' ἄλλου
 5 χάριν προτείνοντα· εὐλαβοῦνται γὰρ τὰ πρὸς τὴν
 θέσιν χρήσιμα. ἀπλῶς δ' εἰπεῖν, ὅτι μάλιστα
 ποιεῖν ἄδηλον πότερον τὸ προτεινόμενον ἢ τὸ
 ἀντικείμενον βούλεται λαβεῖν· ἀδήλου γὰρ ὄντος
 τοῦ πρὸς τὸν λόγον χρησίμου μᾶλλον τὸ δοκοῦν
 αὐτοῖς τιθέασιν.

- 10 "Ἐτι διὰ τῆς ὁμοιότητος πυνθάνεσθαι· καὶ γὰρ
 πιθανὸν καὶ λανθάνει μᾶλλον τὸ καθόλου. οἶον
 ὅτι ὥσπερ ἐπιστήμη καὶ ἄγνοια τῶν ἐναντίων ἢ
 αὐτή, οὕτω καὶ αἰσθησις τῶν ἐναντίων ἢ αὐτή, ἢ
 ἀνάπαλιν, ἐπειδὴ αἰσθησις ἢ αὐτή, καὶ ἐπιστήμη.
 τοῦτο δ' ἐστὶν ὅμοιον ἐπαγωγῇ, οὐ μὴν ταυτόν
 15 γε· ἐκεῖ μὲν γὰρ ἀπὸ τῶν καθ' ἕκαστα τὸ καθόλου
 λαμβάνεται, ἐπὶ δὲ τῶν ὁμοίων οὐκ ἔστι τὸ
 λαμβανόμενον τὸ καθόλου, ὅφ' ὃ πάντα τὰ ὁμοιά
 ἐστίν.

- Δεῖ δὲ καὶ αὐτόν ποτε αὐτῷ ἔνστασιν φέρειν·
 ἀνυπόπτως γὰρ ἔχουσιν οἱ ἀποκρινόμενοι πρὸς
 20 τοὺς δοκοῦντας δικαίως ἐπιχειρεῖν. χρήσιμον δὲ
 καὶ τὸ ἐπιλέγειν ὅτι σύνηθες καὶ λεγόμενον τὸ
 τοιοῦτον· ὁκνοῦσι γὰρ κινεῖν τὸ εἰωθὸς ἔνστασιν
 μὴ ἔχοντες. ἅμα δὲ καὶ τῷ χρῆσθαι καὶ αὐτοὶ τοῖς
 τοιούτοις φυλάττονται κινεῖν αὐτά. ἔτι τὸ μὴ
 σπουδάζειν, κἂν ὅλως χρήσιμον ᾖ· πρὸς γὰρ τοὺς
 25 σπουδάζοντας μᾶλλον ἀντιτείνουσιν. καὶ τὸ ὥς
 ἐν παραβολῇ προτείνειν· τὸ γὰρ δι' ἄλλο προτεινό-
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Furthermore, you should state your proposition as if you were doing so not for its own sake but with some other object ; for people are on the watch against what is useful for the thesis. In a word, the questioner should leave it obscure whether he wishes to establish what he is really proposing or its opposite ; for if what is useful to the argument is obscure, people are more likely to state what they really think.

d. Conceal the object of the desired concession.

Further, you should carry on your questioning by means of similarity ; for this is a plausible method, and the universal is less obvious. For example, you should argue that, as knowledge and ignorance of contraries is the same thing, so is the perception of contraries the same thing, or, conversely, since the perception of them is the same, so also is the knowledge. This method resembles induction but is not the same thing ; for, in induction, the universal is established from the particulars, whereas, in dealing with similars, what is established is not the universal under which all the similars fall.

e. Secure the admissions by means of likeness.

You should, also, yourself sometimes bring an objection against yourself ; for answerers are unsuspicious when dealing with those who appear to them to be arguing fairly. It is useful also to add : " Such and such a view is that generally held and expressed " ; for people shrink from trying to upset customary opinions unless they have some objection to bring, and they are wary of trying to upset them at the same time as they are themselves also making use of such things. Further, you should not be too zealous, even though it is entirely to your advantage to be so ; for people offer more opposition to the zealous. Further, you should put forward your proposition as if it were an illustration ; for people

f. Various other devices : e.g. self-objection, indifference and irrelevant amplification.

μενον καὶ μὴ δι' αὐτὸ χρήσιμον τιθέασι μᾶλλον.
 ἔτι μὴ αὐτὸ προτείνειν ὁ δεῖ ληφθῆναι, ἀλλ' ὧ
 τοῦτο ἔπεται ἐξ ἀνάγκης· μᾶλλον τε γὰρ συγ-
 χωροῦσι διὰ τὸ μὴ ὁμοίως ἐκ τούτου φανερόν
 30 εἶναι τὸ συμβησόμενον, καὶ ληφθέντος τούτου
 εἴληπται καὶ αὐτὸ. καὶ τὸ ἐπ' ἐσχάτῳ ἐρωτᾶν ὁ
 μάλιστα βούλεται λαβεῖν· μάλιστα γὰρ τὰ πρῶτα
 ἀνανεύουσι διὰ τὸ τοὺς πλείστους τῶν ἐρωτώντων
 πρῶτα λέγειν περὶ ἃ μάλιστα σπουδάζουσιν. πρὸς
 ἐνίους δὲ πρῶτα τὰ τοιαῦτα προτείνειν· οἱ γὰρ
 35 δύσκολοι τὰ πρῶτα μάλιστα συγχωροῦσιν, ἂν μὴ
 παντελῶς φανερόν ᾗ τὸ συμβησόμενον, ἐπὶ τελευτῆς
 δὲ δυσκολαίνουσιν. ὁμοίως δὲ καὶ ὅσοι οἴονται
 δριμύεις εἶναι ἐν τῷ ἀποκρίνεσθαι· θέντες γὰρ τὰ
 πλεῖστα ἐπὶ τέλους τερθρεύονται ὥς οὐ συμ-
 βαίνοντος ἐκ τῶν κειμένων· τιθέασι δὲ προχείρως,
 157 a πιστεύοντες τῇ ἔξει καὶ ὑπολαμβάνοντες οὐδὲν
 πείσεσθαι. ἔτι τὸ μηκύνειν καὶ παρεμβάλλειν
 τὰ μηδὲν χρήσιμα πρὸς τὸν λόγον, καθάπερ οἱ
 ψευδογραφοῦντες· πολλῶν γὰρ ὄντων ἄδηλον ἐν
 ὁποίῳ τὸ ψεῦδος. διὸ καὶ λανθάνουσιν ἐνίστε οἱ
 5 ἐρωτώντες ἐν παραβύστῳ προστιθέντες ἃ καθ'
 αὐτὰ προτεινόμενα οὐκ ἂν τεθείη.

Εἰς μὲν οὖν κρίψιν τοῖς εἰρημένοισι χρηστέον, εἰς

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more readily admit what is proposed for some other purpose and is not useful for its own sake. Further, you should not put forward the actual proposition which has to be established, but something from which it necessarily follows; for people are more likely to concede the latter because what will follow from it is less obvious, and when it has been established, the other has also been established. Also you should keep for the last question the point which you most wish to establish; for people are most apt to deny the first questions asked because most questioners put first the points on which they set most store. But in dealing with some people you should put forward such propositions first; for bad-tempered people most readily concede the first points, if what is going to result is not absolutely obvious, and indulge their bad temper at the end. Something of the same kind occurs with those who think that they are clever at answering; for, after admitting most of the points, they finally indulge in quibbling, saying that the conclusion does not result from what has been admitted, yet they make admissions readily, trusting to their habitual practice and conceiving that they will suffer no defeat. Further, it is a good thing to prolong the argument and to introduce into it points which are of no practical good, just as those do who construct false geometrical figures; for, when the material is abundant, it is less obvious where the fallacy lies. It is for this reason also that those who are asking questions escape detection by introducing in a hole-and-corner fashion things which, if proposed separately, would not be admitted.

For concealing your purpose, then, the above (3) *For ornament.* mentioned methods should be used; for ornament,

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δὲ κόσμον ἐπαγωγῇ καὶ διαιρέσει τῶν συγγενῶν.
 ἢ μὲν οὖν ἐπαγωγῇ ὅποιον τί ἐστι δῆλον, τὸ δὲ
 διαιρεῖσθαι τοιοῦτον οἶον ὅτι ἐπιστήμη ἐπιστήμης
 10 βελτίων ἢ τῷ ἀκριβεστέρα εἶναι ἢ τῷ βελτιόνων,
 καὶ ὅτι τῶν ἐπιστημῶν αἱ μὲν θεωρητικαὶ αἱ δὲ
 πρακτικαὶ αἱ δὲ ποιητικαί. τῶν γὰρ τοιούτων
 ἕκαστον συνεπικοσμεῖ μὲν τὸν λόγον, οὐκ ἀναγκαῖα
 δὲ ῥηθῆναι πρὸς τὸ συμπέρασμα.

Εἰς δὲ σαφήνειαν παραδείγματα καὶ παραβολὰς
 15 οἰστέον, παραδείγματα δὲ οἰκεία καὶ ἐξ ὧν ἴσμεν,
 οἷα Ὅμηρος, μὴ οἷα Χοιρίλος· οὕτω γὰρ ἂν σα-
 φέστερον εἶη τὸ προτεινόμενον.

II. Χρηστέον δ' ἐν τῷ διαλέγεσθαι τῷ μὲν
 συλλογισμῷ πρὸς τοὺς διαλεκτικούς μᾶλλον ἢ
 20 πρὸς τοὺς πολλούς, τῇ δ' ἐπαγωγῇ τοῦναντίον
 πρὸς τοὺς πολλοὺς μᾶλλον· εἴρηται δ' ὑπὲρ τούτων
 καὶ πρότερον. ἔστι δὲ ἐπ' ἐνίων μὲν ἐπάγοντα
 δυνατόν ἐρωτῆσαι τὸ καθόλου, ἐπ' ἐνίων δ' οὐ
 ῥάδιον διὰ τὸ μὴ κεῖσθαι ταῖς ὁμοιότησιν ὄνομα
 πάσαις κοινόν· ἀλλ' ὅταν δέῃ τὸ καθόλου λαβεῖν,
 οὕτως ἐπὶ πάντων τῶν τοιούτων φασίν· τοῦτο
 25 δὲ διορίσαι τῶν χαλεπωτάτων, ὅποια τῶν προ-
 φερομένων τοιαῦτα καὶ ποῖα οὐ. καὶ παρὰ τοῦτο
 πολλάκις ἀλλήλους παρακροῦνται κατὰ τοὺς
 λόγους, οἱ μὲν φάσκοντες ὅμοια εἶναι τὰ μὴ ὄντα
 ὅμοια, οἱ δ' ἀμφισβητοῦντες τὰ ὅμοια μὴ εἶναι
 ὅμοια. διὸ πειρατέον ἐπὶ πάντων τῶν τοιούτων
 30 ὀνοματοποιεῖν αὐτόν, ὅπως μήτε τῷ ἀποκρινομένῳ

^a An epic poet of Iasos in Asia Minor who attached himself to Alexander the Great (Horace, *A.P.* 357, *Err.* ii. 1. 233).

^b 105 a 16-19.

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you should employ induction and the distinction of things of a closely similar kind. What induction is, is obvious ; distinction is attained by statements such as that one science is better than another, either because it is more exact or because it is concerned with better objects, and that some sciences are theoretical, others practical and others creative. Every distinction of this kind helps to adorn your argument, though its introduction is not necessary to the conclusion.

For clearness, examples and illustrations should be adduced, the examples being to the point and drawn from things which are familiar to us, of the kind which Homer uses and not of the kind that Choerilus ^a employs ; for thus the proposition would be rendered clearer. (4) *For clearness.*

II. In dialectical argument, the syllogism should be used against dialecticians rather than against the multitude ; on the contrary, induction should rather be used against the multitude ; this matter has been dealt with before.^b When you are using induction, it is possible sometimes to put the question in a general form, but sometimes it is not easy to do so, because there is no common term laid down which applies to all the similarities ; but, when it is necessary to establish the universal, people use the expression "So in all cases of this kind." But it is one of the most difficult of tasks to define which of the terms proposed are ' of this kind ' and which are not. Because of this, people often mislead one another in their discussions, some alleging that things are similar which are not similar, others arguing that similar things are not similar. Therefore, you must try to invent a term which will apply to all things of a certain kind, in order that it may be impossible (b) *Inductions.*

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ἐξῇ ἀμφισβητεῖν ὥς οὐχ ὁμοίως τὸ ἐπιφερόμενον λέγεται, μήτε τῷ ἐρωτῶντι συκοφαντεῖν ὥς ὁμοίως λεγομένου, ἐπειδὴ πολλὰ τῶν οὐχ ὁμοίως λεγομένων ὁμοίως φαίνεται λέγεσθαι.

Ὅταν δ' ἐπάγοντος ἐπὶ πολλῶν μὴ διδῶ τὸ
 35 καθόλου, τότε δίκαιον ἀπαιτεῖν ἔνστασιν. μὴ
 εἰπόντα δ' αὐτὸν ἐπὶ τίνων οὕτως, οὐ δίκαιον
 ἀπαιτεῖν ἐπὶ τίνων οὐχ οὕτως· δεῖ γὰρ ἐπάγοντα
 πρότερον οὕτω τὴν ἔνστασιν ἀπαιτεῖν. ἀξιωτέον
 τε τὰς ἐνστάσεις μὴ ἐπ' αὐτοῦ τοῦ προτεινομένου
 φέρειν, ἐὰν μὴ ἔν μόνον ἢ τὸ τοιοῦτον, καθάπερ
 157 b ἡ δυὰς τῶν ἀρτίων μόνος ἀριθμὸς πρῶτος· δεῖ
 γὰρ τὸν ἐνιστάμενον ἐφ' ἑτέρου τὴν ἔνστασιν
 φέρειν, ἢ λέγειν ὅτι τοῦτο μόνον τοιοῦτο. πρὸς
 δὲ τοὺς ἐνισταμένους τῷ καθόλου, μὴ ἐν αὐτῷ δὲ
 τὴν ἔνστασιν φέροντας ἀλλ' ἐν τῷ ὁμωνύμῳ, οἷον
 5 ὅτι ἔχοι ἂν τις τὸ μὴ αὐτοῦ χρῶμα ἢ πόδα ἢ
 χεῖρα (ἔχοι γὰρ ἂν ὁ ζωγράφος χρῶμα καὶ ὁ
 μάγειρος πόδα τὸν μὴ αὐτοῦ) διελόμενον οὖν ἐπὶ
 τῶν τοιούτων ἐρωτητέον· λανθανούσης γὰρ τῆς
 ὁμωνυμίας εὖ δόξει ἐνστήναι τῇ προτάσει. ἐὰν
 δὲ μὴ ἐν τῷ ὁμωνύμῳ ἀλλ' ἐν αὐτῷ ἐνιστάμενος
 10 κωλύῃ τὴν ἐρώτησιν, ἀφαιρουντα δεῖ ἐν ᾧ ἢ
 ἔνστασις προτείνειν τὸ λοιπὸν καθόλου ποιούντα,
 ἕως ἂν λάβῃς¹ τὸ χρήσιμον. οἷον ἐπὶ τῆς λήθης

¹ Reading λάβῃς with C.

either for the answerer to argue that what is being proposed is not used similarly, or for the questioner falsely to represent it as used similarly when it is not so, since many things seem to be used similarly when they are not really so.

