Metaphysics

Aristotle

Greek original

[21] πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει. σημεῖον δ’ ἡ τῶν αἰσθήσεων ἀγάπησις· καὶ γὰρ χωρὶς τῆς χρείας ἀγαπῶνται δι’ αὑτάς, καὶ μάλιστα τῶν ἄλλων ἡ διὰ τῶν ὀμμάτων. οὐ γὰρ μόνον ἵνα πράττωμεν ἀλλὰ καὶ μηθὲν [25] μέλλοντες πράττειν τὸ ὁρᾶν αἱρούμεθα ἀντὶ πάντων ὡς εἰπεῖν τῶν ἄλλων. αἴτιον δ’ ὅτι μάλιστα ποιεῖ γνωρίζειν ἡμᾶς αὕτη τῶν αἰσθήσεων καὶ πολλὰς δηλοῖ διαφοράς. φύσει μὲν οὖν αἴσθησιν ἔχοντα γίγνεται τὰ ζῷα, ἐκ δὲ ταύτης τοῖς μὲν αὐτῶν οὐκ ἐγγίγνεται μνήμη, τοῖς δ’ ἐγγίγνεται. [21] καὶ διὰ τοῦτο ταῦτα φρονιμώτερα καὶ μαθητικώτερα τῶν μὴ δυναμένων μνημονεύειν ἐστί, φρόνιμα μὲν ἄνευ τοῦ μανθάνειν ὅσα μὴ δύναται τῶν ψόφων ἀκούειν (οἷον μέλιττα κἂν εἴ τι τοιοῦτον ἄλλο γένος ζῴων ἔστι), μανθάνει [25] δ’ ὅσα πρὸς τῇ μνήμῃ καὶ ταύτην ἔχει τὴν αἴσθησιν. τὰ μὲν οὖν ἄλλα ταῖς φαντασίαις ζῇ καὶ ταῖς μνήμαις, ἐμπειρίας δὲ μετέχει μικρόν· τὸ δὲ τῶν ἀνθρώπων γένος καὶ τέχνῃ καὶ λογισμοῖς. γίγνεται δ’ ἐκ τῆς μνήμης ἐμπειρία τοῖς ἀνθρώποις· αἱ γὰρ πολλαὶ μνῆμαι τοῦ αὐτοῦ πράγματος μιᾶς ἐμπειρίας δύναμιν ἀποτελοῦσιν. [1] καὶ δοκεῖ σχεδὸν ἐπιστήμῃ καὶ τέχνῃ ὅμοιον εἶναι καὶ ἐμπειρία, ἀποβαίνει δ’ ἐπιστήμη καὶ τέχνη διὰ τῆς ἐμπειρίας τοῖς ἀνθρώποις· ἡ μὲν γὰρ ἐμπειρία τέχνην ἐποίησεν, ὡς φησὶ Πῶλος, ἡ [5] δ’ ἀπειρία τύχην. γίγνεται δὲ τέχνη ὅταν ἐκ πολλῶν τῆς ἐμπειρίας ἐννοημάτων μία καθόλου γένηται περὶ τῶν ὁμοίων ὑπόληψις. τὸ μὲν γὰρ ἔχειν ὑπόληψιν ὅτι Καλλίᾳ κάμνοντι τηνδὶ τὴν νόσον τοδὶ συνήνεγκε καὶ Σωκράτει καὶ καθ’ ἕκαστον οὕτω πολλοῖς, ἐμπειρίας ἐστίν· [10] τὸ δ’ ὅτι πᾶσι τοῖς τοιοῖσδε κατ’ εἶδος ἓν ἀφορισθεῖσι, κάμνουσι τηνδὶ τὴν νόσον, συνήνεγκεν, οἷον τοῖς φλεγματώδεσιν ἢ χολώδεσι ἢ πυρέττουσι καύσῳ, τέχνης.—πρὸς μὲν οὖν τὸ πράττειν ἐμπειρία τέχνης οὐδὲν δοκεῖ διαφέρειν, ἀλλὰ καὶ μᾶλλον ἐπιτυγχάνουσιν οἱ ἔμπειροι τῶν ἄνευ τῆς ἐμπειρίας [15] λόγον ἐχόντων (αἴτιον δ’ ὅτι ἡ μὲν ἐμπειρία τῶν καθ’ ἕκαστόν ἐστι γνῶσις ἡ δὲ τέχνη τῶν καθόλου, αἱ δὲ πράξεις καὶ αἱ γενέσεις πᾶσαι περὶ τὸ καθ’ ἕκαστόν εἰσιν· οὐ γὰρ ἄνθρωπον ὑγιάζει ὁ ἰατρεύων ἀλλ’ ἢ κατὰ συμβεβηκός, ἀλλὰ Καλλίαν ἢ Σωκράτην ἢ τῶν ἄλλων τινὰ [20] τῶν οὕτω λεγομένων ᾧ συμβέβηκεν ἀνθρώπῳ εἶναι· ἐὰν οὖν ἄνευ τῆς ἐμπειρίας ἔχῃ τις τὸν λόγον, καὶ τὸ καθόλου μὲν γνωρίζῃ τὸ δ’ ἐν τούτῳ καθ’ ἕκαστον ἀγνοῇ, πολλάκις διαμαρτήσεται τῆς θεραπείας· θεραπευτὸν γὰρ τὸ καθ’ ἕκαστον)· ἀλλ’ ὅμως τό γε εἰδέναι καὶ τὸ ἐπαΐειν τῇ [25] τέχνῃ τῆς ἐμπειρίας ὑπάρχειν οἰόμεθα μᾶλλον, καὶ σοφωτέρους τοὺς τεχνίτας τῶν ἐμπείρων ὑπολαμβάνομεν, ὡς κατὰ τὸ εἰδέναι μᾶλλον ἀκολουθοῦσαν τὴν σοφίαν πᾶσι· τοῦτο δ’ ὅτι οἱ μὲν τὴν αἰτίαν ἴσασιν οἱ δ’ οὔ. οἱ μὲν γὰρ ἔμπειροι τὸ ὅτι μὲν ἴσασι, διότι δ’ οὐκ ἴσασιν· οἱ δὲ τὸ διότι [30] καὶ τὴν αἰτίαν γνωρίζουσιν. διὸ καὶ τοὺς ἀρχιτέκτονας περὶ ἕκαστον τιμιωτέρους καὶ μᾶλλον εἰδέναι νομίζομεν τῶν χειροτεχνῶν καὶ σοφωτέρους, [1] ὅτι τὰς αἰτίας τῶν ποιουμένων ἴσασιν (τοὺς δ’, ὥσπερ καὶ τῶν ἀψύχων ἔνια ποιεῖ μέν, οὐκ εἰδότα δὲ ποιεῖ ἃ ποιεῖ, οἷον καίει τὸ πῦρ—τὰ μὲν οὖν ἄψυχα φύσει τινὶ ποιεῖν τούτων ἕκαστον τοὺς δὲ χειροτέχνας [5] δι’ ἔθος), ὡς οὐ κατὰ τὸ πρακτικοὺς εἶναι σοφωτέρους ὄντας ἀλλὰ κατὰ τὸ λόγον ἔχειν αὐτοὺς καὶ τὰς αἰτίας γνωρίζειν. ὅλως τε σημεῖον τοῦ εἰδότος καὶ μὴ εἰδότος τὸ δύνασθαι διδάσκειν ἐστίν, καὶ διὰ τοῦτο τὴν τέχνην τῆς ἐμπειρίας ἡγούμεθα μᾶλλον ἐπιστήμην εἶναι· δύνανται γάρ, οἱ δὲ οὐ δύνανται διδάσκειν. [10] ἔτι δὲ τῶν αἰσθήσεων οὐδεμίαν ἡγούμεθα εἶναι σοφίαν· καίτοι κυριώταταί γ’ εἰσὶν αὗται τῶν καθ’ ἕκαστα γνώσεις· ἀλλ’ οὐ λέγουσι τὸ διὰ τί περὶ οὐδενός, οἷον διὰ τί θερμὸν τὸ πῦρ, ἀλλὰ μόνον ὅτι θερμόν. τὸ μὲν οὖν πρῶτον εἰκὸς τὸν ὁποιανοῦν εὑρόντα τέχνην παρὰ τὰς κοινὰς αἰσθήσεις θαυμάζεσθαι [15] ὑπὸ τῶν ἀνθρώπων μὴ μόνον διὰ τὸ χρήσιμον εἶναί τι τῶν εὑρεθέντων ἀλλ’ ὡς σοφὸν καὶ διαφέροντα τῶν ἄλλων· πλειόνων δ’ εὑρισκομένων τεχνῶν καὶ τῶν μὲν πρὸς τἀναγκαῖα τῶν δὲ πρὸς διαγωγὴν οὐσῶν, ἀεὶ σοφωτέρους τοὺς τοιούτους ἐκείνων ὑπολαμβάνεσθαι διὰ τὸ μὴ πρὸς [20] χρῆσιν εἶναι τὰς ἐπιστήμας αὐτῶν. ὅθεν ἤδη πάντων τῶν

τοιούτων κατεσκευασμένων αἱ μὴ πρὸς ἡδονὴν μηδὲ πρὸς τἀναγκαῖα τῶν ἐπιστημῶν εὑρέθησαν, καὶ πρῶτον ἐν τούτοις τοῖς τόποις οὗ πρῶτον ἐσχόλασαν· διὸ περὶ Αἴγυπτον αἱ μαθηματικαὶ πρῶτον τέχναι συνέστησαν, ἐκεῖ γὰρ ἀφείθη σχολάζειν [25] τὸ τῶν ἱερέων ἔθνος. εἴρηται μὲν οὖν ἐν τοῖς ἠθικοῖς τίς διαφορὰ τέχνης καὶ ἐπιστήμης καὶ τῶν ἄλλων τῶν ὁμογενῶν· οὗ δ’ ἕνεκα νῦν ποιούμεθα τὸν λόγον τοῦτ’ ἐστίν, ὅτι τὴν ὀνομαζομένην σοφίαν περὶ τὰ πρῶτα αἴτια καὶ τὰς ἀρχὰς ὑπολαμβάνουσι πάντες· ὥστε, καθάπερ εἴρηται πρότερον, [30] ὁ μὲν ἔμπειρος τῶν ὁποιανοῦν ἐχόντων αἴσθησιν εἶναι δοκεῖ σοφώτερος, ὁ δὲ τεχνίτης τῶν ἐμπείρων, χειροτέχνου δὲ ἀρχιτέκτων, αἱ δὲ θεωρητικαὶ τῶν ποιητικῶν μᾶλλον. [1] ὅτι μὲν οὖν ἡ σοφία περί τινας ἀρχὰς καὶ αἰτίας ἐστὶν ἐπιστήμη, δῆλον.

ἐπεὶ δὲ ταύτην τὴν ἐπιστήμην ζητοῦμεν, τοῦτ’ ἂν εἴη [5] σκεπτέον, ἡ περὶ ποίας αἰτίας καὶ περὶ ποίας ἀρχὰς ἐπιστήμη σοφία ἐστίν. εἰ δὴ λάβοι τις τὰς ὑπολήψεις ἃς ἔχομεν περὶ τοῦ σοφοῦ, τάχ’ ἂν ἐκ τούτου φανερὸν γένοιτο μᾶλλον. ὑπολαμβάνομεν δὴ πρῶτον μὲν ἐπίστασθαι πάντα τὸν σοφὸν ὡς ἐνδέχεται, μὴ καθ’ ἕκαστον ἔχοντα ἐπιστήμην [10] αὐτῶν· εἶτα τὸν τὰ χαλεπὰ γνῶναι δυνάμενον καὶ μὴ ῥᾴδια ἀνθρώπῳ γιγνώσκειν, τοῦτον σοφόν (τὸ γὰρ αἰσθάνεσθαι πάντων κοινόν, διὸ ῥᾴδιον καὶ οὐδὲν σοφόν)· ἔτι τὸν ἀκριβέστερον καὶ τὸν διδασκαλικώτερον τῶν αἰτιῶν σοφώτερον εἶναι περὶ πᾶσαν ἐπιστήμην· καὶ τῶν ἐπιστημῶν δὲ τὴν [15] αὐτῆς ἕνεκεν καὶ τοῦ εἰδέναι χάριν αἱρετὴν οὖσαν μᾶλλον εἶναι σοφίαν ἢ τὴν τῶν ἀποβαινόντων ἕνεκεν, καὶ τὴν ἀρχικωτέραν τῆς ὑπηρετούσης μᾶλλον σοφίαν· οὐ γὰρ δεῖν ἐπιτάττεσθαι τὸν σοφὸν ἀλλ’ ἐπιτάττειν, καὶ οὐ τοῦτον ἑτέρῳ πείθεσθαι, ἀλλὰ τούτῳ τὸν ἧττον σοφόν. —τὰς μὲν οὖν [20] ὑπολήψεις τοιαύτας καὶ τοσαύτας ἔχομεν περὶ τῆς σοφίας καὶ τῶν σοφῶν· τούτων δὲ τὸ μὲν πάντα ἐπίστασθαι τῷ μάλιστα ἔχοντι τὴν καθόλου ἐπιστήμην ἀναγκαῖον ὑπάρχειν (οὗτος γὰρ οἶδέ πως πάντα τὰ ὑποκείμενα), σχεδὸν δὲ καὶ χαλεπώτατα ταῦτα γνωρίζειν τοῖς ἀνθρώποις, τὰ μάλιστα [25] καθόλου (πορρωτάτω γὰρ τῶν αἰσθήσεών ἐστιν), ἀκριβέσταται δὲ τῶν ἐπιστημῶν αἳ μάλιστα τῶν πρώτων εἰσίν (αἱ γὰρ ἐξ ἐλαττόνων ἀκριβέστεραι τῶν ἐκ προσθέσεως λεγομένων, οἷον ἀριθμητικὴ γεωμετρίας)· ἀλλὰ μὴν καὶ διδασκαλική γε ἡ τῶν αἰτιῶν θεωρητικὴ μᾶλλον (οὗτοι γὰρ διδάσκουσιν, οἱ τὰς [30] αἰτίας λέγοντες περὶ ἑκάστου), τὸ δ’ εἰδέναι καὶ τὸ ἐπίστασθαι αὐτῶν ἕνεκα μάλισθ’ ὑπάρχει τῇ τοῦ μάλιστα ἐπιστητοῦ ἐπιστήμῃ (ὁ γὰρ τὸ ἐπίστασθαι δι’ αὑτὸ αἱρούμενος τὴν μάλιστα ἐπιστήμην μάλιστα αἱρήσεται, [1] τοιαύτη δ’ ἐστὶν ἡ τοῦ μάλιστα ἐπιστητου), μάλιστα δ’ ἐπιστητὰ τὰ πρῶτα καὶ τὰ αἴτια (διὰ γὰρ ταῦτα καὶ ἐκ τούτων τἆλλα γνωρίζεται ἀλλ’ οὐ ταῦτα διὰ τῶν ὑποκειμένων), ἀρχικωτάτη δὲ τῶν ἐπιστημῶν, καὶ [5] μᾶλλον ἀρχικὴ τῆς ὑπηρετούσης, ἡ γνωρίζουσα τίνος ἕνεκέν ἐστι πρακτέον ἕκαστον· τοῦτο δ’ ἐστὶ τἀγαθὸν ἑκάστου, ὅλως δὲ τὸ ἄριστον ἐν τῇ φύσει πάσῃ. ἐξ ἁπάντων οὖν τῶν εἰρημένων ἐπὶ τὴν αὐτὴν ἐπιστήμην πίπτει τὸ ζητούμενον ὄνομα· δεῖ γὰρ ταύτην τῶν πρώτων ἀρχῶν καὶ αἰτιῶν εἶναι θεωρητικήν· [10] καὶ γὰρ τἀγαθὸν καὶ τὸ οὗ ἕνεκα ἓν τῶν αἰτίων ἐστίν.

ὅτι δ’ οὐ ποιητική, δῆλον καὶ ἐκ τῶν πρώτων φιλοσοφησάντων· διὰ γὰρ τὸ θαυμάζειν οἱ ἄνθρωποι καὶ νῦν καὶ τὸ πρῶτον ἤρξαντο φιλοσοφεῖν, ἐξ ἀρχῆς μὲν τὰ πρόχειρα τῶν ἀτόπων θαυμάσαντες, εἶτα κατὰ μικρὸν οὕτω προϊόντες [15] καὶ περὶ τῶν μειζόνων διαπορήσαντες, οἷον περί τε τῶν τῆς σελήνης παθημάτων καὶ τῶν περὶ τὸν ἥλιον καὶ ἄστρα καὶ περὶ τῆς τοῦ παντὸς γενέσεως. ὁ δ’ ἀπορῶν καὶ θαυμάζων οἴεται ἀγνοεῖν (διὸ καὶ ὁ φιλόμυθος φιλόσοφός πώς ἐστιν· ὁ γὰρ μῦθος σύγκειται ἐκ θαυμασίων)· ὥστ’ εἴπερ διὰ [20] τὸ φεύγειν τὴν ἄγνοιαν ἐφιλοσόφησαν, φανερὸν ὅτι διὰ τὸ εἰδέναι τὸ ἐπίστασθαι ἐδίωκον καὶ οὐ χρήσεώς τινος ἕνεκεν. μαρτυρεῖ δὲ αὐτὸ τὸ συμβεβηκός· σχεδὸν γὰρ πάντων ὑπαρχόντων τῶν ἀναγκαίων καὶ πρὸς ῥᾳστώνην καὶ διαγωγὴν ἡ τοιαύτη φρόνησις ἤρξατο ζητεῖσθαι. δῆλον οὖν ὡς δι’ [25] οὐδεμίαν αὐτὴν ζητοῦμεν χρείαν ἑτέραν, ἀλλ’ ὥσπερ ἄνθρωπος, φαμέν, ἐλεύθερος ὁ αὑτοῦ ἕνεκα καὶ μὴ ἄλλου ὤν, οὕτω καὶ αὐτὴν ὡς μόνην οὖσαν ἐλευθέραν τῶν ἐπιστημῶν· μόνη γὰρ αὕτη αὐτῆς

ἕνεκέν ἐστιν. διὸ καὶ δικαίως ἂν οὐκ ἀνθρωπίνη νομίζοιτο αὐτῆς ἡ κτῆσις· πολλαχῇ γὰρ ἡ φύσις δούλη τῶν [30] ἀνθρώπων ἐστίν, ὥστε κατὰ Σιμωνίδην θεὸς ἂν μόνος τοῦτ’ ἔχοι γέρας, ἄνδρα δ’ οὐκ ἄξιον μὴ οὐ ζητεῖν τὴν καθ’ αὑτὸν ἐπιστήμην. εἰ δὴ λέγουσί τι οἱ ποιηταὶ καὶ πέφυκε φθονεῖν τὸ θεῖον, [1] ἐπὶ τούτου συμβῆναι μάλιστα εἰκὸς καὶ δυστυχεῖς [2] εἶναι πάντας τοὺς περιττούς. ἀλλ’ οὔτε τὸ θεῖον φθονερὸν ἐνδέχεται εἶναι, ἀλλὰ κατὰ τὴν παροιμίαν πολλὰ ψεύδονται ἀοιδοί, οὔτε τῆς τοιαύτης ἄλλην χρὴ νομίζειν τιμιωτέραν. [5] ἡ γὰρ θειοτάτη καὶ τιμιωτάτη· τοιαύτη δὲ διχῶς ἂν εἴη μόνη· ἥν τε γὰρ μάλιστ’ ἂν ὁ θεὸς ἔχοι, θεία τῶν ἐπιστημῶν ἐστί, κἂν εἴ τις τῶν θείων εἴη. μόνη δ’ αὕτη τούτων ἀμφοτέρων τετύχηκεν· ὅ τε γὰρ θεὸς δοκεῖ τῶν αἰτίων πᾶσιν εἶναι καὶ ἀρχή τις, καὶ τὴν τοιαύτην ἢ μόνος ἢ μάλιστ’ [10] ἂν ἔχοι ὁ θεός. ἀναγκαιότεραι μὲν οὖν πᾶσαι ταύτης, ἀμείνων δ’ οὐδεμία.—δεῖ μέντοι πως καταστῆναι τὴν κτῆσιν αὐτῆς εἰς τοὐναντίον ἡμῖν τῶν ἐξ ἀρχῆς ζητήσεων. ἄρχονται μὲν γάρ, ὥσπερ εἴπομεν, ἀπὸ τοῦ θαυμάζειν πάντες εἰ οὕτως ἔχει, καθάπερ περὶ τῶν θαυμάτων ταὐτόματα τοῖς μήπω τεθεωρηκόσι [15] τὴν αἰτίαν ἢ περὶ τὰς τοῦ ἡλίου τροπὰς ἢ τὴν τῆς διαμέτρου ἀσυμμετρίαν (θαυμαστὸν γὰρ εἶναι δοκεῖ πᾶσι τοῖς μήπω τεθεωρηκόσι τὴν αἰτίαν εἴ τι τῷ ἐλαχίστῳ μὴ μετρεῖται)· δεῖ δὲ εἰς τοὐναντίον καὶ τὸ ἄμεινον κατὰ τὴν παροιμίαν ἀποτελευτῆσαι, καθάπερ καὶ ἐν τούτοις ὅταν μάθωσιν· οὐθὲν γὰρ [20] ἂν οὕτως θαυμάσειεν ἀνὴρ γεωμετρικὸς ὡς εἰ γένοιτο ἡ διάμετρος μετρητή. τίς μὲν οὖν ἡ φύσις τῆς ἐπιστήμης τῆς ζητουμένης, εἴρηται, καὶ τίς ὁ σκοπὸς οὗ δεῖ τυγχάνειν τὴν ζήτησιν καὶ τὴν ὅλην μέθοδον.

ἐπεὶ δὲ φανερὸν ὅτι τῶν ἐξ ἀρχῆς αἰτίων δεῖ λαβεῖν [25] ἐπιστήμην (τότε γὰρ εἰδέναι φαμὲν ἕκαστον, ὅταν τὴν πρώτην αἰτίαν οἰώμεθα γνωρίζειν), τὰ δ’ αἴτια λέγεται τετραχῶς, ὧν μίαν μὲν αἰτίαν φαμὲν εἶναι τὴν οὐσίαν καὶ τὸ τί ἦν εἶναι (ἀνάγεται γὰρ τὸ διὰ τί εἰς τὸν λόγον ἔσχατον, αἴτιον δὲ καὶ ἀρχὴ τὸ διὰ τί πρῶτον), ἑτέραν δὲ τὴν ὕλην [30] καὶ τὸ ὑποκείμενον, τρίτην δὲ ὅθεν ἡ ἀρχὴ τῆς κινήσεως, τετάρτην δὲ τὴν ἀντικειμένην αἰτίαν ταύτῃ, τὸ οὗ ἕνεκα καὶ τἀγαθόν (τέλος γὰρ γενέσεως καὶ κινήσεως πάσης τοῦτ’ ἐστίν), τεθεώρηται μὲν οὖν ἱκανῶς περὶ αὐτῶν ἡμῖν ἐν τοῖς περὶ φύσεως, [1] ὅμως δὲ παραλάβωμεν καὶ τοὺς πρότερον ἡμῶν εἰς ἐπίσκεψιν τῶν ὄντων ἐλθόντας καὶ φιλοσοφήσαντας περὶ τῆς ἀληθείας. δῆλον γὰρ ὅτι κἀκεῖνοι λέγουσιν ἀρχάς τινας καὶ αἰτίας· ἐπελθοῦσιν οὖν ἔσται τι προὔργου τῇ μεθόδῳ τῇ νῦν· [5] ἢ γὰρ ἕτερόν τι γένος εὑρήσομεν αἰτίας ἢ ταῖς νῦν λεγομέναις μᾶλλον πιστεύσομεν.—τῶν δὴ πρώτων φιλοσοφησάντων οἱ πλεῖστοι τὰς ἐν ὕλης εἴδει μόνας ὠήθησαν ἀρχὰς εἶναι πάντων· ἐξ οὗ γὰρ ἔστιν ἅπαντα τὰ ὄντα καὶ ἐξ οὗ γίγνεται πρώτου καὶ εἰς ὃ φθείρεται τελευταῖον, τῆς μὲν [10] οὐσίας ὑπομενούσης τοῖς δὲ πάθεσι μεταβαλλούσης, τοῦτο στοιχεῖον καὶ ταύτην ἀρχήν φασιν εἶναι τῶν ὄντων, καὶ διὰ τοῦτο οὔτε γίγνεσθαι οὐθὲν οἴονται οὔτε ἀπόλλυσθαι, ὡς τῆς τοιαύτης φύσεως ἀεὶ σωζομένης, ὥσπερ οὐδὲ τὸν Σωκράτην φαμὲν οὔτε γίγνεσθαι ἁπλῶς ὅταν γίγνηται καλὸς ἢ μουσικὸς [15] οὔτε ἀπόλλυσθαι ὅταν ἀποβάλῃ ταύτας τὰς ἕξεις, διὰ τὸ ὑπομένειν τὸ ὑποκείμενον τὸν Σωκράτην αὐτόν, οὕτως οὐδὲ τῶν ἄλλων οὐδέν· ἀεὶ γὰρ εἶναί τινα φύσιν ἢ μίαν ἢ πλείους μιᾶς ἐξ ὧν γίγνεται τἆλλα σωζομένης ἐκείνης. τὸ μέντοι πλῆθος καὶ τὸ εἶδος τῆς τοιαύτης ἀρχῆς οὐ τὸ αὐτὸ [20] πάντες λέγουσιν, ἀλλὰ Θαλῆς μὲν ὁ τῆς τοιαύτης ἀρχηγὸς φιλοσοφίας ὕδωρ φησὶν εἶναι (διὸ καὶ τὴν γῆν ἐφ’ ὕδατος ἀπεφήνατο εἶναι), λαβὼν ἴσως τὴν ὑπόληψιν ταύτην ἐκ τοῦ πάντων ὁρᾶν τὴν τροφὴν ὑγρὰν οὖσαν καὶ αὐτὸ τὸ θερμὸν ἐκ τούτου γιγνόμενον καὶ τούτῳ ζῶν (τὸ δ’ ἐξ οὗ γίγνεται, τοῦτ’ ἐστὶν [25] ἀρχὴ πάντων)—διά τε δὴ τοῦτο τὴν ὑπόληψιν λαβὼν ταύτην καὶ διὰ τὸ πάντων τὰ σπέρματα τὴν φύσιν ὑγρὰν ἔχειν, τὸ δ’ ὕδωρ ἀρχὴν τῆς φύσεως εἶναι τοῖς ὑγροῖς. εἰσὶ δέ τινες οἳ καὶ τοὺς παμπαλαίους καὶ πολὺ πρὸ τῆς νῦν γενέσεως καὶ πρώτους θεολογήσαντας οὕτως οἴονται περὶ τῆς φύσεως [30] ὑπολαβεῖν· Ὠκεανόν τε γὰρ καὶ Τηθὺν ἐποίησαν τῆς γενέσεως πατέρας, καὶ τὸν ὅρκον τῶν θεῶν ὕδωρ, τὴν καλουμένην ὑπ’ αὐτῶν Στύγα τῶν ποιητῶν· τιμιώτατον μὲν γὰρ τὸ πρεσβύτατον, ὅρκος δὲ τὸ

τιμιώτατόν ἐστιν. εἰ μὲν οὖν ἀρχαία τις αὕτη καὶ παλαιὰ τετύχηκεν οὖσα περὶ τῆς φύσεως [1] ἡ δόξα, τάχ’ ἂν ἄδηλον εἴη, Θαλῆς μέντοι λέγεται οὕτως ἀποφήνασθαι περὶ τῆς πρώτης αἰτίας (Ἵππωνα γὰρ οὐκ ἄν τις ἀξιώσειε θεῖναι μετὰ τούτων διὰ τὴν εὐτέλειαν [5] αὐτοῦ τῆς διανοίας)· Ἀναξιμένης δὲ ἀέρα καὶ Διογένης πρότερον ὕδατος καὶ μάλιστ’ ἀρχὴν τιθέασι τῶν ἁπλῶν σωμάτων, Ἵππασος δὲ πῦρ ὁ Μεταποντῖνος καὶ Ἡράκλειτος ὁ Ἐφέσιος, Ἐμπεδοκλῆς δὲ τὰ τέτταρα, πρὸς τοῖς εἰρημένοις γῆν προστιθεὶς τέταρτον (ταῦτα γὰρ ἀεὶ διαμένειν καὶ οὐ [10] γίγνεσθαι ἀλλ’ ἢ πλήθει καὶ ὀλιγότητι, συγκρινόμενα καὶ διακρινόμενα εἰς ἕν τε καὶ ἐξ ἑνός)· Ἀναξαγόρας δὲ ὁ Κλαζομένιος τῇ μὲν ἡλικίᾳ πρότερος ὢν τούτου τοῖς δ’ ἔργοις ὕστερος ἀπείρους εἶναί φησι τὰς ἀρχάς· σχεδὸν γὰρ ἅπαντα τὰ ὁμοιομερῆ καθάπερ ὕδωρ ἢ πῦρ οὕτω γίγνεσθαι καὶ [15] ἀπόλλυσθαί φησι, συγκρίσει καὶ διακρίσει μόνον, ἄλλως δ’ οὔτε γίγνεσθαι οὔτ’ ἀπόλλυσθαι ἀλλὰ διαμένειν ἀΐδια.—ἐκ μὲν οὖν τούτων μόνην τις αἰτίαν νομίσειεν ἂν τὴν ἐν ὕλης εἴδει λεγομένην· προϊόντων δ’ οὕτως, αὐτὸ τὸ πρᾶγμα ὡδοποίησεν αὐτοῖς καὶ συνηνάγκασε ζητεῖν· εἰ γὰρ ὅτι μάλιστα [20] πᾶσα γένεσις καὶ φθορὰ ἔκ τινος ἑνὸς ἢ καὶ πλειόνων ἐστίν, διὰ τί τοῦτο συμβαίνει καὶ τί τὸ αἴτιον; οὐ γὰρ δὴ τό γε ὑποκείμενον αὐτὸ ποιεῖ μεταβάλλειν ἑαυτό· λέγω δ’ οἷον οὔτε τὸ ξύλον οὔτε ὁ χαλκὸς αἴτιος τοῦ μεταβάλλειν ἑκάτερον αὐτῶν, οὐδὲ ποιεῖ τὸ μὲν ξύλον κλίνην ὁ δὲ χαλκὸς ἀνδριάντα, [25] ἀλλ’ ἕτερόν τι τῆς μεταβολῆς αἴτιον. τὸ δὲ τοῦτο ζητεῖν ἐστὶ τὸ τὴν ἑτέραν ἀρχὴν ζητεῖν, ὡς ἂν ἡμεῖς φαίημεν, ὅθεν ἡ ἀρχὴ τῆς κινήσεως. οἱ μὲν οὖν πάμπαν ἐξ ἀρχῆς ἀψάμενοι τῆς μεθόδου τῆς τοιαύτης καὶ ἓν φάσκοντες εἶναι τὸ ὑποκείμενον οὐθὲν ἐδυσχέραναν ἑαυτοῖς, ἀλλ’ ἔνιοί [30] γε τῶν ἓν λεγόντων, ὥσπερ ἡττηθέντες ὑπὸ ταύτης τῆς ζητήσεως, τὸ ἓν ἀκίνητόν φασιν εἶναι καὶ τὴν φύσιν ὅλην οὐ μόνον κατὰ γένεσιν καὶ φθοράν (τοῦτο μὲν γὰρ ἀρχαῖόν τε καὶ πάντες ὡμολόγησαν) ἀλλὰ καὶ κατὰ τὴν ἄλλην μεταβολὴν πᾶσαν· καὶ τοῦτο αὐτῶν ἴδιόν ἐστιν. [1] τῶν μὲν οὖν ἓν φασκόντων εἶναι τὸ πᾶν οὐθενὶ συνέβη τὴν τοιαύτην συνιδεῖν αἰτίαν πλὴν εἰ ἄρα Παρμενίδῃ, καὶ τούτῳ κατὰ τοσοῦτον ὅσον οὐ μόνον ἓν ἀλλὰ καὶ δύο πως τίθησιν αἰτίας εἶναι· [5] τοῖς δὲ δὴ πλείω ποιοῦσι μᾶλλον ἐνδέχεται λέγειν, οἷον τοῖς θερμὸν καὶ ψυχρὸν ἢ πῦρ καὶ γῆν· χρῶνται γὰρ ὡς κινητικὴν ἔχοντι τῷ πυρὶ τὴν φύσιν, ὕδατι δὲ καὶ γῇ καὶ τοῖς τοιούτοις τοὐναντίον.—μετὰ δὲ τούτους καὶ τὰς τοιαύτας ἀρχάς, ὡς οὐχ ἱκανῶν οὐσῶν γεννῆσαι τὴν τῶν ὄντων φύσιν, πάλιν [10] ὑπ’ αὐτῆς τῆς ἀληθείας, ὥσπερ εἴπομεν, ἀναγκαζόμενοι τὴν ἐχομένην ἐζήτησαν ἀρχήν. τοῦ γὰρ εὖ καὶ καλῶς τὰ μὲν ἔχειν τὰ δὲ γίγνεσθαι τῶν ὄντων ἴσως οὔτε πῦρ οὔτε γῆν οὔτ’ ἄλλο τῶν τοιούτων οὐθὲν οὔτ’ εἰκὸς αἴτιον εἶναι οὔτ’ ἐκείνους οἰηθῆναι· οὐδ’ αὖ τῷ αὐτομάτῳ καὶ τύχῃ τοσοῦτον ἐπιτρέψαι [15] πρᾶγμα καλῶς εἶχεν. νοῦν δή τις εἰπὼν ἐνεῖναι, καθάπερ ἐν τοῖς ζῴοις, καὶ ἐν τῇ φύσει τὸν αἴτιον τοῦ κόσμου καὶ τῆς τάξεως πάσης οἷον νήφων ἐφάνη παρ’ εἰκῇ λέγοντας [18] τοὺς πρότερον. φανερῶς μὲν οὖν Ἀναξαγόραν ἴσμεν ἁψάμενον τούτων τῶν λόγων, αἰτίαν δ’ ἔχει πρότερον Ἑρμότιμος [20] ὁ Κλαζομένιος εἰπεῖν. οἱ μὲν οὖν οὕτως ὑπολαμβάνοντες ἅμα τοῦ καλῶς τὴν αἰτίαν ἀρχὴν εἶναι τῶν ὄντων ἔθεσαν, καὶ τὴν τοιαύτην ὅθεν ἡ κίνησις ὑπάρχει τοῖς οὖσιν·

ὑποπτεύσειε δ’ ἄν τις Ἡσίοδον πρῶτον ζητῆσαι τὸ τοιοῦτον, κἂν εἴ τις ἄλλος ἔρωτα ἢ ἐπιθυμίαν ἐν τοῖς οὖσιν ἔθηκεν [25] ὡς ἀρχήν, οἷον καὶ Παρμενίδης· καὶ γὰρ οὗτος κατασκευάζων τὴν τοῦ παντὸς γένεσιν

πρώτιστον μέν (φησιν) ἔρωτα θεῶν μητίσατο πάντων

, Ἡσίοδος δὲ

πάντων μὲν πρώτιστα χάος γένετ’, αὐτὰρ ἔπειτα

γαῖ’ εὐρύστερνος

ἠδ’ ἔρος, ὃς πάντεσσι μεταπρέπει ἀθανάτοισιν,

ὡς δέον ἐν τοῖς [30] οὖσιν ὑπάρχειν τιν’ αἰτίαν ἥτις κινήσει καὶ συνάξει τὰ πράγματα. τούτους μὲν οὖν πῶς χρὴ διανεῖμαι περὶ τοῦ τίς πρῶτος, ἐξέστω κρίνειν ὕστερον· ἐπεὶ δὲ καὶ τἀναντία τοῖς ἀγαθοῖς ἐνόντα ἐφαίνετο ἐν τῇ φύσει, καὶ οὐ μόνον τάξις καὶ τὸ καλὸν ἀλλὰ καὶ ἀταξία καὶ τὸ αἰσχρόν, [1] καὶ πλείω τὰ κακὰ τῶν ἀγαθῶν καὶ τὰ φαῦλα τῶν καλῶν, οὕτως ἄλλος τις φιλίαν εἰσήνεγκε καὶ νεῖκος, ἑκάτερον ἑκατέρων αἴτιον τούτων. εἰ γάρ τις ἀκολουθοίη καὶ λαμβάνοι πρὸς τὴν διάνοιαν [5] καὶ μὴ πρὸς ἃ ψελλίζεται λέγων Ἐμπεδοκλῆς, εὑρήσει τὴν μὲν φιλίαν αἰτίαν οὖσαν τῶν ἀγαθῶν τὸ δὲ νεῖκος τῶν κακῶν· ὥστ’ εἴ τις φαίη τρόπον τινὰ καὶ λέγειν καὶ πρῶτον λέγειν τὸ κακὸν καὶ τὸ ἀγαθὸν ἀρχὰς Ἐμπεδοκλέα, τάχ’ ἂν λέγοι καλῶς, εἴπερ τὸ τῶν ἀγαθῶν ἁπάντων αἴτιον [10] αὐτὸ τἀγαθόν ἐστι καὶ τῶν κακῶν τὸ κακόν.—οὗτοι μὲν οὖν, ὥσπερ λέγομεν, καὶ μέχρι τούτου δυοῖν αἰτίαιν ὧν ἡμεῖς διωρίσαμεν ἐν τοῖς περὶ φύσεως ἡμμένοι φαίνονται, τῆς τε ὕλης καὶ τοῦ ὅθεν ἡ κίνησις, ἀμυδρῶς μέντοι καὶ οὐθὲν σαφῶς ἀλλ’ οἷον ἐν ταῖς μάχαις οἱ ἀγύμναστοι ποιοῦσιν· καὶ γὰρ ἐκεῖνοι περιφερόμενοι [15] τύπτουσι πολλάκις καλὰς πληγάς, ἀλλ’ οὔτε ἐκεῖνοι ἀπὸ ἐπιστήμης οὔτε οὗτοι ἐοίκασιν εἰδέναι ὅ τι λέγουσιν· σχεδὸν γὰρ οὐθὲν χρώμενοι φαίνονται τούτοις ἀλλ’ ἢ κατὰ μικρόν. Ἀναξαγόρας τε γὰρ μηχανῇ χρῆται τῷ νῷ πρὸς τὴν κοσμοποιίαν, καὶ ὅταν ἀπορήσῃ διὰ τίν’ αἰτίαν [20] ἐξ ἀνάγκης ἐστί, τότε παρέλκει αὐτόν, ἐν δὲ τοῖς ἄλλοις πάντα μᾶλλον αἰτιᾶται τῶν γιγνομένων ἢ νοῦν, καὶ Ἐμπεδοκλῆς ἐπὶ πλέον μὲν τούτου χρῆται τοῖς αἰτίοις, οὐ μὴν οὔθ’ ἱκανῶς, οὔτ’ ἐν τούτοις εὑρίσκει τὸ ὁμολογούμενον. πολλαχοῦ γοῦν αὐτῷ ἡ μὲν φιλία διακρίνει τὸ δὲ νεῖκος συγκρίνει. [25] ὅταν μὲν γὰρ εἰς τὰ στοιχεῖα διίστηται τὸ πᾶν ὑπὸ τοῦ νείκους, τότε τὸ πῦρ εἰς ἓν συγκρίνεται καὶ τῶν ἄλλων στοιχείων ἕκαστον· ὅταν δὲ πάλιν ὑπὸ τῆς φιλίας συνίωσιν εἰς τὸ ἕν, ἀναγκαῖον ἐξ ἑκάστου τὰ μόρια διακρίνεσθαι πάλιν.—Ἐμπεδοκλῆς μὲν οὖν παρὰ τοὺς πρότερον πρῶτος [30] τὸ τὴν αἰτίαν διελεῖν εἰσήνεγκεν, οὐ μίαν ποιήσας τὴν τῆς κινήσεως ἀρχὴν ἀλλ’ ἑτέρας τε καὶ ἐναντίας, ἔτι δὲ τὰ ὡς ἐν ὕλης εἴδει λεγόμενα στοιχεῖα τέτταρα πρῶτος εἶπεν (οὐ μὴν χρῆταί γε τέτταρσιν ἀλλ’ ὡς δυσὶν οὖσι μόνοις, [1] πυρὶ μὲν καθ’ αὐτὸ τοῖς δ’ ἀντικειμένοις ὡς μιᾷ φύσει, γῇ τε καὶ ἀέρι καὶ ὕδατι· λάβοι δ’ ἄν τις αὐτὸ θεωρῶν ἐκ τῶν ἐπῶν)·—οὗτος μὲν οὖν, ὥσπερ λέγομεν, οὕτω τε καὶ τοσαύτας εἴρηκε τὰς ἀρχάς· Λεύκιππος δὲ καὶ ὁ ἑταῖρος [5] αὐτοῦ Δημόκριτος στοιχεῖα μὲν τὸ πλῆρες καὶ τὸ κενὸν εἶναί φασι, λέγοντες τὸ μὲν ὂν τὸ δὲ μὴ ὄν, τούτων δὲ τὸ μὲν πλῆρες καὶ στερεὸν τὸ ὄν, τὸ δὲ κενὸν τὸ μὴ ὄν (διὸ καὶ οὐθὲν μᾶλλον τὸ ὂν τοῦ μὴ ὄντος εἶναί φασιν, ὅτι οὐδὲ τοῦ κενοῦ τὸ σῶμα), αἴτια δὲ τῶν ὄντων ταῦτα ὡς [10] ὕλην. καὶ καθάπερ οἱ ἓν ποιοῦντες τὴν ὑποκειμένην οὐσίαν τἆλλα τοῖς πάθεσιν αὐτῆς γεννῶσι, τὸ μανὸν καὶ τὸ πυκνὸν ἀρχὰς τιθέμενοι τῶν παθημάτων, τὸν αὐτὸν τρόπον καὶ οὗτοι τὰς διαφορὰς αἰτίας τῶν ἄλλων εἶναί φασιν. ταύτας μέντοι τρεῖς εἶναι λέγουσι, σχῆμά τε καὶ τάξιν καὶ [15] θέσιν· διαφέρειν γάρ φασι τὸ ὂν ῥυσμῷ καὶ διαθιγῇ καὶ τροπῇ μόνον· τούτων δὲ ὁ μὲν ῥυσμὸς σχῆμά ἐστιν ἡ δὲ διαθιγὴ τάξις ἡ δὲ τροπὴ θέσις· διαφέρει γὰρ τὸ μὲν Α τοῦ Ν σχήματι τὸ δὲ ΑΝ τοῦ ΝΑ τάξει τὸ δὲ Ζ τοῦ Η θέσει. περὶ δὲ κινήσεως, ὅθεν ἢ πῶς ὑπάρξει τοῖς οὖσι, καὶ [20] οὗτοι παραπλησίως τοῖς ἄλλοις ῥᾳθύμως ἀφεῖσαν. περὶ μὲν οὖν τῶν δύο αἰτιῶν, ὥσπερ λέγομεν, ἐπὶ τοσοῦτον ἔοικεν ἐζητῆσθαι παρὰ τῶν πρότερον.

ἐν δὲ τούτοις καὶ πρὸ τούτων οἱ καλούμενοι Πυθαγόρειοι τῶν μαθημάτων ἁψάμενοι πρῶτοι ταῦτά τε προήγαγον, καὶ [25] ἐντραφέντες ἐν αὐτοῖς τὰς τούτων ἀρχὰς τῶν ὄντων ἀρχὰς ᾠήθησαν εἶναι πάντων. ἐπεὶ δὲ τούτων οἱ ἀριθμοὶ φύσει πρῶτοι, ἐν δὲ τούτοις ἐδόκουν θεωρεῖν ὁμοιώματα πολλὰ τοῖς οὖσι καὶ γιγνομένοις, μᾶλλον ἢ ἐν πυρὶ καὶ γῇ καὶ ὕδατι, ὅτι τὸ μὲν τοιονδὶ τῶν ἀριθμῶν πάθος δικαιοσύνη [30] τὸ δὲ τοιονδὶ ψυχή τε καὶ νοῦς ἕτερον δὲ καιρὸς καὶ τῶν ἄλλων ὡς εἰπεῖν ἕκαστον ὁμοίως, ἔτι δὲ τῶν ἁρμονιῶν ἐν ἀριθμοῖς ὁρῶντες τὰ πάθη καὶ τοὺς λόγους,—ἐπεὶ δὴ τὰ μὲν ἄλλα τοῖς ἀριθμοῖς ἐφαίνοντο τὴν φύσιν ἀφωμοιῶσθαι πᾶσαν, οἱ

δ’ ἀριθμοὶ πάσης τῆς φύσεως πρῶτοι, [1] τὰ τῶν ἀριθμῶν στοιχεῖα τῶν ὄντων στοιχεῖα πάντων ὑπέλαβον εἶναι, καὶ τὸν ὅλον οὐρανὸν ἁρμονίαν εἶναι καὶ ἀριθμόν· καὶ ὅσα εἶχον ὁμολογούμενα ἔν τε τοῖς ἀριθμοῖς καὶ ταῖς ἁρμονίαις πρὸς [5] τὰ τοῦ οὐρανοῦ πάθη καὶ μέρη καὶ πρὸς τὴν ὅλην διακόσμησιν, ταῦτα συνάγοντες ἐφήρμοττον. κἂν εἴ τί που διέλειπε, προσεγλίχοντο τοῦ συνειρομένην πᾶσαν αὐτοῖς εἶναι τὴν πραγματείαν· λέγω δ’ οἷον, ἐπειδὴ τέλειον ἡ δεκὰς εἶναι δοκεῖ καὶ πᾶσαν περιειληφέναι τὴν τῶν ἀριθμῶν φύσιν, [10] καὶ τὰ φερόμενα κατὰ τὸν οὐρανὸν δέκα μὲν εἶναί φασιν, ὄντων δὲ ἐννέα μόνον τῶν φανερῶν διὰ τοῦτο δεκάτην τὴν ἀντίχθονα ποιοῦσιν. διώρισται δὲ περὶ τούτων ἐν ἑτέροις ἡμῖν ἀκριβέστερον. ἀλλ’ οὗ δὴ χάριν ἐπερχόμεθα, τοῦτό ἐστιν ὅπως λάβωμεν καὶ παρὰ τούτων τίνας εἶναι τιθέασι τὰς [15] ἀρχὰς καὶ πῶς εἰς τὰς εἰρημένας ἐμπίπτουσιν αἰτίας. φαίνονται δὴ καὶ οὗτοι τὸν ἀριθμὸν νομίζοντες ἀρχὴν εἶναι καὶ ὡς ὕλην τοῖς οὖσι καὶ ὡς πάθη τε καὶ ἕξεις, τοῦ δὲ ἀριθμοῦ στοιχεῖα τό τε ἄρτιον καὶ τὸ περιττόν, τούτων δὲ τὸ μὲν πεπερασμένον τὸ δὲ ἄπειρον, τὸ δ’ ἓν ἐξ ἀμφοτέρων εἶναι τούτων [20] (καὶ γὰρ ἄρτιον εἶναι καὶ περιττόν), τὸν δ’ ἀριθμὸν ἐκ τοῦ ἑνός, ἀριθμοὺς δέ, καθάπερ εἴρηται, τὸν ὅλον οὐρανόν.—ἕτεροι δὲ τῶν αὐτῶν τούτων τὰς ἀρχὰς δέκα λέγουσιν εἶναι τὰς κατὰ συστοιχίαν λεγομένας, πέρας καὶ ἄπειρον, περιττὸν καὶ ἄρτιον, ἓν καὶ πλῆθος, δεξιὸν καὶ ἀριστερόν, ἄρρεν [25] καὶ θῆλυ, ἠρεμοῦν καὶ κινούμενον, εὐθὺ καὶ καμπύλον, φῶς καὶ σκότος, ἀγαθὸν καὶ κακόν, τετράγωνον καὶ ἑτερόμηκες· ὅνπερ τρόπον ἔοικε καὶ Ἀλκμαίων ὁ Κροτωνιάτης ὑπολαβεῖν, καὶ ἤτοι οὗτος παρ’ ἐκείνων ἢ ἐκεῖνοι παρὰ τούτου παρέλαβον τὸν λόγον τοῦτον· καὶ γὰρ ἐγένετο τὴν ἡλικίαν Ἀλκμαίων [30] ἐπὶ γέροντι Πυθαγόρᾳ, ἀπεφήνατο δὲ παραπλησίως τούτοις· φησὶ γὰρ εἶναι δύο τὰ πολλὰ τῶν ἀνθρωπίνων, λέγων τὰς ἐναντιότητας οὐχ ὥσπερ οὗτοι διωρισμένας ἀλλὰ τὰς τυχούσας, οἷον λευκὸν μέλαν, γλυκὺ πικρόν, ἀγαθὸν κακόν, μέγα μικρόν. οὗτος μὲν οὖν ἀδιορίστως ἀπέρριψε περὶ τῶν λοιπῶν, [1] οἱ δὲ Πυθαγόρειοι καὶ πόσαι καὶ τίνες αἱ ἐναντιώσεις [2] ἀπεφήναντο. παρὰ μὲν οὖν τούτων ἀμφοῖν τοσοῦτον ἔστι λαβεῖν, ὅτι τἀναντία ἀρχαὶ τῶν ὄντων· τὸ δ’ ὅσαι παρὰ τῶν ἑτέρων, καὶ τίνες αὗταί εἰσιν. πῶς μέντοι πρὸς [5] τὰς εἰρημένας αἰτίας ἐνδέχεται συνάγειν, σαφῶς μὲν οὐ διήρθρωται παρ’ ἐκείνων, ἐοίκασι δ’ ὡς ἐν ὕλης εἴδει τὰ στοιχεῖα τάττειν· ἐκ τούτων γὰρ ὡς ἐνυπαρχόντων συνεστάναι καὶ πεπλάσθαι φασὶ τὴν οὐσίαν.—τῶν μὲν οὖν παλαιῶν καὶ πλείω λεγόντων τὰ στοιχεῖα τῆς φύσεως ἐκ τούτων ἱκανόν [10] ἐστι θεωρῆσαι τὴν διάνοιαν· εἰσὶ δέ τινες οἳ περὶ τοῦ παντὸς ὡς μιᾶς οὔσης φύσεως ἀπεφήναντο, τρόπον δὲ οὐ τὸν αὐτὸν πάντες οὔτε τοῦ καλῶς οὔτε τοῦ κατὰ τὴν φύσιν. εἰς μὲν οὖν τὴν νῦν σκέψιν τῶν αἰτίων οὐδαμῶς συναρμόττει περὶ αὐτῶν ὁ λόγος (οὐ γὰρ ὥσπερ ἔνιοι τῶν φυσιολόγων ἓν ὑποθέμενοι [15] τὸ ὂν ὅμως γεννῶσιν ὡς ἐξ ὕλης τοῦ ἑνός, ἀλλ’ ἕτερον τρόπον οὗτοι λέγουσιν· ἐκεῖνοι μὲν γὰρ προστιθέασι κίνησιν, γεννῶντές γε τὸ πᾶν, οὗτοι δὲ ἀκίνητον εἶναί φασιν)· οὐ μὴν ἀλλὰ τοσοῦτόν γε οἰκεῖόν ἐστι τῇ νῦν σκέψει. Παρμενίδης μὲν γὰρ ἔοικε τοῦ κατὰ τὸν λόγον ἑνὸς ἅπτεσθαι, Μέλισσος [20] δὲ τοῦ κατὰ τὴν ὕλην (διὸ καὶ ὁ μὲν πεπερασμένον ὁ δ’ ἄπειρόν φησιν εἶναι αὐτό)· Ξενοφάνης δὲ πρῶτος τούτων ἐνίσας (ὁ γὰρ Παρμενίδης τούτου λέγεται γενέσθαι μαθητής) οὐθὲν διεσαφήνισεν, οὐδὲ τῆς φύσεως τούτων οὐδετέρας ἔοικε θιγεῖν, ἀλλ’ εἰς τὸν ὅλον οὐρανὸν ἀποβλέψας τὸ ἓν εἶναί φησι τὸν [25] θεόν. οὗτοι μὲν οὖν, καθάπερ εἴπομεν, ἀφετέοι πρὸς τὴν νῦν ζήτησιν, οἱ μὲν δύο καὶ πάμπαν ὡς ὄντες μικρὸν ἀγροικότεροι, Ξενοφάνης καὶ Μέλισσος· Παρμενίδης δὲ μᾶλλον βλέπων ἔοικέ που λέγειν· παρὰ γὰρ τὸ ὂν τὸ μὴ ὂν οὐθὲν ἀξιῶν εἶναι, ἐξ ἀνάγκης ἓν οἴεται εἶναι, τὸ ὄν, καὶ [30] ἄλλο οὐθέν (περὶ οὗ σαφέστερον ἐν τοῖς περὶ φύσεως εἰρήκαμεν), ἀναγκαζόμενος δ’ ἀκολουθεῖν τοῖς φαινομένοις, καὶ τὸ ἓν μὲν κατὰ τὸν λόγον πλείω δὲ κατὰ τὴν αἴσθησιν ὑπολαμβάνων εἶναι, δύο τὰς αἰτίας καὶ δύο τὰς ἀρχὰς πάλιν τίθησι, θερμὸν καὶ ψυχρόν, οἷον πῦρ καὶ γῆν λέγων· [1] τούτων δὲ κατὰ μὲν τὸ ὂν τὸ θερμὸν τάττει θάτερον δὲ κατὰ τὸ μὴ ὄν.—ἐκ μὲν οὖν τῶν εἰρημένων καὶ παρὰ τῶν συνηδρευκότων ἤδη τῷ

λόγῳ σοφῶν ταῦτα παρειλήφαμεν, παρὰ μὲν τῶν πρώτων σωματικήν τε τὴν ἀρχήν (ὕδωρ γὰρ καὶ [5] πῦρ καὶ τὰ τοιαῦτα σώματά ἐστιν), καὶ τῶν μὲν μίαν τῶν δὲ πλείους τὰς ἀρχὰς τὰς σωματικάς, ἀμφοτέρων μέντοι ταύτας ὡς ἐν ὕλης εἴδει τιθέντων, παρὰ δέ τινων ταύτην τε τὴν αἰτίαν τιθέντων καὶ πρὸς ταύτῃ τὴν ὅθεν ἡ κίνησις, καὶ ταύτην παρὰ τῶν μὲν μίαν παρὰ τῶν δὲ δύο. μέχρι μὲν [10] οὖν τῶν Ἰταλικῶν καὶ χωρὶς ἐκείνων μορυχώτερον εἰρήκασιν οἱ ἄλλοι περὶ αὐτῶν, πλὴν ὥσπερ εἴπομεν δυοῖν τε αἰτίαιν τυγχάνουσι κεχρημένοι, καὶ τούτων τὴν ἑτέραν οἱ μὲν μίαν οἱ δὲ δύο ποιοῦσι, τὴν ὅθεν ἡ κίνησις· οἱ δὲ Πυθαγόρειοι δύο μὲν τὰς ἀρχὰς κατὰ τὸν αὐτὸν εἰρήκασι τρόπον, τοσοῦτον [15] δὲ προσεπέθεσαν ὃ καὶ ἴδιόν ἐστιν αὐτῶν, ὅτι τὸ πεπερασμένον καὶ τὸ ἄπειρον καὶ τὸ ἓν οὐχ ἑτέρας τινὰς ᾠήθησαν εἶναι φύσεις, οἷον πῦρ ἢ γῆν ἤ τι τοιοῦτον ἕτερον, ἀλλ’ αὐτὸ τὸ ἄπειρον καὶ αὐτὸ τὸ ἓν οὐσίαν εἶναι τούτων ὧν κατηγοροῦνται, διὸ καὶ ἀριθμὸν εἶναι τὴν οὐσίαν πάντων. περί τε [20] τούτων οὖν τοῦτον ἀπεφήναντο τὸν τρόπον, καὶ περὶ τοῦ τί ἐστιν ἤρξαντο μὲν λέγειν καὶ ὁρίζεσθαι, λίαν δ’ ἁπλῶς ἐπραγματεύθησαν. ὡρίζοντό τε γὰρ ἐπιπολαίως, καὶ ᾧ πρώτῳ ὑπάρξειεν ὁ λεχθεὶς ὅρος, τοῦτ’ εἶναι τὴν οὐσίαν τοῦ πράγματος ἐνόμιζον, ὥσπερ εἴ τις οἴοιτο ταὐτὸν εἶναι διπλάσιον καὶ τὴν [25] δυάδα διότι πρῶτον ὑπάρχει τοῖς δυσὶ τὸ διπλάσιον. ἀλλ’ οὐ ταὐτὸν ἴσως ἐστὶ τὸ εἶναι διπλασίῳ καὶ δυάδι· εἰ δὲ μή, πολλὰ τὸ ἓν ἔσται, ὃ κἀκείνοις συνέβαινεν. παρὰ μὲν οὖν τῶν πρότερον καὶ τῶν ἄλλων τοσαῦτα ἔστι λαβεῖν.

μετὰ δὲ τὰς εἰρημένας φιλοσοφίας ἡ Πλάτωνος ἐπεγένετο [30] πραγματεία, τὰ μὲν πολλὰ τούτοις ἀκολουθοῦσα, τὰ δὲ καὶ ἴδια παρὰ τὴν τῶν Ἰταλικῶν ἔχουσα φιλοσοφίαν. ἐκ νέου τε γὰρ συνήθης γενόμενος πρῶτον Κρατύλῳ καὶ ταῖς Ἡρακλειτείοις δόξαις, ὡς ἁπάντων τῶν αἰσθητῶν ἀεὶ ῥεόντων καὶ ἐπιστήμης περὶ αὐτῶν οὐκ οὔσης, ταῦτα μὲν καὶ ὕστερον οὕτως ὑπέλαβεν· [1] Σωκράτους δὲ περὶ μὲν τὰ ἠθικὰ πραγματευομένου περὶ δὲ τῆς ὅλης φύσεως οὐθέν, ἐν μέντοι τούτοις τὸ καθόλου ζητοῦντος καὶ περὶ ὁρισμῶν ἐπιστήσαντος πρώτου τὴν διάνοιαν, ἐκεῖνον ἀποδεξάμενος διὰ τὸ τοιοῦτον [5] ὑπέλαβεν ὡς περὶ ἑτέρων τοῦτο γιγνόμενον καὶ οὐ τῶν αἰσθητῶν· ἀδύνατον γὰρ εἶναι τὸν κοινὸν ὅρον τῶν αἰσθητῶν τινός, ἀεί γε μεταβαλλόντων. οὗτος οὖν τὰ μὲν τοιαῦτα τῶν ὄντων ἰδέας προσηγόρευσε, τὰ δ’ αἰσθητὰ παρὰ ταῦτα καὶ κατὰ ταῦτα λέγεσθαι πάντα· κατὰ μέθεξιν γὰρ εἶναι τὰ [10] πολλὰ ὁμώνυμα τοῖς εἴδεσιν. τὴν δὲ μέθεξιν τοὔνομα μόνον μετέβαλεν· οἱ μὲν γὰρ Πυθαγόρειοι μιμήσει τὰ ὄντα φασὶν εἶναι τῶν ἀριθμῶν, Πλάτων δὲ μεθέξει, τοὔνομα μεταβαλών. τὴν μέντοι γε μέθεξιν ἢ τὴν μίμησιν ἥτις ἂν εἴη τῶν εἰδῶν ἀφεῖσαν ἐν κοινῷ ζητεῖν. ἔτι δὲ παρὰ τὰ αἰσθητὰ [15] καὶ τὰ εἴδη τὰ μαθηματικὰ τῶν πραγμάτων εἶναί φησι μεταξύ, διαφέροντα τῶν μὲν αἰσθητῶν τῷ ἀΐδια καὶ ἀκίνητα εἶναι, τῶν δ’ εἰδῶν τῷ τὰ μὲν πόλλ’ ἄττα ὅμοια εἶναι τὸ δὲ εἶδος αὐτὸ ἓν ἕκαστον μόνον. ἐπεὶ δ’ αἴτια τὰ εἴδη τοῖς ἄλλοις, τἀκείνων στοιχεῖα πάντων ᾠήθη τῶν ὄντων εἶναι [20] στοιχεῖα. ὡς μὲν οὖν ὕλην τὸ μέγα καὶ τὸ μικρὸν εἶναι ἀρχάς, ὡς δ’ οὐσίαν τὸ ἕν· ἐξ ἐκείνων γὰρ κατὰ μέθεξιν τοῦ ἑνὸς τὰ εἴδη εἶναι τοὺς ἀριθμούς. τὸ μέντοι γε ἓν οὐσίαν εἶναι, καὶ μὴ ἕτερόν γέ τι ὂν λέγεσθαι ἕν, παραπλησίως τοῖς Πυθαγορείοις ἔλεγε, καὶ τὸ τοὺς ἀριθμοὺς αἰτίους εἶναι τοῖς ἄλλοις [25] τῆς οὐσίας ὡσαύτως ἐκείνοις· τὸ δὲ ἀντὶ τοῦ ἀπείρου ὡς ἑνὸς δυάδα ποιῆσαι, τὸ δ’ ἄπειρον ἐκ μεγάλου καὶ μικροῦ, τοῦτ’ ἴδιον· καὶ ἔτι ὁ μὲν τοὺς ἀριθμοὺς παρὰ τὰ αἰσθητά, οἱ δ’ ἀριθμοὺς εἶναί φασιν αὐτὰ τὰ πράγματα, καὶ τὰ μαθηματικὰ μεταξὺ τούτων οὐ τιθέασιν. τὸ μὲν οὖν τὸ ἓν καὶ τοὺς [30] ἀριθμοὺς παρὰ τὰ πράγματα ποιῆσαι, καὶ μὴ ὥσπερ οἱ Πυθαγόρειοι, καὶ ἡ τῶν εἰδῶν εἰσαγωγὴ διὰ τὴν ἐν τοῖς λόγοις ἐγένετο σκέψιν (οἱ γὰρ πρότεροι διαλεκτικῆς οὐ μετεῖχον), τὸ δὲ δυάδα ποιῆσαι τὴν ἑτέραν φύσιν διὰ τὸ τοὺς ἀριθμοὺς ἔξω τῶν πρώτων εὐφυῶς ἐξ αὐτῆς γεννᾶσθαι ὥσπερ ἔκ τινος ἐκμαγείου. [1] καίτοι συμβαίνει γ’ ἐναντίως· οὐ γὰρ εὔλογον οὕτως. οἱ μὲν γὰρ ἐκ τῆς ὕλης πολλὰ ποιοῦσιν, τὸ δ’ εἶδος ἅπαξ γεννᾷ μόνον, φαίνεται δ’ ἐκ μιᾶς ὕλης μία τράπεζα, ὁ δὲ τὸ εἶδος ἐπιφέρων εἷς ὢν πολλὰς ποιεῖ. [5] ὁμοίως δ’ ἔχει καὶ

τὸ ἄρρεν πρὸς τὸ θῆλυ· τὸ μὲν γὰρ ὑπὸ μιᾶς πληροῦται ὀχείας, τὸ δ’ ἄρρεν πολλὰ πληροῖ· καίτοι ταῦτα μιμήματα τῶν ἀρχῶν ἐκείνων ἐστίν. Πλάτων μὲν οὖν περὶ τῶν ζητουμένων οὕτω διώρισεν· φανερὸν δ’ ἐκ τῶν εἰρημένων ὅτι δυοῖν αἰτίαιν μόνον κέχρηται, τῇ τε [10] τοῦ τί ἐστι καὶ τῇ κατὰ τὴν ὕλην (τὰ γὰρ εἴδη τοῦ τί ἐστιν αἴτια τοῖς ἄλλοις, τοῖς δ’ εἴδεσι τὸ ἕν), καὶ τίς ἡ ὕλη ἡ ὑποκειμένη καθ’ ἧς τὰ εἴδη μὲν ἐπὶ τῶν αἰσθητῶν τὸ δ’ ἓν ἐν τοῖς εἴδεσι λέγεται, ὅτι αὕτη δυάς ἐστι, τὸ μέγα καὶ τὸ μικρόν, ἔτι δὲ τὴν τοῦ εὖ καὶ τοῦ κακῶς αἰτίαν τοῖς στοιχείοις [15] ἀπέδωκεν ἑκατέροις ἑκατέραν, ὥσπερ φαμὲν καὶ τῶν προτέρων ἐπιζητῆσαί τινας φιλοσόφων, οἷον Ἐμπεδοκλέα καὶ Ἀναξαγόραν.

συντόμως μὲν οὖν καὶ κεφαλαιωδῶς ἐπεληλύθαμεν τίνες τε καὶ πῶς τυγχάνουσιν εἰρηκότες περί τε τῶν ἀρχῶν [20] καὶ τῆς ἀληθείας· ὅμως δὲ τοσοῦτόν γ’ ἔχομεν ἐξ αὐτῶν, ὅτι τῶν λεγόντων περὶ ἀρχῆς καὶ αἰτίας οὐθεὶς ἔξω τῶν ἐν τοῖς περὶ φύσεως ἡμῖν διωρισμένων εἴρηκεν, ἀλλὰ πάντες ἀμυδρῶς μὲν ἐκείνων δέ πως φαίνονται θιγγάνοντες. οἱ μὲν γὰρ ὡς ὕλην τὴν ἀρχὴν λέγουσιν, ἄν τε μίαν ἄν τε πλείους [25] ὑποθῶσι, καὶ ἐάν τε σῶμα ἐάν τε ἀσώματον τοῦτο τιθῶσιν (οἷον Πλάτων μὲν τὸ μέγα καὶ τὸ μικρὸν λέγων, οἱ δ’ Ἰταλικοὶ τὸ ἄπειρον, Ἐμπεδοκλῆς δὲ πῦρ καὶ γῆν καὶ ὕδωρ καὶ ἀέρα, Ἀναξαγόρας δὲ τὴν τῶν ὁμοιομερῶν ἀπειρίαν· οὗτοί τε δὴ πάντες τῆς τοιαύτης αἰτίας ἡμμένοι εἰσί, καὶ ἔτι ὅσοι [30] ἀέρα ἢ πῦρ ἢ ὕδωρ ἢ πυρὸς μὲν πυκνότερον ἀέρος δὲ λεπτότερον· καὶ γὰρ τοιοῦτόν τινες εἰρήκασιν εἶναι τὸ πρῶτον στοιχεῖον)·—οὗτοι μὲν οὖν ταύτης τῆς αἰτίας ἥψαντο μόνον, ἕτεροι δέ τινες ὅθεν ἡ ἀρχὴ τῆς κινήσεως (οἷον ὅσοι φιλίαν καὶ νεῖκος ἢ νοῦν ἢ ἔρωτα ποιοῦσιν ἀρχήν)· τὸ δὲ τί ἦν εἶναι [35] καὶ τὴν οὐσίαν σαφῶς μὲν οὐθεὶς ἀποδέδωκε, [1] μάλιστα δ’ οἱ τὰ εἴδη τιθέντες λέγουσιν (οὔτε γὰρ ὡς ὕλην τοῖς αἰσθητοῖς τὰ εἴδη καὶ τὸ ἓν τοῖς εἴδεσιν οὔθ’ ὡς ἐντεῦθεν τὴν ἀρχὴν τῆς κινήσεως γιγνομένην ὑπολαμβάνουσιν—ἀκινησίας γὰρ αἴτια μᾶλλον καὶ τοῦ ἐν ἠρεμίᾳ εἶναι φασιν—ἀλλὰ τὸ τί ἦν εἶναι [5] ἑκάστῳ τῶν ἄλλων τὰ εἴδη παρέχονται, τοῖς δ’ εἴδεσι τὸ ἕν)· τὸ δ’ οὗ ἕνεκα αἱ πράξεις καὶ αἱ μεταβολαὶ καὶ αἱ κινήσεις τρόπον μέν τινα λέγουσιν αἴτιον, οὕτω δὲ οὐ λέγουσιν οὐδ’ ὅνπερ πέφυκεν. οἱ μὲν γὰρ νοῦν λέγοντες ἢ φιλίαν ὡς ἀγαθὸν μὲν ταύτας τὰς αἰτίας τιθέασιν, οὐ μὴν ὡς [10] ἕνεκά γε τούτων ἢ ὂν ἢ γιγνόμενόν τι τῶν ὄντων ἀλλ’ ὡς ἀπὸ τούτων τὰς κινήσεις οὔσας λέγουσιν· ὡς δ’ αὕτως καὶ οἱ τὸ ἓν ἢ τὸ ὂν φάσκοντες εἶναι τὴν τοιαύτην φύσιν τῆς μὲν οὐσίας αἴτιόν φασιν εἶναι, οὐ μὴν τούτου γε ἕνεκα ἢ εἶναι ἢ γίγνεσθαι, ὥστε λέγειν τε καὶ μὴ λέγειν πως συμβαίνει αὐτοῖς [15] τἀγαθὸν αἴτιον· οὐ γὰρ ἁπλῶς ἀλλὰ κατὰ συμβεβηκὸς λέγουσιν.—ὅτι μὲν οὖν ὀρθῶς διώρισται περὶ τῶν αἰτίων καὶ πόσα καὶ ποῖα, μαρτυρεῖν ἐοίκασιν ἡμῖν καὶ οὗτοι πάντες, οὐ δυνάμενοι θιγεῖν ἄλλης αἰτίας, πρὸς δὲ τούτοις ὅτι ζητητέαι αἱ ἀρχαὶ ἢ οὕτως ἅπασαι ἢ τινὰ τρόπον τοιοῦτον, δῆλον· [20] πῶς δὲ τούτων ἕκαστος εἴρηκε καὶ πῶς ἔχει περὶ τῶν ἀρχῶν, τὰς ἐνδεχομένας ἀπορίας μετὰ τοῦτο διέλθωμεν περὶ αὐτῶν.

ὅσοι μὲν οὖν ἕν τε τὸ πᾶν καὶ μίαν τινὰ φύσιν ὡς ὕλην τιθέασι, καὶ ταύτην σωματικὴν καὶ μέγεθος ἔχουσαν, δῆλον ὅτι πολλαχῶς ἁμαρτάνουσιν. τῶν γὰρ σωμάτων τὰ [25] στοιχεῖα τιθέασι μόνον, τῶν δ’ ἀσωμάτων οὔ, ὄντων καὶ ἀσωμάτων. καὶ περὶ γενέσεως καὶ φθορᾶς ἐπιχειροῦντες τὰς αἰτίας λέγειν, καὶ περὶ πάντων φυσιολογοῦντες, τὸ τῆς κινήσεως αἴτιον ἀναιροῦσιν. ἔτι δὲ τῷ τὴν οὐσίαν μηθενὸς αἰτίαν τιθέναι μηδὲ τὸ τί ἐστι, καὶ πρὸς τούτοις τῷ ῥᾳδίως τῶν [30] ἁπλῶν σωμάτων λέγειν ἀρχὴν ὁτιοῦν πλὴν γῆς, οὐκ ἐπισκεψάμενοι τὴν ἐξ ἀλλήλων γένεσιν πῶς ποιοῦνται, λέγω δὲ πῦρ καὶ ὕδωρ καὶ γῆν καὶ ἀέρα. τὰ μὲν γὰρ συγκρίσει τὰ δὲ διακρίσει ἐξ ἀλλήλων γίγνεται, τοῦτο δὲ πρὸς τὸ πρότερον εἶναι καὶ ὕστερον διαφέρει πλεῖστον. τῇ μὲν γὰρ ἂν [35] δόξειε στοιχειωδέστατον εἶναι πάντων ἐξ οὗ γίγνονται συγκρίσει πρώτου, [1] τοιοῦτον δὲ τὸ μικρομερέστατον καὶ λεπτότατον ἂν εἴη τῶν σωμάτων (διόπερ ὅσοι πῦρ ἀρχὴν τιθέασι, μάλιστα ὁμολογουμένως ἂν τῷ λόγῳ τούτῳ λέγοιεν· τοιοῦτον δὲ καὶ τῶν

ἄλλων ἕκαστος ὁμολογεῖ τὸ στοιχεῖον εἶναι τὸ τῶν σωμάτων· [5] οὐθεὶς γοῦν ἠξίωσε τῶν ἓν λεγόντων γῆν εἶναι στοιχεῖον, δηλονότι διὰ τὴν μεγαλομέρειαν, τῶν δὲ τριῶν ἕκαστον στοιχείων εἴληφέ τινα κριτήν, οἱ μὲν γὰρ πῦρ οἱ δ’ ὕδωρ οἱ δ’ ἀέρα τοῦτ’ εἶναί φασιν· καίτοι διὰ τί ποτ’ οὐ καὶ τὴν γῆν λέγουσιν, ὥσπερ οἱ πολλοὶ τῶν ἀνθρώπων; πάντα [10] γὰρ εἶναί φασι γῆν, φησὶ δὲ καὶ Ἡσίοδος τὴν γῆν πρώτην γενέσθαι τῶν σωμάτων· οὕτως ἀρχαίαν καὶ δημοτικὴν συμβέβηκεν εἶναι τὴν ὑπόληψιν)·—κατὰ μὲν οὖν τοῦτον τὸν λόγον οὔτ’ εἴ τις τούτων τι λέγει πλὴν πυρός, οὔτ’ εἴ τις ἀέρος μὲν πυκνότερον τοῦτο τίθησιν ὕδατος δὲ [15] λεπτότερον, οὐκ ὀρθῶς ἂν λέγοι· εἰ δ’ ἔστι τὸ τῇ γενέσει ὕστερον τῇ φύσει πρότερον, τὸ δὲ πεπεμμένον καὶ συγκεκριμένον ὕστερον τῇ γενέσει, τοὐναντίον ἂν εἴη τούτων, ὕδωρ μὲν ἀέρος πρότερον γῆ δὲ ὕδατος.—περὶ μὲν οὖν τῶν μίαν τιθεμένων αἰτίαν οἵαν εἴπομεν, ἔστω ταῦτ’ εἰρημένα· τὸ δ’ [20] αὐτὸ κἂν εἴ τις ταῦτα πλείω τίθησιν, οἷον Ἐμπεδοκλῆς τέτταρά φησιν εἶναι σώματα τὴν ὕλην. καὶ γὰρ τούτῳ τὰ μὲν ταὐτὰ τὰ δ’ ἴδια συμβαίνειν ἀνάγκη. γιγνόμενά τε γὰρ ἐξ ἀλλήλων ὁρῶμεν ὡς οὐκ ἀεὶ διαμένοντος πυρὸς καὶ γῆς τοῦ αὐτοῦ σώματος (εἴρηται δὲ ἐν τοῖς περὶ φύσεως περὶ αὐτῶν), [25] καὶ περὶ τῆς τῶν κινουμένων αἰτίας, πότερον ἓν ἢ δύο θετέον, οὔτ’ ὀρθῶς οὔτε εὐλόγως οἰητέον εἰρῆσθαι παντελῶς. ὅλως τε ἀλλοίωσιν ἀναιρεῖσθαι ἀνάγκη τοῖς οὕτω λέγουσιν· οὐ γὰρ ἐκ θερμοῦ ψυχρὸν οὐδὲ ἐκ ψυχροῦ θερμὸν ἔσται. τὶ γὰρ αὐτὰ ἂν πάσχοι τἀναντία, καὶ τὶς εἴη ἂν μία φύσις ἡ γιγνομένη [30] πῦρ καὶ ὕδωρ, ὃ ἐκεῖνος οὔ φησιν. Ἀναξαγόραν δ’ εἴ τις ὑπολάβοι δύο λέγειν στοιχεῖα, μάλιστ’ ἂν ὑπολάβοι κατὰ λόγον, ὃν ἐκεῖνος αὐτὸς μὲν οὐ διήρθρωσεν, ἠκολούθησε μέντ’ ἂν ἐξ ἀνάγκης τοῖς ἐπάγουσιν αὐτόν. ἀτόπου γὰρ ὄντος καὶ ἄλλως τοῦ φάσκειν μεμῖχθαι τὴν ἀρχὴν πάντα, [1] καὶ διὰ τὸ συμβαίνειν ἄμικτα δεῖν προϋπάρχειν καὶ διὰ τὸ μὴ πεφυκέναι τῷ τυχόντι μίγνυσθαι τὸ τυχόν, πρὸς δὲ τούτοις ὅτι τὰ πάθη καὶ τὰ συμβεβηκότα χωρίζοιτ’ ἂν τῶν οὐσιῶν (τῶν γὰρ αὐτῶν μῖξίς ἐστι καὶ χωρισμός), ὅμως εἴ τις ἀκολουθήσειε [5] συνδιαρθρῶν ἃ βούλεται λέγειν, ἴσως ἂν φανείη καινοπρεπεστέρως λέγων. ὅτε γὰρ οὐθὲν ἦν ἀποκεκριμένον, δῆλον ὡς οὐθὲν ἦν ἀληθὲς εἰπεῖν κατὰ τῆς οὐσίας ἐκείνης, λέγω δ’ οἷον ὅτι οὔτε λευκὸν οὔτε μέλαν ἢ φαιὸν ἢ ἄλλο χρῶμα, ἀλλ’ ἄχρων ἦν ἐξ ἀνάγκης· εἶχε γὰρ ἄν τι τούτων [10] τῶν χρωμάτων· ὁμοίως δὲ καὶ ἄχυμον τῷ αὐτῷ λόγῳ τούτῳ, οὐδὲ ἄλλο τῶν ὁμοίων οὐθέν· οὔτε γὰρ ποιόν τι οἷόν τε αὐτὸ εἶναι οὔτε ποσὸν οὔτε τί. τῶν γὰρ ἐν μέρει τι λεγομένων εἰδῶν ὑπῆρχεν ἂν αὐτῷ, τοῦτο δὲ ἀδύνατον μεμιγμένων γε πάντων· ἤδη γὰρ ἂν ἀπεκέκριτο, φησὶ δ’ [15] εἶναι μεμιγμένα πάντα πλὴν τοῦ νοῦ, τοῦτον δὲ ἀμιγῆ μόνον καὶ καθαρόν. ἐκ δὴ τούτων συμβαίνει λέγειν αὐτῷ τὰς ἀρχὰς τό τε ἕν (τοῦτο γὰρ ἁπλοῦν καὶ ἀμιγές) καὶ θάτερον, οἷον τίθεμεν τὸ ἀόριστον πρὶν ὁρισθῆναι καὶ μετασχεῖν εἴδους τινός, ὥστε λέγει μὲν οὔτ’ ὀρθῶς οὔτε σαφῶς, βούλεται μέντοι [20] τι παραπλήσιον τοῖς τε ὕστερον λέγουσι καὶ τοῖς νῦν φαινομένοις μᾶλλον.—ἀλλὰ γὰρ οὗτοι μὲν τοῖς περὶ γένεσιν λόγοις καὶ φθορὰν καὶ κίνησιν οἰκεῖοι τυγχάνουσι μόνον (σχεδὸν γὰρ περὶ τῆς τοιαύτης οὐσίας καὶ τὰς ἀρχὰς καὶ τὰς αἰτίας ζητοῦσι μόνης)· ὅσοι δὲ περὶ μὲν ἁπάντων τῶν ὄντων ποιοῦνται [25] τὴν θεωρίαν, τῶν δ’ ὄντων τὰ μὲν αἰσθητὰ τὰ δ’ οὐκ αἰσθητὰ τιθέασι, δῆλον ὡς περὶ ἀμφοτέρων τῶν γενῶν ποιοῦνται τὴν [27] ἐπίσκεψιν· διὸ μᾶλλον ἄν τις ἐνδιατρίψειε περὶ αὐτῶν, τί καλῶς ἢ μὴ καλῶς λέγουσιν εἰς τὴν τῶν νῦν ἡμῖν προκειμένων σκέψιν. οἱ μὲν οὖν καλούμενοι Πυθαγόρειοι ταῖς μὲν [30] ἀρχαῖς καὶ τοῖς στοιχείοις ἐκτοπωτέροις χρῶνται τῶν φυσιολόγων (τὸ δ’ αἴτιον ὅτι παρέλαβον αὐτὰς οὐκ ἐξ αἰσθητῶν· τὰ γὰρ μαθηματικὰ τῶν ὄντων ἄνευ κινήσεώς ἐστιν ἔξω τῶν περὶ τὴν ἀστρολογίαν), διαλέγονται μέντοι καὶ πραγματεύονται περὶ φύσεως πάντα· γεννῶσί τε γὰρ τὸν οὐρανόν, [1] καὶ περὶ τὰ τούτου μέρη καὶ τὰ πάθη καὶ τὰ ἔργα διατηροῦσι τὸ συμβαῖνον, καὶ τὰς ἀρχὰς καὶ τὰ αἴτια εἰς ταῦτα καταναλίσκουσιν, ὡς ὁμολογοῦντες τοῖς ἄλλοις φυσιολόγοις ὅτι τό γε ὂν τοῦτ’ ἐστὶν ὅσον αἰσθητόν ἐστι καὶ περιείληφεν ὁ [5] καλούμενος οὐρανός. τὰς δ’ αἰτίας καὶ τὰς ἀρχάς, ὥσπερ εἴπομεν, ἱκανὰς λέγουσιν ἐπαναβῆναι καὶ ἐπὶ τὰ ἀνωτέρω τῶν ὄντων, καὶ

μᾶλλον ἢ τοῖς περὶ φύσεως λόγοις ἁρμοττούσας. ἐκ τίνος μέντοι τρόπου κίνησις ἔσται πέρατος καὶ ἀπείρου μόνων ὑποκειμένων καὶ περιττοῦ καὶ ἀρτίου, οὐθὲν [10] λέγουσιν, ἢ πῶς δυνατὸν ἄνευ κινήσεως καὶ μεταβολῆς γένεσιν εἶναι καὶ φθορὰν ἢ τὰ τῶν φερομένων ἔργα κατὰ τὸν οὐρανόν. ἔτι δὲ εἴτε δοίη τις αὐτοῖς ἐκ τούτων εἶναι μέγεθος εἴτε δειχθείη τοῦτο, ὅμως τίνα τρόπον ἔσται τὰ μὲν κοῦφα τὰ δὲ βάρος ἔχοντα τῶν σωμάτων; ἐξ ὧν γὰρ ὑποτίθενται [15] καὶ λέγουσιν, οὐθὲν μᾶλλον περὶ τῶν μαθηματικῶν λέγουσι σωμάτων ἢ τῶν αἰσθητῶν· διὸ περὶ πυρὸς ἢ γῆς ἢ τῶν ἄλλων τῶν τοιούτων σωμάτων οὐδ’ ὁτιοῦν εἰρήκασιν, ἅτε οὐθὲν περὶ τῶν αἰσθητῶν οἶμαι λέγοντες ἴδιον. ἔτι δὲ πῶς δεῖ λαβεῖν αἴτια μὲν εἶναι τὰ τοῦ ἀριθμοῦ πάθη καὶ τὸν ἀριθμὸν [20] τῶν κατὰ τὸν οὐρανὸν ὄντων καὶ γιγνομένων καὶ ἐξ ἀρχῆς καὶ νῦν, ἀριθμὸν δ’ ἄλλον μηθένα εἶναι παρὰ τὸν ἀριθμὸν τοῦτον ἐξ οὗ συνέστηκεν ὁ κόσμος; ὅταν γὰρ ἐν τῳδὶ μὲν τῷ μέρει δόξα καὶ καιρὸς αὐτοῖς ᾖ, μικρὸν δὲ ἄνωθεν ἢ κάτωθεν ἀδικία καὶ κρίσις ἢ μῖξις, ἀπόδειξιν δὲ λέγωσιν ὅτι [25] τούτων μὲν ἕκαστον ἀριθμός ἐστι, συμβαίνει δὲ κατὰ τὸν τόπον τοῦτον ἤδη πλῆθος εἶναι τῶν συνισταμένων μεγεθῶν διὰ τὸ τὰ πάθη ταῦτα ἀκολουθεῖν τοῖς τόποις ἑκάστοις, πότερον οὗτος ὁ αὐτός ἐστιν ἀριθμός, ὁ ἐν τῷ οὐρανῷ, ὃν δεῖ λαβεῖν ὅτι τούτων ἕκαστόν ἐστιν, ἢ παρὰ τοῦτον ἄλλος; ὁ μὲν γὰρ [30] Πλάτων ἕτερον εἶναί φησιν· καίτοι κἀκεῖνος ἀριθμοὺς οἴεται καὶ ταῦτα εἶναι καὶ τὰς τούτων αἰτίας, ἀλλὰ τοὺς μὲν νοητοὺς αἰτίους τούτους δὲ αἰσθητούς.

περὶ μὲν οὖν τῶν Πυθαγορείων ἀφείσθω τὰ νῦν (ἱκανὸν γὰρ αὐτῶν ἅψασθαι τοσοῦτον)· [1] οἱ δὲ τὰς ἰδέας αἰτίας τιθέμενοι πρῶτον μὲν ζητοῦντες τωνδὶ τῶν ὄντων λαβεῖν τὰς αἰτίας ἕτερα τούτοις ἴσα τὸν ἀριθμὸν ἐκόμισαν, ὥσπερ εἴ τις ἀριθμῆσαι βουλόμενος ἐλαττόνων μὲν ὄντων οἴοιτο μὴ δυνήσεσθαι, πλείω δὲ ποιήσας ἀριθμοίη (σχεδὸν γὰρ ἴσα—ἢ οὐκ [5] ἐλάττω—ἐστὶ τὰ εἴδη τούτοις περὶ ὧν ζητοῦντες τὰς αἰτίας ἐκ τούτων ἐπ’ ἐκεῖνα προῆλθον· καθ’ ἕκαστον γὰρ ὁμώνυμόν τι ἔστι καὶ παρὰ τὰς οὐσίας, τῶν τε ἄλλων ἔστιν ἓν ἐπὶ πολλῶν, καὶ ἐπὶ τοῖσδε καὶ ἐπὶ τοῖς ἀϊδίοις)· ἔτι δὲ καθ’ οὓς τρόπους δείκνυμεν ὅτι ἔστι τὰ εἴδη, κατ’ οὐθένα φαίνεται τούτων· [10] ἐξ ἐνίων μὲν γὰρ οὐκ ἀνάγκη γίγνεσθαι συλλογισμόν, ἐξ ἐνίων δὲ καὶ οὐχ ὧν οἰόμεθα τούτων εἴδη γίγνεται. κατά τε γὰρ τοὺς λόγους τοὺς ἐκ τῶν ἐπιστημῶν εἴδη ἔσται πάντων ὅσων ἐπιστῆμαι εἰσί, καὶ κατὰ τὸ ἓν ἐπὶ πολλῶν καὶ τῶν ἀποφάσεων, κατὰ δὲ τὸ νοεῖν τι φθαρέντος τῶν φθαρτῶν· φάντασμα [15] γάρ τι τούτων ἔστιν. ἔτι δὲ οἱ ἀκριβέστεροι τῶν λόγων οἱ μὲν τῶν πρός τι ποιοῦσιν ἰδέας, ὧν οὔ φαμεν εἶναι καθ’ αὐτὸ γένος, οἱ δὲ τὸν τρίτον ἄνθρωπον λέγουσιν. ὅλως τε ἀναιροῦσιν οἱ περὶ τῶν εἰδῶν λόγοι ἃ μᾶλλον εἶναι βουλόμεθα οἱ λέγοντες εἴδη τοῦ τὰς ἰδέας εἶναι· συμβαίνει γὰρ μὴ [20] εἶναι τὴν δυάδα πρώτην ἀλλὰ τὸν ἀριθμόν, καὶ τὸ πρός τι τοῦ καθ’ αὐτό, καὶ πάνθ’ ὅσα τινὲς ἀκολουθήσαντες ταῖς περὶ τῶν ἰδεῶν δόξαις ἠναντιώθησαν ταῖς ἀρχαῖς.—ἔτι κατὰ μὲν τὴν ὑπόληψιν καθ’ ἣν εἶναί φαμεν τὰς ἰδέας οὐ μόνον τῶν οὐσιῶν ἔσται εἴδη ἀλλὰ πολλῶν καὶ ἑτέρων (καὶ γὰρ τὸ [25] νόημα ἓν οὐ μόνον περὶ τὰς οὐσίας ἀλλὰ καὶ κατὰ τῶν ἄλλων ἐστί, καὶ ἐπιστῆμαι οὐ μόνον τῆς οὐσίας εἰσὶν ἀλλὰ καὶ ἑτέρων, καὶ ἄλλα δὲ μυρία συμβαίνει τοιαῦτα)· κατὰ δὲ τὸ ἀναγκαῖον καὶ τὰς δόξας τὰς περὶ αὐτῶν, εἰ ἔστι μεθεκτὰ τὰ εἴδη, τῶν οὐσιῶν ἀναγκαῖον ἰδέας εἶναι μόνον. οὐ [30] γὰρ κατὰ συμβεβηκὸς μετέχονται ἀλλὰ δεῖ ταύτῃ ἑκάστου μετέχειν ᾗ μὴ καθ’ ὑποκειμένου λέγεται (λέγω δ’ οἷον, εἴ τι αὐτοδιπλασίου μετέχει, τοῦτο καὶ ἀϊδίου μετέχει, ἀλλὰ κατὰ συμβεβηκός· συμβέβηκε γὰρ τῷ διπλασίῳ ἀϊδίῳ εἶναι), ὥστ’ ἔσται οὐσία τὰ εἴδη· ταὐτὰ δὲ ἐνταῦθα οὐσίαν σημαίνει κἀκεῖ· [1] ἢ τί ἔσται τὸ εἶναι τι παρὰ ταῦτα, τὸ ἓν ἐπὶ πολλῶν; καὶ εἰ μὲν ταὐτὸ εἶδος τῶν ἰδεῶν καὶ τῶν μετεχόντων, ἔσται τι κοινόν (τί γὰρ μᾶλλον ἐπὶ τῶν φθαρτῶν δυάδων, καὶ τῶν πολλῶν μὲν ἀϊδίων δέ, τὸ [5] δυὰς ἓν καὶ ταὐτόν, ἢ ἐπί τ’ αὐτῆς καὶ τῆς τινός;)· εἰ δὲ μὴ τὸ αὐτὸ εἶδος, ὁμώνυμα ἂν εἴη, καὶ ὅμοιον ὥσπερ ἂν εἴ τις καλοῖ ἄνθρωπον τόν τε Καλλίαν καὶ τὸ ξύλον, μηδεμίαν κοινωνίαν ἐπιβλέψας αὐτῶν.—πάντων δὲ μάλιστα διαπορήσειεν ἄν τις τί ποτε συμβάλλεται τὰ εἴδη τοῖς [10] ἀϊδίοις

τῶν αἰσθητῶν ἢ τοῖς γιγνομένοις καὶ φθειρομένοις· οὔτε γὰρ κινήσεως οὔτε μεταβολῆς οὐδεμιᾶς ἐστὶν αἴτια αὐτοῖς. ἀλλὰ μὴν οὔτε πρὸς τὴν ἐπιστήμην οὐθὲν βοηθεῖ τὴν τῶν ἄλλων (οὐδὲ γὰρ οὐσία ἐκεῖνα τούτων· ἐν τούτοις γὰρ ἂν ἦν), οὔτε εἰς τὸ εἶναι, μὴ ἐνυπάρχοντά γε τοῖς μετέχουσιν· οὕτω μὲν [15] γὰρ ἂν ἴσως αἴτια δόξειεν εἶναι ὡς τὸ λευκὸν μεμιγμένον τῷ λευκῷ, ἀλλ’ οὗτος μὲν ὁ λόγος λίαν εὐκίνητος, ὃν Ἀναξαγόρας μὲν πρῶτος Εὔδοξος δ’ ὕστερον καὶ ἄλλοι τινὲς ἔλεγον (ῥᾴδιον γὰρ συναγαγεῖν πολλὰ καὶ ἀδύνατα πρὸς τὴν τοιαύτην δόξαν)· ἀλλὰ μὴν οὐδ’ ἐκ τῶν εἰδῶν ἐστὶ τἆλλα [20] κατ’ οὐθένα τρόπον τῶν εἰωθότων λέγεσθαι. τὸ δὲ λέγειν παραδείγματα αὐτὰ εἶναι καὶ μετέχειν αὐτῶν τἆλλα κενολογεῖν ἐστὶ καὶ μεταφορὰς λέγειν ποιητικάς. τί γάρ ἐστι τὸ ἐργαζόμενον πρὸς τὰς ἰδέας ἀποβλέπον; ἐνδέχεταί τε καὶ εἶναι καὶ γίγνεσθαι ὅμοιον ὁτιοῦν καὶ μὴ εἰκαζόμενον [25] πρὸς ἐκεῖνο, ὥστε καὶ ὄντος Σωκράτους καὶ μὴ ὄντος γένοιτ’ ἂν οἷος Σωκράτης· ὁμοίως δὲ δῆλον ὅτι κἂν εἰ ἦν ὁ Σωκράτης ἀΐδιος. ἔσται τε πλείω παραδείγματα τοῦ αὐτοῦ, ὥστε καὶ εἴδη, οἷον τοῦ ἀνθρώπου τὸ ζῷον καὶ τὸ δίπουν, ἅμα δὲ καὶ τὸ αὐτοάνθρωπος. ἔτι οὐ μόνον τῶν αἰσθητῶν [30] παραδείγματα τὰ εἴδη ἀλλὰ καὶ αὐτῶν, οἷον τὸ γένος, ὡς γένος εἰδῶν· ὥστε τὸ αὐτὸ ἔσται παράδειγμα καὶ εἰκών. [1] ἔτι δόξειεν ἂν ἀδύνατον εἶναι χωρὶς τὴν οὐσίαν καὶ οὗ ἡ οὐσία· ὥστε πῶς ἂν αἱ ἰδέαι οὐσίαι τῶν πραγμάτων οὖσαι χωρὶς εἶεν; ἐν δὲ τῷ Φαίδωνι οὕτω λέγεται, ὡς καὶ τοῦ εἶναι καὶ τοῦ γίγνεσθαι αἴτια τὰ εἴδη ἐστίν· καίτοι τῶν εἰδῶν [5] ὄντων ὅμως οὐ γίγνεται τὰ μετέχοντα ἂν μὴ ᾖ τὸ κινῆσον, καὶ πολλὰ γίγνεται ἕτερα, οἷον οἰκία καὶ δακτύλιος, ὧν οὐ φαμεν εἴδη εἶναι· ὥστε δῆλον ὅτι ἐνδέχεται καὶ τἆλλα καὶ εἶναι καὶ γίγνεσθαι διὰ τοιαύτας αἰτίας οἵας καὶ τὰ ῥηθέντα νῦν.—ἔτι εἴπερ εἰσὶν ἀριθμοὶ τὰ εἴδη, πῶς αἴτιοι ἔσονται; [10] πότερον ὅτι ἕτεροι ἀριθμοί εἰσι τὰ ὄντα, οἷον ὁδὶ μὲν ὁ ἀριθμὸς ἄνθρωπος ὁδὶ δὲ Σωκράτης ὁδὶ δὲ Καλλίας; τί οὖν ἐκεῖνοι τούτοις αἴτιοί εἰσιν; οὐδὲ γὰρ εἰ οἱ μὲν ἀΐδιοι οἱ δὲ μή, οὐδὲν διοίσει. εἰ δ’ ὅτι λόγοι ἀριθμῶν τἀνταῦθα, οἷον ἡ συμφωνία, δῆλον ὅτι ἐστὶν ἔν γέ τι ὧν εἰσὶ λόγοι. εἰ δή [15] τι τοῦτο, ἡ ὕλη, φανερὸν ὅτι καὶ αὐτοὶ οἱ ἀριθμοὶ λόγοι τινὲς ἔσονται ἑτέρου πρὸς ἕτερον. λέγω δ’ οἷον, εἰ ἔστιν ὁ Καλλίας λόγος ἐν ἀριθμοῖς πυρὸς καὶ γῆς καὶ ὕδατος καὶ ἀέρος, καὶ ἄλλων τινῶν ὑποκειμένων ἔσται καὶ ἡ ἰδέα ἀριθμός· καὶ αὐτοάνθρωπος, εἴτ’ ἀριθμός τις ὢν εἴτε μή, ὅμως ἔσται λόγος [20] ἐν ἀριθμοῖς τινῶν καὶ οὐκ ἀριθμός, οὐδ’ ἔσται τις διὰ ταῦτα ἀριθμός. ἔτι ἐκ πολλῶν ἀριθμῶν εἷς ἀριθμὸς γίγνεται, ἐξ εἰδῶν δὲ ἓν εἶδος πῶς; εἰ δὲ μὴ ἐξ αὐτῶν ἀλλ’ ἐκ τῶν ἐν τῷ ἀριθμῷ, οἷον ἐν τῇ μυριάδι, πῶς ἔχουσιν αἱ μονάδες; εἴτε γὰρ ὁμοειδεῖς, πολλὰ συμβήσεται ἄτοπα, εἴτε μὴ ὁμοειδεῖς, [25] μήτε αὐταὶ ἀλλήλαις μήτε αἱ ἄλλαι πᾶσαι πάσαις· τίνι γὰρ διοίσουσιν ἀπαθεῖς οὖσαι; οὔτε γὰρ εὔλογα ταῦτα οὔτε ὁμολογούμενα τῇ νοήσει. ἔτι δ’ ἀναγκαῖον ἕτερον γένος ἀριθμοῦ κατασκευάζειν περὶ ὃ ἡ ἀριθμητική, καὶ πάντα τὰ μεταξὺ λεγόμενα ὑπό τινων, ἃ πῶς ἢ ἐκ τίνων [30] ἐστὶν ἀρχῶν; ἢ διὰ τί μεταξὺ τῶν δεῦρό τ’ ἔσται καὶ αὐτῶν; ἔτι αἱ μονάδες αἱ ἐν τῇ δυάδι ἑκατέρα ἔκ τινος προτέρας δυάδος· καίτοι ἀδύνατον. [1] ἔτι διὰ τί ἓν ὁ ἀριθμὸς συλλαμβανόμενος; ἔτι δὲ πρὸς τοῖς εἰρημένοις, εἴπερ εἰσὶν αἱ μονάδες διάφοροι, ἐχρῆν οὕτω λέγειν ὥσπερ καὶ ὅσοι τὰ στοιχεῖα τέτταρα ἢ δύο λέγουσιν· καὶ γὰρ τούτων ἕκαστος οὐ [5] τὸ κοινὸν λέγει στοιχεῖον, οἷον τὸ σῶμα, ἀλλὰ πῦρ καὶ γῆν, εἴτ’ ἔστι τι κοινόν, τὸ σῶμα, εἴτε μή. νῦν δὲ λέγεται ὡς ὄντος τοῦ ἑνὸς ὥσπερ πυρὸς ἢ ὕδατος ὁμοιομεροῦς· εἰ δ’ οὕτως, οὐκ ἔσονται οὐσίαι οἱ ἀριθμοί, ἀλλὰ δῆλον ὅτι, εἴπερ ἐστί τι ἓν αὐτὸ καὶ τοῦτό ἐστιν ἀρχή, πλεοναχῶς λέγεται τὸ ἕν· ἄλλως [10] γὰρ ἀδύνατον.—βουλόμενοι δὲ τὰς οὐσίας ἀνάγειν εἰς τὰς ἀρχὰς μήκη μὲν τίθεμεν ἐκ βραχέος καὶ μακροῦ, ἔκ τινος μικροῦ καὶ μεγάλου, καὶ ἐπίπεδον ἐκ πλατέος καὶ στενοῦ, σῶμα δ’ ἐκ βαθέος καὶ ταπεινοῦ. καίτοι πῶς ἕξει ἢ τὸ ἐπίπεδον γραμμὴν ἢ τὸ στερεὸν γραμμὴν καὶ ἐπίπεδον; ἄλλο [15] γὰρ γένος τὸ πλατὺ καὶ στενὸν καὶ βαθὺ καὶ ταπεινόν· ὥσπερ οὖν οὐδ’ ἀριθμὸς ὑπάρχει ἐν αὐτοῖς, ὅτι τὸ πολὺ καὶ ὀλίγον ἕτερον τούτων, δῆλον ὅτι οὐδ’ ἄλλο οὐθὲν τῶν ἄνω ὑπάρξει τοῖς κάτω. ἀλλὰ μὴν οὐδὲ γένος τὸ πλατὺ τοῦ βαθέος· ἦν γὰρ ἂν

ἐπίπεδόν τι τὸ σῶμα. ἔτι αἱ στιγμαὶ ἐκ [20] τίνος ἐνυπάρξουσιν; τούτῳ μὲν οὖν τῷ γένει καὶ διεμάχετο Πλάτων ὡς ὄντι γεωμετρικῷ δόγματι, ἀλλ’ ἐκάλει ἀρχὴν γραμμῆς—τοῦτο δὲ πολλάκις ἐτίθει—τὰς ἀτόμους γραμμάς. καίτοι ἀνάγκη τούτων εἶναί τι πέρας· ὥστ’ ἐξ οὗ λόγου γραμμὴ ἔστι, καὶ στιγμὴ ἔστιν.—ὅλως δὲ ζητούσης τῆς σοφίας περὶ [25] τῶν φανερῶν τὸ αἴτιον, τοῦτο μὲν εἰάκαμεν (οὐθὲν γὰρ λέγομεν περὶ τῆς αἰτίας ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς) , τὴν δ’ οὐσίαν οἰόμενοι λέγειν αὐτῶν ἑτέρας μὲν οὐσίας εἶναί φαμεν, ὅπως δ’ ἐκεῖναι τούτων οὐσίαι, διὰ κενῆς λέγομεν· τὸ γὰρ μετέχειν, ὥσπερ καὶ πρότερον εἴπομεν, οὐθέν ἐστιν. οὐδὲ δὴ ὅπερ ταῖς [30] ἐπιστήμαις ὁρῶμεν ὂν αἴτιον, δι’ ὃ καὶ πᾶς νοῦς καὶ πᾶσα φύσις ποιεῖ, οὐδὲ ταύτης τῆς αἰτίας, ἣν φαμεν εἶναι μίαν τῶν ἀρχῶν, οὐθὲν ἅπτεται τὰ εἴδη, ἀλλὰ γέγονε τὰ μαθήματα τοῖς νῦν ἡ φιλοσοφία, φασκόντων ἄλλων χάριν αὐτὰ δεῖν πραγματεύεσθαι. [1] ἔτι δὲ τὴν ὑποκειμένην οὐσίαν ὡς ὕλην μαθηματικωτέραν ἄν τις ὑπολάβοι, καὶ μᾶλλον κατηγορεῖσθαι καὶ διαφορὰν εἶναι τῆς οὐσίας καὶ τῆς ὕλης ἢ ὕλην, οἷον τὸ μέγα καὶ τὸ μικρόν, ὥσπερ καὶ οἱ φυσιολόγοι [5] φασὶ τὸ μανὸν καὶ τὸ πυκνόν, πρώτας τοῦ ὑποκειμένου φάσκοντες εἶναι διαφορὰς ταύτας· ταῦτα γάρ ἐστιν ὑπεροχή τις καὶ ἔλλειψις. περί τε κινήσεως, εἰ μὲν ἔσται ταῦτα κίνησις, δῆλον ὅτι κινήσεται τὰ εἴδη· εἰ δὲ μή, πόθεν ἦλθεν; ὅλη γὰρ ἡ περὶ φύσεως ἀνῄρηται σκέψις. ὅ τε δοκεῖ ῥᾴδιον [10] εἶναι, τὸ δεῖξαι ὅτι ἓν ἅπαντα, οὐ γίγνεται· τῇ γὰρ ἐκθέσει οὐ γίγνεται πάντα ἓν ἀλλ’ αὐτό τι ἕν, ἂν διδῷ τις πάντα· καὶ οὐδὲ τοῦτο, εἰ μὴ γένος δώσει τὸ καθόλου εἶναι· τοῦτο δ’ ἐν ἐνίοις ἀδύνατον. οὐθένα δ’ ἔχει λόγον οὐδὲ τὰ μετὰ τοὺς ἀριθμοὺς μήκη τε καὶ ἐπίπεδα καὶ στερεά, οὔτε ὅπως ἔστιν ἢ [15] ἔσται οὔτε τίνα ἔχει δύναμιν· ταῦτα γὰρ οὔτε εἴδη οἷόν τε εἶναι (οὐ γάρ εἰσιν ἀριθμοί) οὔτε τὰ μεταξύ (μαθηματικὰ γὰρ ἐκεῖνα) οὔτε τὰ φθαρτά, ἀλλὰ πάλιν τέταρτον ἄλλο φαίνεται τοῦτό τι γένος. ὅλως τε τὸ τῶν ὄντων ζητεῖν στοιχεῖα μὴ διελόντας, πολλαχῶς λεγομένων, ἀδύνατον εὑρεῖν, ἄλλως [20] τε καὶ τοῦτον τὸν τρόπον ζητοῦντας ἐξ οἵων ἐστὶ στοιχείων. ἐκ τίνων γὰρ τὸ ποιεῖν ἢ πάσχειν ἢ τὸ εὐθύ, οὐκ ἔστι δήπου λαβεῖν, ἀλλ’ εἴπερ, τῶν οὐσιῶν μόνον ἐνδέχεται· ὥστε τὸ τῶν ὄντων ἁπάντων τὰ στοιχεῖα ἢ ζητεῖν ἢ οἴεσθαι ἔχειν οὐκ ἀληθές. πῶς δ’ ἄν τις καὶ μάθοι τὰ τῶν πάντων στοιχεῖα; [25] δῆλον γὰρ ὡς οὐθὲν οἷόν τε προϋπάρχειν γνωρίζοντα πρότερον. ὥσπερ γὰρ τῷ γεωμετρεῖν μανθάνοντι ἄλλα μὲν ἐνδέχεται προειδέναι, ὧν δὲ ἡ ἐπιστήμη καὶ περὶ ὧν μέλλει μανθάνειν οὐθὲν προγιγνώσκει, οὕτω δὴ καὶ ἐπὶ τῶν ἄλλων, ὥστ’ εἴ τις τῶν πάντων ἔστιν ἐπιστήμη, οἵαν δή τινές φασιν, [30] οὐθὲν ἂν προϋπάρχοι γνωρίζων οὗτος. καίτοι πᾶσα μάθησις διὰ προγιγνωσκομένων ἢ πάντων ἢ τινῶν ἐστί, καὶ ἡ δι’ ἀποδείξεως καὶ ἡ δι’ ὁρισμῶν (δεῖ γὰρ ἐξ ὧν ὁ ὁρισμὸς προειδέναι καὶ εἶναι γνώριμα)· ὁμοίως δὲ καὶ ἡ δι’ ἐπαγωγῆς. ἀλλὰ μὴν εἰ καὶ τυγχάνοι σύμφυτος οὖσα, [1] θαυμαστὸν πῶς λανθάνομεν ἔχοντες τὴν κρατίστην τῶν ἐπιστημῶν. ἔτι πῶς τις γνωριεῖ ἐκ τίνων ἐστί, καὶ πῶς ἔσται δῆλον; καὶ γὰρ τοῦτ’ ἔχει ἀπορίαν· ἀμφισβητήσειε γὰρ ἄν τις ὥσπερ καὶ περὶ ἐνίας [5] συλλαβάς· οἱ μὲν γὰρ τὸ ζα ἐκ τοῦ ς καὶ δ καὶ α φασὶν εἶναι, οἱ δέ τινες ἕτερον φθόγγον φασὶν εἶναι καὶ οὐθένα τῶν γνωρίμων. ἔτι δὲ ὧν ἐστὶν αἴσθησις, ταῦτα πῶς ἄν τις μὴ ἔχων τὴν αἴσθησιν γνοίη; καίτοι ἔδει, εἴγε πάντων ταὐτὰ στοιχεῖά ἐστιν ἐξ ὧν, ὥσπερ αἱ σύνθετοι φωναί εἰσιν ἐκ τῶν [10] οἰκείων στοιχείων.

ὅτι μὲν οὖν τὰς εἰρημένας ἐν τοῖς φυσικοῖς αἰτίας ζητεῖν ἐοίκασι πάντες, καὶ τούτων ἐκτὸς οὐδεμίαν ἔχοιμεν ἂν εἰπεῖν, δῆλον καὶ ἐκ τῶν πρότερον εἰρημένων· ἀλλ’ ἀμυδρῶς ταύτας, καὶ τρόπον μέν τινα πᾶσαι πρότερον εἴρηνται τρόπον [15] δέ τινα οὐδαμῶς. ψελλιζομένῃ γὰρ ἔοικεν ἡ πρώτη φιλοσοφία περὶ πάντων, ἅτε νέα τε καὶ κατ’ ἀρχὰς οὖσα καὶ τὸ πρῶτον, ἐπεὶ καὶ Ἐμπεδοκλῆς ὀστοῦν τῷ λόγῳ φησὶν εἶναι, τοῦτο δ’ ἐστὶ τὸ τί ἦν εἶναι καὶ ἡ οὐσία τοῦ πράγματες. ἀλλὰ μὴν ὁμοίως ἀναγκαῖον καὶ σάρκας καὶ τῶν ἄλλων [20] ἕκαστον εἶναι τὸν λόγον, ἢ μηδὲ ἕν· διὰ τοῦτο γὰρ καὶ σὰρξ καὶ ὀστοῦν ἔσται καὶ τῶν ἄλλων ἕκαστον καὶ οὐ διὰ τὴν ὕλην, ἣν ἐκεῖνος λέγει, πῦρ καὶ γῆν καὶ ὕδωρ καὶ ἀέρα. ἀλλὰ ταῦτα ἄλλου μὲν λέγοντος συνέφησεν ἂν

ἐξ ἀνάγκης, σαφῶς δὲ οὐκ εἴρηκεν. περὶ μὲν οὖν τούτων δεδήλωται καὶ [25] πρότερον· ὅσα δὲ περὶ τῶν αὐτῶν τούτων ἀπορήσειεν ἄν τις, [26] ἐπανέλθωμεν πάλιν· τάχα γὰρ ἂν ἐξ αὐτῶν εὐπορήσαιμέν τι πρὸς τὰς ὕστερον ἀπορίας.

[30] ἡ περὶ τῆς ἀληθείας θεωρία τῇ μὲν χαλεπὴ τῇ δὲ ῥᾳδία. σημεῖον δὲ τὸ μήτ’ ἀξίως μηδένα δύνασθαι θιγεῖν αὐτῆς μήτε πάντας ἀποτυγχάνειν, [1] ἀλλ’ ἕκαστον λέγειν τι περὶ τῆς φύσεως, καὶ καθ’ ἕνα μὲν ἢ μηθὲν ἢ μικρὸν ἐπιβάλλειν αὐτῇ, ἐκ πάντων δὲ συναθροιζομένων γίγνεσθαί τι μέγεθος· ὥστ’ εἴπερ ἔοικεν ἔχειν καθάπερ τυγχάνομεν παροιμιαζόμενοι, [5] τίς ἂν θύρας ἁμάρτοι; ταύτῃ μὲν ἂν εἴη ῥᾳδία, τὸ δ’ ὅλον τι ἔχειν καὶ μέρος μὴ δύνασθαι δηλοῖ τὸ χαλεπὸν αὐτῆς. ἴσως δὲ καὶ τῆς χαλεπότητος οὔσης κατὰ δύο τρόπους, οὐκ ἐν τοῖς πράγμασιν ἀλλ’ ἐν ἡμῖν τὸ αἴτιον αὐτῆς· ὥσπερ γὰρ τὰ τῶν νυκτερίδων ὄμματα πρὸς τὸ [10] φέγγος ἔχει τὸ μεθ’ ἡμέραν, οὕτω καὶ τῆς ἡμετέρας ψυχῆς ὁ νοῦς πρὸς τὰ τῇ φύσει φανερώτατα πάντων. οὐ μόνον δὲ χάριν ἔχειν δίκαιον τούτοις ὧν ἄν τις κοινώσαιτο ταῖς δόξαις, ἀλλὰ καὶ τοῖς ἐπιπολαιότερον ἀποφηναμένοις· καὶ γὰρ οὗτοι συνεβάλοντό τι· τὴν γὰρ ἕξιν προήσκησαν ἡμῶν· [15] εἰ μὲν γὰρ Τιμόθεος μὴ ἐγένετο, πολλὴν ἂν μελοποιίαν οὐκ εἴχομεν· εἰ δὲ μὴ Φρῦνις, Τιμόθεος οὐκ ἂν ἐγένετο. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν περὶ τῆς ἀληθείας ἀποφηναμένων· παρὰ μὲν γὰρ ἐνίων παρειλήφαμέν τινας δόξας, οἱ δὲ τοῦ γενέσθαι τούτους αἴτιοι γεγόνασιν. ὀρθῶς δ’ ἔχει καὶ τὸ καλεῖσθαι [20] τὴν φιλοσοφίαν ἐπιστήμην τῆς ἀληθείας. θεωρητικῆς μὲν γὰρ τέλος ἀλήθεια πρακτικῆς δ’ ἔργον· καὶ γὰρ ἂν τὸ πῶς ἔχει σκοπῶσιν, οὐ τὸ ἀΐδιον ἀλλ’ ὃ πρός τι καὶ νῦν θεωροῦσιν οἱ πρακτικοί. οὐκ ἴσμεν δὲ τὸ ἀληθὲς ἄνευ τῆς αἰτίας· ἕκαστον δὲ μάλιστα αὐτὸ τῶν ἄλλων καθ’ ὃ καὶ [25] τοῖς ἄλλοις ὑπάρχει τὸ συνώνυμον (οἷον τὸ πῦρ θερμότατον· καὶ γὰρ τοῖς ἄλλοις τὸ αἴτιον τοῦτο τῆς θερμότητος)· ὥστε καὶ ἀληθέστατον τὸ τοῖς ὑστέροις αἴτιον τοῦ ἀληθέσιν εἶναι. διὸ τὰς τῶν ἀεὶ ὄντων ἀρχὰς ἀναγκαῖον ἀεὶ εἶναι ἀληθεστάτας (οὐ γάρ ποτε ἀληθεῖς, οὐδ’ ἐκείναις αἴτιόν τί ἐστι τοῦ [30] εἶναι, ἀλλ’ ἐκεῖναι τοῖς ἄλλοις) , ὥσθ’ ἕκαστον ὡς ἔχει τοῦ εἶναι, οὕτω καὶ τῆς ἀληθείας.

[1] ἀλλὰ μὴν ὅτι γ’ ἔστιν ἀρχή τις καὶ οὐκ ἄπειρα τὰ αἴτια τῶν ὄντων οὔτ’ εἰς εὐθυωρίαν οὔτε κατ’ εἶδος, δῆλον. οὔτε γὰρ ὡς ἐξ ὕλης τόδ’ ἐκ τοῦδε δυνατὸν ἰέναι εἰς ἄπειρον (οἷον σάρκα μὲν ἐκ γῆς, γῆν δ’ ἐξ ἀέρος, ἀέρα δ’ ἐκ πυρός, [5] καὶ τοῦτο μὴ ἵστασθαι), οὔτε ὅθεν ἡ ἀρχὴ τῆς κινήσεως (οἷον τὸν μὲν ἄνθρωπον ὑπὸ τοῦ ἀέρος κινηθῆναι, τοῦτον δ’ ὑπὸ τοῦ ἡλίου, τὸν δὲ ἥλιον ὑπὸ τοῦ νείκους, καὶ τούτου μηδὲν εἶναι πέρας)· ὁμοίως δὲ οὐδὲ τὸ οὗ ἕνεκα εἰς ἄπειρον οἷόν τε ἰέναι, βάδισιν μὲν ὑγιείας ἕνεκα, ταύτην δ’ εὐδαιμονίας, τὴν δ’ εὐδαιμονίαν [10] ἄλλου, καὶ οὕτως ἀεὶ ἄλλο ἄλλου ἕνεκεν εἶναι· καὶ ἐπὶ τοῦ τί ἦν εἶναι δ’ ὡσαύτως. τῶν γὰρ μέσων, ὧν ἐστί τι ἔσχατον καὶ πρότερον, ἀναγκαῖον εἶναι τὸ πρότερον αἴτιον τῶν μετ’ αὐτό. εἰ γὰρ εἰπεῖν ἡμᾶς δέοι τί τῶν τριῶν αἴτιον, τὸ πρῶτον ἐροῦμεν· οὐ γὰρ δὴ τό γ’ ἔσχατον, οὐδενὸς γὰρ τὸ [15] τελευταῖον· ἀλλὰ μὴν οὐδὲ τὸ μέσον, ἑνὸς γάρ (οὐθὲν δὲ διαφέρει ἓν ἢ πλείω εἶναι, οὐδ’ ἄπειρα ἢ πεπερασμένα). τῶν δ’ ἀπείρων τοῦτον τὸν τρόπον καὶ ὅλως τοῦ ἀπείρου πάντα τὰ μόρια μέσα ὁμοίως μέχρι τοῦ νῦν· ὥστ’ εἴπερ μηδέν ἐστι πρῶτον, ὅλως αἴτιον οὐδέν ἐστιν.—ἀλλὰ μὴν οὐδ’ ἐπὶ τὸ κάτω [20] οἷόν τε εἰς ἄπειρον ἰέναι, τοῦ ἄνω ἔχοντος ἀρχήν, ὥστ’ ἐκ πυρὸς μὲν ὕδωρ, ἐκ δὲ τούτου γῆν, καὶ οὕτως ἀεὶ ἄλλο τι γίγνεσθαι γένος. διχῶς γὰρ γίγνεται τόδε ἐκ τοῦδε—μὴ ὡς τόδε λέγεται μετὰ τόδε, οἷον ἐξ Ἰσθμίων Ὀλύμπια, ἀλλ’ ἢ ὡς ἐκ παιδὸς ἀνὴρ μεταβάλλοντος ἢ ὡς ἐξ ὕδατος ἀήρ. [25] ὡς μὲν οὖν ἐκ παιδὸς ἄνδρα γίγνεσθαί φαμεν, ὡς ἐκ τοῦ γιγνομένου τὸ γεγονὸς ἢ ἐκ τοῦ ἐπιτελουμένου τὸ τετελεσμένον (ἀεὶ γάρ ἐστι μεταξύ, ὥσπερ τοῦ εἶναι καὶ μὴ εἶναι γένεσις, οὕτω καὶ τὸ γιγνόμενον τοῦ ὄντος καὶ μὴ ὄντος· ἔστι γὰρ ὁ μανθάνων γιγνόμενος ἐπιστήμων, καὶ τοῦτ’ ἐστὶν ὃ λέγεται, [30] ὅτι γίγνεται ἐκ μανθάνοντος ἐπιστήμων)· τὸ δ’ ὡς ἐξ ἀέρος ὕδωρ, φθειρομένου θατέρου. διὸ ἐκεῖνα μὲν οὐκ ἀνακάμπτει εἰς ἄλληλα, [1] οὐδὲ γίγνεται ἐξ ἀνδρὸς παῖς (οὐ γὰρ γίγνεται ἐκ τῆς γενέσεως τὸ γιγνόμενον ἀλλ’ ὃ ἔστι μετὰ τὴν γένεσιν·

οὕτω γὰρ καὶ ἡμέρα ἐκ τοῦ πρωΐ, ὅτι μετὰ τοῦτο· διὸ οὐδὲ τὸ πρωῒ ἐξ ἡμέρας)· θάτερα δὲ ἀνακάμπτει. ἀμφοτέρως δὲ ἀδύνατον εἰς ἄπειρον ἰέναι· τῶν μὲν γὰρ ὄντων μεταξὺ [5] ἀνάγκη τέλος εἶναι, τὰ δ’ εἰς ἄλληλα ἀνακάμπτει· ἡ γὰρ θατέρου φθορὰ θατέρου ἐστὶ γένεσις.—ἅμα δὲ καὶ ἀδύνατον τὸ πρῶτον ἀΐδιον ὂν φθαρῆναι· ἐπεὶ γὰρ οὐκ ἄπειρος ἡ γένεσις ἐπὶ τὸ ἄνω, ἀνάγκη ἐξ οὗ φθαρέντος πρώτου τι ἐγένετο μὴ ἀΐδιον εἶναι. ἔτι δὲ τὸ οὗ ἕνεκα τέλος, τοιοῦτον δὲ ὃ μὴ ἄλλου [10] ἕνεκα ἀλλὰ τἆλλα ἐκείνου, ὥστ’ εἰ μὲν ἔσται τοιοῦτόν τι ἔσχατον, οὐκ ἔσται ἄπειρον, εἰ δὲ μηθὲν τοιοῦτον, οὐκ ἔσται τὸ οὗ ἕνεκα, ἀλλ’ οἱ τὸ ἄπειρον ποιοῦντες λανθάνουσιν ἐξαιροῦντες τὴν τοῦ ἀγαθοῦ φύσιν (καίτοι οὐθεὶς ἂν ἐγχειρήσειεν οὐδὲν πράττειν μὴ μέλλων ἐπὶ πέρας ἥξειν)· οὐδ’ ἂν εἴη νοῦς ἐν [15] τοῖς οὖσιν· ἕνεκα γάρ τινος ἀεὶ πράττει ὅ γε νοῦν ἔχων, τοῦτο δέ ἐστι πέρας· τὸ γὰρ τέλος πέρας ἐστίν. ἀλλὰ μὴν οὐδὲ τὸ τί ἦν εἶναι ἐνδέχεται ἀνάγεσθαι εἰς ἄλλον ὁρισμὸν πλεονάζοντα τῷ λόγῳ· ἀεί τε γὰρ ἔστιν ὁ ἔμπροσθεν μᾶλλον, ὁ δ’ ὕστερος οὐκ ἔστιν, οὗ δὲ τὸ πρῶτον μὴ ἔστιν, οὐδὲ [20] τὸ ἐχόμενον· ἔτι τὸ ἐπίστασθαι ἀναιροῦσιν οἱ οὕτως λέγοντες, οὐ γὰρ οἷόν τε εἰδέναι πρὶν εἰς τὰ ἄτομα ἐλθεῖν· καὶ τὸ γιγνώσκειν οὐκ ἔστιν, τὰ γὰρ οὕτως ἄπειρα πῶς ἐνδέχεται νοεῖν; οὐ γὰρ ὅμοιον ἐπὶ τῆς γραμμῆς, ἢ κατὰ τὰς διαιρέσεις μὲν οὐχ ἵσταται, νοῆσαι δ’ οὐκ ἔστι μὴ στήσαντα (διόπερ [25] οὐκ ἀριθμήσει τὰς τομὰς ὁ τὴν ἄπειρον διεξιών), ἀλλὰ καὶ τὴν ὅλην οὐ κινουμένῳ νοεῖν ἀνάγκη. καὶ ἀπείρῳ οὐδενὶ ἔστιν εἶναι· εἰ δὲ μή, οὐκ ἄπειρόν γ’ ἐστὶ τὸ ἀπείρῳ εἶναι.—ἀλλὰ μὴν καὶ εἰ ἄπειρά γ’ ἦσαν πλήθει τὰ εἴδη τῶν αἰτίων, οὐκ ἂν ἦν οὐδ’ οὕτω τὸ γιγνώσκειν· τότε γὰρ εἰδέναι οἰόμεθα [30] ὅταν τὰ αἴτια γνωρίσωμεν· τὸ δ’ ἄπειρον κατὰ τὴν πρόσθεσιν οὐκ ἔστιν ἐν πεπερασμένῳ διεξελθεῖν.

αἱ δ’ ἀκροάσεις κατὰ τὰ ἔθη συμβαίνουσιν· ὡς γὰρ εἰώθαμεν οὕτως ἀξιοῦμεν λέγεσθαι, [1] καὶ τὰ παρὰ ταῦτα οὐχ ὅμοια φαίνεται ἀλλὰ διὰ τὴν ἀσυνήθειαν ἀγνωστότερα καὶ ξενικώτερα· τὸ γὰρ σύνηθες γνώριμον. ἡλίκην δὲ ἰσχὺν ἔχει τὸ σύνηθες οἱ νόμοι δηλοῦσιν, ἐν οἷς τὰ μυθώδη καὶ [5] παιδαριώδη μεῖζον ἰσχύει τοῦ γινώσκειν περὶ αὐτῶν διὰ τὸ ἔθος. οἱ μὲν οὖν ἐὰν μὴ μαθηματικῶς λέγῃ τις οὐκ ἀποδέχονται τῶν λεγόντων, οἱ δ’ ἂν μὴ παραδειγματικῶς, οἱ δὲ μάρτυρα ἀξιοῦσιν ἐπάγεσθαι ποιητήν. καὶ οἱ μὲν πάντα ἀκριβῶς, τοὺς δὲ λυπεῖ τὸ ἀκριβὲς ἢ διὰ τὸ μὴ δύνασθαι [10] συνείρειν ἢ διὰ τὴν μικρολογίαν· ἔχει γάρ τι τὸ ἀκριβὲς τοιοῦτον, ὥστε, καθάπερ ἐπὶ τῶν συμβολαίων, καὶ ἐπὶ τῶν λόγων ἀνελεύθερον εἶναί τισι δοκεῖ. διὸ δεῖ πεπαιδεῦσθαι πῶς ἕκαστα ἀποδεκτέον, ὡς ἄτοπον ἅμα ζητεῖν ἐπιστήμην καὶ τρόπον ἐπιστήμης· ἔστι δ’ οὐδὲ θάτερον ῥᾴδιον λαβεῖν. τὴν [15] δ’ ἀκριβολογίαν τὴν μαθηματικὴν οὐκ ἐν ἅπασιν ἀπαιτητέον, [16] ἀλλ’ ἐν τοῖς μὴ ἔχουσιν ὕλην. διόπερ οὐ φυσικὸς ὁ τρόπος· ἅπασα γὰρ ἴσως ἡ φύσις ἔχει ὕλην. διὸ σκεπτέον πρῶτον τί ἐστιν ἡ φύσις· οὕτω γὰρ καὶ περὶ τίνων ἡ φυσικὴ δῆλον ἔσται καὶ εἰ μιᾶς ἐπιστήμης ἢ πλειόνων τὰ αἴτια καὶ [20] τὰς ἀρχὰς θεωρῆσαί ἐστιν.