When one makes an induction on the basis of a number of particulars and the answerer refuses to admit the universal, one is justified in demanding his objection. If, on the other hand, one has not oneself stated the cases in which something is so, one is not justified in demanding from him the cases in which it is not so; one ought to make the induction first and then demand the objection. Also, one ought to demand that objections should not be brought against the actual thing proposed unless it is the only one thing of its kind, as, for example, two is the only even number which is a prime number; for the objector ought either to make his objection with regard to another instance or else assert that the instance in question is the only one of its kind. When people object to a universal proposition, bringing their objection not against the thing itself but against something homonymous with it—saying, for example, that a man could not have a colour or a foot or a hand which was not his own (for a painter could have a colour and a cook could have a foot which was not his own)—you should make a distinction in such cases and then ask your question; for, if the homonym is not exposed, the objection to the proposition will appear valid. If, however, he stops your questioning by objecting not to a homonym but to the thing itself, you should omit the point to which the objection is made and bring forward the remainder, putting it in the form of a universal, until you have got what you require. For

(c) *Objections.*

καὶ τοῦ ἐπιλελῆσθαι· οὐ γὰρ συγχωροῦσι τὸν
 ἀποβεβληκότα ἐπιστήμην ἐπιλελῆσθαι, διότι μετα-
 πεσόντος τοῦ πράγματος ἀποβέβληκε μὲν τὴν
 ἐπιστήμην, ἐπιλέλησται δ' οὐ. ῥητέον οὖν ἀφε-
 15 λόντα ἐν ᾧ ἡ ἔνστασις τὸ λοιπὸν, οἷον εἰ διαμέ-
 νοντος τοῦ πράγματος ἀποβέβληκε τὴν ἐπιστήμην,
 διότι ἐπιλέλησται. ὁμοίως δὲ καὶ πρὸς τοὺς
 ἐνισταμένους διότι τῷ μείζονι ἀγαθῷ μείζον
 ἀντίκειται κακόν· προφέρουσι γὰρ ὅτι τῇ ὑγείᾳ,
 ἐλάττονι ὄντι ἀγαθῷ τῆς εὐεξίας, μείζον κακὸν
 20 ἀντίκειται· τὴν γὰρ νόσον μείζον κακὸν εἶναι τῆς
 καχεξίας. ἀφαιρετέον οὖν καὶ ἐπὶ τούτου ἐν ᾧ
 ἡ ἔνστασις· ἀφαιρεθέντος γὰρ μᾶλλον ἂν θείῃ,
 οἷον ὅτι τῷ μείζονι ἀγαθῷ μείζον κακὸν ἀντίκει-
 ται, ἐὰν μὴ συνεπιφέρῃ θάτερον θάτερον, καθάπερ
 ἡ εὐεξία τὴν ὑγίειαν. οὐ μόνον δ' ἐνισταμένου
 25 τοῦτο ποιητέον, ἀλλὰ καὶ ἄνευ ἐνστάσεως ἀρνήται
 διὰ τὸ προορᾶν τι τῶν τοιούτων· ἀφαιρεθέντος
 γὰρ ἐν ᾧ ἡ ἔνστασις, ἀναγκασθήσεται τιθέναι διὰ
 τὸ μὴ προορᾶν ἐν τῷ λοιπῷ ἐπὶ τίνος οὐχ οὕτως·
 ἐὰν δὲ μὴ τιθῇ, ἀπαιτούμενος ἔνστασιν οὐ μὴ
 ἔχῃ ἀποδοῦναι. εἰσὶ δὲ τοιαῦται τῶν προτάσεων
 30 αἱ ἐπὶ τὶ μὲν ψευδεῖς ἐπὶ τὶ δ' ἀληθεῖς· ἐπὶ τούτων
 γὰρ ἔστιν ἀφελόντα τὸ λοιπὸν ἀληθὲς καταλιπεῖν.

example, in the case of forgetfulness and having forgotten, people do not concede that the man who has lost the knowledge of something has forgotten it, because, if the thing changes, he has lost knowledge of it but has not forgotten it. You must, therefore, omit the point to which the objection is made and assert the remainder, saying, for example, that if he has lost the knowledge of the thing while it still remains, he has then forgotten it. You must deal similarly with those who object to the statement that a greater evil is the opposite of the greater good ; for they advance the argument that health, which is a lesser good than sound bodily condition, has a greater evil as its opposite, since disease is a greater evil than unsound bodily condition. You must, therefore, omit in this instance also the point to which the objection is made ; for, if this is omitted, your opponent would more readily make an admission such as that " the greater evil is the opposite of the greater good, unless one good entails the other also," as sound bodily condition entails health. This course should be followed, not only when he offers an objection, but also if he denies your proposition without making an objection, because he foresees something of this kind ; for, if that to which the objection is made is omitted, he will be forced to admit your proposition because he cannot foresee any case in which it is not true in the future course of the argument. If he does not admit it, he will be quite unable to assign an objection when asked to do so. Propositions of this kind are those which are partly false and partly true. In dealing with these it is possible to omit something and leave the remainder true. If you make a proposition based on

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ἐὰν δ' ἐπὶ πολλῶν προτείνοντος μὴ φέρῃ ἔνστασιν, ἀξιοτέον τιθέναι· διαλεκτικὴ γάρ ἐστι πρότασις πρὸς ἣν οὕτως ἐπὶ πολλῶν ἔχουσιν μὴ ἔστιν ἔνστασις.

Ὅταν δ' ἐνδέχῃται τὸ αὐτὸ ἄνευ τε τοῦ ἀδυνάτου
 35 καὶ διὰ τοῦ ἀδυνάτου συλλογίσασθαι, ἀποδεικνύντι μὲν καὶ μὴ διαλεγομένῳ οὐδὲν διαφέρει οὕτως ἢ ἐκείνῳ συλλογίσασθαι, διαλεγομένῳ δὲ πρὸς ἄλλον οὐ χρηστέον τῷ διὰ τοῦ ἀδυνάτου συλλογισμῷ. ἄνευ μὲν γὰρ τοῦ ἀδυνάτου συλλογισμῷ οὐκ ἔστιν ἀμφισβητεῖν· ὅταν δὲ τὸ ἀδύνατον
 158 a συλλογίσῃται, ἂν μὴ λίαν ἢ περιφανὲς ψεῦδος ὦν, οὐκ ἀδύνατόν φασιν εἶναι, ὥστ' οὐ γίνεται τοῖς ἐρωτῶσιν ὁ βούλονται.

Δεῖ δὲ προτείνειν ὅσα ἐπὶ πολλῶν μὲν οὕτως ἔχει, ἔνστασις δὲ ἢ ὅλως μὴ ἔστιν ἢ μὴ ἐπιπολῆς
 5 τὸ συνιδεῖν· μὴ δυνάμενοι γὰρ συνορᾶν ἐφ' ὧν οὐχ οὕτως, ὥς ἀληθὲς ὦν τιθέασιν.

Οὐ δεῖ δὲ τὸ συμπέρασμα ἐρώτημα ποιεῖν· εἰ δὲ μὴ, ἀνανεύσαντος οὐ δοκεῖ γεγονέναι συλλογισμός. πολλάκις γὰρ καὶ μὴ ἐρωτῶντος ἄλλ'
 10 ὡς συμβαῖνον ἐπιφέροντος ἀρνοῦνται, καὶ τοῦτο ποιοῦντες οὐ δοκοῦσιν ἐλέγχεσθαι τοῖς μὴ συνορῶσιν ὅτι συμβαίνει ἐκ τῶν τεθέντων. ὅταν οὖν μηδὲ φήσας συμβαίνειν ἐρωτήσῃ, ὁ δ' ἀρνηθῇ, παντελῶς οὐ δοκεῖ γεγονέναι συλλογισμός.

a number of instances and he offers no objection, you must claim that he admits it; for a dialectical proposition is one which thus rests on a number of instances and against which there is no objection.

When it is possible to establish the same point either without or by means of the impossible, if one is demonstrating and not arguing dialectically, it does not matter whether one reasons by the former or the latter method; but if one is arguing dialectically with another person, reasoning by means of the impossible must not be employed. For if one has reasoned without the impossible, no dispute can arise; but when one establishes the impossible by reasoning, unless the fallacy is too obvious, people declare that there is no impossibility, so that the questioners do not achieve their object.

One ought to advance all the propositions which are true in a number of instances and to which there is no objection at all, or at any rate none to be seen on the surface; for if men can see no instances in which the proposition does not hold good, they admit it as true.

One ought not to put the conclusion in the form of a question; otherwise one's opponent shakes his head and the reasoning appears to have been unsuccessful. For often, even if one does not put it in the form of a question but advances it as a consequence, people deny it, and by so doing avoid appearing to be refuted in the eyes of those who fail to see that the conclusion follows from the admissions which have been made. Whenever, therefore, one puts the conclusion in the form of a question, without even saying that it follows as a consequence, and the other party denies it, the reasoning has the appearance of having failed utterly.

(d) *The argument per impossible.*

(e) *Various recommendations on the putting of questions.*

Οὐ δοκεῖ δὲ πᾶν τὸ καθόλου διαλεκτικὴ πρό-
 15 τασις εἶναι οἷον τί ἐστὶν ἄνθρωπος, ἣ ποσαχῶς
 λέγεται τὰγαθόν; ἔστι γὰρ πρότασις διαλεκτικὴ
 πρὸς ἣν ἔστιν ἀποκρίνασθαι ναί ἢ οὐ· πρὸς δὲ
 τὰς εἰρημένας οὐκ ἔστιν. διὸ οὐ διαλεκτικά ἐστι
 τὰ τοιαῦτα τῶν ἐρωτημάτων, ἂν μὴ αὐτὸς διορί-
 σας ἢ διελόμενος εἴπῃ, οἷον ἄρά γε τὰγαθὸν οὕτως
 20 ἢ οὕτως λέγεται; πρὸς γὰρ τὰ τοιαῦτα ῥαδίᾳ ἢ
 ἀπόκρισις ἢ καταφήσαντι ἢ ἀποφήσαντι. διὸ πει-
 ρατέον οὕτω προτείνειν τὰς τοιαύτας τῶν προτά-
 σεων. ἅμα δὲ καὶ δίκαιον ἴσως παρ' ἐκείνου
 ζητεῖν ποσαχῶς λέγεται τὰγαθόν, ὅταν αὐτοῦ διαι-
 ρουμένου καὶ προτείνοντος μηδαμῶς συγχωρῇ.

25 "Οστις δ' ἓνα λόγον πολὺν χρόνον ἐρωτᾷ, κακῶς
 πυνθάνεται. εἰ μὲν γὰρ ἀποκρινομένου τοῦ ἐρω-
 τωμένου τὸ ἐρωτώμενον, δῆλον ὅτι πολλὰ ἐρωτή-
 ματα ἐρωτᾷ ἢ πολλάκις ταῦτά, ὥστε ἢ ἀδολεσχεῖ
 ἢ οὐκ ἔχει συλλογισμόν· ἐξ ὀλίγων γὰρ πᾶς συλ-
 λογισμός· εἰ δὲ μὴ ἀποκρινομένου, διὰ τί¹ οὐκ
 30 ἐπιτιμᾷ ἢ ἀφίσταται;

III. "Εστι δ' ἐπιχειρεῖν τε χαλεπὸν καὶ ὑπέχειν
 ῥαδίον τὰς αὐτὰς ὑποθέσεις. ἔστι δὲ τοιαῦτα τὰ
 τε φύσει πρῶτα καὶ τὰ ἔσχατα. τὰ μὲν γὰρ
 πρῶτα ὅρου δεῖται, τὰ δ' ἔσχατα διὰ πολλῶν
 35 περαίνεται βουλομένῳ τὸ συνεχὲς λαμβάνειν ἀπὸ

¹ Reading διὰ τί for ὅτι.

It is generally agreed that not every universal can form a dialectical proposition, for example "What is man?" or "In what various senses can 'the good' be used?" For a dialectical proposition is one to which it is possible to answer 'yes' or 'no,' whereas to the above questions this is impossible. Therefore such questions are not dialectical unless the questioner himself makes divisions or distinctions before he asks them, saying, for example, "Is 'the good' used in this or in that sense?" To such questions the answer can easily be given by affirmation or denial. So you must try to advance such propositions in this form. At the same time it is also perhaps justifiable to inquire from the answerer what are the various senses in which 'the good' is used, when you have yourself distinguished and formulated them, and he absolutely refuses to agree.

Anyone who goes on asking one question for a long time is a bad interrogator. For, if the person questioned keeps on answering his question, obviously he asks a number of questions or asks the same thing time after time, so that either he is babbling or else he has no reasoned argument to offer; for reasoning is always based on a few premisses only. On the other hand, if he goes on asking questions because the other party does not answer, why does he not reprove him or else stop asking questions?

III. The same hypotheses may be both difficult to attack and easy to defend. Both things which are by nature primary and things which are by nature ultimate are of this kind. For things which are primary require definition and things which are ultimate are reached by many stages if one wishes to establish a continuous train of proof from primary

[Notes on various degrees of difficulty in dialectic arguments: (a) Things which are primary and which are ultimate

158 a

τῶν πρώτων, ἢ σοφισματώδη φαίνεται τὰ ἐπιχειρήματα· ἀδύνατον γὰρ ἀποδείξαι τι μὴ ἀρξάμενον ἀπὸ τῶν οἰκείων ἀρχῶν καὶ συνείραντα μέχρι τῶν ἐσχάτων. ὀρίζεσθαι μὲν οὖν οὐτ' ἀξιοῦσιν οἱ ἀποκρινόμενοι, οὐτ' ἂν ὁ ἐρωτῶν ὀρίζεται προσέχουσιν· μὴ γενομένου δὲ φανεροῦ τί

158 b ποτ' ἐστὶ τὸ προκείμενον, οὐ ράδιον ἐπιχειρεῖν. μάλιστα δὲ τὸ τοιοῦτον περὶ τὰς ἀρχὰς συμβαίνει· τὰ μὲν γὰρ ἄλλα διὰ τούτων δείκνυται, ταῦτα δ' οὐκ ἐνδέχεται δι' ἐτέρων, ἀλλ' ἀναγκαῖον ὁρισμῶ τῶν τοιούτων ἕκαστον γνωρίζειν.