[24] ἀνάγκη πρὸς τὴν ἐπιζητουμένην ἐπιστήμην ἐπελθεῖν ἡμᾶς [25] πρῶτον περὶ ὧν ἀπορῆσαι δεῖ πρῶτον· ταῦτα δ’ ἐστὶν ὅσα τε περὶ αὐτῶν ἄλλως ὑπειλήφασί τινες, κἂν εἴ τι χωρὶς τούτων τυγχάνει παρεωραμένον. ἔστι δὲ τοῖς εὐπορῆσαι βουλομένοις προῦργου τὸ διαπορῆσαι καλῶς· ἡ γὰρ ὕστερον εὐπορία λύσις τῶν πρότερον ἀπορουμένων ἐστί, λύειν δ’ οὐκ [30] ἔστιν ἀγνοοῦντας τὸν δεσμόν, ἀλλ’ ἡ τῆς διανοίας ἀπορία δηλοῖ τοῦτο περὶ τοῦ πράγματος· ᾗ γὰρ ἀπορεῖ, ταύτῃ παραπλήσιον πέπονθε τοῖς δεδεμένοις· ἀδύνατον γὰρ ἀμφοτέρως προελθεῖν εἰς τὸ πρόσθεν. διὸ δεῖ τὰς δυσχερείας τεθεωρηκέναι πάσας πρότερον, τούτων τε χάριν καὶ διὰ τὸ τοὺς [35] ζητοῦντας ἄνευ τοῦ διαπορῆσαι πρῶτον ὁμοίους εἶναι τοῖς ποῖ δεῖ βαδίζειν ἀγνοοῦσι, καὶ πρὸς τούτοις οὐδ’ εἴ ποτε τὸ ζητούμενον εὕρηκεν ἢ μὴ γιγνώσκειν· [1] τὸ γὰρ τέλος τούτῳ μὲν οὐ δῆλον τῷ δὲ προηπορηκότι δῆλον. ἔτι δὲ βέλτιον ἀνάγκη ἔχειν πρὸς τὸ κρῖναι τὸν ὥσπερ ἀντιδίκων καὶ τῶν ἀμφισβητούντων λόγων ἀκηκοότα πάντων.—ἔστι δ’ ἀπορία πρώτη [5] μὲν περὶ ὧν ἐν τοῖς πεφροιμιασμένοις διηπορήσαμεν, πότερον μιᾶς ἢ πολλῶν ἐπιστημῶν θεωρῆσαι τὰς αἰτίας· καὶ πότερον τὰς τῆς οὐσίας ἀρχὰς τὰς πρώτας ἐστὶ τῆς ἐπιστήμης ἰδεῖν μόνον ἢ καὶ

περὶ τῶν ἀρχῶν ἐξ ὧν δεικνύουσι πάντες, οἷον πότερον ἐνδέχεται ταὐτὸ καὶ ἓν ἅμα φάναι καὶ ἀποφάναι [10] ἢ οὔ, καὶ περὶ τῶν ἄλλων τῶν τοιούτων· εἴ τ’ ἐστι περὶ τὴν οὐσίαν, πότερον μία περὶ πάσας ἢ πλείονές εἰσι, κἂν εἰ πλείονες πότερον ἅπασαι συγγενεῖς ἢ τὰς μὲν σοφίας τὰς δὲ ἄλλο τι λεκτέον αὐτῶν. καὶ τοῦτο δ’ αὐτὸ τῶν ἀναγκαίων ἐστὶ ζητῆσαι, πότερον τὰς αἰσθητὰς οὐσίας εἶναι [15] μόνον φατέον ἢ καὶ παρὰ ταύτας ἄλλας, καὶ πότερον μοναχῶς ἢ πλείονα γένη τῶν οὐσιῶν, οἷον οἱ ποιοῦντες τά τε εἴδη καὶ τὰ μαθηματικὰ μεταξὺ τούτων τε καὶ τῶν αἰσθητῶν. περί τε τούτων οὖν, καθάπερ φαμέν, ἐπισκεπτέον, καὶ πότερον περὶ τὰς οὐσίας ἡ θεωρία μόνον ἐστὶν ἢ καὶ περὶ [20] τὰ συμβεβηκότα καθ’ αὐτὰ ταῖς οὐσίαις, πρὸς δὲ τούτοις περὶ ταὐτοῦ καὶ ἑτέρου καὶ ὁμοίου καὶ ἀνομοίου καὶ ἐναντιότητος, καὶ περὶ προτέρου καὶ ὑστέρου καὶ τῶν ἄλλων ἁπάντων τῶν τοιούτων περὶ ὅσων οἱ διαλεκτικοὶ πειρῶνται σκοπεῖν ἐκ τῶν ἐνδόξων μόνων ποιούμενοι τὴν σκέψιν, τίνος [25] ἐστὶ θεωρῆσαι περὶ πάντων· ἔτι δὲ τούτοις αὐτοῖς ὅσα καθ’ αὐτὰ συμβέβηκεν, καὶ μὴ μόνον τί ἐστι τούτων ἕκαστον ἀλλὰ καὶ ἆρα ἓν ἑνὶ ἐναντίον· καὶ πότερον αἱ ἀρχαὶ καὶ τὰ στοιχεῖα τὰ γένη ἐστὶν ἢ εἰς ἃ διαιρεῖται ἐνυπάρχοντα ἕκαστον· καὶ εἰ τὰ γένη, πότερον ὅσα ἐπὶ τοῖς ἀτόμοις λέγεται [30] τελευταῖα ἢ τὰ πρῶτα, οἷον πότερον ζῷον ἢ ἄνθρωπος ἀρχή τε καὶ μᾶλλον ἔστι παρὰ τὸ καθ’ ἕκαστον. μάλιστα δὲ ζητητέον καὶ πραγματευτέον πότερον ἔστι τι παρὰ τὴν ὕλην αἴτιον καθ’ αὐτὸ ἢ οὔ, καὶ τοῦτο χωριστὸν ἢ οὔ, καὶ πότερον ἓν ἢ πλείω τὸν ἀριθμόν, καὶ πότερον ἔστι τι παρὰ τὸ [35] σύνολον (λέγω δὲ τὸ σύνολον, ὅταν κατηγορηθῇ τι τῆς ὕλης) ἢ οὐθέν, ἢ τῶν μὲν τῶν δ’ οὔ, καὶ ποῖα τοιαῦτα τῶν ὄντων. [1] ἔτι αἱ ἀρχαὶ πότερον ἀριθμῷ ἢ εἴδει ὡρισμέναι, καὶ αἱ ἐν τοῖς λόγοις καὶ αἱ ἐν τῷ ὑποκειμένῳ; καὶ πότερον τῶν φθαρτῶν καὶ ἀφθάρτων αἱ αὐταὶ ἢ ἕτεραι, καὶ πότερον ἄφθαρτοι πᾶσαι ἢ τῶν φθαρτῶν φθαρταί; ἔτι δὲ τὸ πάντων [5] χαλεπώτατον καὶ πλείστην ἀπορίαν ἔχον, πότερον τὸ ἓν καὶ τὸ ὄν, καθάπερ οἱ Πυθαγόρειοι καὶ Πλάτων ἔλεγεν, οὐχ ἕτερόν τί ἐστιν ἀλλ’ οὐσία τῶν ὄντων; ἢ οὔ, ἀλλ’ ἕτερόν τι τὸ ὑποκείμενον, ὥσπερ Ἐμπεδοκλῆς φησὶ φιλίαν ἄλλος δέ τις πῦρ ὁ δὲ ὕδωρ ἢ ἀέρα· καὶ πότερον αἱ ἀρχαὶ [10] καθόλου εἰσὶν ἢ ὡς τὰ καθ’ ἕκαστα τῶν πραγμάτων, καὶ δυνάμει ἢ ἐνεργείᾳ· ἔτι πότερον ἄλλως ἢ κατὰ κίνησιν· καὶ γὰρ ταῦτα ἀπορίαν ἂν παράσχοι πολλήν. πρὸς δὲ τούτοις πότερον οἱ ἀριθμοὶ καὶ τὰ μήκη καὶ τὰ σχήματα καὶ αἱ στιγμαὶ οὐσίαι τινές εἰσιν ἢ οὔ, κἂν εἰ οὐσίαι πότερον [15] κεχωρισμέναι τῶν αἰσθητῶν ἢ ἐνυπάρχουσαι ἐν τούτοις; περὶ γὰρ τούτων ἁπάντων οὐ μόνον χαλεπὸν τὸ εὐπορῆσαι τῆς ἀληθείας ἀλλ’ οὐδὲ τὸ διαπορῆσαι τῷ λόγῳ ῥᾴδιον καλῶς.

πρῶτον μὲν οὖν περὶ ὧν πρῶτον εἴπομεν, πότερον μιᾶς ἢ πλειόνων ἐστὶν ἐπιστημῶν θεωρῆσαι πάντα τὰ γένη τῶν [20] αἰτίων. μιᾶς μὲν γὰρ ἐπιστήμης πῶς ἂν εἴη μὴ ἐναντίας οὔσας τὰς ἀρχὰς γνωρίζειν; ἔτι δὲ πολλοῖς τῶν ὄντων οὐχ ὑπάρχουσι πᾶσαι· τίνα γὰρ τρόπον οἷόν τε κινήσεως ἀρχὴν εἶναι τοῖς ἀκινήτοις ἢ τὴν τἀγαθοῦ φύσιν, εἴπερ ἅπαν ὃ ἂν ᾖ ἀγαθὸν καθ’ αὐτὸ καὶ διὰ τὴν αὐτοῦ φύσιν τέλος ἐστὶν [25] καὶ οὕτως αἴτιον ὅτι ἐκείνου ἕνεκα καὶ γίγνεται καὶ ἔστι τἆλλα, τὸ δὲ τέλος καὶ τὸ οὗ ἕνεκα πράξεώς τινός ἐστι τέλος, αἱ δὲ πράξεις πᾶσαι μετὰ κινήσεως; ὥστ’ ἐν τοῖς ἀκινήτοις οὐκ ἂν ἐνδέχοιτο ταύτην εἶναι τὴν ἀρχὴν οὐδ’ εἶναί τι αὐτοαγαθόν. διὸ καὶ ἐν τοῖς μαθήμασιν οὐθὲν δείκνυται διὰ [30] ταύτης τῆς αἰτίας, οὐδ’ ἔστιν ἀπόδειξις οὐδεμία διότι βέλτιον ἢ χεῖρον, ἀλλ’ οὐδὲ τὸ παράπαν μέμνηται οὐθεὶς οὐθενὸς τῶν τοιούτων, ὥστε διὰ ταῦτα τῶν σοφιστῶν τινὲς οἷον Ἀρίστιππος προεπηλάκιζεν αὐτάς· ἐν μὲν γὰρ ταῖς ἄλλαις τέχναις, καὶ ταῖς βαναύσοις, οἷον ἐν τεκτονικῇ καὶ σκυτικῇ, διότι [35] βέλτιον ἢ χεῖρον λέγεσθαι πάντα, τὰς δὲ μαθηματικὰς οὐθένα ποιεῖσθαι λόγον περὶ ἀγαθῶν καὶ κακῶν. [1] —ἀλλὰ μὴν εἴ γε πλείους ἐπιστῆμαι τῶν αἰτίων εἰσὶ καὶ ἑτέρα ἑτέρας ἀρχῆς, τίνα τούτων φατέον εἶναι τὴν ζητουμένην, ἢ τίνα μάλιστα τοῦ πράγματος τοῦ ζητουμένου ἐπιστήμονα τῶν ἐχόντων [5] αὐτάς; ἐνδέχεται γὰρ τῷ αὐτῷ πάντας τοὺς τρόπους τοὺς τῶν αἰτίων ὑπάρχειν, οἷον οἰκίας ὅθεν μὲν ἡ κίνησις ἡ τέχνη καὶ ὁ οἰκοδόμος, οὗ δ’ ἕνεκα τὸ ἔργον, ὕλη δὲ γῆ καὶ λίθοι, τὸ δ’ εἶδος ὁ λόγος. ἐκ μὲν οὖν

τῶν πάλαι διωρισμένων τίνα χρὴ καλεῖν τῶν ἐπιστημῶν σοφίαν ἔχει λόγον ἑκάστην [10] προσαγορεύειν· ᾗ μὲν γὰρ ἀρχικωτάτη καὶ ἡγεμονικωτάτη καὶ ᾗ ὥσπερ δούλας οὐδ’ ἀντειπεῖν τὰς ἄλλας ἐπιστήμας δίκαιον, ἡ τοῦ τέλους καὶ τἀγαθοῦ τοιαύτη (τούτου γὰρ ἕνεκα τἆλλα), ᾗ δὲ τῶν πρώτων αἰτίων καὶ τοῦ μάλιστα ἐπιστητοῦ διωρίσθη εἶναι, ἡ τῆς οὐσίας ἂν εἴη τοιαύτη· πολλαχῶς γὰρ [15] ἐπισταμένων τὸ αὐτὸ μᾶλλον μὲν εἰδέναι φαμὲν τὸν τῷ εἶναι γνωρίζοντα τί τὸ πρᾶγμα ἢ τῷ μὴ εἶναι, αὐτῶν δὲ τούτων ἕτερον ἑτέρου μᾶλλον, καὶ μάλιστα τὸν τί ἐστιν ἀλλ’ οὐ τὸν πόσον ἢ ποῖον ἢ τί ποιεῖν ἢ πάσχειν πέφυκεν. ἔτι δὲ καὶ ἐν τοῖς ἄλλοις τὸ εἰδέναι ἕκαστον καὶ ὧν ἀποδείξεις [20] εἰσί, τότ’ οἰόμεθα ὑπάρχειν ὅταν εἰδῶμεν τί ἐστιν (οἷον τί ἐστι τὸ τετραγωνίζειν, ὅτι μέσης εὕρεσις· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων), περὶ δὲ τὰς γενέσεις καὶ τὰς πράξεις καὶ περὶ πᾶσαν μεταβολὴν ὅταν εἰδῶμεν τὴν ἀρχὴν τῆς κινήσεως· τοῦτο δ’ ἕτερον καὶ ἀντικείμενον τῷ τέλει, ὥστ’ ἄλλης ἂν [25] δόξειεν ἐπιστήμης εἶναι τὸ θεωρῆσαι τῶν αἰτίων τούτων ἕκαστον.—ἀλλὰ μὴν καὶ περὶ τῶν ἀποδεικτικῶν ἀρχῶν, πότερον μιᾶς ἐστὶν ἐπιστήμης ἢ πλειόνων, ἀμφισβητήσιμόν ἐστιν (λέγω [28] δὲ ἀποδεικτικὰς τὰς κοινὰς δόξας ἐξ ὧν ἅπαντες δεικνύουσιν) οἷον ὅτι πᾶν ἀναγκαῖον ἢ φάναι ἢ ἀποφάναι, καὶ [30] ἀδύνατον ἅμα εἶναι καὶ μὴ εἶναι, καὶ ὅσαι ἄλλαι τοιαῦται προτάσεις, πότερον μία τούτων ἐπιστήμη καὶ τῆς οὐσίας ἢ ἑτέρα, κἂν εἰ μὴ μία, ποτέραν χρὴ προσαγορεύειν τὴν ζητουμένην νῦν. μιᾶς μὲν οὖν οὐκ εὔλογον εἶναι· τί γὰρ μᾶλλον γεωμετρίας ἢ ὁποιασοῦν περὶ τούτων ἐστὶν ἴδιον τὸ ἐπαΐειν; [35] εἴπερ οὖν ὁμοίως μὲν ὁποιασοῦν ἐστίν, ἁπασῶν δὲ μὴ ἐνδέχεται, [1] ὥσπερ οὐδὲ τῶν ἄλλων οὕτως οὐδὲ τῆς γνωριζούσης τὰς οὐσίας ἴδιόν ἐστι τὸ γιγνώσκειν περὶ αὐτῶν. ἅμα δὲ καὶ τίνα τρόπον ἔσται αὐτῶν ἐπιστήμη; τί μὲν γὰρ ἕκαστον τούτων τυγχάνει ὂν καὶ νῦν γνωρίζομεν (χρῶνται γοῦν ὡς γιγνωσκομένοις [5] αὐτοῖς καὶ ἄλλαι τέχναι)· εἰ δὲ ἀποδεικτικὴ περὶ αὐτῶν ἐστί, δεήσει τι γένος εἶναι ὑποκείμενον καὶ τὰ μὲν πάθη τὰ δ’ ἀξιώματ’ αὐτῶν (περὶ πάντων γὰρ ἀδύνατον ἀπόδειξιν εἶναι), ἀνάγκη γὰρ ἔκ τινων εἶναι καὶ περί τι καὶ τινῶν τὴν ἀπόδειξιν· ὥστε συμβαίνει πάντων εἶναι γένος ἕν [10] τι τῶν δεικνυμένων, πᾶσαι γὰρ αἱ ἀποδεικτικαὶ χρῶνται τοῖς ἀξιώμασιν.—ἀλλὰ μὴν εἰ ἑτέρα ἡ τῆς οὐσίας καὶ ἡ περὶ τούτων, ποτέρα κυριωτέρα καὶ προτέρα πέφυκεν αὐτῶν; καθόλου γὰρ μάλιστα καὶ πάντων ἀρχαὶ τὰ ἀξιώματά ἐστιν, εἴ τ’ ἐστὶ μὴ τοῦ φιλοσόφου, τίνος ἔσται περὶ αὐτῶν ἄλλου τὸ [15] θεωρῆσαι τὸ ἀληθὲς καὶ ψεῦδος;—ὅλως τε τῶν οὐσιῶν πότερον μία πασῶν ἐστὶν ἢ πλείους ἐπιστῆμαι; εἰ μὲν οὖν μὴ μία, ποίας οὐσίας θετέον τὴν ἐπιστήμην ταύτην; τὸ δὲ μίαν πασῶν οὐκ εὔλογον· καὶ γὰρ ἂν ἀποδεικτικὴ μία περὶ πάντων εἴη τῶν συμβεβηκότων, εἴπερ πᾶσα ἀποδεικτικὴ περί [20] τι ὑποκείμενον θεωρεῖ τὰ καθ’ αὑτὰ συμβεβηκότα ἐκ τῶν κοινῶν δοξῶν. περὶ οὖν τὸ αὐτὸ γένος τὰ συμβεβηκότα καθ’ αὑτὰ τῆς αὐτῆς ἐστὶ θεωρῆσαι ἐκ τῶν αὐτῶν δοξῶν. περί τε γὰρ ὃ μιᾶς καὶ ἐξ ὧν μιᾶς, εἴτε τῆς αὐτῆς εἴτε ἄλλης, ὥστε καὶ τὰ συμβεβηκότα, εἴθ’ αὗται θεωροῦσιν εἴτ’ [25] ἐκ τούτων μία.—ἔτι δὲ πότερον περὶ τὰς οὐσίας μόνον ἡ θεωρία ἐστὶν ἢ καὶ περὶ τὰ συμβεβηκότα ταύταις; λέγω δ’ οἷον, εἰ τὸ στερεὸν οὐσία τίς ἐστι καὶ γραμμαὶ καὶ ἐπίπεδα, πότερον τῆς αὐτῆς ταῦτα γνωρίζειν ἐστὶν ἐπιστήμης καὶ τὰ συμβεβηκότα περὶ ἕκαστον γένος περὶ ὧν αἱ μαθηματικαὶ [30] δεικνύουσιν, ἢ ἄλλης. εἰ μὲν γὰρ τῆς αὐτῆς, ἀποδεικτική τις ἂν εἴη καὶ ἡ τῆς οὐσίας, οὐ δοκεῖ δὲ τοῦ τί ἐστιν ἀπόδειξις εἶναι· εἰ δ’ ἑτέρας, τίς ἔσται ἡ θεωροῦσα περὶ τὴν οὐσίαν τὰ συμβεβηκότα; τοῦτο γὰρ ἀποδοῦναι παγχάλεπον.—ἔτι δὲ πότερον τὰς αἰσθητὰς οὐσίας μόνας εἶναι [35] φατέον ἢ καὶ παρὰ ταύτας ἄλλας, καὶ πότερον μοναχῶς ἢ πλείω γένη τετύχηκεν ὄντα τῶν οὐσιῶν, [1] οἷον οἱ λέγοντες τά τε εἴδη καὶ τὰ μεταξύ, περὶ ἃ τὰς μαθηματικὰς εἶναί φασιν ἐπιστήμας; ὡς μὲν οὖν λέγομεν τὰ εἴδη αἴτιά τε καὶ οὐσίας εἶναι καθ’ ἑαυτὰς εἴρηται ἐν τοῖς πρώτοις λόγοις περὶ [5] αὐτῶν· πολλαχῇ δὲ ἐχόντων δυσκολίαν, οὐθενὸς ἧττον ἄτοπον τὸ φάναι μὲν εἶναί τινας φύσεις παρὰ τὰς ἐν τῷ οὐρανῷ, ταύτας δὲ τὰς αὐτὰς φάναι τοῖς αἰσθητοῖς πλὴν ὅτι τὰ μὲν ἀΐδια τὰ δὲ φθαρτά. αὐτὸ γὰρ ἄνθρωπόν φασιν εἶναι καὶ ἵππον καὶ ὑγίειαν, ἄλλο δ’ οὐδέν, παραπλήσιον [10]

ποιοῦντες τοῖς θεοὺς μὲν εἶναι φάσκουσιν ἀνθρωποειδεῖς δέ· οὔτε γὰρ ἐκεῖνοι οὐδὲν ἄλλο ἐποίουν ἢ ἀνθρώπους ἀϊδίους, οὔθ' οὗτοι τὰ εἴδη ἄλλ' ἢ αἰσθητὰ ἀΐδια. ἔτι δὲ εἴ τις παρὰ τὰ εἴδη καὶ τὰ αἰσθητὰ τὰ μεταξὺ θήσεται, πολλὰς ἀπορίας ἕξει· δῆλον γὰρ ὡς ὁμοίως γραμμαί τε παρά τ' αὐτὰς καὶ [15] τὰς αἰσθητὰς ἔσονται καὶ ἕκαστον τῶν ἄλλων γενῶν· ὥστ' ἐπείπερ ἡ ἀστρολογία μία τούτων ἐστίν, ἔσται τις καὶ οὐρανὸς παρὰ τὸν αἰσθητὸν οὐρανὸν καὶ ἥλιός τε καὶ σελήνη καὶ τἆλλα ὁμοίως τὰ κατὰ τὸν οὐρανόν. καίτοι πῶς δεῖ πιστεῦσαι τούτοις; οὐδὲ γὰρ ἀκίνητον εὔλογον εἶναι, κινούμενον δὲ [20] καὶ παντελῶς ἀδύνατον· ὁμοίως δὲ καὶ περὶ ὧν ἡ ὀπτικὴ πραγματεύεται καὶ ἡ ἐν τοῖς μαθήμασιν ἁρμονική· καὶ γὰρ ταῦτα ἀδύνατον εἶναι παρὰ τὰ αἰσθητὰ διὰ τὰς αὐτὰς αἰτίας· εἰ γὰρ ἔστιν αἰσθητὰ μεταξὺ καὶ αἰσθήσεις, δῆλον ὅτι καὶ ζῷα ἔσονται μεταξὺ αὐτῶν τε καὶ τῶν φθαρτῶν. [25] ἀπορήσειε δ' ἄν τις καὶ περὶ ποῖα τῶν ὄντων δεῖ ζητεῖν ταύτας τὰς ἐπιστήμας. εἰ γὰρ τούτῳ διοίσει τῆς γεωδαισίας ἡ γεωμετρία μόνον, ὅτι ἡ μὲν τούτων ἐστὶν ὧν αἰσθανόμεθα ἡ δ' οὐκ αἰσθητῶν, δῆλον ὅτι καὶ παρ' ἰατρικὴν ἔσται τις ἐπιστήμη καὶ παρ' ἑκάστην τῶν ἄλλων μεταξὺ αὐτῆς τε ἰατρικῆς [30] καὶ τῆσδε τῆς ἰατρικῆς· καίτοι πῶς τοῦτο δυνατόν; καὶ γὰρ ἂν ὑγιείν' ἄττα εἴη παρὰ τὰ αἰσθητὰ καὶ αὐτὸ τὸ ὑγιεινόν. ἅμα δὲ οὐδὲ τοῦτο ἀληθές, ὡς ἡ γεωδαισία τῶν αἰσθητῶν ἐστὶ μεγεθῶν καὶ φθαρτῶν· ἐφθείρετο γὰρ ἂν φθειρομένων.—ἀλλὰ μὴν οὐδὲ τῶν αἰσθητῶν ἂν εἴη μεγεθῶν [35] οὐδὲ περὶ τὸν οὐρανὸν ἡ ἀστρολογία τόνδε. [1] οὔτε γὰρ αἱ αἰσθηταὶ γραμμαὶ τοιαῦταί εἰσιν οἵας λέγει ὁ γεωμέτρης (οὐθὲν γὰρ εὐθὺ τῶν αἰσθητῶν οὕτως οὐδὲ στρογγύλον· ἅπτεται γὰρ τοῦ κανόνος οὐ κατὰ στιγμὴν ὁ κύκλος ἀλλ' ὥσπερ Πρωταγόρας ἔλεγεν ἐλέγχων τοὺς γεωμέτρας) , οὔθ' αἱ κινήσεις καὶ [5] ἕλικες τοῦ οὐρανοῦ ὅμοιαι περὶ ὧν ἡ ἀστρολογία ποιεῖται τοὺς λόγους, οὔτε τὰ σημεῖα τοῖς ἄστροις τὴν αὐτὴν ἔχει φύσιν. εἰσὶ δέ τινες οἵ φασιν εἶναι μὲν τὰ μεταξὺ ταῦτα λεγόμενα τῶν τε εἰδῶν καὶ τῶν αἰσθητῶν, οὐ μὴν χωρίς γε τῶν αἰσθητῶν ἀλλ' ἐν τούτοις· οἷς τὰ συμβαίνοντα ἀδύνατα πάντα [10] μὲν πλείονος λόγου διελθεῖν, ἱκανὸν δὲ καὶ τὰ τοιαῦτα θεωρῆσαι. οὔτε γὰρ ἐπὶ τούτων εὔλογον ἔχειν οὕτω μόνον, ἀλλὰ δῆλον ὅτι καὶ τὰ εἴδη ἐνδέχοιτ' ἂν ἐν τοῖς αἰσθητοῖς εἶναι (τοῦ γὰρ αὐτοῦ λόγου ἀμφότερα ταῦτά ἐστιν), ἔτι δὲ δύο στερεὰ ἐν τῷ αὐτῷ ἀναγκαῖον εἶναι τόπῳ, καὶ μὴ εἶναι ἀκίνητα [15] ἐν κινουμένοις γε ὄντα τοῖς αἰσθητοῖς. ὅλως δὲ τίνος ἕνεκ' ἄν τις θείη εἶναι μὲν αὐτά, εἶναι δ' ἐν τοῖς αἰσθητοῖς; ταὐτὰ γὰρ συμβήσεται ἄτοπα τοῖς προειρημένοις· ἔσται γὰρ οὐρανός τις παρὰ τὸν οὐρανόν, πλήν γ' οὐ χωρὶς ἀλλ' ἐν τῷ αὐτῷ τόπῳ· ὅπερ ἐστὶν ἀδυνατώτερον.

[20] περί τε τούτων οὖν ἀπορία πολλὴ πῶς δεῖ θέμενον τυχεῖν τῆς ἀληθείας, καὶ περὶ τῶν ἀρχῶν πότερον δεῖ τὰ γένη στοιχεῖα καὶ ἀρχὰς ὑπολαμβάνειν ἢ μᾶλλον ἐξ ὧν ἐνυπαρχόντων ἐστὶν ἕκαστον πρώτων, οἷον φωνῆς στοιχεῖα καὶ ἀρχαὶ δοκοῦσιν εἶναι ταῦτ' ἐξ ὧν σύγκεινται αἱ φωναὶ [25] πρώτων, ἀλλ' οὐ τὸ κοινὸν ἡ φωνή· καὶ τῶν διαγραμμάτων ταῦτα στοιχεῖα λέγομεν ὧν αἱ ἀποδείξεις ἐνυπάρχουσιν ἐν ταῖς τῶν ἄλλων ἀποδείξεσιν ἢ πάντων ἢ τῶν πλείστων, ἔτι δὲ τῶν σωμάτων καὶ οἱ πλείω λέγοντες εἶναι στοιχεῖα καὶ οἱ ἕν, ἐξ ὧν σύγκειται καὶ ἐξ ὧν συνέστηκεν ἀρχὰς λέγουσιν [30] εἶναι, οἷον Ἐμπεδοκλῆς πῦρ καὶ ὕδωρ καὶ τὰ μετὰ τούτων στοιχεῖά φησιν εἶναι ἐξ ὧν ἐστὶ τὰ ὄντα ἐνυπαρχόντων, ἀλλ' οὐχ ὡς γένη λέγει ταῦτα τῶν ὄντων. πρὸς δὲ τούτοις καὶ τῶν ἄλλων εἴ τις ἐθέλει τὴν φύσιν ἀθρεῖν, [1] οἷον κλίνην ἐξ ὧν μορίων συνέστηκε καὶ πῶς συγκειμένων, τότε γνωρίζει τὴν φύσιν αὐτῆς.—ἐκ μὲν οὖν τούτων τῶν λόγων οὐκ ἂν εἴησαν αἱ ἀρχαὶ τὰ γένη τῶν ὄντων· εἰ δ' ἕκαστον μὲν [5] γνωρίζομεν διὰ τῶν ὁρισμῶν, ἀρχαὶ δὲ τὰ γένη τῶν ὁρισμῶν εἰσίν, ἀνάγκη καὶ τῶν ὁριστῶν ἀρχὰς εἶναι τὰ γένη. κἂν [7] εἰ ἔστι τὴν τῶν ὄντων λαβεῖν ἐπιστήμην τὸ τῶν εἰδῶν λαβεῖν καθ' ἃ λέγονται τὰ ὄντα, τῶν γε εἰδῶν ἀρχαὶ τὰ γένη εἰσίν. φαίνονται δέ τινες καὶ τῶν λεγόντων στοιχεῖα τῶν ὄντων τὸ [10] ἓν ἢ τὸ ὂν ἢ τὸ μέγα καὶ μικρὸν ὡς γένεσιν αὐτοῖς χρῆσθαι.—ἀλλὰ μὴν οὐδὲ ἀμφοτέρως γε οἷόν τε λέγειν τὰς ἀρχάς. ὁ μὲν γὰρ λόγος τῆς οὐσίας εἷς· ἕτερος δ' ἔσται ὁ διὰ τῶν γενῶν ὁρισμὸς καὶ ὁ λέγων

ἐξ ὧν ἔστιν ἐνυπαρχόντων.—πρὸς δὲ τούτοις εἰ καὶ ὅτι μάλιστα ἀρχαὶ τὰ γένη εἰσί, [15] πότερον δεῖ νομίζειν τὰ πρῶτα τῶν γενῶν ἀρχὰς ἢ τὰ ἔσχατα κατηγορούμενα ἐπὶ τῶν ἀτόμων; καὶ γὰρ τοῦτο ἔχει ἀμφισβήτησιν. εἰ μὲν γὰρ ἀεὶ τὰ καθόλου μᾶλλον ἀρχαί, φανερὸν ὅτι τὰ ἀνωτάτω τῶν γενῶν· ταῦτα γὰρ λέγεται κατὰ πάντων. τοσαῦται οὖν ἔσονται ἀρχαὶ τῶν ὄντων ὅσαπερ [20] τὰ πρῶτα γένη, ὥστ’ ἔσται τό τε ὂν καὶ τὸ ἓν ἀρχαὶ καὶ οὐσίαι· ταῦτα γὰρ κατὰ πάντων μάλιστα λέγεται τῶν ὄντων. οὐχ οἷόν τε δὲ τῶν ὄντων ἓν εἶναι γένος οὔτε τὸ ἓν οὔτε τὸ ὄν· ἀνάγκη μὲν γὰρ τὰς διαφορὰς ἑκάστου γένους καὶ εἶναι καὶ μίαν εἶναι ἑκάστην, ἀδύνατον δὲ κατηγορεῖσθαι ἢ τὰ εἴδη τοῦ [25] γένους ἐπὶ τῶν οἰκείων διαφορῶν ἢ τὸ γένος ἄνευ τῶν αὐτοῦ εἰδῶν, ὥστ’ εἴπερ τὸ ἓν γένος ἢ τὸ ὄν, οὐδεμία διαφορὰ οὔτε ὂν οὔτε ἓν ἔσται. ἀλλὰ μὴν εἰ μὴ γένη, οὐδ’ ἀρχαὶ ἔσονται, εἴπερ ἀρχαὶ τὰ γένη. ἔτι καὶ τὰ μεταξὺ συλλαμβανόμενα μετὰ τῶν διαφορῶν ἔσται γένη μέχρι τῶν ἀτόμων [30] (νῦν δὲ τὰ μὲν δοκεῖ τὰ δ’ οὐ δοκει)· πρὸς δὲ τούτοις ἔτι μᾶλλον αἱ διαφοραὶ ἀρχαὶ ἢ τὰ γένη· εἰ δὲ καὶ αὗται ἀρχαί, ἄπειροι ὡς εἰπεῖν ἀρχαὶ γίγνονται, ἄλλως τε κἂν τις τὸ πρῶτον γένος ἀρχὴν τιθῇ. [1] ἀλλὰ μὴν καὶ εἰ μᾶλλόν γε ἀρχοειδὲς τὸ ἕν ἐστιν, ἓν δὲ τὸ ἀδιαίρετον, ἀδιαίρετον δὲ ἅπαν ἢ κατὰ τὸ ποσὸν ἢ κατ’ εἶδος, πρότερον δὲ τὸ κατ’ εἶδος, τὰ δὲ γένη διαιρετὰ εἰς εἴδη, μᾶλλον ἂν ἓν τὸ [5] ἔσχατον εἴη κατηγορούμενον· οὐ γάρ ἐστι γένος ἄνθρωπος τῶν τινῶν ἀνθρώπων. ἔτι ἐν οἷς τὸ πρότερον καὶ ὕστερόν ἐστιν, οὐχ οἷόν τε τὸ ἐπὶ τούτων εἶναί τι παρὰ ταῦτα (οἷον εἰ πρώτη τῶν ἀριθμῶν ἡ δυάς, οὐκ ἔσται τις ἀριθμὸς παρὰ τὰ εἴδη τῶν ἀριθμῶν· ὁμοίως δὲ οὐδὲ σχῆμα παρὰ τὰ εἴδη [10] τῶν σχημάτων· εἰ δὲ μὴ τούτων, σχολῇ τῶν γε ἄλλων ἔσται τὰ γένη παρὰ τὰ εἴδη· τούτων γὰρ δοκεῖ μάλιστα εἶναι γένη)· ἐν δὲ τοῖς ἀτόμοις οὐκ ἔστι τὸ μὲν πρότερον τὸ δ’ ὕστερον. ἔτι ὅπου τὸ μὲν βέλτιον τὸ δὲ χεῖρον, ἀεὶ τὸ βέλτιον πρότερον· ὥστ’ οὐδὲ τούτων ἂν εἴη γένος.—ἐκ μὲν οὖν τούτων [15] μᾶλλον φαίνεται τὰ ἐπὶ τῶν ἀτόμων κατηγορούμενα ἀρχαὶ εἶναι τῶν γενῶν· πάλιν δὲ πῶς αὖ δεῖ ταύτας ἀρχὰς ὑπολαβεῖν οὐ ῥᾴδιον εἰπεῖν. τὴν μὲν γὰρ ἀρχὴν δεῖ καὶ τὴν αἰτίαν εἶναι παρὰ τὰ πράγματα ὧν ἀρχή, καὶ δύνασθαι εἶναι χωριζομένην αὐτῶν· τοιοῦτον δέ τι παρὰ τὸ καθ’ ἕκαστον [20] εἶναι διὰ τί ἄν τις ὑπολάβοι, πλὴν ὅτι καθόλου κατηγορεῖται καὶ κατὰ πάντων; ἀλλὰ μὴν εἰ διὰ τοῦτο, τὰ μᾶλλον καθόλου μᾶλλον θετέον ἀρχάς· ὥστε ἀρχαὶ τὰ πρῶτ’ ἂν εἴησαν γένη.

ἔστι δ’ ἐχομένη τε τούτων ἀπορία καὶ πασῶν χαλεπωτάτη [25] καὶ ἀναγκαιοτάτη θεωρῆσαι, περὶ ἧς ὁ λόγος ἐφέστηκε νῦν. εἴτε γὰρ μὴ ἔστι τι παρὰ τὰ καθ’ ἕκαστα, τὰ δὲ καθ’ ἕκαστα ἄπειρα, τῶν δ’ ἀπείρων πῶς ἐνδέχεται λαβεῖν ἐπιστήμην; ᾗ γὰρ ἕν τι καὶ ταὐτόν, καὶ ᾗ καθόλου τι ὑπάρχει, ταύτῃ πάντα γνωρίζομεν.—ἀλλὰ μὴν εἰ τοῦτο [30] ἀναγκαῖόν ἐστι καὶ δεῖ τι εἶναι παρὰ τὰ καθ’ ἕκαστα, ἀναγκαῖον ἂν εἴη τὰ γένη εἶναι παρὰ τὰ καθ’ ἕκαστα, ἤτοι τὰ ἔσχατα ἢ τὰ πρῶτα· τοῦτο δ’ ὅτι ἀδύνατον ἄρτι διηπορήσαμεν.—ἔτι εἰ ὅτι μάλιστα ἔστι τι παρὰ τὸ σύνολον ὅταν κατηγορηθῇ τι τῆς ὕλης, πότερον, εἰ ἔστι, παρὰ πάντα δεῖ εἶναί τι, ἢ παρὰ μὲν ἔνια εἶναι παρὰ δ’ ἔνια μὴ εἶναι, ἢ παρ’ οὐδέν; [1] εἰ μὲν οὖν μηδέν ἐστι παρὰ τὰ καθ’ ἕκαστα, οὐθὲν ἂν εἴη νοητὸν ἀλλὰ πάντα αἰσθητὰ καὶ ἐπιστήμη οὐδενός, εἰ μή τις εἶναι λέγει τὴν αἴσθησιν ἐπιστήμην. ἔτι δ’ οὐδ’ ἀΐδιον οὐθὲν οὐδ’ ἀκίνητον (τὰ γὰρ αἰσθητὰ [5] πάντα φθείρεται καὶ ἐν κινήσει ἐστίν)· ἀλλὰ μὴν εἴ γε ἀΐδιον μηθέν ἐστιν, οὐδὲ γένεσιν εἶναι δυνατόν. ἀνάγκη γὰρ εἶναί τι τὸ γιγνόμενον καὶ ἐξ οὗ γίγνεται καὶ τούτων τὸ ἔσχατον ἀγένητον, εἴπερ ἵσταταί τε καὶ ἐκ μὴ ὄντος γενέσθαι ἀδύνατον· ἔτι δὲ γενέσεως οὔσης καὶ κινήσεως ἀνάγκη καὶ πέρας εἶναι (οὔτε [10] γὰρ ἄπειρός ἐστιν οὐδεμία κίνησις ἀλλὰ πάσης ἔστι τέλος, γίγνεσθαί τε οὐχ οἷόν τε τὸ ἀδύνατον γενέσθαι· τὸ δὲ γεγονὸς ἀνάγκη εἶναι ὅτε πρῶτον γέγονεν)· ἔτι δ’ εἴπερ ἡ ὕλη ἔστι διὰ τὸ ἀγένητος εἶναι, πολὺ ἔτι μᾶλλον εὔλογον εἶναι τὴν οὐσίαν, ἣ ποτε ἐκείνη γίγνεται· εἰ γὰρ μήτε τοῦτο ἔσται [15] μήτε ἐκείνη, οὐθὲν ἔσται τὸ παράπαν, εἰ δὲ τοῦτο ἀδύνατον, ἀνάγκη τι εἶναι παρὰ τὸ σύνολον, τὴν μορφὴν καὶ τὸ εἶδος.—εἰ δ’ αὖ τις τοῦτο θήσει, ἀπορία ἐπὶ τίνων τε θήσει τοῦτο καὶ ἐπὶ τίνων οὔ. ὅτι μὲν γὰρ ἐπὶ πάντων οὐχ οἷόν τε, φανερόν· οὐ γὰρ ἂν θείημεν εἶναί τινα οἰκίαν παρὰ τὰς

τινὰς [20] οἰκίας. πρὸς δὲ τούτοις πότερον ἡ οὐσία μία πάντων ἔσται, οἷον τῶν ἀνθρώπων; ἀλλ’ ἄτοπον· ἓν γὰρ πάντα ὧν ἡ οὐσία μία. ἀλλὰ πολλὰ καὶ διάφορα; ἀλλὰ καὶ τοῦτο ἄλογον. ἅμα δὲ καὶ πῶς γίγνεται ἡ ὕλη τούτων ἕκαστον καὶ ἔστι τὸ σύνολον ἄμφω ταῦτα;—ἔτι δὲ περὶ τῶν ἀρχῶν [25] καὶ τόδε ἀπορήσειεν ἄν τις. εἰ μὲν γὰρ εἴδει εἰσὶν ἕν, οὐθὲν ἔσται ἀριθμῷ ἕν, οὐδ’ αὐτὸ τὸ ἓν καὶ τὸ ὄν· καὶ τὸ ἐπίστασθαι πῶς ἔσται, εἰ μή τι ἔσται ἓν ἐπὶ πάντων;—ἀλλὰ μὴν εἰ ἀριθμῷ ἓν καὶ μία ἑκάστη τῶν ἀρχῶν, καὶ μὴ ὥσπερ ἐπὶ τῶν αἰσθητῶν ἄλλαι ἄλλων (οἷον τῆσδε τῆς συλλαβῆς [30] τῷ εἴδει τῆς αὐτῆς οὔσης καὶ αἱ ἀρχαὶ εἴδει αἱ αὐταί· καὶ γὰρ αὗται ὑπάρχουσιν ἀριθμῷ ἕτεραι),—εἰ δὲ μὴ οὕτως ἀλλ’ αἱ τῶν ὄντων ἀρχαὶ ἀριθμῷ ἕν εἰσιν, οὐκ ἔσται παρὰ τὰ στοιχεῖα οὐθὲν ἕτερον· τὸ γὰρ ἀριθμῷ ἓν ἢ τὸ καθ’ ἕκαστον λέγειν διαφέρει οὐθέν· οὕτω γὰρ λέγομεν τὸ καθ’ ἕκαστον, τὸ ἀριθμῷ ἕν, καθόλου δὲ τὸ ἐπὶ τούτων. [1] ὥσπερ οὖν εἰ τὰ τῆς φωνῆς ἀριθμῷ ἦν στοιχεῖα ὡρισμένα, ἀναγκαῖον ἦν ἂν τοσαῦτα εἶναι τὰ πάντα γράμματα ὅσαπερ τὰ στοιχεῖα, μὴ ὄντων γε δύο τῶν αὐτῶν μηδὲ πλειόνων.

[5] οὐθενὸς δ’ ἐλάττων ἀπορία παραλέλειπται καὶ τοῖς νῦν καὶ τοῖς πρότερον, πότερον αἱ αὐταὶ τῶν φθαρτῶν καὶ τῶν ἀφθάρτων ἀρχαί εἰσιν ἢ ἕτεραι. εἰ μὲν γὰρ αἱ αὐταί, πῶς τὰ μὲν φθαρτὰ τὰ δὲ ἄφθαρτα, καὶ διὰ τίν’ αἰτίαν; οἱ μὲν οὖν περὶ Ἡσίοδον καὶ πάντες ὅσοι θεολόγοι [10] μόνον ἐφρόντισαν τοῦ πιθανοῦ τοῦ πρὸς αὐτούς, ἡμῶν δ’ ὠλιγώρησαν (θεοὺς γὰρ ποιοῦντες τὰς ἀρχὰς καὶ ἐκ θεῶν γεγονέναι, τὰ μὴ γευσάμενα τοῦ νέκταρος καὶ τῆς ἀμβροσίας θνητὰ γενέσθαι φασίν, δῆλον ὡς ταῦτα τὰ ὀνόματα γνώριμα λέγοντες αὐτοῖς· καίτοι περὶ αὐτῆς τῆς προσφορᾶς [15] τῶν αἰτίων τούτων ὑπὲρ ἡμᾶς εἰρήκασιν· εἰ μὲν γὰρ χάριν ἡδονῆς αὐτῶν θιγγάνουσιν, οὐθὲν αἴτια τοῦ εἶναι τὸ νέκταρ καὶ ἡ ἀμβροσία, εἰ δὲ τοῦ εἶναι, πῶς ἂν εἶεν ἀΐδιοι δεόμενοι τροφῆς)·—ἀλλὰ περὶ μὲν τῶν μυθικῶς σοφιζομένων οὐκ ἄξιον μετὰ σπουδῆς σκοπεῖν· παρὰ δὲ τῶν δι’ [20] ἀποδείξεως λεγόντων δεῖ πυνθάνεσθαι διερωτῶντας τί δή [21] ποτ’ ἐκ τῶν αὐτῶν ὄντα τὰ μὲν ἀΐδια τὴν φύσιν ἐστὶ τὰ δὲ φθείρεται τῶν ὄντων. ἐπεὶ δὲ οὔτε αἰτίαν λέγουσιν οὔτε εὔλογον οὕτως ἔχειν, δῆλον ὡς οὐχ αἱ αὐταὶ ἀρχαὶ οὐδὲ αἰτίαι αὐτῶν ἂν εἶεν. καὶ γὰρ ὅνπερ οἰηθείη λέγειν [25] ἄν τις μάλιστα ὁμολογουμένως αὐτῷ, Ἐμπεδοκλῆς, καὶ οὗτος ταὐτὸν πέπονθεν· τίθησι μὲν γὰρ ἀρχήν τινα αἰτίαν τῆς φθορᾶς τὸ νεῖκος, δόξειε δ’ ἂν οὐθὲν ἧττον καὶ τοῦτο γεννᾶν ἔξω τοῦ ἑνός· ἅπαντα γὰρ ἐκ τούτου τἆλλά ἐστι πλὴν ὁ θεός. λέγει γοῦν

ἐξ ὧν πάνθ’ ὅσα τ’ ἦν ὅσα τ’ [30] ἔσθ’ ὅσα τ’ ἔσται ὀπίσσω,

δένδρεά τ’ ἐβλάστησε καὶ ἀνέρες ἠδὲ γυναῖκες,

θῆρές τ’ οἰωνοί τε καὶ ὑδατοθρέμμονες ἰχθῦς,

καί τε θεοὶ δολιχαίωνες.

καὶ χωρὶς δὲ τούτων δῆλον· [1] εἰ γὰρ μὴ ἦν ἐν τοῖς πράγμασιν, ἓν ἂν ἦν ἅπαντα, ὡς φησίν· ὅταν γὰρ συνέλθῃ,

τότε δ’ ἔσχατον ἵστατο νεῖκος.

διὸ καὶ συμβαίνει αὐτῷ τὸν εὐδαιμονέστατον θεὸν ἧττον φρόνιμον εἶναι τῶν ἄλλων· οὐ γὰρ γνωρίζει [5] ἅπαντα· τὸ γὰρ νεῖκος οὐκ ἔχει, ἡ δὲ γνῶσις τοῦ ὁμοίου τῷ ὁμοίῳ.

γαίῃ μὲν γάρ, (φησί,) γαῖαν ὀπώπαμεν, ὕδατι δ’ ὕδωρ,

αἰθέρι δ’ αἰθέρα δῖον, ἀτὰρ πυρὶ πῦρ ἀΐδηλον,

στοργὴν δὲ στοργῇ, νεῖκος δέ τε νείκεϊ λυγρῷ.

ἀλλ’ ὅθεν δὴ ὁ λόγος, τοῦτό γε φανερόν, ὅτι [10] συμβαίνει αὐτῷ τὸ νεῖκος μηθὲν μᾶλλον φθορᾶς ἢ τοῦ εἶναι αἴτιον· ὁμοίως δ’ οὐδ’ ἡ φιλότης τοῦ εἶναι, συνάγουσα γὰρ εἰς τὸ ἓν φθείρει

τὰ ἄλλα. καὶ ἅμα δὲ αὐτῆς τῆς μεταβολῆς αἴτιον οὐθὲν λέγει ἀλλ’ ἢ ὅτι οὕτως πέφυκεν·

ἀλλ’ ὅτε δὴ μέγα νεῖκος ἐνὶ μελέεσσιν ἐθρέφθη,

εἰς τιμάς [15] τ’ ἀνόρουσε τελειομένοιο χρόνοιο

ὅς σφιν ἀμοιβαῖος πλατέος παρ’ ἐλήλαται ὅρκου·

ὡς ἀναγκαῖον μὲν ὂν μεταβάλλειν· αἰτίαν δὲ τῆς ἀνάγκης οὐδεμίαν δηλοῖ. ἀλλ’ ὅμως τοσοῦτόν γε μόνος λέγει ὁμολογουμένως· οὐ γὰρ τὰ μὲν φθαρτὰ τὰ δὲ ἄφθαρτα ποιεῖ τῶν ὄντων ἀλλὰ πάντα [20] φθαρτὰ πλὴν τῶν στοιχείων. ἡ δὲ νῦν λεγομένη ἀπορία ἐστὶ διὰ τί τὰ μὲν τὰ δ’ οὔ, εἴπερ ἐκ τῶν αὐτῶν ἐστίν.—ὅτι μὲν οὖν οὐκ ἂν εἴησαν αἱ αὐταὶ ἀρχαί, τοσαῦτα εἰρήσθω· εἰ δὲ ἕτεραι ἀρχαί, μία μὲν ἀπορία πότερον ἄφθαρτοι καὶ αὗται ἔσονται ἢ φθαρταί· εἰ μὲν γὰρ φθαρταί, δῆλον ὡς [25] ἀναγκαῖον καὶ ταύτας ἔκ τινων εἶναι (πάντα γὰρ φθείρεται εἰς ταῦτ’ ἐξ ὧν ἔστιν), ὥστε συμβαίνει τῶν ἀρχῶν ἑτέρας ἀρχὰς εἶναι προτέρας, τοῦτο δ’ ἀδύνατον, καὶ εἰ ἵσταται καὶ εἰ βαδίζει εἰς ἄπειρον· ἔτι δὲ πῶς ἔσται τὰ φθαρτά, εἰ αἱ ἀρχαὶ ἀναιρεθήσονται; εἰ δὲ ἄφθαρτοι, διὰ [30] τί ἐκ μὲν τούτων ἀφθάρτων οὐσῶν φθαρτὰ ἔσται, ἐκ δὲ τῶν ἑτέρων ἄφθαρτα; τοῦτο γὰρ οὐκ εὔλογον, ἀλλ’ ἢ ἀδύνατον ἢ πολλοῦ λόγου δεῖται. ἔτι δὲ οὐδ’ ἐγκεχείρηκεν οὐδεὶς ἑτέρας, ἀλλὰ τὰς αὐτὰς ἁπάντων λέγουσιν ἀρχάς. [1] ἀλλὰ τὸ πρῶτον ἀπορηθὲν ἀποτρώγουσιν ὥσπερ τοῦτο μικρόν τι λαμβάνοντες.

πάντων δὲ καὶ θεωρῆσαι χαλεπώτατον καὶ πρὸς τὸ [5] γνῶναι τἀληθὲς ἀναγκαιότατον πότερόν ποτε τὸ ὂν καὶ τὸ ἓν οὐσίαι τῶν ὄντων εἰσί, καὶ ἑκάτερον αὐτῶν οὐχ ἕτερόν τι ὂν τὸ μὲν ἓν τὸ δὲ ὄν ἐστιν, ἢ δεῖ ζητεῖν τί ποτ’ ἐστὶ τὸ ὂν καὶ τὸ ἓν ὡς ὑποκειμένης ἄλλης φύσεως. οἱ μὲν γὰρ ἐκείνως οἱ δ’ οὕτως οἴονται τὴν φύσιν ἔχειν. Πλάτων [10] μὲν γὰρ καὶ οἱ Πυθαγόρειοι οὐχ ἕτερόν τι τὸ ὂν οὐδὲ τὸ ἓν ἀλλὰ τοῦτο αὐτῶν τὴν φύσιν εἶναι, ὡς οὔσης τῆς οὐσίας αὐτοῦ τοῦ ἑνὶ εἶναι καὶ ὄντι· οἱ δὲ περὶ φύσεως, οἷον Ἐμπεδοκλῆς ὡς εἰς γνωριμώτερον ἀνάγων λέγει ὅ τι τὸ ἕν ἐστιν· δόξειε γὰρ ἂν λέγειν τοῦτο τὴν φιλίαν εἶναι (αἰτία [15] γοῦν ἐστὶν αὕτη τοῦ ἓν εἶναι πᾶσιν), ἕτεροι δὲ πῦρ, οἱ δ’ ἀέρα φασὶν εἶναι τὸ ἓν τοῦτο καὶ τὸ ὄν, ἐξ οὗ τὰ ὄντα εἶναί τε καὶ γεγονέναι. ὡς δ’ αὕτως καὶ οἱ πλείω τὰ στοιχεῖα τιθέμενοι· ἀνάγκη γὰρ καὶ τούτοις τοσαῦτα λέγειν τὸ ἓν καὶ τὸ ὂν ὅσας περ ἀρχὰς εἶναί φασιν. συμβαίνει [20] δέ, εἰ μέν τις μὴ θήσεται εἶναί τινα οὐσίαν τὸ ἓν καὶ τὸ ὄν, μηδὲ τῶν ἄλλων εἶναι τῶν καθόλου μηθέν (ταῦτα γάρ ἐστι καθόλου μάλιστα πάντων, εἰ δὲ μὴ ἔστι τι ἓν αὐτὸ μηδ’ αὐτὸ ὄν, σχολῇ τῶν γε ἄλλων τι ἂν εἴη παρὰ τὰ λεγόμενα καθ’ ἕκαστα), ἔτι δὲ μὴ ὄντος τοῦ ἑνὸς οὐσίας, [25] δῆλον ὅτι οὐδ’ ἂν ἀριθμὸς εἴη ὡς κεχωρισμένη τις φύσις τῶν ὄντων (ὁ μὲν γὰρ ἀριθμὸς μονάδες, ἡ δὲ μονὰς ὅπερ ἕν τί ἐστιν)· εἰ δ’ ἔστι τι αὐτὸ ἓν καὶ ὄν, ἀναγκαῖον οὐσίαν αὐτῶν εἶναι τὸ ἓν καὶ τὸ ὄν· οὐ γὰρ ἕτερόν τι καθόλου κατηγορεῖται ἀλλὰ ταῦτα αὐτά.—ἀλλὰ μὴν εἴ γ’ ἔσται [30] τι αὐτὸ ὂν καὶ αὐτὸ ἕν, πολλὴ ἀπορία πῶς ἔσται τι παρὰ ταῦτα ἕτερον, λέγω δὲ πῶς ἔσται πλείω ἑνὸς τὰ ὄντα. τὸ γὰρ ἕτερον τοῦ ὄντος οὐκ ἔστιν, ὥστε κατὰ τὸν Παρμενίδου συμβαίνειν ἀνάγκη λόγον ἓν ἅπαντα εἶναι τὰ ὄντα καὶ τοῦτο εἶναι τὸ ὄν. [1] ἀμφοτέρως δὲ δύσκολον· ἄν τε γὰρ μὴ ᾖ τὸ ἓν οὐσία ἄν τε ᾖ τὸ αὐτὸ ἕν, ἀδύνατον τὸν ἀριθμὸν οὐσίαν εἶναι. ἐὰν μὲν οὖν μὴ ᾖ, εἴρηται πρότερον δι’ ὅ· ἐὰν δὲ ᾖ, ἡ αὐτὴ ἀπορία καὶ περὶ τοῦ ὄντος. ἐκ τίνος γὰρ [5] παρὰ τὸ ἓν ἔσται αὐτὸ ἄλλο ἕν; ἀνάγκη γὰρ μὴ ἓν εἶναι· ἅπαντα δὲ τὰ ὄντα ἢ ἓν ἢ πολλὰ ὧν ἓν ἕκαστον. ἔτι εἰ ἀδιαίρετον αὐτὸ τὸ ἕν, κατὰ μὲν τὸ Ζήνωνος ἀξίωμα οὐθὲν ἂν εἴη (ὃ γὰρ μήτε προστιθέμενον μήτε ἀφαιρούμενον ποιεῖ μεῖζον μηδὲ ἔλαττον, οὔ φησιν εἶναι τοῦτο τῶν ὄντων, [10] ὡς δηλονότι ὄντος μεγέθους τοῦ ὄντος· καὶ εἰ μέγεθος, σωματικόν· τοῦτο γὰρ πάντῃ ὄν· τὰ δὲ ἄλλα πὼς μὲν προστιθέμενα ποιήσει μεῖζον, πὼς δ’ οὐθέν, οἷον ἐπίπεδον καὶ γραμμή, στιγμὴ δὲ καὶ μονὰς οὐδαμῶς)· ἀλλ’ ἐπειδὴ οὗτος θεωρεῖ φορτικῶς, καὶ ἐνδέχεται εἶναι ἀδιαίρετόν τι [15] ὥστε καὶ οὕτως καὶ πρὸς ἐκεῖνόν τιν’ ἀπολογίαν ἔχειν (μεῖζον μὲν γὰρ οὐ ποιήσει πλεῖον δὲ προστιθέμενον τὸ τοιοῦτον)·—ἀλλὰ πῶς δὴ ἐξ ἑνὸς

τοιούτου ἢ πλειόνων τοιούτων ἔσται μέγεθος; ὅμοιον γὰρ καὶ τὴν γραμμὴν ἐκ στιγμῶν εἶναι φάσκειν. ἀλλὰ μὴν καὶ εἴ τις οὕτως ὑπολαμβάνει ὥστε [20] γενέσθαι, καθάπερ λέγουσί τινες, ἐκ τοῦ ἑνὸς αὐτοῦ καὶ ἄλλου μὴ ἑνός τινος τὸν ἀριθμόν, οὐθὲν ἧττον ζητητέον διὰ τί καὶ πῶς ὁτὲ μὲν ἀριθμὸς ὁτὲ δὲ μέγεθος ἔσται τὸ γενόμενον, εἴπερ τὸ μὴ ἓν ἡ ἀνισότης καὶ ἡ αὐτὴ φύσις ἦν. οὔτε γὰρ ὅπως ἐξ ἑνὸς καὶ ταύτης οὔτε ὅπως ἐξ ἀριθμοῦ [25] τινὸς καὶ ταύτης γένοιτ' ἂν τὰ μεγέθη, δῆλον.

τούτων δ' ἐχομένη ἀπορία πότερον οἱ ἀριθμοὶ καὶ τὰ σώματα καὶ τὰ ἐπίπεδα καὶ αἱ στιγμαὶ οὐσίαι τινές εἰσιν ἢ οὔ. εἰ μὲν γὰρ μή εἰσιν, διαφεύγει τί τὸ ὂν καὶ τίνες αἱ οὐσίαι τῶν ὄντων· τὰ μὲν γὰρ πάθη καὶ αἱ κινήσεις [30] καὶ τὰ πρός τι καὶ αἱ διαθέσεις καὶ οἱ λόγοι οὐθενὸς δοκοῦσιν οὐσίαν σημαίνειν (λέγονται γὰρ πάντα καθ' ὑποκειμένου τινός, καὶ οὐθὲν τόδε τι)· ἃ δὲ μάλιστ' ἂν δόξειε σημαίνειν οὐσίαν, ὕδωρ καὶ γῆ καὶ πῦρ καὶ ἀήρ, ἐξ ὧν τὰ σύνθετα σώματα συνέστηκε, [1] τούτων θερμότητες μὲν καὶ ψυχρότητες καὶ τὰ τοιαῦτα πάθη, οὐκ οὐσίαι, τὸ δὲ σῶμα τὸ ταῦτα πεπονθὸς μόνον ὑπομένει ὡς ὄν τι καὶ οὐσία τις οὖσα. ἀλλὰ μὴν τό γε σῶμα ἧττον οὐσία τῆς ἐπιφανείας, [5] καὶ αὕτη τῆς γραμμῆς, καὶ αὕτη τῆς μονάδος καὶ τῆς στιγμῆς· τούτοις γὰρ ὥρισται τὸ σῶμα, καὶ τὰ μὲν ἄνευ σώματος ἐνδέχεσθαι δοκεῖ εἶναι τὸ δὲ σῶμα ἄνευ τούτων ἀδύνατον. διόπερ οἱ μὲν πολλοὶ καὶ οἱ πρότερον τὴν οὐσίαν καὶ τὸ ὂν ᾠοντο τὸ σῶμα εἶναι τὰ δὲ ἄλλα [10] τούτου πάθη, ὥστε καὶ τὰς ἀρχὰς τὰς τῶν σωμάτων τῶν ὄντων εἶναι ἀρχάς· οἱ δ' ὕστεροι καὶ σοφώτεροι τούτων εἶναι δόξαντες ἀριθμούς. καθάπερ οὖν εἴπομεν, εἰ μὴ ἔστιν οὐσία ταῦτα, ὅλως οὐδὲν ἐστὶν οὐσία οὐδὲ ὂν οὐθέν· οὐ γὰρ δὴ τά γε συμβεβηκότα τούτοις ἄξιον ὄντα καλεῖν. [15] —ἀλλὰ μὴν εἰ τοῦτο μὲν ὁμολογεῖται, ὅτι μᾶλλον οὐσία τὰ μήκη τῶν σωμάτων καὶ αἱ στιγμαί, ταῦτα δὲ μὴ ὁρῶμεν ποίων ἂν εἶεν σωμάτων (ἐν γὰρ τοῖς αἰσθητοῖς ἀδύνατον εἶναι), οὐκ ἂν εἴη οὐσία οὐδεμία. ἔτι δὲ φαίνεται ταῦτα πάντα διαιρέσεις ὄντα τοῦ σώματος, τὸ μὲν εἰς πλάτος [20] τὸ δ' εἰς βάθος τὸ δ' εἰς μῆκος. πρὸς δὲ τούτοις ὁμοίως ἔνεστιν ἐν τῷ στερεῷ ὁποιονοῦν σχῆμα· ὥστ' εἰ μηδ' ἐν τῷ λίθῳ Ἑρμῆς, οὐδὲ τὸ ἥμισυ τοῦ κύβου ἐν τῷ κύβῳ οὕτως ὡς ἀφωρισμένον· οὐκ ἄρα οὐδ' ἐπιφάνεια (εἰ γὰρ ὁποιαοῦν, κἂν αὕτη ἂν ἦν ἡ ἀφορίζουσα τὸ ἥμισυ), ὁ δ' [25] αὐτὸς λόγος καὶ ἐπὶ γραμμῆς καὶ στιγμῆς καὶ μονάδος, ὥστ' εἰ μάλιστα μὲν οὐσία τὸ σῶμα, τούτου δὲ μᾶλλον ταῦτα, μὴ ἔστι δὲ ταῦτα μηδὲ οὐσίαι τινές, διαφεύγει τί τὸ ὂν καὶ τίς ἡ οὐσία τῶν ὄντων. πρὸς γὰρ τοῖς εἰρημένοις καὶ τὰ περὶ τὴν γένεσιν καὶ τὴν φθορὰν συμβαίνει ἄλογα. [30] δοκεῖ μὲν γὰρ ἡ οὐσία, ἐὰν μὴ οὖσα πρότερον νῦν ᾖ ἢ πρότερον οὖσα ὕστερον μὴ ᾖ, μετὰ τοῦ γίγνεσθαι καὶ φθείρεσθαι ταῦτα πάσχειν· τὰς δὲ στιγμὰς καὶ τὰς γραμμὰς καὶ τὰς ἐπιφανείας οὐκ ἐνδέχεται οὔτε γίγνεσθαι οὔτε φθείρεσθαι, ὁτὲ μὲν οὔσας ὁτὲ δὲ οὐκ οὔσας. ὅταν γὰρ ἅπτηται ἢ διαιρῆται τὰ σώματα, [1] ἅμα ὁτὲ μὲν μία ἁπτομένων ὁτὲ δὲ δύο διαιρουμένων γίγνονται· ὥστ' οὔτε συγκειμένων ἔστιν ἀλλ' ἔφθαρται, διῃρημένων τε εἰσὶν αἱ πρότερον οὐκ οὖσαι (οὐ γὰρ δὴ ἥ γ' ἀδιαίρετος στιγμὴ διῃρέθη εἰς δύο), εἴ τε γίγνονται καὶ [5] φθείρονται, ἐκ τίνος γίγνονται; παραπλησίως δ' ἔχει καὶ περὶ τὸ νῦν τὸ ἐν τῷ χρόνῳ· οὐδὲ γὰρ τοῦτο ἐνδέχεται γίγνεσθαι καὶ φθείρεσθαι, ἀλλ' ὅμως ἕτερον ἀεὶ δοκεῖ εἶναι, οὐκ οὐσία τις οὖσα. ὁμοίως δὲ δῆλον ὅτι ἔχει καὶ περὶ τὰς στιγμὰς καὶ τὰς γραμμὰς καὶ τὰ ἐπίπεδα· ὁ γὰρ [10] αὐτὸς λόγος· ἅπαντα γὰρ ὁμοίως ἢ πέρατα ἢ διαιρέσεις εἰσίν.

ὅλως δ' ἀπορήσειεν ἄν τις διὰ τί καὶ δεῖ ζητεῖν ἄλλ' ἄττα παρά τε τὰ αἰσθητὰ καὶ τὰ μεταξύ, οἷον ἃ τίθεμεν εἴδη. εἰ γὰρ διὰ τοῦτο, ὅτι τὰ μὲν μαθηματικὰ [15] τῶν δεῦρο ἄλλῳ μέν τινι διαφέρει, τῷ δὲ πόλλ' ἄττα ὁμοειδῆ εἶναι οὐθὲν διαφέρει, ὥστ' οὐκ ἔσονται αὐτῶν αἱ ἀρχαὶ ἀριθμῷ ἀφωρισμέναι (ὥσπερ οὐδὲ τῶν ἐνταῦθα γραμμάτων ἀριθμῷ μὲν πάντων οὐκ εἰσὶν αἱ ἀρχαὶ ὡρισμέναι, εἴδει δέ, ἐὰν μὴ λαμβάνῃ τις τησδὶ τῆς συλλαβῆς [20] ἢ τησδὶ τῆς φωνῆς· τούτων δ' ἔσονται καὶ ἀριθμῷ ὡρισμέναι—ὁμοίως δὲ καὶ ἐπὶ τῶν μεταξύ· ἄπειρα γὰρ κἀκεῖ τὰ ὁμοειδῆ), ὥστ' εἰ μὴ ἔστι παρὰ τὰ αἰσθητὰ καὶ τὰ μαθηματικὰ ἕτερ' ἄττα οἷα λέγουσι τὰ εἴδη τινές, οὐκ

ἔσται μία ἀριθμῷ ἀλλ’ εἴδει οὐσία, οὐδ’ αἱ ἀρχαὶ τῶν [25] ὄντων ἀριθμῷ ἔσονται ποσαί τινες ἀλλὰ εἴδει·—εἰ οὖν τοῦτο ἀναγκαῖον, καὶ τὰ εἴδη ἀναγκαῖον διὰ τοῦτο εἶναι τιθέναι. καὶ γὰρ εἰ μὴ καλῶς διαρθροῦσιν οἱ λέγοντες, ἀλλ’ ἔστι γε τοῦθ’ ὃ βούλονται, καὶ ἀνάγκη ταῦτα λέγειν αὐτοῖς, ὅτι τῶν εἰδῶν οὐσία τις ἕκαστόν ἐστι καὶ οὐθὲν κατὰ συμβεβηκός.— [30] ἀλλὰ μὴν εἴ γε θήσομεν τά τε εἴδη εἶναι καὶ ἓν ἀριθμῷ τὰς ἀρχὰς ἀλλὰ μὴ εἴδει, εἰρήκαμεν ἃ συμβαίνειν ἀναγκαῖον ἀδύνατα.—σύνεγγυς δὲ τούτων ἐστὶ τὸ διαπορῆσαι πότερον δυνάμει ἔστι τὰ στοιχεῖα ἤ τιν’ ἕτερον τρόπον. εἰ μὲν γὰρ ἄλλως πως, πρότερόν τι ἔσται τῶν ἀρχῶν ἄλλο (πρότερον [1] γὰρ ἡ δύναμις ἐκείνης τῆς αἰτίας, τὸ δὲ δυνατὸν οὐκ ἀναγκαῖον ἐκείνως πᾶν ἔχειν)· εἰ δ’ ἔστι δυνάμει τὰ στοιχεῖα, ἐνδέχεται μηθὲν εἶναι τῶν ὄντων· δυνατὸν γὰρ εἶναι καὶ τὸ μήπω ὄν· γίγνεται μὲν γὰρ τὸ [5] μὴ ὄν, οὐθὲν δὲ γίγνεται τῶν εἶναι ἀδυνάτων.—ταύτας τε οὖν τὰς ἀπορίας ἀναγκαῖον ἀπορῆσαι περὶ τῶν ἀρχῶν, καὶ πότερον καθόλου εἰσὶν ἢ ὡς λέγομεν τὰ καθ’ ἕκαστα. εἰ μὲν γὰρ καθόλου, οὐκ ἔσονται οὐσίαι (οὐθὲν γὰρ τῶν κοινῶν τόδε τι σημαίνει ἀλλὰ τοιόνδε, ἡ δ’ οὐσία τόδε τι· εἰ δ’ [10] ἔσται τόδε τι καὶ ἓν θέσθαι τὸ κοινῇ κατηγορούμενον, πολλὰ ἔσται ζῷα ὁ Σωκράτης, αὐτός τε καὶ ὁ ἄνθρωπος καὶ τὸ ζῷον, εἴπερ σημαίνει ἕκαστον τόδε τι καὶ ἕν)·—εἰ μὲν οὖν καθόλου αἱ ἀρχαί, ταῦτα συμβαίνει· εἰ δὲ μὴ καθόλου ἀλλ’ ὡς τὰ καθ’ ἕκαστα, οὐκ ἔσονται ἐπιστηταί (καθόλου [15] γὰρ ἡ ἐπιστήμη πάντων), ὥστ’ ἔσονται ἀρχαὶ ἕτεραι πρότεραι τῶν ἀρχῶν αἱ καθόλου κατηγορούμεναι, ἄνπερ μέλλῃ ἔσεσθαι αὐτῶν ἐπιστήμη.

[21] ἔστιν ἐπιστήμη τις ἣ θεωρεῖ τὸ ὂν ᾗ ὂν καὶ τὰ τούτῳ ὑπάρχοντα καθ’ αὑτό. αὕτη δ’ ἐστὶν οὐδεμιᾷ τῶν ἐν μέρει λεγομένων ἡ αὐτή· οὐδεμία γὰρ τῶν ἄλλων ἐπισκοπεῖ καθόλου περὶ τοῦ ὄντος ᾗ ὄν, ἀλλὰ μέρος αὐτοῦ τι ἀποτεμόμεναι [25] περὶ τούτου θεωροῦσι τὸ συμβεβηκός, οἷον αἱ μαθηματικαὶ τῶν ἐπιστημῶν. ἐπεὶ δὲ τὰς ἀρχὰς καὶ τὰς ἀκροτάτας αἰτίας ζητοῦμεν, δῆλον ὡς φύσεώς τινος αὐτὰς ἀναγκαῖον εἶναι καθ’ αὑτήν. εἰ οὖν καὶ οἱ τὰ στοιχεῖα τῶν ὄντων ζητοῦντες ταύτας τὰς ἀρχὰς ἐζήτουν, ἀνάγκη καὶ τὰ [30] στοιχεῖα τοῦ ὄντος εἶναι μὴ κατὰ συμβεβηκὸς ἀλλ’ ᾗ ὄν· διὸ καὶ ἡμῖν τοῦ ὄντος ᾗ ὂν τὰς πρώτας αἰτίας ληπτέον.

τὸ δὲ ὂν λέγεται μὲν πολλαχῶς, ἀλλὰ πρὸς ἓν καὶ μίαν τινὰ φύσιν καὶ οὐχ ὁμωνύμως ἀλλ’ ὥσπερ καὶ τὸ [35] ὑγιεινὸν ἅπαν πρὸς ὑγίειαν, τὸ μὲν τῷ φυλάττειν τὸ δὲ τῷ ποιεῖν τὸ δὲ τῷ σημεῖον εἶναι τῆς ὑγιείας τὸ δ’ ὅτι δεκτικὸν αὐτῆς, [1] καὶ τὸ ἰατρικὸν πρὸς ἰατρικήν (τὸ μὲν γὰρ τῷ ἔχειν ἰατρικὴν λέγεται ἰατρικὸν τὸ δὲ τῷ εὐφυὲς εἶναι πρὸς αὐτὴν τὸ δὲ τῷ ἔργον εἶναι τῆς ἰατρικῆς), ὁμοιοτρόπως δὲ καὶ ἄλλα ληψόμεθα λεγόμενα τούτοις,— [5] οὕτω δὲ καὶ τὸ ὂν λέγεται πολλαχῶς μὲν ἀλλ’ ἅπαν πρὸς μίαν ἀρχήν· τὰ μὲν γὰρ ὅτι οὐσίαι, ὄντα λέγεται, τὰ δ’ ὅτι πάθη οὐσίας, τὰ δ’ ὅτι ὁδὸς εἰς οὐσίαν ἢ φθοραὶ ἢ στερήσεις ἢ ποιότητες ἢ ποιητικὰ ἢ γεννητικὰ οὐσίας ἢ τῶν πρὸς τὴν οὐσίαν λεγομένων, ἢ τούτων τινὸς [10] ἀποφάσεις ἢ οὐσίας· διὸ καὶ τὸ μὴ ὂν εἶναι μὴ ὄν φαμεν. καθάπερ οὖν καὶ τῶν ὑγιεινῶν ἁπάντων μία ἐπιστήμη ἔστιν, ὁμοίως τοῦτο καὶ ἐπὶ τῶν ἄλλων. οὐ γὰρ μόνον τῶν καθ’ ἓν λεγομένων ἐπιστήμης ἐστὶ θεωρῆσαι μιᾶς ἀλλὰ καὶ τῶν πρὸς μίαν λεγομένων φύσιν· καὶ γὰρ ταῦτα τρόπον τινὰ [15] λέγονται καθ’ ἕν. δῆλον οὖν ὅτι καὶ τὰ ὄντα μιᾶς θεωρῆσαι ᾗ ὄντα. πανταχοῦ δὲ κυρίως τοῦ πρώτου ἡ ἐπιστήμη, καὶ ἐξ οὗ τὰ ἄλλα ἤρτηται, καὶ δι’ ὃ λέγονται. εἰ οὖν τοῦτ’ ἐστὶν ἡ οὐσία, τῶν οὐσιῶν ἂν δέοι τὰς ἀρχὰς καὶ τὰς αἰτίας ἔχειν τὸν φιλόσοφον.—ἅπαντος δὲ γένους καὶ αἴσθησις μία ἑνὸς [20] καὶ ἐπιστήμη, οἷον γραμματικὴ μία οὖσα πάσας θεωρεῖ τὰς φωνάς· διὸ καὶ τοῦ ὄντος ᾗ ὂν ὅσα εἴδη θεωρῆσαι μιᾶς ἐστὶν ἐπιστήμης τῷ γένει, τά τε εἴδη τῶν εἰδῶν. εἰ δὴ τὸ ὂν καὶ τὸ ἓν ταὐτὸν καὶ μία φύσις τῷ ἀκολουθεῖν ἀλλήλοις ὥσπερ ἀρχὴ καὶ αἴτιον, ἀλλ’ οὐχ ὡς ἑνὶ λόγῳ δηλούμενα [25] (διαφέρει δὲ οὐθὲν οὐδ’ ἂν ὁμοίως ὑπολάβωμεν, ἀλλὰ καὶ πρὸ ἔργου μᾶλλον)· ταὐτὸ γὰρ εἷς ἄνθρωπος καὶ ἄνθρωπος, [27] καὶ ὢν ἄνθρωπος καὶ ἄνθρωπος, καὶ οὐχ ἕτερόν τι δηλοῖ κατὰ τὴν λέξιν ἐπαναδιπλούμενον τὸ εἷς ἄνθρωπος καὶ εἷς ὢν ἄνθρωπος (δῆλον δ’ ὅτι οὐ χωρίζεται οὔτ’ ἐπὶ γενέσεως οὔτ’ [30] ἐπὶ φθορᾶς) , ὁμοίως δὲ καὶ ἐπὶ τοῦ ἑνός, ὥστε φανερὸν ὅτι ἡ πρόσθεσις

ἐν τούτοις ταὐτὸ δηλοῖ, καὶ οὐδὲν ἕτερον τὸ ἓν παρὰ τὸ ὄν, ἔτι δ’ ἡ ἑκάστου οὐσία ἕν ἐστιν οὐ κατὰ συμβεβηκός, ὁμοίως δὲ καὶ ὅπερ ὄν τι·—ὥσθ’ ὅσα περ τοῦ ἑνὸς εἴδη, τοσαῦτα καὶ τοῦ ὄντος· περὶ ὧν τὸ τί ἐστι τῆς [35] αὐτῆς ἐπιστήμης τῷ γένει θεωρῆσαι, λέγω δ’ οἷον περὶ ταὐτοῦ καὶ ὁμοίου καὶ τῶν ἄλλων τῶν τοιούτων. σχεδὸν δὲ πάντα ἀνάγεται τἀναντία εἰς τὴν ἀρχὴν ταύτην· [1] τεθεωρήσθω δ’ ἡμῖν ταῦτα ἐν τῇ ἐκλογῇ τῶν ἐναντίων. καὶ τοσαῦτα μέρη φιλοσοφίας ἔστιν ὅσαι περ αἱ οὐσίαι· ὥστε ἀναγκαῖον εἶναί τινα πρώτην καὶ ἐχομένην αὐτῶν. ὑπάρχει [5] γὰρ εὐθὺς γένη ἔχον τὸ ὂν καὶ τὸ ἕν· διὸ καὶ αἱ ἐπιστῆμαι ἀκολουθήσουσι τούτοις. ἔστι γὰρ ὁ φιλόσοφος ὥσπερ ὁ μαθηματικὸς λεγόμενος· καὶ γὰρ αὕτη ἔχει μέρη, καὶ πρώτη τις καὶ δευτέρα ἔστιν ἐπιστήμη καὶ ἄλλαι ἐφεξῆς ἐν τοῖς μαθήμασιν.—ἐπεὶ δὲ μιᾶς τἀντικείμενα [10] θεωρῆσαι, τῷ δὲ ἑνὶ ἀντίκειται πλῆθος—ἀπόφασιν δὲ καὶ στέρησιν μιᾶς ἐστὶ θεωρῆσαι διὰ τὸ ἀμφοτέρως θεωρεῖσθαι τὸ ἓν οὗ ἡ ἀπόφασις ἢ ἡ στέρησις (ἢ γὰρ ἁπλῶς λέγομεν ὅτι οὐχ ὑπάρχει ἐκεῖνο, ἤ τινι γένει· ἔνθα μὲν οὖν †τῷ ἑνὶ ἡ διαφορὰ πρόσεστι παρὰ τὸ ἐν τῇ ἀποφάσει†, ἀπουσία γὰρ [15] ἡ ἀπόφασις ἐκείνου ἐστίν, ἐν δὲ τῇ στερήσει καὶ ὑποκειμένη τις φύσις γίγνεται καθ’ ἣς λέγεται ἡ στέρησις) τῷ δ’ ἑνὶ πλῆθος ἀντίκειται—ὥστε καὶ τἀντικείμενα τοῖς εἰρημένοις, τό τε ἕτερον καὶ ἀνόμοιον καὶ ἄνισον καὶ ὅσα ἄλλα λέγεται ἢ κατὰ ταῦτα ἢ κατὰ πλῆθος καὶ τὸ ἕν, [20] τῆς εἰρημένης γνωρίζειν ἐπιστήμης· ὧν ἐστὶ καὶ ἡ ἐναντιότης· διαφορὰ γάρ τις ἡ ἐναντιότης, ἡ δὲ διαφορὰ ἑτερότης. ὥστ’ ἐπειδὴ πολλαχῶς τὸ ἓν λέγεται, καὶ ταῦτα πολλαχῶς μὲν λεχθήσεται, ὅμως δὲ μιᾶς ἅπαντά ἐστι γνωρίζειν· οὐ γὰρ εἰ πολλαχῶς, ἑτέρας, ἀλλ’ εἰ μήτε καθ’ ἓν μήτε [25] πρὸς ἓν οἱ λόγοι ἀναφέρονται. ἐπεὶ δὲ πάντα πρὸς τὸ πρῶτον ἀναφέρεται, οἷον ὅσα ἓν λέγεται πρὸς τὸ πρῶτον ἕν, ὡσαύτως φατέον καὶ περὶ ταὐτοῦ καὶ ἑτέρου καὶ τῶν ἐναντίων ἔχειν· ὥστε διελόμενον ποσαχῶς λέγεται ἕκαστον, οὕτως ἀποδοτέον πρὸς τὸ πρῶτον ἐν ἑκάστῃ κατηγορίᾳ πῶς πρὸς ἐκεῖνο [30] λέγεται· τὰ μὲν γὰρ τῷ ἔχειν ἐκεῖνο τὰ δὲ τῷ ποιεῖν τὰ δὲ κατ’ ἄλλους λεχθήσεται τοιούτους τρόπους.—φανερὸν οὖν ὅπερ ἐν ταῖς ἀπορίαις ἐλέχθη ὅτι μιᾶς περὶ τούτων καὶ τῆς οὐσίας ἐστὶ λόγον ἔχειν (τοῦτο δ’ ἦν ἓν τῶν ἐν τοῖς ἀπορήμασιν), καὶ ἔστι τοῦ φιλοσόφου περὶ πάντων δύνασθαι θεωρεῖν. [1] εἰ γὰρ μὴ τοῦ φιλοσόφου, τίς ἔσται ὁ ἐπισκεψόμενος εἰ ταὐτὸ Σωκράτης καὶ Σωκράτης καθήμενος, ἢ εἰ ἓν ἑνὶ ἐναντίον, ἢ τί ἐστι τὸ ἐναντίον ἢ ποσαχῶς λέγεται; ὁμοίως δὲ καὶ περὶ τῶν ἄλλων τῶν τοιούτων. [5] ἐπεὶ οὖν τοῦ ἑνὸς ᾗ ἓν καὶ τοῦ ὄντος ᾗ ὂν ταῦτα καθ’ αὑτά ἐστι πάθη, ἀλλ’ οὐχ ᾗ ἀριθμοὶ ἢ γραμμαὶ ἢ πῦρ, δῆλον ὡς ἐκείνης τῆς ἐπιστήμης καὶ τί ἐστι γνωρίσαι καὶ τὰ συμβεβηκότ’ αὐτοῖς. καὶ οὐ ταύτῃ ἁμαρτάνουσιν οἱ περὶ αὐτῶν σκοπούμενοι ὡς οὐ φιλοσοφοῦντες, ἀλλ’ ὅτι πρότερον ἡ οὐσία, [10] περὶ ἧς οὐθὲν ἐπαΐουσιν, ἐπεὶ ὥσπερ ἔστι καὶ ἀριθμοῦ ᾗ ἀριθμὸς ἴδια πάθη, οἷον περιττότης ἀρτιότης, συμμετρία ἰσότης, ὑπεροχὴ ἔλλειψις, καὶ ταῦτα καὶ καθ’ αὑτοὺς καὶ πρὸς ἀλλήλους ὑπάρχει τοῖς ἀριθμοῖς (ὁμοίως δὲ καὶ στερεῷ καὶ ἀκινήτῳ καὶ κινουμένῳ ἀβαρεῖ τε καὶ βάρος [15] ἔχοντι ἔστιν ἕτερα ἴδια), οὕτω καὶ τῷ ὄντι ᾗ ὂν ἔστι τινὰ ἴδια, καὶ ταῦτ’ ἐστὶ περὶ ὧν τοῦ φιλοσόφου ἐπισκέψασθαι τὸ ἀληθές. σημεῖον δέ· οἱ γὰρ διαλεκτικοὶ καὶ σοφισταὶ τὸ αὐτὸ μὲν ὑποδύονται σχῆμα τῷ φιλοσόφῳ· ἡ γὰρ σοφιστικὴ φαινομένη μόνον σοφία ἐστί, καὶ οἱ διαλεκτικοὶ [20] διαλέγονται περὶ ἁπάντων, κοινὸν δὲ πᾶσι τὸ ὄν ἐστιν, διαλέγονται δὲ περὶ τούτων δῆλον ὅτι διὰ τὸ τῆς φιλοσοφίας ταῦτα εἶναι οἰκεῖα. περὶ μὲν γὰρ τὸ αὐτὸ γένος στρέφεται ἡ σοφιστικὴ καὶ ἡ διαλεκτικὴ τῇ φιλοσοφίᾳ, ἀλλὰ διαφέρει τῆς μὲν τῷ τρόπῳ τῆς δυνάμεως, τῆς δὲ τοῦ βίου [25] τῇ προαιρέσει· ἔστι δὲ ἡ διαλεκτικὴ πειραστικὴ περὶ ὧν ἡ φιλοσοφία γνωριστική, ἡ δὲ σοφιστικὴ φαινομένη, οὖσα δ’ οὔ.

ἔτι τῶν ἐναντίων ἡ ἑτέρα συστοιχία στέρησις, καὶ πάντα ἀνάγεται εἰς τὸ ὂν καὶ τὸ μὴ ὄν, καὶ εἰς ἓν καὶ πλῆθος, οἷον στάσις τοῦ ἑνὸς κίνησις δὲ τοῦ πλήθους· τὰ δ’ ὄντα καὶ τὴν [30] οὐσίαν ὁμολογοῦσιν ἐξ ἐναντίων σχεδὸν ἅπαντες συγκεῖσθαι· πάντες γοῦν τὰς ἀρχὰς ἐναντίας λέγουσιν· οἱ μὲν γὰρ περιττὸν καὶ ἄρτιον, οἱ δὲ θερμὸν καὶ ψυχρόν, οἱ δὲ πέρας καὶ ἄπειρον, οἱ

δὲ φιλίαν καὶ νεῖκος. πάντα δὲ καὶ τἆλλα ἀναγόμενα φαίνεται εἰς τὸ ἓν καὶ πλῆθος (εἰλήφθω γὰρ ἡ ἀναγωγὴ ἡμῖν), [1] αἱ δ’ ἀρχαὶ καὶ παντελῶς αἱ παρὰ τῶν ἄλλων ὡς εἰς γένη ταῦτα πίπτουσιν. φανερὸν οὖν καὶ ἐκ τούτων ὅτι μιᾶς ἐπιστήμης τὸ ὂν ᾗ ὂν θεωρῆσαι. πάντα γὰρ ἢ ἐναντία ἢ ἐξ ἐναντίων, ἀρχαὶ δὲ τῶν ἐναντίων τὸ ἓν [5] καὶ πλῆθος. ταῦτα δὲ μιᾶς ἐπιστήμης, εἴτε καθ’ ἓν λέγεται εἴτε μή, ὥσπερ ἴσως ἔχει καὶ τἀληθές. ἀλλ’ ὅμως εἰ καὶ πολλαχῶς λέγεται τὸ ἕν, πρὸς τὸ πρῶτον τἆλλα λεχθήσεται καὶ τὰ ἐναντία ὁμοίως, καὶ διὰ τοῦτο καὶ εἰ μὴ ἔστι τὸ ὂν ἢ τὸ ἓν καθόλου καὶ ταὐτὸ ἐπὶ πάντων ἢ [10] χωριστόν, ὥσπερ ἴσως οὐκ ἔστιν ἀλλὰ τὰ μὲν πρὸς ἓν τὰ δὲ τῷ ἐφεξῆς. καὶ διὰ τοῦτο οὐ τοῦ γεωμέτρου θεωρῆσαι τί τὸ ἐναντίον ἢ τέλειον ἢ ἓν ἢ ὂν ἢ ταὐτὸν ἢ ἕτερον, ἀλλ’ ἢ ἐξ ὑποθέσεως. ὅτι μὲν οὖν μιᾶς ἐπιστήμης τὸ ὂν ᾗ ὂν θεωρῆσαι καὶ τὰ ὑπάρχοντα αὐτῷ ᾗ ὄν, δῆλον, καὶ ὅτι [15] οὐ μόνον τῶν οὐσιῶν ἀλλὰ καὶ τῶν ὑπαρχόντων ἡ αὐτὴ θεωρητική, τῶν τε εἰρημένων καὶ περὶ προτέρου καὶ ὑστέρου, καὶ γένους καὶ εἴδους, καὶ ὅλου καὶ μέρους καὶ τῶν ἄλλων τῶν τοιούτων.

λεκτέον δὲ πότερον μιᾶς ἢ ἑτέρας ἐπιστήμης περί τε [20] τῶν ἐν τοῖς μαθήμασι καλουμένων ἀξιωμάτων καὶ περὶ τῆς οὐσίας. φανερὸν δὴ ὅτι μιᾶς τε καὶ τῆς τοῦ φιλοσόφου καὶ ἡ περὶ τούτων ἐστὶ σκέψις· ἅπασι γὰρ ὑπάρχει τοῖς οὖσιν ἀλλ’ οὐ γένει τινὶ χωρὶς ἰδίᾳ τῶν ἄλλων. καὶ χρῶνται μὲν πάντες, ὅτι τοῦ ὄντος ἐστὶν ᾗ ὄν, ἕκαστον δὲ τὸ γένος [25] ὄν· ἐπὶ τοσοῦτον δὲ χρῶνται ἐφ’ ὅσον αὐτοῖς ἱκανόν, τοῦτο δ’ ἔστιν ὅσον ἐπέχει τὸ γένος περὶ οὗ φέρουσι τὰς ἀποδείξεις· ὥστ’ ἐπεὶ δῆλον ὅτι ᾗ ὄντα ὑπάρχει πᾶσι (τοῦτο γὰρ αὐτοῖς τὸ κοινόν), τοῦ περὶ τὸ ὂν ᾗ ὂν γνωρίζοντος καὶ περὶ τούτων ἐστὶν ἡ θεωρία. διόπερ οὐθεὶς τῶν κατὰ μέρος ἐπισκοπούντων [30] ἐγχειρεῖ λέγειν τι περὶ αὐτῶν, εἰ ἀληθῆ ἢ μή, οὔτε γεωμέτρης οὔτ’ ἀριθμητικός, ἀλλὰ τῶν φυσικῶν ἔνιοι, εἰκότως τοῦτο δρῶντες· μόνοι γὰρ ᾤοντο περί τε τῆς ὅλης φύσεως σκοπεῖν καὶ περὶ τοῦ ὄντος. ἐπεὶ δ’ ἔστιν ἔτι τοῦ φυσικοῦ τις ἀνωτέρω (ἓν γάρ τι γένος τοῦ ὄντος ἡ φύσις) , [35] τοῦ καθόλου καὶ τοῦ περὶ τὴν πρώτην οὐσίαν θεωρητικοῦ καὶ ἡ περὶ τούτων ἂν εἴη σκέψις· [1] ἔστι δὲ σοφία τις καὶ ἡ φυσική, ἀλλ’ οὐ πρώτη. ὅσα δ’ ἐγχειροῦσι τῶν λεγόντων τινὲς περὶ τῆς ἀληθείας ὃν τρόπον δεῖ ἀποδέχεσθαι, δι’ ἀπαιδευσίαν [4] τῶν ἀναλυτικῶν τοῦτο δρῶσιν· δεῖ γὰρ περὶ τούτων [5] ἥκειν προεπισταμένους ἀλλὰ μὴ ἀκούοντας ζητεῖν.—ὅτι μὲν οὖν τοῦ φιλοσόφου, καὶ τοῦ περὶ πάσης τῆς οὐσίας θεωροῦντος ᾗ πέφυκεν, καὶ περὶ τῶν συλλογιστικῶν ἀρχῶν ἐστὶν ἐπισκέψασθαι, δῆλον· προσήκει δὲ τὸν μάλιστα γνωρίζοντα περὶ ἕκαστον γένος ἔχειν λέγειν τὰς βεβαιοτάτας ἀρχὰς [10] τοῦ πράγματος, ὥστε καὶ τὸν περὶ τῶν ὄντων ᾗ ὄντα τὰς πάντων βεβαιοτάτας. ἔστι δ’ οὗτος ὁ φιλόσοφος. βεβαιοτάτη δ’ ἀρχὴ πασῶν περὶ ἣν διαψευσθῆναι ἀδύνατον· γνωριμωτάτην τε γὰρ ἀναγκαῖον εἶναι τὴν τοιαύτην (περὶ γὰρ ἃ μὴ γνωρίζουσιν ἀπατῶνται πάντες) καὶ ἀνυπόθετον. [15] ἣν γὰρ ἀναγκαῖον ἔχειν τὸν ὁτιοῦν ξυνιέντα τῶν ὄντων, τοῦτο οὐχ ὑπόθεσις· ὃ δὲ γνωρίζειν ἀναγκαῖον τῷ ὁτιοῦν γνωρίζοντι, καὶ ἥκειν ἔχοντα ἀναγκαῖον. ὅτι μὲν οὖν βεβαιοτάτη ἡ τοιαύτη πασῶν ἀρχή, δῆλον· τίς δ’ ἔστιν αὕτη, μετὰ ταῦτα λέγωμεν. τὸ γὰρ αὐτὸ ἅμα ὑπάρχειν τε καὶ μὴ [20] ὑπάρχειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό (καὶ ὅσα ἄλλα προσδιορισαίμεθ’ ἄν, ἔστω προσδιωρισμένα πρὸς τὰς λογικὰς δυσχερείας)· αὕτη δὴ πασῶν ἐστὶ βεβαιοτάτη τῶν ἀρχῶν· ἔχει γὰρ τὸν εἰρημένον διορισμόν. ἀδύνατον γὰρ ὁντινοῦν ταὐτὸν ὑπολαμβάνειν εἶναι καὶ μὴ εἶναι, καθάπερ [25] τινὲς οἴονται λέγειν Ἡράκλειτον. οὐκ ἔστι γὰρ ἀναγκαῖον, ἅ τις λέγει, ταῦτα καὶ ὑπολαμβάνειν· εἰ δὲ μὴ ἐνδέχεται ἅμα ὑπάρχειν τῷ αὐτῷ τἀναντία (προσδιωρίσθω δ’ ἡμῖν καὶ ταύτῃ τῇ προτάσει τὰ εἰωθότα), ἐναντία δ’ ἐστὶ δόξα δόξῃ ἡ τῆς ἀντιφάσεως, φανερὸν ὅτι ἀδύνατον ἅμα [30] ὑπολαμβάνειν τὸν αὐτὸν εἶναι καὶ μὴ εἶναι τὸ αὐτό· ἅμα γὰρ ἂν ἔχοι τὰς ἐναντίας δόξας ὁ διεψευσμένος περὶ τούτου. διὸ πάντες οἱ ἀποδεικνύντες εἰς ταύτην ἀνάγουσιν ἐσχάτην δόξαν· φύσει γὰρ ἀρχὴ καὶ τῶν ἄλλων ἀξιωμάτων αὕτη πάντων.

[35] εἰσὶ δέ τινες οἵ, καθάπερ εἴπομεν, αὐτοί τε ἐνδέχεσθαί φασι τὸ αὐτὸ εἶναι καὶ μὴ εἶναι, [1]

καὶ ὑπολαμβάνειν οὕτως. χρῶνται δὲ τῷ λόγῳ τούτῳ πολλοὶ καὶ τῶν περὶ φύσεως. ἡμεῖς δὲ νῦν εἰλήφαμεν ὡς ἀδυνάτου ὄντος ἅμα εἶναι καὶ μὴ εἶναι, καὶ διὰ τούτου ἐδείξαμεν ὅτι βεβαιοτάτη [5] αὕτη τῶν ἀρχῶν πασῶν. ἀξιοῦσι δὴ καὶ τοῦτο ἀποδεικνύναι τινὲς δι’ ἀπαιδευσίαν· ἔστι γὰρ ἀπαιδευσία τὸ μὴ γιγνώσκειν τίνων δεῖ ζητεῖν ἀπόδειξιν καὶ τίνων οὐ δεῖ· ὅλως μὲν γὰρ ἁπάντων ἀδύνατον ἀπόδειξιν εἶναι (εἰς ἄπειρον γὰρ ἂν βαδίζοι, ὥστε μηδ’ οὕτως εἶναι ἀπόδειξιν), [10] εἰ δέ τινων μὴ δεῖ ζητεῖν ἀπόδειξιν, τίνα ἀξιοῦσιν εἶναι μᾶλλον τοιαύτην ἀρχὴν οὐκ ἂν ἔχοιεν εἰπεῖν. ἔστι δ’ ἀποδεῖξαι ἐλεγκτικῶς καὶ περὶ τούτου ὅτι ἀδύνατον, ἂν μόνον τι λέγῃ ὁ ἀμφισβητῶν· ἂν δὲ μηθέν, γελοῖον τὸ ζητεῖν λόγον πρὸς τὸν μηθενὸς ἔχοντα λόγον, ᾗ μὴ ἔχει· ὅμοιος [15] γὰρ φυτῷ ὁ τοιοῦτος ᾗ τοιοῦτος ἤδη. τὸ δ’ ἐλεγκτικῶς ἀποδεῖξαι λέγω διαφέρειν καὶ τὸ ἀποδεῖξαι, ὅτι ἀποδεικνύων μὲν ἂν δόξειεν αἰτεῖσθαι τὸ ἐν ἀρχῇ, ἄλλου δὲ τοῦ τοιούτου αἰτίου ὄντος ἔλεγχος ἂν εἴη καὶ οὐκ ἀπόδειξις. ἀρχὴ δὲ πρὸς ἅπαντα τὰ τοιαῦτα οὐ τὸ ἀξιοῦν ἢ εἶναί τι λέγειν [20] ἢ μὴ εἶναι (τοῦτο μὲν γὰρ τάχ’ ἄν τις ὑπολάβοι τὸ ἐξ ἀρχῆς αἰτεῖν), ἀλλὰ σημαίνειν γέ τι καὶ αὐτῷ καὶ ἄλλῳ· τοῦτο γὰρ ἀνάγκη, εἴπερ λέγοι τι. εἰ γὰρ μή, οὐκ ἂν εἴη τῷ τοιούτῳ λόγος, οὔτ’ αὐτῷ πρὸς αὐτὸν οὔτε πρὸς ἄλλον. ἂν δέ τις τοῦτο διδῷ, ἔσται ἀπόδειξις· ἤδη γάρ τι [25] ἔσται ὡρισμένον. ἀλλ’ αἴτιος οὐχ ὁ ἀποδεικνὺς ἀλλ’ ὁ ὑπομένων· ἀναιρῶν γὰρ λόγον ὑπομένει λόγον. ἔτι δὲ ὁ τοῦτο συγχωρήσας συγκεχώρηκέ τι ἀληθὲς εἶναι χωρὶς ἀποδείξεως ὥστε οὐκ ἂν πᾶν οὕτως καὶ οὐχ οὕτως ἔχοι.—πρῶτον μὲν οὖν δῆλον ὡς τοῦτό γ’ αὐτὸ ἀληθές, ὅτι σημαίνει τὸ [30] ὄνομα τὸ εἶναι ἢ μὴ εἶναι τοδί, ὥστ’ οὐκ ἂν πᾶν οὕτως καὶ οὐχ οὕτως ἔχοι· ἔτι εἰ τὸ ἄνθρωπος σημαίνει ἕν, ἔστω τοῦτο τὸ ζῷον δίπουν. λέγω δὲ τὸ ἓν σημαίνειν τοῦτο· εἰ τοῦτ’ ἔστιν ἄνθρωπος, ἂν ᾗ τι ἄνθρωπος, τοῦτ’ ἔσται τὸ ἀνθρώπῳ εἶναι (διαφέρει δ’ οὐθὲν οὐδ’ εἰ πλείω τις φαίη σημαίνειν μόνον δὲ ὡρισμένα, [1] τεθείη γὰρ ἂν ἐφ’ ἑκάστῳ λόγῳ ἕτερον ὄνομα· λέγω δ’ οἷον, εἰ μὴ φαίη τὸ ἄνθρωπος ἓν σημαίνειν, πολλὰ δέ, ὧν ἑνὸς μὲν εἷς λόγος τὸ ζῷον δίπουν, εἷεν δὲ καὶ ἕτεροι πλείους, ὡρισμένοι δὲ τὸν ἀριθμόν· [5] τεθείη γὰρ ἂν ἴδιον ὄνομα καθ’ ἕκαστον τὸν λόγον· εἰ δὲ μή τεθείη, ἀλλ’ ἄπειρα σημαίνειν φαίη, φανερὸν ὅτι οὐκ ἂν εἴη λόγος· τὸ γὰρ μὴ ἓν σημαίνειν οὐθὲν σημαίνειν ἐστίν, μὴ σημαινόντων δὲ τῶν ὀνομάτων ἀνῄρηται τὸ διαλέγεσθαι πρὸς ἀλλήλους, κατὰ δὲ τὴν ἀλήθειαν καὶ πρὸς αὐτόν· [10] οὐθὲν γὰρ ἐνδέχεται νοεῖν μὴ νοοῦντα ἕν, εἰ δ’ ἐνδέχεται, τεθείη ἂν ὄνομα τούτῳ τῷ πράγματι ἕν).—ἔστω δή, ὥσπερ ἐλέχθη κατ’ ἀρχάς, σημαῖνόν τι τὸ ὄνομα καὶ σημαῖνον ἕν· οὐ δὴ ἐνδέχεται τὸ ἀνθρώπῳ εἶναι σημαίνειν ὅπερ ἀνθρώπῳ μὴ εἶναι, εἰ τὸ ἄνθρωπος σημαίνει μὴ μόνον καθ’ ἑνὸς [15] ἀλλὰ καὶ ἕν (οὐ γὰρ τοῦτο ἀξιοῦμεν τὸ ἓν σημαίνειν, τὸ καθ’ ἑνός, ἐπεὶ οὕτω γε κἂν τὸ μουσικὸν καὶ τὸ λευκὸν καὶ τὸ ἄνθρωπος ἓν ἐσήμαινεν, ὥστε ἓν ἅπαντα ἔσται· συνώνυμα γάρ). καὶ οὐκ ἔσται εἶναι καὶ μὴ εἶναι τὸ αὐτὸ ἀλλ’ ἢ καθ’ ὁμωνυμίαν, ὥσπερ ἂν εἰ ὃν ἡμεῖς ἄνθρωπον [20] καλοῦμεν, ἄλλοι μὴ ἄνθρωπον καλοῖεν· τὸ δ’ ἀπορούμενον οὐ τοῦτό ἐστιν, εἰ ἐνδέχεται τὸ αὐτὸ ἅμα εἶναι καὶ μὴ εἶναι ἄνθρωπον τὸ ὄνομα, ἀλλὰ τὸ πρᾶγμα. εἰ δὲ μὴ σημαίνει ἕτερον τὸ ἄνθρωπος καὶ τὸ μὴ ἄνθρωπος, δῆλον ὅτι καὶ τὸ μὴ εἶναι ἀνθρώπῳ τοῦ εἶναι ἀνθρώπῳ· ὥστ’ ἔσται τὸ ἀνθρώπῳ [25] εἶναι μὴ ἀνθρώπῳ εἶναι· ἓν γὰρ ἔσται. τοῦτο γὰρ σημαίνει τὸ εἶναι ἕν, τὸ ὡς λώπιον καὶ ἱμάτιον, εἰ ὁ λόγος εἷς· εἰ δὲ ἔσται ἕν, ἓν σημανεῖ τὸ ἀνθρώπῳ εἶναι καὶ μὴ ἀνθρώπῳ. ἀλλ’ ἐδέδεικτο ὅτι ἕτερον σημαίνει. ἀνάγκη τοίνυν, εἴ τί ἐστιν ἀληθὲς εἰπεῖν ὅτι ἄνθρωπος, ζῷον εἶναι δίπουν [30] (τοῦτο γὰρ ἦν ὃ ἐσήμαινε τὸ ἄνθρωπος)· εἰ δ’ ἀνάγκη τοῦτο, οὐκ ἐνδέχεται μὴ εἶναι τότε τὸ αὐτὸ ζῷον δίπουν (τοῦτο γὰρ σημαίνει τὸ ἀνάγκη εἶναι, τὸ ἀδύνατον εἶναι μὴ εἶναι ἄνθρωπον)· οὐκ ἄρα ἐνδέχεται ἅμα ἀληθὲς εἶναι εἰπεῖν τὸ αὐτὸ ἄνθρωπον εἶναι καὶ μὴ εἶναι ἄνθρωπον. ὁ δ’ αὐτὸς λόγος καὶ ἐπὶ τοῦ μὴ εἶναι ἄνθρωπον· [1] τὸ γὰρ ἀνθρώπῳ εἶναι καὶ τὸ μὴ ἀνθρώπῳ εἶναι ἕτερον σημαίνει, εἴπερ καὶ τὸ λευκὸν εἶναι καὶ τὸ ἄνθρωπον εἶναι ἕτερον· πολὺ γὰρ ἀντίκειται ἐκεῖνο μᾶλλον, ὥστε σημαίνειν ἕτερον. εἰ δὲ καὶ [5] τὸ λευκὸν φήσει τὸ αὐτὸ καὶ ἓν σημαίνειν, πάλιν τὸ αὐτὸ ἐροῦμεν ὅπερ καὶ

πρότερον ἐλέχθη, ὅτι ἓν πάντα ἔσται καὶ οὐ μόνον τὰ ἀντικείμενα. εἰ δὲ μὴ ἐνδέχεται τοῦτο, συμβαίνει τὸ λεχθέν, ἂν ἀποκρίνηται τὸ ἐρωτώμενον. ἐὰν δὲ προστιθῇ ἐρωτῶντος ἁπλῶς καὶ τὰς ἀποφάσεις, οὐκ ἀποκρίνεται [10] τὸ ἐρωτώμενον. οὐθὲν γὰρ κωλύει εἶναι τὸ αὐτὸ καὶ ἄνθρωπον καὶ λευκὸν καὶ ἄλλα μυρία τὸ πλῆθος· ἀλλ’ ὅμως ἐρομένου εἰ ἀληθὲς εἰπεῖν ἄνθρωπον τοῦτο εἶναι ἢ οὔ, ἀποκριτέον τὸ ἓν σημαῖνον καὶ οὐ προσθετέον ὅτι καὶ λευκὸν καὶ μέγα. καὶ γὰρ ἀδύνατον ἄπειρά γ’ ὄντα τὰ [15] συμβεβηκότα διελθεῖν· ἢ οὖν ἅπαντα διελθέτω ἢ μηθέν. ὁμοίως τοίνυν εἰ καὶ μυριάκις ἐστὶ τὸ αὐτὸ ἄνθρωπος καὶ [17] οὐκ ἄνθρωπος, οὐ προσαποκριτέον τῷ ἐρομένῳ εἰ ἔστιν ἄνθρωπος, ὅτι ἐστὶν ἅμα καὶ οὐκ ἄνθρωπος, εἰ μὴ καὶ τἆλλα ὅσα συμβέβηκε προσαποκριτέον, ὅσα ἐστὶν ἢ μὴ ἔστιν· ἐὰν [20] δὲ τοῦτο ποιῇ, οὐ διαλέγεται.—ὅλως δ’ ἀναιροῦσιν οἱ τοῦτο λέγοντες οὐσίαν καὶ τὸ τί ἦν εἶναι. πάντα γὰρ ἀνάγκη συμβεβηκέναι φάσκειν αὐτοῖς, καὶ τὸ ὅπερ ἀνθρώπῳ εἶναι ἢ ζῴῳ εἶναι μὴ εἶναι. εἰ γὰρ ἔσται τι ὅπερ ἀνθρώπῳ εἶναι, τοῦτο οὐκ ἔσται μὴ ἀνθρώπῳ εἶναι ἢ μὴ εἶναι ἀνθρώπῳ [25] (καίτοι αὗται ἀποφάσεις τούτου)· ἓν γὰρ ἦν ὃ ἐσήμαινε, καὶ ἦν τοῦτό τινος οὐσία. τὸ δ’ οὐσίαν σημαίνειν ἐστὶν ὅτι οὐκ ἄλλο τι τὸ εἶναι αὐτῷ. εἰ δ’ ἔσται αὐτῷ τὸ ὅπερ ἀνθρώπῳ εἶναι ἢ ὅπερ μὴ ἀνθρώπῳ εἶναι ἢ ὅπερ μὴ εἶναι ἀνθρώπῳ, ἄλλο ἔσται, ὥστ’ ἀναγκαῖον αὐτοῖς [30] λέγειν ὅτι οὐθενὸς ἔσται τοιοῦτος λόγος, ἀλλὰ πάντα κατὰ συμβεβηκός· τούτῳ γὰρ διώρισται οὐσία καὶ τὸ συμβεβηκός· τὸ γὰρ λευκὸν τῷ ἀνθρώπῳ συμβέβηκεν ὅτι ἔστι μὲν λευκὸς ἀλλ’ οὐχ ὅπερ λευκόν. εἰ δὲ πάντα κατὰ συμβεβηκὸς λέγεται, οὐθὲν ἔσται πρῶτον τὸ καθ’ οὗ, εἰ ἀεὶ [35] τὸ συμβεβηκὸς καθ’ ὑποκειμένου τινὸς σημαίνει τὴν κατηγορίαν. [1] ἀνάγκη ἄρα εἰς ἄπειρον ἰέναι. ἀλλ’ ἀδύνατον· οὐδὲ γὰρ πλείω συμπλέκεται δυοῖν· τὸ γὰρ συμβεβηκὸς οὐ συμβεβηκότι συμβεβηκός, εἰ μὴ ὅτι ἄμφω συμβέβηκε ταὐτῷ, λέγω δ’ οἷον τὸ λευκὸν μουσικὸν καὶ τοῦτο λευκὸν [5] ὅτι ἄμφω τῷ ἀνθρώπῳ συμβέβηκεν. ἀλλ’ οὐχ ὁ Σωκράτης μουσικὸς οὕτως, ὅτι ἄμφω συμβέβηκεν ἑτέρῳ τινί. ἐπεὶ τοίνυν τὰ μὲν οὕτως τὰ δ’ ἐκείνως λέγεται συμβεβηκότα, ὅσα οὕτως λέγεται ὡς τὸ λευκὸν τῷ Σωκράτει, οὐκ ἐνδέχεται ἄπειρα εἶναι ἐπὶ τὸ ἄνω, οἷον τῷ Σωκράτει τῷ λευκῷ [10] ἕτερόν τι συμβεβηκός· οὐ γὰρ γίγνεταί τι ἓν ἐξ ἁπάντων. οὐδὲ δὴ τῷ λευκῷ ἕτερόν τι ἔσται συμβεβηκός, οἷον τὸ μουσικόν· οὐθέν τε γὰρ μᾶλλον τοῦτο ἐκείνῳ ἢ ἐκεῖνο τούτῳ συμβέβηκεν, καὶ ἅμα διώρισται ὅτι τὰ μὲν οὕτω συμβέβηκε τὰ δ’ ὡς τὸ μουσικὸν Σωκράτει· ὅσα δ’ οὕτως, οὐ [15] συμβεβηκότι συμβέβηκε συμβεβηκός, ἀλλ’ ὅσα ἐκείνως, ὥστ’ οὐ πάντα κατὰ συμβεβηκὸς λεχθήσεται. ἔσται ἄρα τι καὶ ὡς οὐσίαν σημαῖνον. εἰ δὲ τοῦτο, δέδεικται ὅτι ἀδύνατον ἅμα κατηγορεῖσθαι τὰς ἀντιφάσεις.—ἔτι εἰ ἀληθεῖς αἱ ἀντιφάσεις ἅμα κατὰ τοῦ αὐτοῦ πᾶσαι, δῆλον ὡς [20] ἅπαντα ἔσται ἕν. ἔσται γὰρ τὸ αὐτὸ καὶ τριήρης καὶ τοῖχος καὶ ἄνθρωπος, εἰ κατὰ παντός τι ἢ καταφῆσαι ἢ ἀποφῆσαι ἐνδέχεται, καθάπερ ἀνάγκη τοῖς τὸν Πρωταγόρου λέγουσι λόγον. εἰ γάρ τῳ δοκεῖ μὴ εἶναι τριήρης ὁ ἄνθρωπος, δῆλον ὡς οὐκ ἔστι τριήρης· ὥστε καὶ ἔστιν, εἴπερ [25] ἡ ἀντίφασις ἀληθής. καὶ γίγνεται δὴ τὸ τοῦ Ἀναξαγόρου, ὁμοῦ πάντα χρήματα· ὥστε μηθὲν ἀληθῶς ὑπάρχειν. τὸ ἀόριστον οὖν ἐοίκασι λέγειν, καὶ οἰόμενοι τὸ ὂν λέγειν περὶ τοῦ μὴ ὄντος λέγουσιν· τὸ γὰρ δυνάμει ὂν καὶ μὴ ἐντελεχείᾳ τὸ ἀόριστόν ἐστιν. ἀλλὰ μὴν λεκτέον γ’ αὐτοῖς κατὰ [30] παντὸς παντὸς τὴν κατάφασιν ἢ τὴν ἀπόφασιν· ἄτοπον γὰρ εἰ ἑκάστῳ ἡ μὲν αὐτοῦ ἀπόφασις ὑπάρξει, ἡ δ’ ἑτέρου ὃ μὴ ὑπάρχει αὐτῷ οὐχ ὑπάρξει· λέγω δ’ οἷον εἰ ὀληθὲς εἰπεῖν τὸν ἄνθρωπον ὅτι οὐκ ἄνθρωπος, δῆλον ὅτι καὶ ἢ τριήρης ἢ οὐ τριήρης. εἰ μὲν οὖν ἡ κατάφασις, ἀνάγκη καὶ τὴν ἀπόφασιν· [35] εἰ δὲ μὴ ὑπάρχει ἡ κατάφασις, ἥ γε ἀπόφασις ὑπάρξει μᾶλλον ἢ ἡ αὐτοῦ. [1] εἰ οὖν κἀκείνη ὑπάρχει, ὑπάρξει καὶ ἡ τῆς τριήρους· εἰ δ’ αὕτη, καὶ ἡ κατάφασις.—ταῦτά τε οὖν συμβαίνει τοῖς λέγουσι τὸν λόγον τοῦτον, καὶ ὅτι οὐκ ἀνάγκη ἢ φάναι ἢ ἀποφάναι. εἰ γὰρ ἀληθὲς ὅτι ἄνθρωπος καὶ [5] οὐκ ἄνθρωπος, δῆλον ὅτι καὶ οὔτ’ ἄνθρωπος οὔτ’ οὐκ ἄνθρωπος ἔσται· τοῖν γὰρ δυοῖν δύο ἀποφάσεις, εἰ δὲ μία ἐξ ἀμφοῖν ἐκείνη, καὶ αὕτη μία ἂν εἴη ἀντικειμένη.—ἔτι ἤτοι περὶ ἅπαντα οὕτως ἔχει, καὶ ἔστι καὶ λευκὸν καὶ οὐ

λευκὸν καὶ ὂν καὶ οὐκ ὄν, καὶ περὶ τὰς ἄλλας φάσεις καὶ [10] ἀποφάσεις ὁμοιοτρόπως, ἢ οὔ ἀλλὰ περὶ μέν τινας, περί τινας δ’ οὔ. καὶ εἰ μὲν μὴ περὶ πάσας, αὖται ἂν εἶεν ὁμολογούμεναι· εἰ δὲ περὶ πάσας, πάλιν ἤτοι καθ’ ὅσων τὸ φῆσαι καὶ ἀποφῆσαι καὶ καθ’ ὅσων ἀποφῆσαι καὶ φῆσαι, ἢ κατὰ μὲν ὧν φῆσαι καὶ ἀποφῆσαι, καθ’ ὅσων δὲ ἀποφῆσαι [15] οὐ πάντων φῆσαι. καὶ εἰ μὲν οὕτως, εἴη ἄν τι παγίως οὐκ ὄν, καὶ αὕτη βεβαία δόξα, καὶ εἰ τὸ μὴ εἶναι βέβαιόν τι καὶ γνώριμον, γνωριμωτέρα ἂν εἴη ἡ φάσις ἡ ἀντικειμένη· εἰ δὲ ὁμοίως καὶ ὅσα ἀποφῆσαι φάναι, ἀνάγκη ἤτοι ἀληθὲς διαιροῦντα λέγειν, οἷον ὅτι [20] λευκὸν καὶ πάλιν ὅτι οὐ λευκόν, ἢ οὔ. καὶ εἰ μὲν μὴ ἀληθὲς διαιροῦντα λέγειν, οὐ λέγει τε ταῦτα καὶ οὐκ ἔστιν οὐθέν (τὰ δὲ μὴ ὄντα πῶς ἂν φθέγξαιτο ἢ βαδίσειεν;), καὶ πάντα δ’ ἂν εἴη ἕν, ὥσπερ καὶ πρότερον εἴρηται, καὶ ταὐτὸν ἔσται καὶ ἄνθρωπος καὶ θεὸς καὶ τριήρης [25] καὶ αἱ ἀντιφάσεις αὐτῶν (εἰ γὰρ ὁμοίως καθ’ ἑκάστου, οὐδὲν διοίσει ἕτερον ἑτέρου· εἰ γὰρ διοίσει, τοῦτ’ ἔσται ἀληθὲς καὶ ἴδιον)· ὁμοίως δὲ καὶ εἰ διαιροῦντα ἐνδέχεται ἀληθεύειν, συμβαίνει τὸ λεχθέν, πρὸς δὲ τούτῳ ὅτι πάντες ἂν ἀληθεύοιεν καὶ πάντες ἂν ψεύδοιντο, καὶ αὐτὸς αὑτὸν ὁμολογεῖ [30] ψεύδεσθαι. ἅμα δὲ φανερὸν ὅτι περὶ οὐθενός ἐστι πρὸς τοῦτον ἡ σκέψις· οὐθὲν γὰρ λέγει. οὔτε γὰρ οὕτως οὔτ’ οὐχ οὕτως λέγει, ἀλλ’ οὕτως τε καὶ οὐχ οὕτως· καὶ πάλιν γε ταῦτα ἀπόφησιν ἄμφω, ὅτι οὔθ’ οὕτως οὔτε οὐχ οὕτως· εἰ γὰρ μή, ἤδη ἄν τι εἴη ὡρισμένον.—ἔτι εἰ ὅταν ἡ φάσις [35] ἀληθὴς ᾖ, ἡ ἀπόφασις ψευδής, κἂν αὕτη ἀληθὴς ᾖ, ἡ κατάφασις ψευδής, οὐκ ἂν εἴη τὸ αὐτὸ ἅμα φάναι καὶ ἀποφάναι ἀληθῶς. [1] ἀλλ’ ἴσως φαῖεν ἂν τοῦτ’ εἶναι τὸ ἐξ ἀρχῆς κείμενον.—ἔτι ἆρα ὁ μὲν ἢ ἔχειν πως ὑπολαμβάνων ἢ μὴ ἔχειν διέψευσται, ὁ δὲ ἄμφω ἀληθεύει; εἰ γὰρ ἀληθεύει, τί ἂν εἴη τὸ λεγόμενον ὅτι τοιαύτη τῶν ὄντων ἡ [5] φύσις; εἰ δὲ μὴ ἀληθεύει, ἀλλὰ μᾶλλον ἀληθεύει ἢ ὁ ἐκείνως ὑπολαμβάνων, ἤδη πως ἔχοι ἂν τὰ ὄντα, καὶ τοῦτ’ ἀληθὲς ἂν εἴη, καὶ οὐχ ἅμα καὶ οὐκ ἀληθές. εἰ δὲ ὁμοίως ἅπαντες καὶ ψεύδονται καὶ ἀληθῆ λέγουσιν, οὔτε φθέγξασθαι οὔτ’ εἰπεῖν τῷ τοιούτῳ ἔσται· ἅμα γὰρ ταῦτά τε καὶ [10] οὐ ταῦτα λέγει. εἰ δὲ μηθὲν ὑπολαμβάνει ἀλλ’ ὁμοίως οἴεται καὶ οὐκ οἴεται, τί ἂν διαφερόντως ἔχοι τῶν γε φυτῶν; ὅθεν καὶ μάλιστα φανερόν ἐστιν ὅτι οὐδεὶς οὕτω διάκειται οὔτε τῶν ἄλλων οὔτε τῶν λεγόντων τὸν λόγον τοῦτον. διὰ τί γὰρ βαδίζει Μέγαράδε ἀλλ’ οὐχ ἡσυχάζει, οἰόμενος [15] βαδίζειν δεῖν; οὐδ’ εὐθέως ἔωθεν πορεύεται εἰς φρέαρ ἢ εἰς φάραγγα, ἐὰν τύχῃ, ἀλλὰ φαίνεται εὐλαβούμενος, ὡς οὐχ ὁμοίως οἰόμενος μὴ ἀγαθὸν εἶναι τὸ ἐμπεσεῖν καὶ ἀγαθόν; δῆλον ἄρα ὅτι τὸ μὲν βέλτιον ὑπολαμβάνει τὸ δ’ οὐ βέλτιον. εἰ δὲ τοῦτο, καὶ τὸ μὲν ἄνθρωπον τὸ δ’ οὐκ ἄνθρωπον [20] καὶ τὸ μὲν γλυκὺ τὸ δ’ οὐ γλυκὺ ἀνάγκη ὑπολαμβάνειν. οὐ γὰρ ἐξ ἴσου ἅπαντα ζητεῖ καὶ ὑπολαμβάνει, ὅταν οἰηθεὶς βέλτιον εἶναι τὸ πιεῖν ὕδωρ καὶ ἰδεῖν ἄνθρωπον εἶτα ζητῇ αὐτά· καίτοι ἔδει γε, εἰ ταὐτὸν ἦν ὁμοίως καὶ ἄνθρωπος καὶ οὐκ ἄνθρωπος. ἀλλ’ ὅπερ ἐλέχθη, οὐθεὶς ὃς οὐ [25] φαίνεται τὰ μὲν εὐλαβούμενος τὰ δ’ οὔ· ὥστε, ὡς ἔοικε, πάντες ὑπολαμβάνουσιν ἔχειν ἁπλῶς, εἰ μὴ περὶ ἅπαντα, ἀλλὰ περὶ τὸ ἄμεινον καὶ χεῖρον. εἰ δὲ μὴ ἐπιστάμενοι [28] ἀλλὰ δοξάζοντες, πολὺ μᾶλλον ἐπιμελητέον ἂν εἴη τῆς ἀληθείας, ὥσπερ καὶ νοσώδει ὄντι ἢ ὑγιεινῷ τῆς ὑγιείας· [30] καὶ γὰρ ὁ δοξάζων πρὸς τὸν ἐπιστάμενον οὐχ ὑγιεινῶς διάκειται πρὸς τὴν ἀλήθειαν.—ἔτι εἰ ὅτι μάλιστα πάντα οὕτως ἔχει καὶ οὐχ οὕτως, ἀλλὰ τό γε μᾶλλον καὶ ἧττον ἔνεστιν ἐν τῇ φύσει τῶν ὄντων· οὐ γὰρ ἂν ὁμοίως φήσαιμεν εἶναι τὰ δύο ἄρτια καὶ τὰ τρία, οὐδ’ ὁμοίως διέψευσται ὁ τὰ [35] τέτταρα πέντε οἰόμενος καὶ ὁ χίλια. εἰ οὖν μὴ ὁμοίως, δῆλον ὅτι ἄτερος ἧττον, ὥστε μᾶλλον ἀληθεύει. εἰ οὖν τὸ μᾶλλον ἐγγύτερον, [1] εἴη γε ἄν τι ἀληθὲς οὗ ἐγγύτερον τὸ μᾶλλον ἀληθές. κἂν εἰ μὴ ἔστιν, ἀλλ’ ἤδη γέ τι ἔστι βεβαιότερον καὶ ἀληθινώτερον, καὶ τοῦ λόγου ἀπηλλαγμένοι ἂν εἴημεν τοῦ ἀκράτου καὶ κωλύοντός τι τῇ διανοίᾳ [5] ὁρίσαι.