- 5 "Ἐστὶ δὲ δυσεπιχειρήτα καὶ τὰ λίαν ἐγγὺς τῆς ἀρχῆς· οὐ γὰρ ἐνδέχεται πολλοὺς πρὸς αὐτὰ λόγους πορίσασθαι, ὀλίγων ὄντων τῶν ἀνὰ μέσον αὐτοῦ τε καὶ τῆς ἀρχῆς, δι' ὧν ἀνάγκη δείκνυσθαι τὰ μετὰ ταῦτα. τῶν δὲ ὄρων δυσεπιχειρητότατοι πάντων εἰσὶν ὅσοι κέχρηται τοιούτοις ὀνόμασιν,
- 10 ἃ πρῶτον μὲν ἄδηλά ἐστιν εἴτε ἀπλῶς εἴτε πολλαχῶς λέγεται, πρὸς δὲ τούτοις μηδὲ γνώριμα πότερον κυρίως ἢ κατὰ μεταφορὰν ὑπὸ τοῦ ὀρισμένου λέγεται. διὰ μὲν γὰρ τὸ ἀσαφὴ εἶναι οὐκ ἔχει ἐπιχειρήματα, διὰ δὲ τὸ ἀγνοεῖσθαι εἰ παρὰ τὸ κατὰ μεταφορὰν λέγεσθαι τοιαῦτ' ἐστίν, οὐκ
- 15 ἔχει ἐπιτίμησιν.

"Ὅλως δὲ πᾶν πρόβλημα, ὅταν ἢ δυσεπιχείρητον, ἢ ὅρου δεῖσθαι ὑποληπτέον, ἢ τῶν πολλαχῶς ἢ τῶν κατὰ μεταφορὰν εἶναι λεγομένων, ἢ οὐ πόρρω

principles, or else the arguments have the appearance of being sophistical ; for it is impossible to demonstrate anything without starting from the appropriate first principles and keeping up a connected argument until ultimate principles are reached. Now those who are being questioned do not want to give definitions nor do they take any notice if the questioner gives them ; and yet it is difficult to argue if what is proposed is not made clear. This kind of thing is most likely to happen in the matter of first principles ; for, whereas it is through them that everything else is made clear, they cannot be made clear through anything else, but everything of that kind must be made known by definition.

are difficult to overthrow but easy to establish.

Things which lie very close to a first principle are also difficult to attack ; for it is not possible to supply many arguments against them, since the stages between them and the first principle, through which it is necessary to prove what is to follow, are few. Of definitions the most difficult to attack are those which employ terms about which, firstly, it is not clear whether they are used in one sense only or in several senses, and, besides this, it is not known whether they are used in their original sense or metaphorically by the framer of the definition. For, because of their obscurity, they do not offer points of attack, and, because one does not know whether they are obscure from being used metaphorically, they do not offer matter for criticism.

(b) Inferences which lie very near a first principle are difficult to attack.

To speak generally, any problem, when it proves difficult to attack, may be supposed either to require definition, or to be one of those which bear several meanings or are couched in metaphorical language, or else to be not far removed from first principles ;

(c) Various difficulties which hinder the confutation of an opponent.

τῶν ἀρχῶν, ἥ διὰ τὸ μὴ φανερόν εἶναι πρῶτον
 20 ἡμῖν τοῦτ' αὐτό, κατὰ τίνα ποτὲ τῶν εἰρημένων
 τρόπον ἐστὶν ὃ τὴν ἀπορίαν παρέχεται· φανεροῦ
 γὰρ ὄντος τοῦ τρόπου δῆλον ὅτι ἡ ὀρίζεσθαι ἂν
 δέοι ἢ διαιρεῖσθαι ἢ τὰς ἀνὰ μέσον προτάσεις
 πορίζεσθαι· διὰ τούτων γὰρ δείκνυται τὰ ἔσχατα.

Πολλαῖς τε τῶν θέσεων μὴ καλῶς ἀποδιδομένου
 25 τοῦ ὀρισμοῦ οὐ ρᾶδιον διαλέγεσθαι καὶ ἐπιχειρεῖν,
 οἷον πότερον ἐν ἐνὶ ἐναντίον ἢ πλείω· ὀρισθέντων
 δὲ τῶν ἐναντίων κατὰ τρόπον ρᾶδιον συμβιβάσαι
 πότερον ἐνδέχεται πλείω τῷ αὐτῷ εἶναι ἐναντία
 ἢ οὐ. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων
 τῶν ὀρισμοῦ δεομένων. ἔοικε δὲ καὶ ἐν τοῖς
 30 μαθήμασιν ἕνα δι' ὀρισμοῦ ἔλλειψιν οὐ ραδίως
 γράφεσθαι, οἷον καὶ ὅτι ἢ παρὰ τὴν πλευρὰν
 τέμνουσα τὸ ἐπίπεδον ὁμοίως διαιρεῖ τὴν τε γραμ-
 μὴν καὶ τὸ χωρίον. τοῦ δὲ ὀρισμοῦ ῥηθέντος
 εὐθέως φανερόν τὸ λεγόμενον· τὴν γὰρ αὐτὴν
 ἀνταναίρεσιν ἔχει τὰ χωρία καὶ αἱ γραμμαί· ἔστι
 35 δ' ὀρισμὸς τοῦ αὐτοῦ λόγου οὗτος. ἀπλῶς δὲ τὰ
 πρῶτα τῶν στοιχείων τιθεμένων μὲν τῶν ὀρισμῶν,
 οἷον τί γραμμὴ καὶ τί κύκλος, ῥᾶστα δεῖξαι, πλὴν
 οὐ πολλά γε πρὸς ἕκαστον ἔστι τούτων ἐπιχειρεῖν
 διὰ τὸ μὴ πολλὰ τὰ ἀνὰ μέσον εἶναι· ἂν δὲ μὴ
 τιθῶνται οἱ τῶν ἀρχῶν ὀρισμοί, χαλεπόν, τάχα δ'
 698

or it may be because at first this point is not clear to us, namely, in which of the above-mentioned ways the cause of our difficulty arises ; for, when the manner in which it arises is plain, it is obvious that it would be necessary either to give a definition, or to make a distinction, or to supply the intervening premisses ; for it is by these means that the ultimate conclusions are shown.

There are many theses which are not easily discussed and dealt with unless the definition is correctly assigned, for example, the question whether one thing has one contrary or many. If a proper definition has been given of 'contraries,' it is easy to make people see whether the same thing can have more than one contrary or not. The other terms which need definition can be dealt with in the same way. It seems likely that in mathematics also the construction of geometrical figures is sometimes rendered difficult through lack of definition, for example, in the proof that the line cutting the superficies parallel to the side of a parallelogram divides both the line and the area 'similarly.'^a If the definition of 'similarly' is stated, the meaning immediately becomes clear ; for the areas and lines undergo the same corresponding diminution, and this is the definition of 'in the same ratio.' To speak generally, it is very easy to make clear the most primary of the elementary principles, such as the meaning of a line or a circle, if their definitions are laid down, except that it is not possible to advance numerous arguments about any one of them because the intervening stages are not many. If, however, the definitions of the first principles are not laid down, it is difficult and perhaps

(d) Difficulties from a badly enunciated definition.

^a This is interpreted in l. 35 to mean 'in the same ratio.'

159 ^a ὅλως ἀδύνατον. ὁμοίως δὲ τούτοις καὶ ἐπὶ τῶν
κατὰ τοὺς λόγους ἔχει.

Οὕκουν δεῖ λανθάνειν, ὅταν δυσεπιχείρητος ᾖ
ἡ θέσις, ὅτι πέπονθέ τι τῶν εἰρημένων. ὅταν δ'
⁵ ᾖ πρὸς τὸ ἀξίωμα καὶ τὴν πρότασιν μείζον ἔργον
διαλεγῆναι ἢ τὴν θέσιν, διαπορήσειεν ἂν τις πό-
τερον θετέον τὰ τοιαῦτα ἢ οὐ. εἰ γὰρ μὴ θήσῃ
ἀλλ' ἀξιώσει καὶ πρὸς τοῦτο διαλέγεσθαι, μείζον
προστάξει τοῦ ἐν ἀρχῇ κειμένου· εἰ δὲ θήσῃ,
πιστεύσει ἐξ ἡττον πιστῶν. εἰ μὲν οὖν δεῖ μὴ
¹⁰ χαλεπώτερον τὸ πρόβλημα ποιεῖν, θετέον, εἰ δὲ
διὰ γνωριμωτέρων συλλογίζεσθαι, οὐ θετέον· ἢ
τῷ μὲν μανθάνοντι οὐ θετέον, ἂν μὴ γνωριμώτερον
ᾖ, τῷ δὲ γυμναζομένῳ θετέον, ἂν ἀληθὲς μόνον
φαίνεται. ὥστε φανερόν ὅτι οὐχ ὁμοίως ἐρωτῶντί
τε καὶ διδάσκοντι ἀξιωτέον τιθέναι.

¹⁵ IV. Πῶς μὲν οὖν ἐρωτηματίζειν καὶ τάττειν
δεῖ, σχεδὸν ἱκανὰ τὰ εἰρημένα· περὶ δ' ἀποκρίσεως
πρῶτον μὲν διοριστέον τί ἐστὶν ἔργον τοῦ καλῶς
ἀποκρινομένου, καθάπερ τοῦ καλῶς ἐρωτῶντος.
ἔστι δὲ τοῦ μὲν ἐρωτῶντος τὸ οὕτως ἐπαγαγεῖν
τὸν λόγον ὥστε ποιῆσαι τὸν ἀποκρινόμενον τὰ
²⁰ ἀδοξότατα λέγειν τῶν διὰ τὴν θέσιν ἀναγκαίων,
τοῦ δ' ἀποκρινομένου τὸ μὴ δι' αὐτὸν φαίνεσθαι
συμβαίνειν τὸ ἀδύνατον ἢ τὸ παράδοxon, ἀλλὰ διὰ

^a 158 b 16-21.

wholly impossible. There is a close resemblance between dialectical and geometrical processes.

We must then carefully note that, when a thesis is hard to deal with, it is because one of the above-mentioned circumstances ^a has arisen in connexion with it. When, however, it is a harder task to discuss the assumed principle which forms the premiss than the thesis, one might well doubt whether such assumption should be made or not. For if your opponent will not admit the assumption and is going to demand that you shall discuss it as well, he will be prescribing a greater task than was originally proposed, whereas, if he is going to admit the assumption, he will be founding his belief on a less credible basis. If, therefore, one ought not to increase the difficulty of the problem, the admission ought to be made ; but, if one ought to reason through premisses which are more certain, it should not be made, or, to put the matter differently, one who is seeking knowledge ought not to make the admission unless it is more certain than the conclusion, but he who is only practising discussion ought to make the admission if it merely appears to be true. It is clear, then, that a mere questioner and a man who is imparting knowledge have not the same right to claim an admission.

(e) Should assumptions be made which are more difficult than the thesis itself ?]

IV. The formulation and arrangement of questions have now been more or less adequately treated. As regards answering, the function of the good answerer must first be defined, as also that of the good questioner. The function of the questioner is so to direct the discussion as to make the answerer give the most paradoxical replies that necessarily result because of the thesis. The function of the answerer is to make it seem that the impossible or paradoxical is not his

How to ANSWER QUESTIONS. The rôles of questioner and answerer.

159 a

τὴν θέσιν· ἑτέρα γὰρ ἴσως ἀμαρτία τὸ θέσθαι
πρῶτον ὃ μὴ δεῖ καὶ τὸ θέμενον μὴ φυλάξαι κατὰ
τρόπον.

- 25 V. Ἐπεὶ δ' ἐστὶν ἀδιόριστα τοῖς γυμνασίας καὶ
πείρας ἔνεκα τοὺς λόγους ποιουμένοις· (οὐ γὰρ
οἱ αὐτοὶ σκοποὶ τοῖς διδάσκουσιν ἢ μανθάνουσι
καὶ τοῖς ἀγωνιζομένοις, οὐδὲ τούτοις τε καὶ τοῖς
διατρίβουσι μετ' ἀλλήλων σκέψεως χάριν. τῷ
μὲν γὰρ μανθάνοντι θετέον αἰεὶ τὰ δοκοῦντα· καὶ
30 γὰρ οὐδ' ἐπιχειρεῖ ψεῦδος οὐδεὶς διδάσκειν· τῶν
δ' ἀγωνιζομένων τὸν μὲν ἐρωτῶντα φαίνεσθαι τι
δεῖ ποιεῖν πάντως, τὸν δ' ἀποκρινόμενον μηδὲν
φαίνεσθαι πάσχειν· ἐν δὲ ταῖς διαλεκτικαῖς συνόδοις
τοῖς μὴ ἀγῶνος χάριν ἀλλὰ πείρας καὶ σκέψεως
τοὺς λόγους ποιουμένοις οὐ διήρθρωταί πω τίνος
35 δεῖ στοχάζεσθαι τὸν ἀποκρινόμενον καὶ ὅποια
διδόναί καὶ ποῖα μὴ πρὸς τὸ καλῶς ἢ μὴ κα-
λῶς φυλάττειν τὴν θέσιν)· ἐπεὶ οὖν οὐδὲν ἔχομεν
παραδεδομένον ὑπ' ἄλλων, αὐτοὶ τι πειραθῶμεν
εἰπεῖν.

- Ἀνάγκη δὴ τὸν ἀποκρινόμενον ὑπέχειν λόγον
θέμενον ἥτοι ἔνδοξον ἢ ἄδοξον θέσιν ἢ μηδέτερον,
159 b καὶ ἥτοι ἀπλῶς ἔνδοξον ἢ ἄδοξον ἢ ὠρισμένως,
οἶον τῷδ' ἑνὶ ἢ αὐτῷ ἢ ἄλλῳ. διαφέρει δ' οὐδὲν
ὅπως οὖν ἐνδόξου ἢ ἀδόξου οὔσης· ὁ γὰρ αὐτὸς
τρόπος ἔσται τοῦ καλῶς ἀποκρίνεσθαι, καὶ δοῦναι
ἢ μὴ δοῦναι τὸ ἐρωτηθέν. ἀδόξου μὲν οὖν οὔσης

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fault but is due to the thesis ; for, possibly, to lay down the wrong thesis originally is a different kind of mistake from not maintaining it properly after one has laid it down.

V. Now since there are no definite principles for those who discuss for the sake of practice and experiment—for those who teach or learn and those who compete with one another have not the same aim, and the aim of the latter differs from that of those who discuss for the sake of inquiry ; for he who is learning must always state what he thinks, since no one even attempts to teach a lie ; on the other hand, when men are competing with one another, the questioner must by some means or other appear to be producing some effect, while the answerer must appear to be unaffected ; but in meetings held for discussion, where the disputants argue not in competition but for the sake of experiment and inquiry, no formal rules have yet been laid down as to the aim which the answerer ought to seek and what sort of things he must offer and what not, so as to maintain his thesis properly or otherwise—since, then, we have no traditions handed down by others, let us try to say something ourselves on the subject.

The answerer must of necessity carry on the argument by taking up a position which is either generally accepted, or generally rejected, or neither accepted nor rejected, or which is accepted or rejected either absolutely or conditionally, for instance by some particular person or by the speaker himself or by someone else. But the way in which it is accepted or rejected makes no difference ; for the proper mode of answering will be the same, namely, to accede to or reject what has been asked. If the

[Note on the absence of definite rules for discussions held for practice and experiment.]

The answerer's procedure depends on the nature (a) of his own thesis, which may be either

159 b

5 τῆς θέσεως ἔνδοξον ἀνάγκη τὸ συμπέρασμα
 γίνεσθαι, ἐνδόξου δ' ἄδοξον· τὸ γὰρ ἀντικείμενον
 αἰεὶ τῇ θέσει ὁ ἐρωτῶν συμπεραίνεται. εἰ δὲ μήτ'
 ἄδοξον μήτ' ἔνδοξον τὸ κείμενον, καὶ τὸ συμ-
 πέρασμα ἔσται τοιοῦτον. ἐπεὶ δ' ὁ καλῶς συλλο-
 γιζόμενος ἐξ ἐνδοξοτέρων καὶ γνωριμωτέρων τὸ
 προβληθὲν ἀποδείκνυσι, φανερόν ὡς ἀδόξου μὲν
 10 ὄντος ἀπλῶς τοῦ κειμένου οὐ δοτέον τῷ ἀποκρινο-
 μένῳ οὔθ' ὁ μὴ δοκεῖ ἀπλῶς, οὔθ' ὁ δοκεῖ μὲν
 ἦττον δὲ τοῦ συμπεράσματος δοκεῖ. ἀδόξου γὰρ
 οὔσης τῆς θέσεως ἔνδοξον τὸ συμπέρασμα, ὥστε
 δεῖ τὰ λαμβανόμενα ἐνδοξα πάντ' εἶναι καὶ μᾶλλον
 ἐνδοξα τοῦ προκειμένου, εἰ μέλλει διὰ τῶν γνωρι-
 15 μωτέρων τὸ ἦττον γνώριμον περαίνεσθαι. ὥστ'
 εἴ τι μὴ τοιοῦτόν ἐστι τῶν ἐρωτωμένων, οὐ θετέον
 τῷ ἀποκρινομένῳ. εἰ δ' ἐνδοξος ἀπλῶς ἡ θέσις,
 δῆλον ὅτι τὸ συμπέρασμα ἀπλῶς ἄδοξον. θετέον
 οὖν τά τε δοκοῦντα πάντα, καὶ τῶν μὴ δοκούντων
 ὅσα ἦττόν ἐστιν ἄδοξα τοῦ συμπεράσματος·
 20 ἱκανῶς γὰρ ἂν δόξειε διειλέχθαι. ὁμοίως δὲ εἰ
 μήτ' ἄδοξος μήτ' ἐνδοξός ἐστιν ἡ θέσις· καὶ γὰρ

position taken up by the answerer is one which is generally rejected, the conclusion must be one which is generally accepted, and *vice versa* ; for the questioner always tries to elicit the conclusion which is the opposite of the answerer's position. If, however, his position is one which is neither generally accepted nor generally rejected, the conclusion will also be of this kind. Now since he who reasons well demonstrates his proposition from more generally accepted and more familiar premisses, (1) it is obvious that, if the questioner's proposition is one which is generally rejected absolutely, the answerer ought not to concede what is thus absolutely rejected, or what is accepted indeed, but less generally than the conclusion aimed at. For, if the answerer's position is one which is generally rejected, the conclusion will be one which is generally accepted, so that the premisses which the questioner tries to secure must all be generally accepted and more so than the conclusion, if the less familiar is to be reached through the more familiar. Therefore, if any of the questions asked are not of this kind, the answerer ought not to agree to them. (2) If, however, the position taken up by the answerer is one generally accepted absolutely, obviously the conclusion aimed at by the questioner will be one which is generally rejected absolutely. The answerer, therefore, should concede all points which are generally accepted and all those not generally accepted which are less generally rejected than the conclusion aimed at ; for then he would be thought to have argued adequately. (3) So likewise if the answerer's position is one which is neither generally rejected nor generally accepted ; for in these circumstances, too, whatever seems true

(1) Generally rejected.

(2) Generally accepted.

(3) Neither generally accepted nor rejected.

οὕτως τά τε φαινόμενα ἅπαντα δοτέον, καὶ τῶν
 μὴ δοκούντων ὅσα μᾶλλον ἔνδοξα τοῦ συμπερά-
 σματος· οὕτω γὰρ ἐνδοξότερους συμβήσεται τοὺς
 λόγους γίνεσθαι. εἰ μὲν οὖν ἀπλῶς ἔνδοξον ἢ
 25 ἄδοξον τὸ κείμενον, πρὸς τὰ δοκούντα ἀπλῶς τὴν
 σύγκρισιν ποιητέον· εἰ δὲ μὴ ἀπλῶς ἔνδοξον ἢ
 ἄδοξον τὸ κείμενον ἀλλὰ τῷ ἀποκρινομένῳ, πρὸς
 αὐτόν¹ τὸ δοκοῦν καὶ μὴ δοκοῦν κρίνοντα θετέον
 ἢ οὐ θετέον. ἂν δ' ἑτέρου δόξαν διαφυλάττῃ ὁ
 ἀποκρινόμενος, δῆλον ὅτι πρὸς τὴν ἐκείνου διάνοιαν
 30 ἀποβλέποντα θετέον ἕκαστα καὶ ἀρνητέον. διὸ
 καὶ οἱ κομίζοντες ἀλλοτρίας δόξας, οἷον ἀγαθὸν
 καὶ κακὸν εἶναι ταυτόν, καθάπερ Ἡράκλειτός
 φησιν, οὐ διδόασι μὴ παρῆναι ἅμα τῷ αὐτῷ
 τάναντία, οὐχ ὥς οὐ δοκοῦν αὐτοῖς τοῦτο, ἀλλ'
 ὅτι καθ' Ἡράκλειτον οὕτω λεκτέον. ποιουσι δὲ
 τοῦτο καὶ οἱ παρ' ἀλλήλων δεχόμενοι τὰς θέσεις·
 35 στοχάζονται γὰρ ὥς ἂν εἴπειεν ὁ θέμενος.

VI. Φανερόν οὖν τίνων στοχαστέον τῷ ἀποκρι-
 νομένῳ, εἴτε ἀπλῶς ἔνδοξον εἴτε τινὶ τὸ κείμενόν
 ἐστίν. ἐπεὶ δ' ἀνάγκη πᾶν τὸ ἐρωτώμενον ἢ
 ἔνδοξον εἶναι ἢ ἄδοξον ἢ μηδέτερον, καὶ ἢ πρὸς
 τὸν λόγον ἢ μὴ πρὸς τὸν λόγον εἶναι τὸ ἐρωτώ-
 160 a μενον, ἔαν μὲν ἢ δοκοῦν καὶ μὴ πρὸς τὸν λόγον,
 δοτέον φήσαντα δοκεῖν, ἔαν δὲ μὴ δοκοῦν καὶ μὴ

¹ Reading αὐτόν for αὐτόν with Pickard-Cambridge.

^a Frags. 58 and 102 (Diels).

should be conceded, and also of the points not generally accepted those which are more generally accepted than the conclusion ; for the result of this is that the arguments will be more generally accepted. If, then, the answerer's proposition is one which is generally accepted or generally rejected absolutely, the comparison must be made with reference to what is generally accepted ; but, if the proposition is not generally accepted or rejected absolutely, but only by the answerer, then it must be conceded or not conceded with reference to his own personal judgement of what is generally accepted or not. If, however, the answerer is defending someone else's opinion, obviously he must concede or reject each point in accordance with that person's judgement. It is for this reason too that those who bring in other people's opinions—for example, Heracleitus' statement that good and evil are the same thing ^a—refuse to concede that it is impossible for contraries to belong to the same thing at the same time, not because this is not their view, but because, according to Heracleitus, they must say so. This is also the practice of those who take over positions from one another ; for they aim at saying what the man who took up the position in question would say.

VI. It is now clear what should be the aims of the answerer, whether the position adopted is generally accepted absolutely or only by some individual. Now, every question asked must be either generally accepted or generally rejected or neither accepted nor rejected, and what is asked must be either relevant or irrelevant to the argument ; if it is generally accepted and irrelevant, the answerer should admit its general acceptance and concede it. If, however,

(b) Of the particular question asked, which (1) should be generally acceptable and relevant.

πρὸς τὸν λόγον, δοτέον μὲν, ἐπισημαντέον δὲ τὸ
 μὴ δοκοῦν πρὸς εὐλάβειαν εὐηθείας. ὄντος δὲ πρὸς
 τὸν λόγον καὶ δοκοῦντος λεκτέον ὅτι δοκεῖ μὲν,
 5 ἀλλὰ λίαν σύνεγγυς τοῦ ἐν ἀρχῇ ἐστὶ καὶ ἀναιρεῖται
 τούτου τεθέντος τὸ κείμενον. εἰ δὲ πρὸς τὸν
 λόγον, λίαν δ' ἄδοξον τὸ ἀξίωμα, συμβαίνειν μὲν
 φατέον τούτου τεθέντος, ἀλλὰ λίαν εὐηθες εἶναι
 τὸ προτεινόμενον. εἰ δὲ μήτ' ἄδοξον μήτ' ἔνδοξον,
 εἰ μὲν μηδὲν πρὸς τὸν λόγον, δοτέον μηδὲν διορί-
 10 σαντι, εἰ δὲ πρὸς τὸν λόγον, ἐπισημαντέον ὅτι
 ἀναιρεῖται τεθέντος τὸ ἐν ἀρχῇ. οὕτω γὰρ ὁ τ'
 ἀποκρινόμενος οὐδὲν δόξει δι' αὐτὸν πάσχειν, ἐὰν
 προορῶν ἕκαστα τιθῇ, ὁ τ' ἐρωτῶν τεύξεται συλ-
 λογισμοῦ τιθεμένων αὐτῷ πάντων τῶν ἐνδοξο-
 τέρων τοῦ συμπεράσματος. ὅσοι δ' ἐξ ἀδοξοτέρων
 15 τοῦ συμπεράσματος ἐπιχειροῦσι συλλογίζεσθαι,
 δῆλον ὡς οὐ καλῶς συλλογίζονται· διὸ τοῖς ἐρω-
 τῶσιν οὐ θετέον.

VII. Ὅμοίως δὲ καὶ ἐπὶ τῶν ἀσαφῶς καὶ
 πλεοναχῶς λεγομένων ἀπαντητέον. ἐπεὶ γὰρ
 δέδοται τῷ ἀποκρινομένῳ μὴ μανθάνοντι εἰπεῖν
 20 ὅτι οὐ μανθάνω, καὶ πλεοναχῶς λεγομένου μὴ ἐξ
 ἀνάγκης ὁμολογῆσαι ἢ ἀρνήσασθαι, δῆλον ὡς πρῶ-
 τον μὲν, ἂν μὴ σαφὲς ἦ τὸ ῥηθέν, οὐκ ἀποκνη-

TOPICA, VIII. VI-VII

it is not generally accepted and irrelevant, he should concede it but put in a remark that it is not generally accepted, as a precaution against appearing to be simple minded. If, on the other hand, it is relevant and generally accepted, he should remark that it is generally accepted but that it is too near to the original view and say that, if it is conceded, the proposition falls to the ground. If what the questioner claims is relevant to the argument but too generally rejected, he should say that, if this concession is made, the conclusion results, but that what is proposed is too silly to be accepted. When it is neither generally rejected nor generally accepted, if it is not relevant to the argument, it should be conceded without qualification, but, if it is relevant, a remark should be added that, if it is conceded, the original proposition falls to the ground. In this way the answerer will not be thought to suffer through his own fault, since he foresees the result of his various concessions, and the questioner will carry through his reasoning with all the premisses which are more generally accepted than the conclusion conceded to him. Those who attempt to reason from premisses less generally accepted than the conclusion obviously do not reason properly ; therefore such premisses should not be conceded to questioners.

VII. The situation must be met in a similar way when terms are used obscurely and have more than one meaning. For, since the answerer is always allowed, if he does not understand, to say, "I don't understand," and, if the question has more than one meaning, he need not necessarily assent or deny, it is obvious, in the first place, that, if what is said is not clear, he must not shrink from saying that he does

(2) Should be stated clearly and unequivocally.

160 a

τέον τὸ φάναι μὴ συνιέναι· πολλάκις γὰρ ἐκ τοῦ
 μὴ σαφῶς ἐρωτηθέντας διδόναι ἀπαντᾷ τι δυσχερές.
 25 ἂν δὲ γνώριμον μὲν ἢ πλεοναχῶς δὲ λεγόμενον,
 25 εἴαν μὲν ἐπὶ πάντων ἀληθὲς ἢ ψεῦδος ἢ τὸ λεγόμενον,
 δοτέον ἀπλῶς ἢ ἀρνητέον, εἴαν δ' ἐπὶ τὶ
 μὲν ψεῦδος ἢ ἐπὶ τὶ δ' ἀληθές, ἐπισημαντέον
 ὅτι πλεοναχῶς λέγεται καὶ διότι τὸ μὲν ψεῦδος
 τὸ δ' ἀληθές· ὕστερον γὰρ διαιρουμένου ἁδηλον
 εἰ καὶ ἐν ἀρχῇ συνεώρα τὸ ἀμφίβολον. εἴαν δὲ μὴ
 προῦδῃ τὸ ἀμφίβολον ἀλλ' εἰς θάτερον βλέψας θῇ,
 30 ῥητέον πρὸς τὸν ἐπὶ θάτερον ἄγοντα ὅτι οὐκ εἰς
 τοῦτο βλέπων ἔδωκα ἀλλ' εἰς θάτερον αὐτῶν.
 πλειόνων γὰρ ὄντων τῶν ὑπὸ ταῦτόν ὄνομα ἢ
 λόγον ῥαδίᾳ ἢ ἀμφισβήτησις. εἴαν δὲ καὶ σαφὲς
 ἢ καὶ ἀπλοῦν τὸ ἐρωτώμενον, ἢ ναί ἢ οὐ ἀποκρι-
 τέον.