ἔστι δ’ ἀπὸ τῆς αὐτῆς δόξης καὶ ὁ Πρωταγόρου λόγος, καὶ ἀνάγκη ὁμοίως αὐτοὺς ἄμφω ἢ εἶναι ἢ μὴ εἶναι· εἴτε γὰρ τὰ δοκοῦντα πάντα ἐστὶν ἀληθῆ καὶ τὰ φαινόμενα, ἀνάγκη εἶναι πάντα ἅμα ἀληθῆ καὶ ψευδῆ (πολλοὶ γὰρ [10] τἀναντία ὑπολαμβάνουσιν ἀλλήλοις, καὶ τοὺς μὴ ταὐτὰ

δοξάζοντας ἑαυτοῖς διεψεῦσθαι νομίζουσιν· ὥστ’ ἀνάγκη τὸ αὐτὸ εἶναί τε καὶ μὴ εἶναι), καὶ εἰ τοῦτ’ ἔστιν, ἀνάγκη τὰ δοκοῦντα εἶναι πάντ’ ἀληθῆ (τὰ ἀντικείμενα γὰρ δοξάζουσιν ἀλλήλοις οἱ διεψευσμένοι καὶ ἀληθεύοντες· εἰ οὖν ἔχει τὰ [15] ὄντα οὕτως, ἀληθεύσουσι πάντες) . ὅτι μὲν οὖν ἀπὸ τῆς αὐτῆς εἰσὶ διανοίας ἀμφότεροι οἱ λόγοι, δῆλον· ἔστι δ’ οὐχ ὁ αὐτὸς τρόπος πρὸς ἅπαντας τῆς ἐντεύξεως· οἱ μὲν γὰρ πειθοῦς δέονται οἱ δὲ βίας. ὅσοι μὲν γὰρ ἐκ τοῦ ἀπορῆσαι ὑπέλαβον οὕτως, τούτων εὐΐατος ἡ ἄγνοια (οὐ γὰρ πρὸς τὸν [20] λόγον ἀλλὰ πρὸς τὴν διάνοιαν ἡ ἀπάντησις αὐτῶν)· ὅσοι δὲ λόγου χάριν λέγουσι, τούτων δ’ ἔλεγχος ἴασις τοῦ ἐν τῇ φωνῇ λόγου καὶ τοῦ ἐν τοῖς ὀνόμασιν. ἐλήλυθε δὲ τοῖς διαποροῦσιν αὕτη ἡ δόξα ἐκ τῶν αἰσθητῶν, ἡ μὲν τοῦ ἅμα τὰς ἀντιφάσεις καὶ τἀναντία ὑπάρχειν ὁρῶσιν ἐκ ταὐτοῦ [25] γιγνόμενα τἀναντία· εἰ οὖν μὴ ἐνδέχεται γίγνεσθαι τὸ μὴ ὄν, προϋπῆρχεν ὁμοίως τὸ πρᾶγμα ἄμφω ὄν, ὥσπερ καὶ Ἀναξαγόρας μεμῖχθαι πᾶν ἐν παντί φησι καὶ Δημόκριτος· καὶ γὰρ οὗτος τὸ κενὸν καὶ τὸ πλῆρες ὁμοίως καθ’ ὁτιοῦν ὑπάρχειν μέρος, καίτοι τὸ μὲν ὂν τούτων εἶναι τὸ δὲ [30] μὴ ὄν. πρὸς μὲν οὖν τοὺς ἐκ τούτων ὑπολαμβάνοντας ἐροῦμεν ὅτι τρόπον μέν τινα ὀρθῶς λέγουσι τρόπον δέ τινα ἀγνοοῦσιν· τὸ γὰρ ὂν λέγεται διχῶς, ὥστ’ ἔστιν ὂν τρόπον ἐνδέχεται γίγνεσθαί τι ἐκ τοῦ μὴ ὄντος, ἔστι δ’ ὂν οὔ, καὶ ἅμα τὸ αὐτὸ εἶναι καὶ ὂν καὶ μὴ ὄν, ἀλλ’ οὐ κατὰ ταὐτὸ ὄν· δυνάμει [35] μὲν γὰρ ἐνδέχεται ἅμα ταὐτὸ εἶναι τὰ ἐναντία, ἐντελεχείᾳ δ’ οὔ. ἔτι δ’ ἀξιώσομεν αὐτοὺς ὑπολαμβάνειν καὶ ἄλλην τινὰ οὐσίαν εἶναι τῶν ὄντων ᾗ οὔτε κίνησις ὑπάρχει οὔτε φθορὰ οὔτε γένεσις τὸ παράπαν. [1] —ὅμοιως δὲ καὶ ἡ περὶ τὰ φαινόμενα ἀλήθεια ἐνίοις ἐκ τῶν αἰσθητῶν ἐλήλυθεν. τὸ μὲν γὰρ ἀληθὲς οὐ πλήθει κρίνεσθαι οἴονται προσήκειν οὐδὲ ὀλιγότητι, τὸ δ’ αὐτὸ τοῖς μὲν γλυκὺ γευομένοις δοκεῖν εἶναι τοῖς δὲ πικρόν, ὥστ’ εἰ πάντες ἔκαμνον [5] ἢ πάντες παρεφρόνουν, δύο δ’ ἢ τρεῖς ὑγίαινον ἢ νοῦν εἶχον, δοκεῖν ἂν τούτους κάμνειν καὶ παραφρονεῖν τοὺς δ’ ἄλλους οὔ· ἔτι δὲ καὶ πολλοῖς τῶν ἄλλων ζῴων τἀναντία περὶ τῶν αὐτῶν φαίνεσθαι καὶ ἡμῖν, καὶ αὐτῷ δὲ ἑκάστῳ πρὸς αὐτὸν οὐ ταὐτὰ κατὰ τὴν αἴσθησιν ἀεὶ δοκεῖν. ποῖα οὖν τούτων ἀληθῆ [10] ἢ ψευδῆ, ἄδηλον· οὐθὲν γὰρ μᾶλλον τάδε ἢ τάδε ἀληθῆ, ἀλλ’ ὁμοίως. διὸ Δημόκριτός γέ φησιν ἤτοι οὐθὲν εἶναι ἀληθὲς ἢ ἡμῖν γ’ ἄδηλον. ὅλως δὲ διὰ τὸ ὑπολαμβάνειν φρόνησιν μὲν τὴν αἴσθησιν, ταύτην δ’ εἶναι ἀλλοίωσιν, τὸ φαινόμενον κατὰ τὴν αἴσθησιν ἐξ ἀνάγκης ἀληθὲς εἶναί [15] φασιν· ἐκ τούτων γὰρ καὶ Ἐμπεδοκλῆς καὶ Δημόκριτος καὶ τῶν ἄλλων ὡς ἔπος εἰπεῖν ἕκαστος τοιαύταις δόξαις γεγένηνται ἔνοχοι. καὶ γὰρ Ἐμπεδοκλῆς μεταβάλλοντας τὴν ἕξιν μεταβάλλειν φησὶ τὴν φρόνησιν·

πρὸς παρεὸν γὰρ μῆτις ἐναύξεται ἀνθρώποισιν.

καὶ ἐν ἑτέροις δὲ λέγει [20] ὅτι

ὅσσον δ’ ἀλλοῖοι μετέφυν, τόσον ἄρ σφισιν αἰεὶ

καὶ τὸ φρονεῖν ἀλλοῖα παρίστατο.

καὶ Παρμενίδης δὲ ἀποφαίνεται τὸν αὐτὸν τρόπον·

ὡς γὰρ ἑκάστοτ’ ἔχει κρᾶσιν μελέων πολυκάμπτων,

τὼς νόος ἀνθρώποισι παρίσταται· τὸ γὰρ αὐτὸ

ἔστιν ὅπερ φρονέει, μελέων φύσις ἀνθρώποισιν

[25] καὶ πᾶσιν καὶ παντί· τὸ γὰρ πλέον ἐστὶ νόημα.

Ἀναξαγόρου δὲ καὶ ἀπόφθεγμα μνημονεύεται πρὸς τῶν ἑταίρων τινάς, ὅτι τοιαῦτ’ αὐτοῖς ἔσται τὰ ὄντα οἷα ἂν ὑπολάβωσιν. φασὶ δὲ καὶ τὸν Ὅμηρον ταύτην ἔχοντα φαίνεσθαι τὴν δόξαν, ὅτι ἐποίησε τὸν Ἕκτορα, ὡς ἐξέστη ὑπὸ [30] τῆς πληγῆς, κεῖσθαι ἀλλοφρονέοντα, ὡς φρονοῦντας μὲν καὶ τοὺς παραφρονοῦντας ἀλλ’ οὐ ταὐτά. δῆλον οὖν ὅτι, εἰ ἀμφότεραι φρονήσεις, καὶ τὰ

ὄντα ἅμα οὕτω τε καὶ οὐχ οὕτως ἔχει. ᾗ καὶ χαλεπώτατον τὸ συμβαῖνόν ἐστιν· εἰ γὰρ οἱ μάλιστα τὸ ἐνδεχόμενον ἀληθὲς ἑωρακότες—οὗτοι [35] δ’ εἰσὶν οἱ μάλιστα ζητοῦντες αὐτὸ καὶ φιλοῦντες—οὗτοι τοιαύτας ἔχουσι τὰς δόξας καὶ ταῦτα ἀποφαίνονται περὶ τῆς ἀληθείας, πῶς οὐκ ἄξιον ἀθυμῆσαι τοὺς φιλοσοφεῖν ἐγχειροῦντας; τὸ γὰρ τὰ πετόμενα διώκειν τὸ ζητεῖν ἂν εἴη τὴν ἀλήθειαν. [1] —αἴτιον δὲ τῆς δόξης τούτοις ὅτι περὶ τῶν ὄντων μὲν τὴν ἀλήθειαν ἐσκόπουν, τὰ δ’ ὄντα ὑπέλαβον εἶναι τὰ αἰσθητὰ μόνον· ἐν δὲ τούτοις πολλὴ ἡ τοῦ ἀορίστου φύσις ἐνυπάρχει καὶ ἡ τοῦ ὄντος οὕτως ὥσπερ εἴπομεν· [5] διὸ εἰκότως μὲν λέγουσιν, οὐκ ἀληθῆ δὲ λέγουσιν (οὕτω γὰρ ἁρμόττει μᾶλλον εἰπεῖν ἢ ὥσπερ Ἐπίχαρμος εἰς Ξενοφάνην). ἔτι δὲ πᾶσαν ὁρῶντες ταύτην κινουμένην τὴν φύσιν, κατὰ δὲ τοῦ μεταβάλλοντος οὐθὲν ἀληθευόμενον, περί γε τὸ πάντῃ πάντως μεταβάλλον οὐκ ἐνδέχεσθαι ἀληθεύειν. [10] ἐκ γὰρ ταύτης τῆς ὑπολήψεως ἐξήνθησεν ἡ ἀκροτάτη δόξα τῶν εἰρημένων, ἡ τῶν φασκόντων ἡρακλειτίζειν καὶ οἵαν Κρατύλος εἶχεν, ὃς τὸ τελευταῖον οὐθὲν ᾤετο δεῖν λέγειν ἀλλὰ τὸν δάκτυλον ἐκίνει μόνον, καὶ Ἡρακλείτῳ ἐπετίμα εἰπόντι ὅτι δὶς τῷ αὐτῷ ποταμῷ οὐκ ἔστιν ἐμβῆναι· αὐτὸς [15] γὰρ ᾤετο οὐδ’ ἅπαξ. ἡμεῖς δὲ καὶ πρὸς τοῦτον τὸν λόγον ἐροῦμεν ὅτι τὸ μὲν μεταβάλλον ὅτε μεταβάλλει ἔχει τινὰ αὐτοῖς λόγον μὴ οἴεσθαι εἶναι, καίτοι ἔστι γε ἀμφισβητήσιμον· τό τε γὰρ ἀποβάλλον ἔχει τι τοῦ ἀποβαλλομένου, καὶ τοῦ γιγνομένου ἤδη ἀνάγκη τι εἶναι, ὅλως [20] τε εἰ φθείρεται, ὑπάρξει τι ὄν, καὶ εἰ γίγνεται, ἐξ οὗ γίγνεται καὶ ὑφ’ οὗ γεννᾶται ἀναγκαῖον εἶναι, καὶ τοῦτο μὴ ἰέναι εἰς ἄπειρον. ἀλλὰ ταῦτα παρέντες ἐκεῖνα λέγωμεν, ὅτι οὐ ταὐτό ἐστι τὸ μεταβάλλειν κατὰ τὸ ποσὸν καὶ κατὰ τὸ ποιόν· κατὰ μὲν οὖν τὸ ποσὸν ἔστω μὴ μένον, [25] ἀλλὰ κατὰ τὸ εἶδος ἅπαντα γιγνώσκομεν. ἔτι δ’ ἄξιον ἐπιτιμῆσαι τοῖς οὕτως ὑπολαμβάνουσιν, ὅτι καὶ αὐτῶν τῶν αἰσθητῶν ἐπὶ τῶν ἐλαττόνων τὸν ἀριθμὸν ἰδόντες οὕτως ἔχοντα περὶ ὅλου τοῦ οὐρανοῦ ὁμοίως ἀπεφήναντο· ὁ γὰρ περὶ ἡμᾶς τοῦ αἰσθητοῦ τόπος ἐν φθορᾷ καὶ γενέσει διατελεῖ [30] μόνος ὤν, ἀλλ’ οὗτος οὐθὲν ὡς εἰπεῖν μόριον τοῦ παντός ἐστιν, ὥστε δικαιότερον ἂν δι’ ἐκεῖνα τούτων ἀπεψηφίσαντο ἢ διὰ ταῦτα ἐκείνων κατεψηφίσαντο. ἔτι δὲ δῆλον ὅτι καὶ πρὸς τούτους ταὐτὰ τοῖς πάλαι λεχθεῖσιν ἐροῦμεν· ὅτι [34] γὰρ ἔστιν ἀκίνητός τις φύσις δεικτέον αὐτοῖς καὶ πειστέον [35] αὐτούς. καίτοι γε συμβαίνει τοῖς ἅμα φάσκουσιν εἶναι καὶ μὴ εἶναι ἠρεμεῖν μᾶλλον φάναι πάντα ἢ κινεῖσθαι· οὐ γὰρ ἔστιν εἰς ὅ τι μεταβαλεῖ· ἅπαντα γὰρ ὑπάρχει πᾶσιν. [1] —περὶ δὲ τῆς ἀληθείας, ὡς οὐ πᾶν τὸ φαινόμενον ἀληθές, πρῶτον μὲν ὅτι οὐδ’ εἰ ἡ αἴσθησις μὴ ψευδὴς τοῦ γε ἰδίου ἐστίν, ἀλλ’ ἡ φαντασία οὐ ταὐτὸν τῇ αἰσθήσει. εἶτ’ ἄξιον θαυμάσαι εἰ τοῦτ’ ἀποροῦσι, πότερον τηλικαῦτά ἐστι [5] τὰ μεγέθη καὶ τὰ χρώματα τοιαῦτα οἷα τοῖς ἄπωθεν φαίνεται ἢ οἷα τοῖς ἐγγύθεν, καὶ πότερον οἷα τοῖς ὑγιαίνουσιν ἢ οἷα τοῖς κάμνουσιν, καὶ βαρύτερα πότερον ἃ τοῖς ἀσθενοῦσιν ἢ ἃ τοῖς ἰσχύουσιν, καὶ ἀληθῆ πότερον ἃ τοῖς καθεύδουσιν ἢ ἃ τοῖς ἐγρηγορόσιν. ὅτι μὲν γὰρ οὐκ οἴονταί [10] γε, φανερόν· οὐθεὶς γοῦν, ἐὰν ὑπολάβῃ νύκτωρ Ἀθήνῃσιν εἶναι ὢν ἐν Λιβύῃ, πορεύεται εἰς τὸ ᾠδεῖον. ἔτι δὲ περὶ τοῦ μέλλοντος, ὥσπερ καὶ Πλάτων λέγει, οὐ δήπου ὁμοίως κυρία ἡ τοῦ ἰατροῦ δόξα καὶ ἡ τοῦ ἀγνοοῦντος, οἷον περὶ τοῦ μέλλοντος ἔσεσθαι ὑγιοῦς ἢ μὴ μέλλοντος. ἔτι δὲ ἐπ’ αὐτῶν [15] τῶν αἰσθήσεων οὐχ ὁμοίως κυρία ἡ τοῦ ἀλλοτρίου καὶ ἰδίου ἢ τοῦ πλησίον καὶ τοῦ αὐτῆς, ἀλλὰ περὶ μὲν χρώματος ὄψις, οὐ γεῦσις, περὶ δὲ χυμοῦ γεῦσις, οὐκ ὄψις· ὧν ἑκάστη ἐν τῷ αὐτῷ χρόνῳ περὶ τὸ αὐτὸ οὐδέποτε φησιν ἅμα οὕτω καὶ οὐχ οὕτως ἔχειν. ἀλλ’ οὐδὲ ἐν ἑτέρῳ [20] χρόνῳ περί γε τὸ πάθος ἠμφισβήτησεν, ἀλλὰ περὶ τὸ ᾧ συμβέβηκε τὸ πάθος. λέγω δ’ οἷον ὁ μὲν αὐτὸς οἶνος δόξειεν ἂν ἢ μεταβαλὼν ἢ τοῦ σώματος μεταβαλόντος ὁτὲ μὲν εἶναι γλυκὺς ὁτὲ δὲ οὐ γλυκύς· ἀλλ’ οὐ τό γε γλυκύ, οἷόν ἐστιν ὅταν ᾖ, οὐδεπώποτε μετέβαλεν, ἀλλ’ ἀεὶ ἀληθεύει [25] περὶ αὐτοῦ, καὶ ἔστιν ἐξ ἀνάγκης τὸ ἐσόμενον γλυκὺ τοιοῦτον. καίτοι τοῦτο ἀναιροῦσιν οὗτοι οἱ λόγοι ἅπαντες, ὥσπερ καὶ οὐσίαν μὴ εἶναι μηθενός, οὕτω μηδ’ ἐξ ἀνάγκης μηθέν· τὸ γὰρ ἀναγκαῖον οὐκ ἐνδέχεται ἄλλως καὶ ἄλλως ἔχειν, ὥστ’ εἴ τι ἔστιν ἐξ ἀνάγκης, οὐχ ἕξει οὕτω τε καὶ [30] οὐχ οὕτως.—ὅλως

τ’ εἴπερ ἔστι τὸ αἰσθητὸν μόνον, οὐθὲν ἂν εἴη μὴ ὄντων τῶν ἐμψύχων· αἴσθησις γὰρ οὐκ ἂν εἴη. τὸ μὲν οὖν μήτε τὰ αἰσθητὰ εἶναι μήτε τὰ αἰσθήματα ἴσως ἀληθές (τοῦ γὰρ αἰσθανομένου πάθος τοῦτό ἐστι), τὸ δὲ τὰ ὑποκείμενα μὴ εἶναι, ἃ ποιεῖ τὴν αἴσθησιν, καὶ ἄνευ αἰσθήσεως, [35] ἀδύνατον. οὐ γὰρ δὴ ἥ γ’ αἴσθησις αὐτὴ ἑαυτῆς ἐστίν, ἀλλ’ ἔστι τι καὶ ἕτερον παρὰ τὴν αἴσθησιν, ὃ ἀνάγκη πρότερον εἶναι τῆς αἰσθήσεως· [1] τὸ γὰρ κινοῦν τοῦ κινουμένου φύσει πρότερόν ἐστι, κἂν εἰ λέγεται πρὸς ἄλληλα ταῦτα, οὐθὲν ἧττον.

εἰσὶ δέ τινες οἳ ἀποροῦσι καὶ τῶν ταῦτα πεπεισμένων καὶ τῶν τοὺς λόγους τούτους μόνον λεγόντων· ζητοῦσι γὰρ [5] τίς ὁ κρινῶν τὸν ὑγιαίνοντα καὶ ὅλως τὸν περὶ ἕκαστα κρινοῦντα ὀρθῶς. τὰ δὲ τοιαῦτα ἀπορήματα ὁμοιά ἐστι τῷ ἀπορεῖν πότερον καθεύδομεν νῦν ἢ ἐγρηγόραμεν, δύνανται δ’ αἱ ἀπορίαι αἱ τοιαῦται πᾶσαι τὸ αὐτό· πάντων γὰρ λόγον ἀξιοῦσιν εἶναι οὗτοι· ἀρχὴν γὰρ ζητοῦσι, καὶ ταύτην [10] δι’ ἀποδείξεως λαμβάνειν, ἐπεὶ ὅτι γε πεπεισμένοι οὐκ εἰσί, φανεροί εἰσιν ἐν ταῖς πράξεσιν. ἀλλ’ ὅπερ εἴπομεν, τοῦτο αὐτῶν τὸ πάθος ἐστίν· λόγον γὰρ ζητοῦσιν ὧν οὐκ ἔστι λόγος· ἀποδείξεως γὰρ ἀρχὴ οὐκ ἀπόδειξίς ἐστιν. οὗτοι μὲν οὖν ῥᾳδίως ἂν τοῦτο πεισθεῖεν (ἔστι γὰρ οὐ χαλεπὸν λαβεῖν)· [15] οἱ δ’ ἐν τῷ λόγῳ τὴν βίαν μόνον ζητοῦντες ἀδύνατον ζητοῦσιν· ἐναντία γὰρ εἰπεῖν ἀξιοῦσιν, εὐθὺς ἐναντία λέγοντες. εἰ δὲ μὴ ἔστι πάντα πρός τι, ἀλλ’ ἔνιά ἐστι καὶ αὐτὰ καθ’ αὑτά, οὐκ ἂν εἴη πᾶν τὸ φαινόμενον ἀληθές· τὸ γὰρ φαινόμενον τινί ἐστι φαινόμενον· ὥστε ὁ λέγων ἅπαντα τὰ [20] φαινόμενα εἶναι ἀληθῆ ἅπαντα ποιεῖ τὰ ὄντα πρός τι. διὸ καὶ φυλακτέον τοῖς τὴν βίαν ἐν τῷ λόγῳ ζητοῦσιν, ἅμα δὲ καὶ ὑπέχειν λόγον ἀξιοῦσιν, ὅτι οὐ τὸ φαινόμενον ἔστιν ἀλλὰ τὸ φαινόμενον ᾧ φαίνεται καὶ ὅτε φαίνεται καὶ ᾗ καὶ ὡς. ἂν δ’ ὑπέχωσι μὲν λόγον, μὴ οὕτω δ’ [25] ὑπέχωσι, συμβήσεται αὐτοῖς τἀναντία ταχὺ λέγειν. ἐνδέχεται γὰρ τὸ αὐτὸ κατὰ μὲν τὴν ὄψιν μέλι φαίνεσθαι τῇ δὲ γεύσει μή, καὶ τῶν ὀφθαλμῶν δυοῖν ὄντοιν μὴ ταὐτὰ ἑκατέρᾳ τῇ ὄψει, ἂν ὦσιν ἀνόμοιαι· ἐπεὶ πρός γε τοὺς διὰ τὰς πάλαι εἰρημένας αἰτίας τὸ φαινόμενον φάσκοντας [30] ἀληθὲς εἶναι, καὶ διὰ τοῦτο πάνθ’ ὁμοίως εἶναι ψευδῆ καὶ ἀληθῆ· οὔτε γὰρ ἅπασι ταὐτὰ φαίνεσθαι οὔτε ταὐτῷ ἀεὶ ταὐτά, ἀλλὰ πολλάκις τἀναντία κατὰ τὸν αὐτὸν χρόνον (ἡ μὲν γὰρ ἁφὴ δύο λέγει ἐν τῇ ἐπαλλάξει τῶν δακτύλων ἡ δ’ ὄψις ἕν)·—ἀλλ’ οὔ τι τῇ αὐτῇ γε καὶ [35] κατὰ τὸ αὐτὸ αἰσθήσει καὶ ὡσαύτως καὶ ἐν τῷ αὐτῷ χρόνῳ, ὥστε τοῦτ’ ἂν εἴη ἀληθές. [1] ἀλλ’ ἴσως διὰ τοῦτ’ ἀνάγκη λέγειν τοῖς μὴ δι’ ἀπορίαν ἀλλὰ λόγου χάριν λέγουσιν, ὅτι οὐκ ἔστιν ἀληθὲς τοῦτο ἀλλὰ τούτῳ ἀληθές. καὶ ὥσπερ δὴ πρότερον εἴρηται, ἀνάγκη πρός τι ποιεῖν [5] ἅπαντα καὶ πρὸς δόξαν καὶ αἴσθησιν, ὥστ’ οὔτε γέγονεν οὔτ’ ἔσται οὐθὲν μηθενὸς προδοξάσαντος. εἰ δὲ γέγονεν ἢ ἔσται, δῆλον ὅτι οὐκ ἂν εἴη ἅπαντα πρὸς δόξαν. ἔτι εἰ ἕν, πρὸς ἓν ἢ πρὸς ὡρισμένον· καὶ εἰ τὸ αὐτὸ καὶ ἥμισυ καὶ ἴσον, ἀλλ’ οὐ πρὸς τὸ διπλάσιόν γε τὸ ἴσον. πρὸς δὴ τὸ δοξάζον [10] εἰ ταὐτὸ ἄνθρωπος καὶ τὸ δοξαζόμενον, οὐκ ἔσται ἄνθρωπος τὸ δοξάζον ἀλλὰ τὸ δοξαζόμενον. εἰ δ’ ἕκαστον ἔσται πρὸς τὸ δοξάζον, πρὸς ἄπειρα ἔσται τῷ εἴδει τὸ δοξάζον. ὅτι μὲν οὖν βεβαιοτάτη δόξα πασῶν τὸ μὴ εἶναι ἀληθεῖς ἅμα τὰς ἀντικειμένας φάσεις, καὶ τί συμβαίνει τοῖς οὕτω [15] λέγουσι, καὶ διὰ τί οὕτω λέγουσι, τοσαῦτα εἰρήσθω· ἐπεὶ δ’ ἀδύνατον τὴν ἀντίφασιν ἅμα ἀληθεύεσθαι κατὰ τοῦ αὐτοῦ, φανερὸν ὅτι οὐδὲ τἀναντία ἅμα ὑπάρχειν ἐνδέχεται τῷ αὐτῷ· τῶν μὲν γὰρ ἐναντίων θάτερον στέρησίς ἐστιν οὐχ ἧττον, οὐσίας δὲ στέρησις· ἡ δὲ στέρησις ἀπόφασίς ἐστιν ἀπό [20] τινος ὡρισμένου γένους· εἰ οὖν ἀδύνατον ἅμα καταφάναι καὶ ἀποφάναι ἀληθῶς, ἀδύνατον καὶ τἀναντία ὑπάρχειν ἅμα, ἀλλ’ ἢ πῇ ἄμφω ἢ θάτερον μὲν πῇ θάτερον δὲ ἁπλῶς.

ἀλλὰ μὴν οὐδὲ μεταξὺ ἀντιφάσεως ἐνδέχεται εἶναι οὐθέν, ἀλλ’ ἀνάγκη ἢ φάναι ἢ ἀποφάναι ἓν καθ’ ἑνὸς ὁτιοῦν. [25] δῆλον δὲ πρῶτον μὲν ὁρισαμένοις τί τὸ ἀληθὲς καὶ ψεῦδος. τὸ μὲν γὰρ λέγειν τὸ ὂν μὴ εἶναι ἢ τὸ μὴ ὂν εἶναι ψεῦδος, τὸ δὲ τὸ ὂν εἶναι καὶ τὸ μὴ ὂν μὴ εἶναι ἀληθές, ὥστε καὶ ὁ λέγων εἶναι ἢ μὴ ἀληθεύσει ἢ ψεύσεται· ἀλλ’ οὔτε τὸ ὂν λέγεται μὴ εἶναι ἢ εἶναι οὔτε τὸ μὴ ὄν. ἔτι [30] ἤτοι μεταξὺ ἔσται τῆς ἀντιφάσεως ὥσπερ τὸ φαιὸν μέλανος καὶ λευκοῦ, ἢ ὡς

τὸ μηδέτερον ἀνθρώπου καὶ ἵππου. εἰ μὲν οὖν οὕτως, οὐκ ἂν μεταβάλλοι (ἐκ μὴ ἀγαθοῦ γὰρ εἰς ἀγαθὸν μεταβάλλει ἢ ἐκ τούτου εἰς μὴ ἀγαθόν), νῦν δ’ ἀεὶ φαίνεται (οὐ γὰρ ἔστι μεταβολὴ ἀλλ’ ἢ εἰς τὰ ἀντικείμενα [35] καὶ μεταξύ)· εἰ δ’ ἔστι μεταξύ, καὶ οὕτως εἴη ἄν τις εἰς λευκὸν οὐκ ἐκ μὴ λευκοῦ γένεσις, νῦν δ’ οὐχ ὁρᾶται. [1] ἔτι πᾶν τὸ διανοητὸν καὶ νοητὸν ἡ διάνοια ἢ κατάφησιν ἢ ἀπόφησιν—τοῦτο δ’ ἐξ ὁρισμοῦ δῆλον—ὅταν ἀληθεύῃ ἢ ψεύδηται· ὅταν μὲν ὡδὶ συνθῇ φᾶσα ἢ ἀποφᾶσα, ἀληθεύει, [5] ὅταν δὲ ὡδί, ψεύδεται. ἔτι παρὰ πάσας δεῖ εἶναι τὰς ἀντιφάσεις, εἰ μὴ λόγου ἕνεκα λέγεται· ὥστε καὶ οὔτε ἀληθεύσει [7] τις οὔτ’ οὐκ ἀληθεύσει, καὶ παρὰ τὸ ὂν καὶ τὸ μὴ ὂν ἔσται, ὥστε καὶ παρὰ γένεσιν καὶ φθορὰν μεταβολή τις ἔσται. ἔτι ἐν ὅσοις γένεσιν ἡ ἀπόφασις τὸ ἐναντίον ἐπιφέρει, [10] καὶ ἐν τούτοις ἔσται, οἷον ἐν ἀριθμοῖς οὔτε περιττὸς οὔτε οὐ περιττὸς ἀριθμός· ἀλλ’ ἀδύνατον· ἐκ τοῦ ὁρισμοῦ δὲ δῆλον. ἔτι εἰς ἄπειρον βαδιεῖται, καὶ οὐ μόνον ἡμιόλια τὰ ὄντα ἔσται ἀλλὰ πλείω. πάλιν γὰρ ἔσται ἀποφῆσαι τοῦτο πρὸς τὴν φάσιν καὶ τὴν ἀπόφασιν, καὶ τοῦτ’ ἔσται τι· ἡ [15] γὰρ οὐσία ἐστί τις αὐτοῦ ἄλλη. ἔτι ὅταν ἐρομένου εἰ λευκόν ἐστιν εἴπῃ ὅτι οὔ, οὐθὲν ἄλλο ἀποπέφηκεν ἢ τὸ εἶναι· ἀπόφασις δὲ τὸ μὴ εἶναι. ἐλήλυθε δ’ ἐνίοις αὕτη ἡ δόξα ὥσπερ καὶ ἄλλαι τῶν παραδόξων· ὅταν γὰρ λύειν μὴ δύνωνται λόγους ἐριστικούς, ἐνδόντες τῷ λόγῳ σύμφασιν ἀληθὲς [20] εἶναι τὸ συλλογισθέν. οἱ μὲν οὖν διὰ τοιαύτην αἰτίαν λέγουσιν, οἱ δὲ διὰ τὸ πάντων ζητεῖν λόγον. ἀρχὴ δὲ πρὸς ἅπαντας τούτους ἐξ ὁρισμοῦ. ὁρισμὸς δὲ γίγνεται ἐκ τοῦ σημαίνειν τι ἀναγκαῖον εἶναι αὐτούς· ὁ γὰρ λόγος οὗ τὸ ὄνομα σημεῖον ὁρισμὸς ἔσται. ἔοικε δ’ ὁ μὲν Ἡρακλείτου [25] λόγος, λέγων πάντα εἶναι καὶ μὴ εἶναι, ἅπαντα ἀληθῆ ποιεῖν, ὁ δ’ Ἀναξαγόρου, εἶναί τι μεταξὺ τῆς ἀντιφάσεως, πάντα ψευδῆ· ὅταν γὰρ μιχθῇ, οὔτε ἀγαθὸν οὔτε οὐκ ἀγαθὸν τὸ μῖγμα, ὥστ’ οὐδὲν εἰπεῖν ἀληθές.

διωρισμένων δὲ τούτων φανερὸν ὅτι καὶ τὰ μοναχῶς [30] λεγόμενα καὶ κατὰ πάντων ἀδύνατον ὑπάρχειν ὥσπερ τινὲς λέγουσιν, οἱ μὲν οὐθὲν φάσκοντες ἀληθὲς εἶναι (οὐθὲν γὰρ κωλύειν φασὶν οὕτως ἅπαντα εἶναι ὥσπερ τὸ τὴν διάμετρον σύμμετρον εἶναι), οἱ δὲ πάντ’ ἀληθῆ. σχεδὸν γὰρ οὗτοι οἱ λόγοι οἱ αὐτοὶ τῷ Ἡρακλείτου· ὁ γὰρ λέγων [35] ὅτι πάντ’ ἀληθῆ καὶ πάντα ψευδῆ, καὶ χωρὶς λέγει τῶν λόγων ἑκάτερον τούτων, [1] ὥστ’ εἴπερ ἀδύνατα ἐκεῖνα, καὶ ταῦτα ἀδύνατον εἶναι. ἔτι δὲ φανερῶς ἀντιφάσεις εἰσὶν ἃς οὐχ οἷόν τε ἅμα ἀληθεῖς εἶναι—οὐδὲ δὴ ψευδεῖς πάσας· καίτοι δόξειέ γ’ ἂν μᾶλλον ἐνδέχεσθαι ἐκ τῶν εἰρημένων. [5] ἀλλὰ πρὸς πάντας τοὺς τοιούτους λόγους αἰτεῖσθαι δεῖ, καθάπερ ἐλέχθη καὶ ἐν τοῖς ἐπάνω λόγοις, οὐχὶ εἶναί τι ἢ μὴ εἶναι ἀλλὰ σημαίνειν τι, ὥστε ἐξ ὁρισμοῦ διαλεκτέον λαβόντας τί σημαίνει τὸ ψεῦδος ἢ τὸ ἀληθές. εἰ δὲ μηθὲν ἄλλο τὸ ἀληθὲς φάναι ἢ ὃ ἀποφάναι ψεῦδός ἐστιν, ἀδύνατον [10] πάντα ψευδῆ εἶναι· ἀνάγκη γὰρ τῆς ἀντιφάσεως θάτερον εἶναι μόριον ἀληθές. ἔτι εἰ πᾶν ἢ φάναι ἢ ἀποφάναι ἀναγκαῖον, ἀδύνατον ἀμφότερα ψευδῆ εἶναι· θάτερον γὰρ μόριον τῆς ἀντιφάσεως ψεῦδός ἐστιν. συμβαίνει δὴ καὶ τὸ θρυλούμενον πᾶσι τοῖς τοιούτοις λόγοις, αὐτοὺς [15] ἑαυτοὺς ἀναιρεῖν. ὁ μὲν γὰρ πάντα ἀληθῆ λέγων καὶ τὸν ἐναντίον αὑτοῦ λόγον ἀληθῆ ποιεῖ, ὥστε τὸν ἑαυτοῦ οὐκ ἀληθῆ (ὁ γὰρ ἐναντίος οὗ φησιν αὐτὸν ἀληθῆ), ὁ δὲ πάντα ψευδῆ καὶ αὐτὸς αὑτόν. ἐὰν δ’ ἐξαιρῶνται ὁ μὲν τὸν ἐναντίον ὡς οὐκ ἀληθὴς μόνος ἐστίν, ὁ δὲ τὸν αὑτοῦ ὡς οὐ ψευδής, [20] οὐδὲν ἧττον ἀπείρους συμβαίνει αὐτοῖς αἰτεῖσθαι λόγους ἀληθεῖς καὶ ψευδεῖς· ὁ γὰρ λέγων τὸν ἀληθῆ λόγον ἀληθῆ ἀληθής, τοῦτο δ’ εἰς ἄπειρον βαδιεῖται.—φανερὸν δ’ ὅτι οὐδ’ οἱ πάντα ἠρεμεῖν λέγοντες ἀληθῆ λέγουσιν οὐδ’ οἱ πάντα κινεῖσθαι. εἰ μὲν γὰρ ἠρεμεῖ πάντα, ἀεὶ ταὐτὰ ἀληθῆ καὶ [25] ψευδῆ ἔσται, φαίνεται δὲ τοῦτο μεταβάλλον (ὁ γὰρ λέγων ποτὲ αὐτὸς οὐκ ἦν καὶ πάλιν οὐκ ἔσται)· εἰ δὲ πάντα κινεῖται, οὐθὲν ἔσται ἀληθές· πάντα ἄρα ψευδῆ· ἀλλὰ δέδεικται ὅτι ἀδύνατον. ἔτι ἀνάγκη τὸ ὂν μεταβάλλειν· ἔκ τινος γὰρ εἴς τι ἡ μεταβολή. ἀλλὰ μὴν οὐδὲ πάντα ἠρεμεῖ [30] ἢ κινεῖται ποτέ, ἀεὶ δ’ οὐθέν· ἔστι γάρ τι ὃ ἀεὶ κινεῖ τὰ κινούμενα, καὶ τὸ πρῶτον κινοῦν ἀκίνητον αὐτό.

[34] ἀρχὴ λέγεται ἡ μὲν ὅθεν ἄν τις τοῦ πράγματος [35] κινηθείη πρῶτον, οἷον τοῦ μήκους καὶ

ὁδοῦ ἐντεῦθεν μὲν αὕτη ἀρχή, ἐξ ἐναντίας δὲ ἑτέρα· [1] ἡ δὲ ὅθεν ἂν κάλλιστα ἕκαστον γένοιτο, οἷον καὶ μαθήσεως οὐκ ἀπὸ τοῦ πρώτου καὶ τῆς τοῦ πράγματος ἀρχῆς ἐνίοτε ἀρκτέον ἀλλ’ ὅθεν ῥᾷστ’ ἂν μάθοι· ἡ δὲ ὅθεν πρῶτον γίγνεται ἐνυπάρχοντος, οἷον ὡς πλοίου [5] τρόπις καὶ οἰκίας θεμέλιος, καὶ τῶν ζῴων οἱ μὲν καρδίαν οἱ δὲ ἐγκέφαλον οἱ δ’ ὅ τι ἂν τύχωσι τοιοῦτον ὑπολαμβάνουσιν· ἡ δὲ ὅθεν γίγνεται πρῶτον μὴ ἐνυπάρχοντος καὶ ὅθεν πρῶτον ἡ κίνησις πέφυκεν ἄρχεσθαι καὶ ἡ μεταβολή, οἷον τὸ τέκνον ἐκ τοῦ πατρὸς καὶ τῆς μητρὸς καὶ ἡ μάχη [10] ἐκ τῆς λοιδορίας· ἡ δὲ οὗ κατὰ προαίρεσιν κινεῖται τὰ κινούμενα καὶ μεταβάλλει τὰ μεταβάλλοντα, ὥσπερ αἵ τε κατὰ πόλεις ἀρχαὶ καὶ αἱ δυναστεῖαι καὶ αἱ βασιλεῖαι καὶ τυραννίδες ἀρχαὶ λέγονται καὶ αἱ τέχναι, καὶ τούτων αἱ ἀρχιτεκτονικαὶ μάλιστα. ἔτι ὅθεν γνωστὸν τὸ πρᾶγμα [15] πρῶτον, καὶ αὕτη ἀρχὴ λέγεται τοῦ πράγματος, οἷον τῶν ἀποδείξεων αἱ ὑποθέσεις. ἰσαχῶς δὲ καὶ τὰ αἴτια λέγεται· πάντα γὰρ τὰ αἴτια ἀρχαί. πασῶν μὲν οὖν κοινὸν τῶν ἀρχῶν τὸ πρῶτον εἶναι ὅθεν ἢ ἔστιν ἢ γίγνεται ἢ γιγνώσκεται· τούτων δὲ αἱ μὲν ἐνυπάρχουσαί εἰσιν αἱ δὲ [20] ἐκτός. διὸ ἥ τε φύσις ἀρχὴ καὶ τὸ στοιχεῖον καὶ ἡ διάνοια καὶ ἡ προαίρεσις καὶ οὐσία καὶ τὸ οὗ ἕνεκα· πολλῶν γὰρ καὶ τοῦ γνῶναι καὶ τῆς κινήσεως ἀρχὴ τἀγαθὸν καὶ τὸ καλόν.

αἴτιον λέγεται ἕνα μὲν τρόπον ἐξ οὗ γίγνεταί τι ἐνυπάρχοντος, [25] οἷον ὁ χαλκὸς τοῦ ἀνδριάντος καὶ ὁ ἄργυρος τῆς φιάλης καὶ τὰ τούτων γένη· ἄλλον δὲ τὸ εἶδος καὶ τὸ παράδειγμα, τοῦτο δ’ ἐστὶν ὁ λόγος τοῦ τί ἦν εἶναι καὶ τὰ τούτου γένη (οἷον τοῦ διὰ πασῶν τὸ δύο πρὸς ἓν καὶ ὅλως ὁ ἀριθμός) καὶ τὰ μέρη τὰ ἐν τῷ λόγῳ. ἔτι ὅθεν ἡ [30] ἀρχὴ τῆς μεταβολῆς ἡ πρώτη ἢ τῆς ἠρεμήσεως, οἷον ὁ βουλεύσας αἴτιος, καὶ ὁ πατὴρ τοῦ τέκνου καὶ ὅλως τὸ ποιοῦν τοῦ ποιουμένου καὶ τὸ μεταβλητικὸν τοῦ μεταβάλλοντος. ἔτι ὡς τὸ τέλος· τοῦτο δ’ ἐστὶ τὸ οὗ ἕνεκα, οἷον τοῦ περιπατεῖν ἡ ὑγίεια. διὰ τί γὰρ περιπατεῖ; φαμέν. ἵνα ὑγιαίνῃ. καὶ [35] εἰπόντες οὕτως οἰόμεθα ἀποδεδωκέναι τὸ αἴτιον. καὶ ὅσα δὴ κινήσαντος ἄλλου μεταξὺ γίγνεται τοῦ τέλους, [1] οἷον τῆς ὑγιείας ἡ ἰσχνασία ἢ ἡ κάθαρσις ἢ τὰ φάρμακα ἢ τὰ ὄργανα· πάντα γὰρ ταῦτα τοῦ τέλους ἕνεκά ἐστι, διαφέρει δὲ ἀλλήλων ὡς ὄντα τὰ μὲν ὄργανα τὰ δ’ ἔργα. τὰ μὲν οὖν αἴτια σχεδὸν τοσαυταχῶς λέγεται, συμβαίνει δὲ πολλαχῶς [5] λεγομένων τῶν αἰτίων καὶ πολλὰ τοῦ αὐτοῦ αἴτια εἶναι οὐ κατὰ συμβεβηκός (οἷον τοῦ ἀνδριάντος καὶ ἡ ἀνδριαντοποιητικὴ καὶ ὁ χαλκὸς οὐ καθ’ ἕτερόν τι ἀλλ’ ᾗ ἀνδριάς· ἀλλ’ οὐ τὸν αὐτὸν τρόπον ἀλλὰ τὸ μὲν ὡς ὕλη τὸ δ’ ὡς ὅθεν ἡ κίνησις), καὶ ἀλλήλων αἴτια (οἷον τὸ πονεῖν [10] τῆς εὐεξίας καὶ αὕτη τοῦ πονεῖν· ἀλλ’ οὐ τὸν αὐτὸν τρόπον ἀλλὰ τὸ μὲν ὡς τέλος τὸ δ’ ὡς ἀρχὴ κινήσεως). ἔτι δὲ ταὐτὸ τῶν ἐναντίων ἐστίν· ὃ γὰρ παρὸν αἴτιον τουδί, τοῦτ’ ἀπὸν αἰτιώμεθα ἐνίοτε τοῦ ἐναντίου, οἷον τὴν ἀπουσίαν τοῦ κυβερνήτου τῆς ἀνατροπῆς, οὗ ἦν ἡ παρουσία αἰτία τῆς [15] σωτηρίας· ἄμφω δέ, καὶ ἡ παρουσία καὶ ἡ στέρησις, αἴτια ὡς κινοῦντα.—ἅπαντα δὲ τὰ νῦν εἰρημένα αἴτια εἰς τέτταρας τρόπους πίπτει τοὺς φανερωτάτους. τὰ μὲν γὰρ στοιχεῖα τῶν συλλαβῶν καὶ ἡ ὕλη τῶν σκευαστῶν καὶ τὸ πῦρ καὶ ἡ γῆ καὶ τὰ τοιαῦτα πάντα τῶν σωμάτων καὶ τὰ [20] μέρη τοῦ ὅλου καὶ αἱ ὑποθέσεις τοῦ συμπεράσματος ὡς τὸ [21] ἐξ οὗ αἴτιά ἐστιν· τούτων δὲ τὰ μὲν ὡς τὸ ὑποκείμενον, οἷον τὰ μέρη, τὰ δὲ ὡς τὸ τί ἦν εἶναι, τό τε ὅλον καὶ ἡ σύνθεσις καὶ τὸ εἶδος. τὸ δὲ σπέρμα καὶ ὁ ἰατρὸς καὶ ὁ βουλεύσας καὶ ὅλως τὸ ποιοῦν, πάντα ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς [25] ἢ στάσεως. τὰ δ’ ὡς τὸ τέλος καὶ τἀγαθὸν τῶν ἄλλων· τὸ γὰρ οὗ ἕνεκα βέλτιστον καὶ τέλος τῶν ἄλλων ἐθέλει εἶναι· διαφερέτω δὲ μηδὲν αὐτὸ εἰπεῖν ἀγαθὸν ἢ φαινόμενον ἀγαθόν.—τὰ μὲν οὖν αἴτια ταῦτα καὶ τοσαῦτά ἐστι τῷ εἴδει, τρόποι δὲ τῶν αἰτίων ἀριθμῷ μέν [30] εἰσι πολλοί, κεφαλαιούμενοι δὲ καὶ οὗτοι ἐλάττους. λέγονται γὰρ αἴτια πολλαχῶς, καὶ αὐτῶν τῶν ὁμοειδῶν προτέρως καὶ ὑστέρως ἄλλο ἄλλου, οἷον ὑγιείας ὁ ἰατρὸς καὶ ὁ τεχνίτης, καὶ τοῦ διὰ πασῶν τὸ διπλάσιον καὶ ἀριθμός, καὶ ἀεὶ τὰ περιέχοντα ὁτιοῦν τῶν καθ’ ἕκαστα. ἔτι δ’ ὡς τὸ συμβεβηκὸς [35] καὶ τὰ τούτων γένη, οἷον ἀνδριάντος ἄλλως Πολύκλειτος καὶ ἄλλως ἀνδριαντοποιός, ὅτι συμβέβηκε τῷ ἀνδριαντοποιῷ Πολυκλείτῳ εἶναι· [1] καὶ τὰ περιέχοντα δὲ τὸ συμβεβηκός, οἷον

ἄνθρωπος αἴτιος ἀνδριάντος, ἢ καὶ ὅλως ζῷον, ὅτι ὁ Πολύκλειτος ἄνθρωπος ὁ δὲ ἄνθρωπος ζῷον. ἔστι δὲ καὶ τῶν συμβεβηκότων ἄλλα ἄλλων πορρώτερον καὶ [5] ἐγγύτερον, οἷον εἰ ὁ λευκὸς καὶ ὁ μουσικὸς αἴτιος λέγοιτο τοῦ ἀνδριάντος, ἀλλὰ μὴ μόνον Πολύκλειτος ἢ ἄνθρωπος. παρὰ πάντα δὲ καὶ τὰ οἰκείως λεγόμενα καὶ τὰ κατὰ συμβεβηκός, τὰ μὲν ὡς δυνάμενα λέγεται τὰ δ’ ὡς ἐνεργοῦντα, οἷον τοῦ οἰκοδομεῖσθαι οἰκοδόμος ἢ οἰκοδομῶν οἰκοδόμος. [10] ὁμοίως δὲ λεχθήσεται καὶ ἐφ’ ὧν αἴτια τὰ αἴτια τοῖς εἰρημένοις, οἷον τοῦδε τοῦ ἀνδριάντος ἢ ἀνδριάντος ἢ ὅλως εἰκόνος, καὶ χαλκοῦ τοῦδε ἢ χαλκοῦ ἢ ὅλως ὕλης· καὶ ἐπὶ τῶν συμβεβηκότων ὡσαύτως. ἔτι δὲ συμπλεκόμενα καὶ ταῦτα κἀκεῖνα λεχθήσεται, οἷον οὐ Πολύκλειτος οὐδὲ ἀνδριαντοποιὸς [15] ἀλλὰ Πολύκλειτος ἀνδριαντοποιός. ἀλλ’ ὅμως ἅπαντά γε ταῦτ’ ἐστὶ τὸ μὲν πλῆθος ἕξ, λεγόμενα δὲ διχῶς· ἢ γὰρ ὡς τὸ καθ’ ἕκαστον ἢ ὡς τὸ γένος, ἢ ὡς τὸ συμβεβηκὸς ἢ ὡς τὸ γένος τοῦ συμβεβηκότος, ἢ ὡς συμπλεκόμενα ταῦτα ἢ ὡς ἁπλῶς λεγόμενα, πάντα δὲ ἢ ὡς [20] ἐνεργοῦντα ἢ κατὰ δύναμιν. διαφέρει δὲ τοσοῦτον, ὅτι τὰ μὲν ἐνεργοῦντα καὶ τὰ καθ’ ἕκαστον ἅμα ἔστι καὶ οὐκ ἔστι καὶ ὧν αἴτια, οἷον ὅδε ὁ ἰατρεύων τῷδε τῷ ὑγιαζομένῳ καὶ ὅδε ὁ οἰκοδόμος τῷδε τῷ οἰκοδομουμένῳ, τὰ δὲ κατὰ δύναμιν οὐκ ἀεί· φθείρεται γὰρ οὐχ ἅμα ἡ οἰκία καὶ ὁ [25] οἰκοδόμος.

στοιχεῖον λέγεται ἐξ οὗ σύγκειται πρώτου ἐνυπάρχοντος ἀδιαιρέτου τῷ εἴδει εἰς ἕτερον εἶδος, οἷον φωνῆς στοιχεῖα ἐξ ὧν σύγκειται ἡ φωνὴ καὶ εἰς ἃ διαιρεῖται ἔσχατα, ἐκεῖνα δὲ μηκέτ’ εἰς ἄλλας φωνὰς ἑτέρας τῷ [30] εἴδει αὐτῶν, ἀλλὰ κἂν διαιρῆται, τὰ μόρια ὁμοειδῆ, οἷον ὕδατος τὸ μόριον ὕδωρ, ἀλλ’ οὐ τῆς συλλαβῆς. ὁμοίως δὲ καὶ τὰ τῶν σωμάτων στοιχεῖα λέγουσιν οἱ λέγοντες εἰς ἃ διαιρεῖται τὰ σώματα ἔσχατα, ἐκεῖνα δὲ μηκέτ’ εἰς ἄλλα εἴδει διαφέροντα· καὶ εἴτε ἓν εἴτε πλείω τὰ τοιαῦτα, [35] ταῦτα στοιχεῖα λέγουσιν. παραπλησίως δὲ καὶ τὰ τῶν διαγραμμάτων στοιχεῖα λέγεται, καὶ ὅλως τὰ τῶν ἀποδείξεων· αἱ γὰρ πρῶται ἀποδείξεις καὶ ἐν πλείοσιν ἀποδείξεσιν ἐνυπάρχουσαι, [1] αὗται στοιχεῖα τῶν ἀποδείξεων λέγονται· εἰσὶ δὲ τοιοῦτοι συλλογισμοὶ οἱ πρῶτοι ἐκ τῶν τριῶν δι’ ἑνὸς μέσου. καὶ μεταφέροντες δὲ στοιχεῖον καλοῦσιν ἐντεῦθεν ὃ ἂν ἓν ὂν καὶ μικρὸν ἐπὶ πολλὰ ᾖ χρήσιμον, [5] διὸ καὶ τὸ μικρὸν καὶ ἁπλοῦν καὶ ἀδιαίρετον στοιχεῖον λέγεται. ὅθεν ἐλήλυθε τὰ μάλιστα καθόλου στοιχεῖα εἶναι, ὅτι ἕκαστον αὐτῶν ἓν ὂν καὶ ἁπλοῦν ἐν πολλοῖς ὑπάρχει ἢ πᾶσιν ἢ ὅτι πλείστοις, καὶ τὸ ἓν καὶ τὴν στιγμὴν ἀρχάς τισι δοκεῖν εἶναι. ἐπεὶ οὖν τὰ καλούμενα γένη [10] καθόλου καὶ ἀδιαίρετα (οὐ γὰρ ἔστι λόγος αὐτῶν), στοιχεῖα τὰ γένη λέγουσί τινες, καὶ μᾶλλον ἢ τὴν διαφορὰν ὅτι καθόλου μᾶλλον τὸ γένος· ᾧ μὲν γὰρ ἡ διαφορὰ ὑπάρχει, καὶ τὸ γένος ἀκολουθεῖ, ᾧ δὲ τὸ γένος, οὐ παντὶ ἡ διαφορά. ἁπάντων δὲ κοινὸν τὸ εἶναι στοιχεῖον ἑκάστου τὸ [15] πρῶτον ἐνυπάρχον ἑκάστῳ.

φύσις λέγεται ἕνα μὲν τρόπον ἡ τῶν φυομένων γένεσις, οἷον εἴ τις ἐπεκτείνας λέγοι τὸ υ, ἕνα δὲ ἐξ οὗ φύεται πρώτου τὸ φυόμενον ἐνυπάρχοντος· ἔτι ὅθεν ἡ κίνησις ἡ πρώτη ἐν ἑκάστῳ τῶν φύσει ὄντων ἐν αὐτῷ ᾗ αὐτὸ [20] ὑπάρχει· φύεσθαι δὲ λέγεται ὅσα αὔξησιν ἔχει δι’ ἑτέρου τῷ ἅπτεσθαι καὶ συμπεφυκέναι ἢ προσπεφυκέναι ὥσπερ τὰ ἔμβρυα· διαφέρει δὲ σύμφυσις ἁφῆς, ἔνθα μὲν γὰρ οὐδὲν παρὰ τὴν ἁφὴν ἕτερον ἀνάγκη εἶναι, ἐν δὲ τοῖς συμπεφυκόσιν ἔστι τι ἓν τὸ αὐτὸ ἐν ἀμφοῖν ὃ ποιεῖ ἀντὶ τοῦ [25] ἅπτεσθαι συμπεφυκέναι καὶ εἶναι ἓν κατὰ τὸ συνεχὲς καὶ ποσόν, ἀλλὰ μὴ κατὰ τὸ ποιόν. ἔτι δὲ φύσις λέγεται ἐξ οὗ πρώτου ἢ ἔστιν ἢ γίγνεταί τι τῶν φύσει ὄντων, ἀρρυθμίστου ὄντος καὶ ἀμεταβλήτου ἐκ τῆς δυνάμεως τῆς αὐτοῦ, οἷον ἀνδριάντος καὶ τῶν σκευῶν τῶν χαλκῶν ὁ χαλκὸς ἡ [30] φύσις λέγεται, τῶν δὲ ξυλίνων ξύλον· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ἐκ τούτων γάρ ἐστιν ἕκαστον διασωζομένης τῆς πρώτης ὕλης· τοῦτον γὰρ τὸν τρόπον καὶ τῶν φύσει ὄντων τὰ στοιχεῖά φασιν εἶναι φύσιν, οἱ μὲν πῦρ οἱ δὲ γῆν οἱ δ’ ἀέρα οἱ δ’ ὕδωρ οἱ δ’ ἄλλο τι τοιοῦτον λέγοντες, οἱ δ’ [35] ἔνια τούτων οἱ δὲ πάντα ταῦτα. ἔτι δ’ ἄλλον τρόπον λέγεται ἡ φύσις ἡ τῶν φύσει ὄντων οὐσία, οἷον οἱ λέγοντες τὴν φύσιν εἶναι τὴν πρώτην σύνθεσιν, [1] ἢ ὥσπερ Ἐμπεδοκλῆς λέγει ὅτι

φύσις οὐδενὸς ἔστιν ἐόντων,

ἀλλὰ μόνον μῖξίς τε διάλλαξίς τε μιγέντων

ἔστι, φύσις δ’ ἐπὶ τοῖς ὀνομάζεται ἀνθρώποισιν.

διὸ καὶ ὅσα φύσει ἔστιν ἢ γίγνεται, ἤδη ὑπάρχοντος ἐξ οὗ πέφυκε γίγνεσθαι ἢ εἶναι, οὔπω φαμὲν [5] τὴν φύσιν ἔχειν ἐὰν μὴ ἔχῃ τὸ εἶδος καὶ τὴν μορφήν. φύσει μὲν οὖν τὸ ἐξ ἀμφοτέρων τούτων ἐστίν, οἷον τὰ ζῷα καὶ τὰ μόρια αὐτῶν· φύσις δὲ ἥ τε πρώτη ὕλη (καὶ αὕτη διχῶς, ἢ ἡ πρὸς αὐτὸ πρώτη ἢ ἡ ὅλως πρώτη, οἷον τῶν χαλκῶν ἔργων πρὸς αὐτὰ μὲν πρῶτος ὁ χαλκός, ὅλως δ’ [10] ἴσως ὕδωρ, εἰ πάντα τὰ τηκτὰ ὕδωρ) καὶ τὸ εἶδος καὶ ἡ οὐσία· τοῦτο δ’ ἐστὶ τὸ τέλος τῆς γενέσεως. μεταφορᾷ δ’ ἤδη καὶ ὅλως πᾶσα οὐσία φύσις λέγεται διὰ ταύτην, ὅτι καὶ ἡ φύσις οὐσία τίς ἐστιν. ἐκ δὴ τῶν εἰρημένων ἡ πρώτη φύσις καὶ κυρίως λεγομένη ἐστὶν ἡ οὐσία ἡ τῶν ἐχόντων [15] ἀρχὴν κινήσεως ἐν αὐτοῖς ᾗ αὐτά· ἡ γὰρ ὕλη τῷ ταύτης δεκτικὴ εἶναι λέγεται φύσις, καὶ αἱ γενέσεις καὶ τὸ φύεσθαι τῷ ἀπὸ ταύτης εἶναι κινήσεις. καὶ ἡ ἀρχὴ τῆς κινήσεως τῶν φύσει ὄντων αὕτη ἐστίν, ἐνυπάρχουσά πως ἢ δυνάμει ἢ ἐντελεχείᾳ.

[20] ἀναγκαῖον λέγεται οὗ ἄνευ οὐκ ἐνδέχεται ζῆν ὡς συναιτίου (οἷον τὸ ἀναπνεῖν καὶ ἡ τροφὴ τῷ ζῴῳ ἀναγκαῖον, ἀδύνατον γὰρ ἄνευ τούτων εἶναι), καὶ ὧν ἄνευ τὸ ἀγαθὸν μὴ ἐνδέχεται ἢ εἶναι ἢ γενέσθαι, ἢ τὸ κακὸν ἀποβαλεῖν ἢ στερηθῆναι (οἷον τὸ πιεῖν τὸ φάρμακον ἀναγκαῖον [25] ἵνα μὴ κάμνῃ, καὶ τὸ πλεῦσαι εἰς Αἴγιναν ἵνα ἀπολάβῃ τὰ χρήματα). ἔτι τὸ βίαιον καὶ ἡ βία· τοῦτο δ’ ἐστὶ τὸ παρὰ τὴν ὁρμὴν καὶ τὴν προαίρεσιν ἐμποδίζον καὶ κωλυτικόν, τὸ γὰρ βίαιον ἀναγκαῖον λέγεται, διὸ καὶ λυπηρόν (ὥσπερ καὶ Εὔηνός φησι πᾶν γὰρ ἀναγκαῖον πρᾶγμ’ ἀνιαρὸν [30] ἔφυ), καὶ ἡ βία ἀνάγκη τις (ὥσπερ καὶ Σοφοκλῆς λέγει [31] ἀλλ’ ἡ βία με ταῦτ’ ἀναγκάζει ποιεῖν), καὶ δοκεῖ ἡ ἀνάγκη ἀμετάπειστόν τι εἶναι, ὀρθῶς· ἐναντίον γὰρ τῇ κατὰ τὴν προαίρεσιν κινήσει καὶ κατὰ τὸν λογισμόν. ἔτι τὸ μὴ ἐνδεχόμενον ἄλλως ἔχειν ἀναγκαῖόν φαμεν οὕτως [35] ἔχειν· καὶ κατὰ τοῦτο τὸ ἀναγκαῖον καὶ τἆλλα λέγεταί πως ἅπαντα ἀναγκαῖα· τό τε γὰρ βίαιον ἀναγκαῖον λέγεται ἢ ποιεῖν ἢ πάσχειν τότε, [1] ὅταν μὴ ἐνδέχηται κατὰ τὴν ὁρμὴν διὰ τὸ βιαζόμενον, ὡς ταύτην ἀνάγκην οὖσαν δι’ ἣν μὴ ἐνδέχεται ἄλλως, καὶ ἐπὶ τῶν συναιτίων τοῦ ζῆν καὶ τοῦ ἀγαθοῦ ὡσαύτως· ὅταν γὰρ μὴ ἐνδέχηται ἔνθα [5] μὲν τὸ ἀγαθὸν ἔνθα δὲ τὸ ζῆν καὶ τὸ εἶναι ἄνευ τινῶν, ταῦτα ἀναγκαῖα καὶ ἡ αἰτία ἀνάγκη τίς ἐστιν αὕτη. ἔτι ἡ ἀπόδειξις τῶν ἀναγκαίων, ὅτι οὐκ ἐνδέχεται ἄλλως ἔχειν, εἰ ἀποδέδεικται ἁπλῶς· τούτου δ’ αἴτια τὰ πρῶτα, εἰ ἀδύνατον ἄλλως ἔχειν ἐξ ὧν ὁ συλλογισμός. τῶν μὲν [10] δὴ ἕτερον αἴτιον τοῦ ἀναγκαῖα εἶναι, τῶν δὲ οὐδέν, ἀλλὰ διὰ ταῦτα ἕτερά ἐστιν ἐξ ἀνάγκης. ὥστε τὸ πρῶτον καὶ κυρίως ἀναγκαῖον τὸ ἁπλοῦν ἐστίν· τοῦτο γὰρ οὐκ ἐνδέχεται πλεοναχῶς ἔχειν, ὥστ’ οὐδὲ ἄλλως καὶ ἄλλως· ἤδη γὰρ πλεοναχῶς ἂν ἔχοι. εἰ ἄρα ἔστιν ἄττα ἀΐδια καὶ ἀκίνητα, [15] οὐδὲν ἐκείνοις ἐστὶ βίαιον οὐδὲ παρὰ φύσιν.

ἓν λέγεται τὸ μὲν κατὰ συμβεβηκὸς τὸ δὲ καθ’ αὑτό, κατὰ συμβεβηκὸς μὲν οἷον Κορίσκος καὶ τὸ μουσικόν, καὶ Κορίσκος μουσικός (ταὐτὸ γὰρ εἰπεῖν Κορίσκος καὶ τὸ μουσικόν, καὶ Κορίσκος μουσικός), καὶ τὸ μουσικὸν καὶ τὸ [20] δίκαιον, καὶ μουσικὸς Κορίσκος καὶ δίκαιος Κορίσκος· πάντα γὰρ ταῦτα ἓν λέγεται κατὰ συμβεβηκός, τὸ μὲν δίκαιον καὶ τὸ μουσικὸν ὅτι μιᾷ οὐσίᾳ συμβέβηκεν, τὸ δὲ μουσικὸν καὶ Κορίσκος ὅτι θάτερον θατέρῳ συμβέβηκεν· ὁμοίως δὲ τρόπον τινὰ καὶ ὁ μουσικὸς Κορίσκος τῷ Κορίσκῳ ἓν ὅτι θάτερον [25] τῶν μορίων θατέρῳ συμβέβηκε τῶν ἐν τῷ λόγῳ, οἷον τὸ μουσικὸν τῷ Κορίσκῳ· καὶ ὁ μουσικὸς Κορίσκος δικαίῳ Κορίσκῳ ὅτι ἑκατέρου μέρος τῷ αὐτῷ ἑνὶ συμβέβηκεν ἕν. ὡσαύτως δὲ κἂν ἐπὶ γένους κἂν ἐπὶ τῶν καθόλου τινὸς ὀνομάτων λέγηται τὸ συμβεβηκός, οἷον ὅτι ἄνθρωπος τὸ αὐτὸ [30] καὶ μουσικὸς ἄνθρωπος· ἢ γὰρ ὅτι τῷ ἀνθρώπῳ μιᾷ οὔσῃ οὐσίᾳ συμβέβηκε τὸ μουσικόν, ἢ ὅτι ἄμφω τῶν καθ’ ἕκαστόν τινι συμβέβηκεν, οἷον Κορίσκῳ. πλὴν οὐ τὸν αὐτὸν τρόπον ἄμφω ὑπάρχει, ἀλλὰ τὸ μὲν

ἴσως ὡς γένος καὶ ἐν τῇ οὐσίᾳ τὸ δὲ ὡς ἕξις ἢ πάθος τῆς οὐσίας.—ὅσα μὲν [35] οὖν κατὰ συμβεβηκὸς λέγεται ἕν, τοῦτον τὸν τρόπον λέγεται· τῶν δὲ καθ’ ἑαυτὰ ἓν λεγομένων τὰ μὲν λέγεται τῷ συνεχῆ εἶναι, οἷον φάκελος δεσμῷ καὶ ξύλα κόλλῃ· [1] καὶ γραμμή, κἂν κεκαμμένη ᾖ, συνεχὴς δέ, μία λέγεται, ὥσπερ καὶ τῶν μερῶν ἕκαστον, οἷον σκέλος καὶ βραχίων. αὐτῶν δὲ τούτων μᾶλλον ἓν τὰ φύσει συνεχῆ ἢ τέχνῃ. [5] συνεχὲς δὲ λέγεται οὗ κίνησις μία καθ’ αὑτὸ καὶ μὴ οἷόν τε ἄλλως· μία δ’ οὗ ἀδιαίρετος, ἀδιαίρετος δὲ κατὰ χρόνον. καθ’ αὑτὰ δὲ συνεχῆ ὅσα μὴ ἁφῇ ἕν· εἰ γὰρ θείης ἁπτόμενα ἀλλήλων ξύλα, οὐ φήσεις ταῦτα εἶναι ἓν οὔτε ξύλον οὔτε σῶμα οὔτ’ ἄλλο συνεχὲς οὐδέν. τά τε δὴ ὅλως συνεχῆ [10] ἓν λέγεται κἂν ἔχῃ κάμψιν, καὶ ἔτι μᾶλλον τὰ μὴ ἔχοντα κάμψιν, οἷον κνήμη ἢ μηρὸς σκέλους, ὅτι ἐνδέχεται μὴ μίαν εἶναι τὴν κίνησιν τοῦ σκέλους. καὶ ἡ εὐθεῖα τῆς κεκαμμένης μᾶλλον ἕν· τὴν δὲ κεκαμμένην καὶ ἔχουσαν γωνίαν καὶ μίαν καὶ οὐ μίαν λέγομεν, ὅτι ἐνδέχεται καὶ μὴ ἅμα τὴν [15] κίνησιν αὐτῆς εἶναι καὶ ἅμα· τῆς δ’ εὐθείας ἀεὶ ἅμα, καὶ οὐδὲν μόριον ἔχον μέγεθος τὸ μὲν ἠρεμεῖ τὸ δὲ κινεῖται, ὥσπερ τῆς κεκαμμένης. ἔτι ἄλλον τρόπον ἓν λέγεται τῷ τὸ ὑποκείμενον τῷ εἴδει εἶναι ἀδιάφορον· ἀδιάφορον δ’ ὧν ἀδιαίρετον τὸ εἶδος κατὰ τὴν αἴσθησιν· τὸ δ’ ὑποκείμενον [20] ἢ τὸ πρῶτον ἢ τὸ τελευταῖον πρὸς τὸ τέλος· καὶ γὰρ οἶνος εἷς λέγεται καὶ ὕδωρ ἕν, ᾗ ἀδιαίρετον κατὰ τὸ εἶδος, καὶ οἱ χυμοὶ πάντες λέγονται ἕν (οἷον ἔλαιον οἶνος) καὶ τὰ τηκτά, ὅτι πάντων τὸ ἔσχατον ὑποκείμενον τὸ αὐτό· ὕδωρ γὰρ ἢ ἀὴρ πάντα ταῦτα. λέγεται δ’ ἓν καὶ ὧν τὸ γένος ἓν [25] διαφέρον ταῖς ἀντικειμέναις διαφοραῖς—καὶ ταῦτα λέγεται πάντα ἓν ὅτι τὸ γένος ἓν τὸ ὑποκείμενον ταῖς διαφοραῖς (οἷον ἵππος ἄνθρωπος κύων ἕν τι ὅτι πάντα ζῷα), καὶ τρόπον δὴ παραπλήσιον ὥσπερ ἡ ὕλη μία. ταῦτα δὲ ὁτὲ μὲν οὕτως ἓν λέγεται, ὁτὲ δὲ τὸ ἄνω γένος ταὐτὸν λέγεται [30] —ἂν ᾖ τελευταῖα τοῦ γένους εἴδη—τὸ ἀνωτέρω τούτων, οἷον τὸ ἰσοσκελὲς καὶ τὸ ἰσόπλευρον ταὐτὸ καὶ ἓν σχῆμα ὅτι ἄμφω τρίγωνα· τρίγωνα δ’ οὐ ταὐτά. ἔτι δὲ ἓν λέγεται ὅσων ὁ λόγος ὁ τὸ τί ἦν εἶναι λέγων ἀδιαίρετος πρὸς ἄλλον τὸν δηλοῦντα τί ἦν εἶναι τὸ πρᾶγμα (αὐτὸς γὰρ καθ’ αὑτὸν [35] πᾶς λόγος διαιρετός). οὕτω γὰρ καὶ τὸ ηὐξημένον καὶ φθῖνον ἕν ἐστιν, ὅτι ὁ λόγος εἷς, ὥσπερ ἐπὶ τῶν ἐπιπέδων ὁ τοῦ εἴδους. [1] ὅλως δὲ ὧν ἡ νόησις ἀδιαίρετος ἡ νοοῦσα τὸ τί ἦν εἶναι, καὶ μὴ δύναται χωρίσαι μήτε χρόνῳ μήτε τόπῳ μήτε λόγῳ, μάλιστα ταῦτα ἕν, καὶ τούτων ὅσα οὐσίαι· καθόλου γὰρ ὅσα μὴ ἔχει διαίρεσιν, ᾗ μὴ ἔχει, ταύτῃ ἓν λέγεται, [5] οἷον εἰ ᾗ ἄνθρωπος μὴ ἔχει διαίρεσιν, εἷς ἄνθρωπος, εἰ δ’ ᾗ ζῷον, ἓν ζῷον, εἰ δὲ ᾗ μέγεθος, ἓν μέγεθος. τὰ μὲν οὖν πλεῖστα ἓν λέγεται τῷ ἕτερόν τι ἢ ποιεῖν ἢ ἔχειν ἢ πάσχειν ἢ πρός τι εἶναι ἕν, τὰ δὲ πρώτως λεγόμενα ἓν ὧν ἡ οὐσία μία, μία δὲ ἢ συνεχείᾳ ἢ εἴδει ἢ λόγῳ· καὶ γὰρ [10] ἀριθμοῦμεν ὡς πλείω ἢ τὰ μὴ συνεχῆ ἢ ὧν μὴ ἓν τὸ εἶδος ἢ ὧν ὁ λόγος μὴ εἷς. ἔτι δ’ ἔστι μὲν ὡς ὁτιοῦν ἕν φαμεν εἶναι ἂν ᾗ ποσὸν καὶ συνεχές, ἔστι δ’ ὡς οὔ, ἂν μή τι ὅλον ᾗ, τοῦτο δὲ ἂν μὴ τὸ εἶδος ἔχῃ ἕν· οἷον οὐκ ἂν φαῖμεν ὁμοίως ἓν ἰδόντες ὁπωσοῦν τὰ μέρη συγκείμενα τοῦ ὑποδήματος, [15] ἐὰν μὴ διὰ τὴν συνέχειαν, ἀλλ’ ἐὰν οὕτως ὥστε ὑπόδημα εἶναι καὶ εἶδός τι ἔχειν ἤδη ἕν· διὸ καὶ ἡ τοῦ κύκλου μάλιστα μία τῶν γραμμῶν, ὅτι ὅλη καὶ τέλειός ἐστιν.—τὸ δὲ ἑνὶ εἶναι ἀρχῇ τινί ἐστιν ἀριθμοῦ εἶναι· τὸ γὰρ πρῶτον μέτρον ἀρχή, ᾧ γὰρ πρώτῳ γνωρίζομεν, τοῦτο πρῶτον μέτρον [20] ἑκάστου γένους· ἀρχὴ οὖν τοῦ γνωστοῦ περὶ ἕκαστον τὸ ἕν. οὐ ταὐτὸ δὲ ἐν πᾶσι τοῖς γένεσι τὸ ἕν. ἔνθα μὲν γὰρ δίεσις ἔνθα δὲ τὸ φωνῆεν ἢ ἄφωνον· βάρους δὲ ἕτερον καὶ κινήσεως ἄλλο. πανταχοῦ δὲ τὸ ἓν ἢ τῷ ποσῷ ἢ τῷ εἴδει ἀδιαίρετον. τὸ μὲν οὖν κατὰ τὸ ποσὸν ἀδιαίρετον, [25] τὸ μὲν πάντῃ καὶ ἄθετον λέγεται μονάς, τὸ δὲ πάντῃ καὶ θέσιν ἔχον στιγμή, τὸ δὲ μοναχῇ γραμμή, τὸ δὲ διχῇ ἐπίπεδον, τὸ δὲ πάντῃ καὶ τριχῇ διαιρετὸν κατὰ τὸ ποσὸν σῶμα· καὶ ἀντιστρέψαντι δὴ τὸ μὲν διχῇ διαιρετὸν ἐπίπεδον, τὸ δὲ μοναχῇ γραμμή, τὸ δὲ μηδαμῇ διαιρετὸν κατὰ [30] τὸ ποσὸν στιγμὴ καὶ μονάς, ἡ μὲν ἄθετος μονὰς ἡ δὲ θετὸς στιγμή. ἔτι δὲ τὰ μὲν κατ’ ἀριθμόν ἐστιν ἕν, τὰ δὲ κατ’ εἶδος, τὰ δὲ κατὰ γένος, τὰ δὲ κατ’ ἀναλογίαν, ἀριθμῷ μὲν ὧν ἡ ὕλη μία, εἴδει δ’ ὧν ὁ λόγος εἷς, γένει δ’ ὧν τὸ αὐτὸ σχῆμα τῆς κατηγορίας, κατ’ ἀναλογίαν

δὲ ὅσα ἔχει ὡς [35] ἄλλο πρὸς ἄλλο. ἀεὶ δὲ τὰ ὕστερα τοῖς ἔμπροσθεν ἀκολουθεῖ, οἷον ὅσα ἀριθμῷ καὶ εἴδει ἕν, ὅσα δ’ εἴδει οὐ πάντα ἀριθμῷ· [1] ἀλλὰ γένει πάντα ἓν ὅσαπερ καὶ εἴδει, ὅσα δὲ γένει οὐ πάντα [2] εἴδει ἀλλ’ ἀναλογίᾳ· ὅσα δὲ ἀνολογίᾳ οὐ πάντα γένει. φανερὸν δὲ καὶ ὅτι τὰ πολλὰ ἀντικειμένως λεχθήσεται τῷ ἑνί· τὰ μὲν γὰρ τῷ μὴ συνεχῆ εἶναι, τὰ δὲ τῷ διαιρετὴν [5] ἔχειν τὴν ὕλην κατὰ τὸ εἶδος, ἢ τὴν πρώτην ἢ τὴν τελευταίαν, τὰ δὲ τῷ τοὺς λόγους πλείους τοὺς τί ἦν εἶναι λέγοντας.

τὸ ὂν λέγεται τὸ μὲν κατὰ συμβεβηκὸς τὸ δὲ καθ’ αὑτό, κατὰ συμβεβηκὸς μέν, οἷον τὸν δίκαιον μουσικὸν εἶναί φαμεν καὶ τὸν ἄνθρωπον μουσικὸν καὶ τὸν μουσικὸν [10] ἄνθρωπον, παραπλησίως λέγοντες ὡσπερεὶ τὸν μουσικὸν οἰκοδομεῖν ὅτι συμβέβηκε τῷ οἰκοδόμῳ μουσικῷ εἶναι ἢ τῷ μουσικῷ οἰκοδόμῳ (τὸ γὰρ τόδε εἶναι τόδε σημαίνει τὸ συμβεβηκέναι τῷδε τόδε),—οὕτω δὲ καὶ ἐπὶ τῶν εἰρημένων· τὸν γὰρ ἄνθρωπον ὅταν μουσικὸν λέγωμεν καὶ τὸν μουσικὸν ἄνθρωπον, [15] ἢ τὸν λευκὸν μουσικὸν ἢ τοῦτον λευκόν, τὸ μὲν ὅτι ἄμφω τῷ αὐτῷ συμβεβήκασι, τὸ δ’ ὅτι τῷ ὄντι συμβέβηκε, τὸ δὲ μουσικὸν ἄνθρωπον ὅτι τούτῳ τὸ μουσικὸν συμβέβηκεν (οὕτω δὲ λέγεται καὶ τὸ μὴ λευκὸν εἶναι, ὅτι ᾧ συμβέβηκεν, ἐκεῖνο ἔστιν)·—τὰ μὲν οὖν κατὰ συμβεβηκὸς [20] εἶναι λεγόμενα οὕτω λέγεται ἢ διότι τῷ αὐτῷ ὄντι ἄμφω ὑπάρχει, ἢ ὅτι ὄντι ἐκείνῳ ὑπάρχει, ἢ ὅτι αὐτὸ ἔστιν ᾧ ὑπάρχει οὗ αὐτὸ κατηγορεῖται· καθ’ αὑτὰ δὲ εἶναι λέγεται ὅσαπερ σημαίνει τὰ σχήματα τῆς κατηγορίας· ὁσαχῶς γὰρ λέγεται, τοσαυταχῶς τὸ εἶναι σημαίνει. ἐπεὶ οὖν τῶν [25] κατηγορουμένων τὰ μὲν τί ἐστι σημαίνει, τὰ δὲ ποιόν, τὰ δὲ ποσόν, τὰ δὲ πρός τι, τὰ δὲ ποιεῖν ἢ πάσχειν, τὰ δὲ πού, τὰ δὲ ποτέ, ἑκάστῳ τούτων τὸ εἶναι ταὐτὸ σημαίνει· οὐθὲν γὰρ διαφέρει τὸ ἄνθρωπος ὑγιαίνων ἐστὶν ἢ τὸ ἄνθρωπος ὑγιαίνει, οὐδὲ τὸ ἄνθρωπος βαδίζων ἐστὶν ἢ τέμνων τοῦ ἄνθρωπος [30] βαδίζει ἢ τέμνει, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ἔτι τὸ εἶναι σημαίνει καὶ τὸ ἔστιν ὅτι ἀληθές, τὸ δὲ μὴ εἶναι ὅτι οὐκ ἀληθὲς ἀλλὰ ψεῦδος, ὁμοίως ἐπὶ καταφάσεως καὶ ἀποφάσεως, οἷον ὅτι ἔστι Σωκράτης μουσικός, ὅτι ἀληθὲς τοῦτο, ἢ ὅτι ἔστι Σωκράτης οὐ λευκός, ὅτι ἀληθές· τὸ δ’ οὐκ [35] ἔστιν ἡ διάμετρος σύμμετρος, ὅτι ψεῦδος. [1] ἔτι τὸ εἶναι σημαίνει καὶ τὸ ὂν τὸ μὲν δυνάμει ῥητὸν τὸ δ’ ἐντελεχείᾳ τῶν εἰρημένων τούτων· ὁρῶν τε γὰρ εἶναί φαμεν καὶ τὸ δυνάμει ὁρῶν καὶ τὸ ἐντελεχείᾳ, καὶ τὸ ἐπίστασθαι ὡσαύτως καὶ τὸ δυνάμενον χρῆσθαι τῇ ἐπιστήμῃ καὶ τὸ [5] χρώμενον, καὶ ἠρεμοῦν καὶ ᾧ ἤδη ὑπάρχει ἠρεμία καὶ τὸ δυνάμενον ἠρεμεῖν. ὁμοίως δὲ καὶ ἐπὶ τῶν οὐσιῶν· καὶ γὰρ Ἑρμῆν ἐν τῷ λίθῳ φαμὲν εἶναι, καὶ τὸ ἥμισυ τῆς γραμμῆς, καὶ σῖτον τὸν μήπω ἁδρόν. πότε δὲ δυνατὸν καὶ πότε οὔπω, ἐν ἄλλοις διοριστέον.

[10] οὐσία λέγεται τά τε ἁπλᾶ σώματα, οἷον γῆ καὶ πῦρ καὶ ὕδωρ καὶ ὅσα τοιαῦτα, καὶ ὅλως σώματα καὶ τὰ ἐκ τούτων συνεστῶτα ζῷά τε καὶ δαιμόνια καὶ τὰ μόρια τούτων· ἅπαντα δὲ ταῦτα λέγεται οὐσία ὅτι οὐ καθ’ ὑποκειμένου λέγεται ἀλλὰ κατὰ τούτων τὰ ἄλλα. ἄλλον δὲ [15] τρόπον ὃ ἂν ᾖ αἴτιον τοῦ εἶναι, ἐνυπάρχον ἐν τοῖς τοιούτοις ὅσα μὴ λέγεται καθ’ ὑποκειμένου, οἷον ἡ ψυχὴ τῷ ζῴῳ. ἔτι ὅσα μόρια ἐνυπάρχοντά ἐστιν ἐν τοῖς τοιούτοις ὁρίζοντά τε καὶ τόδε τι σημαίνοντα, ὧν ἀναιρουμένων ἀναιρεῖται τὸ ὅλον, οἷον ἐπιπέδου σῶμα, ὥς φασί τινες, καὶ ἐπίπεδον [20] γραμμῆς· καὶ ὅλως ὁ ἀριθμὸς δοκεῖ εἶναί τισι τοιοῦτος (ἀναιρουμένου τε γὰρ οὐδὲν εἶναι, καὶ ὁρίζειν πάντα)· ἔτι τὸ τί ἦν εἶναι, οὗ ὁ λόγος ὁρισμός, καὶ τοῦτο οὐσία λέγεται ἑκάστου. συμβαίνει δὴ κατὰ δύο τρόπους τὴν οὐσίαν λέγεσθαι, τό θ’ ὑποκείμενον ἔσχατον, ὃ μηκέτι κατ’ ἄλλου λέγεται, καὶ ὃ [25] ἂν τόδε τι ὂν καὶ χωριστὸν ᾖ· τοιοῦτον δὲ ἑκάστου ἡ μορφὴ καὶ τὸ εἶδος.

ταὐτὰ λέγεται τὰ μὲν κατὰ συμβεβηκός, οἷον τὸ λευκὸν καὶ τὸ μουσικὸν τὸ αὐτὸ ὅτι τῷ αὐτῷ συμβέβηκε, καὶ ἄνθρωπος καὶ μουσικὸν ὅτι θάτερον θατέρῳ συμβέβηκεν, [30] τὸ δὲ μουσικὸν ἄνθρωπος ὅτι τῷ ἀνθρώπῳ συμβέβηκεν· ἑκατέρῳ δὲ τοῦτο καὶ τούτῳ ἑκάτερον ἐκείνων, καὶ γὰρ

τῷ ἀνθρώπῳ τῷ μουσικῷ καὶ ὁ ἄνθρωπος καὶ τὸ μουσικὸν ταὐτὸ λέγεται, καὶ τούτοις ἐκεῖνο (διὸ καὶ πάντα ταῦτα καθόλου οὐ λέγεται· οὐ γὰρ ἀληθὲς εἰπεῖν ὅτι πᾶς ἄνθρωπος ταὐτὸ [35] καὶ τὸ μουσικόν· τὰ γὰρ καθόλου καθ' αὑτὰ ὑπάρχει, τὰ δὲ συμβεβηκότα οὐ καθ' αὑτά· [1] ἀλλ' ἐπὶ τῶν καθ' ἕκαστα ἁπλῶς λέγεται· ταὐτὸ γὰρ δοκεῖ Σωκράτης καὶ Σωκράτης εἶναι μουσικός· τὸ δὲ Σωκράτης οὐκ ἐπὶ πολλῶν, διὸ οὐ πᾶς Σωκράτης λέγεται ὥσπερ πᾶς ἄνθρωπος)·—καὶ τὰ μὲν οὕτως [5] λέγεται ταὐτά, τὰ δὲ καθ' αὑτὰ ὁσαχῶσπερ καὶ τὸ ἕν· καὶ γὰρ ὧν ἡ ὕλη μία ἢ εἴδει ἢ ἀριθμῷ ταὐτὰ λέγεται καὶ ὧν ἡ οὐσία μία, ὥστε φανερὸν ὅτι ἡ ταυτότης ἑνότης τίς ἐστιν ἢ πλειόνων τοῦ εἶναι ἢ ὅταν χρῆται ὡς πλείοσιν, οἷον ὅταν λέγῃ αὐτὸ αὑτῷ ταὐτόν· ὡς δυσὶ γὰρ χρῆται αὐτῷ.—ἕτερα [10] δὲ λέγεται ὧν ἢ τὰ εἴδη πλείω ἢ ἡ ὕλη ἢ ὁ λόγος τῆς οὐσίας· καὶ ὅλως ἀντικειμένως τῷ ταὐτῷ λέγεται τὸ ἕτερον.

διάφορα δὲ λέγεται ὅσ' ἕτερά ἐστι τὸ αὐτό τι ὄντα, μὴ μόνον ἀριθμῷ ἀλλ' ἢ εἴδει ἢ γένει ἢ ἀναλογίᾳ· ἔτι ὧν ἕτερον τὸ γένος, καὶ τὰ ἐναντία, καὶ ὅσα ἔχει ἐν τῇ οὐσίᾳ [15] τὴν ἑτερότητα. ὅμοια λέγεται τά τε πάντῃ ταὐτὸ πεπονθότα, καὶ τὰ πλείω ταὐτὰ πεπονθότα ἢ ἕτερα, καὶ ὧν ἡ ποιότης μία· καὶ καθ' ὅσα ἀλλοιοῦσθαι ἐνδέχεται τῶν ἐναντίων, τούτων τὸ πλείω ἔχον ἢ κυριώτερα ὅμοιον τούτῳ. ἀντικειμένως δὲ τοῖς ὁμοίοις τὰ ἀνόμοια.

[20] ἀντικείμενα λέγεται ἀντίφασις καὶ τἀναντία καὶ τὰ πρός τι καὶ στέρησις καὶ ἕξις καὶ ἐξ ὧν καὶ εἰς ἃ ἔσχατα αἱ γενέσεις καὶ φθοραί· καὶ ὅσα μὴ ἐνδέχεται ἅμα παρεῖναι τῷ ἀμφοῖν δεκτικῷ, ταῦτα ἀντικεῖσθαι λέγεται ἢ αὐτὰ ἢ ἐξ ὧν ἐστίν. φαιὸν γὰρ καὶ λευκὸν ἅμα τῷ [25] αὐτῷ οὐχ ὑπάρχει· διὸ ἐξ ὧν ἐστὶν ἀντίκειται. ἐναντία λέγεται τά τε μὴ δυνατὰ ἅμα τῷ αὐτῷ παρεῖναι τῶν διαφερόντων κατὰ γένος, καὶ τὰ πλεῖστον διαφέροντα τῶν ἐν τῷ αὐτῷ γένει, καὶ τὰ πλεῖστον διαφέροντα τῶν ἐν ταὐτῷ δεκτικῷ, καὶ τὰ πλεῖστον διαφέροντα τῶν ὑπὸ τὴν αὐτὴν [30] δύναμιν, καὶ ὧν ἡ διαφορὰ μεγίστη ἢ ἁπλῶς ἢ κατὰ γένος ἢ κατ' εἶδος. τὰ δ' ἄλλα ἐναντία λέγεται τὰ μὲν τῷ τὰ τοιαῦτα ἔχειν, τὰ δὲ τῷ δεκτικὰ εἶναι τῶν τοιούτων, τὰ δὲ τῷ ποιητικὰ ἢ παθητικὰ εἶναι τῶν τοιούτων, ἢ ποιοῦντα ἢ πάσχοντα, ἢ ἀποβολαὶ ἢ λήψεις, ἢ ἕξεις ἢ στερήσεις [35] εἶναι τῶν τοιούτων. ἐπεὶ δὲ τὸ ἓν καὶ τὸ ὂν πολλαχῶς λέγεται, ἀκολουθεῖν ἀνάγκη καὶ τἆλλα ὅσα κατὰ ταῦτα λέγεται, ὥστε καὶ τὸ ταὐτὸν καὶ τὸ ἕτερον καὶ τὸ ἐναντίον, ὥστ' εἶναι ἕτερον καθ' ἑκάστην κατηγορίαν.—ἕτερα δὲ τῷ εἴδει λέγεται ὅσα τε ταὐτοῦ γένους ὄντα μὴ ὑπάλληλά ἐστι, [1] καὶ ὅσα ἐν τῷ αὐτῷ γένει ὄντα διαφορὰν ἔχει, καὶ ὅσα ἐν τῇ οὐσίᾳ ἐναντίωσιν ἔχει· καὶ τὰ ἐναντία ἕτερα τῷ εἴδει ἀλλήλων ἢ πάντα ἢ τὰ λεγόμενα πρώτως, καὶ ὅσων ἐν τῷ [5] τελευταίῳ τοῦ γένους εἴδει οἱ λόγοι ἕτεροι (οἷον ἄνθρωπος καὶ ἵππος ἄτομα τῷ γένει οἱ δὲ λόγοι ἕτεροι αὐτῶν), καὶ ὅσα ἐν τῇ αὐτῇ οὐσίᾳ ὄντα ἔχει διαφοράν. ταὐτὰ δὲ τῷ εἴδει τὰ ἀντικειμένως λεγόμενα τούτοις.

πρότερα καὶ ὕστερα λέγεται ἔνια μέν, ὡς ὄντος τινὸς [10] πρώτου καὶ ἀρχῆς ἐν ἑκάστῳ γένει, τῷ ἐγγύτερον εἶναι ἀρχῆς τινὸς ὡρισμένης ἢ ἁπλῶς καὶ τῇ φύσει ἢ πρός τι ἢ ποὺ ἢ ὑπό τινων, οἷον τὰ μὲν κατὰ τόπον τῷ εἶναι ἐγγύτερον ἢ φύσει τινὸς τόπου ὡρισμένου (οἷον τοῦ μέσου ἢ τοῦ ἐσχάτου) ἢ πρὸς τὸ τυχόν, τὸ δὲ πορρώτερον ὕστερον· τὰ δὲ κατὰ [15] χρόνον (τὰ μὲν γὰρ τῷ πορρώτερον τοῦ νῦν, οἷον ἐπὶ τῶν γενομένων, πρότερον γὰρ τὰ Τρωϊκὰ τῶν Μηδικῶν ὅτι πορρώτερον ἀπέχει τοῦ νῦν· τὰ δὲ τῷ ἐγγύτερον τοῦ νῦν, οἷον ἐπὶ τῶν μελλόντων, πρότερον γὰρ Νέμεα Πυθίων ὅτι ἐγγύτερον τοῦ νῦν τῷ νῦν ὡς ἀρχῇ καὶ πρώτῳ χρησαμένων)· τὰ [20] δὲ κατὰ κίνησιν (τὸ γὰρ ἐγγύτερον τοῦ πρώτου κινήσαντος πρότερον, οἷον παῖς ἀνδρός· ἀρχὴ δὲ καὶ αὕτη τις ἁπλῶς)· τὰ δὲ κατὰ δύναμιν (τὸ γὰρ ὑπερέχον τῇ δυνάμει πρότερον, καὶ τὸ δυνατώτερον· τοιοῦτον δ' ἐστὶν οὗ κατὰ τὴν προαίρεσιν ἀνάγκη ἀκολουθεῖν θάτερον καὶ τὸ ὕστερον, ὥστε μὴ κινοῦντός [25] τε ἐκείνου μὴ κινεῖσθαι καὶ κινοῦντος κινεῖσθαι· ἡ δὲ προαίρεσις ἀρχή)· τὰ δὲ κατὰ τάξιν (ταῦτα δ' ἐστὶν ὅσα πρός τι ἓν ὡρισμένον διέστηκε κατά τινα

λόγον, οἷον παραστάτης τριτοστάτου πρότερον καὶ παρανήτη νήτης· ἔνθα μὲν γὰρ ὁ κορυφαῖος ἔνθα δὲ ἡ μέση ἀρχή)·—ταῦτα μὲν οὖν πρότερα [30] τοῦτον λέγεται τὸν τρόπον, ἄλλον δὲ τρόπον τὸ τῇ γνώσει πρότερον ὡς καὶ ἁπλῶς πρότερον. τούτων δὲ ἄλλως τὰ κατὰ τὸν λόγον καὶ τὰ κατὰ τὴν αἴσθησιν. κατὰ μὲν γὰρ τὸν λόγον τὰ καθόλου πρότερα κατὰ δὲ τὴν αἴσθησιν τὰ καθ’ ἕκαστα· καὶ κατὰ τὸν λόγον δὲ τὸ συμβεβηκὸς τοῦ ὅλου [35] πρότερον, οἷον τὸ μουσικὸν τοῦ μουσικοῦ ἀνθρώπου· οὐ γὰρ ἔσται ὁ λόγος ὅλος ἄνευ τοῦ μέρους· καίτοι οὐκ ἐνδέχεται μουσικὸν εἶναι μὴ ὄντος μουσικοῦ τινός. ἔτι πρότερα λέγεται τὰ τῶν προτέρων πάθη, οἷον εὐθύτης λειότητος· τὸ μὲν γὰρ γραμμῆς καθ’ αὐτὴν πάθος τὸ δὲ ἐπιφανείας. [1] τὰ μὲν δὴ οὕτω λέγεται πρότερα καὶ ὕστερα, τὰ δὲ κατὰ φύσιν καὶ οὐσίαν, ὅσα ἐνδέχεται εἶναι ἄνευ ἄλλων, ἐκεῖνα δὲ ἄνευ ἐκείνων μή· ᾗ διαιρέσει ἐχρήσατο Πλάτων. (ἐπεὶ δὲ τὸ εἶναι [5] πολλαχῶς, πρῶτον μὲν τὸ ὑποκείμενον πρότερον, διὸ ἡ οὐσία πρότερον, ἔπειτα ἄλλως τὰ κατὰ δύναμιν καὶ κατ’ ἐντελέχειαν· τὰ μὲν γὰρ κατὰ δύναμιν πρότερά ἐστι τὰ δὲ κατὰ ἐντελέχειαν, οἷον κατὰ δύναμιν μὲν ἡ ἡμίσεια τῆς ὅλης καὶ τὸ μόριον τοῦ ὅλου καὶ ἡ ὕλη τῆς οὐσίας, κατ’ [10] ἐντελέχειαν δ’ ὕστερον· διαλυθέντος γὰρ κατ’ ἐντελέχειαν ἔσται.) τρόπον δή τινα πάντα τὰ πρότερον καὶ ὕστερον λεγόμενα κατὰ ταῦτα λέγεται· τὰ μὲν γὰρ κατὰ γένεσιν ἐνδέχεται ἄνευ τῶν ἑτέρων εἶναι, οἷον τὸ ὅλον τῶν μορίων, τὰ δὲ κατὰ φθοράν, οἷον τὸ μόριον τοῦ ὅλου. ὁμοίως δὲ καὶ τἆλλα.

[15] δύναμις λέγεται ἡ μὲν ἀρχὴ κινήσεως ἢ μεταβολῆς ἡ ἐν ἑτέρῳ ἢ ᾗ ἕτερον, οἷον ἡ οἰκοδομικὴ δύναμίς ἐστιν ἣ οὐχ ὑπάρχει ἐν τῷ οἰκοδομουμένῳ, ἀλλ’ ἡ ἰατρικὴ δύναμις οὖσα ὑπάρχοι ἂν ἐν τῷ ἰατρευομένῳ, ἀλλ’ οὐχ ᾗ ἰατρευόμενος. ἡ μὲν οὖν ὅλως ἀρχὴ μεταβολῆς ἢ κινήσεως λέγεται δύναμις [20] ἐν ἑτέρῳ ἢ ᾗ ἕτερον, ἡ δ’ ὑφ’ ἑτέρου ἢ ᾗ ἕτερον (καθ’ ἣν γὰρ τὸ πάσχον πάσχει τι, ὁτὲ μὲν ἐὰν ὁτιοῦν, δυνατὸν αὐτό φαμεν εἶναι παθεῖν, ὁτὲ δ’ οὐ κατὰ πᾶν πάθος ἀλλ’ ἂν ἐπὶ τὸ βέλτιον)· ἔτι ἡ τοῦ καλῶς τοῦτ’ ἐπιτελεῖν ἢ κατὰ προαίρεσιν· ἐνίοτε γὰρ τοὺς μόνον ἂν πορευθέντας ἢ εἰπόντας, μὴ [25] καλῶς δὲ ἢ μὴ ὡς προείλοντο, οὗ φαμεν δύνασθαι λέγειν ἢ βαδίζειν· ὁμοίως δὲ καὶ ἐπὶ τοῦ πάσχειν. ἔτι ὅσαι ἕξεις καθ’ ἃς ἀπαθῆ ὅλως ἢ ἀμετάβλητα ἢ μὴ ῥᾳδίως ἐπὶ τὸ χεῖρον εὐμετακίνητα, δυνάμεις λέγονται· κλᾶται μὲν γὰρ καὶ συντρίβεται καὶ κάμπτεται καὶ ὅλως φθείρεται οὐ τῷ [30] δύνασθαι ἀλλὰ τῷ μὴ δύνασθαι καὶ ἐλλείπειν τινός· ἀπαθῆ δὲ τῶν τοιούτων ἃ μόλις καὶ ἠρέμα πάσχει διὰ δύναμιν καὶ τῷ δύνασθαι καὶ τῷ ἔχειν πώς. λεγομένης δὲ τῆς δυνάμεως τοσαυταχῶς, καὶ τὸ δυνατὸν ἕνα μὲν τρόπον λεχθήσεται τὸ ἔχον κινήσεως ἀρχὴν ἢ μεταβολῆς (καὶ γὰρ [35] τὸ στατικὸν δυνατόν τι) ἐν ἑτέρῳ ἢ ᾗ ἕτερον, ἕνα δ’ ἐὰν ἔχῃ τι αὐτοῦ ἄλλο δύναμιν τοιαύτην, [1] ἕνα δ’ ἐὰν ἔχῃ μεταβάλλειν ἐφ’ ὁτιοῦν δύναμιν, εἴτ’ ἐπὶ τὸ χεῖρον εἴτ’ ἐπὶ τὸ βέλτιον (καὶ γὰρ τὸ φθειρόμενον δοκεῖ δυνατὸν εἶναι φθείρεσθαι, ἢ οὐκ ἂν φθαρῆναι εἰ ἦν ἀδύνατον· νῦν δὲ ἔχει τινὰ [5] διάθεσιν καὶ αἰτίαν καὶ ἀρχὴν τοῦ τοιούτου πάθους· ὁτὲ μὲν δὴ τῷ ἔχειν τι δοκεῖ, ὁτὲ δὲ τῷ ἐστερῆσθαι τοιοῦτον εἶναι· εἰ δ’ ἡ στέρησίς ἐστιν ἕξις πως, πάντα τῷ ἔχειν ἂν εἴη τι, εἰ δὲ μὴ ὥστε τῷ τε ἔχειν ἕξιν τινὰ καὶ ἀρχήν ἐστι δυνατὸν ὁμωνύμως καὶ τῷ ἔχειν τὴν τούτου στέρησιν, εἰ ἐνδέχεται [10] ἔχειν στέρησιν· εἰ δὲ μή, ὁμωνύμως)· ἕνα δὲ τῷ μὴ ἔχειν αὐτοῦ δύναμιν ἢ ἀρχὴν ἄλλο ἢ ᾗ ἄλλο φθαρτικήν. ἔτι δὲ ταῦτα πάντα ἢ τῷ μόνον ἂν συμβῆναι γενέσθαι ἢ μὴ γενέσθαι, ἢ τῷ καλῶς. καὶ γὰρ ἐν τοῖς ἀψύχοις ἔνεστιν ἡ τοιαύτη δύναμις, οἷον ἐν τοῖς ὀργάνοις· τὴν μὲν γὰρ δύνασθαί φασι [15] φθέγγεσθαι λύραν, τὴν δ’ οὐδέν, ἂν ᾗ μὴ εὔφωνος. ἀδυναμία δὲ ἐστὶ στέρησις δυνάμεως καὶ τῆς τοιαύτης ἀρχῆς οἵα εἴρηται, ἢ ὅλως ἢ τῷ πεφυκότι ἔχειν, ἢ καὶ ὅτε πέφυκεν ἤδη ἔχειν· οὐ γὰρ ὁμοίως ἂν φαῖεν ἀδύνατον εἶναι γεννᾶν παῖδα καὶ ἄνδρα καὶ εὐνοῦχον. ἔτι δὲ καθ’ ἑκατέραν [20] δύναμιν ἔστιν ἀδυναμία ἀντικειμένη, τῇ τε μόνον κινητικῇ καὶ τῇ καλῶς κινητικῇ. καὶ ἀδύνατα δὴ τὰ μὲν κατὰ τὴν ἀδυναμίαν ταύτην λέγεται, τὰ δὲ ἄλλον τρόπον, οἷον δυνατόν τε καὶ ἀδύνατον, ἀδύνατον μὲν οὗ τὸ ἐναντίον ἐξ ἀνάγκης ἀληθές (οἷον τὸ τὴν διάμετρον σύμμετρον εἶναι [25]

ἀδύνατον ὅτι ψεῦδος τὸ τοιοῦτον οὗ τὸ ἐναντίον οὐ μόνον ἀληθὲς ἀλλὰ καὶ ἀνάγκη ἀσύμμετρον εἶναι· τὸ ἄρα σύμμετρον οὐ μόνον ψεῦδος ἀλλὰ καὶ ἐξ ἀνάγκης ψεῦδος)· τὸ δ’ ἐναντίον τούτῳ, τὸ δυνατόν, ὅταν μὴ ἀναγκαῖον ᾖ τὸ ἐναντίον ψεῦδος εἶναι, οἷον τὸ καθῆσθαι ἄνθρωπον δυνατόν· οὐ [30] γὰρ ἐξ ἀνάγκης τὸ μὴ καθῆσθαι ψεῦδος. τὸ μὲν οὖν δυνατὸν ἕνα μὲν τρόπον, ὥσπερ εἴρηται, τὸ μὴ ἐξ ἀνάγκης ψεῦδος σημαίνει, ἕνα δὲ τὸ ἀληθές εἶναι, ἕνα δὲ τὸ ἐνδεχόμενον ἀληθὲς εἶναι. κατὰ μεταφορὰν δὲ ἡ ἐν γεωμετρίᾳ λέγεται δύναμις. ταῦτα μὲν οὖν τὰ δυνατὰ οὐ κατὰ δύναμιν· [35] τὰ δὲ λεγόμενα κατὰ δύναμιν πάντα λέγεται πρὸς τὴν πρώτην μίαν· [1] αὕτη δ’ ἐστὶν ἀρχὴ μεταβολῆς ἐν ἄλλῳ ἢ ᾗ ἄλλο. τὰ γὰρ ἄλλα λέγεται δυνατὰ τῷ τὰ μὲν ἔχειν αὐτῶν ἄλλο τι τοιαύτην δύναμιν τὰ δὲ μὴ ἔχειν τὰ δὲ ὠδὶ ἔχειν. ὁμοίως δὲ καὶ τὰ ἀδύνατα. ὥστε ὁ κύριος ὅρος [5] τῆς πρώτης δυνάμεως ἂν εἴη ἀρχὴ μεταβλητικὴ ἐν ἄλλῳ ἢ ᾗ ἄλλο.

ποσὸν λέγεται τὸ διαιρετὸν εἰς ἐνυπάρχοντα ὧν ἑκάτερον ἢ ἕκαστον ἕν τι καὶ τόδε τι πέφυκεν εἶναι. πλῆθος μὲν οὖν ποσόν τι ἐὰν ἀριθμητὸν ᾖ, μέγεθος δὲ ἂν μετρητὸν [10] ᾖ. λέγεται δὲ πλῆθος μὲν τὸ διαιρετὸν δυνάμει εἰς μὴ συνεχῆ, μέγεθος δὲ τὸ εἰς συνεχῆ· μεγέθους δὲ τὸ μὲν ἐφ’ ἓν συνεχὲς μῆκος τὸ δ’ ἐπὶ δύο πλάτος τὸ δ’ ἐπὶ τρία βάθος. τούτων δὲ πλῆθος μὲν τὸ πεπερασμένον ἀριθμὸς μῆκος δὲ γραμμὴ πλάτος δὲ ἐπιφάνεια βάθος δὲ σῶμα. ἔτι τὰ [15] μὲν λέγεται καθ’ αὑτὰ ποσά, τὰ δὲ κατὰ συμβεβηκός, οἷον ἡ μὲν γραμμὴ ποσόν τι καθ’ ἑαυτό, τὸ δὲ μουσικὸν κατὰ συμβεβηκός. τῶν δὲ καθ’ αὑτὰ τὰ μὲν κατ’ οὐσίαν ἐστίν, οἷον ἡ γραμμὴ ποσόν τι (ἐν γὰρ τῷ λόγῳ τῷ [19] τί ἐστι λέγοντι τὸ ποσόν τι ὑπάρχει), τὰ δὲ πάθη καὶ ἕξεις [20] τῆς τοιαύτης ἐστὶν οὐσίας, οἷον τὸ πολὺ καὶ τὸ ὀλίγον, καὶ μακρὸν καὶ βραχύ, καὶ πλατὺ καὶ στενόν, καὶ βαθὺ καὶ ταπεινόν, καὶ βαρὺ καὶ κοῦφον, καὶ τὰ ἄλλα τὰ τοιαῦτα. ἔστι δὲ καὶ τὸ μέγα καὶ τὸ μικρὸν καὶ μεῖζον καὶ ἔλαττον, καὶ καθ’ αὑτὰ καὶ πρὸς ἄλληλα λεγόμενα, τοῦ [25] ποσοῦ πάθη καθ’ αὑτά· μεταφέρονται μέντοι καὶ ἐπ’ ἄλλα ταῦτα τὰ ὀνόματα. τῶν δὲ κατὰ συμβεβηκὸς λεγομένων ποσῶν τὰ μὲν οὕτως λέγεται ὥσπερ ἐλέχθη ὅτι τὸ μουσικὸν ποσὸν καὶ τὸ λευκὸν τῷ εἶναι ποσόν τι ᾧ ὑπάρχουσι, τὰ δὲ ὡς κίνησις καὶ χρόνος· καὶ γὰρ ταῦτα πόσ’ ἄττα λέγεται [30] καὶ συνεχῆ τῷ ἐκεῖνα διαιρετὰ εἶναι ὧν ἐστὶ ταῦτα πάθη. λέγω δὲ οὐ τὸ κινούμενον ἀλλ’ ὃ ἐκινήθη· τῷ γὰρ ποσὸν εἶναι ἐκεῖνο καὶ ἡ κίνησις ποσή, ὁ δὲ χρόνος τῷ ταύτην.

τὸ ποιὸν λέγεται ἕνα μὲν τρόπον ἡ διαφορὰ τῆς οὐσίας, οἷον ποιόν τι ἄνθρωπος ζῷον ὅτι δίπουν, ἵππος δὲ τετράπουν, [35] καὶ κύκλος ποιόν τι σχῆμα ὅτι ἀγώνιον, ὡς τῆς διαφορᾶς τῆς κατὰ τὴν οὐσίαν ποιότητος οὔσης· [1] —ἕνα μὲν δὴ τρόπον τοῦτον λέγεται ἡ ποιότης διαφορὰ οὐσίας, ἕνα δὲ ὡς τὰ ἀκίνητα καὶ τὰ μαθηματικά, ὥσπερ οἱ ἀριθμοὶ ποιοί τινες, οἷον οἱ σύνθετοι καὶ μὴ μόνον ἐφ’ ἓν ὄντες ἀλλ’ ὧν μίμημα [5] τὸ ἐπίπεδον καὶ τὸ στερεόν (οὗτοι δ’ εἰσὶν οἱ ποσάκις ποσοὶ ἢ ποσάκις ποσάκις ποσοί), καὶ ὅλως ὃ παρὰ τὸ ποσὸν ὑπάρχει ἐν τῇ οὐσίᾳ· οὐσία γὰρ ἑκάστου ὃ ἅπαξ, οἷον τῶν ἓξ οὐχ ὃ δὶς ἢ τρὶς εἰσὶν ἀλλ’ ὃ ἅπαξ· ἓξ γὰρ ἅπαξ ἕξ. ἔτι ὅσα πάθη τῶν κινουμένων οὐσιῶν, οἷον θερμότης καὶ ψυχρότης, [10] καὶ λευκότης καὶ μελανία, καὶ βαρύτης καὶ κουφότης, καὶ ὅσα τοιαῦτα, καθ’ ἃ λέγονται καὶ ἀλλοιοῦσθαι τὰ σώματα μεταβαλλόντων. ἔτι κατ’ ἀρετὴν καὶ κακίαν καὶ ὅλως τὸ κακὸν καὶ ἀγαθόν. σχεδὸν δὴ κατὰ δύο τρόπους λέγοιτ’ ἂν τὸ ποιόν, καὶ τούτων ἕνα τὸν κυριώτατον· πρώτη μὲν γὰρ [15] ποιότης ἡ τῆς οὐσίας διαφορά (ταύτης δέ τι καὶ ἡ ἐν τοῖς ἀριθμοῖς ποιότης μέρος· διαφορὰ γάρ τις οὐσιῶν, ἀλλ’ ἢ οὐ κινουμένων ἢ οὐχ ᾗ κινούμενα), τὰ δὲ πάθη τῶν κινουμένων ᾗ κινούμενα, καὶ αἱ τῶν κινήσεων διαφοραί. ἀρετὴ δὲ καὶ κακία τῶν παθημάτων μέρος τι· διαφορὰς γὰρ δηλοῦσι τῆς [20] κινήσεως καὶ τῆς ἐνεργείας, καθ’ ἃς ποιοῦσιν ἢ πάσχουσι καλῶς ἢ φαύλως τὰ ἐν κινήσει ὄντα· τὸ μὲν γὰρ ὠδὶ δυνάμενον κινεῖσθαι ἢ ἐνεργεῖν ἀγαθὸν τὸ δ’ ὠδὶ καὶ ἐναντίως μοχθηρόν. μάλιστα δὲ τὸ ἀγαθὸν καὶ τὸ κακὸν σημαίνει τὸ ποιὸν ἐπὶ τῶν ἐμψύχων, καὶ τούτων μάλιστα ἐπὶ τοῖς ἔχουσι [25] προαίρεσιν.

πρός τι λέγεται τὰ μὲν ὡς διπλάσιον πρὸς ἥμισυ καὶ τριπλάσιον πρὸς τριτημόριον, καὶ ὅλως πολλαπλάσιον πρὸς πολλοστημόριον καὶ ὑπερέχον πρὸς ὑπερεχόμενον· τὰ δ’ ὡς τὸ θερμαντικὸν πρὸς τὸ θερμαντὸν καὶ τὸ τμητικὸν πρὸς τὸ [30] τμητόν, καὶ ὅλως τὸ ποιητικὸν πρὸς τὸ παθητικόν· τὰ δ’ ὡς τὸ μετρητὸν πρὸς τὸ μέτρον καὶ ἐπιστητὸν πρὸς ἐπιστήμην καὶ αἰσθητὸν πρὸς αἴσθησιν. λέγεται δὲ τὰ μὲν πρῶτα κατ’ ἀριθμὸν ἢ ἁπλῶς ἢ ὡρισμένως, πρὸς αὐτοὺς ἢ πρὸς ἕν (οἷον τὸ μὲν διπλάσιον πρὸς ἓν ἀριθμὸς ὡρισμένος, τὸ δὲ πολλαπλάσιον [35] κατ’ ἀριθμὸν πρὸς ἕν, οὐχ ὡρισμένον δέ, οἷον τόνδε ἢ τόνδε· [1] τὸ δὲ ἡμιόλιον πρὸς τὸ ὑφημιόλιον κατ’ ἀριθμὸν πρὸς ἀριθμὸν ὡρισμένον· τὸ δ’ ἐπιμόριον πρὸς τὸ ὑπεπιμόριον κατὰ ἀόριστον, ὥσπερ τὸ πολλαπλάσιον πρὸς τὸ ἕν· τὸ δ’ ὑπερέχον πρὸς τὸ ὑπερεχόμενον ὅλως ἀόριστον κατ’ ἀριθμόν· [5] ὁ γὰρ ἀριθμὸς σύμμετρος, κατὰ μὴ συμμέτρου δὲ ἀριθμὸς οὐ λέγεται, τὸ δὲ ὑπερέχον πρὸς τὸ ὑπερεχόμενον τοσοῦτόν τέ ἐστι καὶ ἔτι, τοῦτο δ’ ἀόριστον· ὁπότερον γὰρ ἔτυχέν ἐστιν, ἢ ἴσον ἢ οὐκ ἴσον)· ταῦτά τε οὖν τὰ πρός τι πάντα κατ’ ἀριθμὸν λέγεται καὶ ἀριθμοῦ πάθη, καὶ ἔτι τὸ ἴσον καὶ [10] ὅμοιον καὶ ταὐτὸ κατ’ ἄλλον τρόπον (κατὰ γὰρ τὸ ἓν λέγεται πάντα, ταὐτὰ μὲν γὰρ ὧν μία ἡ οὐσία, ὅμοια δ’ ὧν ἡ ποιότης μία, ἴσα δὲ ὧν τὸ ποσὸν ἕν· τὸ δ’ ἓν τοῦ ἀριθμοῦ ἀρχὴ καὶ μέτρον, ὥστε ταῦτα πάντα πρός τι λέγεται κατ’ ἀριθμὸν μέν, οὐ τὸν αὐτὸν δὲ τρόπον)· τὰ δὲ [15] ποιητικὰ καὶ παθητικὰ κατὰ δύναμιν ποιητικὴν καὶ παθητικὴν καὶ ἐνεργείας τὰς τῶν δυνάμεων, οἷον τὸ θερμαντικὸν πρὸς τὸ θερμαντὸν ὅτι δύναται, καὶ πάλιν τὸ θερμαῖνον πρὸς τὸ θερμαινόμενον καὶ τὸ τέμνον πρὸς τὸ τεμνόμενον ὡς ἐνεργοῦντα. τῶν δὲ κατ’ ἀριθμὸν οὐκ εἰσὶν ἐνέργειαι ἀλλ’ [20] ἢ ὃν τρόπον ἐν ἑτέροις εἴρηται· αἱ δὲ κατὰ κίνησιν ἐνέργειαι οὐχ ὑπάρχουσιν. τῶν δὲ κατὰ δύναμιν καὶ κατὰ χρόνους ἤδη λέγονται πρός τι οἷον τὸ πεποιηκὸς πρὸς τὸ πεποιημένον καὶ τὸ ποιῆσον πρὸς τὸ ποιησόμενον. οὕτω γὰρ καὶ πατὴρ υἱοῦ λέγεται πατήρ· τὸ μὲν γὰρ πεποιηκὸς τὸ δὲ πεπονθός [25] τί ἐστιν. ἔτι ἔνια κατὰ στέρησιν δυνάμεως, ὥσπερ τὸ ἀδύνατον καὶ ὅσα οὕτω λέγεται, οἷον τὸ ἀόρατον. τὰ μὲν οὖν κατ’ ἀριθμὸν καὶ δύναμιν λεγόμενα πρός τι πάντα ἐστὶ πρός τι τῷ ὅπερ ἐστὶν ἄλλου λέγεσθαι αὐτὸ ὅ ἐστιν, ἀλλὰ μὴ τῷ ἄλλο πρὸς ἐκεῖνο· τὸ δὲ μετρητὸν καὶ τὸ ἐπιστητὸν καὶ τὸ [30] διανοητὸν τῷ ἄλλο πρὸς αὐτὸ λέγεσθαι πρός τι λέγονται. τό τε γὰρ διανοητὸν σημαίνει ὅτι ἔστιν αὐτοῦ διάνοια, οὐκ ἔστι δ’ ἡ διάνοια πρὸς τοῦτο οὗ ἐστὶ διάνοια (δὶς γὰρ ταὐτὸν εἰρημένον ἂν εἴη), ὁμοίως δὲ καὶ τινός ἐστιν ἡ ὄψις ὄψις, οὐχ οὗ ἐστὶν ὄψις (καίτοι γ’ ἀληθὲς τοῦτο εἰπεῖν) ἀλλὰ πρὸς χρῶμα ἢ πρὸς ἄλλο τι τοιοῦτον. ἐκείνως δὲ δὶς τὸ αὐτὸ λεχθήσεται, ὅτι ἐστὶν οὗ ἐστὶν ἡ ὄψις. [1] τὰ μὲν οὖν καθ’ ἑαυτὰ λεγόμενα πρός τι τὰ μὲν οὕτω λέγεται, τὰ δὲ ἂν τὰ [5] γένη αὐτῶν ᾖ τοιαῦτα, οἷον ἡ ἰατρικὴ τῶν πρός τι ὅτι τὸ γένος αὐτῆς ἡ ἐπιστήμη δοκεῖ εἶναι πρός τι· ἔτι καθ’ ὅσα τὰ ἔχοντα λέγεται πρός τι, οἷον ἰσότης ὅτι τὸ ἴσον καὶ ὁμοιότης ὅτι τὸ ὅμοιον· τὰ δὲ κατὰ συμβεβηκός, οἷον ἄνθρωπος πρός τι ὅτι συμβέβηκεν αὐτῷ διπλασίῳ εἶναι, [10] τοῦτο δ’ ἐστὶ τῶν πρός τι· ἢ τὸ λευκόν, εἰ τῷ αὐτῷ συμβέβηκε διπλασίῳ καὶ λευκῷ εἶναι.

τέλειον λέγεται ἓν μὲν οὗ μὴ ἔστιν ἔξω τι λαβεῖν μηδὲ ἓν μόριον (οἷον χρόνος τέλειος ἑκάστου οὗτος οὗ μὴ ἔστιν ἔξω λαβεῖν χρόνον τινὰ ὃς τούτου μέρος ἐστὶ τοῦ χρόνου), καὶ τὸ [15] κατ’ ἀρετὴν καὶ τὸ εὖ μὴ ἔχον ὑπερβολὴν πρὸς τὸ γένος, οἷον τέλειος ἰατρὸς καὶ τέλειος αὐλητὴς ὅταν κατὰ τὸ εἶδος τῆς οἰκείας ἀρετῆς μηθὲν ἐλλείπωσιν (οὕτω δὲ μεταφέροντες καὶ ἐπὶ τῶν κακῶν λέγομεν συκοφάντην τέλειον καὶ κλέπτην τέλειον, ἐπειδὴ καὶ ἀγαθοὺς λέγομεν αὐτούς, οἷον κλέπτην [20] ἀγαθὸν καὶ συκοφάντην ἀγαθόν· καὶ ἡ ἀρετὴ τελείωσίς τις· ἕκαστον γὰρ τότε τέλειον καὶ οὐσία πᾶσα τότε τελεία, ὅταν κατὰ τὸ εἶδος τῆς οἰκείας ἀρετῆς μηδὲν ἐλλείπῃ μόριον τοῦ κατὰ φύσιν μεγέθους)· ἔτι οἷς ὑπάρχει τὸ τέλος, σπουδαῖον ὄν, ταῦτα λέγεται τέλεια· κατὰ γὰρ τὸ ἔχειν τὸ [25] τέλος τέλεια, ὥστ’ ἐπεὶ τὸ τέλος τῶν ἐσχάτων τί ἐστι, καὶ ἐπὶ τὰ φαῦλα μεταφέροντες λέγομεν τελείως ἀπολωλέναι καὶ τελείως ἐφθάρθαι, ὅταν μηδὲν ἐλλείπῃ τῆς φθορᾶς καὶ τοῦ κακοῦ ἀλλ’ ἐπὶ τῷ ἐσχάτῳ ᾖ· διὸ καὶ ἡ τελευτὴ κατὰ μεταφορὰν λέγεται τέλος,

ὅτι ἄμφω ἔσχατα· τέλος δὲ [30] καὶ τὸ οὗ ἕνεκα ἔσχατον. τὰ μὲν οὖν καθ’ αὑτὰ λεγόμενα τέλεια τοσαυταχῶς λέγεται, τὰ μὲν τῷ κατὰ τὸ εὖ μηδὲν ἐλλείπειν μηδ’ ἔχειν ὑπερβολὴν μηδὲ ἔξω τι λαβεῖν, τὰ δ’ [33] ὅλως κατὰ τὸ μὴ ἔχειν ὑπερβολὴν ἐν ἑκάστῳ γένει μηδ’ εἶναί τι ἔξω· [1] τὰ δὲ ἄλλα ἤδη κατὰ ταῦτα τῷ ἢ ποιεῖν τι τοιοῦτον ἢ ἔχειν ἢ ἁρμόττειν τούτῳ ἢ ἁμῶς γέ πως λέγεσθαι πρὸς τὰ πρώτως λεγόμενα τέλεια.

πέρας λέγεται τό τε ἔσχατον ἑκάστου καὶ οὗ ἔξω μηδὲν [5] ἔστι λαβεῖν πρώτου καὶ οὗ ἔσω πάντα πρώτου, καὶ ὃ ἂν ᾖ εἶδος μεγέθους ἢ ἔχοντος μέγεθος, καὶ τὸ τέλος ἑκάστου (τοιοῦτον δ’ ἐφ’ ὃ ἡ κίνησις καὶ ἡ πρᾶξις, καὶ οὐκ ἀφ’ οὗ—ὁτὲ δὲ ἄμφω, καὶ ἀφ’ οὗ καὶ ἐφ’ ὃ καὶ τὸ οὗ ἕνεκα), καὶ ἡ οὐσία ἡ ἑκάστου καὶ τὸ τί ἦν εἶναι ἑκάστῳ· τῆς γνώσεως γὰρ τοῦτο [10] πέρας· εἰ δὲ τῆς γνώσεως, καὶ τοῦ πράγματος. ὥστε φανερὸν ὅτι ὁσαχῶς τε ἡ ἀρχὴ λέγεται, τοσαυταχῶς καὶ τὸ πέρας, καὶ ἔτι πλεοναχῶς· ἡ μὲν γὰρ ἀρχὴ πέρας τι, τὸ δὲ πέρας οὐ πᾶν ἀρχή.

τὸ καθ’ ὃ λέγεται πολλαχῶς, ἕνα μὲν τρόπον τὸ εἶδος [15] καὶ ἡ οὐσία ἑκάστου πράγματος, οἷον καθ’ ὃ ἀγαθός, αὐτὸ ἀγαθόν, ἕνα δὲ ἐν ᾧ πρώτῳ πέφυκε γίγνεσθαι, οἷον τὸ χρῶμα ἐν τῇ ἐπιφανείᾳ. τὸ μὲν οὖν πρώτως λεγόμενον καθ’ ὃ τὸ εἶδός ἐστι, δευτέρως δὲ ὡς ἡ ὕλη ἑκάστου καὶ τὸ ὑποκείμενον ἑκάστῳ πρῶτον. ὅλως δὲ τὸ καθ’ ὃ ἰσαχῶς καὶ [20] τὸ αἴτιον ὑπάρξει· κατὰ τί γὰρ ἐλήλυθεν ἢ οὗ ἕνεκα ἐλήλυθε λέγεται, καὶ κατὰ τί παραλελόγισται ἢ συλλελόγισται, ἢ τί τὸ αἴτιον τοῦ συλλογισμοῦ ἢ παραλογισμοῦ. ἔτι δὲ τὸ καθ’ ὃ τὸ κατὰ θέσιν λέγεται, καθ’ ὃ ἕστηκεν ἢ καθ’ ὃ βαδίζει· πάντα γὰρ ταῦτα τόπον σημαίνει καὶ θέσιν. ὥστε καὶ [25] τὸ καθ’ αὐτὸ πολλαχῶς ἀνάγκη λέγεσθαι. ἓν μὲν γὰρ καθ’ αὐτὸ τὸ τί ἦν εἶναι ἑκάστῳ, οἷον ὁ Καλλίας καθ’ αὐτὸν Καλλίας καὶ τὸ τί ἦν εἶναι Καλλίᾳ· ἓν δὲ ὅσα ἐν τῷ τί ἐστιν ὑπάρχει, οἷον ζῷον ὁ Καλλίας καθ’ αὐτόν· ἐν γὰρ τῷ λόγῳ ἐνυπάρχει τὸ ζῷον· ζῷον γάρ τι ὁ Καλλίας. ἔτι [30] δὲ εἰ ἐν αὐτῷ δέδεκται πρώτῳ ἢ τῶν αὐτοῦ τινί, οἷον ἡ ἐπιφάνεια λευκὴ καθ’ ἑαυτήν, καὶ ζῇ ὁ ἄνθρωπος καθ’ αὐτόν· ἡ γὰρ ψυχὴ μέρος τι τοῦ ἀνθρώπου, ἐν ᾗ πρώτῃ τὸ ζῆν. ἔτι οὗ μὴ ἔστιν ἄλλο αἴτιον· τοῦ γὰρ ἀνθρώπου πολλὰ αἴτια, τὸ ζῷον, τὸ δίπουν, ἀλλ’ ὅμως καθ’ αὐτὸν ἄνθρωπος ὁ ἄνθρωπός [35] ἐστιν. ἔτι ὅσα μόνῳ ὑπάρχει καὶ ᾗ μόνον δι’ αὐτὸ κεχωρισμένον καθ’ αὑτό.