- 35 VIII. Ἐπεὶ δὲ πᾶσα πρότασις συλλογιστικὴ ἢ
 τούτων τίς ἐστὶν ἐξ ὧν ὁ συλλογισμὸς ἢ τινος
 τούτων ἔνεκα (δῆλον δ' ὅταν ἐτέρου χάριν λαμβάνηται
 τῷ πλείῳ τὰ ὅμοια ἐρωτᾷ· ἢ γὰρ δι' ἐπαγωγῆς ἢ δι'
 ὁμοιότητος ὡς ἐπὶ τὸ πολὺ τὸ καθόλου λαμβάνουσιν), τὰ μὲν οὖν καθ' ἕκαστα
 160 b πάντα θετέον, ἂν ἢ ἀληθῇ καὶ ἔνδοξα, πρὸς δὲ τὸ
 καθόλου πειρατέον ἔνστασιν φέρειν· τὸ γὰρ ἄνευ
 ἐνστάσεως, ἢ οὔσης ἢ δοκούσης, κωλύειν τὸν
 λόγον δυσκολαίνειν ἐστίν. εἰ οὖν ἐπὶ πολλῶν
 φαινομένων μὴ δίδωσι τὸ καθόλου μὴ ἔχων ἐν-
 5 στασιν, φανερόν ὅτι δυσκολαίνει. ἔτι εἰ μὴδ'

not comprehend ; for a difficulty often confronts people if they assent when questions have not been clearly put to them. When the question is intelligible but can bear more than one meaning, then, supposing what it says is true or false in every case, he must assent or deny absolutely, but, if it is partly true and partly false, he must add the remark that it has several meanings and that in one meaning it is false, in the other true ; for, if he makes this distinction only at a later stage, it is not clear whether originally he noticed the ambiguity. If he did not foresee the ambiguity but assents when he has only seen one meaning, he must say to the questioner when he leads on to the other meaning, " It was not that meaning that I had in view but the other one, when I gave my assent " ; for, when several things fall under the same term or expression, disagreement easily arises. If, on the other hand, the question asked is plain and simple, the answer must be ' yes ' or ' no.'

VIII. Now since every premiss used in reasoning is either one of the constituent parts of the reasoning or else is assumed for the sake of one of these parts (and it is obvious when it is assumed for the sake of something else from the asking of many similar questions ; for people usually secure the universal either by induction or by similarity), all the several particulars must be admitted if they are true and generally accepted. But against the universal one must try to bring an objection ; for to hold up the argument without an objection, either real or apparent, is to behave peevishly. If, therefore, a man refuses to concede the universal, in a case where many instances are displayed, without having any objection to offer, he is clearly behaving peevishly. Further, if

(3) Should not admit of objection or counter-argument.

ἀντεπιχειρεῖν ἔχει ὅτι οὐκ ἀληθές, πολλῶ μᾶλλον
 ἂν δόξειε δυσκολαίνειν. καίτοι οὐδὲ τοῦθ' ἱκανόν·
 πολλοὺς γὰρ λόγους ἔχομεν ἐναντίους ταῖς δόξαις,
 οὓς χαλεπὸν λύειν, καθάπερ τοῦ¹ Ζήνωνος ὅτι οὐκ
 ἐνδέχεται κινεῖσθαι οὐδὲ τὸ στάδιον διελθεῖν· ἀλλ'
 10 οὐ διὰ τοῦτο ἀντικείμενα τούτοις οὐ θετέον. εἰ
 οὖν μήτ' ἐνίστασθαι μήτ' ἀντεπιχειρεῖν ἔχων μὴ
 τίθησι, δῆλον ὅτι δυσκολαίνει· ἔστι γὰρ ἢ ἐν
 λόγοις δυσκολία ἀπόκρισις παρὰ τοὺς εἰρημένους
 τρόπους, συλλογισμοῦ φθαρτική.

IX. Ὑπέχειν δὲ καὶ θέσιν καὶ ὀρισμὸν αὐτὸν
 15 αὐτῷ δεῖ προεγχειρήσαντα· ἐξ ὧν γὰρ ἀναιροῦσιν
 οἱ πυνθανόμενοι τὸ κείμενον, δῆλον ὅτι τούτοις
 ἐναντιωτέον.

"Αδοξον δ' ὑπόθεσιν εὐλαβητέον ὑπέχειν. εἴη
 δ' ἂν ἄδοξος διχῶς· καὶ γὰρ ἐξ ἧς ἄτοπα συμ-
 βαίνει λέγειν, οἷον εἰ πάντα φαίη τις κινεῖσθαι ἢ
 20 μηδέν, καὶ ὅσα χείρονος ἡθους ἐλέσθαι καὶ ὑπ-
 εναντία ταῖς βουλήσεσιν, οἷον ὅτι ἡδονὴ τὰγαθὸν
 καὶ τὸ ἀδικεῖν βέλτιον τοῦ ἀδικεῖσθαι. οὐ γὰρ
 ὥς λόγου χάριν ὑπέχοντα ἀλλ' ὥς τὰ δοκοῦντα
 λέγοντα μισοῦσιν.

X. Ὅσοι δὲ τῶν λόγων ψεῦδος συλλογίζονται,
 λυτέον ἀναιροῦντα παρ' ὃ γίνεται τὸ ψεῦδος. οὐ

¹ τοῦ is omitted by Bekker in error.

^a *Phys.* 233 a 21 ff. ; 239 b 9 ff.

he cannot even advance a counter-argument to prove that it is not true, he would be regarded as much more peevish. Yet even this is not enough ; for we get many arguments which are contrary to accepted opinions and yet are difficult to solve, for example, that of Zeno ^a that motion or traversing the stadium is impossible ; but we ought not on this account to refuse to assert the opposites of these views. If, therefore, a man refuses to make an admission when he has no objection or counter-argument to advance, he is obviously acting peevishly ; for peevishness in argument is answering otherwise than in the ways mentioned above, with the object of destroying the reasoning.

IX. Before he upholds a thesis or a definition, a man ought to argue against it by himself ; for obviously he must oppose the grounds on which the questioners seek to subvert the position which he has taken up.

*Rules for
the defence
of a thesis.*

Care must be taken not to uphold a hypothesis which is generally unacceptable. There are two ways in which it may be unacceptable. It may be one which leads to the making of absurd statements, for example, if one were to say that everything or nothing is in motion ; on the other hand, it may be one of those which a bad character would choose or which are contrary to our wishes, for example, that pleasure is the good and that to commit injustice is better than to suffer it. For men hate him who makes such assertions, regarding him not as maintaining them for the sake of argument but as saying what he really thinks.

X. Of arguments which reason to establish a falsehood, a solution must be provided by demolishing that from which the falsehood arises. For a man has

*The solu-
tion of false
arguments.*

160 b

25 γὰρ ὅτιοῦν ἀνελὼν λέλυκεν, οὐδ' εἰ ψεῦδός ἐστι
 τὸ ἀναιρούμενον. ἔχοι γὰρ ἂν πλείω ψεύδη ὁ
 λόγος, οἷον ἐάν τις λάβῃ τὸν καθήμενον γράφειν,
 Σωκράτη δὲ καθῆσθαι· συμβαίνει γὰρ ἐκ τούτων
 Σωκράτη γράφειν. ἀναιρεθέντος οὖν τοῦ Σωκράτη
 καθῆσθαι οὐδὲν μᾶλλον λέλυται ὁ λόγος· καίτοι
 30 ψεῦδος τὸ ἀξίωμα. ἀλλ' οὐ παρὰ τοῦτο ὁ λόγος
 ψευδής· ἂν γὰρ τις τύχῃ καθήμενος μὲν μὴ γράφων
 δέ, οὐκέτι ἐπὶ τοῦ τοιούτου ἡ αὐτὴ λύσις ἀρμόσει.
 ὥστε οὐ τοῦτο ἀναιρετέον, ἀλλὰ τὸ τὸν καθήμενον
 γράφειν· οὐ γὰρ πᾶς ὁ καθήμενος γράφει. λέλυκε
 μὲν οὖν πάντως ὁ ἀνελὼν παρ' ὃ γίνεται τὸ ψεῦδος,
 35 οἷδε δὲ τὴν λύσιν ὁ εἰδὼς ὅτι παρὰ τοῦτο ὁ λόγος,
 καθάπερ ἐπὶ τῶν ψευδογραφουμένων· οὐ γὰρ
 ἀπόχρη τὸ ἐνστήναι, οὐδ' ἂν ψεῦδος ᾗ τὸ ἀναιρού-
 μενον, ἀλλὰ καὶ διότι ψεῦδος ἀποδεικτέον· οὕτω
 γὰρ ἂν εἴη φανερόν ποτερον προορῶν τι ἢ οὐ
 ποιεῖται τὴν ἔνστασιν.

161 a "Ἔστι δὲ λόγον κωλύσαι συμπεράνασθαι τετρα-
 χῶς. ἢ γὰρ ἀνελόντα παρ' ὃ γίνεται τὸ ψεῦδος,
 ἢ πρὸς τὸν ἐρωτῶντα ἔνστασιν εἰπόντα· πολλάκις
 γὰρ οὐδὲ λέλυκεν, ὁ μέντοι πυνθανόμενος οὐ
 5 δύναται πορρωτέρω προαγαγεῖν. τρίτον δὲ πρὸς
 τὰ ἠρωτημένα· συμβαίη γὰρ ἂν ἐκ μὲν τῶν
 ἠρωτημένων μὴ γίνεσθαι ὃ βούλεται διὰ τὸ κακῶς
 ἠρωτηῆσθαι, προστεθέντος δέ τινος γίνεσθαι τὸ

not reached a solution by demolishing any chance point, even though what is demolished is false. For the argument might contain several falsehoods, for example, if one were to assume that 'he who sits, writes' and 'Socrates is sitting'; for the result of these premisses is that 'Socrates is writing.' If the statement that 'Socrates is sitting' is demolished, the argument is no nearer a solution, and yet what was claimed is false, but the argument is not false in respect of this; for if a man happened to be sitting but not writing, then the same solution would be no longer applicable. And so this is not the point which must be demolished, but that 'he who sits, writes'; for not everyone who sits is writing. The man who has demolished that on which the falsehood depends has provided a complete solution, and he who knows that the argument depends on a particular point, knows the solution, just as in the case of false geometrical figures; for it is not enough to make an objection even if what is demolished is false, but why it is false must also be demonstrated; for thus it would be clear whether or no he makes his objection with an object in view.

There are four ways in which it is possible to prevent a man from bringing his argument to a conclusion, firstly, by demolishing that on which the falsehood depends, or, secondly, by bringing an objection against the questioner; for often the answerer has provided no solution, but nevertheless the questioner can proceed no further. Thirdly, an objection can be made to the questions; for it might so happen that what the questioner wants does not follow as a result of his questions because they have been badly asked, but, if something is added, the

Four
methods of
preventing
an argu-
ment from
reaching a
conclusion.

συμπέρασμα. εἰ μὲν οὖν μηκέτι δύναται προάγειν
 ὁ ἐρωτῶν, πρὸς τὸν ἐρωτῶντα εἴη ἂν ἔνστασις,
 εἰ δὲ δύναται, πρὸς τὰ ἡρωτημένα. τετάρτη δὲ
 10 καὶ χειρίστη τῶν ἐνστάσεων ἡ πρὸς τὸν χρόνον·
 ἔνιοι γὰρ τοιαῦτα ἐνίστανται πρὸς ἃ διαλεχθῆναι
 πλείονός ἐστι χρόνου ἢ τῆς παρούσης διατριβῆς.

Αἱ μὲν οὖν ἐνστάσεις, καθάπερ εἶπαμεν, τε-
 τραχῶς γίνονται· λύσις δ' ἐστὶ τῶν εἰρημένων ἡ
 15 πρώτη μόνον, αἱ δὲ λοιπαὶ κωλύσεις τινὲς καὶ
 ἐμποδισμοὶ τῶν συμπερασμάτων.

XI. Ἐπιτίμησις δὲ λόγου κατ' αὐτόν τε τὸν
 λόγον, καὶ ὅταν ἐρωτᾶται, οὐχ ἡ αὐτή· πολλάκις
 γὰρ τοῦ μὴ καλῶς διειλέχθαι τὸν λόγον ὁ ἐρωτώ-
 μενος αἴτιος διὰ τὸ μὴ συγχωρεῖν ἐξ ὧν ἦν δια-
 20 λεχθῆναι καλῶς πρὸς τὴν θέσιν· οὐ γὰρ ἔστιν ἐπὶ
 θατέρῳ μόνον τὸ καλῶς ἐπιτελεσθῆναι τὸ κοινὸν
 ἔργον. ἀναγκαῖον οὖν ἐνίστε πρὸς τὸν λέγοντα
 καὶ μὴ πρὸς τὴν θέσιν ἐπιχειρεῖν, ὅταν ὁ ἀπο-
 κρινόμενος τάναντία τῷ ἐρωτῶντι παρατηρῇ προσ-
 επηρεάζων. δυσκολαίνοντες οὖν ἀγωνιστικὰς καὶ
 οὐ διαλεκτικὰς ποιοῦνται τὰς διατριβάς. ἔτι δ'
 25 ἐπεὶ γυμνασίας καὶ πείρας χάριν ἄλλ' οὐ διδα-
 σκαλίας οἱ τοιοῦτοι τῶν λόγων, δῆλον ὡς οὐ μόνον
 τἀληθῆ συλλογιστέον ἀλλὰ καὶ ψεῦδος, οὐδὲ δι'
 ἀληθῶν ἀεὶ ἄλλ' ἐνίστε καὶ ψευδῶν. πολλάκις
 γὰρ ἀληθοῦς τεθέντος ἀναιρεῖν ἀνάγκη τὸν δια-
 λεγόμενον, ὥστε προτατέον τὰ ψευδῆ. ἐνίστε δὲ

conclusion results. If, therefore, he cannot advance his argument any further, an objection could be raised against the questioner, but, if he can still advance his argument, against his questions. The fourth and worst form of objection is that which relates to the time available ; for some people bring forward objections which take longer to deal with than the present discussion allows.

The kinds of objection, then, as we have said, are four in number ; but of those mentioned the first only is a solution, the others are merely hindrances and impediments in the path to conclusions.

XI. Criticism of an argument when it is taken by itself is not the same thing as when it forms the subject of questions ; for often the person questioned is the cause of the argument not being properly discussed, because he does not concede the points which would have enabled the argument against his thesis to have been properly carried out ; for it is not within the power of one party only to ensure the proper accomplishment of the common task. It is, therefore, necessary sometimes to attack the speaker and not his thesis, when the answerer is on the watch for points against the questioner and also employs abuse. By behaving peevishly, then, people make their discussions contentious instead of dialectical. Furthermore, since such arguments are carried on for the sake of practice and experiment rather than instruction, it is obvious that people must argue to establish not only the truth but also falsehood, and not always by means of what is true but also sometimes by means of what is false. For often, when what is true has been asserted, the dialectician has to demolish it and so false views have to be put forward. Sometimes,

Various points concerning arguments and conclusions :
(a) Adverse criticism of an argument and of a person arguing is not the same thing.