[1] διάθεσις λέγεται τοῦ ἔχοντος μέρη τάξις ἢ κατὰ τόπον ἢ κατὰ δύναμιν ἢ κατ’ εἶδος· θέσιν γὰρ δεῖ τινὰ εἶναι, ὥσπερ καὶ τοὔνομα δηλοῖ ἡ διάθεσις.

ἕξις δὲ λέγεται ἕνα μὲν τρόπον οἷον ἐνέργειά τις τοῦ [5] ἔχοντος καὶ ἐχομένου, ὥσπερ πρᾶξίς τις ἢ κίνησις (ὅταν γὰρ τὸ μὲν ποιῇ τὸ δὲ ποιῆται, ἔστι ποίησις μεταξύ· οὕτω καὶ τοῦ ἔχοντος ἐσθῆτα καὶ τῆς ἐχομένης ἐσθῆτος ἔστι μεταξὺ ἕξις)·—ταύτην μὲν οὖν φανερὸν ὅτι οὐκ ἐνδέχεται ἔχειν ἕξιν (εἰς ἄπειρον γὰρ βαδιεῖται, εἰ τοῦ ἐχομένου ἔσται ἔχειν τὴν [10] ἕξιν), ἄλλον δὲ τρόπον ἕξις λέγεται διάθεσις καθ’ ἣν ἢ εὖ ἢ κακῶς διάκειται τὸ διακείμενον, καὶ ἢ καθ’ αὐτὸ ἢ πρὸς ἄλλο, οἷον ἡ ὑγίεια ἕξις τις· διάθεσις γάρ ἐστι τοιαύτη. ἔτι ἕξις λέγεται ἂν ᾖ μόριον διαθέσεως τοιαύτης· διὸ καὶ ἡ τῶν μερῶν ἀρετὴ ἕξις τίς ἐστιν.

[15] πάθος λέγεται ἕνα μὲν τρόπον ποιότης καθ’ ἣν ἀλλοιοῦσθαι ἐνδέχεται, οἷον τὸ λευκὸν καὶ τὸ μέλαν, καὶ γλυκὺ καὶ πικρόν, καὶ βαρύτης καὶ κουφότης, καὶ ὅσα ἄλλα τοιαῦτα· ἕνα δὲ αἱ τούτων ἐνέργειαι καὶ ἀλλοιώσεις ἤδη. ἔτι τούτων μᾶλλον αἱ βλαβεραὶ ἀλλοιώσεις καὶ κινήσεις, [20] καὶ μάλιστα αἱ λυπηραὶ βλάβαι. ἔτι τὰ μεγέθη τῶν συμφορῶν καὶ λυπηρῶν πάθη λέγεται.

στέρησις λέγεται ἕνα μὲν τρόπον ἂν μὴ ἔχῃ τι τῶν πεφυκότων ἔχεσθαι, κἂν μὴ αὐτὸ ᾗ πεφυκὸς ἔχειν, οἷον φυτὸν ὀμμάτων ἐστερῆσθαι λέγεται· ἕνα δὲ ἂν πεφυκὸς [25] ἔχειν, ἢ αὐτὸ ἢ τὸ γένος, μὴ ἔχῃ, οἷον ἄλλως ἄνθρωπος ὁ τυφλὸς ὄψεως ἐστέρηται καὶ ἀσπάλαξ, τὸ μὲν κατὰ τὸ γένος τὸ δὲ καθ’ αὑτό. ἔτι ἂν πεφυκὸς καὶ ὅτε πέφυκεν ἔχειν μὴ ἔχῃ· ἡ γὰρ τυφλότης στέρησίς τις, τυφλὸς δ’ οὐ κατὰ πᾶσαν ἡλικίαν, ἀλλ’ ἐν ᾗ πέφυκεν ἔχειν, ἂν μὴ ἔχῃ. [30] ὁμοίως δὲ καὶ ἐν ᾧ ἂν ᾗ

πεφυκὸς καὶ καθ’ ὃ καὶ πρὸς ὃ καὶ ὥς, ἂν μὴ ἔχῃ πεφυκός. ἔτι ἡ βιαία ἑκάστου ἀφαίρεσις στέρησις λέγεται. καὶ ὁσαχῶς δὲ αἱ ἀπὸ τοῦ α ἀποφάσεις λέγονται, τοσαυταχῶς καὶ αἱ στερήσεις λέγονται· ἄνισον μὲν γὰρ τῷ μὴ ἔχειν ἰσότητα πεφυκὸς λέγεται, ἀόρατον δὲ [35] καὶ τῷ ὅλως μὴ ἔχειν χρῶμα καὶ τῷ φαύλως, καὶ ἄπουν καὶ τῷ μὴ ἔχειν ὅλως πόδας καὶ τῷ φαύλους. ἔτι καὶ τῷ μικρὸν ἔχειν, οἷον τὸ ἀπύρηνον· [1] τοῦτο δ’ ἐστὶ τὸ φαύλως πως ἔχειν. ἔτι τῷ μὴ ῥᾳδίως ἢ τῷ μὴ καλῶς, οἷον τὸ ἄτμητον οὐ μόνον τῷ μὴ τέμνεσθαι ἀλλὰ καὶ τῷ μὴ ῥᾳδίως ἢ μὴ καλῶς. ἔτι τῷ πάντῃ μὴ ἔχειν· τυφλὸς γὰρ οὐ λέγεται ὁ [5] ἑτερόφθαλμος ἀλλ’ ὁ ἐν ἀμφοῖν μὴ ἔχων ὄψιν· διὸ οὐ πᾶς ἀγαθὸς ἢ κακός, ἢ δίκαιος ἢ ἄδικος, ἀλλὰ καὶ τὸ μεταξύ.

τὸ ἔχειν λέγεται πολλαχῶς, ἕνα μὲν τρόπον τὸ ἄγειν κατὰ τὴν αὐτοῦ φύσιν ἢ κατὰ τὴν αὐτοῦ ὁρμήν, διὸ [10] λέγεται πυρετός τε ἔχειν τὸν ἄνθρωπον καὶ οἱ τύραννοι τὰς πόλεις καὶ τὴν ἐσθῆτα οἱ ἀμπεχόμενοι· ἕνα δ’ ἐν ᾧ ἄν τι ὑπάρχῃ ὡς δεκτικῷ, οἷον ὁ χαλκὸς ἔχει τὸ εἶδος τοῦ ἀνδριάντος καὶ τὴν νόσον τὸ σῶμα· ἕνα δὲ ὡς τὸ περιέχον τὰ περιεχόμενα· ἐν ᾧ γάρ ἐστι περιέχοντι, ἔχεσθαι ὑπὸ [15] τούτου λέγεται, οἷον τὸ ἀγγεῖον ἔχειν τὸ ὑγρόν φαμεν καὶ τὴν πόλιν ἀνθρώπους καὶ τὴν ναῦν ναύτας, οὕτω δὲ καὶ τὸ ὅλον ἔχειν τὰ μέρη. ἔτι τὸ κωλῦον κατὰ τὴν αὐτοῦ ὁρμήν τι κινεῖσθαι ἢ πράττειν ἔχειν λέγεται τοῦτο αὐτό, οἷον καὶ οἱ κίονες τὰ ἐπικείμενα βάρη, καὶ ὡς οἱ ποιηταὶ [20] τὸν Ἄτλαντα ποιοῦσι τὸν οὐρανὸν ἔχειν ὡς συμπεσόντ’ ἂν ἐπὶ τὴν γῆν, ὥσπερ καὶ τῶν φυσιολόγων τινές φασιν· τοῦτον δὲ τὸν τρόπον καὶ τὸ συνέχον λέγεται ἃ συνέχει ἔχειν, ὡς διαχωρισθέντα ἂν κατὰ τὴν αὐτοῦ ὁρμὴν ἕκαστον. καὶ τὸ ἔν τινι δὲ εἶναι ὁμοτρόπως λέγεται καὶ ἑπομένως τῷ [25] ἔχειν.

τὸ ἔκ τινος εἶναι λέγεται ἕνα μὲν τρόπον ἐξ οὗ ἐστὶν ὡς ὕλης, καὶ τοῦτο διχῶς, ἢ κατὰ τὸ πρῶτον γένος ἢ κατὰ τὸ ὕστατον εἶδος, οἷον ἔστι μὲν ὡς ἅπαντα τὰ τηκτὰ ἐξ ὕδατος, ἔστι δ’ ὡς ἐκ χαλκοῦ ὁ ἀνδριάς· ἕνα δ’ ὡς ἐκ τῆς [30] πρώτης κινησάσης ἀρχῆς (οἷον ἐκ τίνος ἡ μάχη; ἐκ λοιδορίας, ὅτι αὕτη ἀρχὴ τῆς μάχης)· ἕνα δ’ ἐκ τοῦ συνθέτου ἐκ τῆς ὕλης καὶ τῆς μορφῆς, ὥσπερ ἐκ τοῦ ὅλου τὰ μέρη καὶ ἐκ τῆς Ἰλιάδος τὸ ἔπος καὶ ἐκ τῆς οἰκίας οἱ λίθοι· τέλος μὲν γάρ ἐστιν ἡ μορφή, τέλειον δὲ τὸ ἔχον τέλος. [35] τὰ δὲ ὡς ἐκ τοῦ μέρους τὸ εἶδος, οἷον ἄνθρωπος ἐκ τοῦ δίποδος καὶ ἡ συλλαβὴ ἐκ τοῦ στοιχείου· ἄλλως γὰρ τοῦτο καὶ ὁ ἀνδριὰς ἐκ χαλκοῦ· [1] ἐκ τῆς αἰσθητῆς γὰρ ὕλης ἡ συνθετὴ οὐσία, ἀλλὰ καὶ τὸ εἶδος ἐκ τῆς τοῦ εἴδους ὕλης. τὰ μὲν οὖν οὕτω λέγεται, τὰ δ’ ἐὰν κατὰ μέρος τι τούτων τις ὑπάρχῃ τῶν τρόπων, οἷον ἐκ πατρὸς καὶ μητρὸς τὸ τέκνον [5] καὶ ἐκ γῆς τὰ φυτά, ὅτι ἔκ τινος μέρους αὐτῶν. ἕνα δὲ μεθ’ ὃ τῷ χρόνῳ, οἷον ἐξ ἡμέρας νὺξ καὶ ἐξ εὐδίας χειμών, ὅτι τοῦτο μετὰ τοῦτο· τούτων δὲ τὰ μὲν τῷ ἔχειν μεταβολὴν εἰς ἄλληλα οὕτω λέγεται, ὥσπερ καὶ τὰ νῦν εἰρημένα, τὰ δὲ τῷ κατὰ τὸν χρόνον ἐφεξῆς μόνον, οἷον ἐξ ἰσημερίας [10] ἐγένετο ὁ πλοῦς ὅτι μετ’ ἰσημερίαν ἐγένετο, καὶ ἐκ Διονυσίων Θαργήλια ὅτι μετὰ τὰ Διονύσια.

μέρος λέγεται ἕνα μὲν τρόπον εἰς ὃ διαιρεθείη ἂν τὸ ποσὸν ὁπωσοῦν (ἀεὶ γὰρ τὸ ἀφαιρούμενον τοῦ ποσοῦ ᾗ ποσὸν μέρος λέγεται ἐκείνου, οἷον τῶν τριῶν τὰ δύο μέρος λέγεταί [15] πως), ἄλλον δὲ τρόπον τὰ καταμετροῦντα τῶν τοιούτων μόνον· διὸ τὰ δύο τῶν τριῶν ἔστι μὲν ὡς λέγεται μέρος, ἔστι δ’ ὡς οὔ. ἔτι εἰς ἃ τὸ εἶδος διαιρεθείη ἂν ἄνευ τοῦ ποσοῦ, καὶ ταῦτα μόρια λέγεται τούτου· διὸ τὰ εἴδη τοῦ γένους φασὶν εἶναι μόρια. ἔτι εἰς ἃ διαιρεῖται ἢ ἐξ ὧν σύγκειται [20] τὸ ὅλον, ἢ τὸ εἶδος ἢ τὸ ἔχον τὸ εἶδος, οἷον τῆς σφαίρας τῆς χαλκῆς ἢ τοῦ κύβου τοῦ χαλκοῦ καὶ ὁ χαλκὸς μέρος (τοῦτο δ’ ἐστὶν ἡ ὕλη ἐν ᾗ τὸ εἶδος) καὶ ἡ γωνία μέρος. ἔτι τὰ ἐν τῷ λόγῳ τῷ δηλοῦντι ἕκαστον, καὶ ταῦτα μόρια τοῦ ὅλου· διὸ τὸ γένος τοῦ εἴδους καὶ μέρος λέγεται, ἄλλως δὲ τὸ [25] εἶδος τοῦ γένους μέρος.

ὅλον λέγεται οὗ τε μηθὲν ἄπεστι μέρος ἐξ ὧν λέγεται ὅλον φύσει, καὶ τὸ περιέχον τὰ περιεχόμενα ὥστε ἕν τι εἶναι ἐκεῖνα· τοῦτο δὲ διχῶς· ἢ γὰρ ὡς ἕκαστον ἓν ἢ ὡς ἐκ τούτων τὸ ἕν.

τὸ μὲν γὰρ καθόλου, καὶ τὸ ὅλως λεγόμενον [30] ὡς ὅλον τι ὄν, οὕτως ἐστὶ καθόλου ὡς πολλὰ περιέχον τῷ κατηγορεῖσθαι καθ’ ἑκάστου καὶ ἓν ἅπαντα εἶναι ὡς ἕκαστον, οἷον ἄνθρωπον ἵππον θεόν, διότι ἅπαντα ζῷα· τὸ δὲ συνεχὲς καὶ πεπερασμένον, ὅταν ἕν τι ἐκ πλειόνων ᾖ, ἐνυπαρχόντων μάλιστα μὲν δυνάμει, εἰ δὲ μή, ἐνεργείᾳ. τούτων [35] δ’ αὐτῶν μᾶλλον τὰ φύσει ἢ τέχνῃ τοιαῦτα, ὥσπερ καὶ ἐπὶ τοῦ ἑνὸς ἐλέγομεν, ὡς οὔσης τῆς ὁλότητος ἑνότητός τινος. [1] ἔτι τοῦ ποσοῦ ἔχοντος δὲ ἀρχὴν καὶ μέσον καὶ ἔσχατον, ὅσων μὲν μὴ ποιεῖ ἡ θέσις διαφοράν, πᾶν λέγεται, ὅσων δὲ ποιεῖ, ὅλον. ὅσα δὲ ἄμφω ἐνδέχεται, καὶ ὅλα καὶ πάντα· ἔστι δὲ ταῦτα ὅσων ἡ μὲν φύσις ἡ αὐτὴ μένει τῇ μεταθέσει, ἡ [5] δὲ μορφὴ οὔ, οἷον κηρὸς καὶ ἱμάτιον· καὶ γὰρ ὅλον καὶ πᾶν λέγεται· ἔχει γὰρ ἄμφω. ὕδωρ δὲ καὶ ὅσα ὑγρὰ καὶ ἀριθμὸς πᾶν μὲν λέγεται, ὅλος δ’ ἀριθμὸς καὶ ὅλον ὕδωρ οὐ λέγεται, ἂν μὴ μεταφορᾷ. πάντα δὲ λέγεται ἐφ’ οἷς τὸ πᾶν ὡς ἐφ’ ἑνί, ἐπὶ τούτοις τὸ πάντα ὡς ἐπὶ διῃρημένοις· [10] πᾶς οὗτος ὁ ἀριθμός, πᾶσαι αὗται αἱ μονάδες.

κολοβὸν δὲ λέγεται τῶν ποσῶν οὐ τὸ τυχόν, ἀλλὰ μεριστόν τε δεῖ αὐτὸ εἶναι καὶ ὅλον. τά τε γὰρ δύο οὐ κολοβὰ θατέρου ἀφαιρουμένου ἑνός (οὐ γὰρ ἴσον τὸ καλόβωμα καὶ τὸ λοιπὸν οὐδέποτ’ ἐστίν) οὐδ’ ὅλως ἀριθμὸς οὐδείς· καὶ [15] γὰρ τὴν οὐσίαν δεῖ μένειν· εἰ κύλιξ κολοβός, ἔτι εἶναι κύλικα· ὁ δὲ ἀριθμὸς οὐκέτι ὁ αὐτός. πρὸς δὲ τούτοις κἂν ἀνομοιομερῆ ᾖ, οὐδὲ ταῦτα πάντα (ὁ γὰρ ἀριθμὸς ἔστιν ὡς καὶ ἀνόμοια ἔχει μέρη, οἷον δυάδα τριάδα), ἀλλ’ ὅλως ὧν μὴ ποιεῖ ἡ θέσις διαφορὰν οὐδὲν κολοβόν, οἷον ὕδωρ ἢ πῦρ, [20] ἀλλὰ δεῖ τοιαῦτα εἶναι ἃ κατὰ τὴν οὐσίαν θέσιν ἔχει. ἔτι συνεχῆ· ἡ γὰρ ἁρμονία ἐξ ἀνομοίων μὲν καὶ θέσιν ἔχει, κολοβὸς δὲ οὐ γίγνεται. πρὸς δὲ τούτοις οὐδ’ ὅσα ὅλα, οὐδὲ ταῦτα ὁτουοῦν μορίου στερήσει κολοβά. οὐ γὰρ δεῖ οὔτε τὰ κύρια τῆς οὐσίας οὔτε τὰ ὁπουοῦν ὄντα· οἷον ἂν τρυπηθῇ ἡ [25] κύλιξ, οὐ κολοβός, ἀλλ’ ἂν τὸ οὗς ἢ ἀκρωτήριόν τι, καὶ ὁ ἄνθρωπος οὐκ ἐὰν σάρκα ἢ τὸν σπλῆνα, ἀλλ’ ἐὰν ἀκρωτήριόν τι, καὶ τοῦτο οὐ πᾶν ἀλλ’ ὃ μὴ ἔχει γένεσιν ἀφαιρεθὲν ὅλον. διὰ τοῦτο οἱ φαλακροὶ οὐ κολοβοί.

γένος λέγεται τὸ μὲν ἐὰν ᾖ ἡ γένεσις συνεχὴς τῶν τὸ [30] εἶδος ἐχόντων τὸ αὐτό, οἷον λέγεται ἕως ἂν ἀνθρώπων γένος ᾖ, ὅτι ἕως ἂν ᾖ ἡ γένεσις συνεχὴς αὐτῶν· τὸ δὲ ἀφ’ οὗ ἂν ὦσι πρώτου κινήσαντος εἰς τὸ εἶναι· οὕτω γὰρ λέγονται Ἕλληνες τὸ γένος οἱ δὲ Ἴωνες, τῷ οἱ μὲν ἀπὸ Ἕλληνος οἱ δὲ ἀπὸ Ἴωνος εἶναι πρώτου γεννήσαντος· καὶ μᾶλλον οἱ ἀπὸ [35] τοῦ γεννήσαντος ἢ τῆς ὕλης (λέγονται γὰρ καὶ ἀπὸ τοῦ θήλεος τὸ γένος, οἷον οἱ ἀπὸ Πύρρας). [1] ἔτι δὲ ὡς τὸ ἐπίπεδον τῶν σχημάτων γένος τῶν ἐπιπέδων καὶ τὸ στερεὸν τῶν στερεῶν· ἕκαστον γὰρ τῶν σχημάτων τὸ μὲν ἐπίπεδον τοιονδὶ τὸ δὲ στερεόν ἐστι τοιονδί· τοῦτο δ’ ἐστὶ τὸ ὑποκείμενον ταῖς διαφοραῖς. ἔτι ὡς ἐν τοῖς λόγοις τὸ πρῶτον ἐνυπάρχον, ὃ [5] λέγεται ἐν τῷ τί ἐστι, τοῦτο γένος, οὗ διαφοραὶ λέγονται αἱ ποιότητες. τὸ μὲν οὖν γένος τοσαυταχῶς λέγεται, τὸ μὲν κατὰ γένεσιν συνεχῆ τοῦ αὐτοῦ εἴδους, τὸ δὲ κατὰ τὸ πρῶτον κινῆσαν ὁμοειδές, τὸ δ’ ὡς ὕλη· οὗ γὰρ ἡ διαφορὰ καὶ ἡ ποιότης ἐστί, τοῦτ’ ἔστι τὸ ὑποκείμενον, ὃ λέγομεν ὕλην. ἕτερα [10] δὲ τῷ γένει λέγεται ὧν ἕτερον τὸ πρῶτον ὑποκείμενον καὶ μὴ ἀναλύεται θάτερον εἰς θάτερον μηδ’ ἅμφω εἰς ταὐτόν, οἷον τὸ εἶδος καὶ ἡ ὕλη ἕτερον τῷ γένει, καὶ ὅσα καθ’ ἕτερον σχῆμα κατηγορίας τοῦ ὄντος λέγεται (τὰ μὲν γὰρ τί ἐστι σημαίνει τῶν ὄντων τὰ δὲ ποιόν τι τὰ δ’ ὡς διῄρηται [15] πρότερον)· οὐδὲ γὰρ ταῦτα ἀναλύεται οὔτ’ εἰς ἄλληλα οὔτ’ εἰς ἕν τι.

τὸ ψεῦδος λέγεται ἄλλον μὲν τρόπον ὡς πρᾶγμα ψεῦδος, καὶ τούτου τὸ μὲν τῷ μὴ συγκεῖσθαι ἢ ἀδύνατον εἶναι συντεθῆναι (ὥσπερ λέγεται τὸ τὴν διάμετρον εἶναι [20] σύμμετρον ἢ τὸ σὲ καθῆσθαι· τούτων γὰρ ψεῦδος τὸ μὲν ἀεὶ τὸ δὲ ποτέ· οὕτω γὰρ οὐκ ὄντα ταῦτά, τὰ δὲ ὅσα ἔστι μὲν ὄντα, πέφυκε μέντοι φαίνεσθαι ἢ μὴ οἷα) ἐστιν ἢ ἃ μὴ ἔστιν (οἷον ἡ σκιαγραφία καὶ τὰ ἐνύπνια· ταῦτα γὰρ ἔστι μέν τι, ἀλλ’ οὐχ ὧν ἐμποιεῖ τὴν φαντασίαν)·—πράγματα [25] μὲν οὖν ψευδῆ οὕτω λέγεται, ἢ τῷ μὴ εἶναι αὐτὰ ἢ τῷ τὴν ἀπ’ αὐτῶν φαντασίαν μὴ ὄντος εἶναι· λόγος δὲ ψευδὴς ὁ τῶν μὴ ὄντων, ᾗ ψευδής, διὸ πᾶς λόγος ψευδὴς ἑτέρου ἢ οὗ ἐστὶν ἀληθής, οἷον ὁ τοῦ

κύκλου ψευδὴς τριγώνου. ἑκάστου δὲ λόγος ἔστι μὲν ὡς εἷς, ὁ τοῦ τί ἦν εἶναι, ἔστι δ’ ὡς [30] πολλοί, ἐπεὶ ταὐτό πως αὐτὸ καὶ αὐτὸ πεπονθός, οἷον Σωκράτης καὶ Σωκράτης μουσικός (ὁ δὲ ψευδὴς λόγος οὐθενός ἐστιν ἁπλῶς λόγος)· διὸ Ἀντισθένης ᾤετο εὐήθως μηθὲν ἀξιῶν λέγεσθαι πλὴν τῷ οἰκείῳ λόγῳ, ἓν ἐφ’ ἑνός· ἐξ ὧν συνέβαινε μὴ εἶναι ἀντιλέγειν, σχεδὸν δὲ μηδὲ ψεύδεσθαι. ἔστι [35] δ’ ἕκαστον λέγειν οὐ μόνον τῷ αὐτοῦ λόγῳ ἀλλὰ καὶ τῷ ἑτέρου, ψευδῶς μὲν καὶ παντελῶς, ἔστι δ’ ὡς καὶ ἀληθῶς, ὥσπερ τὰ ὀκτὼ διπλάσια τῷ τῆς δυάδος λόγῳ. [1] τὰ μὲν οὖν οὕτω λέγεται ψευδῆ, ἄνθρωπος δὲ ψευδὴς ὁ εὐχερὴς καὶ προαιρετικὸς τῶν τοιούτων λόγων, μὴ δι’ ἕτερόν τι ἀλλὰ δι’ αὐτό, καὶ ὁ ἄλλοις ἐμποιητικὸς τῶν τοιούτων λόγων, [5] ὥσπερ καὶ τὰ πράγματά φαμεν ψευδῆ εἶναι ὅσα ἐμποιεῖ φαντασίαν ψευδῆ. διὸ ὁ ἐν τῷ Ἱππίᾳ λόγος παρακρούεται ὡς ὁ αὐτὸς ψευδὴς καὶ ἀληθής. τὸν δυνάμενον γὰρ ψεύσασθαι λαμβάνει ψευδῆ (οὗτος δ’ ὁ εἰδὼς καὶ ὁ φρόνιμος)· ἔτι τὸν ἑκόντα φαῦλον βελτίω. τοῦτο δὲ ψεῦδος [10] λαμβάνει διὰ τῆς ἐπαγωγῆς—ὁ γὰρ ἑκὼν χωλαίνων τοῦ ἄκοντος κρείττων—τὸ χωλαίνειν τὸ μιμεῖσθαι λέγων, ἐπεὶ εἴ γε χωλὸς ἑκών, χείρων ἴσως, ὥσπερ ἐπὶ τοῦ ἤθους, καὶ οὗτος.

συμβεβηκὸς λέγεται ὃ ὑπάρχει μέν τινι καὶ ἀληθὲς [15] εἰπεῖν, οὐ μέντοι οὔτ’ ἐξ ἀνάγκης οὔτε ὡς ἐπὶ τὸ πολύ, οἷον εἴ τις ὀρύττων φυτῷ βόθρον εὗρε θησαυρόν. τοῦτο τοίνυν συμβεβηκὸς τῷ ὀρύττοντι τὸν βόθρον, τὸ εὑρεῖν θησαυρόν· οὔτε γὰρ ἐξ ἀνάγκης τοῦτο ἐκ τούτου ἢ μετὰ τοῦτο, οὔθ’ ὡς ἐπὶ τὸ πολὺ ἄν τις φυτεύῃ θησαυρὸν εὑρίσκει. καὶ μουσικός γ’ [20] ἄν τις εἴη λευκός· ἀλλ’ ἐπεὶ οὔτε ἐξ ἀνάγκης οὔθ’ ὡς ἐπὶ τὸ πολὺ τοῦτο γίγνεται, συμβεβηκὸς αὐτὸ λέγομεν. ὥστ’ ἐπεὶ ἔστιν ὑπάρχον τι καὶ τινί, καὶ ἔνια τούτων καὶ ποὺ καὶ ποτέ, ὅ τι ἂν ὑπάρχῃ μέν, ἀλλὰ μὴ διότι τοδὶ ἦν ἢ νῦν ἢ ἐνταῦθα, συμβεβηκὸς ἔσται. οὐδὲ δὴ αἴτιον ὡρισμένον οὐδὲν [25] τοῦ συμβεβηκότος ἀλλὰ τὸ τυχόν· τοῦτο δ’ ἀόριστον. συνέβη τῳ εἰς Αἴγιναν ἐλθεῖν, εἰ μὴ διὰ τοῦτο ἀφίκετο ὅπως ἐκεῖ ἔλθῃ, ἀλλ’ ὑπὸ χειμῶνος ἐξωσθεὶς ἢ ὑπὸ λῃστῶν ληφθείς. γέγονε μὲν δὴ ἢ ἔστι τὸ συμβεβηκός, ἀλλ’ οὐχ ᾗ αὐτὸ ἀλλ’ ᾗ ἕτερον· ὁ γὰρ χειμὼν αἴτιος τοῦ μὴ ὅπου ἔπλει ἐλθεῖν, [30] τοῦτο δ’ ἦν Αἴγινα. λέγεται δὲ καὶ ἄλλως συμβεβηκός, οἷον ὅσα ὑπάρχει ἑκάστῳ καθ’ αὐτὸ μὴ ἐν τῇ οὐσίᾳ ὄντα, οἷον τῷ τριγώνῳ τὸ δύο ὀρθὰς ἔχειν. καὶ ταῦτα μὲν ἐνδέχεται ἀΐδια εἶναι, ἐκείνων δὲ οὐδέν. λόγος δὲ τούτου ἐν ἑτέροις.

[3] αἱ ἀρχαὶ καὶ τὰ αἴτια ζητεῖται τῶν ὄντων, δῆλον δὲ ὅτι ᾗ ὄντα. ἔστι γάρ τι αἴτιον ὑγιείας καὶ εὐεξίας, καὶ τῶν [5] μαθηματικῶν εἰσὶν ἀρχαὶ καὶ στοιχεῖα καὶ αἴτια, καὶ ὅλως δὲ πᾶσα ἐπιστήμη διανοητικὴ ἢ μετέχουσά τι διανοίας περὶ αἰτίας καὶ ἀρχάς ἐστιν ἢ ἀκριβεστέρας ἢ ἁπλουστέρας. ἀλλὰ πᾶσαι αὗται περὶ ὄν τι καὶ γένος τι περιγραψάμεναι περὶ τούτου πραγματεύονται, ἀλλ’ οὐχὶ περὶ ὄντος ἁπλῶς οὐδὲ ᾗ [10] ὄν, οὐδὲ τοῦ τί ἐστιν οὐθένα λόγον ποιοῦνται, ἀλλ’ ἐκ τούτου, αἱ μὲν αἰσθήσει ποιήσασαι αὐτὸ δῆλον αἱ δ’ ὑπόθεσιν λαβοῦσαι τὸ τί ἐστιν, οὕτω τὰ καθ’ αὑτὰ ὑπάρχοντα τῷ γένει περὶ ὅ εἰσιν ἀποδεικνύουσιν ἢ ἀναγκαιότερον ἢ μαλακώτερον· διόπερ φανερὸν ὅτι οὐκ ἔστιν ἀπόδειξις οὐσίας οὐδὲ τοῦ τί ἐστιν [15] ἐκ τῆς τοιαύτης ἐπαγωγῆς, ἀλλά τις ἄλλος τρόπος τῆς δηλώσεως. ὁμοίως δὲ οὐδ’ εἰ ἔστιν ἢ μὴ ἔστι τὸ γένος περὶ ὃ πραγματεύονται οὐδὲν λέγουσι, διὰ τὸ τῆς αὐτῆς εἶναι διανοίας τό τε τί ἐστι δῆλον ποιεῖν καὶ εἰ ἔστιν.—ἐπεὶ δὲ καὶ ἡ φυσικὴ ἐπιστήμη τυγχάνει οὖσα περὶ γένος τι τοῦ ὄντος (περὶ [20] γὰρ τὴν τοιαύτην ἐστὶν οὐσίαν ἐν ᾗ ἡ ἀρχὴ τῆς κινήσεως καὶ στάσεως ἐν αὐτῇ, δῆλον ὅτι οὔτε πρακτικὴ ἐστιν οὔτε ποιητική (τῶν μὲν γὰρ ποιητῶν ἐν τῷ ποιοῦντι ἡ ἀρχή, ἢ νοῦς ἢ τέχνη ἢ δύναμίς τις, τῶν δὲ πρακτῶν ἐν τῷ πράττοντι, ἡ προαίρεσις· τὸ αὐτὸ γὰρ τὸ πρακτὸν καὶ προαιρετόν), [25] ὥστε εἰ πᾶσα διάνοια ἢ πρακτικὴ ἢ ποιητικὴ ἢ θεωρητική, ἡ φυσικὴ θεωρητική τις ἂν εἴη, ἀλλὰ θεωρητικὴ περὶ τοιοῦτον ὂν ὅ ἐστι δυνατὸν κινεῖσθαι, καὶ περὶ οὐσίαν τὴν κατὰ τὸν λόγον ὡς ἐπὶ τὸ πολὺ ὡς οὐ χωριστὴν μόνον. δεῖ δὲ τὸ τί ἦν εἶναι καὶ τὸν λόγον πῶς ἐστὶ μὴ λανθάνειν, ὡς ἄνευ γε [30] τούτου τὸ ζητεῖν μηδέν ἐστι ποιεῖν. ἔστι δὲ τῶν ὁριζομένων καὶ τῶν τί ἐστι τὰ μὲν ὡς τὸ σιμὸν τὰ δ’ ὡς τὸ κοῖλον. διαφέρει δὲ ταῦτα ὅτι τὸ μὲν σιμὸν συνειλημμένον ἐστὶ μετὰ τῆς

ὕλης (ἔστι γὰρ τὸ σιμὸν κοίλη ῥίς), ἡ δὲ κοιλότης ἄνευ ὕλης αἰσθητῆς. [1] εἰ δὴ πάντα τὰ φυσικὰ ὁμοίως τῷ σιμῷ λέγονται, οἷον ῥὶς ὀφθαλμὸς πρόσωπον σὰρξ ὀστοῦν, ὅλως ζῷον, φύλλον ῥίζα φλοιός, ὅλως φυτόν (οὐθενὸς γὰρ ἄνευ κινήσεως ὁ λόγος αὐτῶν, ἀλλ’ ἀεὶ ἔχει ὕλην), δῆλον πῶς δεῖ ἐν τοῖς φυσικοῖς τὸ τί ἐστι ζητεῖν καὶ ὁρίζεσθαι, [5] καὶ διότι καὶ περὶ ψυχῆς ἐνίας θεωρῆσαι τοῦ φυσικοῦ, ὅση μὴ ἄνευ τῆς ὕλης ἐστίν. ὅτι μὲν οὖν ἡ φυσικὴ θεωρητική ἐστι, φανερὸν ἐκ τούτων· ἀλλ’ ἔστι καὶ ἡ μαθηματικὴ θεωρητική· ἀλλ’ εἰ ἀκινήτων καὶ χωριστῶν ἐστί, νῦν ἄδηλον, ὅτι μέντοι ἔνια μαθήματα ᾗ ἀκίνητα καὶ ᾗ χωριστὰ [10] θεωρεῖ, δῆλον. εἰ δέ τί ἐστιν ἀΐδιον καὶ ἀκίνητον καὶ χωριστόν, φανερὸν ὅτι θεωρητικῆς τὸ γνῶναι, οὐ μέντοι φυσικῆς γε (περὶ κινητῶν γάρ τινων ἡ φυσικὴ οὐδὲ μαθηματικῆς, ἀλλὰ προτέρας ἀμφοῖν. ἡ μὲν γὰρ φυσικὴ περὶ χωριστὰ μὲν ἀλλ’ οὐκ ἀκίνητα, τῆς δὲ μαθηματικῆς ἔνια [15] περὶ ἀκίνητα μὲν οὐ χωριστὰ δὲ ἴσως ἀλλ’ ὡς ἐν ὕλῃ· ἡ δὲ πρώτη καὶ περὶ χωριστὰ καὶ ἀκίνητα. ἀνάγκη δὲ πάντα μὲν τὰ αἴτια ἀΐδια εἶναι, μάλιστα δὲ ταῦτα· ταῦτα γὰρ αἴτια τοῖς φανεροῖς τῶν θείων. ὥστε τρεῖς ἂν εἶεν φιλοσοφίαι θεωρητικαί, μαθηματική, φυσική, θεολογική (οὐ γὰρ [20] ἄδηλον ὅτι εἴ που τὸ θεῖον ὑπάρχει, ἐν τῇ τοιαύτῃ φύσει ὑπάρχει, καὶ τὴν τιμιωτάτην δεῖ περὶ τὸ τιμιώτατον γένος εἶναι. αἱ μὲν οὖν θεωρητικαὶ τῶν ἄλλων ἐπιστημῶν αἱρετώταται, αὕτη δὲ τῶν θεωρητικῶν. ἀπορήσειε γὰρ ἄν τις πότερόν ποθ’ ἡ πρώτη φιλοσοφία καθόλου ἐστὶν ἢ περί τι γένος [25] καὶ φύσιν τινὰ μίαν (οὐ γὰρ ὁ αὐτὸς τρόπος οὐδ’ ἐν ταῖς μαθηματικαῖς, ἀλλ’ ἡ μὲν γεωμετρία καὶ ἀστρολογία περί τινα φύσιν εἰσίν, ἡ δὲ καθόλου πασῶν κοινῆ· εἰ μὲν οὖν μὴ ἔστι τις ἑτέρα οὐσία παρὰ τὰς φύσει συνεστηκυίας, ἡ φυσικὴ ἂν εἴη πρώτη ἐπιστήμη· εἰ δ’ ἔστι τις οὐσία ἀκίνητος, [30] αὕτη προτέρα καὶ φιλοσοφία πρώτη, καὶ καθόλου οὕτως ὅτι πρώτη· καὶ περὶ τοῦ ὄντος ᾗ ὂν ταύτης ἂν εἴη θεωρῆσαι, καὶ τί ἐστι καὶ τὰ ὑπάρχοντα ᾗ ὄν.

ἀλλ’ ἐπεὶ τὸ ὂν τὸ ἁπλῶς λεγόμενον λέγεται πολλαχῶς, ὧν ἓν μὲν ἦν τὸ κατὰ συμβεβηκός, ἕτερον δὲ τὸ [35] ὡς ἀληθές, καὶ τὸ μὴ ὂν ὡς τὸ ψεῦδος, παρὰ ταῦτα δ’ ἐστὶ τὰ σχήματα τῆς κατηγορίας (οἷον τὸ μὲν τί, τὸ δὲ ποιόν, τὸ δὲ ποσόν, τὸ δὲ πού, τὸ δὲ ποτέ, καὶ εἴ τι ἄλλο σημαίνει τὸν τρόπον τοῦτον), [1] ἔτι παρὰ ταῦτα πάντα τὸ δυνάμει καὶ ἐνεργείᾳ·—ἐπεὶ δὴ πολλαχῶς λέγεται τὸ ὄν, πρῶτον περὶ τοῦ κατὰ συμβεβηκὸς λεκτέον, ὅτι οὐδεμία ἐστὶ περὶ αὐτὸ θεωρία. σημεῖον δέ· οὐδεμιᾷ γὰρ ἐπιστήμῃ ἐπιμελὲς [5] περὶ αὐτοῦ οὔτε πρακτικῇ οὔτε ποιητικῇ οὔτε θεωρητικῇ. οὔτε γὰρ ὁ ποιῶν οἰκίαν ποιεῖ ὅσα συμβαίνει ἅμα τῇ οἰκίᾳ γιγνομένῃ (ἄπειρα γάρ ἐστιν· τοῖς μὲν γὰρ ἡδεῖαν τοῖς δὲ βλαβερὰν τοῖς δ’ ὠφέλιμον οὐθὲν εἶναι κωλύει τὴν ποιηθεῖσαν, καὶ ἑτέραν ὡς εἰπεῖν πάντων τῶν ὄντων· ὧν οὐθενός [10] ἐστιν ἡ οἰκοδομικὴ ποιητική, τὸν αὐτὸν δὲ τρόπον οὐδ’ ὁ γεωμέτρης θεωρεῖ τὰ οὕτω συμβεβηκότα τοῖς σχήμασιν, οὐδ’ εἰ ἕτερόν ἐστι τρίγωνον καὶ τρίγωνον δύο ὀρθὰς ἔχον. καὶ τοῦτ’ εὐλόγως συμπίπτει· ὥσπερ γὰρ ὄνομά τι μόνον τὸ συμβεβηκός ἐστιν. διὸ Πλάτων τρόπον τινὰ οὐ κακῶς τὴν σοφιστικὴν [15] περὶ τὸ μὴ ὂν ἔταξεν. εἰσὶ γὰρ οἱ τῶν σοφιστῶν λόγοι περὶ τὸ συμβεβηκὸς ὡς εἰπεῖν μάλιστα πάντων, πότερον ἕτερον ἢ ταὐτὸν μουσικὸν καὶ γραμματικόν, καὶ μουσικὸς Κορίσκος καὶ Κορίσκος, καὶ εἰ πᾶν ὃ ἂν ᾖ, μὴ ἀεὶ δέ, γέγονεν, ὥστ’ εἰ μουσικὸς ὢν γραμματικὸς γέγονε, καὶ γραμματικὸς [20] ὢν μουσικός, καὶ ὅσοι δὴ ἄλλοι τοιοῦτοι τῶν λόγων εἰσίν· φαίνεται γὰρ τὸ συμβεβηκὸς ἐγγύς τι τοῦ μὴ ὄντος. δῆλον δὲ καὶ ἐκ τῶν τοιούτων λόγων· τῶν μὲν γὰρ ἄλλον τρόπον ὄντων ἔστι γένεσις καὶ φθορά, τῶν δὲ κατὰ συμβεβηκὸς οὐκ ἔστιν. ἀλλ’ ὅμως λεκτέον ἔτι περὶ τοῦ συμβεβηκότος [25] ἐφ’ ὅσον ἐνδέχεται, τίς ἡ φύσις αὐτοῦ καὶ διὰ τίν’ αἰτίαν ἔστιν· ἅμα γὰρ δῆλον ἴσως ἔσται καὶ διὰ τί ἐπιστήμη οὐκ ἔστιν αὐτοῦ.—ἐπεὶ οὖν ἐστὶν ἐν τοῖς οὖσι τὰ μὲν ἀεὶ ὡσαύτως ἔχοντα καὶ ἐξ ἀνάγκης, οὐ τῆς κατὰ τὸ βίαιον λεγομένης ἀλλ’ ἣν λέγομεν τῷ μὴ ἐνδέχεσθαι ἄλλως, τὰ δ’ [30] ἐξ ἀνάγκης μὲν οὐκ ἔστιν οὐδ’ ἀεί, ὡς δ’ ἐπὶ τὸ πολύ, αὕτη ἀρχὴ καὶ αὕτη αἰτία ἐστὶ τοῦ εἶναι τὸ συμβεβηκός· ὃ γὰρ [32] ἂν ᾖ μήτ’ ἀεὶ μήθ’ ὡς ἐπὶ τὸ πολύ, τοῦτό φαμεν συμβεβηκὸς εἶναι. οἷον ἐπὶ κυνὶ ἂν χειμὼν γένηται καὶ ψῦχος, τοῦτο συμβῆναί φαμεν, ἀλλ’ οὐκ ἂν πνῖγος καὶ ἀλέα, ὅτι

[35] τὸ μὲν ἀεὶ ἢ ὡς ἐπὶ τὸ πολὺ τὸ δ’ οὔ. καὶ τὸν ἄνθρωπον λευκὸν εἶναι συμβέβηκεν (οὔτε γὰρ ἀεὶ οὔθ’ ὡς ἐπὶ τὸ πολύ, ζῷον δ’ οὐ κατὰ συμβεβηκός. καὶ τὸ ὑγιάζειν δὲ τὸν οἰκοδόμον συμβεβηκός, [1] ὅτι οὐ πέφυκε τοῦτο ποιεῖν οἰκοδόμος ἀλλὰ ἰατρός, ἀλλὰ συνέβη ἰατρὸν εἶναι τὸν οἰκοδόμον. καὶ ὀψοποιὸς ἡδονῆς στοχαζόμενος ποιήσειεν ἄν τι ὑγιεινόν, ἀλλ’ οὐ κατὰ τὴν ὀψοποιητικήν· διὸ συνέβη, φαμέν, καὶ [5] ἔστιν ὡς ποιεῖ, ἁπλῶς δ’ οὔ. τῶν μὲν γὰρ ἄλλων ἐνίοτε δυνάμεις εἰσὶν αἱ ποιητικαί, τῶν δ’ οὐδεμία τέχνη οὐδὲ δύναμις ὡρισμένη· τῶν γὰρ κατὰ συμβεβηκὸς ὄντων ἢ γιγνομένων καὶ τὸ αἴτιόν ἐστι κατὰ συμβεβηκός. ὥστ’ ἐπεὶ οὐ πάντα ἐστὶν ἐξ ἀνάγκης καὶ ἀεὶ ἢ ὄντα ἢ γιγνόμενα, ἀλλὰ τὰ [10] πλεῖστα ὡς ἐπὶ τὸ πολύ, ἀνάγκη εἶναι τὸ κατὰ συμβεβηκὸς ὄν· οἷον οὔτ’ ἀεὶ οὔθ’ ὡς ἐπὶ τὸ πολὺ ὁ λευκὸς μουσικός ἐστιν, ἐπεὶ δὲ γίγνεταί ποτε, κατὰ συμβεβηκὸς ἔσται (εἰ δὲ μή, πάντ’ ἔσται ἐξ ἀνάγκης)· ὥστε ἡ ὕλη ἔσται αἰτία ἡ ἐνδεχομένη παρὰ τὸ ὡς ἐπὶ τὸ πολὺ ἄλλως τοῦ συμβεβηκότος. [15] ἀρχὴν δὲ τηνδὶ ληπτέον, πότερον οὐδέν ἐστιν οὔτ’ αἰεὶ οὔθ’ ὡς ἐπὶ τὸ πολύ. ἢ τοῦτο ἀδύνατον; ἔστιν ἄρα τι παρὰ ταῦτα τὸ ὁπότερ’ ἔτυχε καὶ κατὰ συμβεβηκός. ἀλλὰ πότερον τὸ ὡς ἐπὶ τὸ πολύ, τὸ δ’ ἀεὶ οὐθενὶ ὑπάρχει, ἢ ἔστιν ἄττα ἀΐδια; περὶ μὲν οὖν τούτων ὕστερον σκεπτέον, ὅτι δ’ [20] ἐπιστήμη οὐκ ἔστι τοῦ συμβεβηκότος φανερόν· ἐπιστήμη μὲν γὰρ πᾶσα ἢ τοῦ ἀεὶ ἢ τοῦ ὡς ἐπὶ τὸ πολύ—πῶς γὰρ ἢ μαθήσεταί ἢ διδάξει ἄλλον; δεῖ γὰρ ὡρίσθαι ἢ τῷ ἀεὶ ἢ τῷ ὡς ἐπὶ τὸ πολύ, οἷον ὅτι ὠφέλιμον τὸ μελίκρατον τῷ πυρέττοντι ὡς ἐπὶ τὸ πολύ—τὸ δὲ παρὰ τοῦτο οὐχ ἕξει λέγειν, [25] πότε οὔ, οἷον νουμηνίᾳ· ἢ γὰρ ἀεὶ ἢ ὡς ἐπὶ τὸ πολὺ καὶ τὸ τῇ νουμηνίᾳ· τὸ δὲ συμβεβηκός ἐστι παρὰ ταῦτα. τί μὲν οὖν ἐστὶ τὸ συμβεβηκὸς καὶ διὰ τίν’ αἰτίαν καὶ ὅτι ἐπιστήμη οὐκ ἔστιν αὐτοῦ, εἴρηται.

ὅτι δ’ εἰσὶν ἀρχαὶ καὶ αἴτια γενητὰ καὶ φθαρτὰ [30] ἄνευ τοῦ γίγνεσθαι καὶ φθείρεσθαι, φανερόν. εἰ γὰρ μὴ τοῦτ’, ἐξ ἀνάγκης πάντ’ ἔσται, εἰ τοῦ γιγνομένου καὶ φθειρομένου μὴ κατὰ συμβεβηκὸς αἴτιόν τι ἀνάγκη εἶναι. πότερον γὰρ ἔσται τοδὶ ἢ οὔ; ἐάν γε τοδὶ γένηται· εἰ δὲ μή, οὔ. τοῦτο δὲ ἐὰν ἄλλο. καὶ οὕτω δῆλον ὅτι ἀεὶ χρόνου ἀφαιρουμένου ἀπὸ πεπερασμένου χρόνου ἥξει ἐπὶ τὸ νῦν, [1] ὥστε ὁδὶ ἀποθανεῖται νόσῳ ἢ βίᾳ, ἐάν γε ἐξέλθῃ· τοῦτο δὲ ἐὰν διψήσῃ· τοῦτο δὲ ἐὰν ἄλλο· καὶ οὕτως ἥξει εἰς ὃ νῦν ὑπάρχει, ἢ εἰς τῶν γεγονότων τι. οἷον ἐὰν διψήσῃ· τοῦτο δὲ εἰ ἐσθίει δριμέα· [5] τοῦτο δ’ ἤτοι ὑπάρχει ἢ οὔ· ὥστ’ ἐξ ἀνάγκης ἀποθανεῖται ἢ οὐκ ἀποθανεῖται. ὁμοίως δὲ κἂν ὑπερπηδήσῃ τις εἰς τὰ γενόμενα, ὁ αὐτὸς λόγος· ἤδη γὰρ ὑπάρχει τοῦτο ἔν τινι, λέγω δὲ τὸ γεγονός· ἐξ ἀνάγκης ἄρα πάντα ἔσται τὰ ἐσόμενα, οἷον τὸ ἀποθανεῖν τὸν ζῶντα· ἤδη γάρ τι γέγονεν, [10] οἷον τὰ ἐναντία ἐν τῷ αὐτῷ. ἀλλ’ εἰ νόσῳ ἢ βίᾳ, οὔπω, ἀλλ’ ἐὰν τοδὶ γένηται. δῆλον ἄρα ὅτι μέχρι τινὸς βαδίζει ἀρχῆς, αὕτη δ’ οὐκέτι εἰς ἄλλο. ἔσται οὖν ἡ τοῦ ὁπότερ’ ἔτυχεν αὕτη, καὶ αἴτιον τῆς γενέσεως αὐτῆς ἄλλο οὐθέν. ἀλλ’ εἰς ἀρχὴν ποίαν καὶ αἴτιον ποῖον ἡ ἀναγωγὴ ἡ [15] τοιαύτη, πότερον ὡς εἰς ὕλην ἢ ὡς εἰς τὸ οὗ ἕνεκα ἢ ὡς εἰς τὸ κινῆσαν, μάλιστα σκεπτέον.

περὶ μὲν οὖν τοῦ κατὰ συμβεβηκὸς ὄντος ἀφείσθω (διώρισται γὰρ ἱκανῶς)· τὸ δὲ ὡς ἀληθὲς ὄν, καὶ μὴ ὂν ὡς ψεῦδος, ἐπειδὴ παρὰ σύνθεσίν ἐστι καὶ διαίρεσιν, τὸ δὲ σύνολον [20] περὶ μερισμὸν ἀντιφάσεως (τὸ μὲν γὰρ ἀληθὲς τὴν κατάφασιν ἐπὶ τῷ συγκειμένῳ ἔχει τὴν δ’ ἀπόφασιν ἐπὶ τῷ διῃρημένῳ, τὸ δὲ ψεῦδος τούτου τοῦ μερισμοῦ τὴν ἀντίφασιν· πῶς δὲ τὸ ἅμα ἢ τὸ χωρὶς νοεῖν συμβαίνει, ἄλλος λόγος, λέγω δὲ τὸ ἅμα καὶ τὸ χωρὶς ὥστε μὴ τὸ ἐφεξῆς [25] ἀλλ’ ἕν τι γίγνεσθαι· οὐ γάρ ἐστι τὸ ψεῦδος καὶ τὸ ἀληθὲς ἐν τοῖς πράγμασιν, οἷον τὸ μὲν ἀγαθὸν ἀληθὲς τὸ δὲ κακὸν εὐθὺς ψεῦδος, ἀλλ’ ἐν διανοίᾳ, περὶ δὲ τὰ ἁπλᾶ καὶ τὰ τί ἐστιν οὐδ’ ἐν διανοίᾳ·—ὅσα μὲν οὖν δεῖ θεωρῆσαι περὶ τὸ οὕτως ὂν καὶ μὴ ὄν, ὕστερον ἐπισκεπτέον· ἐπεὶ δὲ ἡ συμπλοκή [30] ἐστιν καὶ ἡ διαίρεσις ἐν διανοίᾳ ἀλλ’ οὐκ ἐν τοῖς πράγμασι, τὸ δ’ οὕτως ὂν ἕτερον ὂν τῶν κυρίως (ἢ γὰρ τὸ τί ἐστιν ἢ ὅτι ποιὸν ἢ ὅτι ποσὸν ἤ τι ἄλλο συνάπτει ἢ ἀφαιρεῖ ἡ διάνοιά, τὸ μὲν ὡς συμβεβηκὸς καὶ τὸ ὡς ἀληθὲς ὂν ἀφετέον—τὸ γὰρ αἴτιον τοῦ μὲν ἀόριστον τοῦ δὲ τῆς

διανοίας τι πάθος, [1] καὶ ἀμφότερα περὶ τὸ λοιπὸν γένος τοῦ ὄντος, καὶ οὐκ ἔξω δηλοῦσιν οὖσάν τινα φύσιν τοῦ ὄντος—διὸ ταῦτα μὲν ἀφείσθω, σκεπτέον δὲ τοῦ ὄντος αὐτοῦ τὰ αἴτια καὶ τὰς ἀρχὰς ᾗ ὄν. φανερὸν δ’ ἐν οἷς διωρισάμεθα περὶ [5] τοῦ ποσαχῶς λέγεται ἕκαστον, ὅτι πολλαχῶς λέγεται τὸ ὄν.

[10] τὸ ὂν λέγεται πολλαχῶς, καθάπερ διειλόμεθα πρότερον ἐν τοῖς περὶ τοῦ ποσαχῶς· σημαίνει γὰρ τὸ μὲν τί ἐστι καὶ τόδε τι, τὸ δὲ ποιὸν ἢ ποσὸν ἢ τῶν ἄλλων ἕκαστον τῶν οὕτω κατηγορουμένων. τοσαυταχῶς δὲ λεγομένου τοῦ ὄντος φανερὸν ὅτι τούτων πρῶτον ὂν τὸ τί ἐστιν, ὅπερ σημαίνει [15] τὴν οὐσίαν (ὅταν μὲν γὰρ εἴπωμεν ποιόν τι τόδε, ἢ ἀγαθὸν λέγομεν ἢ κακόν, ἀλλ’ οὐ τρίπηχυ ἢ ἄνθρωπον· ὅταν δὲ τί ἐστιν, οὐ λευκὸν οὐδὲ θερμὸν οὐδὲ τρίπηχυ, ἀλλὰ ἄνθρωπον ἢ θεόν), τὰ δ’ ἄλλα λέγεται ὄντα τῷ τοῦ οὕτως ὄντος τὰ μὲν ποσότητες εἶναι, τὰ δὲ ποιότητες, τὰ δὲ πάθη, τὰ δὲ [20] ἄλλο τι. διὸ κἂν ἀπορήσειέ τις πότερον τὸ βαδίζειν καὶ τὸ ὑγιαίνειν καὶ τὸ καθῆσθαι ἕκαστον αὐτῶν ὂν σημαίνει, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων ὁτουοῦν τῶν τοιούτων· οὐδὲν γὰρ αὐτῶν ἐστὶν οὔτε καθ’ αὑτὸ πεφυκὸς οὔτε χωρίζεσθαι δυνατὸν τῆς οὐσίας, ἀλλὰ μᾶλλον, εἴπερ, τὸ βαδίζον [25] τῶν ὄντων καὶ τὸ καθήμενον καὶ τὸ ὑγιαῖνον. ταῦτα δὲ μᾶλλον φαίνεται ὄντα, διότι ἔστι τι τὸ ὑποκείμενον αὐτοῖς ὡρισμένον (τοῦτο δ’ ἐστὶν ἡ οὐσία καὶ τὸ καθ’ ἕκαστον), ὅπερ ἐμφαίνεται ἐν τῇ κατηγορίᾳ τῇ τοιαύτῃ· τὸ ἀγαθὸν γὰρ ἢ τὸ καθήμενον οὐκ ἄνευ τούτου λέγεται. δῆλον οὖν ὅτι διὰ [30] ταύτην κἀκείνων ἕκαστον ἔστιν, ὥστε τὸ πρώτως ὂν καὶ οὐ τὶ ὂν ἀλλ’ ὂν ἁπλῶς ἡ οὐσία ἂν εἴη. πολλαχῶς μὲν οὖν λέγεται τὸ πρῶτον· ὅμως δὲ πάντως ἡ οὐσία πρῶτον, καὶ λόγῳ καὶ γνώσει καὶ χρόνῳ. τῶν μὲν γὰρ ἄλλων κατηγορημάτων οὐθὲν χωριστόν, αὕτη δὲ μόνη· καὶ τῷ λόγῳ δὲ τοῦτο [35] πρῶτον (ἀνάγκη γὰρ ἐν τῷ ἑκάστου λόγῳ τὸν τῆς οὐσίας ἐνυπάρχειν)· καὶ εἰδέναι δὲ τότ’ οἰόμεθα ἕκαστον μάλιστα, ὅταν τί ἐστιν ὁ ἄνθρωπος γνῶμεν ἢ τὸ πῦρ, [1] μᾶλλον ἢ τὸ ποιὸν ἢ τὸ ποσὸν ἢ τὸ πού, ἐπεὶ καὶ αὐτῶν τούτων τότε ἕκαστον ἴσμεν, ὅταν τί ἐστι τὸ ποσὸν ἢ τὸ ποιὸν γνῶμεν. καὶ δὴ καὶ τὸ πάλαι τε καὶ νῦν καὶ ἀεὶ ζητούμενον καὶ ἀεὶ ἀπορούμενον, τί τὸ ὄν, τοῦτό ἐστι τίς ἡ οὐσία (τοῦτο γὰρ οἱ μὲν ἓν εἶναί [5] φασιν οἱ δὲ πλείω ἢ ἕν, καὶ οἱ μὲν πεπερασμένα οἱ δὲ ἄπειρα), διὸ καὶ ἡμῖν καὶ μάλιστα καὶ πρῶτον καὶ μόνον ὡς εἰπεῖν περὶ τοῦ οὕτως ὄντος θεωρητέον τί ἐστιν.

δοκεῖ δ’ ἡ οὐσία ὑπάρχειν φανερώτατα μὲν τοῖς σώμασιν (διὸ τά τε ζῷα καὶ τὰ φυτὰ καὶ τὰ μόρια αὐτῶν [10] οὐσίας εἶναί φαμεν, καὶ τὰ φυσικὰ σώματα, οἷον πῦρ καὶ ὕδωρ καὶ γῆν καὶ τῶν τοιούτων ἕκαστον, καὶ ὅσα ἢ μόρια τούτων ἢ ἐκ τούτων ἐστίν, ἢ μορίων ἢ πάντων, οἷον ὅ τε οὐρανὸς καὶ τὰ μόρια αὐτοῦ, ἄστρα καὶ σελήνη καὶ ἥλιος)· πότερον δὲ αὗται μόναι οὐσίαι εἰσὶν ἢ καὶ ἄλλαι, ἢ τούτων τινὲς [15] ἢ καὶ ἄλλαι, ἢ τούτων μὲν οὐθὲν ἕτεραι δέ τινες, σκεπτέον. δοκεῖ δέ τισι τὰ τοῦ σώματος πέρατα, οἷον ἐπιφάνεια καὶ γραμμὴ καὶ στιγμὴ καὶ μονάς, εἶναι οὐσίαι, καὶ μᾶλλον ἢ τὸ σῶμα καὶ τὸ στερεόν. ἔτι παρὰ τὰ αἰσθητὰ οἱ μὲν οὐκ οἴονται εἶναι οὐδὲν τοιοῦτον, οἱ δὲ πλείω καὶ μᾶλλον ὄντα ἀΐδια, ὥσπερ Πλάτων [20] τά τε εἴδη καὶ τὰ μαθηματικὰ δύο οὐσίας, τρίτην δὲ τὴν τῶν αἰσθητῶν σωμάτων οὐσίαν, Σπεύσιππος δὲ καὶ πλείους οὐσίας ἀπὸ τοῦ ἑνὸς ἀρξάμενος, καὶ ἀρχὰς ἑκάστης οὐσίας, ἄλλην μὲν ἀριθμῶν ἄλλην δὲ μεγεθῶν, ἔπειτα ψυχῆς· καὶ τοῦτον δὴ τὸν τρόπον ἐπεκτείνει τὰς οὐσίας. ἔνιοι δὲ [25] τὰ μὲν εἴδη καὶ τοὺς ἀριθμοὺς τὴν αὐτὴν ἔχειν φασὶ φύσιν, τὰ δὲ ἄλλα ἐχόμενα, γραμμὰς καὶ ἐπίπεδα, μέχρι πρὸς τὴν τοῦ οὐρανοῦ οὐσίαν καὶ τὰ αἰσθητά. περὶ δὴ τούτων τί λέγεται καλῶς ἢ μὴ καλῶς, καὶ τίνες εἰσὶν οὐσίαι, καὶ πότερον εἰσί τινες παρὰ τὰς αἰσθητὰς ἢ οὐκ εἰσί, καὶ αὗται πῶς [30] εἰσί, καὶ πότερον ἔστι τις χωριστὴ οὐσία, καὶ διὰ τί καὶ πῶς, ἢ οὐδεμία, παρὰ τὰς αἰσθητάς, σκεπτέον, ὑποτυπωσαμένοις τὴν οὐσίαν πρῶτον τί ἐστιν.

λέγεται δ’ ἡ οὐσία, εἰ μὴ πλεοναχῶς, ἀλλ’ ἐν τέτταρσί γε μάλιστα· καὶ γὰρ τὸ τί ἦν εἶναι καὶ τὸ καθόλου [35] καὶ τὸ γένος οὐσία δοκεῖ εἶναι ἑκάστου, καὶ τέταρτον τούτων τὸ ὑποκείμενον. τὸ δ’

ὑποκείμενόν ἐστι καθ’ οὗ τὰ ἄλλα λέγεται, ἐκεῖνο δὲ αὐτὸ μηκέτι κατ’ ἄλλου· διὸ πρῶτον περὶ τούτου διοριστέον· [1] μάλιστα γὰρ δοκεῖ εἶναι οὐσία τὸ ὑποκείμενον πρῶτον. τοιοῦτον δὲ τρόπον μέν τινα ἡ ὕλη λέγεται, ἄλλον δὲ τρόπον ἡ μορφή, τρίτον δὲ τὸ ἐκ τούτων (λέγω δὲ τὴν μὲν ὕλην οἷον τὸν χαλκόν, τὴν δὲ μορφὴν τὸ σχῆμα τῆς [5] ἰδέας, τὸ δ’ ἐκ τούτων τὸν ἀνδριάντα τὸ σύνολον), ὥστε εἰ τὸ εἶδος τῆς ὕλης πρότερον καὶ μᾶλλον ὄν, καὶ τοῦ ἐξ ἀμφοῖν πρότερον ἔσται διὰ τὸν αὐτὸν λόγον. νῦν μὲν οὖν τύπῳ εἴρηται τί ποτ’ ἐστὶν ἡ οὐσία, ὅτι τὸ μὴ καθ’ ὑποκειμένου ἀλλὰ καθ’ οὗ τὰ ἄλλα· δεῖ δὲ μὴ μόνον οὕτως· οὐ γὰρ ἱκανόν· [10] αὐτὸ γὰρ τοῦτο ἄδηλον, καὶ ἔτι ἡ ὕλη οὐσία γίγνεται. εἰ γὰρ μὴ αὕτη οὐσία, τίς ἐστιν ἄλλη διαφεύγει· περιαιρουμένων γὰρ τῶν ἄλλων οὐ φαίνεται οὐδὲν ὑπομένον· τὰ μὲν γὰρ ἄλλα τῶν σωμάτων πάθη καὶ ποιήματα καὶ δυνάμεις, τὸ δὲ μῆκος καὶ πλάτος καὶ βάθος ποσότητές τινες ἀλλ’ [15] οὐκ οὐσίαι (τὸ γὰρ ποσὸν οὐκ οὐσία), ἀλλὰ μᾶλλον ᾧ ὑπάρχει ταῦτα πρώτῳ, ἐκεῖνό ἐστιν οὐσία. ἀλλὰ μὴν ἀφαιρουμένου μήκους καὶ πλάτους καὶ βάθους οὐδὲν ὁρῶμεν ὑπολειπόμενον, πλὴν εἴ τί ἐστι τὸ ὁριζόμενον ὑπὸ τούτων, ὥστε τὴν ὕλην ἀνάγκη φαίνεσθαι μόνην οὐσίαν οὕτω σκοπουμένοις. [20] λέγω δ’ ὕλην ἣ καθ’ αὑτὴν μήτε τὶ μήτε ποσὸν μήτε ἄλλο μηδὲν λέγεται οἷς ὥρισται τὸ ὄν. ἔστι γάρ τι καθ’ οὗ κατηγορεῖται τούτων ἕκαστον, ᾧ τὸ εἶναι ἕτερον καὶ τῶν κατηγοριῶν ἑκάστῃ (τὰ μὲν γὰρ ἄλλα τῆς οὐσίας κατηγορεῖται, αὕτη δὲ τῆς ὕλης), ὥστε τὸ ἔσχατον καθ’ αὑτὸ οὔτε τὶ οὔτε ποσὸν [25] οὔτε ἄλλο οὐδέν ἐστιν· οὐδὲ δὴ αἱ ἀποφάσεις, καὶ γὰρ αὗται ὑπάρξουσι κατὰ συμβεβηκός. ἐκ μὲν οὖν τούτων θεωροῦσι συμβαίνει οὐσίαν εἶναι τὴν ὕλην· ἀδύνατον δέ· καὶ γὰρ τὸ χωριστὸν καὶ τὸ τόδε τι ὑπάρχειν δοκεῖ μάλιστα τῇ οὐσίᾳ, διὸ τὸ εἶδος καὶ τὸ ἐξ ἀμφοῖν οὐσία δόξειεν ἂν εἶναι μᾶλλον [30] τῆς ὕλης. τὴν μὲν τοίνυν ἐξ ἀμφοῖν οὐσίαν, λέγω δὲ τὴν ἔκ τε τῆς ὕλης καὶ τῆς μορφῆς, ἀφετέον, ὑστέρα γὰρ καὶ δήλη· φανερὰ δέ πως καὶ ἡ ὕλη· περὶ δὲ τῆς τρίτης σκεπτέον, αὕτη γὰρ ἀπορωτάτη. ὁμολογοῦνται δ’ οὐσίαι εἶναι τῶν αἰσθητῶν τινές, ὥστε ἐν ταύταις ζητητέον πρῶτον. [3] πρὸ ἔργου γὰρ τὸ μεταβαίνειν εἰς τὸ γνωριμώτερον. ἡ γὰρ μάθησις οὕτω γίγνεται πᾶσι διὰ τῶν ἧττον γνωρίμων φύσει [5] εἰς τὰ γνώριμα μᾶλλον· καὶ τοῦτο ἔργον ἐστίν, ὥσπερ ἐν ταῖς πράξεσι τὸ ποιῆσαι ἐκ τῶν ἑκάστῳ ἀγαθῶν τὰ ὅλως ἀγαθὰ ἑκάστῳ ἀγαθά, οὕτως ἐκ τῶν αὐτῷ γνωριμωτέρων τὰ τῇ φύσει γνώριμα αὐτῷ γνώριμα. τὰ δ’ ἑκάστοις γνώριμα καὶ πρῶτα πολλάκις ἠρέμα ἐστὶ γνώριμα, καὶ μικρὸν ἢ [10] οὐθὲν ἔχει τοῦ ὄντος· ἀλλ’ ὅμως ἐκ τῶν φαύλως μὲν γνωστῶν αὐτῷ δὲ γνωστῶν τὰ ὅλως γνωστὰ γνῶναι πειρατέον, μεταβαίνοντας, ὥσπερ εἴρηται, διὰ τούτων αὐτῶν.

ἐπεὶ δ’ ἐν ἀρχῇ διειλόμεθα πόσοις ὁρίζομεν τὴν οὐσίαν, καὶ τούτων ἕν τι ἐδόκει εἶναι τὸ τί ἦν εἶναι, θεωρητέον περὶ [13] αὐτοῦ. καὶ πρῶτον εἴπωμεν ἔνια περὶ αὐτοῦ λογικῶς, ὅτι ἐστὶ τὸ τί ἦν εἶναι ἑκάστου ὃ λέγεται καθ’ αὑτό. οὐ γάρ ἐστι τὸ σοὶ [15] εἶναι τὸ μουσικῷ εἶναι· οὐ γὰρ κατὰ σαυτὸν εἶ μουσικός. ὃ ἄρα κατὰ σαυτόν. οὐδὲ δὴ τοῦτο πᾶν· οὐ γὰρ τὸ οὕτως καθ’ αὑτὸ ὡς ἐπιφανείᾳ λευκόν, ὅτι οὐκ ἔστι τὸ ἐπιφανείᾳ εἶναι τὸ λευκῷ εἶναι. ἀλλὰ μὴν οὐδὲ τὸ ἐξ ἀμφοῖν, τὸ ἐπιφανείᾳ λευκῇ, ὅτι πρόσεστιν αὐτό. ἐν ᾧ ἄρα μὴ ἐνέσται λόγῳ [20] αὐτό, λέγοντι αὐτό, οὗτος ὁ λόγος τοῦ τί ἦν εἶναι ἑκάστῳ, ὥστ’ εἰ τὸ ἐπιφανείᾳ λευκῇ εἶναί ἐστι τὸ ἐπιφανείᾳ εἶναι λείᾳ, τὸ λευκῷ καὶ λείῳ εἶναι τὸ αὐτὸ καὶ ἕν. ἐπεὶ δ’ ἔστι καὶ κατὰ τὰς ἄλλας κατηγορίας σύνθετα (ἔστι γάρ τι ὑποκείμενον ἑκάστῳ, οἷον τῷ ποιῷ καὶ τῷ ποσῷ καὶ τῷ [25] ποτὲ καὶ τῷ ποὺ καὶ τῇ κινήσει), σκεπτέον ἆρ’ ἔστι λόγος τοῦ τί ἦν εἶναι ἑκάστῳ αὐτῶν, καὶ ὑπάρχει καὶ τούτοις τὸ τί ἦν εἶναι, οἷον λευκῷ ἀνθρώπῳ τί ἦν λευκῷ ἀνθρώπῳ. ἔστω δὴ ὄνομα αὐτῷ ἱμάτιον. τί ἐστι τὸ ἱματίῳ εἶναι; ἀλλὰ μὴν οὐδὲ τῶν καθ’ αὑτὸ λεγομένων οὐδὲ τοῦτο. ἢ τὸ οὐ καθ’ αὑτὸ [30] λέγεται διχῶς, καὶ τούτου ἐστὶ τὸ μὲν ἐκ προσθέσεως τὸ δὲ οὔ. τὸ μὲν γὰρ τῷ αὐτὸ ἄλλῳ προσκεῖσθαι λέγεται ὃ ὁρίζεται, οἷον εἰ τὸ λευκῷ εἶναι ὁριζόμενος λέγοι λευκοῦ ἀνθρώπου λόγον· τὸ δὲ τῷ ἄλλο αὐτῷ, οἷον εἰ σημαίνοι τὸ ἱμάτιον λευκὸν ἄνθρωπον, ὁ δὲ ὁρίζοιτο ἱμάτιον ὡς λευκόν. τὸ δὴ λευκὸς ἄνθρωπος ἔστι μὲν λευκόν, [1] οὐ μέντοι τὸ τί ἦν εἶναι λευκῷ εἶναι.—ἀλλὰ τὸ ἱματίῳ

εἶναι ἆρά ἐστι τί ἦν εἶναί τι ἢ ὅλως; ἢ οὔ; ὅπερ γάρ τί ἐστι τὸ τί ἦν εἶναι· ὅταν δ’ ἄλλο κατ’ ἄλλου λέγηται, οὐκ ἔστιν ὅπερ τόδε τι, οἷον ὁ [5] λευκὸς ἄνθρωπος οὐκ ἔστιν ὅπερ τόδε τι, εἴπερ τὸ τόδε ταῖς οὐσίαις ὑπάρχει μόνον· ὥστε τὸ τί ἦν εἶναί ἐστιν ὅσων ὁ λόγος ἐστὶν ὁρισμός. ὁρισμὸς δ’ ἐστὶν οὐκ ἂν ὄνομα λόγῳ ταὐτὸ σημαίνῃ (πάντες γὰρ ἂν εἶεν οἱ λόγοι ὅροι· ἔσται γὰρ ὄνομα ὁτῳοῦν λόγῳ, ὥστε καὶ ἡ Ἰλιὰς ὁρισμὸς ἔσται), [10] ἀλλ’ ἐὰν πρώτου τινὸς ᾖ· τοιαῦτα δ’ ἐστὶν ὅσα λέγεται μὴ τῷ ἄλλο κατ’ ἄλλου λέγεσθαι. οὐκ ἔσται ἄρα οὐδενὶ τῶν μὴ γένους εἰδῶν ὑπάρχον τὸ τί ἦν εἶναι, ἀλλὰ τούτοις μόνον (ταῦτα γὰρ δοκεῖ οὐ κατὰ μετοχὴν λέγεσθαι καὶ πάθος οὐδ’ ὡς συμβεβηκός)· ἀλλὰ λόγος μὲν ἔσται ἑκάστου [15] καὶ τῶν ἄλλων τί σημαίνει, ἐὰν ᾖ ὄνομα, ὅτι τόδε τῷδε ὑπάρχει, ἢ ἀντὶ λόγου ἁπλοῦ ἀκριβέστερος· ὁρισμὸς δ’ οὐκ ἔσται οὐδὲ τὸ τί ἦν εἶναι. ἢ καὶ ὁ ὁρισμὸς ὥσπερ καὶ τὸ τί ἐστι πλεοναχῶς λέγεται; καὶ γὰρ τὸ τί ἐστιν ἕνα μὲν τρόπον σημαίνει τὴν οὐσίαν καὶ τὸ τόδε τι, ἄλλον δὲ ἕκαστον [20] τῶν κατηγορουμένων, ποσὸν ποιὸν καὶ ὅσα ἄλλα τοιαῦτα. ὥσπερ γὰρ καὶ τὸ ἔστιν ὑπάρχει πᾶσιν, ἀλλ’ οὐχ ὁμοίως ἀλλὰ τῷ μὲν πρώτως τοῖς δ’ ἑπομένως, οὕτω καὶ τὸ τί ἐστιν ἁπλῶς μὲν τῇ οὐσίᾳ πὼς δὲ τοῖς ἄλλοις· καὶ γὰρ τὸ ποιὸν ἐροίμεθ’ ἂν τί ἐστιν, ὥστε καὶ τὸ ποιὸν τῶν τί ἐστιν, ἀλλ’ [25] οὐχ ἁπλῶς, ἀλλ’ ὥσπερ ἐπὶ τοῦ μὴ ὄντος λογικῶς φασί τινες εἶναι τὸ μὴ ὄν, οὐχ ἁπλῶς ἀλλὰ μὴ ὄν, οὕτω καὶ τὸ ποιόν.—δεῖ μὲν οὖν σκοπεῖν καὶ τὸ πῶς δεῖ λέγειν περὶ ἕκαστον, οὐ μὴν μᾶλλόν γε ἢ τὸ πῶς ἔχει· διὸ καὶ νῦν ἐπεὶ τὸ λεγόμενον φανερόν, καὶ τὸ τί ἦν εἶναι ὁμοίως ὑπάρξει πρώτως [30] μὲν καὶ ἁπλῶς τῇ οὐσίᾳ, εἶτα καὶ τοῖς ἄλλοις, ὥσπερ καὶ τὸ τί ἐστιν, οὐχ ἁπλῶς τί ἦν εἶναι ἀλλὰ ποιῷ ἢ ποσῷ τί ἦν εἶναι. δεῖ γὰρ ἢ ὁμωνύμως ταῦτα φάναι εἶναι ὄντα, ἢ προστιθέντας καὶ ἀφαιροῦντας, ὥσπερ καὶ τὸ μὴ ἐπιστητὸν ἐπιστητόν, ἐπεὶ τό γε ὀρθόν ἐστι μήτε ὁμωνύμως φάναι [35] μήτε ὡσαύτως ἀλλ’ ὥσπερ τὸ ἰατρικὸν τῷ πρὸς τὸ αὐτὸ μὲν καὶ ἕν, οὐ τὸ αὐτὸ δὲ καὶ ἕν, οὐ μέντοι οὐδὲ ὁμωνύμως· [1] οὐδὲ γὰρ ἰατρικὸν σῶμα καὶ ἔργον καὶ σκεῦος λέγεται οὔτε ὁμωνύμως οὔτε καθ’ ἓν ἀλλὰ πρὸς ἕν. ἀλλὰ ταῦτα μὲν ὁποτέρως τις ἐθέλει λέγειν διαφέρει οὐδέν· ἐκεῖνο δὲ φανερὸν [5] ὅτι ὁ πρώτως καὶ ἁπλῶς ὁρισμὸς καὶ τὸ τί ἦν εἶναι τῶν οὐσιῶν ἐστίν. οὐ μὴν ἀλλὰ καὶ τῶν ἄλλων ὁμοίως ἐστί, πλὴν οὐ πρώτως. οὐ γὰρ ἀνάγκη, ἂν τοῦτο τιθῶμεν, τούτου ὁρισμὸν εἶναι ὃ ἂν λόγῳ τὸ αὐτὸ σημαίνῃ, ἀλλὰ τινὶ λόγῳ· τοῦτο δὲ ἐὰν ἑνὸς ᾖ, μὴ τῷ συνεχεῖ ὥσπερ ἡ Ἰλιὰς ἢ ὅσα συνδέσμω [10] ،،ι ἀλλ’ ἐὰν ὁσαχῶς λέγεται τὸ ἕν· τὸ δ’ ἓν λέγεται ὥσπερ τὸ ὄν· τὸ δὲ ὂν τὸ μὲν τόδε τι τὸ δὲ ποσὸν τὸ δὲ ποιόν τι σημαίνει. διὸ καὶ λευκοῦ ἀνθρώπου ἔσται λόγος καὶ ὁρισμός, ἄλλον δὲ τρόπον καὶ τοῦ λευκοῦ καὶ οὐσίας.

ἔχει δ’ ἀπορίαν, ἐάν τις μὴ φῇ ὁρισμὸν εἶναι τὸν ἐκ [15] προσθέσεως λόγον, τίνος ἔσται ὁρισμὸς τῶν οὐχ ἁπλῶν ἀλλὰ συνδεδυασμένων· ἐκ προσθέσεως γὰρ ἀνάγκη δηλοῦν. λέγω δὲ οἷον ἔστι ῥὶς καὶ κοιλότης, καὶ σιμότης τὸ ἐκ τῶν δυοῖν λεγόμενον τῷ τόδε ἐν τῷδε, καὶ οὐ κατὰ συμβεβηκός γε οὔθ’ ἡ κοιλότης οὔθ’ ἡ σιμότης πάθος τῆς ῥινός, ἀλλὰ καθ’ [20] αὑτήν· οὐδ’ ὡς τὸ λευκὸν Καλλίᾳ, ἢ ἀνθρώπῳ, ὅτι Καλλίας λευκὸς ᾧ συμβέβηκεν ἀνθρώπῳ εἶναι, ἀλλ’ ὡς τὸ ἄρρεν τῷ ζῴῳ καὶ τὸ ἴσον τῷ ποσῷ καὶ πάντα ὅσα λέγεται καθ’ αὑτὰ ὑπάρχειν. ταῦτα δ’ ἐστὶν ἐν ὅσοις ὑπάρχει ἢ ὁ λόγος ἢ τοὔνομα οὗ ἐστὶ τοῦτο τὸ πάθος, καὶ μὴ ἐνδέχεται δηλῶσαι [25] χωρίς, ὥσπερ τὸ λευκὸν ἄνευ τοῦ ἀνθρώπου ἐνδέχεται ἀλλ’ οὐ τὸ θῆλυ ἄνευ τοῦ ζῴου· ὥστε τούτων τὸ τί ἦν εἶναι καὶ ὁρισμὸς ἢ οὐκ ἔστιν οὐδενὸς ἤ, εἰ ἔστιν, ἄλλως, καθάπερ εἰρήκαμεν. ἔστι δὲ ἀπορία καὶ ἑτέρα περὶ αὐτῶν. εἰ μὲν γὰρ τὸ αὐτό ἐστι σιμὴ ῥὶς καὶ κοίλη ῥίς, τὸ αὐτὸ ἔσται τὸ σιμὸν καὶ τὸ [30] κοῖλον· εἰ δὲ μή, διὰ τὸ ἀδύνατον εἶναι εἰπεῖν τὸ σιμὸν ἄνευ τοῦ πράγματος οὗ ἐστὶ πάθος καθ’ αὑτό (ἔστι γὰρ τὸ σιμὸν κοιλότης ἐν ῥινί), τὸ ῥῖνα σιμὴν εἰπεῖν ἢ οὐκ ἔστιν ἢ δὶς τὸ αὐτὸ ἔσται εἰρημένον, ῥὶς ῥὶς κοίλη (ἡ γὰρ ῥὶς ἡ σιμὴ ῥὶς ῥὶς κοίλη ἔσται), διὸ ἄτοπον τὸ ὑπάρχειν τοῖς τοιούτοις τὸ τί [35] ἦν εἶναι· εἰ δὲ μή, εἰς ἄπειρον εἶσιν· ῥινὶ γὰρ ῥινὶ σιμῇ ἔτι ἄλλο ἐνέσται. [1] δῆλον τοίνυν ὅτι μόνης τῆς οὐσίας ἐστὶν ὁ ὁρισμός. εἰ γὰρ καὶ τῶν ἄλλων κατηγοριῶν, ἀνάγκη ἐκ προσθέσεως εἶναι, οἷον τοῦ †ποιοῦ† καὶ περιττοῦ· οὐ γὰρ ἄνευ ἀριθμοῦ,

οὐδὲ τὸ θῆλυ ἄνευ ζῴου (τὸ δὲ ἐκ προσθέσεως λέγω ἐν οἷς [5] συμβαίνει δὶς τὸ αὐτὸ λέγειν ὥσπερ ἐν τούτοις). εἰ δὲ τοῦτο ἀληθές, οὐδὲ συνδυαζομένων ἔσται, οἷον ἀριθμοῦ περιττοῦ· ἀλλὰ λανθάνει ὅτι οὐκ ἀκριβῶς λέγονται οἱ λόγοι. εἰ δ’ εἰσὶ καὶ τούτων ὅροι, ἤτοι ἄλλον τρόπον εἰσὶν ἢ καθάπερ ἐλέχθη πολλαχῶς λεκτέον εἶναι τὸν ὁρισμὸν καὶ τὸ τί ἦν [10] εἶναι, ὥστε ὡδὶ μὲν οὐδενὸς ἔσται ὁρισμὸς οὐδὲ τὸ τί ἦν εἶναι οὐδενὶ ὑπάρξει πλὴν ταῖς οὐσίαις, ὡδὶ δ’ ἔσται. ὅτι μὲν οὖν ἐστὶν ὁ ὁρισμὸς ὁ τοῦ τί ἦν εἶναι λόγος, καὶ τὸ τί ἦν εἶναι ἢ μόνων τῶν οὐσιῶν ἐστὶν ἢ μάλιστα καὶ πρώτως καὶ ἁπλῶς, δῆλον.

[15] πότερον δὲ ταὐτόν ἐστιν ἢ ἕτερον τὸ τί ἦν εἶναι καὶ ἕκαστον, σκεπτέον. ἔστι γάρ τι πρὸ ἔργου πρὸς τὴν περὶ τῆς οὐσίας σκέψιν· ἕκαστόν τε γὰρ οὐκ ἄλλο δοκεῖ εἶναι τῆς ἑαυτοῦ οὐσίας, καὶ τὸ τί ἦν εἶναι λέγεται εἶναι ἡ ἑκάστου οὐσία. ἐπὶ μὲν δὴ τῶν λεγομένων κατὰ συμβεβηκὸς δόξειεν ἂν [20] ἕτερον εἶναι, οἷον λευκὸς ἄνθρωπος ἕτερον καὶ τὸ λευκῷ ἀνθρώπῳ εἶναι (εἰ γὰρ τὸ αὐτό, καὶ τὸ ἀνθρώπῳ εἶναι καὶ τὸ λευκῷ ἀνθρώπῳ τὸ αὐτό· τὸ αὐτὸ γὰρ ἄνθρωπος καὶ λευκὸς ἄνθρωπος, ὡς φασίν, ὥστε καὶ τὸ λευκῷ ἀνθρώπῳ καὶ τὸ ἀνθρώπῳ· ἢ οὐκ ἀνάγκη ὅσα κατὰ συμβεβηκὸς εἶναι [25] ταὐτά, οὐ γὰρ ὡσαύτως τὰ ἄκρα γίγνεται ταὐτά· ἀλλ’ ἴσως γε ἐκεῖνο δόξειεν ἂν συμβαίνειν, τὰ ἄκρα γίγνεσθαι ταὐτὰ τὰ κατὰ συμβεβηκός, οἷον τὸ λευκῷ εἶναι καὶ τὸ μουσικῷ· δοκεῖ δὲ οὔ)· ἐπὶ δὲ τῶν καθ’ αὑτὰ λεγομένων ἆρ’ ἀνάγκη ταὐτὸ εἶναι, οἷον εἴ τινες εἰσὶν οὐσίαι ὧν ἕτεραι [30] μὴ εἰσὶν οὐσίαι μηδὲ φύσεις ἕτεραι πρότεραι, οἵας φασὶ τὰς ἰδέας εἶναί τινες; εἰ γὰρ ἔσται ἕτερον αὐτὸ τὸ ἀγαθὸν καὶ τὸ ἀγαθῷ εἶναι, καὶ ζῷον καὶ τὸ ζῴῳ, καὶ τὸ ὄντι καὶ τὸ ὄν, [1] ἔσονται ἄλλαι τε οὐσίαι καὶ φύσεις καὶ ἰδέαι παρὰ τὰς λεγομένας, καὶ πρότεραι οὐσίαι ἐκεῖναι, εἰ τὸ τί ἦν εἶναι οὐσία ἐστίν. καὶ εἰ μὲν ἀπολελυμέναι ἀλλήλων, τῶν μὲν οὐκ ἔσται ἐπιστήμη τὰ δ’ οὐκ ἔσται ὄντα (λέγω δὲ τὸ ἀπολελύσθαι [5] εἰ μήτε τῷ ἀγαθῷ αὐτῷ ὑπάρχει τὸ εἶναι ἀγαθῷ μήτε τούτῳ τὸ εἶναι ἀγαθόν)· ἐπιστήμη τε γὰρ ἑκάστου ἔστιν ὅταν τὸ τί ἦν ἐκείνῳ εἶναι γνῶμεν, καὶ ἐπὶ ἀγαθοῦ καὶ τῶν ἄλλων ὁμοίως ἔχει, ὥστε εἰ μηδὲ τὸ ἀγαθῷ εἶναι ἀγαθόν, οὐδὲ τὸ ὄντι ὂν οὐδὲ τὸ ἑνὶ ἕν· ὁμοίως δὲ πάντα ἔστιν ἢ οὐθὲν τὰ [10] τί ἦν εἶναι, ὥστ’ εἰ μηδὲ τὸ ὄντι ὄν, οὐδὲ τῶν ἄλλων οὐδέν. ἔτι ᾧ μὴ ὑπάρχει ἀγαθῷ εἶναι, οὐκ ἀγαθόν. ἀνάγκη ἄρα ἓν εἶναι τὸ ἀγαθὸν καὶ ἀγαθῷ εἶναι καὶ καλὸν καὶ καλῷ εἶναι, καὶ ὅσα μὴ κατ’ ἄλλο λέγεται, ἀλλὰ καθ’ αὑτὰ καὶ πρῶτα· καὶ γὰρ τοῦτο ἱκανὸν ἂν ὑπάρχῃ, κἂν μὴ ᾖ εἴδη, [15] μᾶλλον δ’ ἴσως κἂν ᾖ εἴδη (ἅμα δὲ δῆλον καὶ ὅτι εἴπερ εἰσὶν αἱ ἰδέαι οἵας τινές φασιν, οὐκ ἔσται τὸ ὑποκείμενον οὐσία· ταύτας γὰρ οὐσίας μὲν ἀναγκαῖον εἶναι, μὴ καθ’ ὑποκειμένου δέ· ἔσονται γὰρ κατὰ μέθεξιν).—ἔκ τε δὴ τούτων τῶν λόγων ἓν καὶ ταὐτὸ οὐ κατὰ συμβεβηκὸς αὐτὸ ἕκαστον [20] καὶ τὸ τί ἦν εἶναι, καὶ ὅτι γε τὸ ἐπίστασθαι ἕκαστον τοῦτό ἐστι, τὸ τί ἦν εἶναι ἐπίστασθαι, ὥστε καὶ κατὰ τὴν ἔκθεσιν ἀνάγκη ἕν τι εἶναι ἄμφω (τὸ δὲ κατὰ συμβεβηκὸς λεγόμενον, οἷον τὸ μουσικὸν ἢ λευκόν, διὰ τὸ διττὸν σημαίνειν [24] οὐκ ἀληθὲς εἰπεῖν ὡς ταὐτὸ τὸ τί ἦν εἶναι καὶ αὐτό· καὶ [25] γὰρ ᾧ συμβέβηκε λευκὸν καὶ τὸ συμβεβηκός, ὥστ’ ἔστι μὲν ὡς ταὐτόν, ἔστι δὲ ὡς οὐ ταὐτὸ τὸ τί ἦν εἶναι καὶ αὐτό· τῷ μὲν γὰρ ἀνθρώπῳ καὶ τῷ λευκῷ ἀνθρώπῳ οὐ ταὐτό, τῷ πάθει δὲ ταὐτό). ἄτοπον δ’ ἂν φανείη κἂν εἴ τις ἑκάστῳ ὄνομα θεῖτο τῶν τί ἦν εἶναι· ἔσται γὰρ καὶ παρ’ ἐκεῖνο [30] ἄλλο, οἷον τῷ τί ἦν εἶναι ἵππῳ τί ἦν εἶναι ἵππῳ ἕτερον. καίτοι τί κωλύει καὶ νῦν εἶναι ἔνια εὐθὺς τί ἦν εἶναι, εἴπερ οὐσία τὸ τί ἦν εἶναι; ἀλλὰ μὴν οὐ μόνον ἕν, ἀλλὰ καὶ ὁ λόγος ὁ αὐτὸς αὐτῶν, ὡς δῆλον καὶ ἐκ τῶν εἰρημένων· [1] οὐ γὰρ κατὰ συμβεβηκὸς ἓν τὸ ἑνὶ εἶναι καὶ ἕν. ἔτι εἰ ἄλλο ἔσται, εἰς ἄπειρον εἶσιν· τὸ μὲν γὰρ ἔσται τί ἦν εἶναι τοῦ ἑνὸς τὸ δὲ τὸ ἕν, ὥστε καὶ ἐπ’ ἐκείνων ὁ αὐτὸς ἔσται λόγος. ὅτι [5] μὲν οὖν ἐπὶ τῶν πρώτων καὶ καθ’ αὑτὰ λεγομένων τὸ ἑκάστῳ εἶναι καὶ ἕκαστον τὸ αὐτὸ καὶ ἕν ἐστι, δῆλον· οἱ δὲ σοφιστικοὶ ἔλεγχοι πρὸς τὴν θέσιν ταύτην φανερὸν ὅτι τῇ αὐτῇ λύονται λύσει καὶ εἰ ταὐτὸ Σωκράτης καὶ Σωκράτει εἶναι· οὐδὲν γὰρ διαφέρει οὔτε ἐξ ὧν ἐρωτήσειεν ἄν τις οὔτε ἐξ ὧν [10] λύων ἐπιτύχοι. πῶς μὲν οὖν τὸ τί ἦν εἶναι ταὐτὸν καὶ πῶς οὐ ταὐτὸν ἑκάστῳ, εἴρηται.

τῶν δὲ γιγνομένων τὰ μὲν φύσει γίγνεται τὰ δὲ τέχνῃ τὰ δὲ ἀπὸ ταὐτομάτου, πάντα δὲ τὰ γιγνόμενα ὑπό τέ τινος γίγνεται καὶ ἔκ τινος καὶ τί· τὸ δὲ τὶ λέγω καθ' [15] ἑκάστην κατηγορίαν· ἢ γὰρ τόδε ἢ ποσὸν ἢ ποιὸν ἢ πού. αἱ δὲ γενέσεις αἱ μὲν φυσικαὶ αὗταί εἰσιν ὧν ἡ γένεσις ἐκ φύσεώς ἐστιν, τὸ δ' ἐξ οὗ γίγνεται, ἣν λέγομεν ὕλην, τὸ δὲ ὑφ' οὗ τῶν φύσει τι ὄντων, τὸ δὲ τὶ ἄνθρωπος ἢ φυτὸν ἢ ἄλλο τι τῶν τοιούτων, ἃ δὴ μάλιστα λέγομεν οὐσίας εἶναι [20] —ἅπαντα δὲ τὰ γιγνόμενα ἢ φύσει ἢ τέχνῃ ἔχει ὕλην· δυνατὸν γὰρ καὶ εἶναι καὶ μὴ εἶναι ἕκαστον αὐτῶν, τοῦτο δ' ἐστὶν ἡ ἐν ἑκάστῳ ὕλη—καθόλου δὲ καὶ ἐξ οὗ φύσις καὶ καθ' ὃ φύσις (τὸ γὰρ γιγνόμενον ἔχει φύσιν, οἷον φυτὸν ἢ ζῷον) καὶ ὑφ' οὗ ἡ κατὰ τὸ εἶδος λεγομένη φύσις ἡ ὁμοειδής [25] (ἀΰτη δὲ ἐν ἄλλῳ)· ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ·—οὕτω μὲν οὖν γίγνεται τὰ γιγνόμενα διὰ τὴν φύσιν, αἱ δ' ἄλλαι γενέσεις λέγονται ποιήσεις. πᾶσαι δὲ εἰσὶν αἱ ποιήσεις ἢ ἀπὸ τέχνης ἢ ἀπὸ δυνάμεως ἢ ἀπὸ διανοίας. τούτων δέ τινες γίγνονται καὶ ἀπὸ ταὐτομάτου καὶ ἀπὸ τύχης παραπλησίως [30] ὥσπερ ἐν τοῖς ἀπὸ φύσεως γιγνομένοις· ἔνια γὰρ κἀκεῖ ταὐτὰ καὶ ἐκ σπέρματος γίγνεται καὶ ἄνευ σπέρματος. περὶ μὲν οὖν τούτων ὕστερον ἐπισκεπτέον, [1] ἀπὸ τέχνης δὲ γίγνεται ὅσων τὸ εἶδος ἐν τῇ ψυχῇ (εἶδος δὲ λέγω τὸ τί ἦν εἶναι ἑκάστου καὶ τὴν πρώτην οὐσίαν)· καὶ γὰρ τῶν ἐναντίων τρόπον τινὰ τὸ αὐτὸ εἶδος· τῆς γὰρ στερήσεως οὐσία ἡ οὐσία ἡ ἀντικειμένη, οἷον ὑγίεια νόσου, ἐκείνης γὰρ ἀπουσία [5] ἡ νόσος, ἡ δὲ ὑγίεια ὁ ἐν τῇ ψυχῇ λόγος καὶ ἡ ἐπιστήμη. γίγνεται δὲ τὸ ὑγιὲς νοήσαντος οὕτως· ἐπειδὴ τοδὶ ὑγίεια, ἀνάγκη εἰ ὑγιὲς ἔσται τοδὶ ὑπάρξαι, οἷον ὁμαλότητα, εἰ δὲ τοῦτο, θερμότητα· καὶ οὕτως ἀεὶ νοεῖ, ἕως ἂν ἀγάγῃ εἰς τοῦτο ὃ αὐτὸς δύναται ἔσχατον ποιεῖν. εἶτα ἤδη [10] ἡ ἀπὸ τούτου κίνησις ποίησις καλεῖται, ἡ ἐπὶ τὸ ὑγιαίνειν. ὥστε συμβαίνει τρόπον τινὰ τὴν ὑγίειαν ἐξ ὑγιείας γίγνεσθαι καὶ τὴν οἰκίαν ἐξ οἰκίας, τῆς ἄνευ ὕλης τὴν ἔχουσαν ὕλην· ἡ γὰρ ἰατρικὴ ἐστι καὶ ἡ οἰκοδομικὴ τὸ εἶδος τῆς ὑγιείας καὶ τῆς οἰκίας, λέγω δὲ οὐσίαν ἄνευ ὕλης τὸ τί ἦν εἶναι.

[15] τῶν δὴ γενέσεων καὶ κινήσεων ἡ μὲν νόησις καλεῖται ἡ δὲ ποίησις, ἡ μὲν ἀπὸ τῆς ἀρχῆς καὶ τοῦ εἴδους νόησις ἡ δ' ἀπὸ τοῦ τελευταίου τῆς νοήσεως ποίησις. ὁμοίως δὲ καὶ τῶν ἄλλων τῶν μεταξὺ ἕκαστον γίγνεται. λέγω δ' οἷον εἰ ὑγιανεῖ, δέοι ἂν ὁμαλυνθῆναι. τί οὖν ἐστὶ τὸ ὁμαλυνθῆναι; τοδί, [20] τοῦτο δ' ἔσται εἰ θερμανθήσεται. τοῦτο δὲ τί ἐστι; τοδί. ὑπάρχει δὲ τοδὶ δυνάμει· τοῦτο δὲ ἤδη ἐπ' αὐτῷ. τὸ δὴ ποιοῦν καὶ ὅθεν ἄρχεται ἡ κίνησις τοῦ ὑγιαίνειν, ἂν μὲν ἀπὸ τέχνης, τὸ εἶδός ἐστι τὸ ἐν τῇ ψυχῇ, ἐὰν δ' ἀπὸ ταὐτομάτου, ἀπὸ τούτου ὅ ποτε τοῦ ποιεῖν ἄρχει τῷ ποιοῦντι ἀπὸ [25] τέχνης, ὥσπερ καὶ ἐν τῷ ἰατρεύειν ἴσως ἀπὸ τοῦ θερμαίνειν ἡ ἀρχή (τοῦτο δὲ ποιεῖ τῇ τρίψει)· ἡ θερμότης τοίνυν ἡ ἐν τῷ σώματι ἢ μέρος τῆς ὑγιείας ἢ ἕπεταί τι αὐτῇ τοιοῦτον ὅ ἐστι μέρος τῆς ὑγιείας, ἢ διὰ πλειόνων· τοῦτο δ' ἔσχατόν ἐστι, τὸ ποιοῦν τὸ μέρος τῆς ὑγιείας,—καὶ τῆς οἰκίας [30] (ὀΐον οἱ λίθοι) καὶ τῶν ἄλλων· ὥστε, καθάπερ λέγεται, ἀδύνατον γενέσθαι εἰ μηδὲν προϋπάρχοι. ὅτι μὲν οὖν τι μέρος ἐξ ἀνάγκης ὑπάρξει φανερόν· ἡ γὰρ ὕλη μέρος (ἐνυπάρχει γὰρ καὶ γίγνεται αὕτη). [1] ἀλλ' ἆρα καὶ τῶν ἐν τῷ λόγῳ; ἀμφοτέρως δὴ λέγομεν τοὺς χαλκοῦς κύκλους τί εἰσι, καὶ τὴν ὕλην λέγοντες ὅτι χαλκός, καὶ τὸ εἶδος ὅτι σχῆμα τοιόνδε, καὶ τοῦτό ἐστι τὸ γένος εἰς ὃ πρῶτον τίθεται. ὁ δὴ [5] χαλκοῦς κύκλος ἔχει ἐν τῷ λόγῳ τὴν ὕλην.—ἐξ οὗ δὲ ὡς ὕλης γίγνεται ἔνια λέγεται, ὅταν γένηται, οὐκ ἐκεῖνο ἀλλ' ἐκείνινον, οἷον ὁ ἀνδριὰς οὐ λίθος ἀλλὰ λίθινος, ὁ δὲ ἄνθρωπος ὁ ὑγιαίνων οὐ λέγεται ἐκεῖνο ἐξ οὗ· αἴτιον δὲ ὅτι γίγνεται ἐκ τῆς στερήσεως καὶ τοῦ ὑποκειμένου, ὃ λέγομεν τὴν [10] ὕλην (οἷον καὶ ὁ ἄνθρωπος καὶ ὁ κάμνων γίγνεται ὑγιής), μᾶλλον μέντοι λέγεται γίγνεσθαι ἐκ τῆς στερήσεως, οἷον ἐκ κάμνοντος ὑγιὴς ἢ ἐξ ἀνθρώπου, διὸ κάμνων μὲν ὁ ὑγιὴς οὐ λέγεται, ἄνθρωπος δέ, καὶ ὁ ἄνθρωπος ὑγιής· ὧν δ' ἡ στέρησις ἄδηλος καὶ ἀνώνυμος, οἷον ἐν χαλκῷ σχήματος ὁποιουοῦν ἢ [15] ἐν πλίνθοις καὶ ξύλοις οἰκίας, ἐκ τούτων δοκεῖ γίγνεσθαι ὡς ἐκεῖ ἐκ κάμνοντος· διὸ ὥσπερ οὐδ' ἐκεῖ ἐξ οὗ τοῦτο, ἐκεῖνο οὐ λέγεται, οὐδ' ἐνταῦθα ὁ ἀνδριὰς ξύλον, ἀλλὰ παράγεται ξύλινος, οὐ ξύλον, καὶ χαλκοῦς ἀλλ' οὐ χαλκός, καὶ λίθινος ἀλλ' οὐ λίθος, καὶ ἡ οἰκία πλινθίνη ἀλλ' οὐ

πλίνθοι, ἐπεὶ οὐδὲ [20] ὡς ἐκ ξύλου γίγνεται ἀνδριὰς ἢ ἐκ πλίνθων οἰκία, ἐάν τις ἐπιβλέπῃ σφόδρα, οὐκ ἂν ἁπλῶς εἴπειεν, διὰ τὸ δεῖν μεταβάλλοντος γίγνεσθαι ἐξ οὗ, ἀλλ’ οὐχ ὑπομένοντος. διὰ μὲν οὖν τοῦτο οὕτως λέγεται.

ἐπεὶ δὲ ὑπό τινός τε γίγνεται τὸ γιγνόμενον (τοῦτο δὲ [25] λέγω ὅθεν ἡ ἀρχὴ τῆς γενέσεώς ἐστι) καὶ ἔκ τινος (ἔστω δὲ μὴ ἡ στέρησις τοῦτο ἀλλ’ ἡ ὕλη· ἤδη γὰρ διώρισται ὃν τρόπον τοῦτο λέγομεν) καὶ τὶ γίγνεται (τοῦτο δ’ ἐστὶν ἢ σφαῖρα ἢ κύκλος ἢ ὅ τι ἔτυχε τῶν ἄλλων), ὥσπερ οὐδὲ τὸ ὑποκείμενον ποιεῖ, τὸν χαλκόν, οὕτως οὐδὲ τὴν σφαῖραν, εἰ μὴ [30] κατὰ συμβεβηκὸς ὅτι ἡ χαλκῆ σφαῖρα σφαῖρά ἐστιν ἐκείνην δὲ ποιεῖ. τὸ γὰρ τόδε τι ποιεῖν ἐκ τοῦ ὅλως ὑποκειμένου τόδε τι ποιεῖν ἐστίν (λέγω δ’ ὅτι τὸν χαλκὸν στρογγύλον ποιεῖν ἐστὶν οὐ τὸ στρογγύλον ἢ τὴν σφαῖραν ποιεῖν ἀλλ’ ἕτερόν τι, οἷον τὸ εἶδος τοῦτο ἐν ἄλλῳ· εἰ γὰρ ποιεῖ, ἔκ τινος ἂν ποιοίη ἄλλου, τοῦτο γὰρ ὑπέκειτο· [1] οἷον ποιεῖ χαλκῆν σφαῖραν, τοῦτο δὲ οὕτως ὅτι ἐκ τουδί, ὅ ἐστι χαλκός, τοδὶ ποιεῖ, ὅ ἐστι σφαῖρα)· εἰ οὖν καὶ τοῦτο ποιεῖ αὐτό, δῆλον ὅτι ὡσαύτως ποιήσει, καὶ βαδιοῦνται αἱ γενέσεις εἰς ἄπειρον. [5] φανερὸν ἄρα ὅτι οὐδὲ τὸ εἶδος, ἢ ὁτιδήποτε χρὴ καλεῖν τὴν ἐν τῷ αἰσθητῷ μορφήν, οὐ γίγνεται, οὐδ’ ἔστιν αὐτοῦ γένεσις, [7] οὐδὲ τὸ τί ἦν εἶναι (τοῦτο γάρ ἐστιν ὃ ἐν ἄλλῳ γίγνεται ἢ ὑπὸ τέχνης ἢ ὑπὸ φύσεως ἢ δυνάμεως). τὸ δὲ χαλκῆν σφαῖραν εἶναι ποιεῖ· ποιεῖ γὰρ ἐκ χαλκοῦ καὶ σφαίρας· [10] εἰς τοδὶ γὰρ τὸ εἶδος ποιεῖ, καὶ ἔστι τοῦτο σφαῖρα χαλκῆ. τοῦ δὲ σφαίρᾳ εἶναι ὅλως εἰ ἔσται γένεσις, ἔκ τινος τὶ ἔσται. δεήσει γὰρ διαιρετὸν εἶναι ἀεὶ τὸ γιγνόμενον, καὶ εἶναι τὸ μὲν τόδε τὸ δὲ τόδε, λέγω δ’ ὅτι τὸ μὲν ὕλην τὸ δὲ εἶδος. εἰ δή ἐστι σφαῖρα τὸ ἐκ τοῦ μέσου σχῆμα ἴσον, τούτου τὸ μὲν [15] ἐν ᾧ ἔσται ὃ ποιεῖ, τὸ δ’ ἐν ἐκείνῳ, τὸ δὲ ἅπαν τὸ γεγονός, οἷον ἡ χαλκῆ σφαῖρα. φανερὸν δὴ ἐκ τῶν εἰρημένων ὅτι τὸ μὲν ὡς εἶδος ἢ οὐσία λεγόμενον οὐ γίγνεται, ἡ δὲ σύνολος ἡ κατὰ ταύτην λεγομένη γίγνεται, καὶ ὅτι ἐν παντὶ τῷ γεννωμένῳ ὕλη ἔνεστι, καὶ ἔστι τὸ μὲν τόδε τὸ δὲ τόδε.—πότερον [20] οὖν ἔστι τις σφαῖρα παρὰ τάσδε ἢ οἰκία παρὰ τὰς πλίνθους; ἢ οὐδ’ ἄν ποτε ἐγίγνετο, εἰ οὕτως ἦν, τόδε τι, ἀλλὰ τὸ τοιόνδε σημαίνει, τόδε δὲ καὶ ὡρισμένον οὐκ ἔστιν, ἀλλὰ ποιεῖ καὶ γεννᾷ ἐκ τοῦδε τοιόνδε, καὶ ὅταν γεννηθῇ, ἔστι τόδε τοιόνδε; τὸ δὲ ἅπαν τόδε, Καλλίας ἢ Σωκράτης, ἐστὶν ὥσπερ [25] ἡ σφαῖρα ἡ χαλκῆ ἡδί, ὁ δ’ ἄνθρωπος καὶ τὸ ζῷον ὥσπερ σφαῖρα χαλκῆ ὅλως. φανερὸν ἄρα ὅτι ἡ τῶν εἰδῶν αἰτία, ὡς εἰώθασί τινες λέγειν τὰ εἴδη, εἰ ἔστιν ἄττα παρὰ τὰ καθ’ ἕκαστα, πρός γε τὰς γενέσεις καὶ τὰς οὐσίας οὐθὲν χρησίμη· οὐδ’ ἂν εἶεν διά γε ταῦτα οὐσίαι καθ’ αὐτάς. ἐπὶ μὲν δή [30] τινων καὶ φανερὸν ὅτι τὸ γεννῶν τοιοῦτον μὲν οἷον τὸ γεννώμενον, οὐ μέντοι τὸ αὐτό γε, οὐδὲ ἓν τῷ ἀριθμῷ ἀλλὰ τῷ εἴδει, οἷον ἐν τοῖς φυσικοῖς—ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ—ἂν μή τι παρὰ φύσιν γένηται, οἷον ἵππος ἡμίονον (καὶ ταῦτα δὲ ὁμοίως· ὃ γὰρ ἂν κοινὸν εἴη ἐφ’ ἵππου καὶ ὄνου οὐκ ὠνόμασται, τὸ ἐγγύτατα γένος, εἴη δ’ ἂν ἄμφω ἴσως, οἷον ἡμίονος)· [1] ὥστε φανερὸν ὅτι οὐθὲν δεῖ ὡς παράδειγμα εἶδος κατασκευάζειν (μάλιστα γὰρ ἂν ἐν τούτοις ἐπεζητοῦντο· οὐσίαι γὰρ αἱ μάλιστα αὗται) ἀλλὰ ἱκανὸν τὸ γεννῶν ποιῆσαι [5] καὶ τοῦ εἴδους αἴτιον εἶναι ἐν τῇ ὕλῃ. τὸ δ’ ἅπαν ἤδη, τὸ τοιόνδε εἶδος ἐν ταῖσδε ταῖς σαρξὶ καὶ ὀστοῖς, Καλλίας καὶ Σωκράτης· καὶ ἕτερον μὲν διὰ τὴν ὕλην (ἑτέρα γάρ), ταὐτὸ δὲ τῷ εἴδει (ἄτομον γὰρ τὸ εἶδος).

ἀπορήσειε δ’ ἄν τις διὰ τί τὰ μὲν γίγνεται καὶ τέχνῃ [10] καὶ ἀπὸ ταὐτομάτου, οἷον ὑγίεια, τὰ δ’ οὔ, οἷον οἰκία. αἴτιον δὲ ὅτι τῶν μὲν ἡ ὕλη ἡ ἄρχουσα τῆς γενέσεως ἐν τῷ ποιεῖν καὶ γίγνεσθαί τι τῶν ἀπὸ τέχνης, ἐν ᾗ ὑπάρχει τι μέρος τοῦ πράγματος,—ἡ μὲν τοιαύτη ἐστὶν οἵα κινεῖσθαι ὑφ’ αὑτῆς ἡ δ’ οὔ, καὶ ταύτης ἡ μὲν ὠδὶ οἵα τε ἡ δὲ ἀδύνατος· πολλὰ [15] γὰρ δυνατὰ μὲν ὑφ’ αὑτῶν κινεῖσθαι ἀλλ’ οὐχ ὠδί, οἷον ὀρχήσασθαι. ὅσων οὖν τοιαύτη ἡ ὕλη, οἷον οἱ λίθοι, ἀδύνατον ὠδὶ κινηθῆναι εἰ μὴ ὑπ’ ἄλλου, ὠδὶ μέντοι ναί—καὶ τὸ πῦρ. διὰ τοῦτο τὰ μὲν οὐκ ἔσται ἄνευ τοῦ ἔχοντος τὴν τέχνην τὰ δὲ ἔσται· ὑπὸ γὰρ τούτων κινηθήσεται τῶν οὐκ ἐχόντων [20] τὴν τέχνην, κινεῖσθαι δὲ δυναμένων αὐτῶν ὑπ’ ἄλλων οὐκ ἐχόντων τὴν τέχνην ἢ ἐκ μέρους. δῆλον δ’ ἐκ τῶν

εἰρημένων καὶ ὅτι τρόπον τινὰ πάντα γίγνεται ἐξ ὁμωνύμου, ὥσπερ τὰ φύσει, ἢ ἐκ μέρους ὁμωνύμου (οἷον ἡ οἰκία ἐξ οἰκίας, ᾗ ὑπὸ νοῦ· ἡ γὰρ τέχνη τὸ εἶδος) ἢ ἐκ μέρους ἢ [25] ἔχοντός τι μέρος,—ἐὰν μὴ κατὰ συμβεβηκὸς γίγνηται· τὸ γὰρ αἴτιον τοῦ ποιεῖν πρῶτον καθ' αὑτὸ μέρος. θερμότης γὰρ ἡ ἐν τῇ κινήσει θερμότητα ἐν τῷ σώματι ἐποίησεν· αὕτη δὲ ἐστὶν ἢ ὑγίεια ἢ μέρος, ἢ ἀκολουθεῖ αὐτῇ μέρος τι τῆς ὑγιείας ἢ αὐτὴ ἡ ὑγίεια· διὸ καὶ λέγεται ποιεῖν, ὅτι ἐκεῖνο [30] ποιεῖ τὴν ὑγίειαν ᾧ ἀκολουθεῖ καὶ συμβέβηκε θερμότης. ὥστε, ὥσπερ ἐν τοῖς συλλογισμοῖς, πάντων ἀρχὴ ἡ οὐσία· ἐκ γὰρ τοῦ τί ἐστιν οἱ συλλογισμοί εἰσιν, ἐνταῦθα δὲ αἱ γενέσεις. ὁμοίως δὲ καὶ τὰ φύσει συνιστάμενα τούτοις ἔχει. τὸ μὲν γὰρ σπέρμα ποιεῖ ὥσπερ τὰ ἀπὸ τέχνης (ἔχει γὰρ δυνάμει τὸ εἶδος, [1] καὶ ἀφ' οὗ τὸ σπέρμα, ἐστί πως ὁμώνυμον—οὐ γὰρ πάντα οὕτω δεῖ ζητεῖν ὡς ἐξ ἀνθρώπου ἄνθρωπος· καὶ γὰρ γυνὴ ἐξ ἀνδρός—ἐὰν μὴ πήρωμα ᾖ· διὸ ἡμίονος οὐκ ἐξ ἡμιόνου)· ὅσα δὲ ἀπὸ ταὐτομάτου ὥσπερ ἐκεῖ γίγνεται, [5] ὅσων ἡ ὕλη δύναται καὶ ὑφ' αὑτῆς κινεῖσθαι ταύτην τὴν κίνησιν ἣν τὸ σπέρμα κινεῖ· ὅσων δὲ μή, ταῦτα ἀδύνατα γίγνεσθαι ἄλλως πως ἢ ἐξ αὐτῶν.—οὐ μόνον δὲ περὶ τῆς οὐσίας ὁ λόγος δηλοῖ τὸ μὴ γίγνεσθαι τὸ εἶδος, ἀλλὰ περὶ πάντων ὁμοίως τῶν πρώτων κοινὸς ὁ λόγος, οἷον ποσοῦ [10] ποιοῦ καὶ τῶν ἄλλων κατηγοριῶν. γίγνεται γὰρ ὥσπερ ἡ χαλκῆ σφαῖρα ἀλλ' οὐ σφαῖρα οὐδὲ χαλκός, καὶ ἐπὶ χαλκοῦ, εἰ γίγνεται (ἀεὶ γὰρ δεῖ προϋπάρχειν τὴν ὕλην καὶ τὸ εἶδος), οὕτως καὶ ἐπὶ τοῦ τί ἐστι καὶ ἐπὶ τοῦ ποιοῦ καὶ ποσοῦ καὶ τῶν ἄλλων ὁμοίως κατηγοριῶν· οὐ γὰρ γίγνεται [15] τὸ ποιὸν ἀλλὰ τὸ ποιὸν ξύλον, οὐδὲ τὸ ποσὸν ἀλλὰ τὸ ποσὸν ξύλον ἢ ζῷον. ἀλλ' ἴδιον τῆς οὐσίας ἐκ τούτων λαβεῖν ἔστιν ὅτι ἀναγκαῖον προϋπάρχειν ἑτέραν οὐσίαν ἐντελεχείᾳ οὖσαν ἢ ποιεῖ, οἷον ζῷον εἰ γίγνεται ζῷον· ποιὸν δ' ἢ ποσὸν οὐκ ἀνάγκη ἀλλ' ἢ δυνάμει μόνον.

[20] ἐπεὶ δὲ ὁ ὁρισμὸς λόγος ἐστί, πᾶς δὲ λόγος μέρη ἔχει, ὡς δὲ ὁ λόγος πρὸς τὸ πρᾶγμα, καὶ τὸ μέρος τοῦ λόγου πρὸς τὸ μέρος τοῦ πράγματος ὁμοίως ἔχει, ἀπορεῖται ἤδη πότερον δεῖ τὸν τῶν μερῶν λόγον ἐνυπάρχειν ἐν τῷ τοῦ ὅλου λόγῳ ἢ οὔ. ἐπ' ἐνίων μὲν γὰρ φαίνονται ἐνόντες ἐνίων δ' οὔ. τοῦ μὲν [25] γὰρ κύκλου ὁ λόγος οὐκ ἔχει τὸν τῶν τμημάτων, ὁ δὲ τῆς συλλαβῆς ἔχει τὸν τῶν στοιχείων· καίτοι διαιρεῖται καὶ ὁ κύκλος εἰς τὰ τμήματα ὥσπερ καὶ ἡ συλλαβὴ εἰς τὰ στοιχεῖα. ἔτι δὲ εἰ πρότερα τὰ μέρη τοῦ ὅλου, τῆς δὲ ὀρθῆς ἡ ὀξεῖα μέρος καὶ ὁ δάκτυλος τοῦ ζῴου, πρότερον ἂν εἴη ἡ ὀξεῖα [30] τῆς ὀρθῆς καὶ ὁ δάκτυλος τοῦ ἀνθρώπου. δοκεῖ δ' ἐκεῖνα εἶναι πρότερα· τῷ λόγῳ γὰρ λέγονται ἐξ ἐκείνων, καὶ τῷ εἶναι δὲ ἄνευ ἀλλήλων πρότερα.—ἢ πολλαχῶς λέγεται τὸ μέρος, ὧν εἷς μὲν τρόπος τὸ μετροῦν κατὰ τὸ ποσόν—ἀλλὰ τοῦτο μὲν ἀφείσθω· ἐξ ὧν δὲ ἡ οὐσία ὡς μερῶν, τοῦτο σκεπτέον. [1] εἰ οὖν ἐστὶ τὸ μὲν ὕλη τὸ δὲ εἶδος τὸ δ' ἐκ τούτων, καὶ οὐσία ἥ τε ὕλη καὶ τὸ εἶδος καὶ τὸ ἐκ τούτων, ἔστι μὲν ὡς καὶ ἡ ὕλη μέρος τινὸς λέγεται, ἔστι δ' ὡς οὔ, ἀλλ' ἐξ ὧν ὁ τοῦ εἴδους λόγος. οἷον τῆς μὲν κοιλότητος οὐκ ἔστι μέρος [5] ἡ σάρξ (αὕτη γὰρ ἡ ὕλη ἐφ' ἧς γίγνεται), τῆς δὲ σιμότητος μέρος· καὶ τοῦ μὲν συνόλου ἀνδριάντος μέρος ὁ χαλκὸς τοῦ δ' ὡς εἴδους λεγομένου ἀνδριάντος οὔ (λεκτέον γὰρ τὸ εἶδος καὶ ᾧ εἶδος ἔχει ἕκαστον, τὸ δ' ὑλικὸν οὐδέποτε καθ' αὑτὸ λεκτέον)· διὸ ὁ μὲν τοῦ κύκλου λόγος οὐκ ἔχει [10] τὸν τῶν τμημάτων, ὁ δὲ τῆς συλλαβῆς ἔχει τὸν τῶν στοιχείων· τὰ μὲν γὰρ στοιχεῖα τοῦ λόγου μέρη τοῦ εἴδους καὶ οὐχ ὕλη, τὰ δὲ τμήματα οὕτως μέρη ὡς ὕλη ἐφ' ἧς ἐπιγίγνεται· ἐγγυτέρω μέντοι τοῦ εἴδους ἢ ὁ χαλκὸς ὅταν ἐν χαλκῷ ἡ στρογγυλότης ἐγγένηται. ἔστι δ' ὡς οὐδὲ τὰ στοιχεῖα πάντα [15] τῆς συλλαβῆς ἐν τῷ λόγῳ ἐνέσται, οἷον ταδὶ τὰ κήρινα ἢ τὰ ἐν τῷ ἀέρι· ἤδη γὰρ καὶ ταῦτα μέρος τῆς συλλαβῆς ὡς ὕλη αἰσθητή. καὶ γὰρ ἡ γραμμὴ οὐκ εἰ διαιρουμένη [18] εἰς τὰ ἡμίση φθείρεται, ἢ ὁ ἄνθρωπος εἰς τὰ ὀστᾶ καὶ νεῦρα καὶ σάρκας, διὰ τοῦτο καὶ εἰσὶν ἐκ τούτων οὕτως [20] ὡς ὄντων τῆς οὐσίας μερῶν, ἀλλ' ὡς ἐξ ὕλης, καὶ τοῦ μὲν συνόλου μέρη, τοῦ εἴδους δὲ καὶ οὗ ὁ λόγος οὐκέτι· διόπερ οὐδ' ἐν τοῖς λόγοις. τῷ μὲν οὖν ἐνέσται ὁ τῶν τοιούτων μερῶν λόγος, τῷ δ' οὐ δεῖ ἐνεῖναι, ἂν μὴ ᾖ τοῦ συνειλημμένου· διὰ γὰρ τοῦτο ἔνια μὲν ἐκ τούτων ὡς ἀρχῶν ἐστὶν εἰς ἃ [25] φθείρονται, ἔνια δὲ οὐκ ἔστιν. ὅσα μὲν οὖν

συνειλημμένα τὸ εἶδος καὶ ἡ ὕλη ἐστίν, οἷον τὸ σιμὸν ἢ ὁ χαλκοῦς κύκλος, ταῦτα μὲν φθείρεται εἰς ταῦτα καὶ μέρος αὐτῶν ἡ ὕλη· ὅσα δὲ μὴ συνείληπται τῇ ὕλῃ ἀλλὰ ἄνευ ὕλης, ὧν οἱ λόγοι τοῦ εἴδους μόνον, ταῦτα δ’ οὐ φθείρεται, ἢ ὅλως ἢ [30] οὕτοι οὕτω γε· ὥστ’ ἐκείνων μὲν ἀρχαὶ καὶ μέρη ταῦτα τοῦ δὲ εἴδους οὔτε μέρη οὔτε ἀρχαί. καὶ διὰ τοῦτο φθείρεται ὁ πήλινος ἀνδριὰς εἰς πηλὸν καὶ ἡ σφαῖρα εἰς χαλκὸν καὶ ὁ Καλλίας εἰς σάρκα καὶ ὀστᾶ, ἔτι δὲ ὁ κύκλος εἰς τὰ τμήματα· ἔστι γάρ τις ὃς συνείληπται τῇ ὕλῃ· [1] ὁμωνύμως γὰρ λέγεται κύκλος ὅ τε ἁπλῶς λεγόμενος καὶ ὁ καθ’ ἕκαστα διὰ τὸ μὴ εἶναι ἴδιον ὄνομα τοῖς καθ’ ἕκαστον.—εἴρηται μὲν οὖν καὶ νῦν τὸ ἀληθές, ὅμως δ’ ἔτι σαφέστερον εἴπωμεν ἐπαναλαβόντες. ὅσα μὲν γὰρ τοῦ λόγου [5] μέρη καὶ εἰς ἃ διαιρεῖται ὁ λόγος, ταῦτα πρότερα ἢ πάντα ἢ ἔνια· ὁ δὲ τῆς ὀρθῆς λόγος οὐ διαιρεῖται εἰς ὀξείας λόγον, ἀλλ’ ὁ τῆς ὀξείας εἰς ὀρθήν· χρῆται γὰρ ὁ ὁριζόμενος τὴν ὀξεῖαν τῇ ὀρθῇ· ἐλάττων γὰρ ὀρθῆς ἡ ὀξεῖα. ὁμοίως δὲ καὶ ὁ κύκλος καὶ τὸ ἡμικύκλιον ἔχουσιν· τὸ [10] γὰρ ἡμικύκλιον τῷ κύκλῳ ὁρίζεται καὶ ὁ δάκτυλος τῷ ὅλῳ· τὸ γὰρ τοιόνδε μέρος ἀνθρώπου δάκτυλος. ὥσθ’ ὅσα μὲν μέρη ὡς ὕλη καὶ εἰς ἃ διαιρεῖται ὡς ὕλην, ὕστερα· ὅσα δὲ ὡς τοῦ λόγου καὶ τῆς οὐσίας τῆς κατὰ τὸν λόγον, πρότερα ἢ πάντα ἢ ἔνια. ἐπεὶ δὲ ἡ τῶν ζῴων ψυχὴ [15] (τοῦτο γὰρ οὐσία τοῦ ἐμψύχου) ἡ κατὰ τὸν λόγον οὐσία καὶ τὸ εἶδος καὶ τὸ τί ἦν εἶναι τῷ τοιῷδε σώματι (ἕκαστον γοῦν τὸ μέρος ἐὰν ὁρίζηται καλῶς, οὐκ ἄνευ τοῦ ἔργου ὁριεῖται, ὃ οὐχ ὑπάρξει ἄνευ αἰσθήσεως), ὥστε τὰ ταύτης μέρη πρότερα ἢ πάντα ἢ ἔνια τοῦ συνόλου ζῴου, καὶ καθ’ ἕκαστον [20] δὴ ὁμοίως, τὸ δὲ σῶμα καὶ τὰ τούτου μόρια ὕστερα ταύτης τῆς οὐσίας, καὶ διαιρεῖται εἰς ταῦτα ὡς εἰς ὕλην οὐχ ἡ οὐσία ἀλλὰ τὸ σύνολον,—τοῦ μὲν οὖν συνόλου πρότερα ταῦτ’ ἔστιν ὥς, ἔστι δ’ ὡς οὔ (οὐδὲ γὰρ εἶναι δύναται χωριζόμενα· οὐ γὰρ ὁ πάντως ἔχων δάκτυλος ζῴου, ἀλλ’ [25] ὁμώνυμος ὁ τεθνεώς)· ἔνια δὲ ἅμα, ὅσα κύρια καὶ ἐν ᾧ πρώτῳ ὁ λόγος καὶ ἡ οὐσία, οἷον εἰ τοῦτο καρδία ἢ ἐγκέφαλος· διαφέρει γὰρ οὐθὲν πότερον τοιοῦτον. ὁ δ’ ἄνθρωπος καὶ ὁ ἵππος καὶ τὰ οὕτως ἐπὶ τῶν καθ’ ἕκαστα, καθόλου δέ, οὐκ ἔστιν οὐσία ἀλλὰ σύνολόν τι ἐκ τουδὶ τοῦ λόγου καὶ τησδὶ [30] τῆς ὕλης ὡς καθόλου· καθ’ ἕκαστον δ’ ἐκ τῆς ἐσχάτης ὕλης ὁ Σωκράτης ἤδη ἐστίν, καὶ ἐπὶ τῶν ἄλλων ὁμοίως.—μέρος μὲν οὖν ἐστὶ καὶ τοῦ εἴδους (εἶδος δὲ λέγω τὸ τί ἦν εἶναι) καὶ τοῦ συνόλου τοῦ ἐκ τοῦ εἴδους καὶ τῆς ὕλης καὶ τῆς ὕλης αὐτῆς. ἀλλὰ τοῦ λόγου μέρη τὰ τοῦ εἴδους μόνον ἐστίν, ὁ δὲ λόγος ἐστὶ τοῦ καθόλου· [1] τὸ γὰρ κύκλῳ εἶναι καὶ κύκλος καὶ ψυχῇ εἶναι καὶ ψυχὴ ταὐτό. τοῦ δὲ συνόλου ἤδη, οἷον κύκλου τουδὶ καὶ τῶν καθ’ ἕκαστά τινος ἢ αἰσθητοῦ ἢ νοητοῦ—λέγω δὲ νοητοὺς μὲν οἷον τοὺς μαθηματικούς, αἰσθητοὺς δὲ οἷον τοὺς χαλκοῦς [5] καὶ τοὺς ξυλίνους—τούτων δὲ οὐκ ἔστιν ὁρισμός, ἀλλὰ μετὰ νοήσεως ἢ αἰσθήσεως γνωρίζονται, ἀπελθόντες δὲ ἐκ τῆς ἐντελεχείας οὐ δῆλον πότερον εἰσὶν ἢ οὐκ εἰσίν· ἀλλ’ ἀεὶ λέγονται καὶ γνωρίζονται τῷ καθόλου λόγῳ. ἡ δ’ ὕλη ἄγνωστος καθ’ αὑτήν. ὕλη δὲ ἡ μὲν αἰσθητή ἐστιν ἡ δὲ [10] νοητή, αἰσθητὴ μὲν οἷον χαλκὸς καὶ ξύλον καὶ ὅση κινητὴ ὕλη, νοητὴ δὲ ἡ ἐν τοῖς αἰσθητοῖς ὑπάρχουσα μὴ ᾗ αἰσθητά, οἷον τὰ μαθηματικά. πῶς μὲν οὖν ἔχει περὶ ὅλου καὶ μέρους καὶ περὶ τοῦ προτέρου καὶ ὑστέρου, εἴρηται· πρὸς δὲ τὴν ἐρώτησιν ἀνάγκη ἁπαντᾶν, ὅταν τις ἔρηται πότερον ἡ ὀρθὴ [15] καὶ ὁ κύκλος καὶ τὸ ζῷον πρότερον ἢ εἰς ἃ διαιροῦνται καὶ ἐξ ὧν εἰσί, τὰ μέρη, ὅτι οὐχ ἁπλῶς. εἰ μὲν γάρ ἐστι καὶ ἡ ψυχὴ ζῷον ἢ ἔμψυχον, ἢ ἕκαστον ἡ ἑκάστου, καὶ κύκλος τὸ κύκλῳ εἶναι, καὶ ὀρθὴ τὸ ὀρθῇ εἶναι καὶ ἡ οὐσία ἡ τῆς ὀρθῆς, τὶ μὲν καὶ τινὸς φατέον ὕστερον, οἷον [20] τῶν ἐν τῷ λόγῳ καὶ τινὸς ὀρθῆς (καὶ γὰρ ἡ μετὰ τῆς ὕλης, ἡ χαλκῆ ὀρθή, καὶ ἡ ἐν ταῖς γραμμαῖς ταῖς καθ’ ἕκαστα), ἡ δ’ ἄνευ ὕλης τῶν μὲν ἐν τῷ λόγῳ ὑστέρα τῶν δ’ ἐν τῷ καθ’ ἕκαστα μορίων προτέρα, ἁπλῶς δ’ οὐ φατέον· εἰ δ’ ἑτέρα καὶ μὴ ἔστιν ἡ ψυχὴ ζῷον, καὶ οὕτω τὰ μὲν [25] φατέον τὰ δ’ οὐ φατέον, ὥσπερ εἴρηται.

ἀπορεῖται δὲ εἰκότως καὶ ποῖα τοῦ εἴδους μέρη καὶ ποῖα οὔ, ἀλλὰ τοῦ συνειλημμένου. καίτοι τούτου μὴ δήλου ὄντος οὐκ ἔστιν ὁρίσασθαι ἕκαστον· τοῦ γὰρ καθόλου καὶ τοῦ εἴδους ὁ ὁρισμός· ποῖα οὖν ἐστὶ τῶν μερῶν ὡς ὕλη καὶ ποῖα [30] οὔ, ἐὰν μὴ ᾖ φανερά, οὐδὲ ὁ λόγος ἔσται

φανερὸς ὁ τοῦ πράγματος. ὅσα μὲν οὖν φαίνεται ἐπιγιγνόμενα ἐφ’ ἑτέρων τῷ εἴδει, οἷον κύκλος ἐν χαλκῷ καὶ λίθῳ καὶ ξύλῳ, ταῦτα μὲν δῆλα εἶναι δοκεῖ ὅτι οὐδὲν τῆς τοῦ κύκλου οὐσίας ὁ χαλκὸς οὐδ’ ὁ λίθος διὰ τὸ χωρίζεσθαι αὐτῶν· ὅσα δὲ [35] μὴ ὁρᾶται χωριζόμενα, οὐδὲν μὲν κωλύει ὁμοίως ἔχειν τούτοις, ὥσπερ κἂν εἰ οἱ κύκλοι πάντες ἑωρῶντο χαλκοῖ· [1] οὐδὲν γὰρ ἂν ἧττον ἦν ὁ χαλκὸς οὐδὲν τοῦ εἴδους· χαλεπὸν δὲ ἀφελεῖν τοῦτον τῇ διανοίᾳ. οἷον τὸ τοῦ ἀνθρώπου εἶδος ἀεὶ ἐν σαρξὶ φαίνεται καὶ ὀστοῖς καὶ τοῖς τοιούτοις μέρεσιν· [5] ἆρ’ οὖν καὶ ἐστὶ ταῦτα μέρη τοῦ εἴδους καὶ τοῦ λόγου; ἢ οὔ, ἀλλ’ ὕλη, ἀλλὰ διὰ τὸ μὴ καὶ ἐπ’ ἄλλων ἐπιγίγνεσθαι ἀδυνατοῦμεν χωρίσαι; ἐπεὶ δὲ τοῦτο δοκεῖ μὲν ἐνδέχεσθαι ἄδηλον δὲ πότε, ἀποροῦσί τινες ἤδη καὶ ἐπὶ τοῦ κύκλου καὶ τοῦ τριγώνου ὡς οὐ προσῆκον γραμμαῖς ὁρίζεσθαι καὶ τῷ [10] συνεχεῖ, ἀλλὰ πάντα καὶ ταῦτα ὁμοίως λέγεσθαι ὡσανεὶ σάρκες καὶ ὀστᾶ τοῦ ἀνθρώπου καὶ χαλκὸς καὶ λίθος τοῦ ἀνδριάντος· καὶ ἀνάγουσι πάντα εἰς τοὺς ἀριθμούς, καὶ γραμμῆς τὸν λόγον τὸν τῶν δύο εἶναί φασιν. καὶ τῶν τὰς ἰδέας λεγόντων οἱ μὲν αὐτογραμμὴν τὴν δυάδα, οἱ δὲ τὸ [15] εἶδος τῆς γραμμῆς, ἔνια μὲν γὰρ εἶναι τὸ αὐτὸ τὸ εἶδος καὶ οὗ τὸ εἶδος (οἷον δυάδα καὶ τὸ εἶδος δυάδος), ἐπὶ γραμμῆς δὲ οὐκέτι. συμβαίνει δὴ ἕν τε πολλῶν εἶδος εἶναι ὧν τὸ εἶδος φαίνεται ἕτερον (ὅπερ καὶ τοῖς Πυθαγορείοις συνέβαινεν), καὶ ἐνδέχεται ἓν πάντων ποιεῖν αὐτὸ [20] εἶδος, τὰ δ’ ἄλλα μὴ εἴδη· καίτοι οὕτως ἓν πάντα ἔσται.

ὅτι μὲν οὖν ἔχει τινὰ ἀπορίαν τὰ περὶ τοὺς ὁρισμούς, καὶ διὰ τίν’ αἰτίαν, εἴρηται· διὸ καὶ τὸ πάντα ἀνάγειν οὕτω καὶ ἀφαιρεῖν τὴν ὕλην περίεργον· ἔνια γὰρ ἴσως τόδ’ ἐν τῷδ’ ἐστὶν ἢ ὠδὶ ταδὶ ἔχοντα. καὶ ἡ παραβολὴ ἡ ἐπὶ τοῦ ζῴου, [25] ἣν εἰώθει λέγειν Σωκράτης ὁ νεώτερος, οὐ καλῶς ἔχει· ἀπάγει γὰρ ἀπὸ τοῦ ἀληθοῦς, καὶ ποιεῖ ὑπολαμβάνειν ὡς ἐνδεχόμενον εἶναι τὸν ἄνθρωπον ἄνευ τῶν μερῶν, ὥσπερ ἄνευ τοῦ χαλκοῦ τὸν κύκλον. τὸ δ’ οὐχ ὅμοιον· αἰσθητὸν γάρ τι τὸ ζῷον, καὶ ἄνευ κινήσεως οὐκ ἔστιν ὁρίσασθαι, διὸ [30] οὐδ’ ἄνευ τῶν μερῶν ἐχόντων πώς. οὐ γὰρ πάντως τοῦ ἀνθρώπου μέρος ἡ χείρ, ἀλλ’ ἢ δυναμένη τὸ ἔργον ἀποτελεῖν, ὥστε ἔμψυχος οὖσα· μὴ ἔμψυχος δὲ οὐ μέρος. περὶ δὲ τὰ μαθηματικὰ διὰ τί οὐκ εἰσὶ μέρη οἱ λόγοι τῶν λόγων, οἷον τοῦ κύκλου τὰ ἡμικύκλια; οὐ γάρ ἐστιν αἰσθητὰ ταῦτα. [35] ἢ οὐθὲν διαφέρει; ἔσται γὰρ ὕλη ἐνίων καὶ μὴ αἰσθητῶν· [1] καὶ παντὸς γὰρ ὕλη τις ἔστιν ὃ μὴ ἔστι τί ἦν εἶναι καὶ εἶδος αὐτὸ καθ’ αὑτὸ ἀλλὰ τόδε τι. κύκλου μὲν οὖν οὐκ ἔσται τοῦ καθόλου, τῶν δὲ καθ’ ἕκαστα ἔσται μέρη ταῦτα, ὥσπερ εἴρηται πρότερον· ἔστι γὰρ ὕλη ἡ μὲν αἰσθητὴ ἡ [5] δὲ νοητή. δῆλον δὲ καὶ ὅτι ἡ μὲν ψυχὴ οὐσία ἡ πρώτη, τὸ δὲ σῶμα ὕλη, ὁ δ’ ἄνθρωπος ἢ τὸ ζῷον τὸ ἐξ ἀμφοῖν ὡς καθόλου· Σωκράτης δὲ καὶ Κορίσκος, εἰ μὲν καὶ ἡ ψυχὴ Σωκράτης, διττόν (οἱ μὲν γὰρ ὡς ψυχὴν οἱ δ’ ὡς τὸ σύνολον), εἰ δ’ ἁπλῶς ἡ ψυχὴ ἥδε καὶ τὸ σῶμα τόδε, ὥσπερ τὸ [10] καθόλου τε καὶ τὸ καθ’ ἕκαστον. πότερον δὲ ἔστι παρὰ τὴν ὕλην τῶν τοιούτων οὐσιῶν τις ἄλλη, καὶ δεῖ ζητεῖν οὐσίαν ἑτέραν τινὰ οἷον ἀριθμοὺς ἤ τι τοιοῦτον, σκεπτέον ὕστερον. τούτου γὰρ χάριν καὶ περὶ τῶν αἰσθητῶν οὐσιῶν πειρώμεθα διορίζειν, ἐπεὶ τρόπον τινὰ τῆς φυσικῆς καὶ [15] δευτέρας φιλοσοφίας ἔργον ἡ περὶ τὰς αἰσθητὰς οὐσίας θεωρία· οὐ γὰρ μόνον περὶ τῆς ὕλης δεῖ γνωρίζειν τὸν φυσικὸν ἀλλὰ καὶ τῆς κατὰ τὸν λόγον, καὶ μᾶλλον. ἐπὶ δὲ τῶν ὁρισμῶν πῶς μέρη τὰ ἐν τῷ λόγῳ, καὶ διὰ τί εἷς λόγος ὁ ὁρισμός (δῆλον γὰρ ὅτι τὸ πρᾶγμα ἕν, τὸ δὲ [20] πρᾶγμα τίνι ἕν, μέρη γε ἔχον;), σκεπτέον ὕστερον.

τί μὲν οὖν ἐστὶ τὸ τί ἦν εἶναι καὶ πῶς αὐτὸ καθ’ αὑτό, καθόλου περὶ παντὸς εἴρηται, καὶ διὰ τί τῶν μὲν ὁ λόγος ὁ τοῦ τί ἦν εἶναι ἔχει τὰ μόρια τοῦ ὁριζομένου τῶν δ’ οὔ, καὶ ὅτι ἐν μὲν τῷ τῆς οὐσίας λόγῳ τὰ οὕτω μόρια [25] ὡς ὕλη οὐκ ἐνέσται—οὐδὲ γὰρ ἔστιν ἐκείνης μόρια τῆς οὐσίας ἀλλὰ τῆς συνόλου, ταύτης δέ γ’ ἔστι πως λόγος καὶ οὐκ ἔστιν· μετὰ μὲν γὰρ τῆς ὕλης οὐκ ἔστιν (ἀόριστον γάρ), κατὰ τὴν πρώτην δ’ οὐσίαν ἔστιν, οἷον ἀνθρώπου ὁ τῆς ψυχῆς λόγος· ἡ γὰρ οὐσία ἐστὶ τὸ εἶδος τὸ ἐνόν, ἐξ οὗ καὶ τῆς [30] ὕλης ἡ σύνολος λέγεται οὐσία, οἷον ἡ κοιλότης (ἐκ γὰρ ταύτης καὶ τῆς ῥινὸς σιμὴ ῥὶς καὶ ἡ σιμότης ἐστί δὶς γὰρ ἐν τούτοις ὑπάρξει ἡ ῥίς)—ἐν δὲ τῇ

συνόλῳ οὐσίᾳ, οἷον ῥινὶ σιμῇ ἢ Καλλίᾳ, ἐνέσται καὶ ἡ ὕλη· καὶ ὅτι τὸ τί ἦν εἶναι καὶ ἕκαστον ἐπὶ τινῶν μὲν ταὐτό, [1] ὥσπερ ἐπὶ τῶν πρώτων οὐσιῶν, οἷον καμπυλότης καὶ καμπυλότητι εἶναι, εἰ πρώτη ἐστίν (λέγω δὲ πρώτην ἢ μὴ λέγεται τῷ ἄλλο ἐν ἄλλῳ εἶναι καὶ ὑποκειμένῳ ὡς ὕλῃ), ὅσα δὲ ὡς ὕλη ἢ [5] ὡς συνειλημμένα τῇ ὕλῃ, οὐ ταὐτό, οὐδ’ εἰ κατὰ συμβεβηκὸς ἕν, οἷον Σωκράτης καὶ τὸ μουσικόν· ταῦτα γὰρ ταὐτὰ κατὰ συμβεβηκός.

νῦν δὲ λέγωμεν πρῶτον ἐφ’ ὅσον ἐν τοῖς ἀναλυτικοῖς περὶ ὁρισμοῦ μὴ εἴρηται· ἡ γὰρ ἐν ἐκείνοις ἀπορία [10] λεχθεῖσα πρὸ ἔργου τοῖς περὶ τῆς οὐσίας ἐστὶ λόγοις. λέγω δὲ ταύτην τὴν ἀπορίαν, διὰ τί ποτε ἕν ἐστιν οὗ τὸν λόγον ὁρισμὸν εἶναί φαμεν, οἷον τοῦ ἀνθρώπου τὸ ζῷον δίπουν· ἔστω γὰρ οὗτος αὐτοῦ λόγος. διὰ τί δὴ τοῦτο ἕν ἐστιν ἀλλ’ οὐ πολλά, ζῷον καὶ δίπουν· ἐπὶ μὲν γὰρ τοῦ ἄνθρωπος [15] καὶ λευκὸν πολλὰ μέν ἐστιν ὅταν μὴ ὑπάρχῃ θατέρῳ θάτερον, ἓν δὲ ὅταν ὑπάρχῃ καὶ πάθῃ τι τὸ ὑποκείμενον, ὁ ἄνθρωπος (τότε γὰρ ἓν γίγνεται καὶ ἔστιν ὁ λευκὸς ἄνθρωπος)· ἐνταῦθα δ’ οὐ μετέχει θατέρου θάτερον· τὸ γὰρ γένος οὐ δοκεῖ μετέχειν τῶν διαφορῶν (ἅμα γὰρ ἂν τῶν [20] ἐναντίων τὸ αὐτὸ μετεῖχεν· αἱ γὰρ διαφοραὶ ἐναντίαι αἷς διαφέρει τὸ γένος). εἰ δὲ καὶ μετέχει, ὁ αὐτὸς λόγος, εἴπερ εἰσὶν αἱ διαφοραὶ πλείους, οἷον πεζὸν δίπουν ἄπτερον. διὰ τί γὰρ ταῦθ’ ἓν ἀλλ’ οὐ πολλά; οὐ γὰρ ὅτι ἐνυπάρχει· οὕτω μὲν γὰρ ἐξ ἁπάντων ἔσται ἕν. δεῖ δέ γε ἓν [25] εἶναι ὅσα ἐν τῷ ὁρισμῷ· ὁ γὰρ ὁρισμὸς λόγος τίς ἐστιν εἷς καὶ οὐσίας, ὥστε ἑνός τινος δεῖ αὐτὸν εἶναι λόγον· καὶ γὰρ ἡ οὐσία ἕν τι καὶ τόδε τι σημαίνει, ὡς φαμέν.—δεῖ δὲ ἐπισκοπεῖν πρῶτον περὶ τῶν κατὰ τὰς διαιρέσεις ὁρισμῶν. οὐδὲν γὰρ ἕτερόν ἐστιν ἐν τῷ ὁρισμῷ πλὴν τὸ [30] πρῶτον λεγόμενον γένος καὶ αἱ διαφοραί· τὰ δ’ ἄλλα γένη ἐστὶ τό τε πρῶτον καὶ μετὰ τούτου αἱ συλλαμβανόμεναι διαφοραί, οἷον τὸ πρῶτον ζῷον, τὸ δὲ ἐχόμενον ζῷον δίπουν, καὶ πάλιν ζῷον δίπουν ἄπτερον· ὁμοίως δὲ κἂν διὰ πλειόνων λέγηται. [1] ὅλως δ’ οὐδὲν διαφέρει διὰ πολλῶν ἢ δι’ ὀλίγων λέγεσθαι, ὥστ’ οὐδὲ δι’ ὀλίγων ἢ διὰ δυοῖν· τοῖν δυοῖν δὲ τὸ μὲν διαφορὰ τὸ δὲ γένος, οἷον τοῦ ζῷον δίπουν τὸ μὲν ζῷον γένος διαφορὰ δὲ θάτερον. [5] εἰ οὖν τὸ γένος ἁπλῶς μὴ ἔστι παρὰ τὰ ὡς γένους εἴδη, ἢ εἰ ἔστι μὲν ὡς ὕλη δ’ ἐστίν (ἡ μὲν γὰρ φωνὴ γένος καὶ ὕλη, αἱ δὲ διαφοραὶ τὰ εἴδη καὶ τὰ στοιχεῖα ἐκ ταύτης ποιοῦσιν), φανερὸν ὅτι ὁ ὁρισμός ἐστιν ὁ ἐκ τῶν διαφορῶν λόγος. ἀλλὰ μὴν καὶ δεῖ γε διαιρεῖσθαι τῇ τῆς διαφορᾶς [10] διαφορᾷ, οἷον ζῴου διαφορὰ τὸ ὑπόπουν· πάλιν τοῦ ζῴου τοῦ ὑπόποδος τὴν διαφορὰν δεῖ εἶναι ᾗ ὑπόπουν, ὥστ’ οὐ λεκτέον τοῦ ὑπόποδος τὸ μὲν πτερωτὸν τὸ δὲ ἄπτερον, ἐάνπερ λέγῃ καλῶς (ἀλλὰ διὰ τὸ ἀδυνατεῖν ποιήσει τοῦτο), ἀλλ’ ἢ τὸ μὲν σχιζόπουν τὸ δ’ ἄσχιστον· αὗται [15] γὰρ διαφοραὶ ποδός· ἡ γὰρ σχιζοποδία ποδότης τις. καὶ οὕτως ἀεὶ βούλεται βαδίζειν ἕως ἂν ἔλθῃ εἰς τὰ ἀδιάφορα· τότε δ’ ἔσονται τοσαῦτα εἴδη ποδὸς ὅσαιπερ αἱ διαφοραί, καὶ τὰ ὑπόποδα ζῷα ἴσα ταῖς διαφοραῖς. εἰ δὴ ταῦτα οὕτως ἔχει, φανερὸν ὅτι ἡ τελευταία διαφορὰ ἡ οὐσία τοῦ [20] πράγματος ἔσται καὶ ὁ ὁρισμός, εἴπερ μὴ δεῖ πολλάκις ταὐτὰ λέγειν ἐν τοῖς ὅροις· περίεργον γάρ. συμβαίνει δέ γε τοῦτο· ὅταν γὰρ εἴπῃ ζῷον ὑπόπουν δίπουν, οὐδὲν ἄλλο εἴρηκεν ἢ ζῷον πόδας ἔχον, δύο πόδας ἔχον· κἂν τοῦτο διαιρῇ τῇ οἰκείᾳ διαιρέσει, πλεονάκις ἐρεῖ καὶ ἰσάκις ταῖς [25] διαφοραῖς. ἐὰν μὲν δὴ διαφορᾶς διαφορὰ γίγνηται, μία ἔσται ἡ τελευταία τὸ εἶδος καὶ ἡ οὐσία· ἐὰν δὲ κατὰ συμβεβηκός, οἷον εἰ διαιροῖ τοῦ ὑπόποδος τὸ μὲν λευκὸν τὸ δὲ μέλαν, τοσαῦται ὅσαι ἂν αἱ τομαὶ ὦσιν. ὥστε φανερὸν ὅτι ὁ ὁρισμὸς λόγος ἐστὶν ὁ ἐκ τῶν διαφορῶν, καὶ τούτων τῆς τελευταίας [30] κατά γε τὸ ὀρθόν. δῆλον δ’ ἂν εἴη, εἴ τις μετατάξειε τοὺς τοιούτους ὁρισμούς, οἷον τὸν τοῦ ἀνθρώπου, λέγων ζῷον δίπουν ὑπόπουν· περίεργον γὰρ τὸ ὑπόπουν εἰρημένου τοῦ δίποδος. τάξις δ’ οὐκ ἔστιν ἐν τῇ οὐσίᾳ· πῶς γὰρ δεῖ νοῆσαι τὸ μὲν ὕστερον τὸ δὲ πρότερον; περὶ μὲν οὖν τῶν κατὰ τὰς διαιρέσεις [35] ὁρισμῶν τοσαῦτα εἰρήσθω τὴν πρώτην, ποῖοί τινές εἰσιν.

[1] ἐπεὶ δὲ περὶ τῆς οὐσίας ἡ σκέψις ἐστί, πάλιν ἐπανέλθωμεν. λέγεται δ’ ὥσπερ τὸ ὑποκείμενον οὐσία εἶναι καὶ τὸ τί ἦν εἶναι καὶ τὸ ἐκ τούτων, καὶ τὸ καθόλου. περὶ μὲν οὖν τοῖν δυοῖν εἴρηται

(καὶ γὰρ περὶ τοῦ τί ἦν εἶναι καὶ τοῦ [5] ὑποκειμένου, ὅτι διχῶς ὑπόκειται, ἢ τόδε τι ὄν, ὥσπερ τὸ ζῷον τοῖς πάθεσιν, ἢ ὡς ἡ ὕλη τῇ ἐντελεχείᾳ), δοκεῖ δὲ καὶ τὸ καθόλου αἴτιόν τισιν εἶναι μάλιστα, καὶ εἶναι ἀρχὴ τὸ καθόλου· διὸ ἐπέλθωμεν καὶ περὶ τούτου. ἔοικε γὰρ ἀδύνατον εἶναι οὐσίαν εἶναι ὁτιοῦν τῶν καθόλου λεγομένων. πρῶτον [10] μὲν γὰρ οὐσία ἑκάστου ἡ ἴδιος ἑκάστῳ, ἢ οὐχ ὑπάρχει ἄλλῳ, τὸ δὲ καθόλου κοινόν· τοῦτο γὰρ λέγεται καθόλου ὃ πλείοσιν ὑπάρχειν πέφυκεν. τίνος οὖν οὐσία τοῦτ᾽ ἔσται; ἢ γὰρ πάντων ἢ οὐδενός, πάντων δ᾽ οὐχ οἷόν τε· ἑνὸς δ᾽ εἰ ἔσται, καὶ τἆλλα τοῦτ᾽ ἔσται· ὧν γὰρ μία ἡ οὐσία καὶ τὸ τί ἦν εἶναι [15] ἕν, καὶ αὐτὰ ἕν. ἔτι οὐσία λέγεται τὸ μὴ καθ᾽ ὑποκειμένου, τὸ δὲ καθόλου καθ᾽ ὑποκειμένου τινὸς λέγεται ἀεί. ἀλλ᾽ ἆρα οὕτω μὲν οὐκ ἐνδέχεται ὡς τὸ τί ἦν εἶναι, ἐν τούτῳ δὲ ἐνυπάρχειν, οἷον τὸ ζῷον ἐν τῷ ἀνθρώπῳ καὶ ἵππῳ; οὐκοῦν δῆλον ὅτι ἔστι τις αὐτοῦ λόγος. διαφέρει δ᾽ οὐθὲν οὐδ᾽ εἰ μὴ [20] πάντων λόγος ἔστι τῶν ἐν τῇ οὐσίᾳ· οὐδὲν γὰρ ἧττον οὐσία τοῦτ᾽ ἔσται τινός, ὡς ὁ ἄνθρωπος τοῦ ἀνθρώπου ἐν ᾧ ὑπάρχει, ὥστε τὸ αὐτὸ συμβήσεται πάλιν· ἔσται γὰρ ἐκείνου οὐσία, οἷον τὸ ζῷον, ἐν ᾧ ὡς ἴδιον ὑπάρχει. ἔτι δὲ καὶ ἀδύνατον καὶ ἄτοπον τὸ τόδε καὶ οὐσίαν, εἰ ἔστιν ἔκ τινων, [25] μὴ ἐξ οὐσιῶν εἶναι μηδ᾽ ἐκ τοῦ τόδε τι ἀλλ᾽ ἐκ ποιοῦ· πρότερον γὰρ ἔσται μὴ οὐσία τε καὶ τὸ ποιὸν οὐσίας τε καὶ τοῦ τόδε. ὅπερ ἀδύνατον· οὔτε λόγῳ γὰρ οὔτε χρόνῳ οὔτε γενέσει οἷόν τε τὰ πάθη τῆς οὐσίας εἶναι πρότερα· ἔσται γὰρ καὶ χωριστά. ἔτι τῷ Σωκράτει ἐνυπάρξει οὐσία οὐσίᾳ, [30] ὥστε δυοῖν ἔσται οὐσία. ὅλως δὲ συμβαίνει, εἰ ἔστιν οὐσία ὁ ἄνθρωπος καὶ ὅσα οὕτω λέγεται, μηθὲν τῶν ἐν τῷ λόγῳ εἶναι μηδενὸς οὐσίαν μηδὲ χωρὶς ὑπάρχειν αὐτῶν μηδ᾽ ἐν ἄλλῳ, λέγω δ᾽ οἷον οὐκ εἶναί τι ζῷον παρὰ τὰ τινά, οὐδ᾽ ἄλλο τῶν ἐν τοῖς λόγοις οὐδέν. ἔκ τε δὴ τούτων θεωροῦσι [35] φανερὸν ὅτι οὐδὲν τῶν καθόλου ὑπαρχόντων οὐσία ἐστί, καὶ ὅτι οὐδὲν σημαίνει τῶν κοινῇ κατηγορουμένων τόδε τι, [1] ἀλλὰ τοιόνδε. εἰ δὲ μή, ἄλλα τε πολλὰ συμβαίνει καὶ ὁ τρίτος ἄνθρωπος. ἔτι δὲ καὶ ὧδε δῆλον. ἀδύνατον γὰρ οὐσίαν ἐξ οὐσιῶν εἶναι ἐνυπαρχουσῶν ὡς ἐντελεχείᾳ· τὰ γὰρ δύο [5] οὕτως ἐντελεχείᾳ οὐδέποτε ἓν ἐντελεχείᾳ, ἀλλ᾽ ἐὰν δυνάμει δύο ᾖ, ἔσται ἕν (οἷον ἡ διπλασία ἐκ δύο ἡμίσεων δυνάμει γε· ἡ γὰρ ἐντελέχεια χωρίζει), ὥστ᾽ εἰ ἡ οὐσία ἕν, οὐκ ἔσται ἐξ οὐσιῶν ἐνυπαρχουσῶν καὶ κατὰ τοῦτον τὸν τρόπον, ὃν λέγει Δημόκριτος ὀρθῶς· ἀδύνατον γὰρ εἶναί φησιν ἐκ [10] δύο ἓν ἢ ἐξ ἑνὸς δύο γενέσθαι· τὰ γὰρ μεγέθη τὰ ἄτομα τὰς οὐσίας ποιεῖ. ὁμοίως τοίνυν δῆλον ὅτι καὶ ἐπ᾽ ἀριθμοῦ ἔξει, εἴπερ ἐστὶν ὁ ἀριθμὸς σύνθεσις μονάδων, ὥσπερ λέγεται ὑπό τινων· ἢ γὰρ οὐχ ἓν ἡ δυὰς ἢ οὐκ ἔστι μονὰς ἐν αὐτῇ ἐντελεχείᾳ.—ἔχει δὲ τὸ συμβαῖνον ἀπορίαν. εἰ γὰρ [15] μήτε ἐκ τῶν καθόλου οἷόν τ᾽ εἶναι μηδεμίαν οὐσίαν διὰ τὸ τοιόνδε ἀλλὰ μὴ τόδε τι σημαίνειν, μήτ᾽ ἐξ οὐσιῶν ἐνδέχεται ἐντελεχείᾳ εἶναι μηδεμίαν οὐσίαν σύνθετον, ἀσύνθετον ἂν εἴη οὐσία πᾶσα, ὥστ᾽ οὐδὲ λόγος ἂν εἴη οὐδεμιᾶς οὐσίας. ἀλλὰ μὴν δοκεῖ γε πᾶσι καὶ ἐλέχθη πάλαι ἢ [20] μόνον οὐσίας εἶναι ὅρον ἢ μάλιστα· νῦν δ᾽ οὐδὲ ταύτης. οὐδενὸς ἄρ᾽ ἔσται ὁρισμός· ἢ τρόπον μέν τινα ἔσται τρόπον δέ τινα οὔ. δῆλον δ᾽ ἔσται τὸ λεγόμενον ἐκ τῶν ὕστερον μᾶλλον.

φανερὸν δ᾽ ἐξ αὐτῶν τούτων τὸ συμβαῖνον καὶ τοῖς [25] τὰς ἰδέας λέγουσιν οὐσίας τε χωριστὰς εἶναι καὶ ἅμα τὸ εἶδος ἐκ τοῦ γένους ποιοῦσι καὶ τῶν διαφορῶν. εἰ γὰρ ἔστι τὰ εἴδη, καὶ τὸ ζῷον ἐν τῷ ἀνθρώπῳ καὶ ἵππῳ, ἤτοι ἓν καὶ ταὐτὸν τῷ ἀριθμῷ ἐστὶν ἢ ἕτερον· τῷ μὲν γὰρ λόγῳ δῆλον ὅτι ἕν· τὸν γὰρ αὐτὸν διέξεισι λόγον ὁ λέγων [30] ἐν ἑκατέρῳ. εἰ οὖν ἐστί τις ἄνθρωπος αὐτὸς καθ᾽ αὑτὸν τόδε τι καὶ κεχωρισμένον, ἀνάγκη καὶ ἐξ ὧν, οἷον τὸ ζῷον καὶ τὸ δίπουν, τόδε τι σημαίνειν καὶ εἶναι χωριστὰ καὶ οὐσίας· ὥστε καὶ τὸ ζῷον. εἰ μὲν οὖν τὸ αὐτὸ καὶ ἓν τὸ ἐν τῷ ἵππῳ καὶ τῷ ἀνθρώπῳ, ὥσπερ σὺ σαυτῷ, πῶς τὸ ἓν ἐν τοῖς οὖσι χωρὶς ἓν ἔσται, [1] καὶ διὰ τί οὐ καὶ χωρὶς αὑτοῦ ἔσται τὸ ζῷον τοῦτο; ἔπειτα εἰ μὲν μεθέξει τοῦ δίποδος καὶ τοῦ πολύποδος, ἀδύνατόν τι συμβαίνει, τἀναντία γὰρ ἅμα ὑπάρξει αὐτῷ ἐνὶ καὶ τῷδέ τινι ὄντι· εἰ δὲ μή, τίς ὁ τρόπος [5] ὅταν εἴπῃ τις τὸ ζῷον εἶναι δίπουν ἢ πεζόν; ἀλλ᾽ ἴσως σύγκειται καὶ ἅπτεται ἢ μέμικται· ἀλλὰ πάντα ἄτοπα. ἀλλ᾽ ἕτερον ἐν ἑκάστῳ· οὐκοῦν ἄπειρα ὡς ἔπος εἰπεῖν ἔσται ὧν ἡ

οὐσία ζῷον· οὐ γὰρ κατὰ συμβεβηκὸς ἐκ ζῴου ἄνθρωπος. ἔτι πολλὰ ἔσται αὐτὸ τὸ ζῷον· οὐσία τε γὰρ τὸ [10] ἐν ἑκάστῳ ζῷον (οὐ γὰρ κατ’ ἄλλο λέγεται· εἰ δὲ μή, ἐξ ἐκείνου ἔσται ὁ ἄνθρωπος καὶ γένος αὐτοῦ ἐκεῖνο), καὶ ἔτι ἰδέαι ἅπαντα ἐξ ὧν ὁ ἄνθρωπος· οὐκοῦν οὐκ ἄλλου μὲν ἰδέα ἔσται ἄλλου δ’ οὐσία (ἀδύνατον γάρ)· αὐτὸ ἄρα ζῷον ἓν ἕκαστον ἔσται τῶν ἐν τοῖς ζῴοις. ἔτι ἐκ τίνος τοῦτο, καὶ [15] πῶς ἐξ αὐτοῦ ζῴου; ἢ πῶς οἷόν τε εἶναι τὸ ζῷον, ᾧ οὐσία τοῦτο αὐτό, παρ’ αὐτὸ τὸ ζῷον; ἔτι δ’ ἐπὶ τῶν αἰσθητῶν ταῦτά τε συμβαίνει καὶ τούτων ἀτοπώτερα. εἰ δὴ ἀδύνατον οὕτως ἔχειν, δῆλον ὅτι οὐκ ἔστιν εἴδη αὐτῶν οὕτως ὥς τινές φασιν.

[20] ἐπεὶ δ’ ἡ οὐσία ἑτέρα, τό τε σύνολον καὶ ὁ λόγος (λέγω δ’ ὅτι ἡ μὲν οὕτως ἐστὶν οὐσία, σὺν τῇ ὕλῃ συνειλημμένος ὁ λόγος, ἡ δ’ ὁ λόγος ὅλως), ὅσαι μὲν οὖν οὕτω λέγονται, τούτων μὲν ἔστι φθορά (καὶ γὰρ γένεσις), τοῦ δὲ λόγου οὐκ ἔστιν οὕτως ὥστε φθείρεσθαι (οὐδὲ γὰρ γένεσις, οὐ [25] γὰρ γίγνεται τὸ οἰκίᾳ εἶναι ἀλλὰ τὸ τῇδε τῇ οἰκίᾳ), ἀλλ’ ἄνευ γενέσεως καὶ φθορᾶς εἰσὶ καὶ οὐκ εἰσίν· δέδεικται γὰρ ὅτι οὐδεὶς ταῦτα γεννᾷ οὐδὲ ποιεῖ. διὰ τοῦτο δὲ καὶ τῶν οὐσιῶν τῶν αἰσθητῶν τῶν καθ’ ἕκαστα οὔτε ὁρισμὸς οὔτε ἀπόδειξις ἔστιν, ὅτι ἔχουσιν ὕλην ἧς ἡ φύσις τοιαύτη ὥστ’ ἐνδέχεσθαι [30] καὶ εἶναι καὶ μή· διὸ φθαρτὰ πάντα τὰ καθ’ ἕκαστα αὐτῶν. εἰ οὖν ἥ τ’ ἀπόδειξις τῶν ἀναγκαίων καὶ ὁ ὁρισμὸς ἐπιστημονικόν, καὶ οὐκ ἐνδέχεται, ὥσπερ οὐδ’ ἐπιστήμην ὁτὲ μὲν ἐπιστήμην ὁτὲ δ’ ἄγνοιαν εἶναι, ἀλλὰ δόξα τὸ τοιοῦτόν ἐστιν, οὕτως οὐδ’ ἀπόδειξιν οὐδ’ ὁρισμόν, ἀλλὰ δόξα ἐστὶ τοῦ ἐνδεχομένου ἄλλως ἔχειν, [1] δῆλον ὅτι οὐκ ἂν εἴη αὐτῶν οὔτε ὁρισμὸς οὔτε ἀπόδειξις. ἄδηλά τε γὰρ τὰ φθειρόμενα τοῖς ἔχουσι τὴν ἐπιστήμην, ὅταν ἐκ τῆς αἰσθήσεως ἀπέλθῃ, καὶ σωζομένων τῶν λόγων ἐν τῇ ψυχῇ τῶν [5] αὐτῶν οὐκ ἔσται οὔτε ὁρισμὸς ἔτι οὔτε ἀπόδειξις. διὸ δεῖ, τῶν πρὸς ὅρον ὅταν τις ὁρίζηταί τι τῶν καθ’ ἕκαστον, μὴ ἀγνοεῖν ὅτι ἀεὶ ἀναιρεῖν ἔστιν· οὐ γὰρ ἐνδέχεται ὁρίσασθαι.

οὐδὲ δὴ ἰδέαν οὐδεμίαν ἔστιν ὁρίσασθαι. τῶν γὰρ καθ’ ἕκαστον ἡ ἰδέα, ὡς φασί, καὶ χωριστή· ἀναγκαῖον δὲ ἐξ ὀνομάτων [10] εἶναι τὸν λόγον, ὄνομα δ’ οὐ ποιήσει ὁ ὁριζόμενος (ἄγνωστον γὰρ ἔσται), τὰ δὲ κείμενα κοινὰ πᾶσιν· ἀνάγκη ἄρα ὑπάρχειν καὶ ἄλλῳ ταῦτα· οἷον εἴ τις σὲ ὁρίσαιτο, ζῷον ἐρεῖ ἰσχνὸν ἢ λευκὸν ἢ ἕτερόν τι ὃ καὶ ἄλλῳ ὑπάρξει. εἰ δέ τις φαίη μηδὲν κωλύειν χωρὶς μὲν πάντα πολλοῖς [15] ἅμα δὲ μόνῳ τούτῳ ὑπάρχειν, λεκτέον πρῶτον μὲν ὅτι καὶ ἀμφοῖν, οἷον τὸ ζῷον δίπουν τῷ ζῴῳ καὶ τῷ δίποδι (καὶ τοῦτο ἐπὶ μὲν τῶν ἀϊδίων καὶ ἀνάγκη εἶναι, πρότερά γ’ ὄντα καὶ μέρη τοῦ συνθέτου· ἀλλὰ μὴν καὶ χωριστά, εἴπερ τὸ ἄνθρωπος χωριστόν· ἢ γὰρ οὐθὲν ἢ ἄμφω· [20] εἰ μὲν οὖν μηθέν, οὐκ ἔσται τὸ γένος παρὰ τὰ εἴδη, εἰ δ’ ἔσται, καὶ ἡ διαφορά)· εἶθ’ ὅτι πρότερα τῷ εἶναι· ταῦτα δὲ οὐκ ἀνταναιρεῖται. ἔπειτα εἰ ἐξ ἰδεῶν αἱ ἰδέαι [23] (ἀσυνθετώτερα γὰρ τὰ ἐξ ὧν), ἔτι ἐπὶ πολλῶν δεήσει κἀκεῖνα κατηγορεῖσθαι ἐξ ὧν ἡ ἰδέα, οἷον τὸ ζῷον καὶ τὸ [25] δίπουν. εἰ δὲ μή, πῶς γνωρισθήσεται; ἔσται γὰρ ἰδέα τις ἣν ἀδύνατον ἐπὶ πλειόνων κατηγορῆσαι ἢ ἑνός. οὐ δοκεῖ δέ, ἀλλὰ πᾶσα ἰδέα εἶναι μεθεκτή. ὥσπερ οὖν εἴρηται, λανθάνει ὅτι ἀδύνατον ὁρίσασθαι ἐν τοῖς ἀϊδίοις, μάλιστα δὲ ὅσα μοναχά, οἷον ἥλιος ἢ σελήνη. οὐ μόνον γὰρ διαμαρτάνουσι [30] τῷ προστιθέναι τοιαῦτα ὧν ἀφαιρουμένων ἔτι ἔσται ἥλιος, ὥσπερ τὸ περὶ γῆν ἰὸν ἢ νυκτικρυφές (ἂν γὰρ στῇ ἢ φανῇ, οὐκέτι ἔσται ἥλιος· ἀλλ’ ἄτοπον εἰ μή· ὁ γὰρ ἥλιος οὐσίαν τινὰ σημαίνει)· ἔτι ὅσα ἐπ’ ἄλλου ἐνδέχεται, οἷον ἐὰν ἕτερος γένηται τοιοῦτος, δῆλον ὅτι ἥλιος ἔσται· κοινὸς ἄρα ὁ λόγος· [1] ἀλλ’ ἦν τῶν καθ’ ἕκαστα ὁ ἥλιος, ὥσπερ Κλέων ἢ Σωκράτης· ἐπεὶ διὰ τί οὐδεὶς ὅρον ἐκφέρει αὐτῶν ἰδέας; γένοιτο γὰρ ἂν δῆλον πειρωμένων ὅτι ἀληθὲς τὸ νῦν εἰρημένον.

[5] φανερὸν δὲ ὅτι καὶ τῶν δοκουσῶν εἶναι οὐσιῶν αἱ πλεῖσται δυνάμεις εἰσί, τά τε μόρια τῶν ζῴων (οὐθὲν γὰρ κεχωρισμένον αὐτῶν ἐστίν· ὅταν δὲ χωρισθῇ, καὶ τότε ὄντα ὡς ὕλη πάντα) καὶ γῆ καὶ πῦρ καὶ ἀήρ· οὐδὲν γὰρ αὐτῶν ἕν ἐστιν, ἀλλ’ οἷον σωρός, πρὶν ἢ πεφθῇ καὶ γένηταί τι [10] ἐξ αὐτῶν ἕν. μάλιστα δ’ ἄν τις τὰ τῶν ἐμψύχων ὑπολάβοι μόρια καὶ τὰ τῆς ψυχῆς πάρεγγυς

ἄμφω γίγνεσθαι, ὄντα καὶ ἐντελεχείᾳ καὶ δυνάμει, τῷ ἀρχὰς ἔχειν κινήσεως ἀπό τινος ἐν ταῖς καμπαῖς· διὸ ἕνια ζῷα διαιρούμενα ζῇ. ἀλλ’ ὅμως δυνάμει πάντ’ ἔσται, ὅταν ᾖ ἓν καὶ [15] συνεχὲς φύσει, ἀλλὰ μὴ βίᾳ ἢ συμφύσει· τὸ γὰρ τοιοῦτον πήρωσις. ἐπεὶ δὲ τὸ ἓν λέγεται ὥσπερ καὶ τὸ ὄν, καὶ ἡ οὐσία ἡ τοῦ ἑνὸς μία, καὶ ὧν μία ἀριθμῷ ἓν ἀριθμῷ, φανερὸν ὅτι οὔτε τὸ ἓν οὔτε τὸ ὂν ἐνδέχεται οὐσίαν εἶναι τῶν πραγμάτων, ὥσπερ οὐδὲ τὸ στοιχείῳ εἶναι ἢ ἀρχῇ· ἀλλὰ [20] ζητοῦμεν τίς οὖν ἡ ἀρχή, ἵνα εἰς γνωριμώτερον ἀναγάγωμεν. μᾶλλον μὲν οὖν τούτων οὐσία τὸ ὂν καὶ ἓν ἢ ἥ τε ἀρχὴ καὶ τὸ στοιχεῖον καὶ τὸ αἴτιον, οὔπω δὲ οὐδὲ ταῦτα, εἴπερ μηδ’ ἄλλο κοινὸν μηδὲν οὐσία· οὐδενὶ γὰρ ὑπάρχει ἡ οὐσία ἀλλ’ ἢ αὐτῇ τε καὶ τῷ ἔχοντι αὐτήν, οὗ ἐστὶν οὐσία. [25] ἔτι τὸ ἓν πολλαχῇ οὐκ ἂν εἴη ἅμα, τὸ δὲ κοινὸν ἅμα πολλαχῇ ὑπάρχει· ὥστε δῆλον ὅτι οὐδὲν τῶν καθόλου ὑπάρχει παρὰ τὰ καθ’ ἕκαστα χωρίς. ἀλλ’ οἱ τὰ εἴδη λέγοντες τῇ μὲν ὀρθῶς λέγουσι χωρίζοντες αὐτά, εἴπερ οὐσίαι εἰσί, τῇ δ’ οὐκ ὀρθῶς, ὅτι τὸ ἓν ἐπὶ πολλῶν εἶδος [30] λέγουσιν. αἴτιον δ’ ὅτι οὐκ ἔχουσιν ἀποδοῦναι τίνες αἱ τοιαῦται οὐσίαι αἱ ἄφθαρτοι παρὰ τὰς καθ’ ἕκαστα καὶ αἰσθητάς· ποιοῦσιν οὖν τὰς αὐτὰς τῷ εἴδει τοῖς φθαρτοῖς (ταύτας γὰρ ἴσμεν), αὐτοάνθρωπον καὶ αὐτόϊππον, προστιθέντες τοῖς αἰσθητοῖς τὸ ῥῆμα τὸ αὐτό. καίτοι κἂν εἰ μὴ ἑωράκειμεν τὰ ἄστρα, [1] οὐδὲν ἂν ἧττον, οἶμαι, ἦσαν οὐσίαι ἀΐδιοι παρ’ ἃς ἡμεῖς ᾔδειμεν· ὥστε καὶ νῦν εἰ μὴ ἔχομεν τίνες εἰσίν, ἀλλ’ εἶναί γέ τινας ἴσως ἀναγκαῖον. ὅτι μὲν οὖν οὔτε τῶν καθόλου λεγομένων οὐδὲν οὐσία οὔτ’ ἐστὶν οὐσία [5] οὐδεμία ἐξ οὐσιῶν, δῆλον.

τί δὲ χρὴ λέγειν καὶ ὁποῖόν τι τὴν οὐσίαν, πάλιν ἄλλην οἷον ἀρχὴν ποιησάμενοι λέγωμεν· ἴσως γὰρ ἐκ τούτων ἔσται δῆλον καὶ περὶ ἐκείνης τῆς οὐσίας ἥτις ἐστὶ κεχωρισμένη τῶν αἰσθητῶν οὐσιῶν. ἐπεὶ οὖν ἡ οὐσία ἀρχὴ καὶ [10] αἰτία τις ἐστίν, ἐντεῦθεν μετιτέον. ζητεῖται δὲ τὸ διὰ τί ἀεὶ οὕτως, διὰ τί ἄλλο ἄλλῳ τινὶ ὑπάρχει. τὸ γὰρ ζητεῖν διὰ τί ὁ μουσικὸς ἄνθρωπος μουσικὸς ἄνθρωπός ἐστιν, ἤτοι ἐστὶ τὸ εἰρημένον ζητεῖν, διὰ τί ὁ ἄνθρωπος μουσικός ἐστιν, ἢ ἄλλο. τὸ μὲν οὖν διὰ τί αὐτό ἐστιν αὐτό, οὐδέν ἐστι [15] ζητεῖν (δεῖ γὰρ τὸ ὅτι καὶ τὸ εἶναι ὑπάρχειν δῆλα ὄντα—λέγω δ’ οἷον ὅτι ἡ σελήνη ἐκλείπει—, αὐτὸ δὲ ὅτι αὐτό, εἷς λόγος καὶ μία αἰτία ἐπὶ πάντων, διὰ τί ὁ ἄνθρωπος ἄνθρωπος ἢ ὁ μουσικὸς μουσικός, πλὴν εἴ τις λέγοι ὅτι ἀδιαίρετον πρὸς αὐτὸ ἕκαστον, τοῦτο δ’ ἦν τὸ ἑνὶ εἶναι· ἀλλὰ τοῦτο [20] κοινόν γε κατὰ πάντων καὶ σύντομον)· ζητήσειε δ’ ἄν τις διὰ τί ἄνθρωπός ἐστι ζῷον τοιονδί. τοῦτο μὲν τοίνυν δῆλον, ὅτι οὐ ζητεῖ διὰ τί ὅς ἐστιν ἄνθρωπος ἄνθρωπός ἐστιν· τὶ ἄρα κατά τινος ζητεῖ διὰ τί ὑπάρχει (ὅτι δ’ ὑπάρχει, δεῖ δῆλον εἶναι· εἰ γὰρ μὴ οὕτως, οὐδὲν ζητεῖ), οἷον διὰ τί [25] βροντᾷ; διὰ τί ψόφος γίγνεται ἐν τοῖς νέφεσιν; ἄλλο γὰρ οὕτω κατ’ ἄλλου ἐστὶ τὸ ζητούμενον. καὶ διὰ τί ταδί, οἷον πλίνθοι καὶ λίθοι, οἰκία ἐστίν; φανερὸν τοίνυν ὅτι ζητεῖ τὸ αἴτιον· τοῦτο δ’ ἐστὶ τὸ τί ἦν εἶναι, ὡς εἰπεῖν λογικῶς, ὃ ἐπ’ ἐνίων μέν ἐστι τίνος ἕνεκα, οἷον ἴσως ἐπ’ οἰκίας ἢ κλίνης, [30] ἐπ’ ἐνίων δὲ τί ἐκίνησε πρῶτον· αἴτιον γὰρ καὶ τοῦτο. ἀλλὰ τὸ μὲν τοιοῦτον αἴτιον ἐπὶ τοῦ γίγνεσθαι ζητεῖται καὶ φθείρεσθαι, θάτερον δὲ καὶ ἐπὶ τοῦ εἶναι. λανθάνει δὲ μάλιστα τὸ ζητούμενον ἐν τοῖς μὴ κατ’ ἀλλήλων λεγομένοις, [1] οἷον ἄνθρωπος τί ἐστι ζητεῖται διὰ τὸ ἁπλῶς λέγεσθαι ἀλλὰ μὴ διορίζειν ὅτι τάδε τόδε. ἀλλὰ δεῖ διαρθρώσαντας ζητεῖν· εἰ δὲ μή, κοινὸν τοῦ μηθὲν ζητεῖν καὶ τοῦ ζητεῖν τι γίγνεται. ἐπεὶ δὲ δεῖ ἔχειν τε καὶ ὑπάρχειν τὸ [5] εἶναι, δῆλον δὴ ὅτι τὴν ὕλην ζητεῖ διὰ τί τί ἐστιν· οἷον οἰκία ταδὶ διὰ τί; ὅτι ὑπάρχει ὃ ἦν οἰκίᾳ εἶναι. καὶ ἄνθρωπος τοδί, ἢ τὸ σῶμα τοῦτο τοδὶ ἔχον. ὥστε τὸ αἴτιον ζητεῖται τῆς ὕλης (τοῦτο δ’ ἐστὶ τὸ εἶδος) ᾧ τί ἐστιν· τοῦτο δ’ ἡ οὐσία. φανερὸν τοίνυν ὅτι ἐπὶ τῶν ἁπλῶν οὐκ ἔστι ζήτησις [10] οὐδὲ δίδαξις, ἀλλ’ ἕτερος τρόπος τῆς ζητήσεως τῶν τοιούτων.—ἐπεὶ δὲ τὸ ἔκ τινος σύνθετον οὕτως ὥστε ἓν εἶναι τὸ πᾶν, ἂν μὴ ὡς σωρὸς ἀλλ’ ὡς ἡ συλλαβή—ἡ δὲ συλλαβὴ οὐκ ἔστι τὰ στοιχεῖα, οὐδὲ τῷ βα ταὐτὸ τὸ β καὶ α, οὐδ’ ἡ σὰρξ πῦρ καὶ γῆ (διαλυθέντων γὰρ τὰ μὲν οὐκέτι ἔστιν, [15] οἷον ἡ σὰρξ καὶ ἡ συλλαβή, τὰ δὲ στοιχεῖα ἔστι, καὶ τὸ πῦρ καὶ ἡ γῆ)· ἔστιν ἄρα τι ἡ συλλαβή, οὐ μόνον τὰ στοιχεῖα τὸ φωνῆεν καὶ ἄφωνον ἀλλὰ καὶ ἕτερόν τι, καὶ ἡ σὰρξ οὐ μόνον πῦρ καὶ γῆ ἢ τὸ θερμὸν καὶ ψυχρὸν ἀλλὰ

καὶ ἕτερόν τι—εἰ τοίνυν ἀνάγκη κἀκεῖνο ἢ στοιχεῖον [20] ἢ ἐκ στοιχείων εἶναι, εἰ μὲν στοιχεῖον, πάλιν ὁ αὐτὸς ἔσται λόγος (ἐκ τούτου γὰρ καὶ πυρὸς καὶ γῆς ἔσται ἡ σὰρξ καὶ ἔτι ἄλλου, ὥστ' εἰς ἄπειρον βαδιεῖται)· εἰ δὲ ἐκ στοιχείου, δῆλον ὅτι οὐχ ἑνὸς ἀλλὰ πλειόνων, ἢ ἐκεῖνο αὐτὸ ἔσται, ὥστε πάλιν ἐπὶ τούτου τὸν αὐτὸν ἐροῦμεν λόγον καὶ ἐπὶ τῆς [25] σαρκὸς ἢ συλλαβῆς. δόξειε δ' ἂν εἶναι τὶ τοῦτο καὶ οὐ στοιχεῖον, καὶ αἴτιόν γε τοῦ εἶναι τοδὶ μὲν σάρκα τοδὶ δὲ συλλαβήν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. οὐσία δὲ ἑκάστου μὲν τοῦτο (τοῦτο γὰρ αἴτιον πρῶτον τοῦ εἶναι)—ἐπεὶ δ' ἔνια οὐκ οὐσίαι τῶν πραγμάτων, ἀλλ' ὅσαι οὐσίαι, κατὰ φύσιν [30] καὶ φύσει συνεστήκασι, φανείη ἂν καὶ αὕτη ἡ φύσις οὐσία, ἥ ἐστιν οὐ στοιχεῖον ἀλλ' ἀρχή—· στοιχεῖον δ' ἐστὶν εἰς ὃ διαιρεῖται ἐνυπάρχον ὡς ὕλην, οἷον τῆς συλλαβῆς τὸ α καὶ τὸ β.

[3] ἐκ δὴ τῶν εἰρημένων συλλογίσασθαι δεῖ καὶ συναγαγόντας τὸ κεφάλαιον τέλος ἐπιθεῖναι. εἴρηται δὴ ὅτι [5] τῶν οὐσιῶν ζητεῖται τὰ αἴτια καὶ αἱ ἀρχαὶ καὶ τὰ στοιχεῖα. οὐσίαι δὲ αἱ μὲν ὁμολογούμεναί εἰσιν ὑπὸ πάντων, [7] περὶ δὲ ἐνίων ἰδίᾳ τινὲς ἀπεφήναντο· ὁμολογούμεναι μὲν αἱ φυσικαί, οἷον πῦρ γῆ ὕδωρ ἀὴρ καὶ τἆλλα τὰ ἁπλᾶ σώματα, ἔπειτα τὰ φυτὰ καὶ τὰ μόρια αὐτῶν, καὶ τὰ [10] ζῷα καὶ τὰ μόρια τῶν ζῴων, καὶ τέλος ὁ οὐρανὸς καὶ τὰ μόρια τοῦ οὐρανοῦ· ἰδίᾳ δέ τινες οὐσίας λέγουσιν εἶναι τά τ' εἴδη καὶ τὰ μαθηματικά. ἄλλας δὲ δὴ συμβαίνει ἐκ τῶν λόγων οὐσίας εἶναι, τὸ τί ἦν εἶναι καὶ τὸ ὑποκείμενον· ἔτι ἄλλως τὸ γένος μᾶλλον τῶν εἰδῶν καὶ τὸ καθόλου τῶν [15] καθ' ἕκαστα· τῷ δὲ καθόλου καὶ τῷ γένει καὶ αἱ ἰδέαι συνάπτουσιν (κατὰ τὸν αὐτὸν γὰρ λόγον οὐσίαι δοκοῦσιν εἶναι). ἐπεὶ δὲ τὸ τί ἦν εἶναι οὐσία, τούτου δὲ λόγος ὁ ὁρισμός, διὰ τοῦτο περὶ ὁρισμοῦ καὶ περὶ τοῦ καθ' αὐτὸ διώρισται· ἐπεὶ δὲ ὁ ὁρισμὸς λόγος, ὁ δὲ λόγος μέρη ἔχει, ἀναγκαῖον καὶ [20] περὶ μέρους ἦν ἰδεῖν, ποῖα τῆς οὐσίας μέρη καὶ ποῖα οὔ, καὶ εἰ ταῦτα καὶ τοῦ ὁρισμοῦ. ἔτι τοίνυν οὔτε τὸ καθόλου οὐσία οὔτε τὸ γένος· περὶ δὲ τῶν ἰδεῶν καὶ τῶν μαθηματικῶν ὕστερον σκεπτέον· παρὰ γὰρ τὰς αἰσθητὰς οὐσίας ταύτας λέγουσί τινες εἶναι.—νῦν δὲ περὶ τῶν ὁμολογουμένων οὐσιῶν [25] ἐπέλθωμεν. αὗται δ' εἰσὶν αἱ αἰσθηταί· αἱ δ' αἰσθηταὶ οὐσίαι πᾶσαι ὕλην ἔχουσιν. ἔστι δ' οὐσία τὸ ὑποκείμενον, ἄλλως μὲν ἡ ὕλη (ὕλην δὲ λέγω ἣ μὴ τόδε τι οὖσα ἐνεργείᾳ δυνάμει ἐστὶ τόδε τι), ἄλλως δ' ὁ λόγος καὶ ἡ μορφή, ὃ τόδε τι ὂν τῷ λόγῳ χωριστόν ἐστιν· τρίτον δὲ τὸ [30] ἐκ τούτων, οὗ γένεσις μόνου καὶ φθορά ἐστι, καὶ χωριστὸν ἁπλῶς· τῶν γὰρ κατὰ τὸν λόγον οὐσιῶν αἱ μὲν αἱ δ' οὔ. ὅτι δ' ἐστὶν οὐσία καὶ ἡ ὕλη, δῆλον· ἐν πάσαις γὰρ ταῖς ἀντικειμέναις μεταβολαῖς ἐστί τι τὸ ὑποκείμενον ταῖς μεταβολαῖς, οἷον κατὰ τόπον τὸ νῦν μὲν ἐνταῦθα πάλιν δ' [35] ἄλλοθι, καὶ κατ' αὔξησιν ὃ νῦν μὲν τηλικόνδε πάλιν δ' ἔλαττον ἢ μεῖζον, καὶ κατ' ἀλλοίωσιν ὃ νῦν μὲν ὑγιὲς πάλιν δὲ κάμνον· [1] ὁμοίως δὲ καὶ κατ' οὐσίαν ὃ νῦν μὲν ἐν γενέσει πάλιν δ' ἐν φθορᾷ, καὶ νῦν μὲν ὑποκείμενον ὡς τόδε τι πάλιν δ' ὑποκείμενον ὡς κατὰ στέρησιν. καὶ ἀκολουθοῦσι δὴ ταύτῃ αἱ ἄλλαι μεταβολαί, τῶν δ' ἄλλων ἢ [5] μιᾷ ἢ δυοῖν αὕτη οὐκ ἀκολουθεῖ· οὐ γὰρ ἀνάγκη, εἴ τι ὕλην ἔχει τοπικήν, τοῦτο καὶ γεννητὴν καὶ φθαρτὴν ἔχειν. τίς μὲν οὖν διαφορὰ τοῦ ἁπλῶς γίγνεσθαι καὶ μὴ ἁπλῶς, ἐν τοῖς φυσικοῖς εἴρηται.

ἐπεὶ δ' ἡ μὲν ὡς ὑποκειμένη καὶ ὡς ὕλη οὐσία ὁμολογεῖται, [10] αὕτη δ' ἐστὶν ἡ δυνάμει, λοιπὸν τὴν ὡς ἐνέργειαν οὐσίαν τῶν αἰσθητῶν εἰπεῖν τίς ἐστιν. Δημόκριτος μὲν οὖν τρεῖς διαφορὰς ἔοικεν οἰομένῳ εἶναι (τὸ μὲν γὰρ ὑποκείμενον σῶμα, τὴν ὕλην, ἓν καὶ ταὐτόν, διαφέρειν δὲ ἢ ῥυσμῷ, ὅ ἐστι σχῆμα, ἢ τροπῇ, ὅ ἐστι θέσις, ἢ διαθιγῇ, ὅ [15] ἐστι τάξις)· φαίνονται δὲ πολλαὶ διαφοραὶ οὖσαι, οἷον τὰ μὲν συνθέσει λέγεται τῆς ὕλης, ὥσπερ ὅσα κράσει καθάπερ μελίκρατον, τὰ δὲ δεσμῷ οἷον φάκελος, τὰ δὲ κόλλῃ οἷον βιβλίον, τὰ δὲ γόμφῳ οἷον κιβώτιον, τὰ δὲ πλείοσι τούτων, τὰ δὲ θέσει οἷον οὐδὸς καὶ ὑπέρθυρον (ταῦτα γὰρ [20] τῷ κεῖσθαί πως διαφέρει), τὰ δὲ χρόνῳ οἷον δεῖπνον καὶ ἄριστον, τὰ δὲ τόπῳ οἷον τὰ πνεύματα· τὰ δὲ τοῖς τῶν αἰσθητῶν πάθεσιν οἷον σκληρότητι καὶ μαλακότητι, καὶ πυκνότητι καὶ ἀραιότητι, καὶ ξηρότητι καὶ ὑγρότητι, καὶ τὰ μὲν ἐνίοις τούτων τὰ δὲ πᾶσι τούτοις, καὶ ὅλως τὰ [25] μὲν ὑπεροχῇ τὰ δὲ

ἐλλείψει. ὥστε δῆλον ὅτι καὶ τὸ ἔστι τοσαυταχῶς λέγεται· οὐδὸς γὰρ ἔστιν ὅτι οὕτως κεῖται, καὶ τὸ εἶναι τὸ οὕτως αὐτὸ κεῖσθαι σημαίνει, καὶ τὸ κρύσταλλον εἶναι τὸ οὕτω πεπυκνῶσθαι. ἐνίων δὲ τὸ εἶναι καὶ πᾶσι τούτοις ὁρισθήσεται, τῷ τὰ μὲν μεμῖχθαι, τὰ δὲ κεκρᾶσθαι, [30] τὰ δὲ δεδέσθαι, τὰ δὲ πεπυκνῶσθαι, τὰ δὲ ταῖς ἄλλαις διαφοραῖς κεχρῆσθαι, ὥσπερ χεὶρ ἢ πούς. ληπτέα οὖν τὰ γένη τῶν διαφορῶν (αὗται γὰρ ἀρχαὶ ἔσονται τοῦ εἶναι), οἷον τὰ τῷ μᾶλλον καὶ ἧττον ἢ πυκνῷ καὶ μανῷ καὶ τοῖς ἄλλοις τοῖς τοιούτοις· πάντα γὰρ ταῦτα [35] ὑπεροχὴ καὶ ἔλλειψίς ἐστιν. εἰ δέ τι σχήματι ἢ λειότητι καὶ τραχύτητι, πάντα εὐθεῖ καὶ καμπύλῳ. τοῖς δὲ τὸ εἶναι τὸ μεμῖχθαι ἔσται, ἀντικειμένως δὲ τὸ μὴ εἶναι. [1] φανερὸν δὴ ἐκ τούτων ὅτι εἴπερ ἡ οὐσία αἰτία τοῦ εἶναι ἕκαστον, ὅτι ἐν τούτοις ζητητέον τί τὸ αἴτιον τοῦ εἶναι τούτων ἕκαστον. οὐσία μὲν οὖν οὐδὲν τούτων οὐδὲ συνδυαζόμενον, ὅμως [5] δὲ τὸ ἀνάλογον ἐν ἑκάστῳ· καὶ ὡς ἐν ταῖς οὐσίαις τὸ τῆς ὕλης κατηγορούμενον αὐτὴ ἡ ἐνέργεια, καὶ ἐν τοῖς ἄλλοις ὁρισμοῖς μάλιστα. οἷον εἰ οὐδὸν δέοι ὁρίσασθαι, ξύλον ἢ λίθον ὠδὶ κείμενον ἐροῦμεν, καὶ οἰκίαν πλίνθους καὶ ξύλα ὠδὶ κείμενα (ἢ ἔτι καὶ τὸ οὗ ἕνεκα ἐπ' ἐνίων ἔστιν), εἰ δὲ κρύσταλλον, [10] ὕδωρ πεπηγὸς ἢ πεπυκνωμένον ὠδί· συμφωνία δὲ ὀξέος καὶ βαρέος μῖξις τοιαδί· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων. φανερὸν δὴ ἐκ τούτων ὅτι ἡ ἐνέργεια ἄλλη ἄλλης ὕλης καὶ ὁ λόγος· τῶν μὲν γὰρ ἡ σύνθεσις τῶν δ' ἡ μῖξις τῶν δὲ ἄλλο τι τῶν εἰρημένων. διὸ τῶν ὁριζομένων οἱ μὲν [15] λέγοντες τί ἐστιν οἰκία, ὅτι λίθοι πλίνθοι ξύλα, τὴν δυνάμει οἰκίαν λέγουσιν, ὕλη γὰρ ταῦτα· οἱ δὲ ἀγγεῖον σκεπαστικὸν χρημάτων καὶ σωμάτων ἤ τι ἄλλο τοιοῦτον προτιθέντες, τὴν ἐνέργειαν λέγουσιν· οἱ δ' ἄμφω ταῦτα συντιθέντες τὴν τρίτην καὶ τὴν ἐκ τούτων οὐσίαν (ἔοικε γὰρ ὁ μὲν διὰ τῶν διαφορῶν [20] λόγος τοῦ εἴδους καὶ τῆς ἐνεργείας εἶναι, ὁ δ' ἐκ τῶν ἐνυπαρχόντων τῆς ὕλης μᾶλλον)· ὁμοίως δὲ καὶ οἵους Ἀρχύτας ἀπεδέχετο ὅρους· τοῦ συνάμφω γάρ εἰσιν. οἷον τί ἐστι νηνεμία; ἠρεμία ἐν πλήθει ἀέρος· ὕλη μὲν γὰρ ὁ ἀήρ, ἐνέργεια δὲ καὶ οὐσία ἡ ἠρεμία. τί ἐστι γαλήνη; ὁμαλότης θαλάττης· [25] τὸ μὲν ὑποκείμενον ὡς ὕλη ἡ θάλαττα, ἡ δὲ ἐνέργεια καὶ ἡ μορφὴ ἡ ὁμαλότης. φανερὸν δὴ ἐκ τῶν εἰρημένων τίς ἡ αἰσθητὴ οὐσία ἐστὶ καὶ πῶς· ἡ μὲν γὰρ ὡς ὕλη, ἡ δ' ὡς μορφὴ καὶ ἐνέργεια, ἡ δὲ τρίτη ἡ ἐκ τούτων.

δεῖ δὲ μὴ ἀγνοεῖν ὅτι ἐνίοτε λανθάνει πότερον σημαίνει [30] τὸ ὄνομα τὴν σύνθετον οὐσίαν ἢ τὴν ἐνέργειαν καὶ τὴν μορφήν, οἷον ἡ οἰκία πότερον σημεῖον τοῦ κοινοῦ ὅτι σκέπασμα ἐκ πλίνθων καὶ λίθων ὠδὶ κειμένων, ἢ τῆς ἐνεργείας καὶ τοῦ εἴδους ὅτι σκέπασμα, καὶ γραμμὴ πότερον δυὰς ἐν μήκει ἢ ὅτι δυάς, καὶ ζῷον πότερον ψυχὴ ἐν [35] σώματι ἢ ψυχή· αὕτη γὰρ οὐσία καὶ ἐνέργεια σώματός τινος. εἴη δ' ἂν καὶ ἐπ' ἀμφοτέροις τὸ ζῷον, οὐχ ὡς ἑνὶ λόγῳ λεγόμενον ἀλλ' ὡς πρὸς ἕν. ἀλλὰ ταῦτα πρὸς μέν τι ἄλλο διαφέρει, πρὸς δὲ τὴν ζήτησιν τῆς οὐσίας τῆς αἰσθητῆς οὐδέν· [1] τὸ γὰρ τί ἦν εἶναι τῷ εἴδει καὶ τῇ ἐνεργείᾳ ὑπάρχει. ψυχὴ μὲν γὰρ καὶ ψυχῇ εἶναι ταὐτόν, ἀνθρώπῳ δὲ καὶ ἄνθρωπος οὐ ταὐτόν, εἰ μὴ καὶ ἡ ψυχὴ ἄνθρωπος λεχθήσεται· οὕτω δὲ τινὶ μὲν τινὶ δ' οὔ.—οὐ φαίνεται [5] δὴ ζητοῦσιν ἡ συλλαβὴ ἐκ τῶν στοιχείων οὖσα καὶ συνθέσεως, οὐδ' ἡ οἰκία πλίνθοι τε καὶ σύνθεσις. καὶ τοῦτο ὀρθῶς· οὐ γάρ ἐστιν ἡ σύνθεσις οὐδ' ἡ μῖξις ἐκ τούτων ὧν ἐστὶ σύνθεσις ἢ μῖξις. ὁμοίως δὲ οὐδὲ τῶν ἄλλων οὐθέν, οἷον εἰ ὁ οὐδὸς θέσει, οὐκ ἐκ τοῦ οὐδοῦ ἡ θέσις ἀλλὰ μᾶλλον [10] οὗτος ἐξ ἐκείνης. οὐδὲ δὴ ὁ ἄνθρωπός ἐστι τὸ ζῷον καὶ δίπουν, ἀλλά τι δεῖ εἶναι ὃ παρὰ ταῦτά ἐστιν, εἰ ταῦθ' ὕλη, οὔτε δὲ στοιχεῖον οὔτ' ἐκ στοιχείου, ἀλλ' ἡ οὐσία· ὃ ἐξαιροῦντες [13] τὴν ὕλην λέγουσιν. εἰ οὖν τοῦτ' αἴτιον τοῦ εἶναι, καὶ οὐσία τοῦτο, αὐτὴν ἂν τὴν οὐσίαν οὐ λέγοιεν. (ἀνάγκη δὴ ταύτην ἢ [15] ἀΐδιον εἶναι ἢ φθαρτὴν ἄνευ τοῦ φθείρεσθαι καὶ γεγονέναι ἄνευ τοῦ γίγνεσθαι. δέδεικται δὲ καὶ δεδήλωται ἐν ἄλλοις ὅτι τὸ εἶδος οὐθεὶς ποιεῖ οὐδὲ γεννᾷ, ἀλλὰ ποιεῖται τόδε, γίγνεται δὲ τὸ ἐκ τούτων. εἰ δ' εἰσὶ τῶν φθαρτῶν αἱ οὐσίαι χωρισταί, οὐδέν πω δῆλον· πλὴν ὅτι γ' ἐνίων οὐκ ἐνδέχεται [20] δῆλον, ὅσα μὴ οἷόν τε παρὰ τὰ τινὰ εἶναι, οἷον οἰκίαν ἢ σκεῦος. ἴσως μὲν οὖν οὐδ' οὐσίαι εἰσὶν οὔτ' αὐτὰ ταῦτα οὔτε τι τῶν ἄλλων ὅσα μὴ φύσει συνέστηκεν· τὴν γὰρ φύσιν μόνην

ἄν τις θείη τὴν ἐν τοῖς φθαρτοῖς οὐσίαν.) ὥστε ἡ ἀπορία ἦν οἱ Ἀντισθένειοι καὶ οἱ οὕτως ἀπαίδευτοι ἠπόρουν [25] ἔχει τινὰ καιρόν, ὅτι οὐκ ἔστι τὸ τί ἔστιν ὁρίσασθαι (τὸν γὰρ ὅρον λόγον εἶναι μακρόν), ἀλλὰ ποῖον μέν τί ἐστιν ἐνδέχεται καὶ διδάξαι, ὥσπερ ἄργυρον, τί μέν ἐστιν οὔ, ὅτι δ' οἷον καττίτερος· ὥστ' οὐσίας ἔστι μὲν ἧς ἐνδέχεται εἶναι ὅρον καὶ λόγον, οἷον τῆς συνθέτου, ἐάν τε αἰσθητὴ [30] ἐάν τε νοητὴ ᾖ· ἐξ ὧν δ' αὕτη πρώτων, οὐκέτι, εἴπερ τὶ κατὰ τινὸς σημαίνει ὁ λόγος ὁ ὁριστικὸς καὶ δεῖ τὸ μὲν ὥσπερ ὕλην εἶναι τὸ δὲ ὡς μορφήν.—φανερὸν δὲ καὶ διότι, εἴπερ εἰσί πως ἀριθμοὶ αἱ οὐσίαι, οὕτως εἰσὶ καὶ οὐχ ὥς τινες λέγουσι μονάδων· ὅ τε γὰρ ὁρισμὸς ἀριθμός τις· [35] διαιρετός τε γὰρ καὶ εἰς ἀδιαίρετα (οὐ γὰρ ἄπειροι οἱ λόγοι), καὶ ὁ ἀριθμὸς δὲ τοιοῦτον. καὶ ὥσπερ οὐδ' ἀπ' ἀριθμοῦ ἀφαιρεθέντος τινὸς ἢ προστεθέντος ἐξ ὧν ὁ ἀριθμός ἐστιν, οὐκέτι ὁ αὐτὸς ἀριθμός ἐστιν ἀλλ' ἕτερος, κἂν τοὐλάχιστον ἀφαιρεθῇ ἢ προστεθῇ, [1] οὕτως οὐδὲ ὁ ὁρισμὸς οὐδὲ τὸ τί ἦν εἶναι οὐκέτι ἔσται ἀφαιρεθέντος τινὸς ἢ προστεθέντος. καὶ τὸν ἀριθμὸν δεῖ εἶναί τι ᾧ εἷς, ὃ νῦν οὐκ ἔχουσι λέγειν τίνι εἷς, εἴπερ ἐστὶν εἷς (ἢ γὰρ οὐκ ἔστιν ἀλλ' οἷον σωρός, ἢ [5] εἴπερ ἐστί, λεκτέον τί τὸ ποιοῦν ἓν ἐκ πολλῶν)· καὶ ὁ ὁρισμὸς εἷς ἐστίν, ὁμοίως δὲ οὐδὲ τοῦτον ἔχουσι λέγειν. καὶ τοῦτο εἰκότως συμβαίνει· τοῦ αὐτοῦ γὰρ λόγου, καὶ ἡ οὐσία ἓν οὕτως, ἀλλ' οὐχ ὡς λέγουσί τινες οἷον μονάς τις οὖσα ἢ στιγμή, ἀλλ' ἐντελέχεια καὶ φύσις τις ἑκάστη. καὶ ὥσπερ οὐδὲ ὁ [10] ἀριθμὸς ἔχει τὸ μᾶλλον καὶ ἧττον, οὐδ' ἡ κατὰ τὸ εἶδος οὐσία, ἀλλ' εἴπερ, ἡ μετὰ τῆς ὕλης. περὶ μὲν οὖν γενέσεως καὶ φθορᾶς τῶν λεγομένων οὐσιῶν, πῶς τ' ἐνδέχεται καὶ πῶς ἀδύνατον, καὶ περὶ τῆς εἰς τὸν ἀριθμὸν ἀναγωγῆς, ἔστω μέχρι τούτων διωρισμένον.

[15] περὶ δὲ τῆς ὑλικῆς οὐσίας δεῖ μὴ λανθάνειν ὅτι εἰ καὶ ἐκ τοῦ αὐτοῦ πάντα πρώτου ἢ τῶν αὐτῶν ὡς πρώτων καὶ ἡ αὐτὴ ὕλη ὡς ἀρχὴ τοῖς γιγνομένοις, ὅμως ἔστι τις οἰκεία ἑκάστου, οἷον φλέγματος ἐστι πρώτη ὕλη τὰ γλυκέα ἢ λιπαρά, χολῆς δὲ τὰ πικρὰ ἢ ἄλλ' ἄττα· ἴσως δὲ [20] ταῦτα ἐκ τοῦ αὐτοῦ. γίγνονται δὲ πλείους ὕλαι τοῦ αὐτοῦ ὅταν θατέρου ἡ ἑτέρα ᾖ, οἷον φλέγμα ἐκ λιπαροῦ καὶ γλυκέος εἰ τὸ λιπαρὸν ἐκ τοῦ γλυκέος, ἐκ δὲ χολῆς τῷ ἀναλύεσθαι εἰς τὴν πρώτην ὕλην τὴν χολήν. διχῶς γὰρ τόδ' ἐκ τοῦδε, ἢ ὅτι πρὸ ὁδοῦ ἔσται ἢ ὅτι ἀναλυθέντος εἰς τὴν [25] ἀρχήν. ἐνδέχεται δὲ μιᾶς τῆς ὕλης οὔσης ἕτερα γίγνεσθαι διὰ τὴν κινοῦσαν αἰτίαν, οἷον ἐκ ξύλου καὶ κιβωτὸς καὶ κλίνη. ἐνίων δ' ἑτέρα ἡ ὕλη ἐξ ἀνάγκης ἑτέρων ὄντων, οἷον πρίων οὐκ ἂν γένοιτο ἐκ ξύλου, οὐδ' ἐπὶ τῇ κινούσῃ αἰτίᾳ τοῦτο· οὐ γὰρ ποιήσει πρίονα ἐξ ἐρίου ἢ ξύλου. εἰ δ' ἄρα [30] τὸ αὐτὸ ἐνδέχεται ἐξ ἄλλης ὕλης ποιῆσαι, δῆλον ὅτι ἡ τέχνη καὶ ἡ ἀρχὴ ἡ ὡς κινοῦσα ἡ αὐτή· εἰ γὰρ καὶ ἡ ὕλη ἑτέρα καὶ τὸ κινοῦν, καὶ τὸ γεγονός.—ὅταν δή τις ζητῇ τὸ αἴτιον, ἐπεὶ πλεοναχῶς τὰ αἴτια λέγεται, πάσας δεῖ λέγειν τὰς ἐνδεχομένας αἰτίας. οἷον ἀνθρώπου τίς αἰτία ὡς [35] ὕλη; ἆρα τὰ καταμήνια; τί δ' ὡς κινοῦν; ἆρα τὸ σπέρμα; τί δ' ὡς τὸ εἶδος; τὸ τί ἦν εἶναι. τί δ' ὡς οὗ ἕνεκα; τὸ τέλος. [1] ἴσως δὲ ταῦτα ἄμφω τὸ αὐτό. δεῖ δὲ τὰ ἐγγύτατα αἴτια λέγειν. τίς ἡ ὕλη; μὴ πῦρ ἢ γῆν ἀλλὰ τὴν ἴδιον. περὶ μὲν οὖν τὰς φυσικὰς οὐσίας καὶ γενητὰς ἀνάγκη οὕτω μετιέναι εἴ τις μέτεισιν ὀρθῶς, εἴπερ ἄρα [5] αἴτιά τε ταῦτα καὶ τοσαῦτα καὶ δεῖ τὰ αἴτια γνωρίζειν· ἐπὶ δὲ τῶν φυσικῶν μὲν ἀϊδίων δὲ οὐσιῶν ἄλλος λόγος. ἴσως γὰρ ἔνια οὐκ ἔχει ὕλην, ἢ οὐ τοιαύτην ἀλλὰ μόνον κατὰ τόπον κινητήν. οὐδ' ὅσα δὴ φύσει μέν, μὴ οὐσίαι δέ, οὐκ ἔστι τούτοις ὕλη, ἀλλὰ τὸ ὑποκείμενον ἡ οὐσία. οἷον τί [10] αἴτιον ἐκλείψεως, τίς ὕλη; οὐ γὰρ ἔστιν, ἀλλ' ἡ σελήνη τὸ πάσχον. τί δ' αἴτιον ὡς κινῆσαν καὶ φθεῖραν τὸ φῶς; ἡ γῆ. τὸ δ' οὗ ἕνεκα ἴσως οὐκ ἔστιν. τὸ δ' ὡς εἶδος ὁ λόγος, ἀλλὰ ἄδηλος ἐὰν μὴ μετὰ τῆς αἰτίας ᾖ ὁ λόγος. οἷον τί ἔκλειψις; στέρησις φωτός. ἐὰν δὲ προστεθῇ τὸ ὑπὸ γῆς ἐν [15] μέσῳ γιγνομένης, ὁ σὺν τῷ αἰτίῳ λόγος οὗτος. ὕπνου δ' ἄδηλον τί τὸ πρῶτον πάσχον. ἀλλ' ὅτι τὸ ζῷον; ναί, ἀλλὰ τοῦτο κατὰ τί, καὶ τί πρῶτον; καρδία ἢ ἄλλο τι. εἶτα ὑπὸ τίνος; εἶτα τί τὸ πάθος, τὸ ἐκείνου καὶ μὴ τοῦ ὅλου; ὅτι ἀκινησία τοιαδί; ναί, ἀλλ' αὕτη τῷ τί πάσχειν [20] τὸ πρῶτον;

ἐπεὶ δ' ἔνια ἄνευ γενέσεως καὶ φθορᾶς ἔστι καὶ οὐκ ἔστιν, οἷον αἱ στιγμαί, εἴπερ εἰσί, καὶ ὅλως τὰ

εἴδη (οὐ γὰρ τὸ λευκὸν γίγνεται ἀλλὰ τὸ ξύλον λευκόν, εἰ ἔκ τινος καὶ τὶ πᾶν τὸ γιγνόμενον γίγνεται), οὐ πάντα [25] ἂν τἀναντία γίγνοιτο ἐξ ἀλλήλων, ἀλλ’ ἑτέρως λευκὸς ἄνθρωπος ἐκ μέλανος ἀνθρώπου καὶ λευκὸν ἐκ μέλανος· οὐδὲ παντὸς ὕλη ἔστιν ἀλλ’ ὅσων γένεσις ἔστι καὶ μεταβολὴ εἰς ἄλληλα· ὅσα δ’ ἄνευ τοῦ μεταβάλλειν ἔστιν ἢ μή, οὐκ ἔστι τούτων ὕλη.—ἔχει δ’ ἀπορίαν πῶς πρὸς τἀναντία ἡ [30] ὕλη ἡ ἑκάστου ἔχει. οἷον εἰ τὸ σῶμα δυνάμει ὑγιεινόν, ἐναντίον δὲ νόσος ὑγιείᾳ, ἆρα ἄμφω δυνάμει; καὶ τὸ ὕδωρ δυνάμει οἶνος καὶ ὄξος; ἢ τοῦ μὲν καθ’ ἕξιν καὶ κατὰ τὸ εἶδος ὕλη, τοῦ δὲ κατὰ στέρησιν καὶ φθορὰν τὴν παρὰ φύσιν; ἀπορία δέ τις ἔστι καὶ διὰ τί ὁ οἶνος οὐχ [35] ὕλη τοῦ ὄξους οὐδὲ δυνάμει ὄξος (καίτοι γίγνεται ἐξ αὐτοῦ ὄξος) καὶ ὁ ζῶν δυνάμει νεκρός. ἢ οὔ, ἀλλὰ κατὰ συμβεβηκὸς αἱ φθοραί, [1] ἡ δὲ τοῦ ζῴου ὕλη αὐτὴ κατὰ φθορὰν νεκροῦ δύναμις καὶ ὕλη, καὶ τὸ ὕδωρ ὄξους· γίγνεται γὰρ ἐκ τούτων ὥσπερ ἐξ ἡμέρας νύξ. καὶ ὅσα δὴ οὕτω μεταβάλλει εἰς ἄλληλα, εἰς τὴν ὕλην δεῖ ἐπανελθεῖν, οἷον εἰ [5] ἐκ νεκροῦ ζῷον, εἰς τὴν ὕλην πρῶτον, εἶθ’ οὕτω ζῷον· καὶ τὸ ὄξος εἰς ὕδωρ, εἶθ’ οὕτως οἶνος.

περὶ δὲ τῆς ἀπορίας τῆς εἰρημένης περί τε τοὺς ὁρισμοὺς καὶ περὶ τοὺς ἀριθμούς, τί αἴτιον τοῦ ἓν εἶναι; πάντων γὰρ ὅσα πλείω μέρη ἔχει καὶ μὴ ἔστιν οἷον σωρὸς τὸ πᾶν [10] ἀλλ’ ἔστι τι τὸ ὅλον παρὰ τὰ μόρια, ἔστι τι αἴτιον, ἐπεὶ καὶ ἐν τοῖς σώμασι τοῖς μὲν ἁφὴ αἰτία τοῦ ἓν εἶναι τοῖς δὲ γλισχρότης ἤ τι πάθος ἕτερον τοιοῦτον. ὁ δ’ ὁρισμὸς λόγος ἐστὶν εἷς οὐ συνδέσμῳ καθάπερ ἡ Ἰλιὰς ἀλλὰ τῷ ἑνὸς εἶναι. τί οὖν ἐστὶν ὃ ποιεῖ ἓν τὸν ἄνθρωπον, καὶ διὰ τί [15] ἓν ἀλλ’ οὐ πολλά, οἷον τό τε ζῷον καὶ τὸ δίπουν, ἄλλως τε δὴ καὶ εἰ ἔστιν, ὥσπερ φασί τινες, αὐτό τι ζῷον καὶ αὐτὸ δίπουν; διὰ τί γὰρ οὐκ ἐκεῖνα αὐτὰ ὁ ἄνθρωπός ἐστι, καὶ ἔσονται κατὰ μέθεξιν οἱ ἄνθρωποι οὐκ ἀνθρώπου οὐδ’ [19] ἑνὸς ἀλλὰ δυοῖν, ζῴου καὶ δίποδος, καὶ ὅλως δὴ οὐκ ἂν [20] εἴη ὁ ἄνθρωπος ἓν ἀλλὰ πλείω, ζῷον καὶ δίπουν; φανερὸν δὴ ὅτι οὕτω μὲν μετιοῦσιν ὡς εἰώθασιν ὁρίζεσθαι καὶ λέγειν, οὐκ ἐνδέχεται ἀποδοῦναι καὶ λῦσαι τὴν ἀπορίαν· εἰ δ’ ἐστίν, ὥσπερ λέγομεν, τὸ μὲν ὕλη τὸ δὲ μορφή, καὶ τὸ μὲν δυνάμει τὸ δὲ ἐνεργείᾳ, οὐκέτι ἀπορία δόξειεν ἂν [25] εἶναι τὸ ζητούμενον. ἔστι γὰρ αὕτη ἡ ἀπορία ἡ αὐτὴ κἂν εἰ ὁ ὅρος εἴη ἱματίου στρογγύλος χαλκός· εἴη γὰρ ἂν σημεῖον τοὔνομα τοῦτο τοῦ λόγου, ὥστε τὸ ζητούμενόν ἐστι τί αἴτιον τοῦ ἓν εἶναι τὸ στρογγύλον καὶ τὸν χαλκόν. οὐκέτι δὴ ἀπορία φαίνεται, ὅτι τὸ μὲν ὕλη τὸ δὲ μορφή. [30] τί οὖν τούτου αἴτιον, τοῦ τὸ δυνάμει ὂν ἐνεργείᾳ εἶναι, παρὰ τὸ ποιῆσαν, ἐν ὅσοις ἔστι γένεσις; οὐθὲν γάρ ἐστιν αἴτιον ἕτερον τοῦ τὴν δυνάμει σφαῖραν ἐνεργείᾳ εἶναι σφαῖραν, ἀλλὰ τοῦτ’ ἦν τὸ τί ἦν εἶναι ἑκατέρῳ. ἔστι δὲ τῆς ὕλης ἡ μὲν νοητὴ ἡ δ’ αἰσθητή, καὶ ἀεὶ τοῦ λόγου τὸ μὲν [35] ὕλη τὸ δὲ ἐνέργειά ἐστιν, οἷον ὁ κύκλος σχῆμα ἐπίπεδον. ὅσα δὲ μὴ ἔχει ὕλην μήτε νοητὴν μήτε αἰσθητήν, εὐθὺς ὅπερ ἕν τί εἶναί ἐστιν ἕκαστον, [1] ὥσπερ καὶ ὅπερ ὄν τι, τὸ τόδε, τὸ ποιόν, τὸ ποσόν—διὸ καὶ οὐκ ἔνεστιν ἐν τοῖς ὁρισμοῖς οὔτε τὸ ὂν οὔτε τὸ ἕν—, καὶ τὸ τί ἦν εἶναι εὐθὺς ἕν τί ἐστιν ὥσπερ καὶ ὄν τι—διὸ καὶ οὐκ ἔστιν ἕτερόν τι αἴτιον τοῦ [5] ἓν εἶναι οὐθενὶ τούτων οὐδὲ τοῦ ὄν τι εἶναι· εὐθὺς γὰρ ἕκαστόν ἐστιν ὄν τι καὶ ἕν τι, οὐχ ὡς ἐν γένει τῷ ὄντι καὶ τῷ ἑνί, οὐδ’ ὡς χωριστῶν ὄντων παρὰ τὰ καθ’ ἕκαστα. διὰ ταύτην δὲ τὴν ἀπορίαν οἱ μὲν μέθεξιν λέγουσι, καὶ αἴτιον τί τῆς μεθέξεως καὶ τί τὸ μετέχειν ἀποροῦσιν· οἱ δὲ συνουσίαν [10] ψυχῆς, ὥσπερ Λυκόφρων φησὶν εἶναι τὴν ἐπιστήμην τοῦ ἐπίστασθαι καὶ ψυχῆς· οἱ δὲ σύνθεσιν ἢ σύνδεσμον ψυχῆς σώματι τὸ ζῆν. καίτοι ὁ αὐτὸς λόγος ἐπὶ πάντων· καὶ γὰρ τὸ ὑγιαίνειν ἔσται ἢ συνουσία ἢ σύνδεσμος ἢ σύνθεσις ψυχῆς καὶ ὑγιείας, καὶ τὸ τὸν χαλκὸν εἶναι τρίγωνον [15] σύνθεσις χαλκοῦ καὶ τριγώνου, καὶ τὸ λευκὸν εἶναι σύνθεσις ἐπιφανείας καὶ λευκότητος. αἴτιον δ’ ὅτι δυνάμεως καὶ ἐντελεχείας ζητοῦσι λόγον ἑνοποιὸν καὶ διαφοράν. ἔστι δ’, ὥσπερ εἴρηται, ἡ ἐσχάτη ὕλη καὶ ἡ μορφὴ ταὐτὸ καὶ ἕν, δυνάμει, τὸ δὲ ἐνεργείᾳ, ὥστε ὅμοιον τὸ ζητεῖν τοῦ [20] ἑνός τί αἴτιον καὶ τοῦ ἓν εἶναι· ἓν γάρ τι ἕκαστον, καὶ τὸ δυνάμει καὶ τὸ ἐνεργείᾳ ἕν πώς ἐστιν, ὥστε αἴτιον οὐθὲν ἄλλο πλὴν εἴ τι ὡς κινῆσαν ἐκ δυνάμεως εἰς ἐνέργειαν. ὅσα δὲ μὴ ἔχει ὕλην, πάντα ἁπλῶς ὅπερ ἕν τι.

[27] περὶ μὲν οὖν τοῦ πρώτως ὄντος καὶ πρὸς ὃ πᾶσαι αἱ ἄλλαι κατηγορίαι τοῦ ὄντος ἀναφέρονται εἴρηται, περὶ τῆς οὐσίας (κατὰ γὰρ τὸν τῆς οὐσίας λόγον λέγεται τἆλλα [30] ὄντα, τό τε ποσὸν καὶ τὸ ποιὸν καὶ τἆλλα τὰ οὕτω λεγόμενα· πάντα γὰρ ἕξει τὸν τῆς οὐσίας λόγον, ὥσπερ εἴπομεν ἐν τοῖς πρώτοις λόγοις)· ἐπεὶ δὲ λέγεται τὸ ὂν τὸ μὲν τὸ τί ἢ ποιὸν ἢ ποσόν, τὸ δὲ κατὰ δύναμιν καὶ ἐντελέχειαν καὶ κατὰ τὸ ἔργον, διορίσωμεν καὶ περὶ δυνάμεως [35] καὶ ἐντελεχείας, καὶ πρῶτον περὶ δυνάμεως ἣ λέγεται μὲν μάλιστα κυρίως, οὐ μὴν χρησιμωτάτη γέ ἐστι πρὸς ὃ βουλόμεθα νῦν· [1] ἐπὶ πλέον γάρ ἐστιν ἡ δύναμις καὶ ἡ ἐνέργεια τῶν μόνον λεγομένων κατὰ κίνησιν. ἀλλ’ εἰπόντες περὶ ταύτης, ἐν τοῖς περὶ τῆς ἐνεργείας διορισμοῖς δηλώσομεν καὶ περὶ τῶν ἄλλων. ὅτι μὲν οὖν λέγεται [5] πολλαχῶς ἡ δύναμις καὶ τὸ δύνασθαι, διώρισται ἡμῖν ἐν ἄλλοις· τούτων δ’ ὅσαι μὲν ὁμωνύμως λέγονται δυνάμεις ἀφείσθωσαν (ἔνιαι γὰρ ὁμοιότητί τινι λέγονται, καθάπερ ἐν γεωμετρίᾳ καὶ δυνατὰ καὶ ἀδύνατα λέγομεν τῷ εἶναί πως ἢ μὴ εἶναι), ὅσαι δὲ πρὸς τὸ αὐτὸ εἶδος, πᾶσαι ἀρχαί [10] τινές εἰσι, καὶ πρὸς πρώτην μίαν λέγονται, ἥ ἐστιν ἀρχὴ μεταβολῆς ἐν ἄλλῳ ἢ ᾗ ἄλλο. ἡ μὲν γὰρ τοῦ παθεῖν ἐστὶ δύναμις, ἡ ἐν αὐτῷ τῷ πάσχοντι ἀρχὴ μεταβολῆς παθητικῆς ὑπ’ ἄλλου ἢ ᾗ ἄλλο· ἡ δ’ ἕξις ἀπαθείας τῆς ἐπὶ τὸ χεῖρον καὶ φθορᾶς τῆς ὑπ’ ἄλλου ἢ ᾗ ἄλλο ὑπ’ ἀρχῆς [15] μεταβλητικῆς. ἐν γὰρ τούτοις ἔνεστι πᾶσι τοῖς ὅροις ὁ τῆς πρώτης δυνάμεως λόγος. πάλιν δ’ αὖται δυνάμεις λέγονται ἢ τοῦ μόνον ποιῆσαι ἢ τοῦ παθεῖν ἢ τοῦ καλῶς, ὥστε καὶ ἐν τοῖς τούτων λόγοις ἐνυπάρχουσί πως οἱ τῶν προτέρων δυνάμεων λόγοι.—φανερὸν οὖν ὅτι ἔστι μὲν ὡς μία δύναμις [20] τοῦ ποιεῖν καὶ πάσχειν (δυνατὸν γάρ ἐστι καὶ τῷ ἔχειν αὐτὸ δύναμιν τοῦ παθεῖν καὶ τῷ ἄλλο ὑπ’ αὐτοῦ), ἔστι δὲ ὡς ἄλλη. ἡ μὲν γὰρ ἐν τῷ πάσχοντι (διὰ γὰρ τὸ ἔχειν τινὰ ἀρχήν, καὶ εἶναι καὶ τὴν ὕλην ἀρχήν τινα, πάσχει τὸ πάσχον, καὶ ἄλλο ὑπ’ ἄλλου· τὸ λιπαρὸν μὲν [25] γὰρ καυστὸν τὸ δ’ ὑπεῖκον ὠδὶ θλαστόν, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων), ἡ δ’ ἐν τῷ ποιοῦντι, οἷον τὸ θερμὸν καὶ ἡ οἰκοδομική, ἡ μὲν ἐν τῷ θερμαντικῷ ἡ δ’ ἐν τῷ οἰκοδομικῷ· διὸ ᾗ συμπέφυκεν, οὐθὲν πάσχει αὐτὸ ὑφ’ ἑαυτοῦ· ἓν γὰρ καὶ οὐκ ἄλλο. καὶ ἡ ἀδυναμία καὶ τὸ ἀδύνατον [30] ἡ τῇ τοιαύτῃ δυνάμει ἐναντία στέρησίς ἐστιν, ὥστε τοῦ αὐτοῦ καὶ κατὰ τὸ αὐτὸ πᾶσα δύναμις ἀδυναμίᾳ. ἡ δὲ στέρησις λέγεται πολλαχῶς· καὶ γὰρ τὸ μὴ ἔχον καὶ τὸ πεφυκὸς ἂν μὴ ἔχῃ, ἢ ὅλως ἢ ὅτε πέφυκεν, καὶ ἢ ὠδί, οἷον παντελῶς, ἢ κἂν ὁπωσοῦν. ἐπ’ ἐνίων δέ, ἂν πεφυκότα [35] ἔχειν μὴ ἔχῃ βίᾳ, ἐστερῆσθαι ταῦτα λέγομεν.

ἐπεὶ δ’ αἱ μὲν ἐν τοῖς ἀψύχοις ἐνυπάρχουσιν ἀρχαὶ τοιαῦται, αἱ δ’ ἐν τοῖς ἐμψύχοις καὶ ἐν ψυχῇ καὶ τῆς ψυχῆς ἐν τῷ λόγον ἔχοντι, [1] δῆλον ὅτι καὶ τῶν δυνάμεων αἱ μὲν ἔσονται ἄλογοι αἱ δὲ μετὰ λόγου· διὸ πᾶσαι αἱ τέχναι καὶ αἱ ποιητικαὶ ἐπιστῆμαι δυνάμεις εἰσίν· ἀρχαὶ γὰρ μεταβλητικαί εἰσιν ἐν ἄλλῳ ἢ ᾗ ἄλλο. καὶ αἱ μὲν [5] μετὰ λόγου πᾶσαι τῶν ἐναντίων αἱ αὐταί, αἱ δὲ ἄλογοι μία ἑνός, οἷον τὸ θερμὸν τοῦ θερμαίνειν μόνον’ ἡ δὲ ἰατρικὴ νόσου καὶ ὑγιείας. αἴτιον δὲ ὅτι λόγος ἐστὶν ἡ ἐπιστήμη, ὁ δὲ λόγος ὁ αὐτὸς δηλοῖ τὸ πρᾶγμα καὶ τὴν στέρησιν, πλὴν οὐχ ὡσαύτως, καὶ ἔστιν ὡς ἀμφοῖν ἔστι δ’ ὡς [10] τοῦ ὑπάρχοντος μᾶλλον, ὥστ’ ἀνάγκη καὶ τὰς τοιαύτας ἐπιστήμας εἶναι μὲν τῶν ἐναντίων, εἶναι δὲ τοῦ μὲν καθ’ αὑτὰς τοῦ δὲ μὴ καθ’ αὑτάς· καὶ γὰρ ὁ λόγος τοῦ μὲν καθ’ αὐτὸ τοῦ δὲ τρόπον τινὰ κατὰ συμβεβηκός· ἀποφάσει γὰρ καὶ ἀποφορᾷ δηλοῖ τὸ ἐναντίον· ἡ γὰρ στέρησις [15] ἡ πρώτη τὸ ἐναντίον, αὕτη δὲ ἀποφορὰ θατέρου. ἐπεὶ δὲ τὰ ἐναντία οὐκ ἐγγίγνεται ἐν τῷ αὐτῷ, ἡ δ’ ἐπιστήμη δύναμις τῷ λόγον ἔχειν, καὶ ἡ ψυχὴ κινήσεως ἔχει ἀρχήν, τὸ μὲν ὑγιεινὸν ὑγίειαν μόνον ποιεῖ καὶ τὸ θερμαντικὸν θερμότητα καὶ τὸ ψυκτικὸν ψυχρότητα, ὁ δ’ ἐπιστήμων [20] ἄμφω. λόγος γάρ ἐστιν ἀμφοῖν μέν, οὐχ ὁμοίως δέ, καὶ ἐν ψυχῇ ἢ ἔχει κινήσεως ἀρχήν· ὥστε ἄμφω ἀπὸ τῆς αὐτῆς ἀρχῆς κινήσει πρὸς ταὐτὸ συνάψασα· διὸ τὰ κατὰ λόγον δυνατὰ τοῖς ἄνευ λόγου δυνατοῖς ποιεῖ τἀναντία· μιᾷ γὰρ ἀρχῇ περιέχεται, τῷ λόγῳ. φανερὸν δὲ καὶ ὅτι [25] τῇ μὲν τοῦ εὖ δυνάμει ἀκολουθεῖ ἡ τοῦ μόνον ποιῆσαι ἢ παθεῖν δύναμις, ταύτῃ δ’ ἐκείνη οὐκ ἀεί· ἀνάγκη γὰρ τὸν εὖ ποιοῦντα καὶ

ποιεῖν, τὸν δὲ μόνον ποιοῦντα οὐκ ἀνάγκη καὶ εὖ ποιεῖν.

εἰσὶ δέ τινες οἵ φασιν, οἷον οἱ Μεγαρικοί, ὅταν ἐνεργῇ [30] μόνον δύνασθαι, ὅταν δὲ μὴ ἐνεργῇ οὐ δύνασθαι, οἷον τὸν [31] μὴ οἰκοδομοῦντα οὐ δύνασθαι οἰκοδομεῖν, ἀλλὰ τὸν οἰκοδομοῦντα ὅταν οἰκοδομῇ· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. οἷς τὰ συμβαίνοντα ἄτοπα οὐ χαλεπὸν ἰδεῖν. δῆλον γὰρ ὅτι οὔτ’ οἰκοδόμος ἔσται ἐὰν μὴ οἰκοδομῇ (τὸ γὰρ οἰκοδόμῳ [35] εἶναι τὸ δυνατῷ εἶναί ἐστιν οἰκοδομεῖν), ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τεχνῶν. εἰ οὖν ἀδύνατον τὰς τοιαύτας ἔχειν τέχνας μὴ μαθόντα ποτὲ καὶ λαβόντα, [1] καὶ μὴ ἔχειν μὴ ἀποβαλόντα ποτέ (ἢ γὰρ λήθῃ ἢ πάθει τινὶ ἢ χρόνῳ· οὐ γὰρ δὴ τοῦ γε πράγματος φθαρέντος, ἀεὶ γὰρ ἔστιν), ὅταν παύσηται, οὐχ ἕξει τὴν τέχνην, πάλιν δ’ εὐθὺς οἰκοδομήσει πῶς λαβών; καὶ τὰ ἄψυχα δὴ ὁμοίως· οὔτε γὰρ [5] ψυχρὸν οὔτε θερμὸν οὔτε γλυκὺ οὔτε ὅλως αἰσθητὸν οὐθὲν ἔσται μὴ αἰσθανομένων· ὥστε τὸν Πρωταγόρου λόγον συμβήσεται λέγειν αὐτοῖς. ἀλλὰ μὴν οὐδ’ αἴσθησιν ἕξει οὐδὲν ἂν μὴ αἰσθάνηται μηδ’ ἐνεργῇ. εἰ οὖν τυφλὸν τὸ μὴ ἔχον ὄψιν, πεφυκὸς δὲ καὶ ὅτε πέφυκε καὶ ἔτι ὄν, οἱ αὐτοὶ [10] τυφλοὶ ἔσονται πολλάκις τῆς ἡμέρας, καὶ κωφοί. ἔτι εἰ ἀδύνατον τὸ ἐστερημένον δυνάμεως, τὸ μὴ γιγνόμενον ἀδύνατον ἔσται γενέσθαι· τὸ δ’ ἀδύνατον γενέσθαι ὁ λέγων ἢ εἶναι ἢ ἔσεσθαι ψεύσεται (τὸ γὰρ ἀδύνατον τοῦτο ἐσήμαινεν), ὥστε οὗτοι οἱ λόγοι ἐξαιροῦσι καὶ κίνησιν καὶ γένεσιν. [15] ἀεὶ γὰρ τό τε ἑστηκὸς ἑστήξεται καὶ τὸ καθήμενον καθεδεῖται· οὐ γὰρ ἀναστήσεται ἂν καθέζηται· ἀδύνατον γὰρ ἔσται ἀναστῆναι ὅ γε μὴ δύναται ἀναστῆναι. εἰ οὖν μὴ ἐνδέχεται ταῦτα λέγειν, φανερὸν ὅτι δύναμις καὶ ἐνέργεια ἕτερόν ἐστιν (ἐκεῖνοι δ’ οἱ λόγοι δύναμιν καὶ ἐνέργειαν ταὐτὸ [20] ποιοῦσιν, διὸ καὶ οὐ μικρόν τι ζητοῦσιν ἀναιρεῖν), ὥστε ἐνδέχεται δυνατὸν μέν τι εἶναι μὴ εἶναι δέ, καὶ δυνατὸν μὴ εἶναι εἶναι δέ, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων κατηγοριῶν δυνατὸν βαδίζειν ὃν μὴ βαδίζειν, καὶ μὴ βαδίζειν δυνατὸν ὃν βαδίζειν. ἔστι δὲ δυνατὸν τοῦτο ᾧ ἐὰν ὑπάρξῃ [25] ἡ ἐνέργεια οὗ λέγεται ἔχειν τὴν δύναμιν, οὐθὲν ἔσται ἀδύνατον. λέγω δὲ οἷον, εἰ δυνατὸν καθῆσθαι καὶ ἐνδέχεται καθῆσθαι, τούτῳ ἐὰν ὑπάρξῃ τὸ καθῆσθαι, οὐδὲν ἔσται ἀδύνατον· καὶ εἰ κινηθῆναι ἢ κινῆσαι ἢ στῆναι ἢ στῆσαι ἢ εἶναι ἢ γίγνεσθαι ἢ μὴ εἶναι ἢ μὴ γίγνεσθαι, ὁμοίως. [30] ἐλήλυθε δ’ ἡ ἐνέργεια τοὔνομα, ἡ πρὸς τὴν ἐντελέχειαν συντιθεμένη, καὶ ἐπὶ τὰ ἄλλα ἐκ τῶν κινήσεων μάλιστα· δοκεῖ γὰρ ἡ ἐνέργεια μάλιστα ἡ κίνησις εἶναι, διὸ καὶ τοῖς μὴ οὖσιν οὐκ ἀποδιδόασι τὸ κινεῖσθαι, ἄλλας δέ τινας κατηγορίας, οἷον διανοητὰ καὶ ἐπιθυμητὰ εἶναι τὰ μὴ ὄντα, [35] κινούμενα δὲ οὔ, τοῦτο δὲ ὅτι οὐκ ὄντα ἐνεργείᾳ ἔσονται ἐνεργείᾳ. [1] τῶν γὰρ μὴ ὄντων ἔνια δυνάμει ἐστίν· οὐκ ἔστι δέ, ὅτι οὐκ ἐντελεχείᾳ ἐστίν.

εἰ δέ ἐστι τὸ εἰρημένον τὸ δυνατὸν ἢ ἀκολουθεῖ, φανερὸν ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν ὅτι δυνατὸν μὲν [5] τοδί, οὐκ ἔσται δέ, ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν· λέγω δὲ οἷον εἴ τις φαίη δυνατὸν τὴν διάμετρον μετρηθῆναι οὐ μέντοι μετρηθήσεσθαι—ὁ μὴ λογιζόμενος τὸ ἀδύνατον εἶναι—ὅτι οὐθὲν κωλύει δυνατόν τι ὂν εἶναι ἢ γενέσθαι μὴ εἶναι μηδ’ ἔσεσθαι. ἀλλ’ ἐκεῖνο ἀνάγκη ἐκ [10] τῶν κειμένων, εἰ καὶ ὑποθοίμεθα εἶναι ἢ γεγονέναι ὃ οὐκ ἔστι μὲν δυνατὸν δέ, ὅτι οὐθὲν ἔσται ἀδύνατον· συμβήσεται δέ γε, τὸ γὰρ μετρεῖσθαι ἀδύνατον. οὐ γὰρ δή ἐστι ταὐτὸ τὸ ψεῦδος καὶ τὸ ἀδύνατον· τὸ γάρ σε ἑστάναι νῦν ψεῦδος μέν, οὐκ ἀδύνατον δέ. ἅμα δὲ δῆλον καὶ ὅτι, εἰ [15] τοῦ Α ὄντος ἀνάγκη τὸ Β εἶναι, καὶ δυνατοῦ ὄντος εἶναι τοῦ Α καὶ τὸ Β ἀνάγκη εἶναι δυνατόν· εἰ γὰρ μὴ ἀνάγκη δυνατὸν εἶναι, οὐθὲν κωλύει μὴ εἶναι δυνατὸν εἶναι. ἔστω δὴ τὸ Α δυνατόν. οὐκοῦν ὅτε τὸ Α δυνατὸν εἴη εἶναι, εἰ τεθείη τὸ Α, οὐθὲν ἀδύνατον εἶναι συνέβαινεν· τὸ δέ γε Β [20] ἀνάγκη εἶναι. ἀλλ’ ἦν ἀδύνατον. ἔστω δὴ ἀδύνατον. εἰ δὴ ἀδύνατον ἀνάγκη εἶναι τὸ Β, ἀνάγκη καὶ τὸ Α εἶναι. ἀλλ’ ἦν ἄρα τὸ πρῶτον ἀδύνατον· καὶ τὸ δεύτερον ἄρα. ἂν ἄρα ᾖ τὸ Α δυνατόν, καὶ τὸ Β ἔσται δυνατόν, εἴπερ οὕτως εἶχον ὥστε τοῦ Α ὄντος ἀνάγκη εἶναι τὸ Β. ἐὰν δὴ οὕτως ἐχόντων [25] τῶν Α Β μὴ ᾖ δυνατὸν τὸ Β οὕτως, οὐδὲ τὰ Α Β ἕξει ὡς ἐτέθη· καὶ εἰ τοῦ Α δυνατοῦ ὄντος ἀνάγκη τὸ Β δυνατὸν εἶναι, εἰ ἔστι τὸ Α ἀνάγκη εἶναι

καὶ τὸ Β. τὸ γὰρ δυνατὸν εἶναι ἐξ ἀνάγκης τὸ Β εἶναι, εἰ τὸ Α δυνατόν, τοῦτο σημαίνει, ἐὰν ᾖ τὸ Α καὶ ὅτε καὶ ὡς ἦν δυνατὸν [30] εἶναι, κἀκεῖνο τότε καὶ οὕτως εἶναι ἀναγκαῖον.

ἁπασῶν δὲ τῶν δυνάμεων οὐσῶν τῶν μὲν συγγενῶν οἷον τῶν αἰσθήσεων, τῶν δὲ ἕθει οἷον τῆς τοῦ αὐλεῖν, τῶν δὲ μαθήσει οἷον τῆς τῶν τεχνῶν, τὰς μὲν ἀνάγκη προενεργήσαντας ἔχειν, ὅσαι ἕθει καὶ λόγῳ, τὰς δὲ μὴ τοιαύτας [35] καὶ τὰς ἐπὶ τοῦ πάσχειν οὐκ ἀνάγκη. [1] ἐπεὶ δὲ τὸ δυνατὸν τὶ δυνατὸν καὶ ποτὲ καὶ πὼς καὶ ὅσα ἄλλα ἀνάγκη προσεῖναι ἐν τῷ διορισμῷ, καὶ τὰ μὲν κατὰ λόγον δύναται κινεῖν καὶ αἱ δυνάμεις αὐτῶν μετὰ λόγου, τὰ δὲ ἄλογα καὶ αἱ δυνάμεις ἄλογοι, κἀκείνας μὲν ἀνάγκη ἐν ἐμψύχῳ [5] εἶναι ταύτας δὲ ἐν ἀμφοῖν, τὰς μὲν τοιαύτας δυνάμεις ἀνάγκη, ὅταν ὡς δύνανται τὸ ποιητικὸν καὶ τὸ παθητικὸν πλησιάζωσι, τὸ μὲν ποιεῖν τὸ δὲ πάσχειν, ἐκείνας δ’ οὐκ ἀνάγκη· αὗται μὲν γὰρ πᾶσαι μία ἑνὸς ποιητική, ἐκεῖναι δὲ τῶν ἐναντίων, ὥστε ἅμα ποιήσει τὰ ἐναντία· τοῦτο δὲ [10] ἀδύνατον. ἀνάγκη ἄρα ἕτερόν τι εἶναι τὸ κύριον· λέγω δὲ τοῦτο ὄρεξιν ἢ προαίρεσιν. ὁποτέρου γὰρ ἂν ὀρέγηται κυρίως, τοῦτο ποιήσει ὅταν ὡς δύναται ὑπάρχῃ καὶ πλησιάζῃ τῷ παθητικῷ· ὥστε τὸ δυνατὸν κατὰ λόγον ἅπαν ἀνάγκη, ὅταν ὀρέγηται οὗ ἔχει τὴν δύναμιν καὶ ὡς ἔχει, [15] τοῦτο ποιεῖν· ἔχει δὲ παρόντος τοῦ παθητικοῦ καὶ ὡδὶ ἔχοντος ποιεῖν· εἰ δὲ μή, ποιεῖν οὐ δυνήσεται (τὸ γὰρ μηθενὸς τῶν ἔξω κωλύοντος προσδιορίζεσθαι οὐθὲν ἔτι δεῖ· τὴν γὰρ δύναμιν ἔχει ὡς ἔστι δύναμις τοῦ ποιεῖν, ἔστι δ’ οὐ πάντως ἀλλ’ ἐχόντων πῶς, ἐν οἷς ἀφορισθήσεται καὶ τὰ ἔξω κωλύοντα· [20] ἀφαιρεῖται γὰρ ταῦτα τῶν ἐν τῷ διορισμῷ προσόντων ἕνια)· διὸ οὐδ’ ἐὰν ἅμα βούληται ἢ ἐπιθυμῇ ποιεῖν δύο ἢ τὰ ἐναντία, οὐ ποιήσει· οὐ γὰρ οὕτως ἔχει αὐτῶν τὴν δύναμιν οὐδ’ ἔστι τοῦ ἅμα ποιεῖν ἡ δύναμις, ἐπεὶ ὧν ἐστὶν οὕτως ποιήσει.

[25] ἐπεὶ δὲ περὶ τῆς κατὰ κίνησιν λεγομένης δυνάμεως εἴρηται, περὶ ἐνεργείας διορίσωμεν τί τέ ἐστιν ἡ ἐνέργεια καὶ ποῖόν τι. καὶ γὰρ τὸ δυνατὸν ἅμα δῆλον ἔσται διαιροῦσιν, ὅτι οὐ μόνον τοῦτο λέγομεν δυνατὸν ὃ πέφυκε κινεῖν ἄλλο ἢ κινεῖσθαι ὑπ’ ἄλλου ἢ ἁπλῶς ἢ τρόπον τινά, ἀλλὰ [30] καὶ ἑτέρως, διὸ ζητοῦντες καὶ περὶ τούτων διήλθομεν. ἔστι δὴ ἐνέργεια τὸ ὑπάρχειν τὸ πρᾶγμα μὴ οὕτως ὥσπερ λέγομεν δυνάμει· λέγομεν δὲ δυνάμει οἷον ἐν τῷ ξύλῳ Ἑρμῆν καὶ ἐν τῇ ὅλῃ τὴν ἡμίσειαν, ὅτι ἀφαιρεθείη ἄν, καὶ ἐπιστήμονα καὶ τὸν μὴ θεωροῦντα, ἂν δυνατὸς ᾖ θεωρῆσαι· [35] τὸ δὲ ἐνεργείᾳ. δῆλον δ’ ἐπὶ τῶν καθ’ ἕκαστα τῇ ἐπαγωγῇ ὃ βουλόμεθα λέγειν, καὶ οὐ δεῖ παντὸς ὅρον ζητεῖν ἀλλὰ καὶ τὸ ἀνάλογον συνορᾶν, ὅτι ὡς τὸ οἰκοδομοῦν πρὸς τὸ οἰκοδομικόν, [1] καὶ τὸ ἐγρηγορὸς πρὸς τὸ καθεῦδον, καὶ τὸ ὁρῶν πρὸς τὸ μῦον μὲν ὄψιν δὲ ἔχον, καὶ τὸ ἀποκεκριμένον ἐκ τῆς ὕλης πρὸς τὴν ὕλην, καὶ τὸ ἀπειργασμένον πρὸς τὸ ἀνέργαστον. ταύτης δὲ τῆς διαφορᾶς [5] θατέρῳ μορίῳ ἔστω ἡ ἐνέργεια ἀφωρισμένη θατέρῳ δὲ τὸ δυνατόν. λέγεται δὲ ἐνεργείᾳ οὐ πάντα ὁμοίως ἀλλ’ ἢ τῷ ἀνάλογον, ὡς τοῦτο ἐν τούτῳ ἢ πρὸς τοῦτο, τόδ’ ἐν τῷδε ἢ πρὸς τόδε· τὰ μὲν γὰρ ὡς κίνησις πρὸς δύναμιν τὰ δ’ ὡς οὐσία πρός τινα ὕλην. ἄλλως δὲ καὶ τὸ ἄπειρον [10] καὶ τὸ κενόν, καὶ ὅσα τοιαῦτα, λέγεται δυνάμει καὶ ἐνεργείᾳ ἢ πολλοῖς τῶν ὄντων, οἷον τῷ ὁρῶντι καὶ βαδίζοντι καὶ ὁρωμένῳ. ταῦτα μὲν γὰρ ἐνδέχεται καὶ ἁπλῶς ἀληθεύεσθαί ποτε (τὸ μὲν γὰρ ὁρώμενον ὅτι ὁρᾶται, τὸ δὲ ὅτι ὁρᾶσθαι δυνατόν)· τὸ δ’ ἄπειρον οὐχ οὕτω δυνάμει ἔστιν ὡς [15] ἐνεργείᾳ ἐσόμενον χωριστόν, ἀλλὰ γνώσει. τὸ γὰρ μὴ ὑπολείπειν τὴν διαίρεσιν ἀποδίδωσι τὸ εἶναι δυνάμει ταύτην τὴν ἐνέργειαν, τὸ δὲ χωρίζεσθαι οὔ.

ἐπεὶ δὲ τῶν πράξεων ὧν ἔστι πέρας οὐδεμία τέλος ἀλλὰ τῶν περὶ τὸ τέλος, οἷον τὸ ἰσχναίνειν ἢ ἰσχνασία [20] αὐτό, αὐτὰ δὲ ὅταν ἰσχναίνῃ οὕτως ἐστὶν ἐν κινήσει, μὴ ὑπάρχοντα ὧν ἕνεκα ἡ κίνησις, οὐκ ἔστι ταῦτα πρᾶξις ἢ οὐ τελεία γε (οὐ γὰρ τέλος)· ἀλλ’ ἐκείνη ᾗ ἐνυπάρχει τὸ τέλος καὶ ἡ πρᾶξις. οἷον ὁρᾷ ἅμα καὶ ἑώρακε, καὶ φρονεῖ καὶ πεφρόνηκε, καὶ νοεῖ καὶ νενόηκεν, ἀλλ’ οὐ μανθάνει καὶ μεμάθηκεν [25] οὐδ’ ὑγιάζεται καὶ ὑγίασται· εὖ ζῇ καὶ εὖ ἔζηκεν ἅμα, καὶ

εὐδαιμονεῖ καὶ εὐδαιμόνηκεν. εἰ δὲ μή, ἔδει ἄν ποτε παύεσθαι ὥσπερ ὅταν ἰσχναίνῃ, νῦν δ’ οὔ, ἀλλὰ ζῇ καὶ ἔζηκεν. τούτων δὴ δεῖ τὰς μὲν κινήσεις λέγειν, τὰς δ’ ἐνεργείας. πᾶσα γὰρ κίνησις ἀτελής, ἰσχνασία μάθησις βάδισις οἰκοδόμησις· [30] αὗται δὴ κινήσεις, καὶ ἀτελεῖς γε. οὐ γὰρ ἅμα βαδίζει καὶ βεβάδικεν, οὐδ’ οἰκοδομεῖ καὶ ᾠκοδόμηκεν, οὐδὲ γίγνεται καὶ γέγονεν ἢ κινεῖται καὶ κεκίνηται, ἀλλ’ ἕτερον, καὶ κινεῖ καὶ κεκίνηκεν· ἑώρακε δὲ καὶ ὁρᾷ ἅμα τὸ αὐτό, καὶ νοεῖ καὶ νενόηκεν. τὴν μὲν οὖν τοιαύτην ἐνέργειαν [35] λέγω, ἐκείνην δὲ κίνησιν. τὸ μὲν οὖν ἐνεργείᾳ τί τέ ἐστι καὶ ποῖον, ἐκ τούτων καὶ τῶν τοιούτων δῆλον ἡμῖν ἔστω.

πότε δὲ δυνάμει ἔστιν ἕκαστον καὶ πότε οὔ, διοριστέον· οὐ γὰρ ὁποτεοῦν. [1] οἷον ἡ γῆ ἆρ’ ἐστὶ δυνάμει ἄνθρωπος; ἢ οὔ, ἀλλὰ μᾶλλον ὅταν ἤδη γένηται σπέρμα, καὶ οὐδὲ τότε ἴσως; ὥσπερ οὖν οὐδ’ ὑπὸ ἰατρικῆς ἅπαν ἂν ὑγιασθείη οὐδ’ ἀπὸ τύχης, ἀλλ’ ἔστι τι ὃ δυνατόν ἐστι, καὶ τοῦτ’ ἔστιν [5] ὑγιαῖνον δυνάμει. ὅρος δὲ τοῦ μὲν ἀπὸ διανοίας ἐντελεχείᾳ γιγνομένου ἐκ τοῦ δυνάμει ὄντος, ὅταν βουληθέντος γίγνηται μηθενὸς κωλύοντος τῶν ἐκτός, ἐκεῖ δ’ ἐν τῷ ὑγιαζομένῳ, ὅταν μηθὲν κωλύῃ τῶν ἐν αὐτῷ· ὁμοίως δὲ δυνάμει καὶ οἰκία· εἰ μηθὲν κωλύει τῶν ἐν τούτῳ καὶ τῇ [10] ὕλῃ τοῦ γίγνεσθαι οἰκίαν, οὐδ’ ἔστιν ὃ δεῖ προσγενέσθαι ἢ ἀπογενέσθαι ἢ μεταβαλεῖν, τοῦτο δυνάμει οἰκία· καὶ ἐπὶ τῶν ἄλλων ὡσαύτως ὅσων ἔξωθεν ἡ ἀρχὴ τῆς γενέσεως. καὶ ὅσων δὴ ἐν αὐτῷ τῷ ἔχοντι, ὅσα μηθενὸς τῶν ἔξωθεν ἐμποδίζοντος ἔσται δι’ αὐτοῦ· οἷον τὸ σπέρμα οὔπω (δεῖ γὰρ [15] ἐν ἄλλῳ πεσεῖν καὶ μεταβάλλειν), ὅταν δ’ ἤδη διὰ τῆς αὐτοῦ ἀρχῆς ᾖ τοιοῦτον, ἤδη τοῦτο δυνάμει· ἐκεῖνο δὲ ἑτέρας ἀρχῆς δεῖται, ὥσπερ ἡ γῆ οὔπω ἀνδριὰς δυνάμει (μεταβαλοῦσα γὰρ ἔσται χαλκός). ἔοικε δὲ ὃ λέγομεν εἶναι οὐ τόδε ἀλλ’ ἐκείνινον—οἷον τὸ κιβώτιον οὐ ξύλον ἀλλὰ ξύλινον, [20] οὐδὲ τὸ ξύλον γῆ ἀλλὰ γήϊνον, πάλιν ἡ γῆ εἰ οὕτως μὴ ἄλλο ἀλλὰ ἐκείνινον—ἀεὶ ἐκεῖνο δυνάμει ἁπλῶς τὸ ὕστερόν ἐστιν. οἷον τὸ κιβώτιον οὐ γήϊνον οὐδὲ γῆ ἀλλὰ ξύλινον· τοῦτο γὰρ δυνάμει κιβώτιον καὶ ὕλη κιβωτίου αὕτη, ἁπλῶς μὲν τοῦ ἁπλῶς τουδὶ δὲ τοδὶ τὸ ξύλον. εἰ δέ τί ἐστι πρῶτον [25] ὃ μηκέτι κατ’ ἄλλο λέγεται ἐκείνινον, τοῦτο πρώτη ὕλη· οἷον εἰ ἡ γῆ ἀερίνη, ὁ δ’ ἀὴρ μὴ πῦρ ἀλλὰ πύρινος, τὸ πῦρ ὕλη πρώτη οὐ τόδε τι οὖσα. τούτῳ γὰρ διαφέρει τὸ καθ’ οὗ καὶ τὸ ὑποκείμενον, τῷ εἶναι τόδε τι ἢ μὴ εἶναι· οἷον τοῖς πάθεσι τὸ ὑποκείμενον ἄνθρωπος καὶ [30] σῶμα καὶ ψυχή, πάθος δὲ τὸ μουσικὸν καὶ λευκόν (λέγεται δὲ τῆς μουσικῆς ἐγγενομένης ἐκεῖνο οὐ μουσικὴ ἀλλὰ μουσικόν, καὶ οὐ λευκότης ὁ ἄνθρωπος ἀλλὰ λευκόν, οὐδὲ βάδισις ἢ κίνησις ἀλλὰ βαδίζον ἢ κινούμενον, ὡς τὸ ἐκείνινον)·—ὅσα μὲν οὖν οὕτω, τὸ ἔσχατον οὐσία· ὅσα δὲ μὴ [35] οὕτως ἀλλ’ εἶδός τι καὶ τόδε τι τὸ κατηγορούμενον, τὸ ἔσχατον ὕλη καὶ οὐσία ὑλική. καὶ ὀρθῶς δὴ συμβαίνει τὸ ἐκείνινον λέγεσθαι κατὰ τὴν ὕλην καὶ τὰ πάθη· [1] ἄμφω γὰρ ἀόριστα. πότε μὲν οὖν λεκτέον δυνάμει καὶ πότε οὔ, εἴρηται.