161 a

- 30 καὶ ψεύδους τεθέντος ἀναιρετέον διὰ ψευδῶν· οὐδὲν γὰρ κωλύει τινὶ δοκεῖν τὰ μὴ ὄντα μᾶλλον τῶν ἀληθῶν, ὥστ' ἐκ τῶν ἐκείνῳ δοκούντων τοῦ λόγου γινομένου μᾶλλον ἔσται πεπεισμένος ἢ ὠφελημένος. δεῖ δὲ τὸν καλῶς μεταβιβάζοντα διαλεκτικῶς καὶ μὴ ἐριστικῶς μεταβιβάζειν, καθ-
- 35 ἅπερ τὸν γεωμέτρην γεωμετρικῶς, ἅν τε ψεῦδος ἂν τ' ἀληθὲς ἢ τὸ συμπεραινόμενον· ποῖοι δὲ διαλεκτικοὶ συλλογισμοί, πρότερον εἴρηται. ἐπεὶ δὲ φαῦλος κοινωνὸς ὁ ἐμποδίζων τὸ κοινὸν ἔργον, δηλὸν ὅτι καὶ ἐν λόγῳ. κοινὸν γάρ τι καὶ ἐν τούτοις προκείμενόν ἐστι, πλὴν τῶν ἀγωνιζομένων.
- 40 τούτοις δ' οὐκ ἔστιν ἀμφοτέροις τυχεῖν τοῦ αὐτοῦ
- 161 b τέλους· πλείους γὰρ ἐνὸς ἀδύνατον νικᾶν. διαφέρει δ' οὐδὲν ἂν τε διὰ τοῦ ἀποκρίνεσθαι ἂν τε διὰ τοῦ ἐρωτᾶν ποιῇ τοῦτο· ὃ τε γὰρ ἐριστικῶς ἐρωτῶν φαύλως διαλέγεται, ὃ τ' ἐν τῷ ἀποκρίνεσθαι μὴ διδούς τὸ φαινόμενον μηδ' ἐκδεχόμενος ὃ τί ποτε
- 5 βούλεται ὁ ἐρωτῶν πυθέσθαι. δηλὸν οὖν ἐκ τῶν εἰρημένων ὅτι οὐχ ὁμοίως ἐπιτιμητέον καθ' αὐτόν τε τῷ λόγῳ καὶ τῷ ἐρωτῶντι· οὐδὲν γὰρ κωλύει τὸν μὲν λόγον φαῦλον εἶναι, τὸν δ' ἐρωτῶντα ὡς ἐνδέχεται βέλτιστα πρὸς τὸν ἀποκρινόμενον διελέχθαι. πρὸς γὰρ τοὺς δυσκολαίνοντας οὐ δυνατόν
- 10 ἴσως εὐθὺς οἷους τις βούλεται ἀλλ' οἷους ἐνδέχεται ποιεῖσθαι τοὺς συλλογισμούς.

Ἐπεὶ δ' ἐστὶν ἀδιόριστον πότε τάναντία καὶ πότε τὰ ἐν ἀρχῇ λαμβάνουσιν οἱ ἄνθρωποι (πολ-

too, when what is false has been asserted, it has to be demolished by means of falsehoods ; for there is nothing to prevent a man accepting what are not facts rather than the truth ; and so, if the argument is based on what he accepts, he will be persuaded rather than benefited. The man, however, who is seeking to convert another in the proper manner should do so in a dialectical and not in a contentious way, just as a geometrician reasons geometrically, whether the conclusion aimed at is false or true. The nature of dialectical reasonings has already been described. Now in business he who hinders the common task is a bad partner, and the same is true in argument ; for here, too, there is a common purpose, unless the parties are merely competing against one another ; for then they cannot both reach the same goal, since more than one cannot be victorious. It makes no difference whether a man acts like this in his answers or in his questions ; for he who asks questions in a contentious spirit and he who in replying refuses to admit what is apparent and to accept whatever question the questioner wishes to put, are both of them bad dialecticians. It is clear, therefore, from what has been said that the argument by itself and the questioner by himself are not open to the same sort of criticism ; for there is no reason why, though the argument is bad, the questioner should not have argued with the answerer in the best possible manner. Against those who shew peevishness it is not perhaps possible immediately to employ such reasonings as one wishes, but one only employs such as one can.

Since it cannot be determined when men are assuming contraries and when they are assuming

(b) Contentious argument should be avoided.

(c) How arguments become vitiated.

λάκεις γὰρ καθ' αὐτοὺς λέγοντες τὰ ἐναντία λέγουσι,
καὶ ἀνανεύσαντες πρότερον διδόασιν ὕστερον·
διόπερ ἐρωτώμενοι τὰναντία καὶ τὸ ἐν ἀρχῇ
15 πολλάκις ὑπακούουσιν), ἀνάγκη φαύλους γίνεσθαι
τοὺς λόγους. αἴτιος δ' ὁ ἀποκρινόμενος, τὰ μὲν
οὐ διδούς, τὰ δὲ τοιαῦτα διδούς. φανερόν οὖν ὡς
οὐχ ὁμοίως ἐπιτιμητέον τοῖς ἐρωτῶσι καὶ τοῖς
λόγοις.

Καθ' αὐτὸν δὲ τῷ λόγῳ πέντ' εἰσὶν ἐπιτιμήσεις,
20 πρώτη μὲν ὅταν ἐκ τῶν ἐρωτωμένων μὴ συμ-
περαίνηται μήτε τὸ προτεθέν μήτε ὅλως μηδὲν
ὄντων ψευδῶν ἢ ἀδόξων, ἢ ἀπάντων ἢ τῶν πλεί-
στων, ἐν οἷς τὸ συμπέρασμα, καὶ μήτ' ἀφαιρεθέντων
τινῶν μήτε προστεθέντων μηδὲ τῶν μὲν ἀφαιρεθέν-
των τῶν δὲ προστεθέντων γίνηται τὸ συμπέρασμα.
25 δευτέρα δὲ εἰ πρὸς τὴν θέσιν μὴ γίνοιτο ὁ συλλο-
γισμὸς ἐκ τοιούτων τε καὶ οὕτως ὡς εἴρηται
πρότερον. τρίτη δ' εἰ προστεθέντων τινῶν γίνοιτο
συλλογισμὸς, ταῦτα δ' εἴη χεῖρω τῶν ἐρωτηθέντων
καὶ ἥττον ἔνδοξα τοῦ συμπεράσματος. πάλιν εἰ
ἀφαιρεθέντων τινῶν· ἐνίοτε γὰρ πλείω λαμβάνουσι
30 τῶν ἀναγκαίων, ὥστε οὐ τῷ ταῦτ' εἶναι γίνεται
ὁ συλλογισμὸς. ἔτι εἰ ἐξ ἀδοξοτέρων καὶ ἥττον
πιστῶν τοῦ συμπεράσματος, ἢ εἰ ἐξ ἀληθῶν ἀλλὰ
πλείονος ἔργου δεομένων ἀποδείξαι τοῦ προβλή-
ματος.

the original contention—for often when they are speaking by themselves they assert contraries and, after first denying something, afterwards admit it (hence, when they are questioned, they often assent to contraries and to the original contention)—arguments necessarily deteriorate. But it is the answerer who is responsible since he refuses to grant some points but grants others of the same kind. It is obvious, therefore, that the questioners and the arguments are not open to the same kind of criticism.

The argument in itself is open to criticism under five different conditions : (1) when as a result of the questions neither the conclusion proposed, nor any conclusion at all, is reached, because all or most of the premisses on which the conclusion depends are either false or not generally accepted, and when neither the suppression nor the addition of any premisses makes the conclusion possible ; (2) if the reasoning, based on the premisses in the manner described above, were not to be applicable to the thesis ; (3) if reasoning were to proceed as a result of certain additional premisses, but yet these were to be inferior to those contained in the questions and less generally accepted than the conclusion ; again (4) if the reasoning were to proceed as the result of certain suppressions : for sometimes people assume more premisses than are necessary, and so it is not their presence which allows the reasoning to proceed ; furthermore (5) if the reasoning were to proceed from premisses less generally accepted and less credible than the conclusion, or if it were to proceed from premisses which, though true, require more labour to demonstrate than the problem.

(d) Five ways in which an argument is in itself open to criticism.

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Οὐ δεῖ δὲ πάντων τῶν προβλημάτων ὁμοίως
 35 ἀξιούν τοὺς συλλογισμοὺς ἐνδόξους εἶναι καὶ
 πιθανούς· φύσει γὰρ εὐθὺς ὑπάρχει τὰ μὲν ῥᾶυ
 τὰ δὲ χαλεπώτερα τῶν ζητουμένων, ὥστε ἂν ἐξ
 ὧν ἐνδέχεται μάλιστα ἐνδόξων συμβιβάσῃ, διεί-
 λεκται καλῶς. φανερόν οὖν ὅτι οὐδὲ λόγῳ ἢ αὐτῇ
 ἐπιτίμησις πρὸς τε τὸ προβληθὲν καὶ καθ' αὐτόν.
 40 οὐδὲν γὰρ κωλύει καθ' αὐτόν μὲν εἶναι τὸν λόγον
 162 a ψεκτόν, πρὸς δὲ τὸ πρόβλημα ἐπαινετόν, καὶ
 πάλιν ἀντεστραμμένως καθ' αὐτόν μὲν ἐπαινετόν,
 πρὸς δὲ τὸ πρόβλημα ψεκτόν, ὅταν ἐκ πολλῶν ἢ
 ῥᾶδιον ἐνδόξων συμπεράνασθαι καὶ ἀληθῶν. εἴη
 δ' ἂν ποτε λόγος καὶ συμπεπερασμένος μὴ συμ-
 5 πεπερασμένου χείρων, ὅταν ὁ μὲν ἐξ εὐθῶν
 συμπεραίνηται μὴ τοιούτου τοῦ προβλήματος
 ὄντος, ὁ δὲ προσδέηται τοιούτων ἃ ἐστὶν ἐνδοξα
 καὶ ἀληθῆ, καὶ μὴ ἐν τοῖς προσλαμβανομένοις ἢ
 ὁ λόγος. τοῖς δὲ διὰ ψευδῶν ἀληθὲς συμπεραι-
 νομένοις οὐ δίκαιον ἐπιτιμᾶν· ψεῦδος μὲν γὰρ ἀεὶ
 10 ἀνάγκη διὰ ψεύδους συλλογίζεσθαι, τὸ δ' ἀληθὲς
 ἔστι καὶ διὰ ψευδῶν ποτὲ συλλογίζεσθαι. φανερόν
 δ' ἐκ τῶν Ἀναλυτικῶν.

Ὅταν δ' ἀπόδειξις ἢ τινὸς ὁ εἰρημένος λόγος,
 εἰ τί ἐστὶν ἄλλο πρὸς τὸ συμπέρασμα μηδαμῶς

^a An. Pr. 53 b 26 ff.

One ought not to demand that the reasoning of every problem should meet with the same general acceptance and be equally convincing; for it is an immediate result of the nature of things that some subjects of inquiry are easier and some more difficult, so that, if a man carries conviction by means of views which meet with the widest acceptance possible, he has argued well. It is clear, therefore, that the same criticism does not apply to an argument when viewed in relation to the proposition and when taken by itself. For there is no reason why the argument should not be reprehensible in itself but commendable when viewed in relation to the proposition, and again, conversely, commendable in itself but reprehensible when viewed in relation to the proposition, when it is easy to draw a conclusion from a number of premisses which are generally accepted and true. It may also be that sometimes an argument even though brought to a conclusion is inferior to one which is not brought to a conclusion, when the former is concluded from premisses which are foolish, though the proposition is not foolish, whereas the latter requires additional premisses which are generally accepted and true but the argument does not depend on these additional assumptions. It is unjust to criticize those who draw true conclusions from false premisses; for a false conclusion must necessarily be always argued by means of a false premiss, whereas the truth may sometimes be argued even by means of false premisses. This is clearly shown in the *Analytics*.^a

When the argument stated is a demonstration of something, but it is something irrelevant which has nothing to do with the conclusion, no inference will

(e) An argument may be open to criticism in itself but commendable in relation to the proposition, and *vice versa*.

(f) Philo-sopheme, epichireme, sophism and aporeme.

ἔχον, οὐκ ἔσται περὶ¹ ἐκείνου συλλογισμός· ἂν δὲ
 15 φαίνεται, σόφισμα ἔσται, οὐκ ἀπόδειξις. ἔστι
 δὲ φιλοσόφημα μὲν συλλογισμὸς ἀποδεικτικός,
 ἐπιχείρημα δὲ συλλογισμὸς διαλεκτικός, σόφισμα
 δὲ συλλογισμὸς ἐριστικός, ἀπόρημα δὲ συλλογισμὸς
 διαλεκτικὸς ἀντιφάσεως.

Εἰ δ' ἐξ ἀμφοτέρων τι δοκούντων δειχθείη, μὴ
 20 ὁμοίως δὲ δοκούντων, οὐδὲν κωλύει τὸ δειχθὲν
 μᾶλλον ἑκατέρου δοκεῖν. ἀλλ' εἰ τὸ μὲν δοκοίη
 τὸ δὲ μηδετέρως, ἢ εἰ τὸ μὲν δοκοίη τὸ δὲ μὴ
 δοκοίη, εἰ μὲν ὁμοίως, ὁμοίως ἂν εἴη καὶ μὴ, εἰ
 δὲ μᾶλλον θάτερον, ἀκολουθήσει τῷ μᾶλλον.

Ἔστι δέ τις ἀμαρτία καὶ αὕτη περὶ τοὺς συλ-
 25 λογισμούς, ὅταν δείξῃ διὰ μακροτέρων, ἐνὸν δι'
 ἐλαττόνων καὶ ἐν τῷ λόγῳ ὑπαρχόντων, οἷον ὅτι
 ἐστὶ δόξα μᾶλλον ἑτέρα ἑτέρας, εἴ τις αἰτήσαιτο
 αὐτοέκαστον μάλιστα εἶναι, εἶναι δὲ δοξαστὸν
 ἀληθῶς αὐτό, ὥστε τῶν τινῶν μᾶλλον εἶναι αὐτό·
 πρὸς δὲ τὸ μᾶλλον μᾶλλον τὸ λεγόμενον εἶναι· εἶναι
 30 δὲ καὶ αὐτοδόξαν ἀληθῆ, ἢ ἔσται μᾶλλον ἀκριβῆς
 τῶν τινῶν· ῥηται δὲ καὶ αὐτοδόξαν ἀληθῆ εἶναι
 καὶ αὐτοέκαστον μάλιστα εἶναι· ὥστε αὕτη ἡ δόξα²

¹ Reading περὶ for παρὰ with Strache-Wallies.

² Omitting ἡ μάλιστα ἀληθῆς with the best mss.

be drawn from it about the latter ; if there appears to be such an inference, it will be a sophism not a demonstration. A philosopheme is a demonstrative inference, an epichireme is a dialectical inference, a sophism is a contentious inference, and an aporeme is a contentious inference of contradiction.

If something were to be shown from two premisses, both of them generally accepted but not equally accepted, there is no reason why what is shown should not be more generally accepted than either of them. But if one premiss were to be generally accepted and the other neither accepted nor rejected, or if one were to be accepted and the other rejected, then, if the acceptance and the rejection were equal, the conclusion would also be equally accepted and rejected. If, however, either acceptance or rejection is more general, the conclusion will follow the more general.