ἐπεὶ δὲ τὸ πρότερον διώρισται ποσαχῶς λέγεται, [5] φανερὸν ὅτι πρότερον ἐνέργεια δυνάμεώς ἐστιν. λέγω δὲ δυνάμεως οὐ μόνον τῆς ὡρισμένης ἢ λέγεται ἀρχὴ μεταβλητικὴ ἐν ἄλλῳ ἢ ᾗ ἄλλο, ἀλλ’ ὅλως πάσης ἀρχῆς κινητικῆς ἢ στατικῆς. καὶ γὰρ ἡ φύσις ἐν ταὐτῷ γίγνεται· ἐν ταὐτῷ γὰρ γένει τῇ δυνάμει· ἀρχὴ γὰρ κινητική, ἀλλ’ [10] οὐκ ἐν ἄλλῳ ἀλλ’ ἐν αὐτῷ ᾗ αὐτό.—πάσης δὴ τῆς τοιαύτης προτέρα ἐστὶν ἡ ἐνέργεια καὶ λόγῳ καὶ τῇ οὐσίᾳ· χρόνῳ δ’ ἔστι μὲν ὡς, ἔστι δὲ ὡς οὔ. τῷ λόγῳ μὲν οὖν ὅτι προτέρα, δῆλον (τῷ γὰρ ἐνδέχεσθαι ἐνεργῆσαι δυνατόν ἐστι τὸ πρώτως δυνατόν, οἷον λέγω οἰκοδομικὸν τὸ δυνάμενον οἰκοδομεῖν, [15] καὶ ὁρατικὸν τὸ ὁρᾶν, καὶ ὁρατὸν τὸ δυνατὸν ὁρᾶσθαι· ὁ δ’ αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων, ὥστ’ ἀνάγκη τὸν λόγον προϋπάρχειν καὶ τὴν γνῶσιν τῆς γνώσεως)· τῷ δὲ χρόνῳ πρότερον ὧδε· τὸ τῷ εἴδει τὸ αὐτὸ ἐνεργοῦν πρότερον, ἀριθμῷ δ’ οὔ. λέγω δὲ τοῦτο ὅτι τοῦδε μὲν τοῦ ἀνθρώπου τοῦ [20] ἤδη ὄντος κατ’ ἐνέργειαν καὶ τοῦ σίτου καὶ τοῦ ὁρῶντος πρότερον τῷ χρόνῳ ἡ ὕλη καὶ τὸ σπέρμα καὶ τὸ ὁρατικόν, ἃ δυνάμει μέν ἐστιν ἄνθρωπος καὶ σῖτος καὶ ὁρῶν, ἐνεργείᾳ δ’ οὔπω· ἀλλὰ τούτων πρότερα τῷ χρόνῳ ἕτερα ὄντα ἐνεργείᾳ ἐξ ὧν ταῦτα ἐγένετο· ἀεὶ γὰρ ἐκ τοῦ δυνάμει ὄντος [25] γίγνεται τὸ ἐνεργείᾳ ὂν ὑπὸ ἐνεργείᾳ ὄντος, οἷον ἄνθρωπος ἐξ ἀνθρώπου, μουσικὸς

ὑπὸ μουσικοῦ, ἀεὶ κινοῦντός τινος πρώτου· τὸ δὲ κινοῦν ἐνεργείᾳ ἤδη ἔστιν. εἴρηται δὲ ἐν τοῖς περὶ τῆς οὐσίας λόγοις ὅτι πᾶν τὸ γιγνόμενον γίγνεται ἔκ τινος τι καὶ ὑπό τινος, καὶ τοῦτο τῷ εἴδει τὸ αὐτό. διὸ καὶ δοκεῖ [30] ἀδύνατον εἶναι οἰκοδόμον εἶναι μὴ οἰκοδομήσαντα μηθὲν ἢ κιθαριστὴν μηθὲν κιθαρίσαντα· ὁ γὰρ μανθάνων κιθαρίζειν κιθαρίζων μανθάνει κιθαρίζειν, ὁμοίως δὲ καὶ οἱ ἄλλοι. ὅθεν ὁ σοφιστικὸς ἔλεγχος ἐγίγνετο ὅτι οὐκ ἔχων τις τὴν ἐπιστήμην ποιήσει οὗ ἡ ἐπιστήμη· ὁ γὰρ μανθάνων οὐκ ἔχει. [35] ἀλλὰ διὰ τὸ τοῦ γιγνομένου γεγενῆσθαί τι καὶ τοῦ ὅλως κινουμένου κεκινῆσθαί τι (δῆλον δ’ ἐν τοῖς περὶ κινήσεως τοῦτο) [1] καὶ τὸν μανθάνοντα ἀνάγκη ἔχειν τι τῆς ἐπιστήμης ἴσως. ἀλλ’ οὖν καὶ ταύτῃ γε δῆλον ὅτι ἡ ἐνέργεια καὶ οὕτω προτέρα τῆς δυνάμεως κατὰ γένεσιν καὶ χρόνον. ἀλλὰ μὴν καὶ οὐσίᾳ γε, πρῶτον μὲν ὅτι τὰ τῇ γενέσει [5] ὕστερα τῷ εἴδει καὶ τῇ οὐσίᾳ πρότερα (οἷον ἀνὴρ παιδὸς καὶ ἄνθρωπος σπέρματος· τὸ μὲν γὰρ ἤδη ἔχει τὸ εἶδος τὸ δ’ οὔ), καὶ ὅτι ἅπαν ἐπ’ ἀρχὴν βαδίζει τὸ γιγνόμενον καὶ τέλος (ἀρχὴ γὰρ τὸ οὗ ἕνεκα, τοῦ τέλους δὲ ἕνεκα ἡ γένεσις), τέλος δ’ ἡ ἐνέργεια, καὶ τούτου χάριν ἡ δύναμις [10] λαμβάνεται. οὐ γὰρ ἵνα ὄψιν ἔχωσιν ὁρῶσι τὰ ζῷα ἀλλ’ ὅπως ὁρῶσιν ὄψιν ἔχουσιν, ὁμοίως δὲ καὶ οἰκοδομικὴν ἵνα [12] οἰκοδομῶσι καὶ τὴν θεωρητικὴν ἵνα θεωρῶσιν· ἀλλ’ οὐ θεωροῦσιν ἵνα θεωρητικὴν ἔχωσιν, εἰ μὴ οἱ μελετῶντες· οὗτοι δὲ οὐχὶ θεωροῦσιν ἀλλ’ ἢ ὠδί, †ἢ ὅτι οὐδὲν δέονται θεωρεῖν†. [15] ἔτι ἡ ὕλη ἔστι δυνάμει ὅτι ἔλθοι ἂν εἰς τὸ εἶδος· ὅταν δέ γε ἐνεργείᾳ ᾖ, τότε ἐν τῷ εἴδει ἐστίν. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, καὶ ὧν κίνησις τὸ τέλος, διὸ ὥσπερ οἱ διδάσκοντες ἐνεργοῦντα ἐπιδείξαντες οἴονται τὸ τέλος ἀποδεδωκέναι, καὶ ἡ φύσις ὁμοίως. εἰ γὰρ μὴ οὕτω γίγνεται, ὁ [20] Παύσωνος ἔσται Ἑρμῆς· ἄδηλος γὰρ καὶ ἡ ἐπιστήμη εἰ ἔσω ἢ ἔξω, ὥσπερ κἀκεῖνος. τὸ γὰρ ἔργον τέλος, ἡ δὲ ἐνέργεια τὸ ἔργον, διὸ καὶ τοὔνομα ἐνέργεια λέγεται κατὰ τὸ ἔργον καὶ συντείνει πρὸς τὴν ἐντελέχειαν. ἐπεὶ δ’ ἐστὶ τῶν μὲν ἔσχατον ἡ χρῆσις (οἷον ὄψεως ἡ ὅρασις, καὶ οὐθὲν [25] γίγνεται παρὰ ταύτην ἕτερον ἀπὸ τῆς ὄψεως), ἀπ’ ἐνίων δὲ γίγνεταί τι (οἷον ἀπὸ τῆς οἰκοδομικῆς οἰκία παρὰ τὴν οἰκοδόμησιν), ὅμως οὐθὲν ἧττον ἔνθα μὲν τέλος, ἔνθα δὲ μᾶλλον τέλος τῆς δυνάμεώς ἐστιν· ἡ γὰρ οἰκοδόμησις ἐν τῷ οἰκοδομουμένῳ, καὶ ἅμα γίγνεται καὶ ἔστι τῇ οἰκίᾳ. [30] ὅσων μὲν οὖν ἕτερόν τί ἐστι παρὰ τὴν χρῆσιν τὸ γιγνόμενον, τούτων μὲν ἡ ἐνέργεια ἐν τῷ ποιουμένῳ ἐστίν (οἷον ἥ τε οἰκοδόμησις ἐν τῷ οἰκοδομουμένῳ καὶ ἡ ὕφανσις ἐν τῷ ὑφαινομένῳ, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, καὶ ὅλως ἡ κίνησις ἐν τῷ κινουμένῳ)· ὅσων δὲ μὴ ἔστιν ἄλλο τι ἔργον [35] παρὰ τὴν ἐνέργειαν, ἐν αὐτοῖς ὑπάρχει ἡ ἐνέργεια (οἷον ἡ ὅρασις ἐν τῷ ὁρῶντι καὶ ἡ θεωρία ἐν τῷ θεωροῦντι καὶ ἡ ζωὴ ἐν τῇ ψυχῇ, διὸ καὶ ἡ εὐδαιμονία· [1] ζωὴ γὰρ ποιά τίς ἐστιν). ὥστε φανερὸν ὅτι ἡ οὐσία καὶ τὸ εἶδος ἐνέργειά ἐστιν. κατά τε δὴ τοῦτον τὸν λόγον φανερὸν ὅτι πρότερον τῇ οὐσίᾳ ἐνέργεια δυνάμεως, καὶ ὥσπερ εἴπομεν, τοῦ χρόνου [5] ἀεὶ προλαμβάνει ἐνέργεια ἑτέρα πρὸ ἑτέρας ἕως τῆς τοῦ ἀεὶ κινοῦντος πρώτως.—ἀλλὰ μὴν καὶ κυριωτέρως· τὰ μὲν γὰρ ἀΐδια πρότερα τῇ οὐσίᾳ τῶν φθαρτῶν, ἔστι δ’ οὐθὲν δυνάμει ἀΐδιον. λόγος δὲ ὅδε· πᾶσα δύναμις ἅμα τῆς ἀντιφάσεώς ἐστιν· τὸ μὲν γὰρ μὴ δυνατὸν ὑπάρχειν οὐκ [10] ἂν ὑπάρξειεν οὐθενί, τὸ δυνατὸν δὲ πᾶν ἐνδέχεται μὴ ἐνεργεῖν. τὸ ἄρα δυνατὸν εἶναι ἐνδέχεται καὶ εἶναι καὶ μὴ εἶναι· τὸ αὐτὸ ἄρα δυνατὸν καὶ εἶναι καὶ μὴ εἶναι. τὸ δὲ δυνατὸν μὴ εἶναι ἐνδέχεται μὴ εἶναι· τὸ δὲ ἐνδεχόμενον μὴ εἶναι φθαρτόν, ἢ ἁπλῶς ἢ τοῦτο αὐτὸ ὃ λέγεται [15] ἐνδέχεσθαι μὴ εἶναι, ἢ κατὰ τόπον ἢ κατὰ τὸ ποσὸν ἢ ποιόν· ἁπλῶς δὲ τὸ κατ’ οὐσίαν. οὐθὲν ἄρα τῶν ἀφθάρτων ἁπλῶς δυνάμει ἔστιν ἁπλῶς (κατά τι δὲ οὐδὲν κωλύει, οἷον ποιὸν ἢ πού)· ἐνεργείᾳ ἄρα πάντα· οὐδὲ τῶν ἐξ ἀνάγκης ὄντων (καίτοι ταῦτα πρῶτα· εἰ γὰρ ταῦτα μὴ ἦν, οὐθὲν ἂν ἦν)· [20] οὐδὲ δὴ κίνησις, εἴ τίς ἐστιν ἀΐδιος· οὐδ’ εἴ τι κινούμενον ἀΐδιον, οὐκ ἔστι κατὰ δύναμιν κινούμενον ἀλλ’ ἢ ποθὲν ποί (τούτου δ’ ὕλην οὐδὲν κωλύει ὑπάρχειν), διὸ ἀεὶ ἐνεργεῖ ἥλιος καὶ ἄστρα καὶ ὅλος ὁ οὐρανός, καὶ οὐ φοβερὸν μή ποτε στῇ, ὃ φοβοῦνται οἱ περὶ φύσεως. οὐδὲ κάμνει τοῦτο δρῶντα· οὐ [25] γὰρ περὶ τὴν δύναμιν τῆς ἀντιφάσεως αὐτοῖς, οἷον τοῖς φθαρτοῖς, ἡ κίνησις, ὥστε ἐπίπονον εἶναι τὴν συνέχειαν τῆς

κινήσεως· ἡ γὰρ οὐσία ὕλη καὶ δύναμις οὖσα, οὐκ ἐνέργεια, αἰτία τούτου. μιμεῖται δὲ τὰ ἄφθαρτα καὶ τὰ ἐν μεταβολῇ ὄντα, οἷον γῆ καὶ πῦρ. καὶ γὰρ ταῦτα ἀεὶ ἐνεργεῖ· [30] καθ’ αὐτὰ γὰρ καὶ ἐν αὐτοῖς ἔχει τὴν κίνησιν. αἱ δὲ ἄλλαι δυνάμεις, ἐξ ὧν διώρισται, πᾶσαι τῆς ἀντιφάσεώς εἰσιν· τὸ γὰρ δυνάμενον ὠδὶ κινεῖν δύναται καὶ μὴ ὠδί, ὅσα γε κατὰ λόγον· αἱ δ’ ἄλογοι τῷ παρεῖναι καὶ μὴ τῆς ἀντιφάσεως ἔσονται αἱ αὐταί. εἰ ἄρα τινὲς εἰσὶ φύσεις [35] τοιαῦται ἢ οὐσίαι οἵας λέγουσιν οἱ ἐν τοῖς λόγοις τὰς ἰδέας, πολὺ μᾶλλον ἐπιστῆμον ἄν τι εἴη ἢ αὐτὸ ἐπιστήμη καὶ κινούμενον ἢ κίνησις· [1] ταῦτα γὰρ ἐνέργειαι μᾶλλον, ἐκεῖναι δὲ δυνάμεις τούτων. ὅτι μὲν οὖν πρότερον ἡ ἐνέργεια καὶ δυνάμεως καὶ πάσης ἀρχῆς μεταβλητικῆς, φανερόν.

ὅτι δὲ καὶ βελτίων καὶ τιμιωτέρα τῆς σπουδαίας [5] δυνάμεως ἡ ἐνέργεια, ἐκ τῶνδε δῆλον. ὅσα γὰρ κατὰ τὸ δύνασθαι λέγεται, ταὐτόν ἐστι δυνατὸν τἀναντία, οἷον τὸ δύνασθαι λεγόμενον ὑγιαίνειν ταὐτόν ἐστι καὶ τὸ νοσεῖν, καὶ ἅμα· ἡ αὐτὴ γὰρ δύναμις τοῦ ὑγιαίνειν καὶ κάμνειν, καὶ ἠρεμεῖν καὶ κινεῖσθαι, καὶ οἰκοδομεῖν καὶ καταβάλλειν, [10] καὶ οἰκοδομεῖσθαι καὶ καταπίπτειν. τὸ μὲν οὖν δύνασθαι τἀναντία ἅμα ὑπάρχει· τὰ δ’ ἐναντία ἅμα ἀδύνατον, καὶ τὰς ἐνεργείας δὲ ἅμα ἀδύνατον ὑπάρχειν (οἷον ὑγιαίνειν καὶ κάμνειν), ὥστ’ ἀνάγκη τούτων θάτερον εἶναι τἀγαθόν, τὸ δὲ δύνασθαι ὁμοίως ἀμφότερον ἢ οὐδέτερον· [15] ἡ ἄρα ἐνέργεια βελτίων. ἀνάγκη δὲ καὶ ἐπὶ τῶν κακῶν τὸ τέλος καὶ τὴν ἐνέργειαν εἶναι χεῖρον τῆς δυνάμεως· τὸ γὰρ δυνάμενον ταὐτὸ ἄμφω τἀναντία. δῆλον ἄρα ὅτι οὐκ ἔστι τὸ κακὸν παρὰ τὰ πράγματα· ὕστερον γὰρ τῇ φύσει τὸ κακὸν τῆς δυνάμεως. οὐκ ἄρα οὐδ’ ἐν τοῖς ἐξ ἀρχῆς [20] καὶ τοῖς ἀϊδίοις οὐθὲν ἔστιν οὔτε κακὸν οὔτε ἁμάρτημα οὔτε διεφθαρμένον (καὶ γὰρ ἡ διαφθορὰ τῶν κακῶν ἐστίν). εὑρίσκεται δὲ καὶ τὰ διαγράμματα ἐνεργείᾳ· διαιροῦντες γὰρ εὑρίσκουσιν. εἰ δ’ ἦν διῃρημένα, φανερὰ ἂν ἦν· νῦν δ’ ἐνυπάρχει δυνάμει. διὰ τί δύο ὀρθαὶ τὸ τρίγωνον; ὅτι αἱ [25] περὶ μίαν στιγμὴν γωνίαι ἴσαι δύο ὀρθαῖς. εἰ οὖν ἀνῆκτο ἡ παρὰ τὴν πλευράν, ἰδόντι ἂν ἦν εὐθὺς δῆλον διὰ τί. ἐν ἡμικυκλίῳ ὀρθὴ καθόλου διὰ τί; ἐὰν ἴσαι τρεῖς, ἥ τε βάσις δύο καὶ ἡ ἐκ μέσου ἐπισταθεῖσα ὀρθή, ἰδόντι δῆλον τῷ ἐκεῖνο εἰδότι. ὥστε φανερὸν ὅτι τὰ δυνάμει ὄντα εἰς [30] ἐνέργειαν ἀγόμενα εὑρίσκεται· αἴτιον δὲ ὅτι ἡ νόησις ἐνέργεια· ὥστ’ ἐξ ἐνεργείας ἡ δύναμις, καὶ διὰ τοῦτο ποιοῦντες γιγνώσκουσιν (ὕστερον γὰρ γενέσει ἡ ἐνέργεια ἡ κατ’ ἀριθμόν).

ἐπεὶ δὲ τὸ ὂν λέγεται καὶ τὸ μὴ ὂν τὸ μὲν κατὰ [35] τὰ σχήματα τῶν κατηγοριῶν, τὸ δὲ κατὰ δύναμιν ἢ ἐνέργειαν τούτων ἢ τἀναντία, [1] τὸ δὲ κυριώτατα ὂν ἀληθὲς ἢ ψεῦδος, τοῦτο δ’ ἐπὶ τῶν πραγμάτων ἐστὶ τῷ συγκεῖσθαι ἢ διῃρῆσθαι, ὥστε ἀληθεύει μὲν ὁ τὸ διῃρημένον οἰόμενος διῃρῆσθαι καὶ τὸ συγκείμενον συγκεῖσθαι, ἔψευσται δὲ ὁ ἐναντίως [5] ἔχων ἢ τὰ πράγματα, πότ’ ἔστιν ἢ οὐκ ἔστι τὸ ἀληθὲς λεγόμενον ἢ ψεῦδος; τοῦτο γὰρ σκεπτέον τί λέγομεν. οὐ γὰρ διὰ τὸ ἡμᾶς οἴεσθαι ἀληθῶς σε λευκὸν εἶναι εἶ σὺ λευκός, ἀλλὰ διὰ τὸ σὲ εἶναι λευκὸν ἡμεῖς οἱ φάντες τοῦτο ἀληθεύομεν. εἰ δὴ τὰ μὲν ἀεὶ σύγκειται καὶ ἀδύνατα διαιρεθῆναι, [10] τὰ δ’ ἀεὶ διῄρηται καὶ ἀδύνατα συντεθῆναι, τὰ δ’ ἐνδέχεται τἀναντία, τὸ μὲν εἶναί ἐστι τὸ συγκεῖσθαι καὶ ἓν εἶναι, τὸ δὲ μὴ εἶναι τὸ μὴ συγκεῖσθαι ἀλλὰ πλείω εἶναι· περὶ μὲν οὖν τὰ ἐνδεχόμενα ἡ αὐτὴ γίγνεται ψευδὴς καὶ ἀληθὴς δόξα καὶ ὁ λόγος ὁ αὐτός, καὶ ἐνδέχεται ὁτὲ [15] μὲν ἀληθεύειν ὁτὲ δὲ ψεύδεσθαι· περὶ δὲ τὰ ἀδύνατα ἄλλως ἔχειν οὐ γίγνεται ὁτὲ μὲν ἀληθὲς ὁτὲ δὲ ψεῦδος, ἀλλ’ ἀεὶ ταὐτὰ ἀληθῆ καὶ ψευδῆ.—περὶ δὲ δὴ τὰ ἀσύνθετα τί τὸ εἶναι ἢ μὴ εἶναι καὶ τὸ ἀληθὲς καὶ τὸ ψεῦδος; οὐ γάρ ἐστι σύνθετον, ὥστε εἶναι μὲν ὅταν συγκέηται, μὴ εἶναι δὲ [20] ἐὰν διῃρημένον ᾖ, ὥσπερ τὸ λευκὸν τὸ ξύλον ἢ τὸ ἀσύμμετρον [21] τὴν διάμετρον· οὐδὲ τὸ ἀληθὲς καὶ τὸ ψεῦδος ὁμοίως ἔτι ὑπάρξει καὶ ἐπ’ ἐκείνων. ἢ ὥσπερ οὐδὲ τὸ ἀληθὲς ἐπὶ τούτων τὸ αὐτό, οὕτως οὐδὲ τὸ εἶναι, ἀλλ’ ἔστι τὸ μὲν ἀληθὲς ἢ ψεῦδος, τὸ μὲν θιγεῖν καὶ φάναι ἀληθές (οὐ γὰρ ταὐτὸ κατάφασις [25] καὶ φάσις), τὸ δ’ ἀγνοεῖν μὴ θιγγάνειν (ἀπατηθῆναι γὰρ περὶ τὸ τί ἐστιν οὐκ ἔστιν ἀλλ’ ἢ κατὰ συμβεβηκός· ὁμοίως δὲ καὶ περὶ τὰς μὴ συνθετὰς οὐσίας, οὐ γὰρ ἔστιν ἀπατηθῆναι· καὶ πᾶσαι εἰσὶν ἐνεργείᾳ, οὐ δυνάμει, ἐγίγνοντο γὰρ ἂν καὶ ἐφθείροντο, νῦν δὲ τὸ ὂν αὐτὸ οὐ

γίγνεται οὐδὲ φθείρεται, [30] ἔκ τινος γὰρ ἂν ἐγίγνετο·—ὅσα δή ἐστιν ὅπερ εἶναί τι καὶ ἐνέργειαι, περὶ ταῦτα οὐκ ἔστιν ἀπατηθῆναι ἀλλ’ ἢ νοεῖν ἢ μή· ἀλλὰ τὸ τί ἐστι ζητεῖται περὶ αὐτῶν, εἰ τοιαῦτά ἐστιν ἢ μή)· τὸ δὲ εἶναι ὡς τὸ ἀληθές, καὶ τὸ μὴ εἶναι τὸ ὡς τὸ ψεῦδος, ἓν μέν ἐστιν, εἰ σύγκειται, ἀληθές, τὸ [35] δ’ εἰ μὴ σύγκειται, ψεῦδος· τὸ δὲ ἕν, εἴπερ ὄν, οὕτως ἐστίν, εἰ δὲ μὴ οὕτως, οὐκ ἔστιν· [1] τὸ δὲ ἀληθὲς τὸ νοεῖν ταῦτα· τὸ δὲ ψεῦδος οὐκ ἔστιν, οὐδὲ ἀπάτη, ἀλλὰ ἄγνοια, οὐχ οἷα ἡ τυφλότης· ἡ μὲν γὰρ τυφλότης ἐστὶν ὡς ἂν εἰ τὸ νοητικὸν ὅλως μὴ ἔχοι τις. φανερὸν δὲ καὶ ὅτι περὶ τῶν ἀκινήτων [5] οὐκ ἔστιν ἀπάτη κατὰ τὸ ποτέ, εἴ τις ὑπολαμβάνει ἀκίνητα. οἷον τὸ τρίγωνον εἰ μὴ μεταβάλλειν οἴεται, οὐκ οἰήσεται ποτὲ μὲν δύο ὀρθὰς ἔχειν ποτὲ δὲ οὔ (μεταβάλλοι γὰρ ἄν), ἀλλὰ τὶ μὲν τὶ δ’ οὔ, οἷον ἄρτιον ἀριθμὸν πρῶτον εἶναι μηθένα, ἢ τινὰς μὲν τινὰς δ’ οὔ· ἀριθμῷ δὲ περὶ ἕνα οὐδὲ [10] τοῦτο· οὐ γὰρ ἔτι τινὰ μὲν τινὰ δὲ οὐ οἰήσεται, ἀλλ’ ἀληθεύσει ἢ ψεύσεται ὡς ἀεὶ οὕτως ἔχοντος.

[15] τὸ ἓν ὅτι μὲν λέγεται πολλαχῶς, ἐν τοῖς περὶ τοῦ ποσαχῶς διῃρημένοις εἴρηται πρότερον· πλεοναχῶς δὲ λεγομένου οἱ συγκεφαλαιούμενοι τρόποι εἰσὶ τέτταρες τῶν πρώτων καὶ καθ’ αὑτὰ λεγομένων ἓν ἀλλὰ μὴ κατὰ συμβεβηκός. τό τε γὰρ συνεχὲς ἢ ἁπλῶς ἢ μάλιστά γε [20] τὸ φύσει καὶ μὴ ἁφῇ μηδὲ δεσμῷ (καὶ τούτων μᾶλλον ἓν καὶ πρότερον οὗ ἀδιαιρετωτέρα ἡ κίνησις καὶ μᾶλλον ἁπλῆ)· ἔτι τοιοῦτον καὶ μᾶλλον τὸ ὅλον καὶ ἔχον τινὰ μορφὴν καὶ εἶδος, μάλιστα δ’ εἴ τι φύσει τοιοῦτον καὶ μὴ βίᾳ, ὥσπερ ὅσα κόλλῃ ἢ γόμφῳ ἢ συνδέσμῳ, ἀλλὰ ἔχει ἐν αὑτῷ τὸ [25] αἴτιον αὐτῷ τοῦ συνεχὲς εἶναι. τοιοῦτον δὲ τῷ μίαν τὴν κίνησιν εἶναι καὶ ἀδιαίρετον τόπῳ καὶ χρόνῳ, ὥστε φανερόν, εἴ τι φύσει κινήσεως ἀρχὴν ἔχει τῆς πρώτης τὴν πρώτην, οἷον λέγω φορᾶς κυκλοφορίαν, ὅτι τοῦτο πρῶτον μέγεθος ἕν. τὰ μὲν δὴ οὕτως ἓν ᾗ συνεχὲς ἢ ὅλον, τὰ δὲ ὧν ἂν ὁ λόγος [30] εἷς ᾖ, τοιαῦτα δὲ ὧν ἡ νόησις μία, τοιαῦτα δὲ ὧν ἀδιαίρετος, ἀδιαίρετος δὲ τοῦ ἀδιαιρέτου εἴδει ἢ ἀριθμῷ· ἀριθμῷ μὲν οὖν τὸ καθ’ ἕκαστον ἀδιαίρετον, εἴδει δὲ τὸ τῷ γνωστῷ καὶ τῇ ἐπιστήμῃ, ὥσθ’ ἓν ἂν εἴη πρῶτον τὸ ταῖς οὐσίαις αἴτιον τοῦ ἑνός. λέγεται μὲν οὖν τὸ ἓν τοσαυταχῶς, τό τε [35] συνεχὲς φύσει καὶ τὸ ὅλον, καὶ τὸ καθ’ ἕκαστον καὶ τὸ καθόλου, πάντα δὲ ταῦτα ἓν τῷ ἀδιαίρετον εἶναι τῶν μὲν τὴν κίνησιν τῶν δὲ τὴν νόησιν ἢ τὸν λόγον. [1] —δεῖ δὲ κατανοεῖν ὅτι οὐχ ὡσαύτως ληπτέον λέγεσθαι ποῖά τε ἓν λέγεται, καὶ τί ἐστι τὸ ἑνὶ εἶναι καὶ τίς αὐτοῦ λόγος. λέγεται μὲν γὰρ τὸ ἓν τοσαυταχῶς, καὶ ἕκαστον ἔσται ἓν τούτων, ᾧ [5] ἂν ὑπάρχῃ τις τούτων τῶν τρόπων· τὸ δὲ ἑνὶ εἶναι ὁτὲ μὲν τούτων τινὶ ἔσται, ὁτὲ δὲ ἄλλῳ ὃ καὶ μᾶλλον ἐγγὺς τῷ ὀνόματί ἐστι, τῇ δυνάμει δ’ ἐκεῖνα, ὥσπερ καὶ περὶ στοιχείου καὶ αἰτίου εἰ δέοι λέγειν ἐπί τε τοῖς πράγμασι διορίζοντα καὶ τοῦ ὀνόματος ὅρον ἀποδιδόντα. ἔστι μὲν γὰρ ὡς [10] στοιχεῖον τὸ πῦρ (ἔστι δ’ ἴσως καθ’ αὐτὸ καὶ τὸ ἄπειρον ἤ τι ἄλλο τοιοῦτον), ἔστι δ’ ὡς οὔ· οὐ γὰρ τὸ αὐτὸ πυρὶ καὶ στοιχείῳ εἶναι, ἀλλ’ ὡς μὲν πρᾶγμά τι καὶ φύσις τὸ πῦρ στοιχεῖον, τὸ δὲ ὄνομα σημαίνει τὸ τοδὶ συμβεβηκέναι αὐτῷ, ὅτι ἐστί τι ἐκ τούτου ὡς πρώτου ἐνυπάρχοντος. οὕτω [15] καὶ ἐπὶ αἰτίου καὶ ἑνὸς καὶ τῶν τοιούτων ἁπάντων, διὸ καὶ τὸ ἑνὶ εἶναι τὸ ἀδιαιρέτῳ ἐστὶν εἶναι, ὅπερ τόδε ὄντι καὶ ἰδίᾳ χωριστῷ ἢ τόπῳ ἢ εἴδει ἢ διανοίᾳ, ἢ καὶ τὸ ὅλῳ καὶ ἀδιαιρέτῳ, μάλιστα δὲ τὸ μέτρῳ εἶναι πρώτῳ ἑκάστου γένους καὶ κυριώτατα τοῦ ποσοῦ· ἐντεῦθεν γὰρ ἐπὶ τὰ ἄλλα ἐλήλυθεν. [20] μέτρον γάρ ἐστιν ᾧ τὸ ποσὸν γιγνώσκεται· γιγνώσκεται δὲ ἢ ἑνὶ ἢ ἀριθμῷ τὸ ποσὸν ᾗ ποσόν, ὁ δὲ ἀριθμὸς ἅπας ἑνί, ὥστε πᾶν τὸ ποσὸν γιγνώσκεται ᾗ ποσὸν τῷ ἑνί, καὶ ᾧ πρώτῳ ποσὰ γιγνώσκεται, τοῦτο αὐτὸ ἕν· διὸ τὸ ἓν ἀριθμοῦ ἀρχὴ ᾗ ἀριθμός. ἐντεῦθεν δὲ καὶ ἐν τοῖς ἄλλοις [25] λέγεται μέτρον τε ᾧ ἕκαστον πρώτῳ γιγνώσκεται, καὶ τὸ μέτρον ἑκάστου ἕν, ἐν μήκει, ἐν πλάτει, ἐν βάθει, ἐν βάρει, ἐν τάχει (τὸ γὰρ βάρος καὶ τάχος κοινὸν ἐν τοῖς ἐναντίοις· διττὸν γὰρ ἑκάτερον αὐτῶν, οἷον βάρος τό τε ὁποσηνοῦν ἔχον ῥοπὴν καὶ τὸ ἔχον ὑπεροχὴν ῥοπῆς, καὶ τάχος τό τε ὁποσηνοῦν [30] κίνησιν ἔχον καὶ τὸ ὑπεροχὴν κινήσεως· ἔστι γάρ τι τάχος καὶ τοῦ βραδέος καὶ βάρος τοῦ κουφοτέρου). ἐν πᾶσι δὴ τούτοις μέτρον καὶ ἀρχὴ ἕν τι καὶ ἀδιαίρετον, ἐπεὶ καὶ ἐν ταῖς γραμμαῖς χρῶνται ὡς ἀτόμῳ τῇ

ποδιαίᾳ. πανταχοῦ γὰρ τὸ μέτρον ἕν τι ζητοῦσι καὶ ἀδιαίρετον· τοῦτο δὲ [35] τὸ ἁπλοῦν ἢ τῷ ποιῷ ἢ τῷ ποσῷ. ὅπου μὲν οὖν δοκεῖ μὴ εἶναι ἀφελεῖν ἢ προσθεῖναι, τοῦτο ἀκριβὲς τὸ μέτρον (διὸ τὸ τοῦ ἀριθμοῦ ἀκριβέστατον· [1] τὴν γὰρ μονάδα τιθέασι πάντῃ ἀδιαίρετον)· ἐν δὲ τοῖς ἄλλοις μιμοῦνται τὸ τοιοῦτον· ἀπὸ γὰρ σταδίου καὶ ταλάντου καὶ ἀεὶ τοῦ μείζονος λάθοι ἂν καὶ προστεθέν τι καὶ ἀφαιρεθὲν μᾶλλον ἢ ἀπὸ ἐλάττονος· [5] ὥστε ἀφ’ οὗ πρώτου κατὰ τὴν αἴσθησιν μὴ ἐνδέχεται, τοῦτο πάντες ποιοῦνται μέτρον καὶ ὑγρῶν καὶ ξηρῶν καὶ βάρους καὶ μεγέθους· καὶ τότ’ οἴονται εἰδέναι τὸ ποσόν, ὅταν εἰδῶσι διὰ τούτου τοῦ μέτρου. καὶ δὴ καὶ κίνησιν τῇ ἁπλῇ κινήσει καὶ τῇ ταχίστῃ (ὀλίγιστον γὰρ αὕτη ἔχει χρόνον)· [10] διὸ ἐν τῇ ἀστρολογίᾳ τὸ τοιοῦτον ἓν ἀρχὴ καὶ μέτρον (τὴν κίνησιν γὰρ ὁμαλὴν ὑποτίθενται καὶ ταχίστην τὴν τοῦ οὐρανοῦ, πρὸς ἣν κρίνουσι τὰς ἄλλας), καὶ ἐν μουσικῇ δίεσις, ὅτι ἐλάχιστον, καὶ ἐν φωνῇ στοιχεῖον. καὶ ταῦτα πάντα ἕν τι οὕτως, οὐχ ὡς κοινόν τι τὸ ἓν ἀλλ’ ὥσπερ εἴρηται.—οὐκ ἀεὶ [15] δὲ τῷ ἀριθμῷ ἓν τὸ μέτρον ἀλλ’ ἐνίοτε πλείω, οἷον αἱ διέσεις δύο, αἱ μὴ κατὰ τὴν ἀκοὴν ἀλλ’ ἐν τοῖς λόγοις, καὶ αἱ φωναὶ πλείους αἷς μετροῦμεν, καὶ ἡ διάμετρος δυσὶ μετρεῖται καὶ ἡ πλευρά, καὶ τὰ μεγέθη πάντα. οὕτω δὴ πάντων μέτρον τὸ ἕν, ὅτι γνωρίζομεν ἐξ ὧν ἐστὶν ἡ οὐσία διαιροῦντες [20] ἢ κατὰ τὸ ποσὸν ἢ κατὰ τὸ εἶδος. καὶ διὰ τοῦτο τὸ ἓν ἀδιαίρετον, ὅτι τὸ πρῶτον ἑκάστων ἀδιαίρετον. οὐχ ὁμοίως δὲ πᾶν ἀδιαίρετον, οἷον ποὺς καὶ μονάς, ἀλλὰ τὸ μὲν πάντῃ, τὸ δ’ εἰς ἀδιαίρετα πρὸς τὴν αἴσθησιν θετέον, ὥσπερ εἴρηται ἤδη· ἴσως γὰρ πᾶν συνεχὲς διαιρετόν. ἀεὶ δὲ συγγενὲς [25] τὸ μέτρον· μεγεθῶν μὲν γὰρ μέγεθος, καὶ καθ’ ἕκαστον μήκους μῆκος, πλάτους πλάτος, φωνῆς φωνή, βάρους βάρος, μονάδων μονάς. οὕτω γὰρ δεῖ λαμβάνειν, ἀλλ’ οὐχ ὅτι ἀριθμῶν ἀριθμός· καίτοι ἔδει, εἰ ὁμοίως· ἀλλ’ οὐχ ὁμοίως ἀξιοῖ ἀλλ’ ὥσπερ εἰ μονάδων μονάδας ἀξιώσειε [30] μέτρον ἀλλὰ μὴ μονάδα· ὁ δ’ ἀριθμὸς πλῆθος μονάδων. καὶ τὴν ἐπιστήμην δὲ μέτρον τῶν πραγμάτων λέγομεν καὶ τὴν αἴσθησιν διὰ τὸ αὐτό, ὅτι γνωρίζομέν τι αὐταῖς, ἐπεὶ μετροῦνται μᾶλλον ἢ μετροῦσιν. ἀλλὰ συμβαίνει ἡμῖν ὥσπερ ἂν εἰ ἄλλου ἡμᾶς μετροῦντος ἐγνωρίσαμεν πηλίκοι ἐσμὲν [35] τῷ τὸν πῆχυν ἐπὶ τοσοῦτον ἡμῶν ἐπιβάλλειν. Πρωταγόρας δ’ ἄνθρωπόν φησι πάντων εἶναι μέτρον, ὥσπερ ἂν εἰ τὸν ἐπιστήμονα εἰπὼν ἢ τὸν αἰσθανόμενον· [1] τούτους δ’ ὅτι ἔχουσιν ὁ μὲν αἴσθησιν ὁ δὲ ἐπιστήμην, ἃ φαμεν εἶναι μέτρα τῶν ὑποκειμένων. οὐθὲν δὴ λέγοντες περιττὸν φαίνονταί τι λέγειν. ὅτι μὲν οὖν τὸ ἑνὶ εἶναι μάλιστά ἐστι κατὰ τὸ ὄνομα ἀφορίζοντι [5] μέτρον τι, καὶ κυριώτατα τοῦ ποσοῦ, εἶτα τοῦ ποιοῦ, φανερόν· ἔσται δὲ τοιοῦτον τὸ μὲν ἂν ᾖ ἀδιαίρετον κατὰ τὸ ποσόν, τὸ δὲ ἂν κατὰ τὸ ποιόν· διόπερ ἀδιαίρετον τὸ ἓν ἢ ἁπλῶς ἢ ᾗ ἕν.

κατὰ δὲ τὴν οὐσίαν καὶ τὴν φύσιν ζητητέον ποτέρως [10] ἔχει, καθάπερ ἐν τοῖς διαπορήμασιν ἐπήλθομεν τί τὸ ἕν ἐστι καὶ πῶς δεῖ περὶ αὐτοῦ λαβεῖν, πότερον ὡς οὐσίας τινὸς οὔσης αὐτοῦ τοῦ ἑνός, καθάπερ οἵ τε Πυθαγόρειοί φασι πρότερον καὶ Πλάτων ὕστερον, ἢ μᾶλλον ὑπόκειταί τις φύσις καὶ πῶς δεῖ γνωριμωτέρως λεχθῆναι καὶ μᾶλλον ὥσπερ οἱ [15] περὶ φύσεως· ἐκείνων γὰρ ὁ μέν τις φιλίαν εἶναί φησι τὸ ἓν ὁ δ’ ἀέρα ὁ δὲ τὸ ἄπειρον. εἰ δὴ μηδὲν τῶν καθόλου δυνατὸν οὐσίαν εἶναι, καθάπερ ἐν τοῖς περὶ οὐσίας καὶ περὶ τοῦ ὄντος εἴρηται λόγοις, οὐδ’ αὐτὸ τοῦτο οὐσίαν ὡς ἕν τι παρὰ τὰ πολλὰ δυνατὸν εἶναι (κοινὸν γάρ) ἀλλ’ ἢ κατηγόρημα [20] μόνον, δῆλον ὡς οὐδὲ τὸ ἕν· τὸ γὰρ ὂν καὶ τὸ ἓν καθόλου κατηγορεῖται μάλιστα πάντων. ὥστε οὔτε τὰ γένη φύσεις τινὲς καὶ οὐσίαι χωρισταὶ τῶν ἄλλων εἰσίν, οὔτε τὸ ἓν γένος ἐνδέχεται εἶναι διὰ τὰς αὐτὰς αἰτίας δι’ ἅσπερ οὐδὲ τὸ ὂν οὐδὲ τὴν οὐσίαν. ἔτι δ’ ὁμοίως ἐπὶ πάντων ἀναγκαῖον ἔχειν· [25] λέγεται δ’ ἰσαχῶς τὸ ὂν καὶ τὸ ἕν· ὥστ’ ἐπείπερ ἐν τοῖς ποιοῖς ἐστί τι τὸ ἓν καί τις φύσις, ὁμοίως δὲ καὶ ἐν τοῖς ποσοῖς, δῆλον ὅτι καὶ ὅλως ζητητέον τί τὸ ἕν, ὥσπερ καὶ τί τὸ ὄν, ὡς οὐχ ἱκανὸν ὅτι τοῦτο αὐτὸ ἡ φύσις αὐτοῦ. ἀλλὰ μὴν ἔν γε χρώμασίν ἐστι τὸ ἓν χρῶμα, οἷον τὸ λευκόν, εἶτα [30] τὰ ἄλλα ἐκ τούτου καὶ τοῦ μέλανος φαίνεται γιγνόμενα, τὸ δὲ μέλαν στέρησις λευκοῦ ὥσπερ καὶ φωτὸς σκότος τοῦτο δ’ ἐστὶ στέρησις φωτός· ὥστε εἰ τὰ ὄντα ἦν χρώματα, ἦν

ἂν ἀριθμός τις τὰ ὄντα, ἀλλὰ τίνων; δῆλον δὴ ὅτι χρωμάτων, καὶ τὸ ἓν ἦν ἄν τι ἕν, οἷον τὸ λευκόν. ὁμοίως δὲ καὶ [35] εἰ μέλη τὰ ὄντα ἦν, ἀριθμὸς ἂν ἦν, διέσεων μέντοι, ἀλλ’ οὐκ ἀριθμὸς ἡ οὐσία αὐτῶν· καὶ τὸ ἓν ἦν ἄν τι οὗ ἡ οὐσία οὐ τὸ ἓν ἀλλὰ δίεσις. [1] ὁμοίως δὲ καὶ ἐπὶ τῶν φθόγγων στοιχείων ἂν ἦν τὰ ὄντα ἀριθμός, καὶ τὸ ἓν στοιχεῖον φωνῆεν. καὶ εἰ σχήματα εὐθύγραμμα, σχημάτων ἂν ἦν ἀριθμός, καὶ τὸ ἓν τὸ τρίγωνον. ὁ δ’ αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων [5] γενῶν, ὥστ’ εἴπερ καὶ ἐν τοῖς πάθεσι καὶ ἐν τοῖς ποιοῖς καὶ ἐν τοῖς ποσοῖς καὶ ἐν κινήσει ἀριθμῶν ὄντων καὶ ἑνός τινος ἐν ἅπασιν ὅ τε ἀριθμὸς τινῶν καὶ τὸ ἓν τὶ ἕν, ἀλλ’ οὐχὶ τοῦτο αὐτὸ ἡ οὐσία, καὶ ἐπὶ τῶν οὐσιῶν ἀνάγκη ὡσαύτως ἔχειν· ὁμοίως γὰρ ἔχει ἐπὶ πάντων.—ὅτι μὲν οὖν τὸ ἓν ἐν [10] ἅπαντι γένει ἐστί τις φύσις, καὶ οὐδενὸς τοῦτό γ’ αὐτὸ ἡ φύσις τὸ ἕν, φανερόν, ἀλλ’ ὥσπερ ἐν χρώμασι χρῶμα ἓν ζητητέον αὐτὸ τὸ ἕν, οὕτω καὶ ἐν οὐσίᾳ οὐσίαν μίαν αὐτὸ τὸ ἕν· ὅτι δὲ ταὐτὸ σημαίνει πως τὸ ἓν καὶ τὸ ὄν, δῆλον τῷ τε παρακολουθεῖν ἰσαχῶς ταῖς κατηγορίαις καὶ μὴ εἶναι ἐν [15] μηδεμιᾷ (οἷον οὔτ’ ἐν τῇ τί ἐστιν οὔτ’ ἐν τῇ ποῖον, ἀλλ’ ὁμοίως ἔχει ὥσπερ τὸ ὄν) καὶ τῷ μὴ προσκατηγορεῖσθαι ἕτερόν τι τὸ εἷς ἄνθρωπος τοῦ ἄνθρωπος (ὥσπερ οὐδὲ τὸ εἶναι παρὰ τὸ τί ἢ ποῖον ἢ πόσον) καὶ τῷ εἶναι τὸ ἑνὶ εἶναι τὸ ἑκάστῳ εἶναι.

[20] ἀντίκειται δὲ τὸ ἓν καὶ τὰ πολλὰ κατὰ πλείους τρόπους, ὧν ἕνα τὸ ἓν καὶ τὸ πλῆθος ὡς ἀδιαίρετον καὶ διαιρετόν· τὸ μὲν γὰρ ἢ διῃρημένον ἢ διαιρετὸν πλῆθός τι λέγεται, τὸ δὲ ἀδιαίρετον ἢ μὴ διῃρημένον ἕν. ἐπεὶ οὖν αἱ ἀντιθέσεις τετραχῶς, καὶ τούτων κατὰ στέρησιν λέγεται θάτερον, [25] ἐναντία ἂν εἴη καὶ οὔτε ὡς ἀντίφασις οὔτε ὡς τὰ πρός τι λεγόμενα. λέγεται δὲ ἐκ τοῦ ἐναντίου καὶ δηλοῦται τὸ ἕν, ἐκ τοῦ διαιρετοῦ τὸ ἀδιαίρετον, διὰ τὸ μᾶλλον αἰσθητὸν τὸ πλῆθος εἶναι καὶ τὸ διαιρετὸν ἢ τὸ ἀδιαίρετον, ὥστε τῷ λόγῳ πρότερον τὸ πλῆθος τοῦ ἀδιαιρέτου διὰ τὴν αἴσθησιν. ἔστι δὲ τοῦ [30] μὲν ἑνός, ὥσπερ καὶ ἐν τῇ διαιρέσει τῶν ἐναντίων διεγράψαμεν, τὸ ταὐτὸ καὶ ὅμοιον καὶ ἴσον, τοῦ δὲ πλήθους τὸ ἕτερον καὶ ἀνόμοιον καὶ ἄνισον. λεγομένου δὲ τοῦ ταὐτοῦ πολλαχῶς, ἕνα μὲν τρόπον κατ’ ἀριθμὸν λέγομεν ἐνίοτε αὐτό, τὸ δ’ ἐὰν καὶ λόγῳ καὶ ἀριθμῷ ἓν ᾖ, οἷον [35] σὺ σαυτῷ καὶ τῷ εἴδει καὶ τῇ ὕλῃ ἕν· ἔτι δ’ ἐὰν ὁ λόγος ὁ τῆς πρώτης οὐσίας εἷς ᾖ, [1] οἷον αἱ ἴσαι γραμμαὶ εὐθεῖαι αἱ αὐταί, καὶ τὰ ἴσα καὶ ἰσογώνια τετράγωνα, καίτοι πλείω· ἀλλ’ ἐν τούτοις ἡ ἰσότης ἑνότης. ὅμοια δὲ ἐὰν μὴ ταὐτὰ ἁπλῶς ὄντα, μηδὲ κατὰ τὴν οὐσίαν ἀδιάφορα τὴν [5] συγκειμένην, κατὰ τὸ εἶδος ταὐτὰ ᾖ, ὥσπερ τὸ μεῖζον τετράγωνον τῷ μικρῷ ὅμοιον, καὶ αἱ ἄνισοι εὐθεῖαι· αὗται γὰρ ὅμοιαι μέν, αἱ αὐταὶ δὲ ἁπλῶς οὔ. τὰ δὲ ἐὰν τὸ αὐτὸ εἶδος ἔχοντα, ἐν οἷς τὸ μᾶλλον καὶ ἧττον ἐγγίγνεται, μήτε μᾶλλον ᾖ μήτε ἧττον. τὰ δὲ ἐὰν ᾖ τὸ αὐτὸ πάθος καὶ ἓν [10] τῷ εἴδει, οἷον τὸ λευκόν, σφόδρα καὶ ἧττον, ὅμοιά φασιν εἶναι ὅτι ἓν τὸ εἶδος αὐτῶν. τὰ δὲ ἐὰν πλείω ἔχῃ ταὐτὰ ἢ ἕτερα, ἢ ἁπλῶς ἢ τὰ πρόχειρα, οἷον καττίτερος ἀργύρῳ ᾖ λευκόν, χρυσὸς δὲ πυρὶ ᾖ ξανθὸν καὶ πυρρόν. ὥστε δῆλον ὅτι καὶ τὸ ἕτερον καὶ τὸ ἀνόμοιον πολλαχῶς λέγεται. καὶ [15] τὸ μὲν ἄλλο ἀντικειμένως καὶ τὸ ταὐτό, διὸ ἅπαν πρὸς ἅπαν ἢ ταὐτὸ ἢ ἄλλο· τὸ δ’ ἐὰν μὴ καὶ ἡ ὕλη καὶ ὁ λόγος εἷς, διὸ σὺ καὶ ὁ πλησίον ἕτερος· τὸ δὲ τρίτον ὡς τὰ ἐν τοῖς μαθηματικοῖς. τὸ μὲν οὖν ἕτερον ἢ ταὐτὸ διὰ τοῦτο πᾶν πρὸς πᾶν λέγεται, ὅσα λέγεται ἓν καὶ ὄν· οὐ γὰρ [20] ἀντίφασίς ἐστι τοῦ ταὐτοῦ, διὸ οὐ λέγεται ἐπὶ τῶν μὴ ὄντων (τὸ δὲ μὴ ταὐτὸ λέγεται), ἐπὶ δὲ τῶν ὄντων πάντων· ἢ γὰρ ἓν ἢ οὐχ ἓν πέφυχ’ ὅσα ὂν καὶ ἕν. τὸ μὲν οὖν ἕτερον καὶ ταὐτὸν οὕτως ἀντίκειται, διαφορὰ δὲ καὶ ἑτερότης ἄλλο. τὸ μὲν γὰρ ἕτερον καὶ οὗ ἕτερον οὐκ ἀνάγκη εἶναι τινὶ ἕτερον· [25] πᾶν γὰρ ἢ ἕτερον ἢ ταὐτὸ ὅ τι ἂν ᾖ ὄν· τὸ δὲ διάφορον τινὸς τινὶ διάφορον, ὥστε ἀνάγκη ταὐτό τι εἶναι ᾧ διαφέρουσιν. τοῦτο δὲ τὸ ταὐτὸ γένος ἢ εἶδος· πᾶν γὰρ τὸ διαφέρον διαφέρει ἢ γένει ἢ εἴδει, γένει μὲν ὧν μὴ ἔστι κοινὴ ἡ ὕλη μηδὲ γένεσις εἰς ἄλληλα, οἷον ὅσων ἄλλο σχῆμα τῆς κατηγορίας, [30] εἴδει δὲ ὧν τὸ αὐτὸ γένος (λέγεται δὲ γένος ὃ ἅμφω τὸ αὐτὸ λέγονται κατὰ τὴν οὐσίαν τὰ διάφορα). τὰ δ’ ἐναντία διάφορα, καὶ ἡ ἐναντίωσις διαφορά τις. ὅτι δὲ καλῶς τοῦτο ὑποτιθέμεθα, δῆλον ἐκ τῆς

ἐπαγωγῆς· πάντα γὰρ διαφέροντα φαίνεται καὶ ταῦτα, οὐ μόνον ἕτερα [35] ὄντα ἀλλὰ τὰ μὲν τὸ γένος ἕτερα τὰ δ’ ἐν τῇ αὐτῇ συστοιχίᾳ τῆς κατηγορίας, [1] ὥστ’ ἐν ταὐτῷ γένει καὶ ταὐτὰ τῷ γένει. διώρισται δ’ ἐν ἄλλοις ποῖα τῷ γένει ταὐτὰ ἢ ἕτερα.

ἐπεὶ δὲ διαφέρειν ἐνδέχεται ἀλλήλων τὰ διαφέροντα πλεῖον καὶ ἔλαττον, ἔστι τις καὶ μεγίστη διαφορά, καὶ ταύτην [5] λέγω ἐναντίωσιν. ὅτι δ’ ἡ μεγίστη ἐστὶ διαφορά, δῆλον ἐκ τῆς ἐπαγωγῆς. τὰ μὲν γὰρ γένει διαφέροντα οὐκ ἔχει ὁδὸν εἰς ἄλληλα, ἀλλ’ ἀπέχει πλέον καὶ ἀσύμβλητα· τοῖς δ’ εἴδει διαφέρουσιν αἱ γενέσεις ἐκ τῶν ἐναντίων εἰσὶν ὡς ἐσχάτων, τὸ δὲ τῶν ἐσχάτων διάστημα μέγιστον, ὥστε [10] καὶ τὸ τῶν ἐναντίων. ἀλλὰ μὴν τό γε μέγιστον ἐν ἑκάστῳ γένει τέλειον. μέγιστόν τε γὰρ οὗ μὴ ἔστιν ὑπερβολή, καὶ τέλειον οὗ μὴ ἔστιν ἔξω λαβεῖν τι δυνατόν· τέλος γὰρ ἔχει ἡ τελεία διαφορά (ὥσπερ καὶ τἆλλα τῷ τέλος ἔχειν λέγεται τέλεια), τοῦ δὲ τέλους οὐθὲν ἔξω· ἔσχατον γὰρ ἐν παντὶ [15] καὶ περιέχει, διὸ οὐδὲν ἔξω τοῦ τέλους, οὐδὲ προσδεῖται οὐδενὸς τὸ τέλειον. ὅτι μὲν οὖν ἡ ἐναντιότης ἐστὶ διαφορὰ τέλειος, ἐκ τούτων δῆλον· πολλαχῶς δὲ λεγομένων τῶν ἐναντίων, ἀκολουθήσει τὸ τελείως οὕτως ὡς ἂν καὶ τὸ ἐναντίοις εἶναι ὑπάρχῃ αὐτοῖς. τούτων δὲ ὄντων φανερὸν ὅτι οὐκ ἐνδέχεται [20] ἑνὶ πλείω ἐναντία εἶναι (οὔτε γὰρ τοῦ ἐσχάτου ἐσχατώτερον εἴη ἄν τι, οὔτε τοῦ ἑνὸς διαστήματος πλείω δυοῖν ἔσχατα), ὅλως τε εἰ ἔστιν ἡ ἐναντιότης διαφορά, ἡ δὲ διαφορὰ δυοῖν, ὥστε καὶ ἡ τέλειος. ἀνάγκη δὲ καὶ τοὺς ἄλλους ὅρους ἀληθεῖς εἶναι τῶν ἐναντίων. καὶ γὰρ πλεῖστον διαφέρει ἡ τέλειος [25] διαφορά (τῶν τε γὰρ γένει διαφερόντων οὐκ ἔστιν ἐξωτέρω λαβεῖν καὶ τῶν εἴδει· δέδεικται γὰρ ὅτι πρὸς τὰ ἔξω τοῦ γένους οὐκ ἔστι διαφορά, τούτων δ’ αὕτη μεγίστη), καὶ τὰ ἐν ταὐτῷ γένει πλεῖστον διαφέροντα ἐναντία (μεγίστη γὰρ διαφορὰ τούτων ἡ τέλειος), καὶ τὰ ἐν τῷ αὐτῷ δεκτικῷ πλεῖστον [30] διαφέροντα ἐναντία (ἡ γὰρ ὕλη ἡ αὐτὴ τοῖς ἐναντίοις) καὶ τὰ ὑπὸ τὴν αὐτὴν δύναμιν πλεῖστον διαφέροντα (καὶ γὰρ ἡ ἐπιστήμη περὶ ἓν γένος ἡ μία)· ἐν οἷς ἡ τελεία διαφορὰ μεγίστη.—πρώτη δὲ ἐναντίωσις ἕξις καὶ στέρησίς ἐστιν· οὐ πᾶσα δὲ στέρησις (πολλαχῶς γὰρ λέγεται ἡ στέρησις) [35] ἀλλ’ ἥτις ἂν τελεία ᾖ. τὰ δ’ ἄλλα ἐναντία κατὰ ταῦτα λεχθήσεται, τὰ μὲν τῷ ἔχειν τὰ δὲ τῷ ποιεῖν ἢ ποιητικὰ εἶναι τὰ δὲ τῷ λήψεις εἶναι καὶ ἀποβολαὶ τούτων ἢ ἄλλων ἐναντίων. εἰ δὴ ἀντίκειται μὲν ἀντίφασις καὶ στέρησις καὶ ἐναντιότης καὶ τὰ πρός τι, [1] τούτων δὲ πρῶτον ἀντίφασις, ἀντιφάσεως δὲ μηδέν ἐστι μεταξύ, τῶν δὲ ἐναντίων ἐνδέχεται, ὅτι μὲν οὐ ταὐτὸν ἀντίφασις καὶ τἀναντία δῆλον· ἡ δὲ στέρησις ἀντίφασίς τίς ἐστιν· ἢ γὰρ τὸ ἀδύνατον ὅλως ἔχειν, [5] ἢ ὃ ἂν πεφυκὸς ἔχειν μὴ ἔχῃ, ἐστέρηται ἢ ὅλως ἢ πὼς ἀφορισθέν (πολλαχῶς γὰρ ἤδη τοῦτο λέγομεν, ὥσπερ διῄρηται ἡμῖν ἐν ἄλλοις), ὥστ’ ἐστὶν ἡ στέρησις ἀντίφασίς τις ἢ ἀδυναμία διορισθεῖσα ἢ συνειλημμένη τῷ δεκτικῷ· διὸ ἀντιφάσεως μὲν οὐκ ἔστι μεταξύ, στερήσεως δέ τινος ἔστιν· ἴσον [10] μὲν γὰρ ἢ οὐκ ἴσον πᾶν, ἴσον δ’ ἢ ἄνισον οὐ πᾶν, ἀλλ’ εἴπερ, μόνον ἐν τῷ δεκτικῷ τοῦ ἴσου. εἰ δὴ αἱ γενέσεις τῇ ὕλῃ ἐκ τῶν ἐναντίων, γίγνονται δὲ ἢ ἐκ τοῦ εἴδους καὶ τῆς τοῦ εἴδους ἕξεως ἢ ἐκ στερήσεώς τινος τοῦ εἴδους καὶ τῆς μορφῆς, δῆλον ὅτι ἡ μὲν ἐναντίωσις στέρησις ἂν εἴη πᾶσα, ἡ δὲ στέρησις [15] ἴσως οὐ πᾶσα ἐναντιότης (αἴτιον δ’ ὅτι πολλαχῶς ἐνδέχεται ἐστερῆσθαι τὸ ἐστερημένον)· ἐξ ὧν γὰρ αἱ μεταβολαὶ ἐσχάτων, ἐναντία ταῦτα. φανερὸν δὲ καὶ διὰ τῆς ἐπαγωγῆς. πᾶσα γὰρ ἐναντίωσις ἔχει στέρησιν θάτερον τῶν ἐναντίων, ἀλλ’ οὐχ ὁμοίως πάντα· ἀνισότης μὲν γὰρ ἰσότητος ἀνομοιότης [20] δὲ ὁμοιότητος κακία δὲ ἀρετῆς, διαφέρει δὲ ὥσπερ εἴρηται· τὸ μὲν γὰρ ἐὰν μόνον ᾖ ἐστερημένον, τὸ δ’ ἐὰν ἢ ποτὲ ἢ ἔν τινι, οἷον ἂν ἐν ἡλικίᾳ τινὶ ἢ τῷ κυρίῳ, ἢ πάντῃ· διὸ τῶν μὲν ἔστι μεταξύ, καὶ ἔστιν οὔτε ἀγαθὸς ἄνθρωπος οὔτε κακός, τῶν δὲ οὐκ ἔστιν, ἀλλ’ ἀνάγκη εἶναι ἢ περιττὸν ἢ [25] ἄρτιον. ἔτι τὰ μὲν ἔχει τὸ ὑποκείμενον ὡρισμένον, τὰ δ’ οὔ. ὥστε φανερὸν ὅτι ἀεὶ θάτερον τῶν ἐναντίων λέγεται κατὰ στέρησιν· ἀπόχρη δὲ κἂν τὰ πρῶτα καὶ τὰ γένη τῶν ἐναντίων, οἷον τὸ ἓν καὶ τὰ πολλά· τὰ γὰρ ἄλλα εἰς ταῦτα ἀνάγεται.

[30] ἐπεὶ δὲ ἓν ἑνὶ ἐναντίον, ἀπορήσειεν ἄν τις πῶς ἀντίκειται τὸ ἓν καὶ τὰ πολλά, καὶ τὸ ἴσον τῷ

μεγάλῳ καὶ τῷ μικρῷ. εἰ γὰρ τὸ πότερον ἀεὶ ἐν ἀντιθέσει λέγομεν, οἷον πότερον λευκὸν ἢ μέλαν, καὶ πότερον λευκὸν ἢ οὐ λευκόν (πότερον δὲ ἄνθρωπος ἢ λευκὸν οὐ λέγομεν, ἐὰν μὴ ἐξ [35] ὑποθέσεως καὶ ζητοῦντες οἷον πότερον ἦλθε Κλέων ἢ Σωκράτης—ἀλλ’ οὐκ ἀνάγκη ἐν οὐδενὶ γένει τοῦτο· ἀλλὰ καὶ τοῦτο ἐκεῖθεν ἐλήλυθεν· τὰ γὰρ ἀντικείμενα μόνα οὐκ ἐνδέχεται ἅμα ὑπάρχειν, ᾧ καὶ ἐνταῦθα χρῆται ἐν τῷ πότερος ἦλθεν· [1] εἰ γὰρ ἅμα ἐνεδέχετο, γελοῖον τὸ ἐρώτημα· εἰ δέ, καὶ οὕτως ὁμοίως ἐμπίπτει εἰς ἀντίθεσιν, εἰς τὸ ἓν ἢ πολλά, οἷον πότερον ἀμφότεροι ἦλθον ἢ ἄτερος)·—εἰ δὴ ἐν τοῖς ἀντικειμένοις ἀεὶ τοῦ ποτέρου ἡ ζήτησις, λέγεται δὲ πότερον μεῖζον [5] ἢ ἔλαττον ἢ ἴσον, τίς ἐστιν ἡ ἀντίθεσις πρὸς ταῦτα τοῦ ἴσου; οὔτε γὰρ θατέρῳ μόνῳ ἐναντίον οὔτ’ ἀμφοῖν· τί γὰρ μᾶλλον τῷ μείζονι ἢ τῷ ἐλάττονι; ἔτι τῷ ἀνίσῳ ἐναντίον τὸ ἴσον, ὥστε πλείοσιν ἔσται ἢ ἑνί. εἰ δὲ τὸ ἄνισον σημαίνει τὸ αὐτὸ ἅμα ἀμφοῖν, εἴη μὲν ἂν ἀντικείμενον ἀμφοῖν [10] (καὶ ἡ ἀπορία βοηθεῖ τοῖς φάσκουσι τὸ ἄνισον δυάδα εἶναι), ἀλλὰ συμβαίνει ἓν δυοῖν ἐναντίον· ὅπερ ἀδύνατον. ἔτι τὸ μὲν ἴσον μεταξὺ φαίνεται μεγάλου καὶ μικροῦ, ἐναντίωσις δὲ μεταξὺ οὐδεμία οὔτε φαίνεται οὔτε ἐκ τοῦ ὁρισμοῦ δυνατόν· οὐ γὰρ ἂν εἴη τελεία μεταξύ τινος οὖσα, ἀλλὰ μᾶλλον [15] ἔχει ἀεὶ ἑαυτῆς τι μεταξύ. λείπεται δὴ ἢ ὡς ἀπόφασιν ἀντικεῖσθαι ἢ ὡς στέρησιν. θατέρου μὲν δὴ οὐκ ἐνδέχεται (τί γὰρ μᾶλλον τοῦ μεγάλου ἢ μικροῦ;)· ἀμφοῖν ἄρα ἀπόφασις στερητική, διὸ καὶ πρὸς ἀμφότερα τὸ πότερον λέγεται, πρὸς δὲ θάτερον οὔ (οἷον πότερον μεῖζον ἢ ἴσον, ἢ πότερον ἴσον ἢ [20] ἔλαττον), ἀλλ’ ἀεὶ τρία. οὐ στέρησις δὲ ἐξ ἀνάγκης· οὐ γὰρ πᾶν ἴσον ὃ μὴ μεῖζον ἢ ἔλαττον, ἀλλ’ ἐν οἷς πέφυκεν ἐκεῖνα.—ἔστι δὴ τὸ ἴσον τὸ μήτε μέγα μήτε μικρόν, πεφυκὸς δὲ ἢ μέγα ἢ μικρὸν εἶναι· καὶ ἀντίκειται ἀμφοῖν ὡς ἀπόφασις στερητική, διὸ καὶ μεταξύ ἐστιν. καὶ τὸ μήτε [25] ἀγαθὸν μήτε κακὸν ἀντίκειται ἀμφοῖν, ἀλλ’ ἀνώνυμον· πολλαχῶς γὰρ λέγεται ἑκάτερον καὶ οὐκ ἔστιν ἓν τὸ δεκτικόν, ἀλλὰ μᾶλλον τὸ μήτε λευκὸν μήτε μέλαν. ἓν δὲ οὐδὲ τοῦτο λέγεται, ἀλλ’ ὡρισμένα πως ἐφ’ ὧν λέγεται στερητικῶς ἡ ἀπόφασις αὕτη· ἀνάγκη γὰρ ἢ φαιὸν ἢ [30] ὠχρὸν εἶναι ἢ τοιοῦτόν τι ἄλλο. ὥστε οὐκ ὀρθῶς ἐπιτιμῶσιν οἱ νομίζοντες ὁμοίως λέγεσθαι πάντα, ὥστε ἔσεσθαι ὑποδήματος καὶ χειρὸς μεταξὺ τὸ μήτε ὑπόδημα μήτε χεῖρα, ἔπειπερ καὶ τὸ μήτε ἀγαθὸν μήτε κακὸν τοῦ ἀγαθοῦ καὶ τοῦ κακοῦ, ὡς πάντων ἐσομένου τινὸς μεταξύ. οὐκ ἀνάγκη [35] δὲ τοῦτο συμβαίνειν. ἡ μὲν γὰρ ἀντικειμένων συναπόφασίς ἐστιν ὧν ἔστι μεταξύ τι καὶ διάστημά τι πέφυκεν εἶναι· [1] τῶν δ’ οὐκ ἔστι διαφορά· ἐν ἄλλῳ γὰρ γένει ὧν αἱ συναποφάσεις, ὥστ’ οὐχ ἓν τὸ ὑποκείμενον.

ὁμοίως δὲ καὶ περὶ τοῦ ἑνὸς καὶ τῶν πολλῶν ἀπορήσειεν ἄν τις. εἰ γὰρ τὰ πολλὰ τῷ ἑνὶ ἁπλῶς ἀντίκειται, [5] συμβαίνει ἔνια ἀδύνατα. τὸ γὰρ ἓν ὀλίγον ἢ ὀλίγα ἔσται· τὰ γὰρ πολλὰ καὶ τοῖς ὀλίγοις ἀντίκειται. ἔτι τὰ δύο πολλά, εἴπερ τὸ διπλάσιον πολλαπλάσιον λέγεται δὲ κατὰ τὰ δύο· ὥστε τὸ ἓν ὀλίγον· πρὸς τί γὰρ πολλὰ τὰ δύο εἰ μὴ πρὸς ἕν τε καὶ τὸ ὀλίγον; οὐθὲν γάρ ἐστιν ἔλαττον. [10] ἔτι εἰ ὡς ἐν μήκει τὸ μακρὸν καὶ βραχύ, οὕτως ἐν πλήθει τὸ πολὺ καὶ ὀλίγον, καὶ ὃ ἂν ᾖ πολὺ καὶ πολλά, καὶ τὰ πολλὰ πολύ (εἰ μή τι ἄρα διαφέρει ἐν συνεχεῖ εὐορίστῳ), τὸ ὀλίγον πλῆθός τι ἔσται. ὥστε τὸ ἓν πλῆθός τι, εἴπερ καὶ ὀλίγον· τοῦτο δ’ ἀνάγκη, εἰ τὰ δύο πολλά. ἀλλ’ [15] ἴσως τὰ πολλὰ λέγεται μέν πως καὶ τὸ πολύ, ἀλλ’ ὡς διαφέρον, οἷον ὕδωρ πολύ, πολλὰ δ’ οὔ. ἀλλ’ ὅσα διαιρετά, ἐν τούτοις λέγεται, ἕνα μὲν τρόπον ἐὰν ᾖ πλῆθος ἔχον ὑπεροχὴν ἢ ἁπλῶς ἢ πρός τι (καὶ τὸ ὀλίγον ὡσαύτως πλῆθος ἔχον ἔλλειψιν), τὸ δὲ ὡς ἀριθμός, ὃ καὶ ἀντίκειται τῷ ἑνὶ [20] μόνον. οὕτως γὰρ λέγομεν ἓν ἢ πολλά, ὥσπερ εἴ τις εἴποι ἓν καὶ ἕνα ἢ λευκὸν καὶ λευκά, καὶ τὰ μεμετρημένα πρὸς τὸ μέτρον καὶ τὸ μετρητόν· οὕτως καὶ τὰ πολλαπλάσια λέγεται· πολλὰ γὰρ ἕκαστος ὁ ἀριθμὸς ὅτι ἕνα καὶ ὅτι μετρητὸς ἑνὶ ἕκαστος, καὶ ὡς τὸ ἀντικείμενον τῷ ἑνί, οὐ τῷ [25] ὀλίγῳ. οὕτω μὲν οὖν ἐστὶ πολλὰ καὶ τὰ δύο, ὡς δὲ πλῆθος ἔχον ὑπεροχὴν ἢ πρός τι ἢ ἁπλῶς οὐκ ἔστιν, ἀλλὰ πρῶτον. ὀλίγα δ’ ἁπλῶς τὰ δύο· πλῆθος γάρ ἐστιν ἔλλειψιν ἔχον πρῶτον (διὸ καὶ οὐκ ὀρθῶς ἀπέστη Ἀναξαγόρας εἰπὼν ὅτι ὁμοῦ πάντα χρήματα ἦν ἄπειρα καὶ πλήθει καὶ

μικρότητι, [30] ἔδει δ’ εἰπεῖν ἀντὶ τοῦ καὶ μικρότητι καὶ ὀλιγότητι· οὐ γὰρ ἄπειρα), ἐπεὶ τὸ ὀλίγον οὐ διὰ τὸ ἕν, ὥσπερ τινές φασιν, ἀλλὰ διὰ τὰ δύο.—ἀντίκειται δὴ τὸ ἓν καὶ τὰ πολλὰ τὰ ἐν ἀριθμοῖς ὡς μέτρον μετρητῷ· ταῦτα δὲ ὡς τὰ πρός τι, ὅσα μὴ καθ’ αὑτὰ τῶν πρός τι. διῄρηται δ’ [35] ἡμῖν ἐν ἄλλοις ὅτι διχῶς λέγεται τὰ πρός τι, τὰ μὲν ὡς ἐναντία, τὰ δ’ ὡς ἐπιστήμη πρὸς ἐπιστητόν, τῷ λέγεσθαί τι ἄλλο πρὸς αὐτό. [1] τὸ δὲ ἓν ἔλαττον εἶναι τινός, οἷον τοῖν δυοῖν, οὐδὲν κωλύει· οὐ γάρ, εἰ ἔλαττον, καὶ ὀλίγον. τὸ δὲ πλῆθος οἷον γένος ἐστὶ τοῦ ἀριθμοῦ· ἔστι γὰρ ἀριθμὸς πλῆθος ἑνὶ μετρητόν, καὶ ἀντίκειταί πως τὸ ἓν καὶ ἀριθμός, οὐχ ὡς [5] ἐναντίον ἀλλ’ ὥσπερ εἴρηται τῶν πρός τι ἔνια· ᾗ γὰρ μέτρον τὸ δὲ μετρητόν, ταύτῃ ἀντίκειται, διὸ οὐ πᾶν ὃ ἂν ᾖ ἓν ἀριθμός ἐστιν, οἷον εἴ τι ἀδιαίρετόν ἐστιν. ὁμοίως δὲ λεγομένη ἡ ἐπιστήμη πρὸς τὸ ἐπιστητὸν οὐχ ὁμοίως ἀποδίδωσιν. δόξειε μὲν γὰρ ἂν μέτρον ἡ ἐπιστήμη εἶναι τὸ δὲ ἐπιστητὸν [10] τὸ μετρούμενον, συμβαίνει δὲ ἐπιστήμην μὲν πᾶσαν ἐπιστητὸν εἶναι τὸ δὲ ἐπιστητὸν μὴ πᾶν ἐπιστήμην, ὅτι τρόπον τινὰ ἡ ἐπιστήμη μετρεῖται τῷ ἐπιστητῷ. τὸ δὲ πλῆθος οὔτε τῷ ὀλίγῳ ἐναντίον—ἀλλὰ τούτῳ μὲν τὸ πολὺ ὡς ὑπερέχον πλῆθος ὑπερεχομένῳ πλήθει—οὔτε τῷ ἑνὶ πάντως· ἀλλὰ τὸ μὲν [15] ὥσπερ εἴρηται, ὅτι διαιρετὸν τὸ δ’ ἀδιαίρετον, τὸ δ’ ὡς πρός τι ὥσπερ ἡ ἐπιστήμη ἐπιστητῷ, ἐὰν ᾖ ἀριθμὸς τὸ δ’ ἓν μέτρον.

ἐπεὶ δὲ τῶν ἐναντίων ἐνδέχεται εἶναί τι μεταξὺ καὶ ἐνίων ἔστιν, ἀνάγκη ἐκ τῶν ἐναντίων εἶναι τὰ μεταξύ. πάντα [20] γὰρ τὰ μεταξὺ ἐν τῷ αὐτῷ γένει ἐστὶ καὶ ὧν ἐστὶ μεταξύ. μεταξὺ μὲν γὰρ ταῦτα λέγομεν εἰς ὅσα μεταβάλλειν ἀνάγκη πρότερον τὸ μεταβάλλον (οἷον ἀπὸ τῆς ὑπάτης ἐπὶ τὴν νήτην εἰ μεταβαίνοι τῷ ὀλιγίστῳ, ἥξει πρότερον εἰς τοὺς μεταξὺ φθόγγους, καὶ ἐν χρώμασιν εἰ ἥξει ἐκ τοῦ λευκοῦ [25] εἰς τὸ μέλαν, πρότερον ἥξει εἰς τὸ φοινικοῦν καὶ φαιὸν ἢ εἰς τὸ μέλαν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων)· μεταβάλλειν δ’ ἐξ ἄλλου γένους εἰς ἄλλο γένος οὐκ ἔστιν ἀλλ’ ἢ κατὰ συμβεβηκός, οἷον ἐκ χρώματος εἰς σχῆμα. ἀνάγκη ἄρα τὰ μεταξὺ καὶ αὐτοῖς καὶ ὧν μεταξύ εἰσιν ἐν τῷ αὐτῷ γένει [30] εἶναι. ἀλλὰ μὴν πάντα γε τὰ μεταξύ ἐστιν ἀντικειμένων τινῶν· ἐκ τούτων γὰρ μόνων καθ’ αὑτὰ ἔστι μεταβάλλειν (διὸ ἀδύνατον εἶναι μεταξὺ μὴ ἀντικειμένων· εἴη γὰρ ἂν μεταβολὴ καὶ μὴ ἐξ ἀντικειμένων). τῶν δ’ ἀντικειμένων ἀντιφάσεως μὲν οὐκ ἔστι μεταξύ (τοῦτο γάρ ἐστιν ἀντίφασις, [35] ἀντίθεσις ἧς ὁτῳοῦν θάτερον μόριον πάρεστιν, οὐκ ἐχούσης οὐθὲν μεταξύ), τῶν δὲ λοιπῶν τὰ μὲν πρός τι τὰ δὲ στέρησις τὰ δὲ ἐναντία ἐστίν. τῶν δὲ πρός τι ὅσα μὴ ἐναντία, οὐκ ἔχει μεταξύ· αἴτιον δ’ ὅτι οὐκ ἐν τῷ αὐτῷ γένει ἐστίν. [1] τί γὰρ ἐπιστήμης καὶ ἐπιστητοῦ μεταξύ; ἀλλὰ μεγάλου καὶ μικροῦ. εἰ δ’ ἐστὶν ἐν ταὐτῷ γένει τὰ μεταξύ, ὥσπερ δέδεικται, καὶ μεταξὺ ἐναντίων, ἀνάγκη αὐτὰ συγκεῖσθαι ἐκ τούτων τῶν ἐναντίων. ἢ γὰρ ἔσται τι γένος αὐτῶν ἢ οὐθέν. καὶ εἰ μὲν [5] γένος ἔσται οὕτως ὥστ’ εἶναι πρότερόν τι τῶν ἐναντίων, αἱ διαφοραὶ πρότεραι ἐναντίαι ἔσονται αἱ ποιήσουσαι τὰ ἐναντία εἴδη ὡς γένους· ἐκ γὰρ τοῦ γένους καὶ τῶν διαφορῶν τὰ εἴδη (οἷον εἰ τὸ λευκὸν καὶ μέλαν ἐναντία, ἔστι δὲ τὸ μὲν διακριτικὸν χρῶμα τὸ δὲ συγκριτικὸν χρῶμα, αὗται αἱ διαφοραί, [10] τὸ διακριτικὸν καὶ συγκριτικόν, πρότεραι· ὥστε ταῦτα ἐναντία ἀλλήλοις πρότερα). ἀλλὰ μὴν τά γε ἐναντίως διαφέροντα μᾶλλον ἐναντίᾳ· καὶ τὰ λοιπὰ καὶ τὰ μεταξὺ ἐκ τοῦ γένους ἔσται καὶ τῶν διαφορῶν (οἷον ὅσα χρώματα τοῦ λευκοῦ καὶ μέλανός ἐστι μεταξύ, ταῦτα δεῖ ἔκ τε τοῦ γένους λέγεσθαι [15] —ἔστι δὲ γένος τὸ χρῶμα—καὶ ἐκ διαφορῶν τινῶν· αὗται δὲ οὐκ ἔσονται τὰ πρῶτα ἐναντία· εἰ δὲ μή, ἔσται ἕκαστον ἢ λευκὸν ἢ μέλαν· ἕτεραι ἄρα· μεταξὺ ἄρα τῶν πρώτων ἐναντίων αὗται ἔσονται, αἱ πρῶται δὲ διαφοραὶ τὸ διακριτικὸν καὶ συγκριτικόν)· ὥστε ταῦτα πρῶτα ζητητέον [20] ὅσα ἐναντία μὴ ἐν γένει, ἐκ τίνος τὰ μεταξὺ αὐτῶν (ἀνάγκη γὰρ τὰ ἐν τῷ αὐτῷ γένει ἐκ τῶν ἀσυνθέτων τῷ γένει συγκεῖσθαι ἢ ἀσύνθετα εἶναι). τὰ μὲν οὖν ἐναντία ἀσύνθετα ἐξ ἀλλήλων, ὥστε ἀρχαί· τὰ δὲ μεταξὺ ἢ πάντα ἢ οὐθέν. ἐκ δὲ τῶν ἐναντίων γίγνεταί τι, ὥστ’ ἔσται μεταβολὴ εἰς τοῦτο [25] πρὶν ἢ εἰς αὐτά· ἑκατέρου γὰρ καὶ ἧττον ἔσται καὶ μᾶλλον. μεταξὺ ἄρα ἔσται καὶ τοῦτο τῶν ἐναντίων. καὶ τἆλλα ἄρα πάντα σύνθετα τὰ μεταξύ· τὸ γὰρ τοῦ μὲν μᾶλλον τοῦ δ’

ἧττον σύνθετόν πως ἐξ ἐκείνων ὧν λέγεται εἶναι τοῦ μὲν μᾶλλον τοῦ δ’ ἧττον. ἐπεὶ δ’ οὐκ ἔστιν ἕτερα πρότερα ὁμογενῆ [30] τῶν ἐναντίων, ἅπαντ’ ἂν ἐκ τῶν ἐναντίων εἴη τὰ μεταξύ, ὥστε καὶ τὰ κάτω πάντα, καὶ τἀναντία καὶ τὰ μεταξύ, ἐκ τῶν πρώτων ἐναντίων ἔσονται. ὅτι μὲν οὖν τὰ μεταξὺ ἔν τε ταὐτῷ γένει πάντα καὶ μεταξὺ ἐναντίων καὶ σύγκειται ἐκ τῶν ἐναντίων πάντα, δῆλον.

[35] τὸ δ’ ἕτερον τῷ εἴδει τινὸς τὶ ἕτερόν ἐστι, καὶ δεῖ τοῦτο ἀμφοῖν ὑπάρχειν· οἷον εἰ ζῷον ἕτερον τῷ εἴδει, ἄμφω ζῷα. ἀνάγκη ἄρα ἐν γένει τῷ αὐτῷ εἶναι τὰ ἕτερα τῷ εἴδει· τὸ γὰρ τοιοῦτο γένος καλῶ ὃ ἄμφω ἓν ταὐτὸ λέγεται, μὴ κατὰ συμβεβηκὸς ἔχον διαφοράν, [1] εἴτε ὡς ὕλη ὂν εἴτε ἄλλως. οὐ μόνον γὰρ δεῖ τὸ κοινὸν ὑπάρχειν, οἷον ἄμφω ζῷα, ἀλλὰ καὶ ἕτερον ἑκατέρῳ τοῦτο αὐτὸ τὸ ζῷον, οἷον τὸ μὲν ἵππον τὸ δὲ ἄνθρωπον, διὸ τοῦτο τὸ κοινὸν ἕτερον ἀλλήλων [5] ἐστὶ τῷ εἴδει. ἔσται δὴ καθ’ αὑτὰ τὸ μὲν τοιονδὶ ζῷον τὸ δὲ τοιονδί, οἷον τὸ μὲν ἵππος τὸ δ’ ἄνθρωπος. ἀνάγκη ἄρα τὴν διαφορὰν ταύτην ἑτερότητα τοῦ γένους εἶναι. λέγω γὰρ γένους [8] διαφορὰν ἑτερότητα ἢ ἕτερον ποιεῖ τοῦτο αὐτό. ἐναντίωσις τοίνυν ἔσται αὕτη (δῆλον δὲ καὶ ἐκ τῆς ἐπαγωγῆς)· πάντα [10] γὰρ διαιρεῖται τοῖς ἀντικειμένοις, καὶ ὅτι τὰ ἐναντία ἐν ταὐτῷ γένει, δέδεικται· ἡ γὰρ ἐναντιότης ἦν διαφορὰ τελεία, ἡ δὲ διαφορὰ ἡ εἴδει πᾶσα τινὸς τί, ὥστε τοῦτο τὸ αὐτό τε καὶ γένος ἐπ’ ἀμφοῖν (διὸ καὶ ἐν τῇ αὐτῇ συστοιχίᾳ πάντα τὰ ἐναντία τῆς κατηγορίας ὅσα εἴδει διάφορα καὶ μὴ γένει, [15] ἕτερά τε ἀλλήλων μάλιστα—τελεία γὰρ ἡ διαφορά—καὶ ἅμα ἀλλήλοις οὐ γίγνεται). ἡ ἄρα διαφορὰ ἐναντίωσίς ἐστιν. τοῦτο ἄρα ἐστὶ τὸ ἑτέροις εἶναι τῷ εἴδει, τὸ ἐν ταὐτῷ γένει ὄντα ἐναντίωσιν ἔχειν ἄτομα ὄντα (ταὐτὰ δὲ τῷ εἴδει ὅσα μὴ ἔχει ἐναντίωσιν ἄτομα ὄντα)· ἐν γὰρ τῇ διαιρέσει καὶ [20] ἐν τοῖς μεταξὺ γίγνονται ἐναντιώσεις πρὶν εἰς τὰ ἄτομα ἐλθεῖν· ὥστε φανερὸν ὅτι πρὸς τὸ καλούμενον γένος οὔτε ταὐτὸν οὔτε ἕτερον τῷ εἴδει οὐθέν ἐστι τῶν ὡς γένους εἰδῶν (προσηκόντως· ἡ γὰρ ὕλη ἀποφάσει δηλοῦται, τὸ δὲ γένος ὕλη οὗ λέγεται γένος—μὴ ὡς τὸ τῶν Ἡρακλειδῶν ἀλλ’ ὡς τὸ [25] ἐν τῇ φύσει), οὐδὲ πρὸς τὰ μὴ ἐν ταὐτῷ γένει, ἀλλὰ διοίσει τῷ γένει ἐκείνων, εἴδει δὲ τῶν ἐν ταὐτῷ γένει. ἐναντίωσιν γὰρ ἀνάγκη εἶναι τὴν διαφορὰν οὗ διαφέρει εἴδει· αὕτη δὲ ὑπάρχει τοῖς ἐν ταὐτῷ γένει οὖσι μόνοις.

ἀπορήσειε δ’ ἄν τις διὰ τί γυνὴ ἀνδρὸς οὐκ εἴδει διαφέρει, [30] ἐναντίου τοῦ θήλεος καὶ τοῦ ἄρρενος ὄντος τῆς δὲ διαφορᾶς ἐναντιώσεως, οὐδὲ ζῷον θῆλυ καὶ ἄρρεν ἕτερον τῷ εἴδει· καίτοι καθ’ αὐτὸ τοῦ ζῴου αὕτη ἡ διαφορὰ καὶ οὐχ ὡς λευκότης ἢ μελανία ἀλλ’ ᾗ ζῷον καὶ τὸ θῆλυ καὶ τὸ ἄρρεν ὑπάρχει. ἔστι δ’ ἡ ἀπορία αὕτη σχεδὸν ἡ αὐτὴ καὶ διὰ [35] τί ἡ μὲν ποιεῖ τῷ εἴδει ἕτερα ἐναντίωσις ἡ δ’ οὔ, οἷον τὸ πεζὸν καὶ τὸ πτερωτόν, λευκότης δὲ καὶ μελανία οὔ. ἢ ὅτι τὰ μὲν οἰκεῖα πάθη τοῦ γένους τὰ δ’ ἧττον; καὶ ἐπειδή ἐστι τὸ μὲν λόγος τὸ δ’ ὕλη, [1] ὅσαι μὲν ἐν τῷ λόγῳ εἰσὶν ἐναντιότητες εἴδει ποιοῦσι διαφοράν, ὅσαι δ’ ἐν τῷ συνειλημμένῳ τῇ ὕλῃ οὐ ποιοῦσιν. διὸ ἀνθρώπου λευκότης οὐ ποιεῖ οὐδὲ μελανία, οὐδὲ τοῦ λευκοῦ ἀνθρώπου ἔστι διαφορὰ κατ’ εἶδος πρὸς [5] μέλανα ἄνθρωπον, οὐδ’ ἂν ὄνομα ἓν τεθῇ. ὡς ὕλη γὰρ ὁ ἄνθρωπος, οὐ ποιεῖ δὲ διαφορὰν ἡ ὕλη· οὐδ’ ἀνθρώπου γὰρ εἴδη εἰσὶν οἱ ἄνθρωποι διὰ τοῦτο, καίτοι ἕτεραι αἱ σάρκες καὶ τὰ ὀστᾶ ἐξ ὧν ὅδε καὶ ὅδε· ἀλλὰ τὸ σύνολον ἕτερον μέν, εἴδει δ’ οὐχ ἕτερον, ὅτι ἐν τῷ λόγῳ οὐκ ἔστιν ἐναντίωσις. τοῦτο δ’ [10] ἐστὶ τὸ ἔσχατον ἄτομον· ὁ δὲ Καλλίας ἐστὶν ὁ λόγος μετὰ τῆς ὕλης· καὶ ὁ λευκὸς δὴ ἄνθρωπος, ὅτι Καλλίας λευκός· κατὰ συμβεβηκὸς οὖν ὁ ἄνθρωπος. οὐδὲ χαλκοῦς δὴ κύκλος καὶ ξύλινος· οὐδὲ τρίγωνον χαλκοῦν καὶ κύκλος ξύλινος, οὐ διὰ τὴν ὕλην εἴδει διαφέρουσιν ἀλλ’ ὅτι ἐν τῷ λόγῳ [15] ἔνεστιν ἐναντίωσις. πότερον δ’ ἡ ὕλη οὐ ποιεῖ ἕτερα τῷ εἴδει, οὖσά πως ἑτέρα, ἢ ἔστιν ὡς ποιεῖ; διὰ τί γὰρ ὁδὶ ὁ ἵππος τουδὶ τοῦ ἀνθρώπου ἕτερος τῷ εἴδει; καίτοι σὺν τῇ ὕλῃ οἱ λόγοι αὐτῶν. ἢ ὅτι ἔνεστιν ἐν τῷ λόγῳ ἐναντίωσις; καὶ γὰρ τοῦ λευκοῦ ἀνθρώπου καὶ μέλανος ἵππου, καὶ ἔστι γε [20] εἴδει, ἀλλ’ οὐχ ᾗ ὁ μὲν λευκὸς ὁ δὲ μέλας, ἐπεὶ καὶ εἰ ἄμφω λευκὰ ἦν, ὅμως ἂν ἦν εἴδει ἕτερα. τὸ δὲ ἄρρεν καὶ θῆλυ τοῦ ζῴου οἰκεῖα μὲν πάθη, ἀλλ’ οὐ κατὰ τὴν οὐσίαν ἀλλ’ ἐν τῇ ὕλῃ καὶ τῷ σώματι, διὸ τὸ αὐτὸ

σπέρμα θῆλυ ἢ ἄρρεν γίγνεται παθόν τι πάθος. τί μὲν οὖν ἐστὶ τὸ τῷ εἴδει ἕτερον [25] εἶναι, καὶ διὰ τί τὰ μὲν διαφέρει εἴδει τὰ δ’ οὔ, εἴρηται.

ἐπειδὴ δὲ τὰ ἐναντία ἕτερα τῷ εἴδει, τὸ δὲ φθαρτὸν καὶ τὸ ἄφθαρτον ἐναντία (στέρησις γὰρ ἀδυναμία διωρισμένη), ἀνάγκη ἕτερον εἶναι τῷ γένει τὸ φθαρτὸν καὶ τὸ ἄφθαρτον. νῦν μὲν οὖν ἐπ’ αὐτῶν εἰρήκαμεν τῶν καθόλου [30] ὀνομάτων, ὥστε δόξειεν ἂν οὐκ ἀναγκαῖον εἶναι ὁτιοῦν ἄφθαρτον καὶ φθαρτὸν ἕτερα εἶναι τῷ εἴδει, ὥσπερ οὐδὲ λευκὸν καὶ μέλαν (τὸ γὰρ αὐτὸ ἐνδέχεται εἶναι, καὶ ἅμα, ἐὰν ᾖ τῶν καθόλου, ὥσπερ ὁ ἄνθρωπος εἴη ἂν καὶ λευκὸς καὶ μέλας, καὶ τῶν καθ’ ἕκαστον· εἴη γὰρ ἄν, μὴ ἅμα, ὁ αὐτὸς [35] λευκὸς καὶ μέλας· καίτοι ἐναντίον τὸ λευκὸν τῷ μέλανι)· ἀλλὰ τῶν ἐναντίων τὰ μὲν κατὰ συμβεβηκὸς ὑπάρχει ἐνίοις, οἷον καὶ τὰ νῦν εἰρημένα καὶ ἄλλα πολλά, τὰ δὲ ἀδύνατον, ὧν ἐστὶ καὶ τὸ φθαρτὸν καὶ τὸ ἄφθαρτον· [1] οὐδὲν γάρ ἐστι φθαρτὸν κατὰ συμβεβηκός· τὸ μὲν γὰρ συμβεβηκὸς ἐνδέχεται μὴ ὑπάρχειν, τὸ δὲ φθαρτὸν τῶν ἐξ ἀνάγκης ὑπαρχόντων ἐστὶν οἷς ὑπάρχει· ἢ ἔσται τὸ αὐτὸ καὶ ἓν φθαρτὸν [5] καὶ ἄφθαρτον, εἰ ἐνδέχεται μὴ ὑπάρχειν αὐτῷ τὸ φθαρτόν. ἢ τὴν οὐσίαν ἄρα ἢ ἐν τῇ οὐσίᾳ ἀνάγκη ὑπάρχειν τὸ φθαρτὸν ἑκάστῳ τῶν φθαρτῶν. ὁ δ’ αὐτὸς λόγος καὶ περὶ τοῦ ἀφθάρτου· τῶν γὰρ ἐξ ἀνάγκης ὑπαρχόντων ἄμφω. ᾗ ἄρα καὶ καθ’ ὃ πρῶτον τὸ μὲν φθαρτὸν τὸ δ’ ἄφθαρτον, [10] ἔχει ἀντίθεσιν, ὥστε ἀνάγκη γένει ἕτερα εἶναι. φανερὸν τοίνυν ὅτι οὐκ ἐνδέχεται εἶναι εἴδη τοιαῦτα οἷα λέγουσί τινες· ἔσται γὰρ καὶ ἄνθρωπος ὁ μὲν φθαρτὸς ὁ δ’ ἄφθαρτος. καίτοι τῷ εἴδει ταὐτὰ λέγεται εἶναι τὰ εἴδη τοῖς τισὶ καὶ οὐχ ὁμώνυμα· τὰ δὲ γένει ἕτερα πλεῖον διέστηκεν ἢ τὰ εἴδει.

[18] ὅτι μὲν ἡ σοφία περὶ ἀρχὰς ἐπιστήμη τίς ἐστι, δῆλον ἐκ τῶν πρώτων ἐν οἷς διηπόρηται πρὸς τὰ ὑπὸ τῶν ἄλλων [20] εἰρημένα περὶ τῶν ἀρχῶν· ἀπορήσειε δ’ ἄν τις πότερον μίαν ὑπολαβεῖν εἶναι δεῖ τὴν σοφίαν ἐπιστήμην ἢ πολλάς· εἰ μὲν γὰρ μίαν, μία γ’ ἐστὶν ἀεὶ τῶν ἐναντίων, αἱ δ’ ἀρχαὶ οὐκ ἐναντίαι· εἰ δὲ μὴ μία, ποίας δεῖ θεῖναι ταύτας; ἔτι τὰς ἀποδεικτικὰς ἀρχὰς θεωρῆσαι μιᾶς ἢ πλειόνων; εἰ μὲν γὰρ [25] μιᾶς, τί μᾶλλον ταύτης ἢ ὁποιασοῦν; εἰ δὲ πλειόνων, ποίας δεῖ ταύτας τιθέναι; ἔτι πότερον πασῶν τῶν οὐσιῶν ἢ οὔ; εἰ μὲν γὰρ μὴ πασῶν, ποίων χαλεπὸν ἀποδοῦναι· εἰ δὲ πασῶν μία, ἄδηλον πῶς ἐνδέχεται πλειόνων τὴν αὐτὴν ἐπιστήμην εἶναι. ἔτι πότερον περὶ τὰς οὐσίας μόνον ἢ καὶ τὰ [30] συμβεβηκότα ἀπόδειξίς ἐστιν; εἰ γὰρ περί γε τὰ συμβεβηκότα ἀπόδειξίς ἐστιν, περὶ τὰς οὐσίας οὐκ ἔστιν· εἰ δ’ ἑτέρα, τίς ἑκατέρα καὶ ποτέρα σοφία; ᾗ μὲν γὰρ ἀποδεικτική, σοφία ἡ περὶ τὰ συμβεβηκότα· ᾗ δὲ περὶ τὰ πρῶτα, ἡ τῶν οὐσιῶν. ἀλλ’ οὐδὲ περὶ τὰς ἐν τοῖς φυσικοῖς εἰρημένας αἰτίας [35] τὴν ἐπιζητουμένην ἐπιστήμην θετέον· οὔτε γὰρ περὶ τὸ οὗ ἕνεκεν (τοιοῦτον γὰρ τὸ ἀγαθόν, τοῦτο δ’ ἐν τοῖς πρακτοῖς ὑπάρχει καὶ ταῖς οὖσιν ἐν κινήσει· καὶ τοῦτο πρῶτον κινεῖ—τοιοῦτον γὰρ τὸ τέλος—τὸ δὲ πρῶτον κινῆσαν οὐκ ἔστιν ἐν τοῖς ἀκινήτοις)· ὅλως δ’ ἀπορίαν ἔχει πότερόν ποτε περὶ τὰς αἰσθητὰς οὐσίας ἐστὶν ἡ ζητουμένη νῦν ἐπιστήμη ἢ οὔ, περὶ δέ τινας ἑτέρας. [1] εἰ γὰρ περὶ ἄλλας, ἢ περὶ τὰ εἴδη εἴη ἂν ἢ περὶ τὰ μαθηματικά. τὰ μὲν οὖν εἴδη ὅτι οὐκ ἔστι, δῆλον (ὅμως δὲ ἀπορίαν ἔχει, κἂν εἶναί τις αὐτὰ θῇ, διὰ τί ποτ’ οὐχ ὥσπερ ἐπὶ τῶν μαθηματικῶν, [5] οὕτως ἔχει καὶ ἐπὶ τῶν ἄλλων ὧν ἔστιν εἴδη· λέγω δ’ ὅτι τὰ μαθηματικὰ μὲν μεταξύ τε τῶν εἰδῶν τιθέασι καὶ τῶν αἰσθητῶν οἷον τρίτα τινὰ παρὰ τὰ εἴδη τε καὶ τὰ δεῦρο, τρίτος δ’ ἄνθρωπος οὐκ ἔστιν οὐδ’ ἵππος παρ’ αὐτόν τε καὶ τοὺς καθ’ ἕκαστον· εἰ δ’ αὖ μὴ ἔστιν ὡς λέγουσι, [10] περὶ ποῖα θετέον πραγματεύεσθαι τὸν μαθηματικόν; οὐ γὰρ δὴ περὶ τὰ δεῦρο· τούτων γὰρ οὐθέν ἐστιν οἷον αἱ μαθηματικαὶ ζητοῦσι τῶν ἐπιστημῶν)· οὐδὲ μὴν περὶ τὰ μαθηματικὰ ἡ ζητουμένη νῦν ἐστὶν ἐπιστήμη (χωριστὸν γὰρ αὐτῶν οὐθέν)· ἀλλ’ οὐδὲ τῶν αἰσθητῶν οὐσιῶν· φθαρταὶ γάρ. ὅλως δ’ ἀπορήσειέ [15] τις ἂν ποίας ἐστὶν ἐπιστήμης τὸ διαπορῆσαι περὶ τῆς τῶν μαθηματικῶν ὕλης. οὔτε γὰρ τῆς φυσικῆς, διὰ τὸ περὶ τὰ ἔχοντα ἐν αὑτοῖς ἀρχὴν κινήσεως καὶ στάσεως τὴν τοῦ φυσικοῦ πᾶσαν εἶναι πραγματείαν, οὐδὲ μὴν τῆς σκοπούσης περὶ ἀποδείξεώς τε καὶ ἐπιστήμης· περὶ γὰρ αὐτὸ τοῦτο

τὸ [20] γένος τὴν ζήτησιν ποιεῖται. λείπεται τοίνυν τὴν προκειμένην φιλοσοφίαν περὶ αὐτῶν τὴν σκέψιν ποιεῖσθαι. διαπορήσειε δ’ ἄν τις εἰ δεῖ θεῖναι τὴν ζητουμένην ἐπιστήμην περὶ τὰς ἀρχάς, τὰ καλούμενα ὑπό τινων στοιχεῖα· ταῦτα δὲ πάντες ἐνυπάρχοντα τοῖς συνθέτοις τιθέασιν. μᾶλλον δ’ ἂν δόξειε [25] τῶν καθόλου δεῖν εἶναι τὴν ζητουμένην ἐπιστήμην· πᾶς γὰρ λόγος καὶ πᾶσα ἐπιστήμη τῶν καθόλου καὶ οὐ τῶν ἐσχάτων, ὥστ’ εἴη ἂν οὕτω τῶν πρώτων γενῶν. ταῦτα δὲ γίγνοιτ’ ἂν τό τε ὂν καὶ τὸ ἕν· ταῦτα γὰρ μάλιστ’ ἂν ὑποληφθείη περιέχειν τὰ ὄντα πάντα καὶ μάλιστα ἀρχαῖς ἐοικέναι διὰ [30] τὸ εἶναι πρῶτα τῇ φύσει· φθαρέντων γὰρ αὐτῶν συναναιρεῖται καὶ τὰ λοιπά· πᾶν γὰρ ὂν καὶ ἕν. ᾗ δὲ τὰς διαφορὰς αὐτῶν ἀνάγκη μετέχειν εἰ θήσει τις αὐτὰ γένη, διαφορὰ δ’ οὐδεμία τοῦ γένους μετέχει, ταύτῃ δ’ οὐκ ἂν δόξειε δεῖν αὐτὰ τιθέναι γένη οὐδ’ ἀρχάς. ἔτι δ’ εἰ μᾶλλον [35] ἀρχὴ τὸ ἁπλούστερον τοῦ ἧττον τοιούτου, τὰ δ’ ἔσχατα τῶν ἐκ τοῦ γένους ἁπλούστερα τῶν γενῶν (ἄτομα γάρ, τὰ γένη δ’ εἰς εἴδη πλείω καὶ διαφέροντα διαιρεῖται), μᾶλλον ἂν ἀρχὴ δόξειεν εἶναι τὰ εἴδη τῶν γενῶν. ᾗ δὲ συναναιρεῖται τοῖς γένεσι τὰ εἴδη, τὰ γένη ταῖς ἀρχαῖς ἔοικε μᾶλλον· ἀρχὴ γὰρ τὸ συναναιροῦν. [1] τὰ μὲν οὖν τὴν ἀπορίαν ἔχοντα ταῦτα καὶ τοιαῦτ’ ἐστὶν ἕτερα.

ἔτι πότερον δεῖ τιθέναι τι παρὰ τὰ καθ’ ἕκαστα ἢ οὔ, ἀλλὰ τούτων ἡ ζητουμένη ἐπιστήμη; ἀλλὰ ταῦτα ἄπειρα· [5] τά γε μὴν παρὰ τὰ καθ’ ἕκαστα γένη ἢ εἴδη ἐστίν, ἀλλ’ οὐδετέρου τούτων ἡ ζητουμένη νῦν ἐπιστήμη. διότι γὰρ ἀδύνατον τοῦτο, εἴρηται. καὶ γὰρ ὅλως ἀπορίαν ἔχει πότερον δεῖ τινὰ ὑπολαβεῖν οὐσίαν εἶναι χωριστὴν παρὰ τὰς αἰσθητὰς οὐσίας καὶ τὰς δεῦρο, ἢ οὔ, ἀλλὰ ταῦτ’ εἶναι τὰ ὄντα καὶ [10] περὶ ταῦτα τὴν σοφίαν ὑπάρχειν. ζητεῖν μὲν γὰρ ἐοίκαμεν ἄλλην τινά, καὶ τὸ προκείμενον τοῦτ’ ἔστιν ἡμῖν, λέγω δὲ τὸ ἰδεῖν εἴ τι χωριστὸν καθ’ αὑτὸ καὶ μηδενὶ τῶν αἰσθητῶν ὑπάρχον. ἔτι δ’ εἰ παρὰ τὰς αἰσθητὰς οὐσίας ἔστι τις ἑτέρα οὐσία, παρὰ ποίας τῶν αἰσθητῶν δεῖ τιθέναι ταύτην εἶναι; [15] τί γὰρ μᾶλλον παρὰ τοὺς ἀνθρώπους ἢ τοὺς ἵππους ἢ τῶν ἄλλων ζῴων θήσει τις αὐτὴν ἢ καὶ τῶν ἀψύχων ὅλως; τό γε μὴν ἴσας ταῖς αἰσθηταῖς καὶ φθαρταῖς οὐσίαις ἀϊδίους ἑτέρας κατασκευάζειν ἐκτὸς τῶν εὐλόγων δόξειεν ἂν πίπτειν. εἰ δὲ μὴ χωριστὴ τῶν σωμάτων ἡ ζητουμένη νῦν ἀρχή, [20] τίνα ἄν τις ἄλλην θείη μᾶλλον τῆς ὕλης; αὕτη γε μὴν ἐνεργείᾳ μὲν οὐκ ἔστι, δυνάμει δ’ ἔστιν. μᾶλλόν τ’ ἂν ἀρχὴ κυριωτέρα ταύτης δόξειεν εἶναι τὸ εἶδος καὶ ἡ μορφή· τοῦτο δὲ φθαρτόν, ὥσθ’ ὅλως οὐκ ἔστιν ἀΐδιος οὐσία χωριστὴ καὶ καθ’ αὑτήν. ἀλλ’ ἄτοπον· ἔοικε γὰρ καὶ ζητεῖται σχεδὸν [25] ὑπὸ τῶν χαριεστάτων ὡς οὖσά τις ἀρχὴ καὶ οὐσία τοιαύτη· πῶς γὰρ ἔσται τάξις μή τινος ὄντος ἀϊδίου καὶ χωριστοῦ καὶ μένοντος; ἔτι δ’ εἴπερ ἔστι τις οὐσία καὶ ἀρχὴ τοιαύτη τὴν φύσιν οἵαν νῦν ζητοῦμεν, καὶ αὕτη μία πάντων καὶ ἡ αὐτὴ τῶν ἀϊδίων τε καὶ φθαρτῶν, ἀπορίαν ἔχει διὰ τί ποτε τῆς [30] αὐτῆς ἀρχῆς οὔσης τὰ μέν ἐστιν ἀΐδια τῶν ὑπὸ τὴν ἀρχὴν τὰ δ’ οὐκ ἀΐδια (τοῦτο γὰρ ἄτοπον)· εἰ δ’ ἄλλη μέν ἐστιν ἀρχὴ τῶν φθαρτῶν ἄλλη δὲ τῶν ἀϊδίων, εἰ μὲν ἀΐδιος καὶ ἡ τῶν φθαρτῶν, ὁμοίως ἀπορήσομεν (διὰ τί γὰρ οὐκ ἀϊδίου τῆς ἀρχῆς οὔσης καὶ τὰ ὑπὸ τὴν ἀρχὴν ἀΐδια;)· φθαρτῆς δ’ [35] οὔσης ἄλλη τις ἀρχὴ γίγνεται ταύτης κἀκείνης ἑτέρα, καὶ τοῦτ’ εἰς ἄπειρον πρόεισιν. εἰ δ’ αὖ τις τὰς δοκούσας μάλιστ’ ἀρχὰς ἀκινήτους εἶναι, τό τε ὂν καὶ τὸ ἕν, θήσει, πρῶτον μὲν εἰ μὴ τόδε τι καὶ οὐσίαν ἑκάτερον αὐτῶν σημαίνει, [1] πῶς ἔσονται χωρισταὶ καὶ καθ’ αὑτάς; τοιαύτας δὲ ζητοῦμεν τὰς ἀϊδίους τε καὶ πρώτας ἀρχάς. εἴ γε μὴν τόδε τι καὶ οὐσίαν ἑκάτερον αὐτῶν δηλοῖ, πάντ’ ἐστὶν οὐσίαι τὰ ὄντα· κατὰ [5] πάντων γὰρ τὸ ὂν κατηγορεῖται (κατ’ ἐνίων δὲ καὶ τὸ ἕν)· οὐσίαν δ’ εἶναι πάντα τὰ ὄντα ψεῦδος. ἔτι δὲ τοῖς τὴν πρώτην ἀρχὴν τὸ ἓν λέγουσι καὶ τοῦτ’ οὐσίαν, ἐκ δὲ τοῦ ἑνὸς καὶ τῆς ὕλης τὸν ἀριθμὸν γεννῶσι πρῶτον καὶ τοῦτον οὐσίαν φάσκουσιν εἶναι, πῶς ἐνδέχεται τὸ λεγόμενον ἀληθὲς εἶναι; [10] τὴν γὰρ δυάδα καὶ τῶν λοιπῶν ἕκαστον ἀριθμῶν τῶν συνθέτων πῶς ἓν δεῖ νοῆσαι; περὶ τούτου γὰρ οὔτε λέγουσιν οὐδὲν οὔτε ῥᾴδιον εἰπεῖν. εἴ γε μὴν γραμμὰς ἢ τὰ τούτων ἐχόμενα (λέγω δὲ ἐπιφανείας τὰς πρώτας) θήσει τις ἀρχάς, ταῦτά γ’ οὐκ εἰσὶν οὐσίαι χωρισταί, τομαὶ δὲ καὶ

διαιρέσεις αἱ μὲν [15] ἐπιφανειῶν αἱ δὲ σωμάτων (αἱ δὲ στιγμαὶ γραμμῶν), ἔτι δὲ πέρατα τῶν αὐτῶν τούτων· πάντα δὲ ταῦτα ἐν ἄλλοις ὑπάρχει καὶ χωριστὸν οὐδέν ἐστιν. ἔτι πῶς οὐσίαν ὑπολαβεῖν εἶναι δεῖ τοῦ ἑνὸς καὶ στιγμῆς; οὐσίας μὲν γὰρ πάσης γένεσις ἔστι, στιγμῆς δ’ οὐκ ἔστιν· διαίρεσις γὰρ ἡ στιγμή. παρέχει [20] δ’ ἀπορίαν καὶ τὸ πᾶσαν μὲν ἐπιστήμην εἶναι τῶν καθόλου καὶ τοῦ τοιουδί, τὴν δ’ οὐσίαν μὴ τῶν καθόλου εἶναι, μᾶλλον δὲ τόδε τι καὶ χωριστόν, ὥστ’ εἰ περὶ τὰς ἀρχάς ἐστιν ἐπιστήμη, πῶς δεῖ τὴν ἀρχὴν ὑπολαβεῖν οὐσίαν εἶναι; ἔτι πότερον ἔστι τι παρὰ τὸ σύνολον ἢ οὔ (λέγω δὲ τὴν ὕλην καὶ [25] τὸ μετὰ ταύτης); εἰ μὲν γὰρ μή, τά γε ἐν ὕλῃ φθαρτὰ πάντα· εἰ δ’ ἔστι τι, τὸ εἶδος ἂν εἴη καὶ ἡ μορφή· τοῦτ’ οὖν ἐπὶ τίνων ἔστι καὶ ἐπὶ τίνων οὔ, χαλεπὸν ἀφορίσαι· ἐπ’ ἐνίων γὰρ δῆλον οὐκ ὂν χωριστὸν τὸ εἶδος, οἷον οἰκίας. ἔτι πότερον αἱ ἀρχαὶ εἴδει ἢ ἀριθμῷ αἱ αὐταί; εἰ γὰρ ἀριθμῷ [30] ἕν, πάντ’ ἔσται ταὐτά.

ἐπεὶ δ’ ἐστὶν ἡ τοῦ φιλοσόφου ἐπιστήμη τοῦ ὄντος ᾗ ὂν καθόλου καὶ οὐ κατὰ μέρος, τὸ δ’ ὂν πολλαχῶς καὶ οὐ καθ’ ἕνα λέγεται τρόπον· εἰ μὲν οὖν ὁμωνύμως κατὰ δὲ κοινὸν μηδέν, οὐκ ἔστιν ὑπὸ μίαν ἐπιστήμην (οὐ γὰρ ἓν γένος [35] τῶν τοιούτων), εἰ δὲ κατά τι κοινόν, εἴη ἂν ὑπὸ μίαν ἐπιστήμην. ἔοικε δὴ τὸν εἰρημένον λέγεσθαι τρόπον καθάπερ τό τε ἰατρικὸν καὶ ὑγιεινόν· καὶ γὰρ τούτων ἑκάτερον πολλαχῶς λέγομεν. [1] λέγεται δὲ τοῦτον τὸν τρόπον ἕκαστον τῷ τὸ μὲν πρὸς τὴν ἰατρικὴν ἐπιστήμην ἀνάγεσθαί πως τὸ δὲ πρὸς ὑγίειαν τὸ δ’ ἄλλως, πρὸς ταὐτὸ δ’ ἕκαστον. ἰατρικὸς γὰρ λόγος καὶ μαχαίριον λέγεται τῷ τὸ μὲν ἀπὸ τῆς ἰατρικῆς [5] ἐπιστήμης εἶναι τὸ δὲ ταύτῃ χρήσιμον. ὁμοίως δὲ καὶ ὑγιεινόν· τὸ μὲν γὰρ ὅτι σημαντικὸν ὑγιείας τὸ δ’ ὅτι ποιητικόν. ὁ δ’ αὐτὸς τρόπος καὶ ἐπὶ τῶν λοιπῶν. τὸν αὐτὸν δὴ τρόπον καὶ τὸ ὂν ἅπαν λέγεται· τῷ γὰρ τοῦ ὄντος ᾗ ὂν πάθος ἢ ἕξις ἢ διάθεσις ἢ κίνησις ἢ τῶν ἄλλων τι τῶν τοιούτων [10] εἶναι λέγεται ἕκαστον αὐτῶν ὄν. ἐπεὶ δὲ παντὸς τοῦ ὄντος πρὸς ἕν τι καὶ κοινὸν ἡ ἀναγωγὴ γίγνεται, καὶ τῶν ἐναντιώσεων ἑκάστη πρὸς τὰς πρώτας διαφορὰς καὶ ἐναντιώσεις ἀναχθήσεται τοῦ ὄντος, εἴτε πλῆθος καὶ ἓν εἴθ’ ὁμοιότης καὶ ἀνομοιότης αἱ πρῶται τοῦ ὄντος εἰσὶ διαφοραί, εἴτ’ [15] ἄλλαι τινές· ἔστωσαν γὰρ αὗται τεθεωρημέναι. διαφέρει δ’ οὐδὲν τὴν τοῦ ὄντος ἀναγωγὴν πρὸς τὸ ὂν ἢ πρὸς τὸ ἓν γίγνεσθαι. καὶ γὰρ εἰ μὴ ταὐτὸν ἄλλο δ’ ἐστίν, ἀντιστρέφει γε· τό τε γὰρ ἓν καὶ ὄν πως, τό τε ὂν ἕν.—ἐπεὶ δ’ ἐστὶ τὰ ἐναντία πάντα τῆς αὐτῆς καὶ μιᾶς ἐπιστήμης θεωρῆσαι, λέγεται [20] δ’ ἕκαστον αὐτῶν κατὰ στέρησιν—καίτοι γ’ ἔνια ἀπορήσειέ τις ἂν πῶς λέγεται κατὰ στέρησιν, ὧν ἔστιν ἀνὰ μέσον τι, καθάπερ ἀδίκου καὶ δικαίου—περὶ πάντα δὴ τὰ τοιαῦτα τὴν στέρησιν δεῖ τιθέναι μὴ τοῦ ὅλου λόγου, τοῦ τελευταίου δὲ εἴδους· οἷον εἰ ἔστιν ὁ δίκαιος καθ’ ἕξιν τινὰ [25] πειθαρχικὸς τοῖς νόμοις, οὐ πάντως ὁ ἄδικος ἔσται τοῦ ὅλου στερούμενος λόγου, περὶ δὲ τὸ πείθεσθαι τοῖς νόμοις ἐκλείπων πῃ, καὶ ταύτῃ ἡ στέρησις ὑπάρξει αὐτῷ· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων.—καθάπερ δ’ ὁ μαθηματικὸς περὶ τὰ ἐξ ἀφαιρέσεως τὴν θεωρίαν ποιεῖται (περιελὼν γὰρ πάντα [30] τὰ αἰσθητὰ θεωρεῖ, οἷον βάρος καὶ κουφότητα καὶ σκληρότητα καὶ τοὐναντίον, ἔτι δὲ καὶ θερμότητα καὶ ψυχρότητα καὶ τὰς ἄλλας αἰσθητὰς ἐναντιώσεις, μόνον δὲ καταλείπει τὸ ποσὸν καὶ συνεχές, τῶν μὲν ἐφ’ ἓν τῶν δ’ ἐπὶ δύο τῶν δ’ ἐπὶ τρία, καὶ τὰ πάθη τὰ τούτων ᾗ ποσά ἐστι [35] καὶ συνεχῆ, καὶ οὐ καθ’ ἕτερόν τι θεωρεῖ, καὶ τῶν μὲν τὰς πρὸς ἄλληλα θέσεις σκοπεῖ καὶ τὰ ταύταις ὑπάρχοντα, [1] τῶν δὲ τὰς συμμετρίας καὶ ἀσυμμετρίας, τῶν δὲ τοὺς λόγους, ἀλλ’ ὅμως μίαν πάντων καὶ τὴν αὐτὴν τίθεμεν ἐπιστήμην τὴν γεωμετρικήν), τὸν αὐτὸν δὴ τρόπον ἔχει καὶ περὶ τὸ ὄν. τὰ γὰρ τούτῳ συμβεβηκότα καθ’ ὅσον ἐστὶν ὄν, καὶ [5] τὰς ἐναντιώσεις αὐτοῦ ᾗ ὄν, οὐκ ἄλλης ἐπιστήμης ἢ φιλοσοφίας θεωρῆσαι. τῇ φυσικῇ μὲν γὰρ οὐχ ᾗ ὄντα, μᾶλλον δ’ ᾗ κινήσεως μετέχει, τὴν θεωρίαν τις ἀπονείμειεν ἄν· ἥ γε μὴν διαλεκτικὴ καὶ ἡ σοφιστικὴ τῶν συμβεβηκότων μέν εἰσι τοῖς οὖσιν, οὐχ ᾗ δ’ ὄντα οὐδὲ περὶ τὸ ὂν αὐτὸ καθ’ ὅσον [10] ὄν ἐστιν· ὥστε λείπεται τὸν φιλοσόφον, καθ’ ὅσον ὄντ’ ἐστίν, εἶναι περὶ τὰ λεχθέντα θεωρητικόν. ἐπεὶ δὲ τό τε ὂν ἅπαν καθ’ ἕν τι καὶ κοινὸν λέγεται πολλαχῶς λεγόμενον, καὶ τἀναντία τὸν αὐτὸν τρόπον (εἰς τὰς πρώτας

γὰρ ἐναντιώσεις καὶ διαφορὰς τοῦ ὄντος ἀνάγεται), τὰ δὲ τοιαῦτα δυνατὸν [15] ὑπὸ μίαν ἐπιστήμην εἶναι, διαλύοιτ᾽ ἂν ἡ κατ᾽ ἀρχὰς ἀπορία λεχθεῖσα, λέγω δ᾽ ἐν ᾗ διηπορεῖτο πῶς ἔσται πολλῶν καὶ διαφόρων ὄντων τῷ γένει μία τις ἐπιστήμη.

ἐπεὶ δὲ καὶ ὁ μαθηματικὸς χρῆται τοῖς κοινοῖς ἰδίως, καὶ τὰς τούτων ἀρχὰς ἂν εἴη θεωρῆσαι τῆς πρώτης φιλοσοφίας. ὅτι γὰρ [20] ἀπὸ τῶν ἴσων ἴσων ἀφαιρεθέντων ἴσα τὰ λειπόμενα, κοινὸν μέν ἐστιν ἐπὶ πάντων τῶν ποσῶν, ἡ μαθηματικὴ δ᾽ ἀπολαβοῦσα περί τι μέρος τῆς οἰκείας ὕλης ποιεῖται τὴν θεωρίαν, οἷον περὶ γραμμὰς ἢ γωνίας ἢ ἀριθμοὺς ἢ τῶν λοιπῶν τι ποσῶν, οὐχ ᾗ δ᾽ ὄντα ἀλλ᾽ ᾗ συνεχὲς αὐτῶν ἕκαστον ἐφ᾽ [25] ἓν ἢ δύο ἢ τρία· ἡ δὲ φιλοσοφία περὶ τῶν ἐν μέρει μέν, ᾗ τούτων ἑκάστῳ τι συμβέβηκεν, οὐ σκοπεῖ, περὶ τὸ ὂν δέ, ᾗ ὂν τῶν τοιούτων ἕκαστον, θεωρεῖ. τὸν αὐτὸν δ᾽ ἔχει τρόπον καὶ περὶ τὴν φυσικὴν ἐπιστήμην τῇ μαθηματικῇ· τὰ συμβεβηκότα γὰρ ἡ φυσικὴ καὶ τὰς ἀρχὰς θεωρεῖ τὰς τῶν ὄντων [30] ᾗ κινούμενα καὶ οὐχ ᾗ ὄντα (τὴν δὲ πρώτην εἰρήκαμεν ἐπιστήμην τούτων εἶναι καθ᾽ ὅσον ὄντα τὰ ὑποκείμενά ἐστιν, ἀλλ᾽ οὐχ ᾗ ἕτερόν τι)· διὸ καὶ ταύτην καὶ τὴν μαθηματικὴν ἐπιστήμην μέρη τῆς σοφίας εἶναι θετέον.

ἔστι δέ τις ἐν τοῖς οὖσιν ἀρχὴ περὶ ἣν οὐκ ἔστι διεψεῦσθαι, [35] τοὐναντίον δὲ ἀναγκαῖον ἀεὶ ποιεῖν, λέγω δὲ ἀληθεύειν, οἷον ὅτι οὐκ ἐνδέχεται τὸ αὐτὸ καθ᾽ ἕνα καὶ τὸν αὐτὸν χρόνον εἶναι καὶ μὴ εἶναι, [1] καὶ τἆλλα τὰ τοῦτον αὐτοῖς ἀντικείμενα τὸν τρόπον. καὶ περὶ τῶν τοιούτων ἁπλῶς μὲν οὐκ ἔστιν ἀπόδειξις, πρὸς τόνδε δὲ ἔστιν· οὐ γὰρ ἔστιν ἐκ πιστοτέρας ἀρχῆς αὐτοῦ τούτου ποιήσασθαι συλλογισμόν, δεῖ δέ γ᾽ [5] εἴπερ ἔσται τὸ ἁπλῶς ἀποδεδεῖχθαι. πρὸς δὲ τὸν λέγοντα τὰς ἀντικειμένας φάσεις τῷ δεικνύντι διότι ψεῦδος ληπτέον τι τοιοῦτον ὃ ταὐτὸ μὲν ἔσται τῷ μὴ ἐνδέχεσθαι ταὐτὸ εἶναι καὶ μὴ εἶναι καθ᾽ ἕνα καὶ τὸν αὐτὸν χρόνον, μὴ δόξει δ᾽ εἶναι ταὐτόν· οὕτω γὰρ μόνως ἂν ἀποδειχθείη πρὸς τὸν [10] φάσκοντα ἐνδέχεσθαι τὰς ἀντικειμένας φάσεις ἀληθεύεσθαι κατὰ τοῦ αὐτοῦ. τοὺς δὴ μέλλοντας ἀλλήλοις λόγου κοινωνήσειν δεῖ τι συνιέναι αὐτῶν· μὴ γιγνομένου γὰρ τούτου πῶς ἔσται κοινωνία τούτοις πρὸς ἀλλήλους λόγου; δεῖ τοίνυν τῶν ὀνομάτων ἕκαστον εἶναι γνώριμον καὶ δηλοῦν τι, καὶ μὴ [15] πολλά, μόνον δὲ ἕν· ἂν δὲ πλείονα σημαίνῃ, φανερὸν ποιεῖν ἐφ᾽ ὃ φέρει τοὔνομα τούτων. ὁ δὴ λέγων εἶναι τοῦτο καὶ μὴ εἶναι, τοῦτο ὅ φησιν οὔ φησιν, ὥσθ᾽ ὃ σημαίνει τοὔνομα τοῦτ᾽ οὔ φησι σημαίνειν· τοῦτο δ᾽ ἀδύνατον. ὥστ᾽ εἴπερ σημαίνει τι τὸ εἶναι τόδε, τὴν ἀντίφασιν ἀδύνατον ἀληθεύειν. ἔτι δ᾽ εἴ [20] τι σημαίνει τοὔνομα καὶ τοῦτ᾽ ἀληθεύεται, δεῖ τοῦτ᾽ ἐξ ἀνάγκης εἶναι· τὸ δ᾽ ἐξ ἀνάγκης ὂν οὐκ ἐνδέχεταί ποτε μὴ εἶναι· τὰς ἀντικειμένας ἄρα οὐκ ἐνδέχεται φάσεις καὶ ἀποφάσεις ἀληθεύειν κατὰ τοῦ αὐτοῦ. ἔτι δ᾽ εἰ μηθὲν μᾶλλον ἡ φάσις ἢ ἡ ἀπόφασις ἀληθεύεται, ὁ λέγων ἄνθρωπον ἢ [25] οὐκ ἄνθρωπον οὐθὲν μᾶλλον ἀληθεύσει· δόξειε δὲ κἂν οὐχ ἵππον εἶναι φάσκων τὸν ἄνθρωπον ἢ μᾶλλον ἢ οὐχ ἧττον ἀληθεύειν ἢ οὐκ ἄνθρωπον, ὥστε καὶ ἵππον φάσκων εἶναι τὸν αὐτὸν ἀληθεύσει (τὰς γὰρ ἀντικειμένας ὁμοίως ἦν ἀληθεύειν)· συμβαίνει τοίνυν τὸν αὐτὸν ἄνθρωπον εἶναι καὶ ἵππον [30] ἢ τῶν ἄλλων τι ζῴων.—ἀπόδειξις μὲν οὖν οὐδεμία τούτων ἐστὶν ἁπλῶς, πρὸς μέντοι τὸν ταῦτα τιθέμενον ἀπόδειξις. ταχέως δ᾽ ἄν τις καὶ αὐτὸν τὸν Ἡράκλειτον τοῦτον ἐρωτῶν τὸν τρόπον ἠνάγκασεν ὁμολογεῖν μηδέποτε τὰς ἀντικειμένας φάσεις δυνατὸν εἶναι κατὰ τῶν αὐτῶν ἀληθεύεσθαι· νῦν δ᾽ [35] οὐ συνιεὶς ἑαυτοῦ τί ποτε λέγει, ταύτην ἔλαβε τὴν δόξαν. ὅλως δ᾽ εἰ τὸ λεγόμενον ὑπ᾽ αὐτοῦ ἐστὶν ἀληθές, οὐδ᾽ ἂν αὐτὸ τοῦτο εἴη ἀληθές, [1] λέγω δὲ τὸ ἐνδέχεσθαι τὸ αὐτὸ καθ᾽ ἕνα καὶ τὸν αὐτὸν χρόνον εἶναί τε καὶ μὴ εἶναι· καθάπερ γὰρ καὶ διῃρημένων αὐτῶν οὐδὲν μᾶλλον ἡ κατάφασις ἢ ἡ ἀπόφασις ἀληθεύεται, τὸν αὐτὸν τρόπον καὶ τοῦ συναμφοτέρου [5] καὶ τοῦ συμπεπλεγμένου καθάπερ μιᾶς τινὸς καταφάσεως οὔσης οὐθὲν μᾶλλον ἢ ἡ ἀπόφασις ἢ τὸ ὅλον ὡς ἐν καταφάσει τιθέμενον ἀληθεύσεται. ἔτι δ᾽ εἰ μηθὲν ἔστιν ἀληθῶς καταφῆσαι, κἂν αὐτὸ τοῦτο ψεῦδος εἴη τὸ φάναι μηδεμίαν ἀληθῆ κατάφασιν ὑπάρχειν. εἰ δ᾽ ἔστι τι, λύοιτ᾽ ἂν τὸ [10] λεγόμενον ὑπὸ τῶν τὰ τοιαῦτα ἐνισταμένων καὶ παντελῶς

ἀναιρούντων τὸ διαλέγεσθαι.

παραπλήσιον δὲ τοῖς εἰρημένοις ἐστὶ καὶ τὸ λεχθὲν ὑπὸ τοῦ Πρωταγόρου· καὶ γὰρ ἐκεῖνος ἔφη πάντων εἶναι χρημάτων μέτρον ἄνθρωπον, οὐδὲν ἕτερον λέγων ἢ τὸ δοκοῦν ἑκάστῳ [15] τοῦτο καὶ εἶναι παγίως· τούτου δὲ γιγνομένου τὸ αὐτὸ συμβαίνει καὶ εἶναι καὶ μὴ εἶναι, καὶ κακὸν καὶ ἀγαθὸν εἶναι, καὶ τἆλλα τὰ κατὰ τὰς ἀντικειμένας λεγόμενα φάσεις, διὰ τὸ πολλάκις τοισδὶ μὲν φαίνεσθαι τόδε εἶναι καλὸν τοισδὶ δὲ τοὐναντίον, μέτρον δ’ εἶναι τὸ φαινόμενον ἑκάστῳ. [20] λύοιτο δ’ ἂν αὕτη ἡ ἀπορία θεωρήσασι πόθεν ἐλήλυθεν ἡ ἀρχὴ [21] τῆς ὑπολήψεως ταύτης· ἔοικε γὰρ ἐνίοις μὲν ἐκ τῆς τῶν φυσιολόγων δόξης γεγενῆσθαι, τοῖς δ’ ἐκ τοῦ μὴ ταὐτὰ περὶ τῶν αὐτῶν ἅπαντας γιγνώσκειν ἀλλὰ τοῖσδε μὲν ἡδὺ τόδε φαίνεσθαι τοῖσδε δὲ τοὐναντίον. τὸ γὰρ μηδὲν ἐκ μὴ ὄντος [25] γίγνεσθαι, πᾶν δ’ ἐξ ὄντος, σχεδὸν ἁπάντων ἐστὶ κοινὸν δόγμα τῶν περὶ φύσεως· ἐπεὶ οὖν οὐ λευκὸν γίγνεται λευκοῦ τελέως ὄντος καὶ οὐδαμῇ μὴ λευκοῦ νῦν δὲ γεγενημένον μὴ λευκόν, γίγνοιτ’ ἂν ἐκ μὴ ὄντος λευκοῦ τὸ γιγνόμενον μὴ λευκόν· ὥστε ἐκ μὴ ὄντος γίγνοιτ’ ἂν κατ’ ἐκείνους, εἰ μὴ [30] ὑπῆρχε λευκὸν τὸ αὐτὸ καὶ μὴ λευκόν. οὐ χαλεπὸν δὲ διαλύειν τὴν ἀπορίαν ταύτην· εἴρηται γὰρ ἐν τοῖς φυσικοῖς πῶς ἐκ τοῦ μὴ ὄντος γίγνεται τὰ γιγνόμενα καὶ πῶς ἐξ ὄντος. τό γε μὴν ὁμοίως προσέχειν ταῖς δόξαις καὶ ταῖς φαντασίαις τῶν πρὸς αὐτοὺς διαμφισβητούντων εὔηθες· δῆλον [35] γὰρ ὅτι τοὺς ἑτέρους αὐτῶν ἀνάγκη διεψεῦσθαι. φανερὸν δὲ τοῦτ’ ἐκ τῶν γιγνομένων κατὰ τὴν αἴσθησιν· οὐδέποτε γὰρ τὸ αὐτὸ φαίνεται τοῖς μὲν γλυκὺ τοῖς δὲ τοὐναντίον, [1] μὴ διεφθαρμένων καὶ λελωβημένων τῶν ἑτέρων τὸ αἰσθητήριον καὶ κριτήριον τῶν λεχθέντων χυμῶν. τούτου δ’ ὄντος τοιούτου τοὺς ἑτέρους μὲν ὑποληπτέον μέτρον εἶναι τοὺς δ’ ἄλλους οὐχ [5] ὑποληπτέον. ὁμοίως δὲ τοῦτο λέγω καὶ ἐπὶ ἀγαθοῦ καὶ κακοῦ, καὶ καλοῦ καὶ αἰσχροῦ, καὶ τῶν ἄλλων τῶν τοιούτων. οὐδὲν γὰρ διαφέρει τοῦτ’ ἀξιοῦν ἢ τὰ φαινόμενα τοῖς ὑπὸ τὴν ὄψιν ὑποβάλλουσι τὸν δάκτυλον καὶ ποιοῦσιν ἐκ τοῦ ἑνὸς φαίνεσθαι δύο, δύο δεῖν εἶναι διὰ τὸ φαίνεσθαι τοσαῦτα, καὶ πάλιν ἕν· [10] τοῖς γὰρ μὴ κινοῦσι τὴν ὄψιν ἓν φαίνεται τὸ ἕν. ὅλως δὲ ἄτοπον ἐκ τοῦ φαίνεσθαι τὰ δεῦρο μεταβάλλοντα καὶ μηδέποτε διαμένοντα ἐν τοῖς αὐτοῖς, ἐκ τούτου περὶ τῆς ἀληθείας τὴν κρίσιν ποιεῖσθαι· δεῖ γὰρ ἐκ τῶν ἀεὶ κατὰ ταὐτὰ ἐχόντων καὶ μηδεμίαν μεταβολὴν ποιουμένων τἀληθὲς θηρεύειν, [15] τοιαῦτα δ’ ἐστὶ τὰ κατὰ τὸν κόσμον· ταῦτα γὰρ οὐχ ὁτὲ μὲν τοιαδὶ πάλιν δ’ ἀλλοῖα φαίνεται, ταὐτὰ δ’ ἀεὶ καὶ μεταβολῆς οὐδεμιᾶς κοινωνοῦντα. ἔτι δ’ εἰ κίνησις ἔστι, καὶ κινούμενόν τι, κινεῖται δὲ πᾶν ἔκ τινος καὶ εἴς τι· δεῖ ἄρα τὸ κινούμενον εἶναι ἐν ἐκείνῳ ἐξ οὗ κινήσεται καὶ οὐκ [20] εἶναι ἐν αὐτῷ, καὶ εἰς τοδὶ κινεῖσθαι καὶ γίγνεσθαι ἐν τούτῳ, τὸ δὲ κατὰ τὴν ἀντίφασιν μὴ συναληθεύεσθαι κατ’ αὐτούς. καὶ εἰ κατὰ τὸ ποσὸν συνεχῶς τὰ δεῦρο ῥεῖ καὶ κινεῖται, καί τις τοῦτο θείη καίπερ οὐκ ἀληθὲς ὄν, διὰ τί κατὰ τὸ ποιὸν οὐ μενεῖ; φαίνονται γὰρ οὐχ ἥκιστα τὰ κατὰ τὰς ἀντιφάσεις [25] ταὐτοῦ κατηγορεῖν ἐκ τοῦ τὸ ποσὸν ὑπειληφέναι μὴ μένειν ἐπὶ τῶν σωμάτων, διὸ καὶ εἶναι τετράπηχυ τὸ αὐτὸ καὶ οὐκ εἶναι. ἡ δ’ οὐσία κατὰ τὸ ποιόν, τοῦτο δὲ τῆς ὡρισμένης φύσεως, τὸ δὲ ποσὸν τῆς ἀορίστου. ἔτι διὰ τί προστάττοντος τοῦ ἰατροῦ τοδὶ τὸ σιτίον προσενέγκασθαι προσφέρονται; [30] τί γὰρ μᾶλλον τοῦτο ἄρτος ἐστὶν ἢ οὐκ ἔστιν; ὥστ’ οὐθὲν ἂν διέχοι φαγεῖν ἢ μὴ φαγεῖν· νῦν δ’ ὡς ἀληθεύοντες περὶ αὐτὸ καὶ ὄντος τοῦ προσταχθέντος σιτίου τούτου προσφέρονται τοῦτο· καίτοι γ’ οὐκ ἔδει μὴ διαμενούσης παγίως μηδεμιᾶς φύσεως ἐν τοῖς αἰσθητοῖς ἀλλ’ ἀεὶ πασῶν κινουμένων [35] καὶ ῥεουσῶν. ἔτι δ’ εἰ μὲν ἀλλοιούμεθα ἀεὶ καὶ μηδέποτε διαμένομεν οἱ αὐτοί, τί καὶ θαυμαστὸν εἰ μηδέποθ’ ἡμῖν ταὐτὰ φαίνεται καθάπερ τοῖς κάμνουσιν [1] (καὶ γὰρ τούτοις διὰ τὸ μὴ ὁμοίως διακεῖσθαι τὴν ἕξιν καὶ ὅθ’ ὑγίαινον, οὐχ ὅμοια φαίνεται τὰ κατὰ τὰς αἰσθήσεις, αὐτὰ μὲν οὐδεμιᾶς διά γε τοῦτο μεταβολῆς κοινωνοῦντα τὰ αἰσθητά, αἰσθήματα δ’ ἕτερα ποιοῦντα τοῖς κάμνουσι καὶ μὴ τὰ αὐτά· [5] τὸν αὐτὸν δὴ τρόπον ἔχειν καὶ τῆς εἰρημένης μεταβολῆς γιγνομένης ἴσως ἀναγκαῖόν ἐστιν); εἰ δὲ μὴ μεταβάλλομεν ἀλλ’ οἱ αὐτοὶ διατελοῦμεν ὄντες, εἴη ἄν τι μένον.—πρὸς μὲν οὖν

τοὺς ἐκ λόγου τὰς εἰρημένας ἀπορίας ἔχοντας οὐ ῥᾴδιον διαλῦσαι μὴ τιθέντων τι καὶ τούτου μηκέτι λόγον ἀπαιτούντων· [10] οὕτω γὰρ πᾶς λόγος καὶ πᾶσα ἀπόδειξις γίγνεται· μηθὲν γὰρ τιθέντες ἀναιροῦσι τὸ διαλέγεσθαι καὶ ὅλως λόγον,—ὥστε πρὸς μὲν τοὺς τοιούτους οὐκ ἔστι λόγος, πρὸς δὲ τοὺς διαποροῦντας ἐκ τῶν παραδεδομένων ἀποριῶν ῥᾴδιον ἀπαντᾶν καὶ διαλύειν τὰ ποιοῦντα τὴν ἀπορίαν ἐν αὐτοῖς· δῆλον δ’ ἐκ τῶν [15] εἰρημένων. ὥστε φανερὸν ἐκ τούτων. ὅτι οὐκ ἐνδέχεται τὰς ἀντικειμένας φάσεις περὶ τοῦ αὐτοῦ καθ’ ἕνα χρόνον ἀληθεύειν, οὐδὲ τὰ ἐναντία, διὰ τὸ λέγεσθαι κατὰ στέρησιν πᾶσαν ἐναντιότητα· δῆλον δὲ τοῦτ’ ἐπ’ ἀρχὴν τοὺς λόγους ἀναλύουσι τοὺς τῶν ἐναντίων. ὁμοίως δ’ οὐδὲ τῶν ἀνὰ μέσον οὐδὲν οἷόν τε [20] κατηγορεῖσθαι καθ’ ἑνὸς καὶ τοῦ αὐτοῦ· λευκοῦ γὰρ ὄντος τοῦ ὑποκειμένου λέγοντες αὐτὸ εἶναι οὔτε μέλαν οὔτε λευκὸν ψευσόμεθα· συμβαίνει γὰρ εἶναι λευκὸν αὐτὸ καὶ μὴ εἶναι· θάτερον γὰρ τῶν συμπεπλεγμένων ἀληθεύσεται κατ’ αὐτοῦ, τοῦτο δ’ ἐστὶν ἀντίφασις τοῦ λευκοῦ. οὔτε δὴ καθ’ Ἡράκλειτον [25] ἐνδέχεται λέγοντας ἀληθεύειν, οὔτε κατ’ Ἀναξαγόραν· εἰ δὲ μή, συμβήσεται τἀναντία τοῦ αὐτοῦ κατηγορεῖν· ὅταν γὰρ ἐν παντὶ φῇ παντὸς εἶναι μοῖραν, οὐδὲν μᾶλλον εἶναί φησι γλυκὺ ἢ πικρὸν ἢ τῶν λοιπῶν ὁποιανοῦν ἐναντιώσεων, εἴπερ ἐν ἅπαντι πᾶν ὑπάρχει μὴ δυνάμει μόνον ἀλλ’ ἐνεργείᾳ [30] ι ικαὶ ἀποκεκριμένον. ὁμοίως δὲ οὐδὲ πάσας ψευδεῖς οὐδ’ ἀληθεῖς τὰς φάσεις δυνατὸν εἶναι, δι’ ἄλλα τε πολλὰ τῶν συναχθέντων ἂν δυσχερῶν διὰ ταύτην τὴν θέσιν, καὶ διότι ψευδῶν μὲν οὐσῶν πασῶν οὐδ’ αὐτὸ τοῦτό τις φάσκων ἀληθεύσει, ἀληθῶν δὲ ψευδεῖς εἶναι πάσας λέγων οὐ ψεύσεται.

[35] πᾶσα δ’ ἐπιστήμη ζητεῖ τινὰς ἀρχὰς καὶ αἰτίας περὶ ἕκαστον τῶν ὑφ’ αὐτὴν ἐπιστητῶν, [1] οἷον ἰατρικὴ καὶ γυμναστικὴ καὶ τῶν λοιπῶν ἑκάστη τῶν ποιητικῶν καὶ μαθηματικῶν. ἑκάστη γὰρ τούτων περιγραψαμένη τι γένος αὑτῇ περὶ τοῦτο πραγματεύεται ὡς ὑπάρχον καὶ ὄν, οὐχ ᾗ δὲ ὄν, ἀλλ’ ἑτέρα τις αὕτη παρὰ ταύτας τὰς ἐπιστήμας ἐστὶν ἐπιστήμη. τῶν δὲ [5] λεχθεισῶν ἐπιστημῶν ἑκάστη λαβοῦσά πως τὸ τί ἐστιν ἐν ἑκάστῳ γένει πειρᾶται δεικνύναι τὰ λοιπὰ μαλακώτερον ἢ ἀκριβέστερον. λαμβάνουσι δὲ τὸ τί ἐστιν αἱ μὲν δι’ αἰσθήσεως αἱ δ’ ὑποτιθέμεναι· διὸ καὶ δῆλον ἐκ τῆς τοιαύτης ἐπαγωγῆς ὅτι τῆς οὐσίας καὶ τοῦ τί ἐστιν οὐκ ἔστιν ἀπόδειξις. [10] ἐπεὶ δ’ ἔστι τις ἡ περὶ φύσεως ἐπιστήμη, δῆλον ὅτι καὶ πρακτικῆς ἑτέρα καὶ ποιητικῆς ἔσται. ποιητικῆς μὲν γὰρ ἐν τῷ ποιοῦντι καὶ οὐ τῷ ποιουμένῳ τῆς κινήσεως ἡ ἀρχή, καὶ τοῦτ’ ἔστιν εἴτε τέχνη τις εἴτ’ ἄλλη τις δύναμις· ὁμοίως δὲ καὶ τῆς πρακτικῆς οὐκ ἐν τῷ πρακτῷ μᾶλλον δ’ ἐν τοῖς [15] πράττουσιν ἡ κίνησις. ἡ δὲ τοῦ φυσικοῦ περὶ τὰ ἔχοντ’ ἐν ἑαυτοῖς κινήσεως ἀρχήν ἐστιν. ὅτι μὲν τοίνυν οὔτε πρακτικὴν οὔτε ποιητικὴν ἀλλὰ θεωρητικὴν ἀναγκαῖον εἶναι τὴν φυσικὴν ἐπιστήμην, δῆλον ἐκ τούτων (εἰς ἓν γάρ τι τούτων τῶν γενῶν ἀνάγκη πίπτειν)· ἐπεὶ δὲ τὸ τί ἐστιν ἀναγκαῖον [20] ἑκάστῃ πως τῶν ἐπιστημῶν εἰδέναι καὶ τούτῳ χρῆσθαι ἀρχῇ, δεῖ μὴ λανθάνειν πῶς ὁριστέον τῷ φυσικῷ καὶ πῶς ὁ τῆς οὐσίας λόγος ληπτέος, πότερον ὡς τὸ σιμὸν ἢ μᾶλλον ὡς τὸ κοῖλον. τούτων γὰρ ὁ μὲν τοῦ σιμοῦ λόγος μετὰ τῆς ὕλης λέγεται τῆς τοῦ πράγματος, ὁ δὲ τοῦ κοίλου χωρὶς τῆς ὕλης· [25] ἡ γὰρ σιμότης ἐν ῥινὶ γίγνεται, διὸ καὶ ὁ λόγος αὐτῆς μετὰ ταύτης θεωρεῖται· τὸ σιμὸν γάρ ἐστι ῥὶς κοίλη. φανερὸν οὖν ὅτι καὶ σαρκὸς καὶ ὀφθαλμοῦ καὶ τῶν λοιπῶν μορίων μετὰ τῆς ὕλης ἀεὶ τὸν λόγον ἀποδοτέον. ἐπεὶ δ’ ἔστι τις ἐπιστήμη τοῦ ὄντος ᾗ ὂν καὶ χωριστόν, σκεπτέον πότερόν ποτε τῇ φυσικῇ [30] ι ιτὴν αὐτὴν θετέον εἶναι ταύτην ἢ μᾶλλον ἑτέραν. ἡ μὲν οὖν φυσικὴ περὶ τὰ κινήσεως ἔχοντ’ ἀρχὴν ἐν αὐτοῖς ἐστίν, ἡ δὲ μαθηματικὴ θεωρητικὴ μὲν καὶ περὶ μένοντά τις αὕτη, ἀλλ’ οὐ χωριστά. περὶ τὸ χωριστὸν ἄρα ὂν καὶ ἀκίνητον ἑτέρα τούτων ἀμφοτέρων τῶν ἐπιστημῶν ἔστι τις, εἴπερ [35] ὑπάρχει τις οὐσία τοιαύτη, λέγω δὲ χωριστὴ καὶ ἀκίνητος, ὅπερ πειρασόμεθα δεικνύναι. καὶ εἴπερ ἔστι τις τοιαύτη φύσις ἐν τοῖς οὖσιν, ἐνταῦθ’ ἂν εἴη που καὶ τὸ θεῖον, καὶ αὕτη ἂν εἴη πρώτη καὶ κυριωτάτη ἀρχή. [1] δῆλον τοίνυν ὅτι τρία γένη τῶν θεωρητικῶν ἐπιστημῶν ἔστι, φυσική, μαθηματική, θεολογική. βέλτιστον μὲν οὖν τὸ τῶν θεωρητικῶν γένος, τούτων δ’ αὐτῶν

ἡ τελευταία λεχθεῖσα· περὶ τὸ τιμιώτατον [5] γάρ ἐστι τῶν ὄντων, βελτίων δὲ καὶ χείρων ἑκάστη λέγεται κατὰ τὸ οἰκεῖον ἐπιστητόν. ἀπορήσειε δ’ ἄν τις πότερόν ποτε τὴν τοῦ ὄντος ᾗ ὂν ἐπιστήμην καθόλου δεῖ θεῖναι ἢ οὔ. τῶν μὲν γὰρ μαθηματικῶν ἑκάστη περὶ ἕν τι γένος ἀφωρισμένον ἐστίν, ἡ δὲ καθόλου κοινὴ περὶ πάντων. εἰ μὲν οὖν [10] αἱ φυσικαὶ οὐσίαι πρῶται τῶν ὄντων εἰσί, κἂν ἡ φυσικὴ πρώτη τῶν ἐπιστημῶν εἴη· εἰ δ’ ἔστιν ἑτέρα φύσις καὶ οὐσία χωριστὴ καὶ ἀκίνητος, ἑτέραν ἀνάγκη καὶ τὴν ἐπιστήμην αὐτῆς εἶναι καὶ προτέραν τῆς φυσικῆς καὶ καθόλου τῷ προτέραν.

[15] ἐπεὶ δὲ τὸ ἁπλῶς ὂν κατὰ πλείους λέγεται τρόπους, ὧν εἷς ἐστὶν ὁ κατὰ συμβεβηκὸς εἶναι λεγόμενος, σκεπτέον πρῶτον περὶ τοῦ οὕτως ὄντος. ὅτι μὲν οὖν οὐδεμία τῶν παραδεδομένων ἐπιστημῶν πραγματεύεται περὶ τὸ συμβεβηκός, δῆλον (οὔτε γὰρ οἰκοδομικὴ σκοπεῖ τὸ συμβησόμενον τοῖς τῇ [20] οἰκίᾳ χρησομένοις, οἷον εἰ λυπηρῶς ἢ τοὐναντίον οἰκήσουσιν, οὔθ’ ὑφαντικὴ οὔτε σκυτοτομικὴ οὔτε ὀψοποιική, τὸ δὲ καθ’ αὑτὴν ἴδιον ἑκάστη τούτων σκοπεῖ τῶν ἐπιστημῶν μόνον, τοῦτο δ’ ἐστὶ τὸ οἰκεῖον τέλος· οὐδὲ μουσικὸν καὶ γραμματικόν, οὐδὲ τὸν ὄντα μουσικὸν ὅτι γενόμενος γραμματικὸς ἅμα ἔσται τὰ [25] ἀμφότερα, πρότερον οὐκ ὤν, ὃ δὲ μὴ ἀεὶ ὂν ἔστιν, ἐγένετο τοῦτο, ὥσθ’ ἅμα μουσικὸς ἐγένετο καὶ γραμματικός,—τοῦτο δὲ οὐδεμία ζητεῖ τῶν ὁμολογουμένως οὐσῶν ἐπιστημῶν πλὴν ἡ σοφιστική· περὶ τὸ συμβεβηκὸς γὰρ αὕτη μόνη πραγματεύεται, διὸ Πλάτων οὐ κακῶς εἴρηκε φήσας τὸν σοφιστὴν [30] περὶ τὸ μὴ ὂν διατρίβειν)· ὅτι δ’ οὐδ’ ἐνδεχόμενόν ἐστιν εἶναι τοῦ συμβεβηκότος ἐπιστήμην, φανερὸν ἔσται πειραθεῖσιν ἰδεῖν τί ποτ’ ἐστὶ τὸ συμβεβηκός. πᾶν δή φαμεν εἶναι τὸ μὲν ἀεὶ καὶ ἐξ ἀνάγκης (ἀνάγκης δ’ οὐ τῆς κατὰ τὸ βίαιον λεγομένης ἀλλ’ ᾗ χρώμεθα ἐν τοῖς κατὰ τὰς ἀποδείξεις), [35] τὸ δ’ ὡς ἐπὶ τὸ πολύ, τὸ δ’ οὔθ’ ὡς ἐπὶ τὸ πολὺ οὔτ’ ἀεὶ καὶ ἐξ ἀνάγκης ἀλλ’ ὅπως ἔτυχεν· οἷον ἐπὶ κυνὶ γένοιτ’ ἂν ψῦχος, ἀλλὰ τοῦτ’ οὔτ’ ὡς ἀεὶ καὶ ἐξ ἀνάγκης οὔθ’ ὡς ἐπὶ τὸ πολὺ γίγνεται, συμβαίη δέ ποτ’ ἄν. [1] ἔστι δὴ τὸ συμβεβηκὸς ὃ γίγνεται μέν, οὐκ ἀεὶ δ’ οὐδ’ ἐξ ἀνάγκης οὐδ’ ὡς ἐπὶ τὸ πολύ. τί μὲν οὖν ἐστὶ τὸ συμβεβηκός, εἴρηται, διότι δ’ οὐκ ἔστιν ἐπιστήμη τοῦ τοιούτου, δῆλον· ἐπιστήμη μὲν γὰρ πᾶσα τοῦ [5] ἀεὶ ὄντος ἢ ὡς ἐπὶ τὸ πολύ, τὸ δὲ συμβεβηκὸς ἐν οὐδετέρῳ τούτων ἐστίν. ὅτι δὲ τοῦ κατὰ συμβεβηκὸς ὄντος οὐκ εἰσὶν αἰτίαι καὶ ἀρχαὶ τοιαῦται οἷαίπερ τοῦ καθ’ αὑτὸ ὄντος, δῆλον· ἔσται γὰρ ἅπαντ’ ἐξ ἀνάγκης. εἰ γὰρ τόδε μὲν ἔστι τοῦδε ὄντος τόδε δὲ τοῦδε, τοῦτο δὲ μὴ ὅπως ἔτυχεν ἀλλ’ ἐξ [10] ἀνάγκης, ἐξ ἀνάγκης ἔσται καὶ οὗ τοῦτ’ ἦν αἴτιον ἕως τοῦ τελευταίου λεγομένου αἰτιατοῦ (τοῦτο δ’ ἦν κατὰ συμβεβηκός), ὥστ’ ἐξ ἀνάγκης ἅπαντ’ ἔσται, καὶ τὸ ὁποτέρως ἔτυχε καὶ τὸ ἐνδέχεσθαι καὶ γενέσθαι καὶ μὴ παντελῶς ἐκ τῶν γιγνομένων ἀναιρεῖται. κἂν μὴ ὂν δὲ ἀλλὰ γιγνόμενον τὸ [15] αἴτιον ὑποτεθῇ, ταὐτὰ συμβήσεται· πᾶν γὰρ ἐξ ἀνάγκης γενήσεται. ἡ γὰρ αὔριον ἔκλειψις γενήσεται ἂν τόδε γένηται, τοῦτο δ’ ἐὰν ἕτερόν τι, καὶ τοῦτ’ ἂν ἄλλο· καὶ τοῦτον δὴ τὸν τρόπον ἀπὸ πεπερασμένου χρόνου τοῦ ἀπὸ τοῦ νῦν μέχρι αὔριον ἀφαιρουμένου χρόνου ἥξει ποτὲ εἰς τὸ ὑπάρχον, ὥστ’ [20] ἐπεὶ τοῦτ’ ἔστιν, ἅπαντ’ ἐξ ἀνάγκης τὰ μετὰ τοῦτο γενήσεται, ὥστε πάντα ἐξ ἀνάγκης γίγνεσθαι. τὸ δ’ ὡς ἀληθὲς ὂν καὶ κατὰ συμβεβηκὸς τὸ μέν ἐστιν ἐν συμπλοκῇ διανοίας καὶ πάθος ἐν ταύτῃ (διὸ περὶ μὲν τὸ οὕτως ὂν οὐ ζητοῦνται αἱ ἀρχαί, περὶ δὲ τὸ ἔξω ὂν καὶ χωριστόν)· τὸ δ’ οὐκ [25] ἀναγκαῖον ἀλλ’ ἀόριστον, λέγω δὲ τὸ κατὰ συμβεβηκός· τοῦ τοιούτου δ’ ἄτακτα καὶ ἄπειρα τὰ αἴτια.—τὸ δὲ ἕνεκά του ἐν τοῖς φύσει γιγνομένοις ἢ ἀπὸ διανοίας ἐστίν, τύχη δέ ἐστιν ὅταν τι τούτων γένηται κατὰ συμβεβηκός· ὥσπερ γὰρ καὶ ὄν ἐστι τὸ μὲν καθ’ αὑτὸ τὸ δὲ κατὰ συμβεβηκός, οὕτω [30] καὶ αἴτιον. ἡ τύχη δ’ αἰτία κατὰ συμβεβηκὸς ἐν τοῖς κατὰ προαίρεσιν τῶν ἕνεκά του γιγνομένοις, διὸ περὶ ταὐτὰ τύχη καὶ διάνοια· προαίρεσις γὰρ οὐ χωρὶς διανοίας. τὰ δ’ αἴτια ἀόριστα ἀφ’ ὧν ἂν γένοιτο τὰ ἀπὸ τύχης, διὸ ἄδηλος ἀνθρωπίνῳ λογισμῷ καὶ αἴτιον κατὰ συμβεβηκός, ἁπλῶς δ’ [35] οὐδενός. ἀγαθὴ δὲ τύχη καὶ κακὴ ὅταν ἀγαθὸν ἢ φαῦλον ἀποβῇ· εὐτυχία δὲ καὶ δυστυχία περὶ μέγεθος τούτων. [1] ἐπεὶ δ’ οὐθὲν κατὰ συμβεβηκὸς

πρότερον τῶν καθ’ αὐτό, οὐδ’ ἄρ’ αἴτια· εἰ ἄρα τύχη ἢ τὸ αὐτόματον αἴτιον τοῦ οὐρανοῦ, πρότερον νοῦς αἴτιος καὶ φύσις.

[5] ἔστι δὲ τὸ μὲν ἐνεργείᾳ μόνον τὸ δὲ δυνάμει τὸ δὲ δυνάμει καὶ ἐνεργείᾳ, τὸ μὲν ὂν τὸ δὲ ποσὸν τὸ δὲ τῶν λοιπῶν. οὐκ ἔστι δέ τις κίνησις παρὰ τὰ πράγματα· μεταβάλλει γὰρ ἀεὶ κατὰ τὰς τοῦ ὄντος κατηγορίας, κοινὸν δ’ ἐπὶ τούτων οὐδέν ἐστιν ὃ οὐδ’ ἐν μιᾷ κατηγορίᾳ. ἕκαστον δὲ διχῶς [10] ὑπάρχει πᾶσιν (οἷον τὸ τόδε—τὸ μὲν γὰρ μορφὴ αὐτοῦ τὸ δὲ στέρησις—καὶ κατὰ τὸ ποιὸν τὸ μὲν λευκὸν τὸ δὲ μέλαν, καὶ κατὰ τὸ ποσὸν τὸ μὲν τέλειον τὸ δὲ ἀτελές, καὶ κατὰ φορὰν τὸ μὲν ἄνω τὸ δὲ κάτω, ἢ κοῦφον καὶ βαρύ)· ὥστε κινήσεως καὶ μεταβολῆς τοσαῦτ’ εἴδη ὅσα τοῦ ὄντος. διῃρημένου [15] δὲ καθ’ ἕκαστον γένος τοῦ μὲν δυνάμει τοῦ δ’ ἐντελεχείᾳ, τὴν τοῦ δυνάμει ᾗ τοιοῦτόν ἐστιν ἐνέργειαν λέγω κίνησιν. ὅτι δ’ ἀληθῆ λέγομεν, ἐνθένδε δῆλον· ὅταν γὰρ τὸ οἰκοδομητόν, ᾗ τοιοῦτον αὐτὸ λέγομεν εἶναι, ἐνεργείᾳ ᾖ, οἰκοδομεῖται, καὶ ἔστι τοῦτο οἰκοδόμησις· ὁμοίως μάθησις, ἰάτρευσις, βάδισις, [20] ἅλσις, γήρανσις, ἅδρυνσις. συμβαίνει δὲ κινεῖσθαι ὅταν ἡ ἐντελέχεια ᾖ αὐτή, καὶ οὔτε πρότερον οὔθ’ ὕστερον. ἡ δὴ τοῦ δυνάμει ὄντος, ὅταν ἐντελεχείᾳ ὂν ἐνεργῇ, οὐχ ᾗ αὐτὸ ἀλλ’ ᾗ κινητόν, κίνησίς ἐστιν. λέγω δὲ τὸ ᾗ ὧδε. ἔστι γὰρ ὁ χαλκὸς δυνάμει ἀνδριάς· ἀλλ’ ὅμως οὐχ ἡ τοῦ [25] χαλκοῦ ἐντελέχεια, ᾗ χαλκός, κίνησίς ἐστιν. οὐ γὰρ ταὐτὸν χαλκῷ εἶναι καὶ δυνάμει τινί, ἐπεὶ εἰ ταὐτὸν ἦν ἁπλῶς κατὰ τὸν λόγον, ἦν ἂν ἡ τοῦ χαλκοῦ ἐντελέχεια κίνησίς τις. οὐκ ἔστι δὲ ταὐτό (δῆλον δ’ ἐπὶ τῶν ἐναντίων· τὸ μὲν γὰρ δύνασθαι ὑγιαίνειν καὶ δύνασθαι κάμνειν οὐ ταὐτόν—καὶ γὰρ [30] ἂν τὸ ὑγιαίνειν καὶ τὸ κάμνειν ταὐτὸν ἦν—τὸ δ’ ὑποκείμενον καὶ ὑγιαῖνον καὶ νοσοῦν, εἴθ’ ὑγρότης εἴθ’ αἷμα, ταὐτὸ καὶ ἕν). ἐπεὶ δὲ οὐ τὸ αὐτό, ὥσπερ οὐδὲ χρῶμα ταὐτὸν καὶ ὁρατόν, ἡ τοῦ δυνατοῦ καὶ ᾗ δυνατὸν ἐντελέχεια κίνησίς ἐστιν. [34] ὅτι μὲν οὖν ἐστιν αὕτη, καὶ ὅτι συμβαίνει τότε κινεῖσθαι ὅταν [35] ἡ ἐντελέχεια ᾗ αὐτή, καὶ οὔτε πρότερον οὔθ’ ὕστερον, δῆλον (ἐνδέχεται γὰρ ἕκαστον ὁτὲ μὲν ἐνεργεῖν ὁτὲ δὲ μή, [1] οἷον τὸ οἰκοδομητὸν ᾗ οἰκοδομητόν, καὶ ἡ τοῦ οἰκοδομητοῦ ἐνέργεια ᾗ οἰκοδομητὸν οἰκοδόμησίς ἐστιν· ἢ γὰρ τοῦτό ἐστιν, ἡ οἰκοδόμησις, ἡ ἐνέργεια, ἢ οἰκία· ἀλλ’ ὅταν οἰκία ᾖ, οὐκέτι οἰκοδομητόν, [5] οἰκοδομεῖται δὲ τὸ οἰκοδομητόν· ἀνάγκη ἄρα οἰκοδόμησιν τὴν ἐνέργειαν εἶναι, ἡ δ’ οἰκοδόμησις κίνησίς τις, ὁ δ’ αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων κινήσεων)· ὅτι δὲ καλῶς εἴρηται, δῆλον ἐξ ὧν οἱ ἄλλοι λέγουσι περὶ αὐτῆς, καὶ ἐκ τοῦ μὴ ῥᾴδιον εἶναι διορίσαι ἄλλως αὐτήν. οὔτε γὰρ ἐν ἄλλῳ [10] τις γένει δύναιτ’ ἂν θεῖναι αὐτήν· δῆλον δ’ ἐξ ὧν λέγουσιν· οἱ μὲν γὰρ ἑτερότητα καὶ ἀνισότητα καὶ τὸ μὴ ὄν, ὧν οὐδὲν ἀνάγκη κινεῖσθαι, ἀλλ’ οὐδ’ ἡ μεταβολὴ οὔτ’ εἰς ταῦτα οὔτ’ ἐκ τούτων μᾶλλον ἢ τῶν ἀντικειμένων. αἴτιον δὲ τοῦ εἰς ταῦτα τιθέναι ὅτι ἀόριστόν τι δοκεῖ εἶναι ἡ κίνησις, τῆς [15] δ’ ἑτέρας συστοιχίας αἱ ἀρχαὶ διὰ τὸ στερητικαὶ εἶναι ἀόριστοι· οὔτε γὰρ τόδε οὔτε τοιόνδε οὐδεμία αὐτῶν οὔτε τῶν λοιπῶν κατηγοριῶν. τοῦ δὲ δοκεῖν ἀόριστον εἶναι τὴν κίνησιν αἴτιον ὅτι οὔτ’ εἰς δύναμιν τῶν ὄντων οὔτ’ εἰς ἐνέργειαν ἔστι θεῖναι αὐτήν· οὔτε γὰρ τὸ δυνατὸν ποσὸν εἶναι κινεῖται ἐξ [20] ἀνάγκης, οὔτε τὸ ἐνεργείᾳ ποσόν, ἥ τε κίνησις ἐνέργεια μὲν εἶναι δοκεῖ τις, ἀτελὴς δέ· αἴτιον δ’ ὅτι ἀτελὲς τὸ δυνατὸν οὗ ἐστὶν ἐνέργεια. καὶ διὰ τοῦτο χαλεπὸν αὐτὴν λαβεῖν τί ἐστιν· ἢ γὰρ εἰς στέρησιν ἀνάγκη θεῖναι ἢ εἰς δύναμιν ἢ εἰς ἐνέργειαν ἁπλῆν, τούτων δ’ οὐδὲν φαίνεται ἐνδεχόμενον, ὥστε [25] λείπεται τὸ λεχθὲν εἶναι, καὶ ἐνέργειαν καὶ μὴ ἐνέργειαν τὴν εἰρημένην, ἰδεῖν μὲν χαλεπὴν ἐνδεχομένην δ’ εἶναι. καὶ ὅτι ἐστὶν ἡ κίνησις ἐν τῷ κινητῷ, δῆλον· ἐντελέχεια γάρ ἐστι τούτου ὑπὸ τοῦ κινητικοῦ. καὶ ἡ τοῦ κινητικοῦ ἐνέργεια οὐκ ἄλλη ἐστίν. δεῖ μὲν γὰρ εἶναι ἐντελέχειαν ἀμφοῖν· κινητικὸν [30] μὲν γάρ ἐστι τῷ δύνασθαι, κινοῦν δὲ τῷ ἐνεργεῖν, ἀλλ’ ἔστιν ἐνεργητικὸν τοῦ κινητοῦ, ὥσθ’ ὁμοίως μία ἡ ἀμφοῖν ἐνέργεια ὥσπερ τὸ αὐτὸ διάστημα ἓν πρὸς δύο καὶ δύο πρὸς ἕν, καὶ τὸ ἄναντες καὶ τὸ κάταντες, ἀλλὰ τὸ εἶναι οὐχ ἕν· ὁμοίως δὲ καὶ ἐπὶ τοῦ κινοῦντος καὶ κινουμένου.

[35] τὸ δ’ ἄπειρον ἢ τὸ ἀδύνατον διελθεῖν τῷ μὴ πεφυκέναι διιέναι, καθάπερ ἡ φωνὴ ἀόρατος, ἢ τὸ διέξοδον ἔχον ἀτελεύτητον, ἢ ὃ μόλις, ἢ ὃ πεφυκὸς ἔχειν μὴ ἔχει διέξοδον ἢ πέρας· ἔτι

προσθέσει ἢ ἀφαιρέσει ἢ ἄμφω. [1] χωριστὸν μὲν δὴ αὐτό τι ὂν οὐχ οἷόν τ’ εἶναι· εἰ γὰρ μήτε μέγεθος μήτε πλῆθος, οὐσία δ’ αὐτὸ τὸ ἄπειρον καὶ μὴ συμβεβηκός, ἀδιαίρετον ἔσται (τὸ γὰρ διαιρετὸν ἢ μέγεθος ἢ πλῆθος), εἰ [5] δὲ ἀδιαίρετον, οὐκ ἄπειρον, εἰ μὴ καθάπερ ἡ φωνὴ ἀόρατος· ἀλλ’ οὐχ οὕτω λέγουσιν οὐδ’ ἡμεῖς ζητοῦμεν, ἀλλ’ ὡς ἀδιέξοδον. ἔτι πῶς ἐνδέχεται καθ’ αὑτὸ εἶναι ἄπειρον, εἰ μὴ καὶ ἀριθμὸς καὶ μέγεθος, ὧν πάθος τὸ ἄπειρον; ἔτι εἰ κατὰ συμβεβηκός, οὐκ ἂν εἴη στοιχεῖον τῶν ὄντων [10] ᾗ ἄπειρον, ὥσπερ οὐδὲ τὸ ἀόρατον τῆς διαλέκτου, καίτοι ἡ φωνὴ ἀόρατος. καὶ ὅτι οὐκ ἔστιν ἐνεργείᾳ εἶναι τὸ ἄπειρον, δῆλον. ἔσται γὰρ ὁτιοῦν αὐτοῦ ἄπειρον μέρος τὸ λαμβανόμενον (τὸ γὰρ ἀπείρῳ εἶναι καὶ ἄπειρον τὸ αὐτό, εἴπερ οὐσία τὸ ἄπειρον καὶ μὴ καθ’ ὑποκειμένου), ὥστε ἢ ἀδιαίρετον, ἢ εἰς [15] ἄπειρα διαιρετόν, εἰ μεριστόν· πολλὰ δ’ εἶναι τὸ αὐτὸ ἀδύνατον ἄπειρα (ὥσπερ γὰρ ἀέρος ἀὴρ μέρος, οὕτως ἄπειρον ἀπείρου, εἰ ἔστιν οὐσία καὶ ἀρχή)· ἀμέριστον ἄρα καὶ ἀδιαίρετον. ἀλλὰ ἀδύνατον τὸ ἐντελεχείᾳ ὂν ἄπειρον (ποσὸν γὰρ εἶναι ἀνάγκη)· κατὰ συμβεβηκὸς ἄρα ὑπάρχει. ἀλλ’ εἰ [20] οὕτως, εἴρηται ὅτι οὐκ ἐνδέχεται εἶναι ἀρχήν, ἀλλ’ ἐκεῖνο ᾧ συμβέβηκε, τὸν ἀέρα ἢ τὸ ἄρτιον.—αὕτη μὲν οὖν ἡ ζήτησις καθόλου, ὅτι δ’ ἐν τοῖς αἰσθητοῖς οὐκ ἔστιν, ἐνθένδε δῆλον· εἰ γὰρ σώματος λόγος τὸ ἐπιπέδοις ὡρισμένον, οὐκ εἴη ἂν ἄπειρον σῶμα οὔτ’ αἰσθητὸν οὔτε νοητόν, οὐδ’ ἀριθμὸς ὡς [25] κεχωρισμένος καὶ ἄπειρος· ἀριθμητὸν γὰρ ὁ ἀριθμὸς ἢ τὸ ἔχον ἀριθμόν. φυσικῶς δὲ ἐκ τῶνδε δῆλον· οὔτε γὰρ σύνθετον οἷόν τ’ εἶναι οὔθ’ ἁπλοῦν. σύνθετον μὲν γὰρ οὐκ ἔσται σῶμα, εἰ πεπέρανται τῷ πλήθει τὰ στοιχεῖα (δεῖ γὰρ ἰσάζειν τὰ ἐναντία καὶ μὴ εἶναι ἓν αὐτῶν ἄπειρον· εἰ γὰρ ὁτῳοῦν [30] λείπεται ἡ θατέρου σώματος δύναμις, φθαρήσεται ὑπὸ τοῦ ἀπείρου τὸ πεπερασμένον· ἕκαστον δ’ ἄπειρον εἶναι ἀδύνατον, σῶμα γάρ ἐστι τὸ πάντῃ ἔχον διάστασιν, ἄπειρον δὲ τὸ ἀπεράντως διεστηκός, ὥστ’ εἰ τὸ ἄπειρον σῶμα, πάντῃ ἔσται ἄπειρον)· οὐδὲ ἓν δὲ καὶ ἁπλοῦν ἐνδέχεται τὸ ἄπειρον εἶναι [35] σῶμα, οὔθ’ ὡς λέγουσί τινες, παρὰ τὰ στοιχεῖα ἐξ οὗ γεννῶσι ταῦτα (οὐκ ἔστι γὰρ τοιοῦτο σῶμα παρὰ τὰ στοιχεῖα· ἅπαν γάρ, ἐξ οὗ ἐστί, καὶ διαλύεται εἰς τοῦτο, οὐ φαίνεται δὲ τοῦτο παρὰ τὰ ἁπλᾶ σώματα), [1] οὐδὲ πῦρ οὐδ’ ἄλλο τῶν στοιχείων οὐθέν· χωρὶς γὰρ τοῦ ἄπειρον εἶναί τι αὐτῶν, ἀδύνατον τὸ ἅπαν, κἂν ᾖ πεπερασμένον, ἢ εἶναι ἢ γίγνεσθαι ἕν τι αὐτῶν, ὥσπερ Ἡράκλειτός φησιν ἅπαντα γίγνεσθαί ποτε [5] πῦρ. ὁ δ’ αὐτὸς λόγος καὶ ἐπὶ τοῦ ἑνὸς ὃ ποιοῦσι παρὰ τὰ στοιχεῖα οἱ φυσικοί· πᾶν γὰρ μεταβάλλει ἐξ ἐναντίου, οἷον ἐκ θερμοῦ εἰς ψυχρόν.—ἔτι τὸ αἰσθητὸν σῶμα πού, καὶ ὁ αὐτὸς τόπος ὅλου καὶ μορίου, οἷον τῆς γῆς, ὥστ’ εἰ μὲν ὁμοειδές, ἀκίνητον ἔσται ἢ ἀεὶ οἰσθήσεται, τοῦτο δὲ [10] ἀδύνατον (τί γὰρ μᾶλλον κάτω ἢ ἄνω ἢ ὁπουοῦν; οἷον εἰ βῶλος εἴη, ποῦ αὕτη κινήσεται ἢ μενεῖ; ὁ γὰρ τόπος τοῦ συγγενοῦς αὐτῇ σώματος ἄπειρος· καθέξει οὖν τὸν ὅλον τόπον; καὶ πῶς; τίς οὖν ἡ μονὴ καὶ ἡ κίνησις; ἢ πανταχοῦ μενεῖ—οὐ κινηθήσεται ἄρα, ἢ πανταχοῦ κινηθήσεται [15] —οὐκ ἄρα στήσεται)· εἰ δ’ ἀνόμοιον τὸ πᾶν, ἀνόμοιοι καὶ οἱ τόποι, καὶ πρῶτον μὲν οὐχ ἓν τὸ σῶμα τοῦ παντὸς ἀλλ’ ἢ τῷ ἅπτεσθαι, εἶτα ἢ πεπερασμένα ταῦτ’ ἔσται ἢ ἄπειρα εἴδει. πεπερασμένα μὲν οὖν οὐχ οἷόν τε (ἔσται γὰρ τὰ μὲν ἄπειρα τὰ δ’ οὔ, εἰ τὸ πᾶν ἄπειρον, οἷον πῦρ ἢ ὕδωρ· [20] φθορὰ δὲ τὸ τοιοῦτον τοῖς ἐναντίοις)· εἰ δ’ ἄπειρα καὶ ἁπλᾶ, καὶ οἱ τόποι ἄπειροι καὶ ἔσται ἄπειρα στοιχεῖα· εἰ δὲ τοῦτ’ ἀδύνατον καὶ οἱ τόποι πεπερασμένοι, καὶ τὸ πᾶν ἀνάγκη πεπεράνθαι. ὅλως δ’ ἀδύνατον ἄπειρον εἶναι σῶμα καὶ τόπον τοῖς σώμασιν, εἰ πᾶν σῶμα αἰσθητὸν ἢ βάρος ἔχει [25] ἢ κουφότητα· ἢ γὰρ ἐπὶ τὸ μέσον ἢ ἄνω οἰσθήσεται, ἀδύνατον δὲ τὸ ἄπειρον ἢ πᾶν ἢ τὸ ἥμισυ ὁποτερονοῦν πεπονθέναι· πῶς γὰρ διελεῖς; ἢ πῶς τοῦ ἀπείρου ἔσται τὸ μὲν κάτω τὸ δ’ ἄνω, ἢ ἔσχατον καὶ μέσον; ἔτι πᾶν σῶμα αἰσθητὸν ἐν τόπῳ, τόπου δὲ εἴδη ἕξ, ἀδύνατον δ’ ἐν τῷ [30] ἀπείρῳ σώματι ταῦτ’ εἶναι. ὅλως δ’ εἰ ἀδύνατον τόπον ἄπειρον εἶναι, καὶ σῶμα ἀδύνατον· τὸ γὰρ ἐν τόπῳ πού, τοῦτο δὲ σημαίνει ἢ ἄνω ἢ κάτω ἢ τῶν λοιπῶν τι, τούτων δ’ ἕκαστον πέρας τι. τὸ δ’ ἄπειρον οὐ ταὐτὸν ἐν μεγέθει καὶ κινήσει καὶ χρόνῳ ὡς μία τις φύσις, ἀλλὰ τὸ ὕστερον [35] λέγεται κατὰ τὸ πρότερον, οἷον κίνησις κατὰ τὸ μέγεθος

ἐφ’ οὗ κινεῖται ἢ ἀλλοιοῦται ἢ αὔξεται, χρόνος δὲ διὰ τὴν κίνησιν.

[1] μεταβάλλει δὲ τὸ μεταβάλλον τὸ μὲν κατὰ συμβεβηκός, [2] ὡς τὸ μουσικὸν βαδίζει, τὸ δὲ τῷ τούτου τι μεταβάλλειν ἁπλῶς λέγεται μεταβάλλειν, οἷον ὅσα κατὰ μέρη (ὑγιάζεται γὰρ τὸ σῶμα, ὅτι ὁ ὀφθαλμός), ἔστι δέ [5] τι ὃ καθ’ αὑτὸ πρῶτον κινεῖται, καὶ τοῦτ’ ἔστι τὸ καθ’ αὑτὸ κινητόν. ἔστι δέ τι καὶ ἐπὶ τοῦ κινοῦντος ὡσαύτως· κινεῖ γὰρ κατὰ συμβεβηκὸς τὸ δὲ κατὰ μέρος τὸ δὲ καθ’ αὑτό· ἔστι δέ τι τὸ κινοῦν πρῶτον· ἔστι δέ τι τὸ κινούμενον, ἔτι ἐν ᾧ χρόνῳ καὶ ἐξ οὗ καὶ εἰς ὅ. τὰ δ’ εἴδη καὶ τὰ πάθη καὶ [10] ὁ τόπος, εἰς ἃ κινοῦνται τὰ κινούμενα, ἀκίνητά ἐστιν, οἷον ἐπιστήμη καὶ θερμότης· ἔστι δ’ οὐχ ἡ θερμότης κίνησις ἀλλ’ ἡ θέρμανσις. ἡ δὲ μὴ κατὰ συμβεβηκὸς μεταβολὴ οὐκ ἐν ἅπασιν ὑπάρχει ἀλλ’ ἐν τοῖς ἐναντίοις καὶ μεταξὺ καὶ ἐν ἀντιφάσει· τούτου δὲ πίστις ἐκ τῆς ἐπαγωγῆς. μεταβάλλει [15] δὲ τὸ μεταβάλλον ἢ ἐξ ὑποκειμένου εἰς ὑποκείμενον, ἢ οὐκ ἐξ ὑποκειμένου εἰς οὐχ ὑποκείμενον, ἢ ἐξ ὑποκειμένου εἰς οὐχ ὑποκείμενον, ἢ οὐκ ἐξ ὑποκειμένου εἰς ὑποκείμενον (λέγω δὲ ὑποκείμενον τὸ καταφάσει δηλούμενον), ὥστ’ ἀνάγκη τρεῖς εἶναι μεταβολάς· ἡ γὰρ ἐξ οὐχ ὑποκειμένου [20] εἰς μὴ ὑποκείμενον οὐκ ἔστι μεταβολή· οὔτε γὰρ ἐναντία οὔτε ἀντίφασίς ἐστιν, ὅτι οὐκ ἀντίθεσις. ἡ μὲν οὖν οὐκ ἐξ ὑποκειμένου εἰς ὑποκείμενον κατ’ ἀντίφασιν γένεσίς ἐστιν, ἡ μὲν ἁπλῶς ἁπλῆ, ἡ δὲ τινὸς τίς· ἡ δ’ ἐξ ὑποκειμένου εἰς μὴ ὑποκείμενον φθορά, ἡ μὲν ἁπλῶς ἁπλῆ, ἡ δὲ τινὸς [25] τίς. εἰ δὴ τὸ μὴ ὂν λέγεται πλεοναχῶς, καὶ μήτε τὸ κατὰ σύνθεσιν ἢ διαίρεσιν ἐνδέχεται κινεῖσθαι μήτε τὸ κατὰ δύναμιν τὸ τῷ ἁπλῶς ὄντι ἀντικείμενον (τὸ γὰρ μὴ λευκὸν ἢ μὴ ἀγαθὸν ὅμως ἐνδέχεται κινεῖσθαι κατὰ συμβεβηκός, εἴη γὰρ ἂν ἄνθρωπος τὸ μὴ λευκόν· τὸ δ’ ἁπλῶς [30] μὴ τόδε οὐδαμῶς), ἀδύνατον τὸ μὴ ὂν κινεῖσθαι (εἰ δὲ τοῦτο, καὶ τὴν γένεσιν κίνησιν εἶναι· γίγνεται γὰρ τὸ μὴ ὄν· εἰ γὰρ καὶ ὅτι μάλιστα κατὰ συμβεβηκὸς γίγνεται, ἀλλ’ ὅμως ἀληθὲς εἰπεῖν ὅτι ὑπάρχει τὸ μὴ ὂν κατὰ τοῦ γιγνομένου ἁπλῶς)· ὁμοίως δὲ καὶ τὸ ἠρεμεῖν. ταῦτά [35] τε δὴ συμβαίνει δυσχερῆ, καὶ εἰ πᾶν τὸ κινούμενον ἐν τόπῳ, τὸ δὲ μὴ ὂν οὐκ ἔστιν ἐν τόπῳ· εἴη γὰρ ἂν πού. οὐδὲ δὴ ἡ φθορὰ κίνησις· ἐναντίον γὰρ κινήσει κίνησις ἢ ἠρεμία, φθορὰ δὲ γενέσει. [1] ἐπεὶ δὲ πᾶσα κίνησις μεταβολή τις, μεταβολαὶ δὲ τρεῖς αἱ εἰρημέναι, τούτων δ’ αἱ κατὰ γένεσιν καὶ φθορὰν οὐ κινήσεις, αὗται δ’ εἰσὶν αἱ κατ’ ἀντίφασιν, ἀνάγκη τὴν ἐξ ὑποκειμένου εἰς ὑποκείμενον κίνησιν εἶναι [5] μόνην. τὰ δ’ ὑποκείμενα ἢ ἐναντία ἢ μεταξύ (καὶ γὰρ ἡ στέρησις κείσθω ἐναντίον), καὶ δηλοῦται καταφάσει, οἷον τὸ γυμνὸν καὶ νωδὸν καὶ μέλαν.

εἰ οὖν αἱ κατηγορίαι διῄρηνται οὐσίᾳ, ποιότητι, τόπῳ, τῷ ποιεῖν ἢ πάσχειν, τῷ πρός τι, τῷ ποσῷ, ἀνάγκη τρεῖς [10] εἶναι κινήσεις, ποιοῦ ποσοῦ τόπου· κατ’ οὐσίαν δ’ οὔ, διὰ τὸ μηθὲν εἶναι οὐσίᾳ ἐναντίον, οὐδὲ τοῦ πρός τι (ἔστι γὰρ θατέρου μεταβάλλοντος μὴ ἀληθεύεσθαι θάτερον μηδὲν μεταβάλλον, ὥστε κατὰ συμβεβηκὸς ἡ κίνησις αὐτῶν), οὐδὲ ποιοῦντος καὶ πάσχοντος, ἢ κινοῦντος καὶ κινουμένου, ὅτι οὐκ ἔστι [15] κινήσεως κίνησις οὐδὲ γενέσεως γένεσις, οὐδ’ ὅλως μεταβολῆς μεταβολή. διχῶς γὰρ ἐνδέχεται κινήσεως εἶναι κίνησιν, ἢ ὡς ὑποκειμένου (οἷον ὁ ἄνθρωπος κινεῖται ὅτι ἐκ λευκοῦ εἰς μέλαν μεταβάλλει, ὥστε οὕτω καὶ ἡ κίνησις ἢ θερμαίνεται ἢ ψύχεται ἢ τόπον ἀλλάττει ἢ αὔξεται· τοῦτο [20] δὲ ἀδύνατον· οὐ γὰρ τῶν ὑποκειμένων τι ἡ μεταβολή), ἢ τῷ ἕτερόν τι ὑποκείμενον ἐκ μεταβολῆς μεταβάλλειν εἰς ἄλλο εἶδος, οἷον ἄνθρωπον ἐκ νόσου εἰς ὑγίειαν. ἀλλ’ οὐδὲ τοῦτο δυνατὸν πλὴν κατὰ συμβεβηκός. πᾶσα γὰρ κίνησις ἐξ ἄλλου εἰς ἄλλο ἐστὶ μεταβολή, καὶ γένεσις καὶ φθορὰ [25] ὡσαύτως· πλὴν αἱ μὲν εἰς ἀντικείμενα ὡδί, ἡ δ’ ὡδί, ἡ κίνησις. ἅμα οὖν μεταβάλλει ἐξ ὑγιείας εἰς νόσον, καὶ ἐξ αὐτῆς ταύτης τῆς μεταβολῆς εἰς ἄλλην. δῆλον δὴ ὅτι ἂν νοσήσῃ, μεταβεβληκὸς ἔσται εἰς ὁποιανοῦν (ἐνδέχεται γὰρ ἠρεμεῖν) καὶ ἔτι εἰς μὴ τὴν τυχοῦσαν ἀεί· κἀκείνη ἔκ τινος εἴς [30] τι ἄλλο ἔσται· ὥσθ’ ἡ ἀντικειμένη ἔσται, ὑγίανσις, ἀλλὰ τῷ συμβεβηκέναι, οἷον ἐξ ἀναμνήσεως εἰς λήθην μεταβάλλει ὅτι ᾧ ὑπάρχει ἐκεῖνο μεταβάλλει, ὁτὲ μὲν εἰς ἐπιστήμην ὁτὲ δὲ εἰς ἄγνοιαν.—ἔτι εἰς ἄπειρον βαδιεῖται, εἰ ἔσται μεταβολῆς μεταβολὴ καὶ γενέσεως γένεσις. ἀνάγκη [35] δὴ καὶ τὴν

προτέραν, εἰ ἡ ὑστέρα· οἷον εἰ ἡ ἁπλῆ γένεσις ἐγίγνετό ποτε, καὶ τὸ γιγνόμενον ἐγίγνετο· [1] ὥστε οὔπω ἦν τὸ γιγνόμενον ἁπλῶς, ἀλλά τι γιγνόμενον ἢ γιγνόμενον ἤδη. καὶ τοῦτ’ ἐγίγνετό ποτε, ὥστ’ οὐκ ἦν πω τότε γιγνόμενον. ἐπεὶ δὲ τῶν ἀπείρων οὐκ ἔστι τι πρῶτον, οὐκ [5] ἔσται τὸ πρῶτον, ὥστ’ οὐδὲ τὸ ἐχόμενον. οὔτε γίγνεσθαι οὖν οὔτε κινεῖσθαι οἷόν τε οὔτε μεταβάλλειν οὐδέν. ἔτι τοῦ αὐτοῦ κίνησις ἡ ἐναντία καὶ ἠρέμησις, καὶ γένεσις καὶ φθορά, ὥστε τὸ γιγνόμενον, ὅταν γένηται γιγνόμενον, τότε φθείρεται· οὔτε γὰρ εὐθὺς γιγνόμενον οὔθ’ ὕστερον· εἶναι γὰρ δεῖ [10] τὸ φθειρόμενον. ἔτι δεῖ ὕλην ὑπεῖναι τῷ γιγνομένῳ καὶ μεταβάλλοντι. τίς οὖν ἔσται ὥσπερ τὸ ἀλλοιωτὸν σῶμα ἢ ψυχή—οὕτω τί τὸ γιγνόμενον κίνησις ἢ γένεσις; καὶ ἔτι τί εἰς ὃ κινοῦνται; δεῖ γὰρ εἶναι τὴν τοῦδε ἐκ τοῦδε εἰς τόδε κίνησιν ἢ γένεσιν. πῶς οὖν; οὐ γὰρ ἔσται μάθησις τῆς [15] μαθήσεως, ὥστ’ οὐδὲ γένεσις γενέσεως. ἐπεὶ δ’ οὔτ’ οὐσίας οὔτε τοῦ πρός τι οὔτε τοῦ ποιεῖν καὶ πάσχειν, λείπεται κατὰ τὸ ποιὸν καὶ ποσὸν καὶ τόπον κίνησιν εἶναι (τούτων γὰρ ἑκάστῳ ἐναντίωσις ἔστιν), λέγω δὲ τὸ ποιὸν οὐ τὸ ἐν τῇ οὐσίᾳ (καὶ γὰρ ἡ διαφορὰ ποιόν) ἀλλὰ τὸ παθητικόν, καθ’ ὃ [20] λέγεται πάσχειν ἢ ἀπαθὲς εἶναι. τὸ δὲ ἀκίνητον τό τε ὅλως ἀδύνατον κινηθῆναι καὶ τὸ μόλις ἐν χρόνῳ πολλῷ ἢ βραδέως ἀρχόμενον, καὶ τὸ πεφυκὸς μὲν κινεῖσθαι καὶ δυνάμενον μὴ κινούμενον δὲ ὅτε πέφυκε καὶ οὗ καὶ ὡς· ὃ καλῶ ἠρεμεῖν τῶν ἀκινήτων μόνον· ἐναντίον γὰρ ἠρεμία [25] κινήσει, ὥστε στέρησις ἂν εἴη τοῦ δεκτικοῦ. ἅμα κατὰ τόπον ὅσα ἐν ἑνὶ τόπῳ πρώτῳ, καὶ χωρὶς ὅσα ἐν ἄλλῳ· ἅπτεσθαι δὲ ὧν τὰ ἄκρα ἅμα· μεταξὺ δ’ εἰς ὃ πέφυκε πρότερον ἀφικνεῖσθαι τὸ μεταβάλλον ἢ εἰς ὃ ἔσχατον μεταβάλλει κατὰ φύσιν τὸ συνεχῶς μεταβάλλον. [30] ἐναντίον κατὰ τόπον τὸ κατ’ εὐθεῖαν ἀπέχον πλεῖστον· ἑξῆς δὲ οὗ μετὰ τὴν ἀρχὴν ὄντος, θέσει ἢ εἴδει ἢ ἄλλως πως ἀφορισθέντος, μηθὲν μεταξύ ἐστι τῶν ἐν ταὐτῷ γένει καὶ οὗ ἐφεξῆς ἐστίν, οἷον γραμμαὶ γραμμῆς ἢ μονάδες μονάδος ἢ οἰκίας οἰκία (ἄλλο δ’ οὐθὲν κωλύει μεταξὺ [35] εἶναι). τὸ γὰρ ἑξῆς τινὸς ἐφεξῆς καὶ ὕστερόν τι· οὐ γὰρ τὸ ἓν ἑξῆς τῶν δύο οὐδ’ ἡ νουμηνία τῆς δευτέρας. [1] ἐχόμενον δὲ ὃ ἂν ἑξῆς ὂν ἅπτηται. ἐπεὶ δὲ πᾶσα μεταβολὴ ἐν τοῖς ἀντικειμένοις, ταῦτα δὲ τὰ ἐναντία καὶ ἀντίφασις, ἀντιφάσεως δ’ οὐδὲν ἀνὰ μέσον, δῆλον ὡς ἐν τοῖς ἐναντίοις τὸ [5] μεταξύ. τὸ δὲ συνεχὲς ὅπερ ἐχόμενόν τι. λέγω δὲ συνεχὲς ὅταν ταὐτὸ γένηται καὶ ἓν τὸ ἑκατέρου πέρας οἷς ἅπτονται καὶ συνέχονται, ὥστε δῆλον ὅτι τὸ συνεχὲς ἐν τούτοις ἐξ ὧν ἕν τι πέφυκε γίγνεσθαι κατὰ τὴν σύναψιν. καὶ ὅτι πρῶτον τὸ ἐφεξῆς, δῆλον (τὸ γὰρ ἐφεξῆς οὐχ ἅπτεται, [10] τοῦτο δ’ ἐφεξῆς· καὶ εἰ συνεχές, ἅπτεται, εἰ δ’ ἅπτεται, οὔπω συνεχές· ἐν οἷς δὲ μὴ ἔστιν ἁφή, οὐκ ἔστι σύμφυσις ἐν τούτοις)· ὥστ’ οὐκ ἔστι στιγμὴ μονάδι ταὐτόν· ταῖς μὲν γὰρ ὑπάρχει τὸ ἅπτεσθαι, ταῖς δ’ οὔ, ἀλλὰ τὸ ἐφεξῆς· καὶ τῶν μὲν μεταξύ τι τῶν δ’ οὔ.

[18] περὶ τῆς οὐσίας ἡ θεωρία· τῶν γὰρ οὐσιῶν αἱ ἀρχαὶ καὶ τὰ αἴτια ζητοῦνται. καὶ γὰρ εἰ ὡς ὅλον τι τὸ πᾶν, [20] ἡ οὐσία πρῶτον μέρος· καὶ εἰ τῷ ἐφεξῆς, κἂν οὕτως πρῶτον ἡ οὐσία, εἶτα τὸ ποιόν, εἶτα τὸ ποσόν. ἅμα δὲ οὐδ’ ὄντα ὡς εἰπεῖν ἁπλῶς ταῦτα, ἀλλὰ ποιότητες καὶ κινήσεις, ἢ καὶ τὸ οὐ λευκὸν καὶ τὸ οὐκ εὐθύ· λέγομεν γοῦν εἶναι καὶ ταῦτα, οἷον ἔστιν οὐ λευκόν. ἔτι οὐδὲν τῶν ἄλλων χωριστόν. [25] μαρτυροῦσι δὲ καὶ οἱ ἀρχαῖοι ἔργῳ· τῆς γὰρ οὐσίας ἐζήτουν ἀρχὰς καὶ στοιχεῖα καὶ αἴτια. οἱ μὲν οὖν νῦν τὰ καθόλου οὐσίας μᾶλλον τιθέασιν (τὰ γὰρ γένη καθόλου, ἃ φασιν ἀρχὰς καὶ οὐσίας εἶναι μᾶλλον διὰ τὸ λογικῶς ζητεῖν)· οἱ δὲ πάλαι τὰ καθ’ ἕκαστα, οἷον πῦρ καὶ γῆν, ἀλλ’ οὐ τὸ [30] κοινόν, σῶμα. οὐσίαι δὲ τρεῖς, μία μὲν αἰσθητή—ἧς ἡ μὲν ἀΐδιος ἡ δὲ φθαρτή, ἣν πάντες ὁμολογοῦσιν, οἷον τὰ φυτὰ καὶ τὰ ζῷα ἡ δ’ ἀΐδιος—ἧς ἀνάγκη τὰ στοιχεῖα λαβεῖν, εἴτε ἓν εἴτε πολλά· ἄλλη δὲ ἀκίνητος, καὶ ταύτην φασί τινες εἶναι χωριστήν, οἱ μὲν εἰς δύο διαιροῦντες, [35] οἱ δὲ εἰς μίαν φύσιν τιθέντες τὰ εἴδη καὶ τὰ μαθηματικά, οἱ δὲ τὰ μαθηματικὰ μόνον τούτων. ἐκεῖναι μὲν δὴ φυσικῆς (μετὰ κινήσεως γάρ), [1] αὕτη δὲ ἑτέρας, εἰ μηδεμία αὐτοῖς ἀρχὴ κοινή.

ἡ δ’ αἰσθητὴ οὐσία μεταβλητή. εἰ δ’ ἡ μεταβολὴ ἐκ τῶν ἀντικειμένων ἢ τῶν μεταξύ, ἀντικειμένων δὲ μὴ [5] πάντων (οὐ λευκὸν γὰρ ἡ φωνή) ἀλλ’ ἐκ τοῦ ἐναντίου, ἀνάγκη ὑπεῖναί τι τὸ μεταβάλλον

εἰς τὴν ἐναντίωσιν· οὐ γὰρ τὰ ἐναντία μεταβάλλει.

ἔτι τὸ μὲν ὑπομένει, τὸ δ’ ἐναντίον οὐχ ὑπομένει· ἔστιν ἄρα τι τρίτον παρὰ τὰ ἐναντία, ἡ ὕλη. εἰ δὴ αἱ μεταβολαὶ τέτταρες, ἢ κατὰ τὸ τί [10] ἢ κατὰ τὸ ποῖον ἢ πόσον ἢ ποῦ, καὶ γένεσις μὲν ἡ ἁπλῆ καὶ φθορὰ ἡ κατὰ τὸ τόδε, αὔξησις δὲ καὶ φθίσις ἡ κατὰ τὸ ποσόν, ἀλλοίωσις δὲ ἡ κατὰ τὸ πάθος, φορὰ δὲ ἡ κατὰ τόπον, εἰς ἐναντιώσεις ἂν εἶεν τὰς καθ’ ἕκαστον αἱ μεταβολαί. ἀνάγκη δὴ μεταβάλλειν τὴν ὕλην δυναμένην [15] ἄμφω· ἐπεὶ δὲ διττὸν τὸ ὄν, μεταβάλλει πᾶν ἐκ τοῦ δυνάμει ὄντος εἰς τὸ ἐνεργείᾳ ὄν (οἷον ἐκ λευκοῦ δυνάμει εἰς τὸ ἐνεργείᾳ λευκόν, ὁμοίως δὲ καὶ ἐπ’ αὐξήσεως καὶ φθίσεως), ὥστε οὐ μόνον κατὰ συμβεβηκὸς ἐνδέχεται γίγνεσθαι ἐκ μὴ ὄντος, ἀλλὰ καὶ ἐξ ὄντος γίγνεται πάντα, δυνάμει [20] μέντοι ὄντος, ἐκ μὴ ὄντος δὲ ἐνεργείᾳ. καὶ τοῦτ’ ἔστι τὸ Ἀναξαγόρου ἕν· βέλτιον γὰρ ἢ ὁμοῦ πάντα —καὶ Ἐμπεδοκλέους τὸ μῖγμα καὶ Ἀναξιμάνδρου, καὶ ὡς Δημόκριτός φησιν—"ἦν ὁμοῦ πάντα δυνάμει, ἐνεργείᾳ δ’ οὔ"· ὥστε τῆς ὕλης ἂν εἶεν ἡμμένοι· πάντα δ’ ὕλην ἔχει ὅσα μεταβάλλει, [25] ἀλλ’ ἑτέραν· καὶ τῶν ἀϊδίων ὅσα μὴ γενητὰ κινητὰ δὲ φορᾷ, ἀλλ’ οὐ γενητὴν ἀλλὰ ποθὲν ποί. ἀπορήσειε δ’ ἄν τις ἐκ ποίου μὴ ὄντος ἡ γένεσις· τριχῶς γὰρ τὸ μὴ ὄν. εἰ δή τι ἔστι δυνάμει, ἀλλ’ ὅμως οὐ τοῦ τυχόντος ἀλλ’ ἕτερον ἐξ ἑτέρου· οὐδ’ ἱκανὸν ὅτι ὁμοῦ πάντα [30] χρήματα· διαφέρει γὰρ τῇ ὕλῃ, ἐπεὶ διὰ τί ἄπειρα ἐγένετο ἀλλ’ οὐχ ἕν; ὁ γὰρ νοῦς εἷς, ὥστ’ εἰ καὶ ἡ ὕλη μία, ἐκεῖνο ἐγένετο ἐνεργείᾳ οὗ ἡ ὕλη ἦν δυνάμει. τρία δὴ τὰ αἴτια καὶ τρεῖς αἱ ἀρχαί, δύο μὲν ἡ ἐναντίωσις, ἧς τὸ μὲν λόγος καὶ εἶδος τὸ δὲ στέρησις, τὸ δὲ τρίτον ἡ ὕλη.

[35] μετὰ ταῦτα ὅτι οὐ γίγνεται οὔτε ἡ ὕλη οὔτε τὸ εἶδος, λέγω δὲ τὰ ἔσχατα. πᾶν γὰρ μεταβάλλει τὶ καὶ ὑπό τινος καὶ εἴς τι· [1] ὑφ’ οὗ μέν, τοῦ πρώτου κινοῦντος· ὃ δέ, ἡ ὕλη· εἰς ὃ δέ, τὸ εἶδος. εἰς ἄπειρον οὖν εἶσιν, εἰ μὴ μόνον ὁ χαλκὸς γίγνεται στρογγύλος ἀλλὰ καὶ τὸ στρογγύλον ἢ ὁ χαλκός· ἀνάγκη δὴ στῆναι.—μετὰ ταῦτα ὅτι ἑκάστη [5] ἐκ συνωνύμου γίγνεται οὐσία (τὰ γὰρ φύσει οὐσίαι καὶ τὰ ἄλλα). ἢ γὰρ τέχνῃ ἢ φύσει γίγνεται ἢ τύχῃ ἢ τῷ αὐτομάτῳ. ἡ μὲν οὖν τέχνη ἀρχὴ ἐν ἄλλῳ, ἡ δὲ φύσις ἀρχὴ ἐν αὐτῷ (ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ), αἱ δὲ λοιπαὶ αἰτίαι στερήσεις τούτων. οὐσίαι δὲ τρεῖς, ἡ μὲν ὕλη [10] τόδε τι οὖσα τῷ φαίνεσθαι (ὅσα γὰρ ἁφῇ καὶ μὴ συμφύσει, ὕλη καὶ ὑποκείμενον), ἡ δὲ φύσις τόδε τι καὶ ἕξις τις εἰς ἥν· ἔτι τρίτη ἡ ἐκ τούτων ἡ καθ’ ἕκαστα, οἷον Σωκράτης ἢ Καλλίας. ἐπὶ μὲν οὖν τινῶν τὸ τόδε τι οὐκ ἔστι παρὰ τὴν συνθετὴν οὐσίαν, οἷον οἰκίας τὸ εἶδος, εἰ [15] μὴ ἡ τέχνη (οὐδ’ ἔστι γένεσις καὶ φθορὰ τούτων, ἀλλ’ ἄλλον τρόπον εἰσὶ καὶ οὐκ εἰσὶν οἰκία τε ἡ ἄνευ ὕλης καὶ ὑγίεια καὶ πᾶν τὸ κατὰ τέχνην), ἀλλ’ εἴπερ, ἐπὶ τῶν φύσει· διὸ δὴ οὐ κακῶς Πλάτων ἔφη ὅτι εἴδη ἔστιν ὁπόσα φύσει, εἴπερ ἔστιν εἴδη ἄλλα τούτων οἷον πῦρ σὰρξ κεφαλή· [20] ἅπαντα γὰρ ὕλη ἐστί, καὶ τῆς μάλιστ’ οὐσίας ἡ τελευταία. τὰ μὲν οὖν κινοῦντα αἴτια ὡς προγεγενημένα ὄντα, τὰ δ’ ὡς ὁ λόγος ἅμα. ὅτε γὰρ ὑγιαίνει ὁ ἄνθρωπος, τότε καὶ ἡ ὑγίεια ἔστιν, καὶ τὸ σχῆμα τῆς χαλκῆς σφαίρας ἅμα καὶ ἡ χαλκῆ σφαῖρα (εἰ δὲ καὶ ὕστερόν τι ὑπομένει, σκεπτέον· [25] ἐπ’ ἐνίων γὰρ οὐδὲν κωλύει, οἷον εἰ ἡ ψυχὴ τοιοῦτον, μὴ πᾶσα ἀλλ’ ὁ νοῦς· πᾶσαν γὰρ ἀδύνατον ἴσως). φανερὸν δὴ ὅτι οὐδὲν δεῖ διά γε ταῦτ’ εἶναι τὰς ἰδέας· ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ, ὁ καθ’ ἕκαστον τὸν τινά· ὁμοίως δὲ καὶ ἐπὶ τῶν τεχνῶν· ἡ γὰρ ἰατρικὴ τέχνη ὁ λόγος τῆς ὑγιείας [30] ἐστίν.

τὰ δ’ αἴτια καὶ αἱ ἀρχαὶ ἄλλα ἄλλων ἔστιν ὥς, ἔστι δ’ ὡς, ἂν καθόλου λέγῃ τις καὶ κατ’ ἀναλογίαν, ταὐτὰ πάντων. ἀπορήσειε γὰρ ἄν τις πότερον ἕτεραι ἢ αἱ αὐταὶ ἀρχαὶ καὶ στοιχεῖα τῶν οὐσιῶν καὶ τῶν πρός τι, καὶ καθ’ [35] ἑκάστην δὴ τῶν κατηγοριῶν ὁμοίως. ἀλλ’ ἄτοπον εἰ ταὐτὰ πάντων· ἐκ τῶν αὐτῶν γὰρ ἔσται τὰ πρός τι καὶ αἱ οὐσίαι. [1] τί οὖν τοῦτ’ ἔσται; παρὰ γὰρ τὴν οὐσίαν καὶ τἆλλα τὰ κατηγορούμενα οὐδέν ἐστι κοινόν, πρότερον δὲ τὸ στοιχεῖον ἢ ὧν στοιχεῖον· ἀλλὰ μὴν οὐδ’ ἡ οὐσία στοιχεῖον τῶν πρός τι, οὐδὲ τούτων οὐδὲν τῆς οὐσίας. ἔτι πῶς ἐνδέχεται πάντων [5] εἶναι ταὐτὰ στοιχεῖα; οὐδὲν γὰρ οἷόν τ’ εἶναι τῶν στοιχείων τῷ ἐκ στοιχείων συγκειμένῳ τὸ

αὐτό, οἷον τῷ ΒΑ τὸ Β ἢ Α (οὐδὲ δὴ τῶν νοητῶν στοιχεῖόν ἐστιν, οἷον τὸ ὂν ἢ τὸ ἕν· ὑπάρχει γὰρ ταῦτα ἑκάστῳ καὶ τῶν συνθέτων). οὐδὲν ἄρ’ ἔσται αὐτῶν οὔτ’ οὐσία οὔτε πρός τι· ἀλλ’ ἀναγκαῖον. οὐκ ἔστιν ἄρα [10] πάντων ταὐτὰ στοιχεῖα.—ἢ ὥσπερ λέγομεν, ἔστι μὲν ὡς, ἔστι δ’ ὡς οὔ, οἷον ἴσως τῶν αἰσθητῶν σωμάτων ὡς μὲν εἶδος τὸ θερμὸν καὶ ἄλλον τρόπον τὸ ψυχρὸν ἡ στέρησις, ὕλη δὲ τὸ δυνάμει ταῦτα πρῶτον καθ’ αὑτό, οὐσίαι δὲ ταῦτά τε καὶ τὰ ἐκ τούτων, ὧν ἀρχαὶ ταῦτα, ἢ εἴ τι ἐκ θερμοῦ καὶ ψυχροῦ [15] γίγνεται ἕν, οἷον σὰρξ ἢ ὀστοῦν· ἕτερον γὰρ ἀνάγκη ἐκείνων εἶναι τὸ γενόμενον. τούτων μὲν οὖν ταὐτὰ στοιχεῖα καὶ ἀρχαί (ἄλλων δ’ ἄλλα), πάντων δὲ οὕτω μὲν εἰπεῖν οὐκ ἔστιν, τῷ ἀνάλογον δέ, ὥσπερ εἴ τις εἴποι ὅτι ἀρχαὶ εἰσὶ τρεῖς, τὸ εἶδος καὶ ἡ στέρησις καὶ ἡ ὕλη. ἀλλ’ ἕκαστον τούτων ἕτερον περὶ [20] ἕκαστον γένος ἐστίν, οἷον ἐν χρώματι λευκὸν μέλαν ἐπιφάνεια· φῶς σκότος ἀήρ, ἐκ δὲ τούτων ἡμέρα καὶ νύξ. ἐπεὶ δὲ οὐ μόνον τὰ ἐνυπάρχοντα αἴτια, ἀλλὰ καὶ τῶν ἐκτὸς οἷον τὸ κινοῦν, δῆλον ὅτι ἕτερον ἀρχὴ καὶ στοιχεῖον, [24] αἴτια δ’ ἄμφω, καὶ εἰς ταῦτα διαιρεῖται ἡ ἀρχή, τὸ δ’ [25] ὡς κινοῦν ἢ ἱστὰν ἀρχή τις καὶ οὐσία, ὥστε στοιχεῖα μὲν κατ’ ἀναλογίαν τρία, αἰτίαι δὲ καὶ ἀρχαὶ τέτταρες· ἄλλο δ’ ἐν ἄλλῳ, καὶ τὸ πρῶτον αἴτιον ὡς κινοῦν ἄλλο ἄλλῳ. ὑγίεια, νόσος, σῶμα· τὸ κινοῦν ἰατρική. εἶδος, ἀταξία τοιαδί, πλίνθοι· τὸ κινοῦν οἰκοδομική καὶ εἰς ταῦτα διαιρεῖται [30] ἡ ἀρχή. ἐπεὶ δὲ τὸ κινοῦν ἐν μὲν τοῖς φυσικοῖς ἀνθρώπῳ ἄνθρωπος, ἐν δὲ τοῖς ἀπὸ διανοίας τὸ εἶδος ἢ τὸ ἐναντίον, τρόπον τινὰ τρία αἴτια ἂν εἴη, ὠδὶ δὲ τέτταρα. ὑγίεια γάρ πως ἡ ἰατρική, καὶ οἰκίας εἶδος ἡ οἰκοδομική, καὶ ἄνθρωπος ἄνθρωπον γεννᾷ· ἔτι παρὰ ταῦτα τὸ ὡς [35] πρῶτον πάντων κινοῦν πάντα.

ἐπεὶ δ’ ἐστὶ τὰ μὲν χωριστὰ τὰ δ’ οὐ χωριστά, οὐσίαι ἐκεῖνα. [1] καὶ διὰ τοῦτο πάντων αἴτια ταὐτά, ὅτι τῶν οὐσιῶν ἄνευ οὐκ ἔστι τὰ πάθη καὶ αἱ κινήσεις. ἔπειτα ἔσται ταῦτα ψυχὴ ἴσως καὶ σῶμα, ἢ νοῦς καὶ ὄρεξις καὶ σῶμα.—ἔτι δ’ ἄλλον τρόπον τῷ ἀνάλογον ἀρχαὶ αἱ αὐταί, οἷον ἐνέργεια [5] καὶ δύναμις· ἀλλὰ καὶ ταῦτα ἄλλα τε ἄλλοις καὶ ἄλλως. ἐν ἐνίοις μὲν γὰρ τὸ αὐτὸ ὁτὲ μὲν ἐνεργείᾳ ἔστιν ὁτὲ δὲ δυνάμει, οἷον οἶνος ἢ σὰρξ ἢ ἄνθρωπος (πίπτει δὲ καὶ ταῦτα εἰς τὰ εἰρημένα αἴτια· ἐνεργείᾳ μὲν γὰρ τὸ εἶδος, ἐὰν ᾖ χωριστόν, καὶ τὸ ἐξ ἀμφοῖν στέρησις δέ, οἷον [10] σκότος ἢ κάμνον, δυνάμει δὲ ἡ ὕλη· τοῦτο γάρ ἐστι τὸ δυνάμενον γίγνεσθαι ἄμφω)· ἄλλως δ’ ἐνεργείᾳ καὶ δυνάμει διαφέρει ὧν μὴ ἔστιν ἡ αὐτὴ ὕλη, ὧν ἐνίων οὐκ ἔστι τὸ αὐτὸ εἶδος ἀλλ’ ἕτερον, ὥσπερ ἀνθρώπου αἴτιον τά τε στοιχεῖα, πῦρ καὶ γῆ ὡς ὕλη καὶ τὸ ἴδιον εἶδος, καὶ ἔτι τι [15] ἄλλο ἔξω οἷον ὁ πατήρ, καὶ παρὰ ταῦτα ὁ ἥλιος καὶ ὁ λοξὸς κύκλος, οὔτε ὕλη ὄντα οὔτ’ εἶδος οὔτε στέρησις οὔτε ὁμοειδὲς ἀλλὰ κινοῦντα. ἔτι δὲ ὁρᾶν δεῖ ὅτι τὰ μὲν καθόλου ἔστιν εἰπεῖν, τὰ δ’ οὔ. πάντων δὴ πρῶται ἀρχαὶ τὸ ἐνεργείᾳ πρῶτον τοδὶ καὶ ἄλλο ὃ δυνάμει. ἐκεῖνα μὲν [20] οὖν τὰ καθόλου οὐκ ἔστιν· ἀρχὴ γὰρ τὸ καθ’ ἕκαστον τῶν καθ’ ἕκαστον· ἄνθρωπος μὲν γὰρ ἀνθρώπου καθόλου, ἀλλ’ οὐκ ἔστιν οὐδείς, ἀλλὰ Πηλεὺς Ἀχιλλέως σοῦ δὲ ὁ πατήρ, καὶ τοδὶ τὸ Β τουδὶ τοῦ ΒΑ, ὅλως δὲ τὸ Β τοῦ ἁπλῶς ΒΑ. ἔπειτα, εἰ δὴ τὰ τῶν οὐσιῶν, ἄλλα δὲ ἄλλων [25] αἴτια καὶ στοιχεῖα, ὥσπερ ἐλέχθη, τῶν μὴ ἐν ταὐτῷ γένει, χρωμάτων ψόφων οὐσιῶν ποσότητος, πλὴν τῷ ἀνάλογον· καὶ τῶν ἐν ταὐτῷ εἴδει ἕτερα, οὐκ εἴδει ἀλλ’ ὅτι τῶν καθ’ ἕκαστον ἄλλο, ἥ τε σὴ ὕλη καὶ τὸ εἶδος καὶ τὸ κινῆσαν καὶ ἡ ἐμή, τῷ καθόλου δὲ λόγῳ ταὐτά. τὸ δὲ ζητεῖν [30] τίνες ἀρχαὶ ἢ στοιχεῖα τῶν οὐσιῶν καὶ πρός τι καὶ ποιῶν, πότερον αἱ αὐταὶ ἢ ἕτεραι, δῆλον ὅτι πολλαχῶς γε λεγομένων ἔστιν ἑκάστου, διαιρεθέντων δὲ οὐ ταὐτὰ ἀλλ’ ἕτερα, πλὴν ὠδὶ καὶ πάντων, ὠδὶ μὲν ταὐτὰ ἢ τὸ ἀνάλογον, ὅτι ὕλη, εἶδος, στέρησις, τὸ κινοῦν, καὶ ὠδὶ τὰ τῶν οὐσιῶν [35] αἴτια ὡς αἴτια πάντων, ὅτι ἀναιρεῖται ἀναιρουμένων· ἔτι τὸ πρῶτον ἐντελεχείᾳ· ὠδὶ δὲ ἕτερα πρῶτα ὅσα τὰ ἐναντία ἃ μήτε ὡς γένη λέγεται μήτε πολλαχῶς λέγεται· καὶ ἔτι αἱ ὗλαι. [1] τίνες μὲν οὖν αἱ ἀρχαὶ τῶν αἰσθητῶν καὶ πόσαι, καὶ πῶς αἱ αὐταὶ καὶ πῶς ἕτεραι, εἴρηται.

ἐπεὶ δ’ ἦσαν τρεῖς οὐσίαι, δύο μὲν αἱ φυσικαὶ μία δ’ ἡ ἀκίνητος, περὶ ταύτης λεκτέον ὅτι ἀνάγκη εἶναι ἀΐδιόν [5] τινα οὐσίαν ἀκίνητον. αἵ τε γὰρ οὐσίαι πρῶται τῶν ὄντων, καὶ εἰ πᾶσαι φθαρταί,

πάντα φθαρτά· ἀλλ’ ἀδύνατον κίνησιν ἢ γενέσθαι ἢ φθαρῆναι (ἀεὶ γὰρ ἦν), οὐδὲ χρόνον. οὐ γὰρ οἷόν τε τὸ πρότερον καὶ ὕστερον εἶναι μὴ ὄντος χρόνου· καὶ ἡ κίνησις ἄρα οὕτω συνεχὴς ὥσπερ καὶ ὁ χρόνος· [10] ἢ γὰρ τὸ αὐτὸ ἢ κινήσεώς τι πάθος. κίνησις δ’ οὐκ ἔστι συνεχὴς ἀλλ’ ἢ ἡ κατὰ τόπον, καὶ ταύτης ἡ κύκλῳ.

ἀλλὰ μὴν εἰ ἔστι κινητικὸν ἢ ποιητικόν, μὴ ἐνεργοῦν δέ τι, οὐκ ἔσται κίνησις· ἐνδέχεται γὰρ τὸ δύναμιν ἔχον μὴ ἐνεργεῖν. οὐθὲν ἄρα ὄφελος οὐδ’ ἐὰν οὐσίας ποιήσωμεν ἀϊδίους, [15] ὥσπερ οἱ τὰ εἴδη, εἰ μή τις δυναμένη ἐνέσται ἀρχὴ μεταβάλλειν· οὐ τοίνυν οὐδ’ αὕτη ἱκανή, οὐδ’ ἄλλη οὐσία παρὰ τὰ εἴδη· εἰ γὰρ μὴ ἐνεργήσει, οὐκ ἔσται κίνησις. ἔτι οὐδ’ εἰ ἐνεργήσει, ἡ δ’ οὐσία αὐτῆς δύναμις· οὐ γὰρ ἔσται κίνησις ἀΐδιος· ἐνδέχεται γὰρ τὸ δυνάμει ὂν μὴ εἶναι. δεῖ [20] ἄρα εἶναι ἀρχὴν τοιαύτην ἧς ἡ οὐσία ἐνέργεια. ἔτι τοίνυν ταύτας δεῖ τὰς οὐσίας εἶναι ἄνευ ὕλης· ἀϊδίους γὰρ δεῖ, εἴπερ γε καὶ ἄλλο τι ἀΐδιον. ἐνέργεια ἄρα. καίτοι ἀπορία· δοκεῖ γὰρ τὸ μὲν ἐνεργοῦν πᾶν δύνασθαι τὸ δὲ δυνάμενον οὐ πᾶν ἐνεργεῖν, ὥστε πρότερον εἶναι τὴν δύναμιν. [25] ἀλλὰ μὴν εἰ τοῦτο, οὐθὲν ἔσται τῶν ὄντων· ἐνδέχεται γὰρ δύνασθαι μὲν εἶναι μήπω δ’ εἶναι. καίτοι εἰ ὡς λέγουσιν οἱ θεολόγοι οἱ ἐκ νυκτὸς γεννῶντες, ἢ ὡς οἱ φυσικοὶ ὁμοῦ πάντα χρήματά φασι, τὸ αὐτὸ ἀδύνατον. πῶς γὰρ κινηθήσεται, εἰ μὴ ἔσται ἐνεργείᾳ τι αἴτιον; οὐ γὰρ ἥ γε [30] ὕλη κινήσει αὐτὴ ἑαυτήν, ἀλλὰ τεκτονική, οὐδὲ τὰ ἐπιμήνια οὐδ’ ἡ γῆ, ἀλλὰ τὰ σπέρματα καὶ ἡ γονή. διὸ ἔνιοι ποιοῦσιν ἀεὶ ἐνέργειαν, οἷον Λεύκιππος καὶ Πλάτων· ἀεὶ γὰρ εἶναί φασι κίνησιν. ἀλλὰ διὰ τί καὶ τίνα οὐ λέγουσιν, οὐδ’, εἰ ὠδὶ ἢ ὠδί, τὴν αἰτίαν. οὐδὲν γὰρ ὡς [35] ἔτυχε κινεῖται, ἀλλὰ δεῖ τι ἀεὶ ὑπάρχειν, ἔσπερ νῦν φύσει μὲν ὠδί, βίᾳ δὲ ἢ ὑπὸ νοῦ ἢ ἄλλου ὠδί. (εἶτα ποία πρώτη; διαφέρει γὰρ ἀμήχανον ὅσον). ἀλλὰ μὴν οὐδὲ Πλάτωνί γε οἷόν τε λέγειν ἣν οἴεται ἐνίοτε ἀρχὴν εἶναι, [1] τὸ αὐτὸ ἑαυτὸ κινοῦν· ὕστερον γὰρ καὶ ἅμα τῷ οὐρανῷ ἡ ψυχή, ὡς φησίν. τὸ μὲν δὴ δύναμιν οἴεσθαι ἐνεργείας πρότερον ἔστι μὲν ὡς καλῶς ἔστι δ’ ὡς οὔ (εἴρηται δὲ πῶς)· ὅτι δ’ [5] ἐνέργεια πρότερον, μαρτυρεῖ Ἀναξαγόρας (ὁ γὰρ νοῦς ἐνέργεια) καὶ Ἐμπεδοκλῆς φιλίαν καὶ τὸ νεῖκος, καὶ οἱ ἀεὶ λέγοντες κίνησιν εἶναι, ὥσπερ Λεύκιππος· ὥστ’ οὐκ ἦν ἄπειρον χρόνον χάος ἢ νύξ, ἀλλὰ ταὐτὰ ἀεὶ ἢ περιόδῳ ἢ ἄλλως, εἴπερ πρότερον ἐνέργεια δυνάμεως. εἰ δὴ τὸ αὐτὸ [10] ἀεὶ περιόδῳ, δεῖ τι ἀεὶ μένειν ὡσαύτως ἐνεργοῦν. εἰ δὲ μέλλει γένεσις καὶ φθορὰ εἶναι, ἄλλο δεῖ εἶναι ἀεὶ ἐνεργοῦν ἄλλως καὶ ἄλλως. ἀνάγκη ἄρα ὠδὶ μὲν καθ’ αὑτὸ ἐνεργεῖν ὠδὶ δὲ κατ’ ἄλλο· ἤτοι ἄρα καθ’ ἕτερον ἢ κατὰ τὸ πρῶτον. ἀνάγκη δὴ κατὰ τοῦτο· πάλιν γὰρ ἐκεῖνο [15] αὐτῷ τε αἴτιον κἀκείνῳ. οὐκοῦν βέλτιον τὸ πρῶτον· καὶ γὰρ αἴτιον ἦν ἐκεῖνο τοῦ ἀεὶ ὡσαύτως· τοῦ δ’ ἄλλως ἕτερον, τοῦ δ’ ἀεὶ ἄλλως ἄμφω δηλονότι. οὐκοῦν οὕτως καὶ ἔχουσιν αἱ κινήσεις. τί οὖν ἄλλας δεῖ ζητεῖν ἀρχάς;

ἐπεὶ δ’ οὕτω τ’ ἐνδέχεται, καὶ εἰ μὴ οὕτως, ἐκ νυκτὸς [20] ἔσται καὶ ὁμοῦ πάντων καὶ ἐκ μὴ ὄντος, λύοιτ’ ἂν ταῦτα, καὶ ἔστι τι ἀεὶ κινούμενον κίνησιν ἄπαυστον, αὕτη δ’ ἡ κύκλῳ (καὶ τοῦτο οὐ λόγῳ μόνον ἀλλ’ ἔργῳ δῆλον), ὥστ’ ἀΐδιος ἂν εἴη ὁ πρῶτος οὐρανός. ἔστι τοίνυν τι καὶ ὃ κινεῖ. ἐπεὶ δὲ τὸ κινούμενον καὶ κινοῦν καὶ μέσον, †τοίνυν† [25] ἔστι τι ὃ οὐ κινούμενον κινεῖ, ἀΐδιον καὶ οὐσία καὶ ἐνέργεια οὖσα. κινεῖ δὲ ὧδε τὸ ὀρεκτὸν καὶ τὸ νοητόν· κινεῖ οὐ κινούμενα. τούτων τὰ πρῶτα τὰ αὐτά. ἐπιθυμητὸν μὲν γὰρ τὸ φαινόμενον καλόν, βουλητὸν δὲ πρῶτον τὸ ὂν καλόν· ὀρεγόμεθα δὲ διότι δοκεῖ μᾶλλον ἢ δοκεῖ διότι ὀρεγόμεθα· [30] ἀρχὴ γὰρ ἡ νόησις. νοῦς δὲ ὑπὸ τοῦ νοητοῦ κινεῖται, νοητὴ δὲ ἡ ἑτέρα συστοιχία καθ’ αὑτήν· καὶ ταύτης ἡ οὐσία πρώτη, καὶ ταύτης ἡ ἁπλῆ καὶ κατ’ ἐνέργειαν (ἔστι δὲ τὸ ἓν καὶ τὸ ἁπλοῦν οὐ τὸ αὐτό· τὸ μὲν γὰρ ἓν μέτρον σημαίνει, τὸ δὲ ἁπλοῦν πὼς ἔχον αὐτό). ἀλλὰ μὴν καὶ τὸ καλὸν καὶ [35] τὸ δι’ αὑτὸ αἱρετὸν ἐν τῇ αὐτῇ συστοιχίᾳ· καὶ ἔστιν ἄριστον ἀεὶ ἢ ἀνάλογον τὸ πρῶτον. [1] ὅτι δ’ ἔστι τὸ οὗ ἕνεκα ἐν τοῖς ἀκινήτοις, ἡ διαίρεσις δηλοῖ· ἔστι γὰρ τινὶ τὸ οὗ ἕνεκα καὶ τινός, ὧν τὸ μὲν ἔστι τὸ δ’ οὐκ ἔστι. κινεῖ δὴ ὡς ἐρώμενον, κινούμενα δὲ τἆλλα κινεῖ. εἰ μὲν οὖν τι κινεῖται, ἐνδέχεται καὶ [5] ἄλλως ἔχειν, ὥστ’ εἰ ἡ φορὰ πρώτη ἡ ἐνέργειά ἐστιν, ᾗ κινεῖται ταύτῃ γε ἐνδέχεται ἄλλως ἔχειν, κατὰ

τόπον, καὶ εἰ μὴ κατ’ οὐσίαν· ἐπεὶ δὲ ἔστι τι κινοῦν αὐτὸ ἀκίνητον ὄν, ἐνεργείᾳ ὄν, τοῦτο οὐκ ἐνδέχεται ἄλλως ἔχειν οὐδαμῶς. φορὰ γὰρ ἡ πρώτη τῶν μεταβολῶν, ταύτης δὲ ἡ κύκλῳ· ταύτην [10] δὲ τοῦτο κινεῖ. ἐξ ἀνάγκης ἄρα ἐστὶν ὄν· καὶ ᾗ ἀνάγκη, καλῶς, καὶ οὕτως ἀρχή. τὸ γὰρ ἀναγκαῖον τοσαυταχῶς, τὸ μὲν βίᾳ ὅτι παρὰ τὴν ὁρμήν, τὸ δὲ οὗ οὐκ ἄνευ τὸ εὖ, τὸ δὲ μὴ ἐνδεχόμενον ἄλλως ἀλλ’ ἁπλῶς.—ἐκ τοιαύτης ἄρα ἀρχῆς ἤρτηται ὁ οὐρανὸς καὶ ἡ φύσις. διαγωγὴ δ’ [15] ἐστὶν οἵα ἡ ἀρίστη μικρὸν χρόνον ἡμῖν (οὕτω γὰρ ἀεὶ ἐκεῖνο· ἡμῖν μὲν γὰρ ἀδύνατον), ἐπεὶ καὶ ἡδονὴ ἡ ἐνέργεια τούτου (καὶ διὰ τοῦτο ἐγρήγορσις αἴσθησις νόησις ἥδιστον, ἐλπίδες δὲ καὶ μνῆμαι διὰ ταῦτα). ἡ δὲ νόησις ἡ καθ’ αὑτὴν τοῦ καθ’ αὑτὸ ἀρίστου, καὶ ἡ μάλιστα τοῦ μάλιστα. αὑτὸν [20] δὲ νοεῖ ὁ νοῦς κατὰ μετάληψιν τοῦ νοητοῦ· νοητὸς γὰρ γίγνεται θιγγάνων καὶ νοῶν, ὥστε ταὐτὸν νοῦς καὶ νοητόν. τὸ γὰρ δεκτικὸν τοῦ νοητοῦ καὶ τῆς οὐσίας νοῦς, ἐνεργεῖ δὲ ἔχων, ὥστ’ ἐκείνου μᾶλλον τοῦτο ὃ δοκεῖ ὁ νοῦς θεῖον ἔχειν, καὶ ἡ θεωρία τὸ ἥδιστον καὶ ἄριστον. εἰ οὖν οὕτως εὖ ἔχει, [25] ὡς ἡμεῖς ποτέ, ὁ θεὸς ἀεί, θαυμαστόν· εἰ δὲ μᾶλλον, ἔτι θαυμασιώτερον. ἔχει δὲ ὧδε. καὶ ζωὴ δέ γε ὑπάρχει· ἡ γὰρ νοῦ ἐνέργεια ζωή, ἐκεῖνος δὲ ἡ ἐνέργεια· ἐνέργεια δὲ ἡ καθ’ αὑτὴν ἐκείνου ζωὴ ἀρίστη καὶ ἀΐδιος. φαμὲν δὴ τὸν θεὸν εἶναι ζῷον ἀΐδιον ἄριστον, ὥστε ζωὴ καὶ αἰὼν συνεχὴς [30] καὶ ἀΐδιος ὑπάρχει τῷ θεῷ· τοῦτο γὰρ ὁ θεός. ὅσοι δὲ ὑπολαμβάνουσιν, ὥσπερ οἱ Πυθαγόρειοι καὶ Σπεύσιππος τὸ κάλλιστον καὶ ἄριστον μὴ ἐν ἀρχῇ εἶναι, διὰ τὸ καὶ τῶν φυτῶν καὶ τῶν ζῴων τὰς ἀρχὰς αἴτια μὲν εἶναι τὸ δὲ καλὸν καὶ τέλειον ἐν τοῖς ἐκ τούτων, οὐκ ὀρθῶς οἴονται. [35] τὸ γὰρ σπέρμα ἐξ ἑτέρων ἐστὶ προτέρων τελείων, καὶ τὸ πρῶτον οὐ σπέρμα ἐστὶν ἀλλὰ τὸ τέλειον· [1] οἷον πρότερον ἄνθρωπον ἂν φαίη τις εἶναι τοῦ σπέρματος, οὐ τὸν ἐκ τούτου γενόμενον ἀλλ’ ἕτερον ἐξ οὗ τὸ σπέρμα. ὅτι μὲν οὖν ἔστιν οὐσία τις ἀΐδιος καὶ ἀκίνητος καὶ κεχωρισμένη τῶν αἰσθητῶν, [5] φανερὸν ἐκ τῶν εἰρημένων· δέδεικται δὲ καὶ ὅτι μέγεθος οὐδὲν ἔχειν ἐνδέχεται ταύτην τὴν οὐσίαν ἀλλ’ ἀμερὴς καὶ ἀδιαίρετός ἐστιν (κινεῖ γὰρ τὸν ἄπειρον χρόνον, οὐδὲν δ’ ἔχει δύναμιν ἄπειρον πεπερασμένον· ἐπεὶ δὲ πᾶν μέγεθος ἢ ἄπειρον ἢ πεπερασμένον, πεπερασμένον μὲν διὰ τοῦτο οὐκ [10] ἂν ἔχοι μέγεθος, ἄπειρον δ’ ὅτι ὅλως οὐκ ἔστιν οὐδὲν ἄπειρον μέγεθος)· ἀλλὰ μὴν καὶ ὅτι ἀπαθὲς καὶ ἀναλλοίωτον· πᾶσαι γὰρ αἱ ἄλλαι κινήσεις ὕστεραι τῆς κατὰ τόπον. ταῦτα μὲν οὖν δῆλα διότι τοῦτον ἔχει τὸν τρόπον.

πότερον δὲ μίαν θετέον τὴν τοιαύτην οὐσίαν ἢ πλείους, [15] καὶ πόσας, δεῖ μὴ λανθάνειν, ἀλλὰ μεμνῆσθαι καὶ τὰς τῶν ἄλλων ἀποφάσεις, ὅτι περὶ πλήθους οὐθὲν εἰρήκασιν ὅ τι καὶ σαφὲς εἰπεῖν. ἡ μὲν γὰρ περὶ τὰς ἰδέας ὑπόληψις οὐδεμίαν ἔχει σκέψιν ἰδίαν (ἀριθμοὺς γὰρ λέγουσι τὰς ἰδέας οἱ λέγοντες ἰδέας, περὶ δὲ τῶν ἀριθμῶν ὁτὲ μὲν ὡς [20] περὶ ἀπείρων λέγουσιν ὁτὲ δὲ ὡς μέχρι τῆς δεκάδος ὡρισμένων· δι’ ἣν δ’ αἰτίαν τοσοῦτον τὸ πλῆθος τῶν ἀριθμῶν, οὐδὲν λέγεται μετὰ σπουδῆς ἀποδεικτικῆς)· ἡμῖν δ’ ἐκ τῶν ὑποκειμένων καὶ διωρισμένων λεκτέον. ἡ μὲν γὰρ ἀρχὴ καὶ τὸ πρῶτον τῶν ὄντων ἀκίνητον καὶ καθ’ αὑτὸ καὶ κατὰ [25] συμβεβηκός, κινοῦν δὲ τὴν πρώτην ἀΐδιον καὶ μίαν κίνησιν· ἐπεὶ δὲ τὸ κινούμενον ἀνάγκη ὑπό τινος κινεῖσθαι, καὶ τὸ πρῶτον κινοῦν ἀκίνητον εἶναι καθ’ αὑτό, καὶ τὴν ἀΐδιον κίνησιν ὑπὸ ἀϊδίου κινεῖσθαι καὶ τὴν μίαν ὑφ’ ἑνός, ὁρῶμεν δὲ παρὰ τὴν τοῦ παντὸς τὴν ἁπλῆν φοράν, ἣν κινεῖν φαμὲν [30] τὴν πρώτην οὐσίαν καὶ ἀκίνητον, ἄλλας φορὰς οὔσας τὰς τῶν πλανήτων ἀϊδίους (ἀΐδιον γὰρ καὶ ἄστατον τὸ κύκλῳ σῶμα· δέδεικται δ’ ἐν τοῖς φυσικοῖς περὶ τούτων), ἀνάγκη καὶ τούτων ἑκάστην τῶν φορῶν ὑπ’ ἀκινήτου τε κινεῖσθαι καθ’ αὑτὴν καὶ ἀϊδίου οὐσίας. ἥ τε γὰρ τῶν ἄστρων φύσις ἀΐδιος [35] οὐσία τις οὖσα, καὶ τὸ κινοῦν ἀΐδιον καὶ πρότερον τοῦ κινουμένου, καὶ τὸ πρότερον οὐσίας οὐσίαν ἀναγκαῖον εἶναι. φανερὸν τοίνυν ὅτι τοσαύτας τε οὐσίας ἀναγκαῖον εἶναι τήν τε φύσιν ἀϊδίους καὶ ἀκινήτους καθ’ αὑτάς, καὶ ἄνευ μεγέθους διὰ τὴν εἰρημένην αἰτίαν πρότερον. [1] —ὅτι μὲν οὖν εἰσὶν οὐσίαι, καὶ τούτων τις πρώτη καὶ δευτέρα κατὰ τὴν αὐτὴν τάξιν ταῖς φοραῖς τῶν ἄστρων, φανερόν· τὸ δὲ πλῆθος ἤδη τῶν φορῶν ἐκ τῆς οἰκειοτάτης φιλοσοφίᾳ τῶν

μαθηματικῶν [5] ἐπιστημῶν δεῖ σκοπεῖν, ἐκ τῆς ἀστρολογίας· αὕτη γὰρ περὶ οὐσίας αἰσθητῆς μὲν ἀϊδίου δὲ ποιεῖται τὴν θεωρίαν, αἱ δ’ ἄλλαι περὶ οὐδεμιᾶς οὐσίας, οἷον ἥ τε περὶ τοὺς ἀριθμοὺς καὶ τὴν γεωμετρίαν. ὅτι μὲν οὖν πλείους τῶν φερομένων αἱ φοραί, φανερὸν τοῖς καὶ μετρίως ἡμμένοις (πλείους γὰρ ἕκαστον [10] φέρεται μιᾶς τῶν πλανωμένων ἄστρων)· πόσαι δ’ αὖται τυγχάνουσιν οὖσαι, νῦν μὲν ἡμεῖς ἃ λέγουσι τῶν μαθηματικῶν τινὲς ἐννοίας χάριν λέγομεν, ὅπως ᾖ τι τῇ διανοίᾳ πλῆθος ὡρισμένον ὑπολαβεῖν· τὸ δὲ λοιπὸν τὰ μὲν ζητοῦντας αὐτοὺς δεῖ τὰ δὲ πυνθανομένους παρὰ τῶν ζητούντων, [15] ἄν τι φαίνηται παρὰ τὰ νῦν εἰρημένα τοῖς ταῦτα πραγματευομένοις, φιλεῖν μὲν ἀμφοτέρους, πείθεσθαι δὲ τοῖς ἀκριβεστέροις.—Εὔδοξος μὲν οὖν ἡλίου καὶ σελήνης ἑκατέρου τὴν φορὰν ἐν τρισὶν ἐτίθετ’ εἶναι σφαίραις, ὧν τὴν μὲν πρώτην τὴν τῶν ἀπλανῶν ἄστρων εἶναι, τὴν δὲ δευτέραν κατὰ τὸν [20] διὰ μέσων τῶν ζῳδίων, τὴν δὲ τρίτην κατὰ τὸν λελοξωμένον ἐν τῷ πλάτει τῶν ζῳδίων (ἐν μείζονι δὲ πλάτει λελοξῶσθαι καθ’ ὃν ἡ σελήνη φέρεται ἢ καθ’ ὃν ὁ ἥλιος), τῶν δὲ πλανωμένων ἄστρων ἐν τέτταρσιν ἑκάστου σφαίραις, καὶ τούτων δὲ τὴν μὲν πρώτην καὶ δευτέραν τὴν αὐτὴν εἶναι [25] ἐκείναις (τήν τε γὰρ τῶν ἀπλανῶν τὴν ἁπάσας φέρουσαν εἶναι, καὶ τὴν ὑπὸ ταύτῃ τεταγμένην καὶ κατὰ τὸν διὰ μέσων τῶν ζῳδίων τὴν φορὰν ἔχουσαν κοινὴν ἁπασῶν εἶναι), τῆς δὲ τρίτης ἁπάντων τοὺς πόλους ἐν τῷ διὰ μέσων τῶν ζῳδίων εἶναι, τῆς δὲ τετάρτης τὴν φορὰν κατὰ τὸν λελοξωμένον [30] πρὸς τὸν μέσον ταύτης· εἶναι δὲ τῆς τρίτης σφαίρας τοὺς πόλους τῶν μὲν ἄλλων ἰδίους, τοὺς δὲ τῆς Ἀφροδίτης καὶ τοῦ Ἑρμοῦ τοὺς αὐτούς· Κάλλιππος δὲ τὴν μὲν θέσιν τῶν σφαιρῶν τὴν αὐτὴν ἐτίθετο Εὐδόξῳ τοῦτ’ ἔστι τῶν ἀποστημάτων τὴν τάξιν, τὸ δὲ πλῆθος τῷ μὲν τοῦ Διὸς καὶ [35] τῷ τοῦ Κρόνου τὸ αὐτὸ ἐκείνῳ ἀπεδίδου, τῷ δ’ ἡλίῳ καὶ τῇ σελήνῃ δύο ᾤετο ἔτι προσθετέας εἶναι σφαίρας, τὰ φαινόμενα [37] εἰ μέλλει τις ἀποδώσειν, τοῖς δὲ λοιποῖς τῶν πλανήτων ἑκάστῳ μίαν. ἀναγκαῖον δέ, εἰ μέλλουσι συντεθεῖσαι πᾶσαι τὰ φαινόμενα ἀποδώσειν, [1] καθ’ ἕκαστον τῶν πλανωμένων ἑτέρας σφαίρας μιᾷ ἐλάττονας εἶναι τὰς ἀνελιττούσας καὶ εἰς τὸ αὐτὸ ἀποκαθιστάσας τῇ θέσει τὴν πρώτην σφαῖραν ἀεὶ τοῦ ὑποκάτω τεταγμένου ἄστρου· οὕτω γὰρ μόνως [5] ἐνδέχεται τὴν τῶν πλανήτων φορὰν ἅπαντα ποιεῖσθαι. ἐπεὶ οὖν ἐν αἷς μὲν αὐτὰ φέρεται σφαίραις αἱ μὲν ὀκτὼ αἱ δὲ πέντε καὶ εἴκοσίν εἰσιν, τούτων δὲ μόνας οὐ δεῖ ἀνελιχθῆναι ἐν αἷς τὸ κατωτάτω τεταγμένον φέρεται, αἱ μὲν τὰς τῶν πρώτων δύο ἀνελίττουσαι ἓξ ἔσονται, αἱ δὲ τὰς [10] τῶν ὕστερον τεττάρων ἑκκαίδεκα· ὁ δὴ ἁπασῶν ἀριθμὸς τῶν τε φερουσῶν καὶ τῶν ἀνελιττουσῶν ταύτας πεντήκοντά τε καὶ πέντε. εἰ δὲ τῇ σελήνῃ τε καὶ τῷ ἡλίῳ μὴ προστιθείη τις ἃς εἴπομεν κινήσεις, αἱ πᾶσαι σφαῖραι ἔσονται ἑπτά τε καὶ τεσσαράκοντα.—τὸ μὲν οὖν πλῆθος τῶν σφαιρῶν ἔστω [15] τοσοῦτον, ὥστε καὶ τὰς οὐσίας καὶ τὰς ἀρχὰς τὰς ἀκινήτους καὶ τὰς αἰσθητὰς τοσαύτας εὔλογον ὑπολαβεῖν (τὸ γὰρ ἀναγκαῖον ἀφείσθω τοῖς ἰσχυροτέροις λέγειν)· εἰ δὲ μηδεμίαν οἷόν τ’ εἶναι φορὰν μὴ συντείνουσαν πρὸς ἄστρου φοράν, ἔτι δὲ πᾶσαν φύσιν καὶ πᾶσαν οὐσίαν ἀπαθῆ καὶ καθ’ [20] αὐτὴν τοῦ ἀρίστου τετυχηκυῖαν τέλος εἶναι δεῖ νομίζειν, οὐδεμία ἂν εἴη παρὰ ταύτας ἑτέρα φύσις, ἀλλὰ τοῦτον ἀνάγκη τὸν ἀριθμὸν εἶναι τῶν οὐσιῶν. εἴτε γὰρ εἰσὶν ἕτεραι, κινοῖεν ἂν ὡς τέλος οὖσαι φορᾶς· ἀλλὰ εἶναί γε ἄλλας φορὰς ἀδύνατον παρὰ τὰς εἰρημένας. τοῦτο δὲ εὔλογον ἐκ τῶν [25] φερομένων ὑπολαβεῖν. εἰ γὰρ πᾶν τὸ φέρον τοῦ φερομένου χάριν πέφυκε καὶ φορὰ πᾶσα φερομένου τινός ἐστιν, οὐδεμία φορὰ αὐτῆς ἂν ἕνεκα εἴη οὐδ’ ἄλλης φορᾶς, ἀλλὰ τῶν ἄστρων ἕνεκα. εἰ γὰρ ἔσται φορὰ φορᾶς ἕνεκα, καὶ ἐκείνην ἑτέρου δεήσει χάριν εἶναι· ὥστ’ ἐπειδὴ οὐχ οἷόν τε εἰς ἄπειρον, [30] τέλος ἔσται πάσης φορᾶς τῶν φερομένων τι θείων σωμάτων κατὰ τὸν οὐρανόν. ὅτι δὲ εἷς οὐρανός, φανερόν. εἰ γὰρ πλείους οὐρανοὶ ὥσπερ ἄνθρωποι, ἔσται εἴδει μία ἡ περὶ ἕκαστον ἀρχή, ἀριθμῷ δέ γε πολλαί. ἀλλ’ ὅσα ἀριθμῷ πολλά, ὕλην ἔχει (εἷς γὰρ λόγος καὶ ὁ αὐτὸς πολλῶν, [35] οἷον ἀνθρώπου, Σωκράτης δὲ εἷς)· τὸ δὲ τί ἦν εἶναι οὐκ ἔχει ὕλην τὸ πρῶτον· ἐντελέχεια γάρ. ἓν ἄρα καὶ λόγῳ καὶ ἀριθμῷ τὸ πρῶτον κινοῦν ἀκίνητον ὄν· καὶ τὸ

κινούμενον ἄρα ἀεὶ καὶ συνεχῶς· εἷς ἄρα οὐρανὸς μόνος. [1] παραδέδοται δὲ παρὰ τῶν ἀρχαίων καὶ παμπαλαίων ἐν μύθου σχήματι καταλελειμμένα τοῖς ὕστερον ὅτι θεοί τέ εἰσιν οὗτοι καὶ περιέχει τὸ θεῖον τὴν ὅλην φύσιν. τὰ δὲ λοιπὰ μυθικῶς ἤδη προσῆκται πρὸς τὴν πειθὼ τῶν πολλῶν καὶ [5] πρὸς τὴν εἰς τοὺς νόμους καὶ τὸ συμφέρον χρῆσιν· ἀνθρωποειδεῖς τε γὰρ τούτους καὶ τῶν ἄλλων ζῴων ὁμοίους τισὶ λέγουσι, καὶ τούτοις ἕτερα ἀκόλουθα καὶ παραπλήσια τοῖς εἰρημένοις, ὧν εἴ τις χωρίσας αὐτὸ λάβοι μόνον τὸ πρῶτον, ὅτι θεοὺς ᾠοντο τὰς πρώτας οὐσίας εἶναι, θείως ἂν εἰρῆσθαι [10] νομίσειεν, καὶ κατὰ τὸ εἰκὸς πολλάκις εὑρημένης εἰς τὸ δυνατὸν ἑκάστης καὶ τέχνης καὶ φιλοσοφίας καὶ πάλιν φθειρομένων καὶ ταύτας τὰς δόξας ἐκείνων οἷον λείψανα περισεσῶσθαι μέχρι τοῦ νῦν. ἡ μὲν οὖν πάτριος δόξα καὶ ἡ παρὰ τῶν πρώτων ἐπὶ τοσοῦτον ἡμῖν φανερὰ μόνον.