An error in reasoning also occurs when a man shows something by a longer process, when he might employ a shorter process, using material which is already existent in the argument, for example, when he is showing that one opinion is more truly an opinion than another ; if he were to claim (a) that ' a thing-in-itself is most completely that thing,' and (b) that ' an object-of-opinion-in-itself really exists,' so that ' it is more completely an object of opinion than the individual objects of opinion,' and were to claim that ' when a thing-in-itself admits of a greater degree, that which is referred to it also admits of a greater degree,' and ' opinion-in-itself, which is more accurate than the individual objects of opinion, is true,' and it has been claimed that ' there is a true opinion-in-itself ' and that ' a thing-in-itself is most completely that thing, it follows that this particular

(g) Conclusions which follow certain combinations of premisses.

(h) The error of proving something by an unnecessarily long process.

162 a

ἀκριβεστέρα ἐστίν. τίς δὲ ἡ μοχθηρία; ἢ ὅτι ποιεῖ, παρ' ὃ ὁ λόγος, λανθάνειν τὸ αἴτιον;

35 XII. Λόγος δ' ἐστὶ δῆλος ἓνα μὲν τρόπον καὶ δημοσιώτατον, εἰς συμπεπερασμένους οὕτως ὥστε μηδὲν δεῖν ἐπερωτῆσαι· ἓνα δέ, καὶ ὅς μάλιστα

162 b λέγεται, ὅταν εἰλημμένα μὲν ἢ ἐξ ὧν ἀναγκαῖον εἶναι, ἢ δὲ διὰ συμπερασμάτων συμπεραίνόμενος¹. ἔτι εἰ ἐλλείπει σφόδρα ἐνδόξων.

Ψευδὴς δὲ λόγος καλεῖται τετραχῶς, ἓνα μὲν τρόπον ὅταν φαίνεται συμπεραίνεσθαι μὴ συμ-
5 περαίνόμενος, ὅς καλεῖται ἐριστικός συλλογισμός· ἄλλον δὲ ὅταν συμπεραίνεται μὲν μὴ μέντοι πρὸς τὸ προκείμενον, ὅπερ συμβαίνει μάλιστα τοῖς εἰς τὸ ἀδύνατον ἄγουσιν· ἢ πρὸς τὸ προκείμενον μὲν συμπεραίνεται, μὴ μέντοι κατὰ τὴν οἰκείαν μέθοδον. τοῦτο δ' ἐστίν, ὅταν μὴ ὧν ἱατρικὸς
10 δοκῇ ἱατρικὸς εἶναι ἢ γεωμετρικὸς μὴ ὧν γεωμετρικὸς ἢ διαλεκτικὸς μὴ ὧν διαλεκτικός, ἂν τε ψεῦδος ἂν τ' ἀληθὲς ἢ τὸ συμβαῖνον. ἄλλον δὲ τρόπον εἰς διὰ ψευδῶν συμπεραίνεται. τούτου δ' ἔσται ποτὲ μὲν τὸ συμπέρασμα ψεῦδος, ποτὲ δ' ἀληθές· τὸ μὲν γὰρ ψεῦδος αἰεὶ διὰ ψευδῶν
15 περαίνεται, τὸ δ' ἀληθὲς ἐγχωρεῖ καὶ μὴ ἐξ ἀληθῶν, ὥσπερ εἴρηται καὶ πρότερον.

Τὸ μὲν οὖν ψευδὴ τὸν λόγον εἶναι τοῦ λέγοντος ἀμάρτημα μᾶλλον ἢ τοῦ λόγου, καὶ οὐδὲ τοῦ λέγοντος αἰεὶ, ἀλλ' ὅταν λανθάνῃ αὐτόν, ἐπεὶ καθ' αὐτόν γε πολλῶν ἀληθῶν ἀποδεχόμεθα μᾶλλον,

¹ Reading συμπεραίνόμενος with A B and Ca¹.

opinion is more accurate.' What is objectionable in this? Is it not that it causes the ground on which the argument rests to be hidden?

XII. An argument is clear in one sense (and this is the most popular one), if it is brought to a conclusion in such a way that it is unnecessary to ask any further questions; and in another sense (and it is in this sense that the term is most often used) when the results are obtained from premisses from which they must necessarily follow and the argument is concluded by means of conclusions, and if, moreover, there is a marked absence of popular opinions.

An argument is called fallacious in four different senses: (a) when it seems to be brought to a conclusion when it is not really so (the so-called contentious reasoning); (b) when it reaches a conclusion, but not the proposed conclusion (this happens most frequently in *reductiones ad impossibile*); (c) when it comes to the proposed conclusion but not by the appropriate method (that is, when a non-medical argument appears to be medical, or a non-geometrical to be geometrical, or a non-dialectical to be dialectical, whether the result be true or false); and (d) when the conclusion is reached by means of false premisses (here the conclusion will be sometimes false and sometimes true; for a false conclusion is always reached through false premisses, but a true conclusion may be reached even from false premisses, as has been already stated^a).

The fallaciousness of an argument is the fault of the arguer rather than of the argument itself; but it is not always the fault of the arguer either, but only when he fails to observe its fallaciousness; for we often accept a fallacious argument for its own sake

Clearness in argument : its three kinds.

Fallacy in argument :

(a) Its four kinds.

(b) How far does it deserve censure ?

162 b

20 ἂν ἐξ ὅτι μάλιστα δοκούντων ἀναιρῇ τι τῶν ἀληθῶν. τοιοῦτος γὰρ ὢν ἐτέρων ἀληθῶν ἀπόδειξις ἐστίν· δεῖ γὰρ τῶν κειμένων τι μὴ εἶναι παντελῶς, ὥστ' ἔσται τούτου ἀπόδειξις. εἰ δ' ἀληθὲς συμπεραίνοιτο διὰ ψευδῶν καὶ λίαν εὐθηλῶν, πολλῶν ἂν εἴη χείρων ψεῦδος συλλογιζομένων· εἴη δ' ἂν 25 τοιοῦτος καὶ ψεῦδος συμπεραίνόμενος. ὥστε δῆλον ὅτι πρώτη μὲν ἐπίσκεψις λόγου καθ' αὐτὸν εἰ συμπεραίνεται, δευτέρα δὲ πότερον ἀληθὲς ἢ ψεῦδος, τρίτη δ' ἐκ ποίων τινῶν. εἰ μὲν γὰρ ἐκ ψευδῶν ἐνδόξων δέ, λογικός, εἰ δ' ἐξ ὄντων μὲν ἀδόξων δέ, φαῦλος. εἰ δὲ καὶ ψευδῇ καὶ λίαν ἄδοξα, δῆλον ὅτι φαῦλος, ἢ ἀπλῶς ἢ τοῦ πρά- 30 γματος.

XIII. Τὸ δ' ἐν ἀρχῇ καὶ τὰ ἐναντία πῶς αἰτεῖται ὁ ἐρωτῶν, κατ' ἀλήθειαν μὲν ἐν τοῖς Ἀναλυτικοῖς εἴρηται, κατὰ δόξαν δὲ νῦν λεκτέον.

Αἰτεῖσθαι δὲ φαίνονται τὸ ἐν ἀρχῇ πενταχῶς, 35 φανερώτατα μὲν καὶ πρῶτον εἴ τις αὐτὸ τὸ δείκνυσθαι δέον αἰτήσῃ. τοῦτο δ' ἐπ' αὐτοῦ μὲν οὐ ράδιον λανθάνειν, ἐν δὲ τοῖς συνωνύμοις, καὶ ἐν 163 a ὅσοις τὸ ὄνομα καὶ ὁ λόγος τὸ αὐτὸ σημαίνει, μᾶλλον. δευτέρον δὲ ὅταν κατὰ μέρος δέον ἀπο-

^a *An. Pr.* II. 16 (64 b 28 ff.).

in preference to several true arguments, if it destroys some true proposition by means of premisses which are as generally accepted as possible. For an argument of this kind is a demonstration of other truths ; for one of the premisses ought not to find a place in it at all, and so it will be a demonstration of this fact. But if a true conclusion were to be reached from false and entirely foolish premisses, the argument would be worse than many which argue to a false conclusion, and an argument leading to a false conclusion might also be of this kind. It is, therefore, obvious that the first thing to look for in an argument itself is whether it reaches a conclusion ; the second thing, whether its conclusion is true or false ; and the third thing, from what premisses it is drawn. For if it is reached from premisses which are false but generally accepted, it is a dialectical argument ; but if it is reached from premisses which are real but generally rejected, it is bad ; whereas, if the premisses are both false and entirely rejected by general opinion, it is obviously bad, either absolutely or with reference to the subject in question.

(c) Test-questions for its detection.

XIII. How the questioner begs the original question and also begs contraries has been truly described in the *Analytics* ^a ; it must now be described from the point of view of popular opinion.

The begging of questions ; five ways of doing this are distinguished.

There seem to be five ways in which people beg the original question. (1) The first and most obvious way is when a man begs the very point which has to be shown ; this does not easily escape detection when the actual term is used, but is more liable to do so where synonyms are used and the term and the description signify the same thing. (2) A second way is when a man begs something universally when

δείξαι καθόλου τις αἰτήσῃ, οἷον ἐπιχειρῶν ὅτι τῶν
 ἐναντίων μία ἐπιστήμη, ὅλως τῶν ἀντικειμένων
 ἀξιώσκειε μίαν εἶναι· δοκεῖ γὰρ ὁ ἔδει καθ' αὐτὸ
 5 δείξαι μετ' ἄλλων αἰτεῖσθαι πλειόνων. τρίτον εἴ
 τις καθόλου δείξαι προκειμένου κατὰ μέρος αἰτή-
 σκειν, οἷον εἰ πάντων τῶν ἐναντίων προκειμένου
 τῶνδ' ἐκ τινων ἀξιώσκει· δοκεῖ γὰρ καὶ οὗτος, ὁ
 μετὰ πλειόνων ἔδει δείξαι, καθ' αὐτὸ χωρὶς
 αἰτεῖσθαι. πάλιν εἴ τις διελὼν αἰτεῖται τὸ προ-
 10 βληθέν, οἷον εἰ δέον δείξαι τὴν ἰατρικὴν ὑγιεινοῦ
 καὶ νοσώδους, χωρὶς ἐκάτερον ἀξιώσκειν. ἢ εἴ
 τις τῶν ἐπομένων ἀλλήλοις ἐξ ἀνάγκης θάτερον
 αἰτήσκειν, οἷον τὴν πλευρὰν ἀσύμμετρον τῇ δια-
 μέτρῳ, δέον ἀποδείξαι ὅτι ἡ διάμετρος τῇ πλευρᾷ.

Ἰσαχῶς δὲ καὶ τὰναντία αἰτοῦνται τῷ ἐξ ἀρχῆς.
 15 πρῶτον μὲν γὰρ εἴ τις τὰς ἀντικειμένας αἰτήσαιο
 φάσιν καὶ ἀπόφασιν, δεύτερον δὲ τὰναντία κατὰ
 τὴν ἀντίθεσιν, οἷον ἀγαθὸν καὶ κακὸν ταυτόν.
 τρίτον εἴ τις τὸ καθόλου ἀξιώσας ἐπὶ μέρους
 αἰτοῖτο τὴν ἀντίφασιν, οἷον εἰ λαβὼν τῶν ἐναντίων
 μίαν ἐπιστήμην, ὑγιεινοῦ καὶ νοσώδους ἑτέραν
 20 ἀξιώσκειν, ἢ τοῦτο αἰτησάμενος ἐπὶ τοῦ καθόλου

he ought to show it in a particular case ; for example, if, when he is endeavouring to show that there is one science of contraries, he were to claim that there is in general one science of opposites ; for then he is regarded as begging, among several other things, what he should have shown by itself. (3) A third way is when it is proposed to show something universally and he begs it in a particular case ; if, for example, when it is proposed to show that the science of contraries is always one, he begs it of a particular pair of contraries ; for he is also regarded as begging separately and by itself something which he ought to have shown in conjunction with a number of other cases. (4) Another way is when he divides the proposition up and begs its separate parts ; for example, if, when he has to show that medicine is the science of the healthy and of the diseased, he were to claim the two points separately ; or (5) if he were to beg one of two things which necessarily follow one another, for example, that the side is incommensurable with the diagonal when he has to show that the diagonal is incommensurable with the side.

There is the same number of ways of begging contraries as of begging the original question. (1) The first way occurs if one were to beg the opposite affirmation and negation ; (2) the second, if he were to beg the contraries in an antithesis, saying, for example, that the same thing is good and bad ; (3) the third, if he were to claim something universally and beg the contradiction of it in a particular case, for example, if he were to secure an assumption that the knowledge of contraries is one and then claim that the knowledge of what is healthy and of what is diseased is different ; or (4) if, after begging this,

The begging of contraries : five ways of doing this are distinguished.

163 a

τὴν ἀντίφασιν πειρῶτο λαμβάνειν. πάλιν ἐάν τις αἰτήσῃ τὸ ἐναντίον τῷ ἐξ ἀνάγκης συμβαίνοντι διὰ τῶν κειμένων, κἂν εἴ τις αὐτὰ μὲν μὴ λάβοι τὰντικείμενα, τοιαῦτα δ' αἰτήσαιτο δύο ἐξ ὧν ἔσται ἡ ἀντικειμένη ἀντίφασις. διαφέρει δὲ τὸ 25 τὰναντία λαμβάνειν τοῦ ἐν ἀρχῇ ὅτι τοῦ μὲν ἐστὶν ἡ ἀμαρτία πρὸς τὸ συμπέρασμα (πρὸς γὰρ ἐκεῖνο βλέποντες τὸ ἐν ἀρχῇ λέγομεν αἰτεῖσθαι), τὰ δ' ἐναντία ἐστὶν ἐν ταῖς προτάσεσι τῷ ἔχειν πως ταύτας πρὸς ἀλλήλας.

XIV. Πρὸς δὲ γυμνασίαν καὶ μελέτην τῶν 30 τοιούτων λόγων πρῶτον μὲν ἀντιστρέφειν ἐθίζεσθαι χρὴ τοὺς λόγους. οὕτως γὰρ πρὸς τε τὸ λεγόμενον εὐπορώτερον ἔξομεν, καὶ ἐν ὀλίγοις πολλοὺς ἐξεπιστησόμεθα λόγους. τὸ γὰρ ἀντιστρέφειν ἐστὶ τὸ μεταλαβόντα τὸ συμπέρασμα μετὰ τῶν λοιπῶν ἐρωτημάτων ἀνελεῖν ἐν τῶν δοθέν- 35 των· ἀνάγκη γάρ, εἰ τὸ συμπέρασμα μὴ ἐστὶ, μίαν τινὰ ἀναιρεῖσθαι τῶν προτάσεων, εἴπερ πασῶν τεθεισῶν ἀνάγκη ἦν τὸ συμπέρασμα εἶναι. πρὸς ἅπασάν τε θέσιν, καὶ ὅτι οὕτως καὶ ὅτι οὐχ 163 b οὕτως, τὸ ἐπιχείρημα σκεπτέον, καὶ εὐρόντα τὴν λύσιν εὐθὺς ζητητέον· οὕτω γὰρ ἅμα συμβήσεται πρὸς τε τὸ ἐρωτᾶν καὶ πρὸς τὸ ἀποκρίνεσθαι γεγυμνάσθαι. κἂν πρὸς μηδένα ἄλλον ἔχωμεν, πρὸς αὐτούς. παράλληλά τε παραβάλλειν, ἐκλέ- 5 γοντα πρὸς τὴν αὐτὴν θέσιν¹ ἐπιχειρήματα· τοῦτο γὰρ πρὸς τε τὸ βιάζεσθαι πολλὴν εὐπορίαν ποιεῖ

¹ Reading ἐκλέγοντα πρὸς τὴν αὐτὴν θέσιν with the best mss.

^a Cf. *An. Pr.* 59 b 1 ff.

he were to try and secure the contradiction universally. (5) Another way occurs if he were to beg the contrary of that which necessarily follows from the premisses, even without securing the assumption of actual opposites but merely begging two premisses of such a kind that the opposite contradiction will result from them. The assumption of contraries differs from the begging of the original question, because in the latter case the error concerns the conclusion (for we are looking to this when we say that there is a begging of the original question), whereas the contraries are situated in the premisses, namely, in the relation in which they stand to one another.

XIV. For training and practice in this kind of argument one should, in the first place, accustom oneself to converting arguments; for thus we shall be better provided for treating the subject under discussion and obtain by a quick method a thorough knowledge of a number of arguments. For conversion^a is the reversing of the conclusion, together with the other questions raised, and the demolition of one of the points conceded; for of necessity, if the conclusion is not true, one of the premisses must be demolished, since it was owing to the assumption of all of them that the conclusion necessarily followed. In dealing with any thesis we must examine the argument both for and against, and having discovered it we must immediately seek the solution; for the result will be that we shall have trained ourselves at the same time both for question and for answer. If we have no one else with whom to argue, we must do so with ourselves. Also one must choose arguments relating to the same thesis and compare them; for this procedure supplies an abundance of material

Various hints upon training and practice in dialectical arguments;
(a) The usefulness of converting arguments.

(b) The usefulness of scrutinizing the arguments pro and con.

καὶ πρὸς τὸ ἐλέγχειν μεγάλην ἔχει βοήθειαν, ὅταν
 εὐπορῇ τις καὶ ὅτι οὕτως καὶ ὅτι οὐχ οὕτως·
 πρὸς τὰ ἐναντία γὰρ συμβαίνει ποιεῖσθαι τὴν
 φυλακὴν. πρὸς τε γνῶσιν καὶ τὴν κατὰ φιλοσοφίαν
 10 φρόνησιν τὸ δύνασθαι συννοᾶν καὶ συνεωρακέναι
 τὰ ἀφ' ἑκατέρας συμβαίνοντα τῆς ὑποθέσεως οὐ
 μικρὸν ὄργανον· λοιπὸν γὰρ τούτων ὀρθῶς ἐλέσθαι
 θάτερον. δεῖ δὲ πρὸς τὸ τοιοῦτο ὑπάρχειν εὐφυᾶ·
 καὶ τοῦτ' ἔστιν ἢ κατ' ἀλήθειαν εὐφυῖα, τὸ δύνασθαι
 15 καλῶς ἐλέσθαι τὰληθές καὶ φυγεῖν τὸ ψεῦδος·
 ὅπερ οἱ πεφυκότες εὖ δύνανται ποιεῖν· εὖ γὰρ
 φιλοῦντες καὶ μισοῦντες τὸ προσφερόμενον εὖ
 κρίνουσι τὸ βέλτιστον.

Πρὸς τε τὰ πλειστάκεις ἐμπίπτοντα τῶν προβλη-
 μάτων ἐξεπίστασθαι δεῖ λόγους, καὶ μάλιστα περὶ
 τῶν πρώτων θέσεων· ἐν τούτοις γὰρ ἀποδυσ-
 20 πετοῦσιν οἱ ἀποκρινόμενοι πολλάκις. ἔτι τε
 ὄρων εὐπορεῖν δεῖ, καὶ τῶν ἐνδόξων τε καὶ τῶν
 πρώτων ἔχειν προχείρους· διὰ γὰρ τούτων οἱ
 συλλογισμοὶ γίνονται. πειρατέον δὲ καὶ εἰς ἃ
 πλειστάκεις ἐμπίπτουσιν οἱ ἄλλοι λόγοι κατέχειν.
 ὥσπερ γὰρ ἐν γεωμετρίᾳ πρὸ ἔργου τὸ περὶ τὰ
 25 στοιχεῖα γεγυμνάσθαι, καὶ ἐν ἀριθμοῖς τὸ περὶ
 τοὺς κεφαλισμοὺς προχείρως ἔχειν μέγα διαφέρει
 πρὸς τὸ καὶ τὸν ἄλλον ἀριθμὸν γινώσκειν πολλα-
 πλασιούμενον, ὁμοίως καὶ ἐν τοῖς λόγοις τὸ
 πρόχειρον εἶναι περὶ τὰς ἀρχὰς καὶ τὰς προτάσεις
 ἀπὸ στόματος ἐξεπίστασθαι· καθάπερ γὰρ ἐν τῷ
 30 μνημονικῷ μόνον οἱ τόποι τεθέντες εὐθὺς ποιοῦσιν
 αὐτὰ μνημονεύειν, καὶ ταῦτα ποιήσει συλλογιστι-
 κώτερον διὰ τὸ πρὸς ὠρισμένας αὐτὰς βλέπειν

for carrying the position by storm and is very helpful in refutation, when one has plenty of arguments both for and against ; for the result is that one is put on one's guard against contrary arguments. Also to take and to have taken in at a glance the results of each of two hypotheses is no mean instrument for the cult of knowledge and philosophic wisdom ; for then it only remains to make a correct choice of one of them. For such a process one must possess a certain natural ability, and real natural ability consists in being able correctly to choose the true and avoid the false. Men of natural ability can do this ; for they judge correctly what is best by a correct feeling of love or hatred for what is set before them.

You ought thoroughly to learn arguments dealing with questions of frequent occurrence and especially primary propositions ; for answerers often become discouraged in dealing with these. Moreover, you should have a good supply of definitions and have those of familiar and primary ideas ready to hand ; for it is by means of these that reasonings are carried on. You should also try and grasp the categories into which the other arguments most often fall. For just as in geometry it is useful to have been trained in the elements, and in arithmetic to have a ready knowledge of the multiplication table up to ten times helps much to the recognition of other numbers which are the result of multiplication, so too in arguments it is important to be prompt about first principles and to know your premisses by heart. For just as to a trained memory the mere reference to the places in which they occur causes the things themselves to be remembered, so the above rules will make a man a better reasoner, because he sees the premisses

(c) The usefulness of a thorough knowledge of the most usual arguments.

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κατ' ἀριθμόν. πρότασίν τε κοινήν μᾶλλον ἢ λόγον εἰς μνήμην θετέον· ἀρχῆς γὰρ καὶ ὑποθέσεως εὐπορῆσαι μετρίως χαλεπόν.

Ἔτι τὸν ἓνα λόγον πολλοὺς ποιεῖν ἐθιστέον, ὥς
 35 ἀδηλότατα κρύπτοντας. εἴη δ' ἂν τὸ τοιοῦτον, εἴ τις ὅτι πλείστον ἀφισταίῃ τῆς συγγενείας περὶ ὧν ὁ λόγος. ἔσονται δὲ δυνατοὶ τῶν λόγων οἱ
 164 a μάλιστα καθόλου τοῦτο πάσχειν, οἷον ὅτι οὐκ ἔστι μία πλειόνων ἐπιστήμη· οὕτω γὰρ καὶ ἐπὶ τῶν πρὸς τι καὶ ἐπὶ τῶν ἐναντίων καὶ συστοίχων ἐστίν.

Δεῖ δὲ καὶ τὰς ἀπομνημονεύσεις καθόλου ποιεῖσθαι τῶν λόγων, κἂν ἢ διειλεγμένος ἐπὶ μέρους·
 5 οὕτω γὰρ καὶ πολλοὺς ἐξέσται τὸν ἓνα ποιεῖν. ὁμοίως δὲ καὶ ἐν ῥητορικοῖς ἐπὶ τῶν ἐνθυμημάτων. αὐτὸν δ' ὅτι μάλιστα φεύγειν ἐπὶ τὸ καθόλου φέρειν τοὺς συλλογισμούς. αἰεὶ τε δεῖ σκοπεῖν τοὺς λόγους, εἰ ἐπὶ κοινῶν διαλέγονται· πάντες γὰρ οἱ ἐν μέρει καὶ καθόλου διειλεγμένοι εἰσὶ, καὶ
 10 ἔνεστιν ἐν τῇ τοῦ κατὰ μέρος ἢ τοῦ καθόλου ἀπόδειξις διὰ τὸ μὴ εἶναι συλλογίσασθαι μηδὲν ἄνευ τοῦ καθόλου.

Τὴν δὲ γυμνασίαν ἀποδοτέον τῶν μὲν ἐπακτικῶν πρὸς νέον, τῶν δὲ συλλογιστικῶν πρὸς ἔμπειρον. πειρατέον δὲ λαμβάνειν παρὰ μὲν τῶν συλλογιστικῶν τὰς προτάσεις, παρὰ δὲ τῶν ἐπακτικῶν
 15 τὰς παραβολάς· ἐν τούτοις γὰρ ἐκάτεροι γεγυμνασμένοι εἰσὶν. ὅλως δ' ἐκ τοῦ γυμνάζεσθαι δια-
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defined and numbered. A premiss of general application should be committed to memory rather than an argument, since it is pretty difficult to have a first principle or hypothesis ready to hand.

You must accustom yourself to making a single argument into many, keeping the process as secret as possible. This would be best achieved by avoiding as far as possible anything closely connected with the topic under discussion. Arguments which are entirely universal will be best suited to this treatment, for example, the argument that 'there is not one knowledge of more than one thing'; for this applies to relative terms, contraries and co-ordinates.

(d) An adversary's single argument should be divided into many, and rendered as universal as possible.

You should also make records of arguments in a universal form, even though the discussion has been concerned with a particular case; for thus it will be possible to make a single argument into many. (The same thing applies also to enthymemes in rhetoric.) You should, however, yourself avoid, as far as possible, directing discussions towards the universal. You should also always examine your arguments and see whether they are proceeding on the basis of principles of general application; for all particular arguments are also argued universally, and the demonstration of the universal is inherent in that of the particular, because it is impossible to reason at all without employing the universal.

Against a young man you should apply your training in inductive methods, against an expert your training in deductive methods. You should try to obtain premisses from those who employ deduction and parallel instances from those who practise induction; for they have been trained in this or that branch respectively. In a word, as a result of

(e) Inductive arguments are most useful against the young, deductive against the expert.

- 164 a λεγόμενον πειρατέον ἀποφέρεισθαι ἢ συλλογισμὸν
 περί τινος ἢ λύσιν ἢ πρότασιν ἢ ἔνστασιν, ἢ εἰ
 ὀρθῶς τις ἤρετο ἢ εἰ μὴ ὀρθῶς, ἢ αὐτὸς ἢ ἕτερος,
- 164 b καὶ παρὰ τί ἐκάτερον. ἐκ τούτων γὰρ ἡ δύναμις,
 τὸ δὲ γυμνάζεσθαι δυνάμεως χάριν, καὶ μάλιστα
 περὶ τὰς προτάσεις καὶ ἐνστάσεις· ἔστι γὰρ ὡς
 ἀπλῶς εἰπεῖν διαλεκτικὸς ὁ προτατικὸς καὶ ἐνστα-
 τικός. ἔστι δὲ τὸ μὲν προτείνεσθαι ἐν ποιεῖν τὰ
 5 πλείω (δεῖ γὰρ ἐν ὅλῳ ληφθῆναι πρὸς ὃ ὁ λόγος),
 τὸ δ' ἐνίστασθαι τὸ ἐν πολλά· ἢ γὰρ διαιρεῖ ἢ
 ἀναιρεῖ, τὸ μὲν διδοὺς τὸ δ' οὐ τῶν προτεινομέ-
 νων.

Οὐχ ἅπαντι δὲ διαλεκτέον, οὐδὲ πρὸς τὸν τυ-
 χόντα γυμναστέον. ἀνάγκη γὰρ πρὸς ἐνίους φαύ-
 10 λους γίνεσθαι τοὺς λόγους. πρὸς γὰρ τὸν πάντως
 πειρώμενον φαίνεσθαι διαφεύγειν δίκαιον μὲν πάν-
 τως πειρᾶσθαι συλλογίσασθαι, οὐκ εὐσχημον δέ.
 διόπερ οὐ δεῖ συνεστάναι εὐχερῶς πρὸς τοὺς τυ-
 χόντας· ἀνάγκη γὰρ πονηρολογίαν συμβαίνειν· καὶ
 γὰρ οἱ γυμναζόμενοι ἀδυνατοῦσιν ἀπέχεσθαι τοῦ
 15 διαλέγεσθαι μὴ ἀγωνιστικῶς.

Δεῖ δὲ καὶ πεποιημένους ἔχειν λόγους πρὸς τὰ
 τοιαῦτα τῶν προβλημάτων, ἐν οἷς ἐλαχίστων εὐ-
 πορήσαντες πρὸς πλείστα χρησίμους ἔξομεν. οὗτοι
 δ' εἰσὶν οἱ καθόλου, καὶ πρὸς οὓς πορίζεσθαι χα-
 λεπώτερον ἐκ τῶν παρὰ πόδας.

dialectical exercise you should try and achieve either a syllogism on some subject, or a solution, or a proposition, or an objection, or a determination whether a question has been put correctly or incorrectly either by yourself or someone else, and the cause of its being correctly or incorrectly put. These are the sources of ability in discussion, and the purpose of exercise is the acquisition of ability, particularly in connexion with propositions and objections ; for, to put the matter simply, the man who can make propositions and objections is the skilled dialectician. To make a proposition is to turn many things into one (for the end to which the argument is directed must be included in a single whole), while to make an objection is to turn one thing into many ; for the objector distinguishes or demolishes, conceding one proposition and refusing to concede another.

You ought not to discuss with everybody or exercise yourself against any casual person ; for against some people argument is sure to deteriorate ; for with a man who tries every means to seem to avoid defeat you are justified in using every means to obtain your conclusion, but this is not a seemly proceeding. You should not, therefore, readily join issue with casual persons ; this can only result in a debased kind of discussion ; for those who are practising cannot forbear from disputing contentiously.

Also you ought to have arguments already framed to deal with problems, where, though we are provided with very few arguments, those which we have will be useful on the greatest number of occasions. These arguments are those which are universal and those for which it is more difficult to provide material from readily accessible sources.

(f) Do not argue with any casual person.

(g) Special provision should be made to deal with arguments of universal application.