[15] τὰ δὲ περὶ τὸν νοῦν ἔχει τινὰς ἀπορίας· δοκεῖ μὲν γὰρ εἶναι τῶν φαινομένων θειότατον, πῶς δ’ ἔχων τοιοῦτος ἂν εἴη, ἔχει τινὰς δυσκολίας. εἴτε γὰρ μηδὲν νοεῖ, τί ἂν εἴη τὸ σεμνόν, ἀλλ’ ἔχει ὥσπερ ἂν εἰ ὁ καθεύδων· εἴτε νοεῖ, τούτου δ’ ἄλλο κύριον, οὐ γάρ ἐστι τοῦτο ὅ ἐστιν αὐτοῦ ἡ [20] οὐσία νόησις, ἀλλὰ δύναμις, οὐκ ἂν ἡ ἀρίστη οὐσία εἴη· διὰ γὰρ τοῦ νοεῖν τὸ τίμιον αὐτῷ ὑπάρχει. ἔτι δὲ εἴτε νοῦς ἡ οὐσία αὐτοῦ εἴτε νόησίς ἐστι, τί νοεῖ; ἢ γὰρ αὐτὸς αὑτὸν ἢ ἕτερόν τι· καὶ εἰ ἕτερόν τι, ἢ τὸ αὐτὸ ἀεὶ ἢ ἄλλο. πότερον οὖν διαφέρει τι ἢ οὐδὲν τὸ νοεῖν τὸ καλὸν ἢ τὸ τυχόν; [25] ἢ καὶ ἄτοπον τὸ διανοεῖσθαι περὶ ἐνίων; δῆλον τοίνυν ὅτι τὸ θειότατον καὶ τιμιώτατον νοεῖ, καὶ οὐ μεταβάλλει· εἰς χεῖρον γὰρ ἡ μεταβολή, καὶ κίνησίς τις ἤδη τὸ τοιοῦτον. πρῶτον μὲν οὖν εἰ μὴ νόησίς ἐστιν ἀλλὰ δύναμις, εὔλογον ἐπίπονον εἶναι τὸ συνεχὲς αὐτῷ τῆς νοήσεως· ἔπειτα δῆλον [30] ὅτι ἄλλο τι ἂν εἴη τὸ τιμιώτερον ἢ ὁ νοῦς, τὸ νοούμενον. καὶ γὰρ τὸ νοεῖν καὶ ἡ νόησις ὑπάρξει καὶ τὸ χείριστον νοοῦντι, ὥστ’ εἰ φευκτὸν τοῦτο (καὶ γὰρ μὴ ὁρᾶν ἔνια κρεῖττον ἢ ὁρᾶν), οὐκ ἂν εἴη τὸ ἄριστον ἡ νόησις. αὐτὸν ἄρα νοεῖ, εἴπερ ἐστὶ τὸ κράτιστον, καὶ ἔστιν ἡ νόησις νοήσεως νόησις. [35] φαίνεται δ’ ἀεὶ ἄλλου ἡ ἐπιστήμη καὶ ἡ αἴσθησις καὶ ἡ δόξα καὶ ἡ διάνοια, αὐτῆς δ’ ἐν παρέργῳ. ἔτι εἰ ἄλλο τὸ νοεῖν καὶ τὸ νοεῖσθαι, κατὰ πότερον αὐτῷ τὸ εὖ ὑπάρχει; οὐδὲ γὰρ ταὐτὸ τὸ εἶναι νοήσει καὶ νοουμένῳ. ἢ ἐπ’ ἐνίων ἡ ἐπιστήμη τὸ πρᾶγμα, [1] ἐπὶ μὲν τῶν ποιητικῶν ἄνευ ὕλης ἡ οὐσία καὶ τὸ τί ἦν εἶναι, ἐπὶ δὲ τῶν θεωρητικῶν ὁ λόγος τὸ πρᾶγμα καὶ ἡ νόησις; οὐχ ἑτέρου οὖν ὄντος τοῦ νοουμένου καὶ τοῦ νοῦ, ὅσα μὴ ὕλην ἔχει, τὸ αὐτὸ ἔσται, καὶ ἡ [5] νόησις τῷ νοουμένῳ μία. ἔτι δὴ λείπεται ἀπορία, εἰ σύνθετον τὸ νοούμενον· μεταβάλλοι γὰρ ἂν ἐν τοῖς μέρεσι τοῦ ὅλου. ἢ ἀδιαίρετον πᾶν τὸ μὴ ἔχον ὕλην—ὥσπερ ὁ ἀνθρώπινος νοῦς ἢ ὅ γε τῶν συνθέτων ἔχει ἔν τινι χρόνῳ (οὐ γὰρ ἔχει τὸ εὖ ἐν τῳδὶ ἢ ἐν τῳδί, ἀλλ’ ἐν ὅλῳ τινὶ τὸ ἄριστον, ὃν ἄλλο τι)— [10] οὕτως δ’ ἔχει αὐτὴ αὑτῆς ἡ νόησις τὸν ἅπαντα αἰῶνα;

ἐπισκεπτέον δὲ καὶ ποτέρως ἔχει ἡ τοῦ ὅλου φύσις τὸ ἀγαθὸν καὶ τὸ ἄριστον, πότερον κεχωρισμένον τι καὶ αὐτὸ καθ’ αὑτό, ἢ τὴν τάξιν. ἢ ἀμφοτέρως ὥσπερ στράτευμα; καὶ γὰρ ἐν τῇ τάξει τὸ εὖ καὶ ὁ στρατηγός, καὶ μᾶλλον [15] οὗτος· οὐ γὰρ οὗτος διὰ τὴν τάξιν ἀλλ’ ἐκείνη διὰ τοῦτόν ἐστιν. πάντα δὲ συντέτακταί πως, ἀλλ’ οὐχ ὁμοίως, καὶ πλωτὰ καὶ πτηνὰ καὶ φυτά· καὶ οὐχ οὕτως ἔχει ὥστε μὴ εἶναι θατέρῳ πρὸς θάτερον μηδέν, ἀλλ’ ἔστι τι. πρὸς μὲν γὰρ ἓν ἅπαντα συντέτακται, ἀλλ’ ὥσπερ ἐν οἰκίᾳ τοῖς ἐλευθέροις [20] ἥκιστα ἔξεστιν ὅ τι ἔτυχε ποιεῖν, ἀλλὰ πάντα ἢ τὰ πλεῖστα τέτακται, τοῖς δὲ ἀνδραπόδοις καὶ τοῖς θηρίοις μικρὸν τὸ εἰς τὸ κοινόν, τὸ δὲ πολὺ ὅ τι ἔτυχεν· τοιαύτη γὰρ ἑκάστου ἀρχὴ αὐτῶν ἡ φύσις ἐστίν. λέγω δ’ οἷον εἷς γε τὸ διακριθῆναι ἀνάγκη ἅπασιν ἐλθεῖν, καὶ ἄλλα οὕτως ἔστιν ὧν κοινωνεῖ [25] ἅπαντα εἰς τὸ ὅλον.—ὅσα δὲ ἀδύνατα συμβαίνει ἢ ἄτοπα τοῖς ἄλλως λέγουσι, καὶ ποῖα οἱ χαριεστέρως λέγοντες, καὶ ἐπὶ ποίων ἐλάχισται ἀπορίαι, δεῖ μὴ λανθάνειν. πάντες γὰρ ἐξ ἐναντίων ποιοῦσι πάντα. οὔτε δὲ τὸ πάντα οὔτε τὸ ἐξ ἐναντίων ὀρθῶς, οὔτ’ ἐν ὅσοις τὰ ἐναντία ὑπάρχει, πῶς [30] ἐκ τῶν ἐναντίων ἔσται, οὐ λέγουσιν· ἀπαθῆ γὰρ τὰ ἐναντία ὑπ’ ἀλλήλων. ἡμῖν δὲ λύεται τοῦτο

εὐλόγως τῷ τρίτον τι εἶναι. οἱ δὲ τὸ ἕτερον τῶν ἐναντίων ὕλην ποιοῦσιν, ὥσπερ οἱ τὸ ἄνισον τῷ ἴσῳ ἢ τῷ ἑνὶ τὰ πολλά. λύεται δὲ καὶ τοῦτο τὸν αὐτὸν τρόπον· ἡ γὰρ ὕλη ἡ μία οὐδενὶ ἐναντίον. ἔτι [35] ἅπαντα τοῦ φαύλου μεθέξει ἔξω τοῦ ἑνός· τὸ γὰρ κακὸν αὐτὸ θάτερον τῶν στοιχείων. οἱ δ' ἄλλοι οὐδ' ἀρχὰς τὸ ἀγαθὸν καὶ τὸ κακόν· καίτοι ἐν ἅπασι μάλιστα τὸ ἀγαθὸν ἀρχή. [38] οἱ δὲ τοῦτο μὲν ὀρθῶς ὅτι ἀρχήν, ἀλλὰ πῶς τὸ ἀγαθὸν ἀρχὴ οὐ λέγουσιν, πότερον ὡς τέλος ἢ ὡς κινῆσαν ἢ ὡς εἶδος. [1] ἀτόπως δὲ καὶ Ἐμπεδοκλῆς· τὴν γὰρ φιλίαν ποιεῖ τὸ ἀγαθόν, αὕτη δ' ἀρχὴ καὶ ὡς κινοῦσα (συνάγει γάρ) καὶ ὡς ὕλη· μόριον γὰρ τοῦ μίγματος. εἰ δὴ καὶ τῷ αὐτῷ συμβέβηκεν [5] καὶ ὡς ὕλῃ ἀρχῇ εἶναι καὶ ὡς κινοῦντι, ἀλλὰ τό γ' εἶναι οὐ ταὐτό. κατὰ πότερον οὖν φιλία; ἄτοπον δὲ καὶ τὸ ἄφθαρτον εἶναι τὸ νεῖκος· τοῦτο δ' ἐστὶν αὐτῷ ἡ τοῦ κακοῦ φύσις. Ἀναξαγόρας δὲ ὡς κινοῦν τὸ ἀγαθὸν ἀρχήν· ὁ γὰρ νοῦς κινεῖ. ἀλλὰ κινεῖ ἕνεκά τινος, ὥστε ἕτερον, πλὴν ὡς ἡμεῖς λέγομεν· [10] ἡ γὰρ ἰατρικὴ ἐστί πως ἡ ὑγίεια. ἄτοπον δὲ καὶ τὸ ἐναντίον μὴ ποιῆσαι τῷ ἀγαθῷ καὶ τῷ νῷ. πάντες δ' οἱ τἀναντία λέγοντες οὐ χρῶνται τοῖς ἐναντίοις, ἐὰν μὴ ῥυθμίσῃ τις. καὶ διὰ τί τὰ μὲν φθαρτὰ τὰ δ' ἄφθαρτα, οὐδεὶς λέγει· πάντα γὰρ τὰ ὄντα ποιοῦσιν ἐκ τῶν αὐτῶν ἀρχῶν. ἔτι οἱ [15] μὲν ἐκ τοῦ μὴ ὄντος ποιοῦσι τὰ ὄντα· οἱ δ' ἵνα μὴ τοῦτο ἀναγκασθῶσιν, ἓν πάντα ποιοῦσιν.—ἔτι διὰ τί ἀεὶ ἔσται γένεσις καὶ τί αἴτιον γενέσεως, οὐδεὶς λέγει. καὶ τοῖς δύο ἀρχὰς ποιοῦσιν ἄλλην ἀνάγκη ἀρχὴν κυριωτέραν εἶναι, καὶ τοῖς τὰ εἴδη ἔτι ἄλλη ἀρχὴ κυριωτέρα· διὰ τί γὰρ μετέσχεν ἢ [20] μετέχει; καὶ τοῖς μὲν ἄλλοις ἀνάγκη τῇ σοφίᾳ καὶ τῇ τιμιωτάτῃ ἐπιστήμῃ εἶναί τι ἐναντίον, ἡμῖν δ' οὔ. οὐ γάρ ἐστιν ἐναντίον τῷ πρώτῳ οὐδέν· πάντα γὰρ τὰ ἐναντία ὕλην ἔχει, καὶ δυνάμει ταῦτα ἔστιν· ἡ δὲ ἐναντία ἄγνοια εἰς τὸ ἐναντίον, τῷ δὲ πρώτῳ ἐναντίον οὐδέν. εἴ τε μὴ ἔσται παρὰ τὰ [25] αἰσθητὰ ἄλλα, οὐκ ἔσται ἀρχὴ καὶ τάξις καὶ γένεσις καὶ τὰ οὐράνια, ἀλλ' ἀεὶ τῆς ἀρχῆς ἀρχή, ὥσπερ τοῖς θεολόγοις καὶ τοῖς φυσικοῖς πᾶσιν. εἰ δ' ἔσται τὰ εἴδη· ἢ οἱ ἀριθμοί, οὐδενὸς αἴτια· εἰ δὲ μή, οὔτι κινήσεώς γε. ἔτι πῶς ἔσται ἐξ ἀμεγεθῶν μέγεθος καὶ συνεχές; ὁ γὰρ ἀριθμὸς οὐ ποιήσει [30] συνεχές, οὔτε ὡς κινοῦν οὔτε ὡς εἶδος. ἀλλὰ μὴν οὐδέν γ' ἔσται τῶν ἐναντίων ὅπερ καὶ ποιητικὸν καὶ κινητικόν; ἐνδέχοιτο γὰρ ἂν μὴ εἶναι. ἀλλὰ μὴν ὕστερόν γε τὸ ποιεῖν δυνάμεως. οὐκ ἄρα ἀΐδια τὰ ὄντα. ἀλλ' ἔστιν· ἀναιρετέον ἄρα τούτων τι. τοῦτο δ' εἴρηται πῶς. ἔτι τίνι οἱ ἀριθμοὶ ἓν ἢ ἡ [35] ψυχὴ καὶ τὸ σῶμα καὶ ὅλως τὸ εἶδος καὶ τὸ πρᾶγμα, οὐδὲν λέγει οὐδείς· οὐδ' ἐνδέχεται εἰπεῖν, ἐὰν μὴ ὡς ἡμεῖς εἴπῃ, ὡς τὸ κινοῦν ποιεῖ. οἱ δὲ λέγοντες τὸν ἀριθμὸν πρῶτον τὸν μαθηματικὸν καὶ οὕτως ἀεὶ ἄλλην ἐχομένην οὐσίαν καὶ ἀρχὰς ἑκάστης ἄλλας, [1] ἐπεισοδιώδη τὴν τοῦ παντὸς οὐσίαν ποιοῦσιν (οὐδὲν γὰρ ἡ ἑτέρα τῇ ἑτέρᾳ συμβάλλεται οὖσα ἢ μὴ οὖσα) καὶ ἀρχὰς πολλάς· τὰ δὲ ὄντα οὐ βούλεται πολιτεύεσθαι κακῶς. οὐκ ἀγαθὸν πολυκοιρανίη· εἷς κοίρανος ἔστω.

[8] περὶ μὲν οὖν τῆς τῶν αἰσθητῶν οὐσίας εἴρηται τίς ἐστιν, ἐν μὲν τῇ μεθόδῳ τῇ τῶν φυσικῶν περὶ τῆς ὕλης, ὕστερον [10] δὲ περὶ τῆς κατ' ἐνέργειαν· ἐπεὶ δ' ἡ σκέψις ἐστὶ πότερον ἔστι τις παρὰ τὰς αἰσθητὰς οὐσίας ἀκίνητος καὶ ἀΐδιος ἢ οὐκ ἔστι, καὶ εἰ ἔστι τίς ἐστι, πρῶτον τὰ παρὰ τῶν ἄλλων λεγόμενα θεωρητέον, ὅπως εἴτε τι μὴ καλῶς λέγουσι, μὴ τοῖς αὐτοῖς ἔνοχοι ὦμεν, καὶ εἴ τι δόγμα κοινὸν ἡμῖν κἀκείνοις, [15] τοῦτ' ἰδίᾳ μὴ καθ' ἡμῶν δυσχεραίνωμεν· ἀγαπητὸν γὰρ εἴ τις τὰ μὲν κάλλιον λέγοι τὰ δὲ μὴ χεῖρον. δύο δ' εἰσὶ δόξαι περὶ τούτων· τά τε γὰρ μαθηματικά φασιν οὐσίας εἶναί τινες, οἷον ἀριθμοὺς καὶ γραμμὰς καὶ τὰ συγγενῆ τούτοις, καὶ πάλιν τὰς ἰδέας. ἐπεὶ δὲ οἱ μὲν δύο ταῦτα γένη [20] ποιοῦσι, τάς τε ἰδέας καὶ τοὺς μαθηματικοὺς ἀριθμούς, οἱ δὲ μίαν φύσιν ἀμφοτέρων, ἕτεροι δέ τινες τὰς μαθηματικὰς μόνον οὐσίας εἶναί φασι, σκεπτέον πρῶτον μὲν περὶ τῶν μαθηματικῶν, μηδεμίαν προστιθέντας φύσιν ἄλλην αὐτοῖς, οἷον πότερον ἰδέαι τυγχάνουσιν οὖσαι ἢ οὔ, καὶ πότερον ἀρχαὶ [25] καὶ οὐσίαι τῶν ὄντων ἢ οὔ, ἀλλ' ὡς περὶ μαθηματικῶν μόνον εἴτ' εἰσὶν εἴτε μὴ εἰσί, καὶ εἰ εἰσὶ πῶς εἰσίν· ἔπειτα μετὰ ταῦτα χωρὶς περὶ τῶν ἰδεῶν αὐτῶν ἁπλῶς καὶ ὅσον νόμου χάριν· τεθρύληται γὰρ τὰ πολλὰ καὶ ὑπὸ τῶν ἐξωτερικῶν λόγων, ἔτι δὲ πρὸς ἐκείνην δεῖ τὴν σκέψιν ἁπαντᾶν [30] τὸν πλείω λόγον, ὅταν

ἐπισκοπῶμεν εἰ αἱ οὐσίαι καὶ αἱ ἀρχαὶ τῶν ὄντων ἀριθμοὶ καὶ ἰδέαι εἰσίν· μετὰ γὰρ τὰς ἰδέας αὕτη λείπεται τρίτη σκέψις.—ἀνάγκη δ’, εἴπερ ἔστι τὰ μαθηματικά, ἢ ἐν τοῖς αἰσθητοῖς εἶναι αὐτὰ καθάπερ λέγουσί τινες, ἢ κεχωρισμένα τῶν αἰσθητῶν (λέγουσι δὲ καὶ [35] οὕτω τινές)· ἢ εἰ μηδετέρως, ἢ οὐκ εἰσὶν ἢ ἄλλον τρόπον εἰσίν· ὥσθ’ ἡ ἀμφισβήτησις ἡμῖν ἔσται οὐ περὶ τοῦ εἶναι ἀλλὰ περὶ τοῦ τρόπου.

ὅτι μὲν τοίνυν ἔν γε τοῖς αἰσθητοῖς ἀδύνατον εἶναι καὶ ἅμα πλασματίας ὁ λόγος, εἴρηται μὲν καὶ ἐν τοῖς διαπορήμασιν ὅτι δύο ἅμα στερεὰ εἶναι ἀδύνατον, [1] ἔτι δὲ καὶ ὅτι τοῦ αὐτοῦ λόγου καὶ τὰς ἄλλας δυνάμεις καὶ φύσεις ἐν τοῖς αἰσθητοῖς εἶναι καὶ μηδεμίαν κεχωρισμένην·—ταῦτα μὲν οὖν εἴρηται πρότερον, ἀλλὰ πρὸς τούτοις φανερὸν ὅτι [5] ἀδύνατον διαιρεθῆναι ὁτιοῦν σῶμα· κατ’ ἐπίπεδον γὰρ διαιρεθήσεται, καὶ τοῦτο κατὰ γραμμὴν καὶ αὕτη κατὰ στιγμήν, ὥστ’ εἰ τὴν στιγμὴν διελεῖν ἀδύνατον, καὶ τὴν γραμμήν, εἰ δὲ ταύτην, καὶ τἆλλα. τί οὖν διαφέρει ἢ ταύτας εἶναι τοιαύτας φύσεις, ἢ αὐτὰς μὲν μή, εἶναι δ’ ἐν αὐταῖς τοιαύτας [10] φύσεις; τὸ αὐτὸ γὰρ συμβήσεται· διαιρουμένων γὰρ τῶν αἰσθητῶν διαιρεθήσονται, ἢ οὐδὲ αἱ αἰσθηταί. ἀλλὰ μὴν οὐδὲ κεχωρισμένας γ’ εἶναι φύσεις τοιαύτας δυνατόν. εἰ γὰρ ἔσται στερεὰ παρὰ τὰ αἰσθητὰ κεχωρισμένα τούτων ἕτερα καὶ πρότερα τῶν αἰσθητῶν, δῆλον ὅτι καὶ παρὰ τὰ ἐπίπεδα [15] ἕτερα ἀναγκαῖον εἶναι ἐπίπεδα κεχωρισμένα καὶ στιγμὰς καὶ γραμμάς (τοῦ γὰρ αὐτοῦ λόγου)· εἰ δὲ ταῦτα, πάλιν παρὰ τὰ τοῦ στερεοῦ τοῦ μαθηματικοῦ ἐπίπεδα καὶ γραμμὰς καὶ στιγμὰς ἕτερα κεχωρισμένα (πρότερα γὰρ τῶν συγκειμένων ἐστὶ τὰ ἀσύνθετα· καὶ εἴπερ τῶν αἰσθητῶν πρότερα [20] σώματα μὴ αἰσθητά, τῷ αὐτῷ λόγῳ καὶ τῶν ἐπιπέδων τῶν ἐν τοῖς ἀκινήτοις στερεοῖς τὰ αὐτὰ καθ’ αὑτά, ὥστε ἕτερα ταῦτα ἐπίπεδα καὶ γραμμαὶ τῶν ἅμα τοῖς στερεοῖς τοῖς κεχωρισμένοις· τὰ μὲν γὰρ ἅμα τοῖς μαθηματικοῖς στερεοῖς τὰ δὲ πρότερα τῶν μαθηματικῶν στερεῶν). πάλιν [25] τοίνυν τούτων τῶν ἐπιπέδων ἔσονται γραμμαί, ὧν πρότερον δεήσει ἑτέρας γραμμὰς καὶ στιγμὰς εἶναι διὰ τὸν αὐτὸν λόγον· καὶ τούτων τῶν ἐκ ταῖς προτέραις γραμμαῖς ἑτέρας προτέρας στιγμάς, ὧν οὐκέτι πρότεραι ἕτεραι. ἄτοπός τε δὴ γίγνεται ἡ σώρευσις (συμβαίνει γὰρ στερεὰ μὲν μοναχὰ [30] παρὰ τὰ αἰσθητά, ἐπίπεδα δὲ τριττὰ παρὰ τὰ αἰσθητά—τά τε παρὰ τὰ αἰσθητὰ καὶ τὰ ἐν τοῖς μαθηματικοῖς στερεοῖς καὶ τὰ παρὰ τὰ ἐν τούτοις—γραμμαὶ δὲ τετραξαί, στιγμαὶ δὲ πενταξαί· ὥστε περὶ ποῖα αἱ ἐπιστῆμαι ἔσονται αἱ μαθηματικαὶ τούτων; οὐ γὰρ δὴ περὶ τὰ ἐν τῷ στερεῷ τῷ ἀκινήτῳ [35] ἐπίπεδα καὶ γραμμὰς καὶ στιγμάς· ἀεὶ γὰρ περὶ τὰ πρότερα ἡ ἐπιστήμη)· ὁ δ’ αὐτὸς λόγος καὶ περὶ τῶν ἀριθμῶν· παρ’ ἑκάστας γὰρ τὰς στιγμὰς ἕτεραι ἔσονται μονάδες, καὶ παρ’ ἕκαστα τὰ ὄντα, τὰ αἰσθητά, εἶτα τὰ νοητά, ὥστ’ ἔσται γένη τῶν μαθηματικῶν ἀριθμῶν. ἔτι ἅπερ καὶ ἐν τοῖς ἀπορήμασιν ἐπήλθομεν πῶς ἐνδέχεται λύειν; [1] περὶ ἃ γὰρ [2] ἡ ἀστρολογία ἐστίν, ὁμοίως ἔσται παρὰ τὰ αἰσθητὰ καὶ περὶ ἃ ἡ γεωμετρία· εἶναι δ’ οὐρανὸν καὶ τὰ μόρια αὐτοῦ πῶς δυνατόν, ἢ ἄλλο ὁτιοῦν ἔχον κίνησιν; ὁμοίως δὲ καὶ τὰ [5] ὀπτικὰ καὶ τὰ ἁρμονικά· ἔσται γὰρ φωνή τε καὶ ὄψις παρὰ τὰ αἰσθητὰ καὶ τὰ καθ’ ἕκαστα, ὥστε δῆλον ὅτι καὶ αἱ ἄλλαι αἰσθήσεις καὶ τὰ ἄλλα αἰσθητά· τί γὰρ μᾶλλον τάδε ἢ τάδε; εἰ δὲ ταῦτα, καὶ ζῷα ἔσονται, εἴπερ καὶ αἰσθήσεις. ἔτι γράφεται ἔνια καθόλου ὑπὸ τῶν μαθηματικῶν [10] παρὰ ταύτας τὰς οὐσίας. ἔσται οὖν καὶ αὕτη τις ἄλλη οὐσία μεταξὺ κεχωρισμένη τῶν τ’ ἰδεῶν καὶ τῶν μεταξύ, ἢ οὔτε ἀριθμός ἐστιν οὔτε στιγμαὶ οὔτε μέγεθος οὔτε χρόνος. εἰ δὲ τοῦτο ἀδύνατον, δῆλον ὅτι κἀκεῖνα ἀδύνατον εἶναι κεχωρισμένα τῶν αἰσθητῶν. ὅλως δὲ τοὐναντίον συμβαίνει καὶ τοῦ [15] ἀληθοῦς καὶ τοῦ εἰωθότος ὑπολαμβάνεσθαι, εἴ τις θήσει οὕτως εἶναι τὰ μαθηματικὰ ὡς κεχωρισμένας τινὰς φύσεις. ἀνάγκη γὰρ διὰ τὸ μὲν οὕτως εἶναι αὐτὰς προτέρας εἶναι τῶν αἰσθητῶν μεγεθῶν, κατὰ τὸ ἀληθὲς δὲ ὑστέρας· τὸ γὰρ ἀτελὲς μέγεθος γενέσει μὲν πρότερόν ἐστι, τῇ οὐσίᾳ δ’ [20] ὕστερον, οἷον ἄψυχον ἐμψύχου. ἔτι τίνι καὶ πότ’ ἔσται ἓν τὰ μαθηματικὰ μεγέθη; τὰ μὲν γὰρ ἐνταῦθα ψυχῇ ἢ μέρει ψυχῆς ἢ ἄλλῳ τινί, εὐλόγως (εἰ δὲ μή, πολλά, καὶ διαλύεται), ἐκείνοις δὲ διαιρετοῖς

καὶ ποσοῖς οὖσι τί αἴτιον τοῦ ἓν εἶναι καὶ συμμένειν; ἔτι αἱ γενέσεις δηλοῦσιν. πρῶτον [25] μὲν γὰρ ἐπὶ μῆκος γίγνεται, εἶτα ἐπὶ πλάτος, τελευταῖον δ’ εἰς βάθος, καὶ τέλος ἔσχεν. εἰ οὖν τὸ τῇ γενέσει ὕστερον τῇ οὐσίᾳ πρότερον, τὸ σῶμα πρότερον ἂν εἴη ἐπιπέδου καὶ μήκους· καὶ ταύτῃ καὶ τέλειον καὶ ὅλον μᾶλλον, ὅτι ἔμψυχον γίγνεται· γραμμὴ δὲ ἔμψυχος ἢ ἐπίπεδον πῶς [30] ἂν εἴη; ὑπὲρ γὰρ τὰς αἰσθήσεις τὰς ἡμετέρας ἂν εἴη τὸ ἀξίωμα. ἔτι τὸ μὲν σῶμα οὐσία τις (ἤδη γὰρ ἔχει πως τὸ τέλειον), αἱ δὲ γραμμαὶ πῶς οὐσίαι; οὔτε γὰρ ὡς εἶδος καὶ μορφή τις, οἷον εἰ ἄρα ἡ ψυχὴ τοιοῦτον, οὔτε ὡς ἡ ὕλη, οἷον τὸ σῶμα· οὐθὲν γὰρ ἐκ γραμμῶν οὐδ’ ἐπιπέδων [35] οὐδὲ στιγμῶν φαίνεται συνίστασθαι δυνάμενον, εἰ δ’ ἦν οὐσία τις ὑλική, τοῦτ’ ἂν ἐφαίνετο δυνάμενα πάσχειν. τῷ μὲν οὖν λόγῳ ἔστω πρότερα, [1] ἀλλ’ οὐ πάντα ὅσα τῷ λόγῳ πρότερα καὶ τῇ οὐσίᾳ πρότερα. τῇ μὲν γὰρ οὐσίᾳ πρότερα ὅσα χωριζόμενα τῷ εἶναι ὑπερβάλλει, τῷ λόγῳ δὲ ὅσων οἱ λόγοι ἐκ τῶν λόγων· ταῦτα δὲ οὐχ ἅμα ὑπάρχει. εἰ γὰρ [5] μὴ ἔστι τὰ πάθη παρὰ τὰς οὐσίας, οἷον κινούμενόν τι ἢ λευκόν, τοῦ λευκοῦ ἀνθρώπου τὸ λευκὸν πρότερον κατὰ τὸν λόγον ἀλλ’ οὐ κατὰ τὴν οὐσίαν· οὐ γὰρ ἐνδέχεται εἶναι κεχωρισμένον ἀλλ’ ἀεὶ ἅμα τῷ συνόλῳ ἐστίν (σύνολον δὲ λέγω τὸν ἄνθρωπον τὸν λευκόν), ὥστε φανερὸν ὅτι οὔτε τὸ ἐξ [10] ἀφαιρέσεως πρότερον οὔτε τὸ ἐκ προσθέσεως ὕστερον· ἐκ προσθέσεως γὰρ τῷ λευκῷ ὁ λευκὸς ἄνθρωπος λέγεται.

ὅτι μὲν οὖν οὔτε οὐσίαι μᾶλλον τῶν σωμάτων εἰσὶν οὔτε πρότερα τῷ εἶναι τῶν αἰσθητῶν ἀλλὰ τῷ λόγῳ μόνον, οὔτε κεχωρισμένα που εἶναι δυνατόν, εἴρηται ἱκανῶς· ἐπεὶ δ’ οὐδ’ [15] ἐν τοῖς αἰσθητοῖς ἐνεδέχετο αὐτὰ εἶναι, φανερὸν ὅτι ἢ ὅλως οὐκ ἔστιν ἢ τρόπον τινὰ ἔστι καὶ διὰ τοῦτο οὐχ ἁπλῶς ἔστιν· πολλαχῶς γὰρ τὸ εἶναι λέγομεν.

ὥσπερ γὰρ καὶ τὰ καθόλου ἐν τοῖς μαθήμασιν οὐ περὶ κεχωρισμένων ἐστὶ παρὰ τὰ μεγέθη καὶ τοὺς ἀριθμοὺς ἀλλὰ περὶ τούτων μέν, οὐχ ᾗ [20] δὲ τοιαῦτα οἷα ἔχειν μέγεθος ἢ εἶναι διαιρετά, δῆλον ὅτι ἐνδέχεται καὶ περὶ τῶν αἰσθητῶν μεγεθῶν εἶναι καὶ λόγους καὶ ἀποδείξεις, μὴ ᾗ δὲ αἰσθητὰ ἀλλ’ ᾗ τοιαδί. ὥσπερ γὰρ καὶ ᾗ κινούμενα μόνον πολλοὶ λόγοι εἰσί, χωρὶς τοῦ τί ἕκαστόν ἐστι τῶν τοιούτων καὶ τῶν συμβεβηκότων αὐτοῖς, [25] καὶ οὐκ ἀνάγκη διὰ ταῦτα ἢ κεχωρισμένον τι εἶναι κινούμενον τῶν αἰσθητῶν ἢ ἐν τούτοις τινὰ φύσιν εἶναι ἀφωρισμένην, οὕτω καὶ ἐπὶ τῶν κινουμένων ἔσονται λόγοι καὶ ἐπιστῆμαι, οὐχ ᾗ κινούμενα δὲ ἀλλ’ ᾗ σώματα μόνον, καὶ πάλιν ᾗ ἐπίπεδα μόνον καὶ ᾗ μήκη μόνον, καὶ ᾗ διαιρετὰ [30] καὶ ᾗ ἀδιαίρετα ἔχοντα δὲ θέσιν καὶ ᾗ ἀδιαίρετα μόνον, ὥστ’ ἐπεὶ ἁπλῶς λέγειν ἀληθὲς μὴ μόνον τὰ χωριστὰ εἶναι ἀλλὰ καὶ τὰ μὴ χωριστά (οἷον κινούμενα εἶναι), καὶ τὰ μαθηματικὰ ὅτι ἔστιν ἁπλῶς ἀληθὲς εἰπεῖν, καὶ τοιαῦτά γε οἷα λέγουσιν. καὶ ὥσπερ καὶ τὰς ἄλλας ἐπιστήμας ἁπλῶς [35] ἀληθὲς εἰπεῖν τούτου εἶναι, οὐχὶ τοῦ συμβεβηκότος (οἷον ὅτι λευκοῦ, εἰ τὸ ὑγιεινὸν λευκόν, ἡ δ’ ἔστιν ὑγιεινοῦ) ἀλλ’ ἐκείνου οὗ ἐστὶν ἑκάστη, [1] εἰ ᾗ ὑγιεινὸν ὑγιεινοῦ, εἰ δ’ ᾗ ἄνθρωπος ἀνθρώπου, οὕτω καὶ τὴν γεωμετρίαν· οὐκ εἰ συμβέβηκεν αἰσθητὰ εἶναι ὧν ἐστί, μὴ ἔστι δὲ ᾗ αἰσθητά, οὐ τῶν αἰσθητῶν ἔσονται αἱ μαθηματικαὶ ἐπιστῆμαι, οὐ μέντοι οὐσὲ παρὰ ταῦτα ἄλλων [5] κεχωρισμένων. πολλὰ δὲ συμβέβηκε καθ’ αὑτὰ τοῖς πράγμασιν ᾗ ἕκαστον ὑπάρχει τῶν τοιούτων, ἐπεὶ καὶ ᾗ θῆλυ τὸ ζῷον καὶ ᾗ ἄρρεν, ἴδια πάθη ἔστιν (καίτοι οὐκ ἔστι τι θῆλυ οὐδ’ ἄρρεν κεχωρισμένον τῶν ζῴων)· ὥστε καὶ ᾗ μήκη μόνον καὶ ᾗ ἐπίπεδα. καὶ ὅσῳ δὴ ἂν περὶ προτέρων τῷ [10] λόγῳ καὶ ἁπλουστέρων, τοσούτῳ μᾶλλον ἔχει τὸ ἀκριβές (τοῦτο δὲ τὸ ἁπλοῦν ἐστίν), ὥστε ἄνευ τε μεγέθους μᾶλλον ἢ μετὰ μεγέθους, καὶ μάλιστα ἄνευ κινήσεως, ἐὰν δὲ κίνησιν, μάλιστα τὴν πρώτην· ἁπλουστάτη γάρ, καὶ ταύτης ἡ ὁμαλή. ὁ δ’ αὐτὸς λόγος καὶ περὶ ἁρμονικῆς καὶ ὀπτικῆς· οὐδετέρα [15] γὰρ ᾗ ὄψις ἢ ᾗ φωνὴ θεωρεῖ, ἀλλ’ ᾗ γραμμαὶ καὶ ἀριθμοί (οἰκεῖα μέντοι ταῦτα πάθη ἐκείνων), καὶ ἡ μηχανικὴ δὲ ὡσαύτως, ὥστ’ εἴ τις θέμενος κεχωρισμένα τῶν συμβεβηκότων σκοπεῖ τι περὶ τούτων ᾗ τοιαῦτα, οὐθὲν διὰ τοῦτο ψεῦδος ψεύσεται, ὥσπερ οὐδ’ ὅταν ἐν τῇ γῇ γράφῃ καὶ [20] ποδιαίαν φῇ τὴν μὴ ποδιαίαν· οὐ γὰρ ἐν ταῖς προτάσεσι τὸ ψεῦδος. ἄριστα δ’ ἂν οὕτω θεωρηθείη ἕκαστον, εἴ τις τὸ μὴ κεχωρισμένον θείη χωρίσας, ὅπερ ὁ

ἀριθμητικὸς ποιεῖ καὶ ὁ γεωμέτρης. ἓν μὲν γὰρ καὶ ἀδιαίρετον ὁ ἄνθρωπος ᾗ ἄνθρωπος· ὁ δ’ ἔθετο ἓν ἀδιαίρετον, εἶτ’ ἐθεώρησεν εἴ τι [25] τῷ ἀνθρώπῳ συμβέβηκεν ᾗ ἀδιαίρετος. ὁ δὲ γεωμέτρης οὔθ’ ᾗ ἄνθρωπος οὔθ’ ᾗ ἀδιαίρετος ἀλλ’ ᾗ στερεόν. ἃ γὰρ κἂν εἰ μή που ἦν ἀδιαίρετος ὑπῆρχεν αὐτῷ, δῆλον ὅτι καὶ ἄνευ τούτων ἐνδέχεται αὐτῷ ὑπάρχειν τὸ δυνατόν, ὥστε διὰ τοῦτο ὀρθῶς οἱ γεωμέτραι λέγουσι, καὶ περὶ ὄντων διαλέγονται, [30] καὶ ὄντα ἐστίν· διττὸν γὰρ τὸ ὄν, τὸ μὲν ἐντελεχείᾳ τὸ δ’ ὑλικῶς. ἐπεὶ δὲ τὸ ἀγαθὸν καὶ τὸ καλὸν ἕτερον (τὸ μὲν γὰρ ἀεὶ ἐν πράξει, τὸ δὲ καλὸν καὶ ἐν τοῖς ἀκινήτοις), οἱ φάσκοντες οὐδὲν λέγειν τὰς μαθηματικὰς ἐπιστήμας περὶ καλοῦ ἢ ἀγαθοῦ ψεύδονται. λέγουσι γὰρ καὶ δεικνύουσι μάλιστα· [35] οὐ γὰρ εἰ μὴ ὀνομάζουσι τὰ δ’ ἔργα καὶ τοὺς λόγους δεικνύουσιν, οὐ λέγουσι περὶ αὐτῶν. τοῦ δὲ καλοῦ μέγιστα εἴδη τάξις καὶ συμμετρία καὶ τὸ ὡρισμένον, [1] ἃ μάλιστα δεικνύουσιν αἱ μαθηματικαὶ ἐπιστῆμαι. καὶ ἐπεί γε πολλῶν αἴτια φαίνεται ταῦτα (λέγω δ’ οἷον ἡ τάξις καὶ τὸ ὡρισμένον), δῆλον ὅτι λέγοιεν ἂν καὶ τὴν τοιαύτην αἰτίαν τὴν [5] ὡς τὸ καλὸν αἴτιον τρόπον τινά. μᾶλλον δὲ γνωρίμως ἐν ἄλλοις περὶ αὐτῶν ἐροῦμεν.

περὶ μὲν οὖν τῶν μαθηματικῶν, ὅτι τε ὄντα ἐστὶ καὶ πῶς ὄντα, καὶ πῶς πρότερα καὶ πῶς οὐ πρότερα, τοσαῦτα εἰρήσθω· περὶ δὲ τῶν ἰδεῶν πρῶτον αὐτὴν τὴν κατὰ τὴν [10] ἰδέαν δόξαν ἐπισκεπτέον, μηθὲν συνάπτοντας πρὸς τὴν τῶν ἀριθμῶν φύσιν, ἀλλ’ ὡς ὑπέλαβον ἐξ ἀρχῆς οἱ πρῶτοι τὰς ἰδέας φήσαντες εἶναι. συνέβη δ’ ἡ περὶ τῶν εἰδῶν δόξα τοῖς εἰποῦσι διὰ τὸ πεισθῆναι περὶ τῆς ἀληθείας τοῖς Ἡρακλειτείοις λόγοις ὡς πάντων τῶν αἰσθητῶν ἀεὶ ῥεόντων, [15] ὥστ’ εἴπερ ἐπιστήμη τινὸς ἔσται καὶ φρόνησις, ἑτέρας δεῖν τινὰς φύσεις εἶναι παρὰ τὰς αἰσθητὰς μενούσας· οὐ γὰρ εἶναι τῶν ῥεόντων ἐπιστήμην. Σωκράτους δὲ περὶ τὰς ἠθικὰς ἀρετὰς πραγματευομένου καὶ περὶ τούτων ὁρίζεσθαι καθόλου ζητοῦντος πρώτου (τῶν μὲν γὰρ φυσικῶν ἐπὶ μικρὸν [20] Δημόκριτος ἥψατο μόνον καὶ ὡρίσατό πως τὸ θερμὸν καὶ τὸ ψυχρόν· οἱ δὲ Πυθαγόρειοι πρότερον περί τινων ὀλίγων, ὧν τοὺς λόγους εἰς τοὺς ἀριθμοὺς ἀνῆπτον, οἷον τί ἐστι καιρὸς ἢ τὸ δίκαιον ἢ γάμος· ἐκεῖνος δ’ εὐλόγως ἐζήτει τὸ τί ἐστιν· συλλογίζεσθαι γὰρ ἐζήτει, ἀρχὴ δὲ τῶν συλλογισμῶν τὸ [25] τί ἐστιν· διαλεκτικὴ γὰρ ἰσχὺς οὔπω τότ’ ἦν ὥστε δύνασθαι καὶ χωρὶς τοῦ τί ἐστι τἀναντία ἐπισκοπεῖν, καὶ τῶν ἐναντίων εἰ ἡ αὐτὴ ἐπιστήμη· δύο γάρ ἐστιν ἅ τις ἂν ἀποδοίη Σωκράτει δικαίως, τούς τ’ ἐπακτικοὺς λόγους καὶ τὸ ὁρίζεσθαι καθόλου· ταῦτα γάρ ἐστιν ἄμφω περὶ ἀρχὴν ἐπιστήμης)· [30] —ἀλλ’ ὁ μὲν Σωκράτης τὰ καθόλου οὐ χωριστὰ ἐποίει οὐδὲ τοὺς ὁρισμούς· οἱ δ’ ἐχώρισαν, καὶ τὰ τοιαῦτα τῶν ὄντων ἰδέας προσηγόρευσαν, ὥστε συνέβαινεν αὐτοῖς σχεδὸν τῷ αὐτῷ λόγῳ πάντων ἰδέας εἶναι τῶν καθόλου λεγομένων, καὶ παραπλήσιον ὥσπερ ἂν εἴ τις ἀριθμῆσαι βουλόμενος [35] ἐλαττόνων μὲν ὄντων οἴοιτο μὴ δυνήσεσθαι, πλείω δὲ ποιήσας ἀριθμοίη· πλείω γάρ ἐστι τῶν καθ’ ἕκαστα αἰσθητῶν ὡς εἰπεῖν τὰ εἴδη, [1] περὶ ὧν ζητοῦντες τὰς αἰτίας ἐκ τούτων ἐκεῖ προῆλθον· καθ’ ἕκαστόν τε γὰρ ὁμώνυμόν τι ἔστι καὶ παρὰ τὰς οὐσίας, τῶν τε ἄλλων ἓν ἔστιν ἐπὶ πολλῶν, καὶ ἐπὶ τοῖσδε καὶ ἐπὶ τοῖς ἀϊδίοις. ἔτι καθ’ οὓς τρόπους [5] δείκνυται ὅτι ἔστι τὰ εἴδη, κατ’ οὐθένα φαίνεται τούτων· ἐξ ἐνίων μὲν γὰρ οὐκ ἀνάγκη γίγνεσθαι συλλογισμόν, ἐξ ἐνίων δὲ καὶ οὐχ ὧν οἴονται τούτων εἴδη γίγνεται. κατά τε γὰρ τοὺς λόγους τοὺς ἐκ τῶν ἐπιστημῶν ἔσται εἴδη πάντων ὅσων ἐπιστῆμαι εἰσίν, καὶ κατὰ τὸ ἓν ἐπὶ πολλῶν καὶ τῶν [10] ἀποφάσεων, κατὰ δὲ τὸ νοεῖν τι φθαρέντος τῶν φθαρτῶν· φάντασμα γάρ τι τούτων ἔστιν. ἔτι δὲ οἱ ἀκριβέστατοι τῶν λόγων οἱ μὲν τῶν πρός τι ποιοῦσιν ἰδέας, ὧν οὐ φασιν εἶναι καθ’ αὐτὸ γένος, οἱ δὲ τὸν τρίτον ἄνθρωπον λέγουσιν. ὅλως τε ἀναιροῦσιν οἱ περὶ τῶν εἰδῶν λόγοι ἃ μᾶλλον βούλονται [15] εἶναι οἱ λέγοντες εἴδη τοῦ τὰς ἰδέας εἶναι· συμβαίνει γὰρ μὴ εἶναι πρῶτον τὴν δυάδα ἀλλὰ τὸν ἀριθμόν, καὶ τούτου τὸ πρός τι καὶ τοῦτο τοῦ καθ’ αὑτό, καὶ πάνθ’ ὅσα τινὲς ἀκολουθήσαντες ταῖς περὶ τῶν εἰδῶν δόξαις ἠναντιώθησαν ταῖς ἀρχαῖς. ἔτι κατὰ μὲν τὴν ὑπόληψιν καθ’ [20] ἣν φασιν εἶναι τὰς ἰδέας οὐ μόνον τῶν οὐσιῶν ἔσονται εἴδη ἀλλὰ καὶ ἄλλων πολλῶν (τὸ γὰρ νόημα

ἓν οὐ μόνον περὶ τὰς οὐσίας ἀλλὰ καὶ κατὰ μὴ οὐσιῶν ἐστί, καὶ ἐπιστῆμαι οὐ μόνον τῆς οὐσίας εἰσί· συμβαίνει δὲ καὶ ἄλλα μυρία τοιαῦτα)· κατὰ δὲ τὸ ἀναγκαῖον καὶ τὰς [25] δόξας τὰς περὶ αὐτῶν, εἰ ἔστι μεθεκτὰ τὰ εἴδη, τῶν οὐσιῶν ἀναγκαῖον ἰδέας εἶναι μόνον· οὐ γὰρ κατὰ συμβεβηκὸς μετέχονται ἀλλὰ δεῖ ταύτῃ ἑκάστου μετέχειν ᾗ μὴ καθ’ ὑποκειμένου λέγονται (λέγω δ’ οἷον, εἴ τι αὐτοῦ διπλασίου μετέχει, τοῦτο καὶ ἀϊδίου μετέχει, ἀλλὰ κατὰ συμβεβηκός· [30] συμβέβηκε γὰρ τῷ διπλασίῳ ἀϊδίῳ εἶναι), ὥστε ἔσται οὐσία τὰ εἴδη· ταὐτὰ δ’ ἐνταῦθα οὐσίαν σημαίνει κἀκεῖ· ἢ τί ἔσται τὸ εἶναι φάναι τι παρὰ ταῦτα, τὸ ἓν ἐπὶ πολλῶν; καὶ εἰ μὲν ταὐτὸ εἶδος τῶν ἰδεῶν καὶ τῶν μετεχόντων, ἔσται τι κοινόν (τί γὰρ μᾶλλον ἐπὶ τῶν φθαρτῶν [35] δυάδων, καὶ τῶν δυάδων τῶν πολλῶν μὲν ἀϊδίων δέ, τὸ δυὰς ἓν καὶ ταὐτόν, ἢ ἐπ’ αὐτῆς καὶ τῆς τινός;)· εἰ δὲ μὴ τὸ αὐτὸ εἶδος, [1] ὁμώνυμα ἂν εἴη, καὶ ὅμοιον ὥσπερ ἂν εἴ τις καλοῖ ἄνθρωπον τόν τε Καλλίαν καὶ τὸ ξύλον, μηδεμίαν κοινωνίαν ἐπιβλέψας αὐτῶν. εἰ δὲ τὰ μὲν ἄλλα τοὺς κοινοὺς λόγους ἐφαρμόττειν θήσομεν τοῖς εἴδεσιν, οἷον [5] ἐπ’ αὐτὸν τὸν κύκλον σχῆμα ἐπίπεδον καὶ τὰ λοιπὰ μέρη τοῦ λόγου, τὸ δ’ ὃ ἔστι προστεθήσεται, σκοπεῖν δεῖ μὴ κενὸν ᾖ τοῦτο παντελῶς. τίνι τε γὰρ προστεθήσεται; τῷ μέσῳ ἢ τῷ ἐπιπέδῳ ἢ πᾶσιν; πάντα γὰρ τὰ ἐν τῇ οὐσίᾳ ἰδέαι, οἷον τὸ ζῷον καὶ τὸ δίπουν. ἔτι δῆλον ὅτι ἀνάγκη αὐτὸ [10] εἶναί τι, ὥσπερ τὸ ἐπίπεδον, φύσιν τινὰ ἢ πᾶσιν ἐνυπάρξει τοῖς εἴδεσιν ὡς γένος.

πάντων δὲ μάλιστα διαπορήσειεν ἄν τις τί ποτε συμβάλλονται τὰ εἴδη ἢ τοῖς ἀϊδίοις τῶν αἰσθητῶν ἢ τοῖς γιγνομένοις καὶ τοῖς φθειρομένοις· οὔτε γὰρ κινήσεώς ἐστιν [15] οὔτε μεταβολῆς οὐδεμιᾶς αἴτια αὐτοῖς. ἀλλὰ μὴν οὔτε πρὸς τὴν ἐπιστήμην οὐθὲν βοηθεῖ τὴν τῶν ἄλλων (οὐδὲ γὰρ οὐσία ἐκεῖνα τούτων· ἐν τούτοις γὰρ ἂν ἦν), οὔτ’ εἰς τὸ εἶναι, μὴ ἐνυπάρχοντά γε τοῖς μετέχουσιν· οὕτω μὲν γὰρ ἴσως αἴτια δόξειεν ἂν εἶναι ὡς τὸ λευκὸν μεμιγμένον τῷ λευκῷ, [20] ἀλλ’ οὗτος μὲν ὁ λόγος λίαν εὐκίνητος, ὃν Ἀναξαγόρας μὲν πρότερος Εὔδοξος δὲ ὕστερος ἔλεγε διαπορῶν καὶ ἕτεροί τινες (ῥᾴδιον γὰρ πολλὰ συναγαγεῖν καὶ ἀδύνατα πρὸς τὴν τοιαύτην δόξαν)· ἀλλὰ μὴν οὐδὲ ἐκ τῶν εἰδῶν ἐστὶ τἆλλα κατ’ οὐθένα τρόπον τῶν εἰωθότων λέγεσθαι. τὸ [25] δὲ λέγειν παραδείγματα εἶναι καὶ μετέχειν αὐτῶν τὰ ἄλλα κενολογεῖν ἐστὶ καὶ μεταφορὰς λέγειν ποιητικάς. τί γάρ ἐστι τὸ ἐργαζόμενον πρὸς τὰς ἰδέας ἀποβλέπον; ἐνδέχεταί τε καὶ εἶναι καὶ γίγνεσθαι ὁτιοῦν καὶ μὴ εἰκαζόμενον, ὥστε καὶ ὄντος Σωκράτους καὶ μὴ ὄντος γένοιτ’ ἂν οἷος Σωκράτης· [30] ὁμοίως δὲ δῆλον ὅτι κἂν εἰ ἦν ὁ Σωκράτης ἀΐδιος. ἔσται τε πλείω παραδείγματα τοῦ αὐτοῦ, ὥστε καὶ εἴδη, οἷον τοῦ ἀνθρώπου τὸ ζῷον καὶ τὸ δίπουν, ἅμα δὲ καὶ αὐτοάνθρωπος. ἔτι οὐ μόνον τῶν αἰσθητῶν παραδείγματα τὰ εἴδη ἀλλὰ καὶ αὐτῶν, οἷον τὸ γένος τῶν ὡς γένους [35] εἰδῶν· ὥστε τὸ αὐτὸ ἔσται παράδειγμα καὶ εἰκών. ἔτι δόξειεν ἂν ἀδύνατον χωρὶς εἶναι τὴν οὐσίαν καὶ οὗ ἡ οὐσία· [1] ὥστε πῶς ἂν αἱ ἰδέαι οὐσίαι τῶν πραγμάτων οὖσαι χωρὶς εἶεν; ἐν δὲ τῷ Φαίδωνι τοῦτον λέγεται τὸν τρόπον, ὡς καὶ τοῦ εἶναι καὶ τοῦ γίγνεσθαι αἴτια τὰ εἴδη ἐστίν· καίτοι τῶν εἰδῶν ὄντων ὅμως οὐ γίγνεται ἂν μὴ ᾖ τὸ κινῆσον, καὶ [5] πολλὰ γίγνεται ἕτερα, οἷον οἰκία καὶ δακτύλιος, ὧν οὔ φασιν εἶναι εἴδη· ὥστε δῆλον ὅτι ἐνδέχεται κἀκεῖνα, ὧν φασὶν ἰδέας εἶναι, καὶ εἶναι καὶ γίγνεσθαι διὰ τοιαύτας αἰτίας οἵας καὶ τὰ ῥηθέντα νῦν, ἀλλ’ οὐ διὰ τὰ εἴδη. ἀλλὰ περὶ μὲν τῶν ἰδεῶν καὶ τοῦτον τὸν τρόπον καὶ διὰ [10] λογικωτέρων καὶ ἀκριβεστέρων λόγων ἔστι πολλὰ συναγαγεῖν ὅμοια τοῖς τεθεωρημένοις.

ἐπεὶ δὲ διώρισται περὶ τούτων, καλῶς ἔχει πάλιν θεωρῆσαι τὰ περὶ τοὺς ἀριθμοὺς συμβαίνοντα τοῖς λέγουσιν οὐσίας αὐτοὺς εἶναι χωριστὰς καὶ τῶν ὄντων αἰτίας πρώτας. [15] ἀνάγκη δ’, εἴπερ ἐστὶν ὁ ἀριθμὸς φύσις τις καὶ μὴ ἄλλη τίς ἐστιν αὐτοῦ ἡ οὐσία ἀλλὰ τοῦτ’ αὐτό, ὥσπερ φασί τινες, ἤτοι εἶναι τὸ μὲν πρῶτόν τι αὐτοῦ τὸ δ’ ἐχόμενον, ἕτερον ὂν τῷ εἴδει ἕκαστον,—καὶ τοῦτο ἢ ἐπὶ τῶν μονάδων εὐθὺς [19] ὑπάρχει καὶ ἔστιν ἀσύμβλητος ὁποιαοῦν μονὰς ὁποιᾳοῦν [20] μονάδι, ἢ εὐθὺς ἐφεξῆς πᾶσαι καὶ συμβληταὶ ὁποιαιοῦν ὁποιαισοῦν, οἷον λέγουσιν εἶναι τὸν μαθηματικὸν ἀριθμόν (ἐν γὰρ τῷ μαθηματικῷ οὐδὲν διαφέρει οὐδεμία μονὰς ἑτέρα ἑτέρας)· ἢ

τὰς μὲν συμβλητὰς τὰς δὲ μή (οἷον εἰ ἔστι μετὰ τὸ ἓν πρώτη ἡ δυάς, ἔπειτα ἡ τριὰς καὶ οὕτω δὴ ὁ [25] ἄλλος ἀριθμός, εἰσὶ δὲ συμβληταὶ αἱ ἐν ἑκάστῳ ἀριθμῷ μονάδες, οἷον αἱ ἐν τῇ δυάδι τῇ πρώτῃ αὐταῖς, καὶ αἱ ἐν τῇ τριάδι τῇ πρώτῃ αὐταῖς, καὶ οὕτω δὴ ἐπὶ τῶν ἄλλων ἀριθμῶν· αἱ δ’ ἐν τῇ δυάδι αὐτῇ πρὸς τὰς ἐν τῇ τριάδι αὐτῇ ἀσύμβλητοι, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν [30] ἐφεξῆς ἀριθμῶν· διὸ καὶ ὁ μὲν μαθηματικὸς ἀριθμεῖται μετὰ τὸ ἓν δύο, πρὸς τῷ ἔμπροσθεν ἑνὶ ἄλλο ἕν, καὶ τὰ τρία πρὸς τοῖς δυσὶ τούτοις ἄλλο ἕν, καὶ ὁ λοιπὸς δὲ ὡσαύτως· οὗτος δὲ μετὰ τὸ ἓν δύο ἕτερα ἄνευ τοῦ ἑνὸς τοῦ πρώτου, καὶ ἡ τριὰς ἄνευ τῆς δυάδος, ὁμοίως δὲ καὶ ὁ [35] ἄλλος ἀριθμός)· ἢ τὸν μὲν εἶναι τῶν ἀριθμῶν οἷος ὁ πρῶτος ἐλέχθη, τὸν δ’ οἷον οἱ μαθηματικοὶ λέγουσι, τρίτον δὲ τὸν ῥηθέντα τελευταῖον· ἔτι τούτους ἢ χωριστοὺς εἶναι τοὺς ἀριθμοὺς τῶν πραγμάτων, [1] ἢ οὐ χωριστοὺς ἀλλ’ ἐν τοῖς αἰσθητοῖς (οὐχ οὕτως δ’ ὡς τὸ πρῶτον ἐπεσκοποῦμεν, ἀλλ’ ὡς ἐκ τῶν ἀριθμῶν ἐνυπαρχόντων ὄντα τὰ αἰσθητά) ἢ τὸν μὲν αὐτῶν εἶναι τὸν δὲ μή, ἢ πάντας εἶναι.—οἱ μὲν οὖν τρόποι [5] καθ’ οὓς ἐνδέχεται αὐτοὺς εἶναι οὗτοί εἰσιν ἐξ ἀνάγκης μόνοι, σχεδὸν δὲ καὶ οἱ λέγοντες τὸ ἓν ἀρχὴν εἶναι καὶ οὐσίαν καὶ στοιχεῖον πάντων, καὶ ἐκ τούτου καὶ ἄλλου τινὸς εἶναι τὸν ἀριθμόν, ἕκαστος τούτων τινὰ τῶν τρόπων εἴρηκε, πλὴν τοῦ πάσας τὰς μονάδας εἶναι ἀσυμβλήτους. καὶ τοῦτο συμβέβηκεν [10] εὐλόγως· οὐ γὰρ ἐνδέχεται ἔτι ἄλλον τρόπον εἶναι παρὰ τοὺς εἰρημένους. οἱ μὲν οὖν ἀμφοτέρους φασὶν εἶναι τοὺς ἀριθμούς, τὸν μὲν ἔχοντα τὸ πρότερον καὶ ὕστερον τὰς ἰδέας, τὸν δὲ μαθηματικὸν παρὰ τὰς ἰδέας καὶ τὰ αἰσθητά, καὶ χωριστοὺς ἀμφοτέρους τῶν αἰσθητῶν· οἱ δὲ τὸν μαθηματικὸν [15] μόνον ἀριθμὸν εἶναι, τὸν πρῶτον τῶν ὄντων, κεχωρισμένον τῶν αἰσθητῶν. καὶ οἱ Πυθαγόρειοι δ’ ἕνα, τὸν μαθηματικόν, πλὴν οὐ κεχωρισμένον ἀλλ’ ἐκ τούτου τὰς αἰσθητὰς οὐσίας συνεστάναι φασίν· τὸν γὰρ ὅλον οὐρανὸν κατασκευάζουσιν ἐξ ἀριθμῶν, πλὴν οὐ μοναδικῶν, ἀλλὰ τὰς μονάδας [20] ὑπολαμβάνουσιν ἔχειν μέγεθος· ὅπως δὲ τὸ πρῶτον ἓν συνέστη ἔχον μέγεθος, ἀπορεῖν ἐοίκασιν. ἄλλος δέ τις τὸν πρῶτον ἀριθμὸν τὸν τῶν εἰδῶν ἕνα εἶναι, ἔνιοι δὲ καὶ τὸν μαθηματικὸν τὸν αὐτὸν τοῦτον εἶναι. ὁμοίως δὲ καὶ περὶ τὰ μήκη καὶ περὶ τὰ ἐπίπεδα καὶ περὶ τὰ στερεά. οἱ μὲν [25] γὰρ ἕτερα τὰ μαθηματικὰ καὶ τὰ μετὰ τὰς ἰδέας· τῶν δὲ ἄλλως λεγόντων οἱ μὲν τὰ μαθηματικὰ καὶ μαθηματικῶς λέγουσιν, ὅσοι μὴ ποιοῦσι τὰς ἰδέας ἀριθμοὺς μηδὲ εἶναί φασιν ἰδέας, οἱ δὲ τὰ μαθηματικά, οὐ μαθηματικῶς δέ· οὐ γὰρ τέμνεσθαι οὔτε μέγεθος πᾶν εἰς μεγέθη, οὔθ’ [30] ὁποιασοῦν μονάδας δυάδα εἶναι. μοναδικοὺς δὲ τοὺς ἀριθμοὺς εἶναι πάντες τιθέασι, πλὴν τῶν Πυθαγορείων, ὅσοι τὸ ἓν στοιχεῖον καὶ ἀρχήν φασιν εἶναι τῶν ὄντων· ἐκεῖνοι δ’ ἔχοντας μέγεθος, καθάπερ εἴηρται πρότερον. ὁσαχῶς μὲν οὖν ἐνδέχεται λεχθῆναι περὶ αὐτῶν, καὶ ὅτι πάντες εἰσὶν [35] εἰρημένοι οἱ τρόποι, φανερὸν ἐκ τούτων· ἔστι δὲ πάντα μὲν ἀδύνατα, μᾶλλον δ’ ἴσως θάτερα τῶν ἑτέρων.

πρῶτον μὲν οὖν σκεπτέον εἰ συμβληταὶ αἱ μονάδες ἢ ἀσύμβλητοι, καὶ εἰ ἀσύμβλητοι, ποτέρως ὥνπερ διείλομεν. [1] ἔστι μὲν γὰρ ὁποιανοῦν εἶναι ὁποιᾳοῦν μονάδι ἀσύμβλητον, ἔστι δὲ τὰς ἐν αὐτῇ τῇ δυάδι πρὸς τὰς ἐν αὐτῇ τῇ τριάδι, καὶ οὕτως δὴ ἀσυμβλήτους εἶναι τὰς ἐν ἑκάστῳ τῷ πρώτῳ [5] ἀριθμῷ πρὸς ἀλλήλας. εἰ μὲν οὖν πᾶσαι συμβληταὶ καὶ ἀδιάφοροι αἱ μονάδες, ὁ μαθηματικὸς γίγνεται ἀριθμὸς καὶ εἷς μόνος, καὶ τὰς ἰδέας οὐκ ἐνδέχεται εἶναι τοὺς ἀριθμούς (ποῖος γὰρ ἔσται ἀριθμὸς αὐτὸ ἄνθρωπος ἢ ζῷον ἢ ἄλλο ὁτιοῦν τῶν εἰδῶν; ἰδέα μὲν γὰρ μία ἑκάστου, οἷον αὐτοῦ ἀνθρώπου [10] μία καὶ αὐτοῦ ζῴου ἄλλη μία· οἱ δ’ ὅμοιοι καὶ ἀδιάφοροι ἄπειροι, ὥστ’ οὐθὲν μᾶλλον ἥδε ἡ τριὰς αὐτοάνθρωπος ἢ ὁποιαοῦν), εἰ δὲ μὴ εἰσὶν ἀριθμοὶ αἱ ἰδέαι, οὐδ’ ὅλως οἷόν τε αὐτὰς εἶναι (ἐκ τίνων γὰρ ἔσονται ἀρχῶν αἱ ἰδέαι; ὁ γὰρ ἀριθμός ἐστιν ἐκ τοῦ ἑνὸς καὶ τῆς δυάδος τῆς [15] ἀορίστου, καὶ αἱ ἀρχαὶ καὶ τὰ στοιχεῖα λέγονται τοῦ ἀριθμοῦ εἶναι, τάξαι τε οὔτε προτέρας ἐνδέχεται τῶν ἀριθμῶν αὐτὰς οὔθ’ ὑστέρας)· εἰ δ’ ἀσύμβλητοι αἱ μονάδες, καὶ οὕτως ἀσύμβλητοι ὥστε ἡτισοῦν ἠτινιοῦν, οὔτε τὸν μαθηματικὸν ἐνδέχεται εἶναι τοῦτον τὸν ἀριθμόν (ὁ μὲν γὰρ μαθηματικὸς ἐξ ἀδιαφόρων, [20] καὶ τὰ

δεικνύμενα κατ’ αὐτοῦ ὡς ἐπὶ τοιούτου ἁρμόττει) οὔτε τὸν τῶν εἰδῶν. οὐ γὰρ ἔσται ἡ δυὰς πρώτη ἐκ τοῦ ἑνὸς καὶ τῆς ἀορίστου δυάδος, ἔπειτα οἱ ἑξῆς ἀριθμοί, ὡς λέγεται δυάς, τριάς, τετράς—ἅμα γὰρ αἱ ἐν τῇ δυάδι τῇ πρώτῃ μονάδες γεννῶνται, εἴτε ὥσπερ ὁ πρῶτος εἰπὼν ἐξ [25] ἀνίσων (ἰσασθέντων γὰρ ἐγένοντο) εἴτε ἄλλως—, ἐπεὶ εἰ ἔσται ἡ ἑτέρα μονὰς τῆς ἑτέρας προτέρα, καὶ τῆς δυάδος τῆς ἐκ τούτων ἔσται προτέρα· ὅταν γὰρ ᾖ τι τὸ μὲν πρότερον τὸ δὲ ὕστερον, καὶ τὸ ἐκ τούτων τοῦ μὲν ἔσται πρότερον τοῦ δ’ ὕστερον. ἔτι ἐπειδὴ ἔστι πρῶτον μὲν αὐτὸ τὸ ἕν, [30] ἔπειτα τῶν ἄλλων ἔστι τι πρῶτον ἓν δεύτερον δὲ μετ’ ἐκεῖνο, καὶ πάλιν τρίτον τὸ δεύτερον μὲν μετὰ τὸ δεύτερον τρίτον δὲ μετὰ τὸ πρῶτον ἕν,—ὥστε πρότεραι ἂν εἶεν αἱ μονάδες ἢ οἱ ἀριθμοὶ ἐξ ὧν λέγονται, οἷον ἐν τῇ δυάδι τρίτη μονὰς ἔσται πρὶν τὰ τρία εἶναι, καὶ ἐν τῇ τριάδι τετάρτη [35] καὶ ἡ πέμπτη πρὶν τοὺς ἀριθμοὺς τούτους. οὐδεὶς μὲν οὖν τὸν τρόπον τοῦτον εἴρηκεν αὐτῶν τὰς μονάδας ἀσυμβλήτους, ἔστι δὲ κατὰ μὲν τὰς ἐκείνων ἀρχὰς εὔλογον καὶ οὕτως, κατὰ μέντοι τὴν ἀλήθειαν ἀδύνατον. [1] τάς τε γὰρ μονάδας προτέρας καὶ ὑστέρας εἶναι εὔλογον, εἴπερ καὶ πρώτη τις ἔστι μονὰς καὶ ἓν πρῶτον, ὁμοίως δὲ καὶ δυάδας, εἴπερ καὶ δυὰς πρώτη ἔστιν· μετὰ γὰρ τὸ πρῶτον εὔλογον καὶ [5] ἀναγκαῖον δεύτερόν τι εἶναι, καὶ εἰ δεύτερον, τρίτον, καὶ οὕτω δὴ τὰ ἄλλα ἐφεξῆς (ἅμα δ’ ἀμφότερα λέγειν, μονάδα τε μετὰ τὸ ἓν πρώτην εἶναι καὶ δευτέραν, καὶ δυάδα πρώτην, ἀδύνατον). οἱ δὲ ποιοῦσι μονάδα μὲν καὶ ἓν πρῶτον, δεύτερον δὲ καὶ τρίτον οὐκέτι, καὶ δυάδα πρώτην, δευτέραν [10] δὲ καὶ τρίτην οὐκέτι. φανερὸν δὲ καὶ ὅτι οὐκ ἐνδέχεται, εἰ ἀσύμβλητοι πᾶσαι αἱ μονάδες, δυάδα εἶναι αὐτὴν καὶ τριάδα καὶ οὕτω τοὺς ἄλλους ἀριθμούς. ἄν τε γὰρ ὦσιν ἀδιάφοροι αἱ μονάδες ἄν τε διαφέρουσαι ἑκάστη ἑκάστης, ἀνάγκη ἀριθμεῖσθαι τὸν ἀριθμὸν κατὰ πρόσθεσιν, οἷον τὴν [15] δυάδα πρὸς τῷ ἑνὶ ἄλλου ἑνὸς προστεθέντος, καὶ τὴν τριάδα ἄλλου ἑνὸς πρὸς τοῖς δυσὶ προστεθέντος, καὶ τὴν τετράδα ὡσαύτως· τούτων δὲ ὄντων ἀδύνατον τὴν γένεσιν εἶναι τῶν ἀριθμῶν ὡς γεννῶσιν ἐκ τῆς δυάδος καὶ τοῦ ἑνός. μόριον γὰρ γίγνεται ἡ δυὰς τῆς τριάδος καὶ αὖτη τῆς τετράδος, [20] τὸν αὐτὸν δὲ τρόπον συμβαίνει καὶ ἐπὶ τῶν ἐχομένων. ἀλλ’ ἐκ τῆς δυάδος τῆς πρώτης καὶ τῆς ἀορίστου δυάδος ἐγίγνετο ἡ τετράς, δύο δυάδες παρ’ αὐτὴν τὴν δυάδα· εἰ δὲ μή, μόριον ἔσται αὐτὴ ἡ δυάς, ἑτέρα δὲ προσέσται μία [24] δυάς. καὶ ἡ δυὰς ἔσται ἐκ τοῦ ἑνὸς αὐτοῦ καὶ ἄλλου ἑνός· [25] εἰ δὲ τοῦτο, οὐχ οἷόν τ’ εἶναι τὸ ἕτερον στοιχεῖον δυάδα ἀόριστον· μονάδα γὰρ μίαν γεννᾷ ἀλλ’ οὐ δυάδα ὡρισμένην. ἔτι παρ’ αὐτὴν τὴν τριάδα καὶ αὐτὴν τὴν δυάδα πῶς ἔσονται ἄλλαι τριάδες καὶ δυάδες; καὶ τίνα τρόπον ἐκ προτέρων μονάδων καὶ ὑστέρων σύγκεινται; πάντα γὰρ ταῦτ’ [30] ἄτοπά ἐστι καὶ πλασματώδη, καὶ ἀδύνατον εἶναι πρώτην δυάδα, εἶτ’ αὐτὴν τριάδα. ἀνάγκη δ’, ἐπείπερ ἔσται τὸ ἓν καὶ ἡ ἀόριστος δυὰς στοιχεῖα. εἰ δ’ ἀδύνατα τὰ συμβαίνοντα, καὶ τὰς ἀρχὰς εἶναι ταύτας ἀδύνατον.—εἰ μὲν οὖν διάφοροι αἱ μονάδες ὁποιαιοῦν ὁποιαισοῦν, ταῦτα καὶ τοιαῦθ’ [35] ἕτερα συμβαίνει ἐξ ἀνάγκης· εἰ δ’ αἱ μὲν ἐν ἄλλῳ διάφοροι αἱ δ’ ἐν τῷ αὐτῷ ἀριθμῷ ἀδιάφοροι ἀλλήλαις μόναι, καὶ οὕτως οὐθὲν ἐλάττω συμβαίνει τὰ δυσχερῆ. [1] οἷον γὰρ ἐν τῇ δεκάδι αὐτῇ ἔνεισι δέκα μονάδες, σύγκειται δὲ καὶ ἐκ τούτων καὶ ἐκ δύο πεντάδων ἡ δεκάς. ἐπεὶ δ’ οὐχ ὁ τυχὼν ἀριθμὸς αὐτὴ ἡ δεκὰς οὐδὲ σύγκειται ἐκ τῶν τυχουσῶν πεντάδων, ὥσπερ οὐδὲ μονάδων, ἀνάγκη διαφέρειν [5] τὰς μονάδας τὰς ἐν τῇ δεκάδι ταύτῃ. ἂν γὰρ μὴ διαφέρωσιν, οὐδ’ αἱ πεντάδες διοίσουσιν ἐξ ὧν ἐστὶν ἡ δεκάς· ἐπεὶ δὲ διαφέρουσι, καὶ αἱ μονάδες διοίσουσιν. εἰ δὲ διαφέρουσι, πότερον οὐκ ἐνέσονται πεντάδες ἄλλαι ἀλλὰ μόνον αὗται αἱ δύο, ἢ ἔσονται; εἴτε δὲ μὴ ἐνέσονται, ἄτοπον· [10] εἴτ’ ἐνέσονται, ποία ἔσται δεκὰς ἐξ ἐκείνων; οὐ γὰρ ἔστιν ἑτέρα δεκὰς ἐν τῇ δεκάδι παρ’ αὐτήν. ἀλλὰ μὴν καὶ ἀνάγκη γε μὴ ἐκ τῶν τυχουσῶν δυάδων τὴν τετράδα συγκεῖσθαι· ἡ γὰρ ἀόριστος δυάς, ὥς φασι, λαβοῦσα τὴν ὡρισμένην δυάδα δύο δυάδας ἐποίησεν· τοῦ γὰρ ληφθέντος [15] ἦν δυοποιός.—ἔτι τὸ εἶναι παρὰ τὰς δύο μονάδας τὴν δυάδα φύσιν τινά, καὶ τὴν τριάδα παρὰ τὰς τρεῖς μονάδας, πῶς ἐνδέχεται; ἢ γὰρ μεθέξει θατέρου θατέρου, ὥσπερ λευκὸς ἄνθρωπος παρὰ λευκὸν καὶ

ἄνθρωπον (μετέχει γὰρ τούτων), ἢ ὅταν ᾖ θατέρου θάτερον διαφορά τις, ὥσπερ ὁ ἄνθρωπος [20] παρὰ ζῷον καὶ δίπουν. ἔτι τὰ μὲν ἁφῇ ἐστὶν ἓν τὰ δὲ μίξει τὰ δὲ θέσει· ὧν οὐδὲν ἐνδέχεται ὑπάρχειν ταῖς μονάσιν ἐξ ὧν ἡ δυὰς καὶ ἡ τριάς· ἀλλ’ ὥσπερ οἱ δύο ἄνθρωποι οὐχ ἕν τι παρ’ ἀμφοτέρους, οὕτως ἀνάγκη καὶ τὰς μονάδας. καὶ οὐχ ὅτι ἀδιαίρετοι, διοίσουσι διὰ τοῦτο· καὶ [25] γὰρ αἱ στιγμαὶ ἀδιαίρετοι, ἀλλ’ ὅμως παρὰ τὰς δύο οὐθὲν ἕτερον ἡ δυὰς αὐτῶν.—ἀλλὰ μὴν οὐδὲ τοῦτο δεῖ λανθάνειν, ὅτι συμβαίνει προτέρας καὶ ὑστέρας εἶναι δυάδας, ὁμοίως δὲ καὶ τοὺς ἄλλους ἀριθμούς. αἱ μὲν γὰρ ἐν τῇ τετράδι δυάδες ἔστωσαν ἀλλήλαις ἅμα· ἀλλ’ αὗται τῶν ἐν τῇ [30] ὀκτάδι πρότεραί εἰσι, καὶ ἐγέννησαν, ὥσπερ ἡ δυὰς ταύτας, αὗται τὰς τετράδας τὰς ἐν τῇ ὀκτάδι αὐτῇ, ὥστε εἰ καὶ ἡ πρώτη δυὰς ἰδέα, καὶ αὗται ἰδέαι τινὲς ἔσονται. ὁ δ’ αὐτὸς λόγος καὶ ἐπὶ τῶν μονάδων· αἱ γὰρ ἐν τῇ δυάδι τῇ πρώτῃ μονάδες γεννῶσι τὰς τέτταρας τὰς ἐν τῇ τετράδι, [35] ὥστε πᾶσαι αἱ μονάδες ἰδέαι γίγνονται καὶ συγκείσεται ἰδέα ἐξ ἰδεῶν· ὥστε δῆλον ὅτι κἀκεῖνα ὧν ἰδέαι αὗται τυγχάνουσιν οὖσαι συγκείμενα ἔσται, οἷον εἰ τὰ ζῷα φαίη τις συγκεῖσθαι ἐκ ζῴων, εἰ τούτων ἰδέαι εἰσίν. [1] —ὅλως δὲ τὸ ποιεῖν τὰς μονάδας διαφόρους ὁπωσοῦν ἄτοπον καὶ πλασματῶδες (λέγω δὲ πλασματῶδες τὸ πρὸς ὑπόθεσιν βεβιασμένον)· οὔτε γὰρ κατὰ τὸ ποσὸν οὔτε κατὰ τὸ ποιὸν [5] ὁρῶμεν διαφέρουσαν μονάδα μονάδος, ἀνάγκη τε ἢ ἴσον ἢ ἄνισον εἶναι ἀριθμόν, πάντα μὲν ἀλλὰ μάλιστα τὸν μοναδικόν, ὥστ’ εἰ μήτε πλείων μήτ’ ἐλάττων, ἴσος· τὰ δὲ ἴσα καὶ ὅλως ἀδιάφορα ταὐτὰ ὑπολαμβάνομεν ἐν τοῖς ἀριθμοῖς. εἰ δὲ μή, οὐδ’ αἱ ἐν αὐτῇ τῇ δεκάδι δυάδες [10] ἀδιάφοροι ἔσονται ἴσαι οὖσαι· τίνα γὰρ αἰτίαν ἕξει λέγειν ὁ φάσκων ἀδιαφόρους εἶναι; ἔτι εἰ ἅπασα μονὰς καὶ μονὰς ἄλλη δύο, ἡ ἐκ τῆς δυάδος αὐτῆς μονὰς καὶ ἡ ἐκ τῆς τριάδος αὐτῆς δυὰς ἔσται ἐκ διαφερουσῶν τε, καὶ πότερον προτέρα τῆς τριάδος ἢ ὑστέρα; μᾶλλον γὰρ ἔοικε [15] προτέραν ἀναγκαῖον εἶναι· ἡ μὲν γὰρ ἅμα τῇ τριάδι ἡ δ’ ἅμα τῇ δυάδι τῶν μονάδων. καὶ ἡμεῖς μὲν ὑπολαμβάνομεν ὅλως ἓν καὶ ἕν, καὶ ἐὰν ᾖ ἴσα ἢ ἄνισα, δύο εἶναι, οἷον τὸ ἀγαθὸν καὶ τὸ κακόν, καὶ ἄνθρωπον καὶ ἵππον· οἱ δ’ οὕτως λέγοντες οὐδὲ τὰς μονάδας. εἴτε δὲ μὴ [20] ἔστι πλείων ἀριθμὸς ὁ τῆς τριάδος αὐτῆς ἢ ὁ τῆς δυάδος, θαυμαστόν· εἴτε ἐστὶ πλείων, δῆλον ὅτι καὶ ἴσος ἔνεστι τῇ δυάδι, ὥστε οὗτος ἀδιάφορος αὐτῇ τῇ δυάδι. ἀλλ’ οὐκ ἐνδέχεται, εἰ πρῶτός τις ἔστιν ἀριθμὸς καὶ δεύτερος. οὐδὲ ἔσονται αἱ ἰδέαι ἀριθμοί. τοῦτο μὲν γὰρ αὐτὸ ὀρθῶς λέγουσιν [25] οἱ διαφόρους τὰς μονάδας ἀξιοῦντες εἶναι, εἴπερ ἰδέαι ἔσονται, ὥσπερ εἴρηται πρότερον· ἓν γὰρ τὸ εἶδος, αἱ δὲ μονάδες εἰ ἀδιάφοροι, καὶ αἱ δυάδες καὶ αἱ τριάδες ἔσονται ἀδιάφοροι. διὸ καὶ τὸ ἀριθμεῖσθαι οὕτως, ἓν δύο, μὴ προσλαμβανομένου πρὸς τῷ ὑπάρχοντι ἀναγκαῖον αὐτοῖς [30] λέγειν (οὔτε γὰρ ἡ γένεσις ἔσται ἐκ τῆς ἀορίστου δυάδος, οὔτ’ ἰδέαν ἐνδέχεται εἶναι· ἐνυπάρξει γὰρ ἑτέρα ἰδέα ἐν ἑτέρᾳ, καὶ πάντα τὰ εἴδη ἑνὸς μέρη)· διὸ πρὸς μὲν τὴν ὑπόθεσιν ὀρθῶς λέγουσιν, ὅλως δ’ οὐκ ὀρθῶς· πολλὰ γὰρ ἀναιροῦσιν, ἐπεὶ τοῦτό γ’ αὐτὸ ἔχειν τινὰ φήσουσιν ἀπορίαν, πότερον, [35] ὅταν ἀριθμῶμεν καὶ εἴπωμεν ἓν δύο τρία, προσλαμβάνοντες ἀριθμοῦμεν ἢ κατὰ μερίδας. ποιοῦμεν δὲ ἀμφοτέρως· διὸ γελοῖον ταύτην εἰς τηλικαύτην τῆς οὐσίας ἀνάγειν διαφοράν.

[1] πάντων δὲ πρῶτον καλῶς ἔχει διορίσασθαι τίς ἀριθμοῦ διαφορά, καὶ μονάδος, εἰ ἔστιν. ἀνάγκη δ’ ἢ κατὰ τὸ ποσὸν ἢ κατὰ τὸ ποιὸν διαφέρειν· τούτων δ’ οὐδέτερον φαίνεται ἐνδέχεσθαι ὑπάρχειν. ἀλλ’ ᾗ ἀριθμός, κατὰ τὸ ποσόν. εἰ [5] δὲ δὴ καὶ αἱ μονάδες τῷ ποσῷ διέφερον, κἂν ἀριθμὸς ἀριθμοῦ διέφερεν ὁ ἴσος τῷ πλήθει τῶν μονάδων. ἔτι πότερον αἱ πρῶται μείζους ἢ ἐλάττους, καὶ αἱ ὕστερον ἐπιδιδόασιν ἢ τοὐναντίον; πάντα γὰρ ταῦτα ἄλογα. ἀλλὰ μὴν οὐδὲ κατὰ τὸ ποιὸν διαφέρειν ἐνδέχεται. οὐθὲν γὰρ [10] αὐταῖς οἷόν τε ὑπάρχειν πάθος· ὕστερον γὰρ καὶ τοῖς ἀριθμοῖς φασὶν ὑπάρχειν τὸ ποιὸν τοῦ ποσοῦ. ἔτι οὔτ’ ἂν ἀπὸ τοῦ ἑνὸς τοῦτ’ αὐταῖς γένοιτο οὔτ’ ἂν ἀπὸ τῆς δυάδος· τὸ μὲν γὰρ οὐ ποιὸν ἡ δὲ ποσοποιόν· τοῦ γὰρ πολλὰ τὰ ὄντα εἶναι αἰτία αὕτη ἡ φύσις. εἰ δ’ ἄρα ἔχει πως [15] ἄλλως, λεκτέον ἐν ἀρχῇ μάλιστα τοῦτο καὶ διοριστέον περὶ μονάδος διαφορᾶς, μάλιστα μὲν καὶ διότι ἀνάγκη ὑπάρχειν· εἰ δὲ μή, τίνα

λέγουσιν;—ὅτι μὲν οὖν, εἴπερ εἰσὶν ἀριθμοὶ αἱ ἰδέαι, οὔτε συμβλητὰς τὰς μονάδας ἁπάσας ἐνδέχεται εἶναι, φανερόν, οὔτε ἀσυμβλήτους ἀλλήλαις οὐδέτερον [20] τῶν τρόπων· ἀλλὰ μὴν οὐδ’ ὡς ἕτεροί τινες λέγουσι περὶ τῶν ἀριθμῶν λέγεται καλῶς. εἰσὶ δ’ οὗτοι ὅσοι ἰδέας μὲν οὐκ οἴονται εἶναι οὔτε ἁπλῶς οὔτε ὡς ἀριθμούς τινας οὔσας, τὰ δὲ μαθηματικὰ εἶναι καὶ τοὺς ἀριθμοὺς πρώτους τῶν ὄντων, καὶ ἀρχὴν αὐτῶν εἶναι αὐτὸ τὸ ἕν. ἄτοπον γὰρ τὸ [25] ἓν μὲν εἶναί τι πρῶτον τῶν ἑνῶν, ὥσπερ ἐκεῖνοί φασι, δυάδα δὲ τῶν δυάδων μή, μηδὲ τριάδα τῶν τριάδων· τοῦ γὰρ αὐτοῦ λόγου πάντα ἐστίν. εἰ μὲν οὖν οὕτως ἔχει τὰ περὶ τὸν ἀριθμὸν καὶ θήσει τις εἶναι τὸν μαθηματικὸν μόνον, οὐκ ἔστι τὸ ἓν ἀρχή (ἀνάγκη γὰρ διαφέρειν τὸ ἓν τὸ τοιοῦτο τῶν [30] ἄλλων μονάδων· εἰ δὲ τοῦτο, καὶ δυάδα τινὰ πρώτην τῶν δυάδων, ὁμοίως δὲ καὶ τοὺς ἄλλους ἀριθμοὺς τοὺς ἐφεξῆς)· εἰ δέ ἐστι τὸ ἓν ἀρχή, ἀνάγκη μᾶλλον ὥσπερ Πλάτων ἔλεγεν ἔχειν τὰ περὶ τοὺς ἀριθμούς, καὶ εἶναι δυάδα πρώτην καὶ τριάδα, καὶ οὐ συμβλητοὺς εἶναι τοὺς ἀριθμοὺς πρὸς [35] ἀλλήλους. ἂν δ’ αὖ πάλιν τις τιθῇ ταῦτα, εἴρηται ὅτι ἀδύνατα πολλὰ συμβαίνει. ἀλλὰ μὴν ἀνάγκη γε ἢ οὕτως ἢ ἐκείνως ἔχειν, ὥστ’ εἰ μηδετέρως, οὐκ ἂν ἐνδέχοιτο εἶναι τὸν ἀριθμὸν χωριστόν. [1] —φανερὸν δ’ ἐκ τούτων καὶ ὅτι χείριστα λέγεται ὁ τρίτος τρόπος, τὸ εἶναι τὸν αὐτὸν ἀριθμὸν τὸν τῶν εἰδῶν καὶ τὸν μαθηματικόν. ἀνάγκη γὰρ εἰς μίαν δόξαν συμβαίνειν δύο ἁμαρτίας· οὔτε γὰρ μαθηματικὸν [5] ἀριθμὸν ἐνδέχεται τοῦτον εἶναι τὸν τρόπον, ἀλλ’ ἰδίας ὑποθέσεις ὑποθέμενον ἀνάγκη μηκύνειν, ὅσα τε τοῖς ὡς εἴδη τὸν ἀριθμὸν λέγουσι συμβαίνει, καὶ ταῦτα ἀναγκαῖον λέγειν.—ὁ δὲ τῶν Πυθαγορείων τρόπος τῇ μὲν ἐλάττους ἔχει δυσχερείας τῶν πρότερον εἰρημένων, τῇ δὲ ἰδίας ἑτέρας. [10] τὸ μὲν γὰρ μὴ χωριστὸν ποιεῖν τὸν ἀριθμὸν ἀφαιρεῖται πολλὰ τῶν ἀδυνάτων· τὸ δὲ τὰ σώματα ἐξ ἀριθμῶν εἶναι συγκείμενα, καὶ τὸν ἀριθμὸν τοῦτον εἶναι μαθηματικόν, ἀδύνατόν ἐστιν. οὔτε γὰρ ἄτομα μεγέθη λέγειν ἀληθές, εἴ θ’ ὅτι μάλιστα τοῦτον ἔχει τὸν τρόπον, οὐχ αἵ γε [15] μονάδες μέγεθος ἔχουσιν· μέγεθος δὲ ἐξ ἀδιαιρέτων συγκεῖσθαι πῶς δυνατόν; ἀλλὰ μὴν ὅ γ’ ἀριθμητικὸς ἀριθμὸς μοναδικός ἐστιν. ἐκεῖνοι δὲ τὸν ἀριθμὸν τὰ ὄντα λέγουσιν· τὰ γοῦν θεωρήματα προσάπτουσι τοῖς σώμασιν ὡς ἐξ ἐκείνων ὄντων τῶν ἀριθμῶν.—εἰ τοίνυν ἀνάγκη μέν, εἴπερ ἐστὶν [20] ἀριθμὸς τῶν ὄντων τι καθ’ αὑτό, τούτων εἶναί τινα τῶν εἰρημένων τρόπων, οὐθένα δὲ τούτων ἐνδέχεται, φανερὸν ὡς οὐκ ἔστιν ἀριθμοῦ τις τοιαύτη φύσις οἵαν κατασκευάζουσιν οἱ χωριστὸν ποιοῦντες αὐτόν.—ἔτι πότερον ἑκάστη μονὰς ἐκ τοῦ μεγάλου καὶ μικροῦ ἰσασθέντων ἐστίν, ἢ ἡ μὲν ἐκ τοῦ μικροῦ [25] ἡ δ’ ἐκ τοῦ μεγάλου; εἰ μὲν δὴ οὕτως, οὔτε ἐκ πάντων τῶν στοιχείων ἕκαστον οὔτε ἀδιάφοροι αἱ μονάδες (ἐν τῇ μὲν γὰρ τὸ μέγα ἐν τῇ δὲ τὸ μικρὸν ὑπάρχει, ἐναντίον τῇ φύσει ὄν)· ἔτι αἱ ἐν τῇ τριάδι αὐτῇ πῶς; μία γὰρ περιττή· ἀλλὰ διὰ τοῦτο ἴσως αὐτὸ τὸ ἓν ποιοῦσιν ἐν τῷ [30] περιττῷ μέσον. εἰ δ’ ἑκατέρα τῶν μονάδων ἐξ ἀμφοτέρων ἐστὶν ἰσασθέντων, ἡ δυὰς πῶς ἔσται μία τις οὖσα φύσις ἐκ τοῦ μεγάλου καὶ μικροῦ; ἢ τί διοίσει τῆς μονάδος; ἔτι προτέρα ἡ μονὰς τῆς δυάδος (ἀναιρουμένης γὰρ ἀναιρεῖται ἡ δυάς)· ἰδέαν οὖν ἰδέας ἀναγκαῖον αὐτὴν εἶναι, προτέραν γ’ [35] οὖσαν ἰδέας, καὶ γεγονέναι προτέραν. ἐκ τίνος οὖν; ἡ γὰρ ἀόριστος δυὰς δυοποιὸς ἦν.—ἔτι ἀνάγκη ἤτοι ἄπειρον τὸν ἀριθμὸν εἶναι ἢ πεπερασμένον· χωριστὸν γὰρ ποιοῦσι τὸν ἀριθμόν, ὥστε οὐχ οἷόν τε μὴ οὐχὶ τούτων θάτερον ὑπάρχειν. [1] ὅτι μὲν τοίνυν ἄπειρον οὐκ ἐνδέχεται, δῆλον (οὔτε γὰρ περιττὸς ὁ ἄπειρός ἐστιν οὔτ’ ἄρτιος, ἡ δὲ γένεσις τῶν ἀριθμῶν ἢ περιττοῦ ἀριθμοῦ ἢ ἀρτίου ἀεί ἐστιν· ὠδὶ μὲν τοῦ ἑνὸς εἰς [5] τὸν ἄρτιον πίπτοντος περιττός, ὠδὶ δὲ τῆς μὲν δυάδος ἐμπιπτούσης ὁ ἀφ’ ἑνὸς διπλασιαζόμενος, ὠδὶ δὲ τῶν περιττῶν ὁ ἄλλος ἄρτιος· ἔτι εἰ πᾶσα ἰδέα τινὸς οἱ δὲ ἀριθμοὶ ἰδέαι, καὶ ὁ ἄπειρος ἔσται ἰδέα τινός, ἢ τῶν αἰσθητῶν ἢ ἄλλου τινός· καίτοι οὔτε κατὰ τὴν θέσιν ἐνδέχεται οὔτε κατὰ [10] λόγον, τάττουσί γ’ οὕτω τὰς ἰδέας)· εἰ δὲ πεπερασμένος, μέχρι πόσου; τοῦτο γὰρ δεῖ λέγεσθαι οὐ μόνον ὅτι ἀλλὰ καὶ διότι. ἀλλὰ μὴν εἰ μέχρι τῆς δεκάδος ὁ ἀριθμός, ὥσπερ τινές φασιν, πρῶτον μὲν ταχὺ ἐπιλείψει τὰ εἴδη—οἷον εἰ ἔστιν ἡ τριὰς αὐτοάνθρωπος, τίς ἔσται ἀριθμὸς αὐτόιππος; [15] αὐτὸ

γὰρ ἕκαστος ἀριθμὸς μέχρι δεκάδος· ἀνάγκη δὴ τῶν ἐν τούτοις ἀριθμῶν τινὰ εἶναι (οὐσίαι γὰρ καὶ ἰδέαι οὗτοι)· ἀλλ’ ὅμως ἐπιλείψει (τὰ τοῦ ζῴου γὰρ εἴδη ὑπερέξει)—. ἅμα δὲ δῆλον ὅτι εἰ οὕτως ἡ τριὰς αὐτοάνθρωπος, καὶ αἱ ἄλλαι τριάδες (ὅμοιαι γὰρ αἱ ἐν τοῖς αὐτοῖς ἀριθμοῖς), [20] ὥστ’ ἄπειροι ἔσονται ἄνθρωποι, εἰ μὲν ἰδέα ἑκάστη τριάς, αὐτὸ ἕκαστος ἄνθρωπος, εἰ δὲ μή, ἀλλ’ ἄνθρωποί γε. καὶ εἰ μέρος ὁ ἐλάττων τοῦ μείζονος, ὁ ἐκ τῶν συμβλητῶν μονάδων τῶν ἐν τῷ αὐτῷ ἀριθμῷ, εἰ δὴ ἡ τετρὰς αὐτὴ ἰδέα τινός ἐστιν, οἷον ἵππου ἢ λευκοῦ, ὁ ἄνθρωπος ἔσται μέρος [25] ἵππου, εἰ δυὰς ὁ ἄνθρωπος. ἄτοπον δὲ καὶ τὸ τῆς μὲν δεκάδος εἶναι ἰδέαν ἑνδεκάδος δὲ μή, μηδὲ τῶν ἐχομένων ἀριθμῶν. ἔτι δὲ καὶ ἔστι καὶ γίγνεται ἕνια καὶ ὧν εἴδη οὐκ ἔστιν, ὥστε διὰ τί οὐ κἀκείνων εἴδη ἔστιν; οὐκ ἄρα αἴτια τὰ εἴδη ἐστίν. ἔτι ἄτοπον εἰ ὁ ἀριθμὸς ὁ μέχρι τῆς δεκάδος [30] μᾶλλόν τι ὂν καὶ εἶδος αὐτῆς τῆς δεκάδος, καίτοι τοῦ μὲν οὐκ ἔστι γένεσις ὡς ἑνός, τῆς δ’ ἔστιν. πειρῶνται δ’ ὡς τοῦ μέχρι τῆς δεκάδος τελείου ὄντος ἀριθμοῦ. γεννῶσι γοῦν τὰ ἑπόμενα, οἷον τὸ κενόν, ἀναλογίαν, τὸ περιττόν, τὰ ἄλλα τὰ τοιαῦτα, ἐντὸς τῆς δεκάδος· τὰ μὲν γὰρ ταῖς ἀρχαῖς [35] ἀποδιδόασιν, οἷον κίνησιν στάσιν, ἀγαθὸν κακόν, τὰ δ’ ἄλλα τοῖς ἀριθμοῖς· διὸ τὸ ἓν τὸ περιττόν· εἰ γὰρ ἐν τῇ τριάδι, πῶς ἡ πεντὰς περιττόν; ἔτι τὰ μεγέθη καὶ ὅσα τοιαῦτα μέχρι ποσοῦ, [1] οἷον ἡ πρώτη γραμμή, ἡ ἄτομος, εἶτα δυάς, εἶτα καὶ ταῦτα μέχρι δεκάδος.—ἔτι εἰ ἔστι χωριστὸς ὁ ἀριθμός, ἀπορήσειεν ἄν τις πότερον πρότερον τὸ ἓν ἢ ἡ τριὰς καὶ ἡ δυάς. ᾗ μὲν δὴ σύνθετος ὁ ἀριθμός, τὸ ἕν, [5] ᾗ δὲ τὸ καθόλου πρότερον καὶ τὸ εἶδος, ὁ ἀριθμός· ἑκάστη γὰρ τῶν μονάδων μόριον τοῦ ἀριθμοῦ ὡς ὕλη, ὁ δ’ ὡς εἶδος. καὶ ἔστι μὲν ὡς ἡ ὀρθὴ προτέρα τῆς ὀξείας, ὅτι ὥρισται καὶ τῷ λόγῳ· ἔστι δ’ ὡς ἡ ὀξεῖα, ὅτι μέρος καὶ εἰς ταύτην διαιρεῖται. ὡς μὲν δὴ ὕλη ἡ ὀξεῖα καὶ τὸ στοιχεῖον καὶ [10] ἡ μονὰς πρότερον, ὡς δὲ κατὰ τὸ εἶδος καὶ τὴν οὐσίαν τὴν κατὰ τὸν λόγον ἡ ὀρθὴ καὶ τὸ ὅλον τὸ ἐκ τῆς ὕλης καὶ τοῦ εἴδους· ἐγγύτερον γὰρ τοῦ εἴδους καὶ οὗ ὁ λόγος τὸ ἄμφω, γενέσει δ’ ὕστερον. πῶς οὖν ἀρχὴ τὸ ἕν; ὅτι οὐ διαιρετόν, φασίν· ἀλλ’ ἀδιαίρετον καὶ τὸ καθόλου καὶ τὸ ἐπὶ μέρους [15] καὶ τὸ στοιχεῖον. ἀλλὰ τρόπον ἄλλον, τὸ μὲν κατὰ λόγον τὸ δὲ κατὰ χρόνον. ποτέρως οὖν τὸ ἓν ἀρχή; ὥσπερ γὰρ εἴρηται, καὶ ἡ ὀρθὴ τῆς ὀξείας καὶ αὕτη ἐκείνης δοκεῖ προτέρα εἶναι, καὶ ἑκατέρα μία. ἀμφοτέρως δὴ ποιοῦσι τὸ ἓν ἀρχήν. ἔστι δὲ ἀδύνατον· τὸ μὲν γὰρ ὡς εἶδος καὶ ἡ οὐσία [20] τὸ δ’ ὡς μέρος καὶ ὡς ὕλη. ἔστι γάρ πως ἓν ἑκάτερον—τῇ μὲν ἀληθείᾳ δυνάμει (εἴ γε ὁ ἀριθμὸς ἕν τι καὶ μὴ ὡς σωρὸς ἀλλ’ ἕτερος ἐξ ἑτέρων μονάδων, ὥσπερ φασίν), ἐντελεχείᾳ δ’ οὔ, ἔστι μονὰς ἑκατέρα· αἴτιον δὲ τῆς συμβαινούσης ἁμαρτίας ὅτι ἅμα ἐκ τῶν μαθημάτων ἐθήρευον [25] καὶ ἐκ τῶν λόγων τῶν καθόλου, ὥστ’ ἐξ ἐκείνων μὲν ὡς στιγμὴν τὸ ἓν καὶ τὴν ἀρχὴν ἔθηκαν (ἡ γὰρ μονὰς στιγμὴ ἄθετός ἐστιν· καθάπερ οὖν καὶ ἕτεροί τινες ἐκ τοῦ ἐλαχίστου τὰ ὄντα συνετίθεσαν, καὶ οὗτοι, ὥστε γίγνεται ἡ μονὰς ὕλη τῶν ἀριθμῶν, καὶ ἅμα προτέρα τῆς δυάδος, πάλιν δ’ ὑστέρα [30] ὡς ὅλου τινὸς καὶ ἑνὸς καὶ εἴδους τῆς δυάδος οὔσης)· διὰ δὲ τὸ καθόλου ζητεῖν τὸ κατηγορούμενον ἓν καὶ οὕτως ὡς μέρος ἔλεγον. ταῦτα δ’ ἅμα τῷ αὐτῷ ἀδύνατον ὑπάρχειν. εἰ δὲ τὸ ἓν αὐτὸ δεῖ †μόνον ἄθετον† εἶναι (οὐθενὶ γὰρ διαφέρει [34] ἢ ὅτι ἀρχή), καὶ ἡ μὲν δυὰς διαιρετὴ ἡ δὲ μονὰς οὔ, ὁμοιοτέρα [35] ἂν εἴη τῷ ἑνὶ αὐτῷ ἡ μονάς. εἰ δ’ ἡ μονάς, κἀκεῖνο τῇ μονάδι ἢ τῇ δυάδι· ὥστε προτέρα ἂν εἴη ἑκατέρα ἡ μονὰς τῆς δυάδος. οὔ φασι δέ· γεννῶσι γοῦν τὴν δυάδα πρῶτον. [1] ἔτι εἰ ἔστιν ἡ δυὰς ἕν τι αὐτὴ καὶ ἡ τριὰς αὐτή, ἄμφω δυάς. ἐκ τίνος οὖν αὕτη ἡ δυάς;

ἀπορήσειε δ’ ἄν τις καὶ ἐπεὶ ἀφὴ μὲν οὐκ ἔστιν ἐν τοῖς ἀριθμοῖς, τὸ δ’ ἐφεξῆς, ὅσων μὴ ἔστι μεταξὺ μονάδων (οἷον [5] τῶν ἐν τῇ δυάδι ἢ τῇ τριάδι), πότερον ἐφεξῆς τῷ ἑνὶ αὐτῷ ἢ οὔ, καὶ πότερον ἡ δυὰς προτέρα τῶν ἐφεξῆς ἢ τῶν μονάδων ὁποτεραοῦν.—ὁμοίως δὲ καὶ περὶ τῶν ὕστερον γενῶν τοῦ ἀριθμοῦ συμβαίνει τὰ δυσχερῆ, γραμμῆς τε καὶ ἐπιπέδου καὶ σώματος. οἱ μὲν γὰρ ἐκ τῶν εἰδῶν τοῦ μεγάλου καὶ [10] τοῦ μικροῦ ποιοῦσιν, οἷον ἐκ μακροῦ μὲν καὶ βραχέος τὰ μήκη, πλατέος δὲ καὶ στενοῦ τὰ ἐπίπεδα, ἐκ βαθέος δὲ καὶ ταπεινοῦ τοὺς ὄγκους· ταῦτα δέ ἐστιν εἴδη τοῦ μεγάλου καὶ μικροῦ. τὴν δὲ κατὰ τὸ ἓν ἀρχὴν ἄλλοι ἄλλως τιθέασι τῶν

τοιούτων. καὶ ἐν τούτοις δὲ μυρία φαίνεται τά τε ἀδύνατα καὶ [15] τὰ πλασματώδη καὶ τὰ ὑπεναντία πᾶσι τοῖς εὐλόγοις. ἀπολελυμένα τε γὰρ ἀλλήλων συμβαίνει, εἰ μὴ συνακολουθοῦσι καὶ αἱ ἀρχαὶ ὥστ’ εἶναι τὸ πλατὺ καὶ στενὸν καὶ μακρὸν καὶ βραχύ (εἰ δὲ τοῦτο, ἔσται τὸ ἐπίπεδον γραμμὴ καὶ τὸ στερεὸν ἐπίπεδον· ἔτι δὲ γωνίαι καὶ σχήματα καὶ [20] τὰ τοιαῦτα πῶς ἀποδοθήσεται;), ταὐτό τε συμβαίνει τοῖς περὶ τὸν ἀριθμόν· ταῦτα γὰρ πάθη μεγέθους ἐστίν, ἀλλ’ οὐκ ἐκ τούτων τὸ μέγεθος, ὥσπερ οὐδ’ ἐξ εὐθέος καὶ καμπύλου τὸ μῆκος οὐδ’ ἐκ λείου καὶ τραχέος τὰ στερεά.—πάντων δὲ κοινὸν τούτων ὅπερ ἐπὶ τῶν εἰδῶν τῶν ὡς γένους [25] συμβαίνει διαπορεῖν, ὅταν τις θῇ τὰ καθόλου, πότερον τὸ ζῷον αὐτὸ ἐν τῷ ζῴῳ ἢ ἕτερον αὐτοῦ ζῴου. τοῦτο γὰρ μὴ χωριστοῦ μὲν ὄντος οὐδεμίαν ποιήσει ἀπορίαν· χωριστοῦ δέ, ὥσπερ οἱ ταῦτα λέγοντές φασι, τοῦ ἑνὸς καὶ τῶν ἀριθμῶν οὐ ῥᾴδιον λῦσαι, εἰ μὴ ῥᾴδιον δεῖ λέγειν τὸ ἀδύνατον. ὅταν [30] γὰρ νοῇ τις ἐν τῇ δυάδι τὸ ἓν καὶ ὅλως ἐν ἀριθμῷ, πότερον αὐτὸ νοεῖ τι ἢ ἕτερον;—οἱ μὲν οὖν τὰ μεγέθη γεννῶσιν ἐκ τοιαύτης ὕλης, ἕτεροι δὲ ἐκ τῆς στιγμῆς (ἡ δὲ στιγμὴ αὐτοῖς δοκεῖ εἶναι οὐχ ἓν ἀλλ’ οἷον τὸ ἕν) καὶ ἄλλης ὕλης οἵας τὸ πλῆθος, ἀλλ’ οὐ πλήθους· περὶ ὧν οὐδὲν ἧττον συμβαίνει τὰ [35] αὐτὰ ἀπορεῖν. εἰ μὲν γὰρ μία ἡ ὕλη, ταὐτὸ γραμμὴ καὶ ἐπίπεδον καὶ στερεόν (ἐκ γὰρ τῶν αὐτῶν τὸ αὐτὸ καὶ ἓν ἔσται)· [1] εἰ δὲ πλείους αἱ ὕλαι καὶ ἑτέρα μὲν γραμμῆς ἑτέρα δὲ τοῦ ἐπιπέδου καὶ ἄλλη τοῦ στερεοῦ, ἢτοι ἀκολουθοῦσιν ἀλλήλαις ἢ οὔ, ὥστε ταὐτὰ συμβήσεται καὶ οὕτως· ἢ γὰρ οὐχ ἕξει τὸ ἐπίπεδον γραμμὴν ἢ ἔσται γραμμή.—ἔτι πῶς μὲν [5] ἐνδέχεται εἶναι ἐκ τοῦ ἑνὸς καὶ πλήθους τὸν ἀριθμὸν οὐθὲν ἐπιχειρεῖται· ὅπως δ’ οὖν λέγουσι ταὐτὰ συμβαίνει δυσχερῆ ἅπερ καὶ τοῖς ἐκ τοῦ ἑνὸς καὶ ἐκ τῆς δυάδος τῆς ἀορίστου. ὁ μὲν γὰρ ἐκ τοῦ κατηγορουμένου καθόλου γεννᾷ τὸν ἀριθμὸν καὶ οὐ τινὸς πλήθους, ὁ δ’ ἐκ τινὸς πλήθους, τοῦ πρώτου δέ [10] (τὴν γὰρ δυάδα πρῶτόν τι εἶναι πλῆθος), ὥστε διαφέρει οὐθὲν ὡς εἰπεῖν, ἀλλ’ αἱ ἀπορίαι αἱ αὐταὶ ἀκολουθήσουσι, μῖξις ἢ θέσις ἢ κρᾶσις ἢ γένεσις καὶ ὅσα ἄλλα τοιαῦτα. μάλιστα δ’ ἄν τις ἐπιζητήσειεν, εἰ μία ἑκάστη μονάς, ἐκ τίνος ἐστίν· οὐ γὰρ δὴ αὐτό γε τὸ ἓν ἑκάστη. ἀνάγκη δὴ ἐκ τοῦ ἑνὸς [15] αὐτοῦ εἶναι καὶ πλήθους ἢ μορίου τοῦ πλήθους. τὸ μὲν οὖν πλῆθός τι εἶναι φάναι τὴν μονάδα ἀδύνατον, ἀδιαίρετόν γ’ οὖσαν· τὸ δ’ ἐκ μορίου ἄλλας ἔχει πολλὰς δυσχερείας· ἀδιαίρετόν τε γὰρ ἕκαστον ἀναγκαῖον εἶναι τῶν μορίων (ἢ πλῆθος εἶναι καὶ τὴν μονάδα διαιρετήν) καὶ μὴ στοιχεῖον [20] εἶναι τὸ ἓν καὶ τὸ πλῆθος (ἡ γὰρ μονὰς ἑκάστη οὐκ ἐκ πλήθους καὶ ἑνός)· ἔτι οὐθὲν ἄλλο ποιεῖ ὁ τοῦτο λέγων ἀλλ’ ἢ ἀριθμὸν ἕτερον· τὸ γὰρ πλῆθος ἀδιαιρέτων ἐστὶν ἀριθμός. ἔτι ζητητέον καὶ περὶ τοὺς οὕτω λέγοντας πότερον ἄπειρος ὁ ἀριθμὸς ἢ πεπερασμένος. ὑπῆρχε γάρ, ὡς ἔοικε, καὶ πεπερασμένον [25] πλῆθος, ἐξ οὗ αἱ πεπερασμέναι μονάδες καὶ τοῦ ἑνός· ἔστι τε ἕτερον αὐτὸ πλῆθος καὶ πλῆθος ἄπειρον· ποῖον οὖν πλῆθος στοιχεῖόν ἐστι καὶ τὸ ἕν; ὁμοίως δὲ καὶ περὶ στιγμῆς ἄν τις ζητήσειε καὶ τοῦ στοιχείου ἐξ οὗ ποιοῦσι τὰ μεγέθη. οὐ γὰρ μία γε μόνον στιγμή ἐστιν αὕτη· τῶν γοῦν [30] ἄλλων στιγμῶν ἑκάστη ἐκ τίνος; οὐ γὰρ δὴ ἔκ γε διαστήματός τινος καὶ αὐτῆς στιγμῆς. ἀλλὰ μὴν οὐδὲ μόρια ἀδιαίρετα ἐνδέχεται τοῦ διαστήματος εἶναι μόρια, ὥσπερ τοῦ πλήθους ἐξ ὧν αἱ μονάδες· ὁ μὲν γὰρ ἀριθμὸς ἐξ ἀδιαιρέτων σύγκειται τὰ δὲ μεγέθη οὔ.—πάντα δὴ ταῦτα καὶ ἄλλα [35] τοιαῦτα φανερὸν ποιεῖ ὅτι ἀδύνατον εἶναι τὸν ἀριθμὸν καὶ τὰ μεγέθη χωριστά, [1] ἔτι δὲ τὸ διαφωνεῖν τοὺς τρόπους περὶ τῶν ἀριθμῶν σημεῖον ὅτι τὰ πράγματα αὐτὰ οὐκ ὄντα ἀληθῆ παρέχει τὴν ταραχὴν αὐτοῖς. οἱ μὲν γὰρ τὰ μαθηματικὰ μόνον ποιοῦντες παρὰ τὰ αἰσθητά, ὁρῶντες τὴν περὶ τὰ εἴδη δυσχέρειαν καὶ πλάσιν, ἀπέστησαν ἀπὸ τοῦ [5] εἰδητικοῦ ἀριθμοῦ καὶ τὸν μαθηματικὸν ἐποίησαν· οἱ δὲ τὰ εἴδη βουλόμενοι ἅμα καὶ ἀριθμοὺς ποιεῖν, οὐχ ὁρῶντες δέ, εἰ τὰς ἀρχάς τις ταύτας θήσεται, πῶς ἔσται ὁ μαθηματικὸς ἀριθμὸς παρὰ τὸν εἰδητικόν, τὸν αὐτὸν εἰδητικὸν καὶ μαθηματικὸν ἐποίησαν ἀριθμὸν τῷ λόγῳ, ἐπεὶ ἔργῳ γε [10] ἀνῄρηται ὁ μαθηματικός (ἰδίας γὰρ καὶ οὐ μαθηματικὰς ὑποθέσεις λέγουσιν)· ὁ δὲ πρῶτος θέμενος τὰ εἴδη εἶναι καὶ ἀριθμοὺς τὰ εἴδη καὶ τὰ μαθηματικὰ εἶναι εὐλόγως

ἐχώρισεν· ὥστε πάντας συμβαίνει κατὰ μέν τι λέγειν ὀρθῶς, ὅλως δ’ οὐκ ὀρθῶς. καὶ αὐτοὶ δὲ ὁμολογοῦσιν οὐ ταὐτὰ λέγοντες [15] ἀλλὰ τὰ ἐναντία. αἴτιον δ’ ὅτι αἱ ὑποθέσεις καὶ αἱ ἀρχαὶ ψευδεῖς. χαλεπὸν δ’ ἐκ μὴ καλῶς ἐχόντων λέγειν καλῶς, κατ’ Ἐπίχαρμον· ἀρτίως τε γὰρ λέλεκται, καὶ εὐθέως φαίνεται οὐ καλῶς ἔχον.—ἀλλὰ περὶ μὲν τῶν ἀριθμῶν ἱκανὰ τὰ διηπορημένα καὶ διωρισμένα (μᾶλλον γὰρ ἐκ πλειόνων ἂν [20] ἔτι πεισθείη τις πεπεισμένος, πρὸς δὲ τὸ πεισθῆναι μὴ πεπεισμένος οὐθὲν μᾶλλον)· περὶ δὲ τῶν πρώτων ἀρχῶν καὶ τῶν πρώτων αἰτίων καὶ στοιχείων ὅσα μὲν λέγουσιν οἱ περὶ μόνης τῆς αἰσθητῆς οὐσίας διορίζοντες, τὰ μὲν ἐν τοῖς περὶ φύσεως εἴρηται, τὰ δ’ οὐκ ἔστι τῆς μεθόδου τῆς νῦν· ὅσα δὲ [25] οἱ φάσκοντες εἶναι παρὰ τὰς αἰσθητὰς ἑτέρας οὐσίας, ἐχόμενόν ἐστι θεωρῆσαι τῶν εἰρημένων. ἐπεὶ οὖν λέγουσί τινες τοιαύτας εἶναι τὰς ἰδέας καὶ τοὺς ἀριθμούς, καὶ τὰ τούτων στοιχεῖα τῶν ὄντων εἶναι στοιχεῖα καὶ ἀρχάς, σκεπτέον περὶ τούτων τί λέγουσι καὶ πῶς λέγουσιν. οἱ μὲν οὖν ἀριθμοὺς [30] ποιοῦντες μόνον καὶ τούτους μαθηματικοὺς ὕστερον ἐπισκεπτέοι· τῶν δὲ τὰς ἰδέας λεγόντων ἅμα τόν τε τρόπον θεάσαιτ’ ἄν τις καὶ τὴν ἀπορίαν τὴν περὶ αὐτῶν. ἅμα γὰρ καθόλου τε ὡς οὐσίας ποιοῦσι τὰς ἰδέας καὶ πάλιν ὡς χωριστὰς καὶ τῶν καθ’ ἕκαστον. ταῦτα δ’ ὅτι οὐκ ἐνδέχεται διηπόρηται [35] πρότερον. αἴτιον δὲ τοῦ συνάψαι ταῦτα εἰς ταὐτὸν τοῖς λέγουσι τὰς οὐσίας καθόλου, ὅτι τοῖς αἰσθητοῖς οὐ τὰς αὐτὰς οὐσίας ἐποίουν· τὰ μὲν οὖν ἐν τοῖς αἰσθητοῖς καθ’ ἕκαστα ῥεῖν ἐνόμιζον καὶ μένειν οὐθὲν αὐτῶν, [1] τὸ δὲ καθόλου παρὰ ταῦτα εἶναί τε καὶ ἕτερόν τι εἶναι. τοῦτο δ’, ὥσπερ ἐν τοῖς ἔμπροσθεν [3] ἐλέγομεν, ἐκίνησε μὲν Σωκράτης διὰ τοὺς ὁρισμούς, οὐ μὴν ἐχώρισέ γε τῶν καθ’ ἕκαστον· καὶ τοῦτο ὀρθῶς ἐνόησεν [5] οὐ χωρίσας. δηλοῖ δὲ ἐκ τῶν ἔργων· ἄνευ μὲν γὰρ τοῦ καθόλου οὐκ ἔστιν ἐπιστήμην λαβεῖν, τὸ δὲ χωρίζειν αἴτιον τῶν συμβαινόντων δυσχερῶν περὶ τὰς ἰδέας ἐστίν. οἱ δ’ ὡς ἀναγκαῖον, εἴπερ ἔσονταί τινες οὐσίαι παρὰ τὰς αἰσθητὰς καὶ ῥεούσας, χωριστὰς εἶναι, ἄλλας μὲν οὐκ εἶχον ταύτας δὲ [10] τὰς καθόλου λεγομένας ἐξέθεσαν, ὥστε συμβαίνειν σχεδὸν τὰς αὐτὰς φύσεις εἶναι τὰς καθόλου καὶ τὰς καθ’ ἕκαστον. αὕτη μὲν οὖν αὐτὴ καθ’ αὑτὴν εἴη τις ἂν δυσχέρεια τῶν εἰρημένων.

ὃ δὲ καὶ τοῖς λέγουσι τὰς ἰδέας ἔχει τινὰ ἀπορίαν [15] καὶ τοῖς μὴ λέγουσιν, καὶ κατ’ ἀρχὰς ἐν τοῖς διαπορήμασιν ἐλέχθη πρότερον, λέγωμεν νῦν. εἰ μὲν γάρ τις μὴ θήσει τὰς οὐσίας εἶναι κεχωρισμένας, καὶ τὸν τρόπον τοῦτον ὡς λέγεται τὰ καθ’ ἕκαστα τῶν ὄντων, ἀναιρήσει τὴν οὐσίαν ὡς βουλόμεθα λέγειν· ἂν δέ τις θῇ τὰς οὐσίας χωριστάς, [20] πῶς θήσει τὰ στοιχεῖα καὶ τὰς ἀρχὰς αὐτῶν; εἰ μὲν γὰρ καθ’ ἕκαστον καὶ μὴ καθόλου, τοσαῦτ’ ἔσται τὰ ὄντα ὅσαπερ τὰ στοιχεῖα, καὶ οὐκ ἐπιστητὰ τὰ στοιχεῖα (ἔστωσαν γὰρ αἱ μὲν ἐν τῇ φωνῇ συλλαβαὶ οὐσίαι τὰ δὲ στοιχεῖα αὐτῶν στοιχεῖα τῶν οὐσιῶν· ἀνάγκη δὴ τὸ ΒΑ ἓν εἶναι καὶ ἑκάστην [25] τῶν συλλαβῶν μίαν, εἴπερ μὴ καθόλου καὶ τῷ εἴδει αἱ αὐταὶ ἀλλὰ μία ἑκάστη τῷ ἀριθμῷ καὶ τόδε τι καὶ μὴ ὁμώνυμον· ἔτι δ’ αὐτὸ ὃ ἔστιν ἓν ἕκαστον τιθέασιν· εἰ δ’ αἱ συλλαβαί, οὕτω καὶ ἐξ ὧν εἰσίν· οὐκ ἔσται ἄρα πλείω ἄλφα ἑνός, οὐδὲ τῶν ἄλλων στοιχείων οὐθὲν κατὰ τὸν αὐτὸν λόγον [30] ὄνπερ οὐδὲ τῶν ἄλλων συλλαβῶν ἡ αὐτὴ ἄλλη καὶ ἄλλη· ἀλλὰ μὴν εἰ τοῦτο, οὐκ ἔσται παρὰ τὰ στοιχεῖα ἕτερα ὄντα, ἀλλὰ μόνον τὰ στοιχεῖα· ἔτι δὲ οὐδ’ ἐπιστητὰ τὰ στοιχεῖα· οὐ γὰρ καθόλου, ἡ δ’ ἐπιστήμη τῶν καθόλου· δῆλον δ’ ἐκ τῶν ἀποδείξεων καὶ τῶν ὁρισμῶν, οὐ γὰρ γίγνεται συλλογισμὸς [35] ὅτι τόδε τὸ τρίγωνον δύο ὀρθαῖς, εἰ μὴ πᾶν τρίγωνον δύο ὀρθαί, οὐδ’ ὅτι ὁδὶ ὁ ἄνθρωπος ζῷον, εἰ μὴ πᾶς ἄνθρωπος ζῷον)· [1] ἀλλὰ μὴν εἴγε καθόλου αἱ ἀρχαί, ἢ καὶ αἱ ἐκ τούτων οὐσίαι καθόλου ἢ ἔσται μὴ οὐσία πρότερον οὐσίας· τὸ μὲν γὰρ καθόλου οὐκ οὐσία, τὸ δὲ στοιχεῖον καὶ ἡ ἀρχὴ καθόλου, πρότερον δὲ τὸ στοιχεῖον καὶ ἡ ἀρχὴ ὧν ἀρχὴ καὶ στοιχεῖόν ἐστιν. ταῦτά τε δὴ πάντα συμβαίνει εὐλόγως, [5] ὅταν ἐκ στοιχείων τε ποιῶσι τὰς ἰδέας καὶ παρὰ τὰς τὸ αὐτὸ εἶδος ἐχούσας οὐσίας καὶ ἰδέας ἕν τι ἀξιῶσιν εἶναι καχωρισμένον· εἰ δὲ μηθὲν κωλύει ὥσπερ ἐπὶ τῶν τῆς φωνῆς στοιχείων πολλὰ εἶναι τὰ ἄλφα καὶ τὰ βῆτα καὶ μηθὲν εἶναι παρὰ τὰ πολλὰ αὐτὸ ἄλφα καὶ αὐτὸ βῆτα, ἔσονται [10] ἕνεκά γε τούτου ἄπειροι αἱ ὅμοιαι

συλλαβαί. τὸ δὲ τὴν ἐπιστήμην εἶναι καθόλου πᾶσαν, ὥστε ἀναγκαῖον εἶναι καὶ τὰς τῶν ὄντων ἀρχὰς καθόλου εἶναι καὶ μὴ οὐσίας κεχωρισμένας, ἔχει μὲν μάλιστ’ ἀπορίαν τῶν λεχθέντων, οὐ μὴν ἀλλὰ ἔστι μὲν ὡς ἀληθὲς τὸ λεγόμενον, ἔστι δ’ ὡς οὐκ ἀληθές. [15] ἡ γὰρ ἐπιστήμη, ὥσπερ καὶ τὸ ἐπίστασθαι, διττόν, ὧν τὸ μὲν δυνάμει τὸ δὲ ἐνεργείᾳ. ἡ μὲν οὖν δύναμις ὡς ὕλη τοῦ καθόλου οὖσα καὶ ἀόριστος τοῦ καθόλου καὶ ἀορίστου ἐστίν, ἡ δ’ ἐνέργεια ὡρισμένη καὶ ὡρισμένου, τόδε τι οὖσα τοῦδέ τινος, ἀλλὰ κατὰ συμβεβηκὸς ἡ ὄψις τὸ καθόλου χρῶμα ὁρᾷ [20] ὅτι τόδε τὸ χρῶμα ὃ ὁρᾷ χρῶμά ἐστιν, καὶ ὃ θεωρεῖ ὁ γραμματικός, τόδε τὸ ἄλφα ἄλφα· ἐπεὶ εἰ ἀνάγκη τὰς ἀρχὰς καθόλου εἶναι, ἀνάγκη καὶ τὰ ἐκ τούτων καθόλου, ὥσπερ ἐπὶ τῶν ἀποδείξεων· εἰ δὲ τοῦτο, οὐκ ἔσται χωριστὸν οὐθὲν οὐδ’ οὐσία. ἀλλὰ δῆλον ὅτι ἔστι μὲν ὡς ἡ ἐπιστήμη καθόλου, ἔστι [25] δ’ ὡς οὔ.

[29] περὶ μὲν οὖν τῆς οὐσίας ταύτης εἰρήσθω τοσαῦτα, πάντες [30] δὲ ποιοῦσι τὰς ἀρχὰς ἐναντίας, ὥσπερ ἐν τοῖς φυσικοῖς, καὶ περὶ τὰς ἀκινήτους οὐσίας ὁμοίως. εἰ δὲ τῆς τῶν ἁπάντων ἀρχῆς μὴ ἐνδέχεται πρότερόν τι εἶναι, ἀδύνατον ἂν εἴη τὴν ἀρχὴν ἕτερόν τι οὖσαν εἶναι ἀρχήν, οἷον εἴ τις λέγοι τὸ λευκὸν ἀρχὴν εἶναι οὐχ ᾗ ἕτερον ἀλλ’ ᾗ λευκόν, εἶναι μέντοι [35] καθ’ ὑποκειμένου καὶ ἕτερόν τι ὂν λευκὸν εἶναι· ἐκεῖνο γὰρ πρότερον ἔσται. ἀλλὰ μὴν γίγνεται πάντα ἐξ ἐναντίων ὡς ὑποκειμένου τινός· ἀνάγκη ἄρα μάλιστα τοῖς ἐναντίοις τοῦθ’ ὑπάρχειν. [1] ἀεὶ ἄρα πάντα τὰ ἐναντία καθ’ ὑποκειμένου καὶ οὐθὲν χωριστόν, ἀλλ’ ὥσπερ καὶ φαίνεται οὐθὲν οὐσίᾳ ἐναντίον, καὶ ὁ λόγος μαρτυρεῖ. οὐθὲν ἄρα τῶν ἐναντίων κυρίως ἀρχὴ πάντων ἀλλ’ ἑτέρα.—οἱ δὲ τὸ ἕτερον τῶν ἐναντίων [5] ὕλην ποιοῦσιν, οἱ μὲν τῷ ἑνὶ τῷ ἴσῳ τὸ ἄνισον, ὡς τοῦτο τὴν τοῦ πλήθους οὖσαν φύσιν, οἱ δὲ τῷ ἑνὶ τὸ πλῆθος (γεννῶνται γὰρ οἱ ἀριθμοὶ τοῖς μὲν ἐκ τῆς τοῦ ἀνίσου δυάδος, τοῦ μεγάλου καὶ μικροῦ, τῷ δ’ ἐκ τοῦ πλήθους, ὑπὸ τῆς τοῦ ἑνὸς δὲ οὐσίας ἀμφοῖν)· καὶ γὰρ ὁ τὸ ἄνισον καὶ ἓν λέγων [10] τὰ στοιχεῖα, τὸ δ’ ἄνισον ἐκ μεγάλου καὶ μικροῦ δυάδα, ὡς ἓν ὄντα τὸ ἄνισον καὶ τὸ μέγα καὶ τὸ μικρὸν λέγει, καὶ οὐ διορίζει ὅτι λόγῳ ἀριθμῷ δ’ οὔ. ἀλλὰ μὴν καὶ τὰς ἀρχὰς ἃς στοιχεῖα καλοῦσιν οὐ καλῶς ἀποδιδόασιν, οἱ μὲν τὸ μέγα καὶ τὸ μικρὸν λέγοντες μετὰ τοῦ ἑνός, τρία ταῦτα [15] στοιχεῖα τῶν ἀριθμῶν, τὰ μὲν δύο ὕλην τὸ δ’ ἓν τὴν μορφήν, οἱ δὲ τὸ πολὺ καὶ ὀλίγον, ὅτι τὸ μέγα καὶ τὸ μικρὸν μεγέθους οἰκειότερα τὴν φύσιν, οἱ δὲ τὸ καθόλου μᾶλλον ἐπὶ τούτων, τὸ ὑπερέχον καὶ τὸ ὑπερεχόμενον. διαφέρει δὲ τούτων οὐθὲν ὡς εἰπεῖν πρὸς ἔνια τῶν συμβαινόντων, ἀλλὰ [20] πρὸς τὰς λογικὰς μόνον δυσχερείας, ἃς φυλάττονται διὰ τὸ καὶ αὐτοὶ λογικὰς φέρειν τὰς ἀποδείξεις. πλὴν τοῦ αὐτοῦ γε λόγου ἐστὶ τὸ ὑπερέχον καὶ ὑπερεχόμενον εἶναι ἀρχὰς ἀλλὰ μὴ τὸ μέγα καὶ τὸ μικρόν, καὶ τὸν ἀριθμὸν πρότερον τῆς δυάδος ἐκ τῶν στοιχείων· καθόλου γὰρ ἀμφότερα [25] μᾶλλόν ἐστιν. νῦν δὲ τὸ μὲν λέγουσι τὸ δ’ οὐ λέγουσιν. οἱ δὲ τὸ ἕτερον καὶ τὸ ἄλλο πρὸς τὸ ἓν ἀντιτιθέασιν, οἱ δὲ πλῆθος καὶ τὸ ἕν. εἰ δέ ἐστιν, ὥσπερ βούλονται, τὰ ὄντα ἐξ ἐναντίων, τῷ δὲ ἑνὶ ἢ οὐθὲν ἐναντίον ἢ εἴπερ ἄρα μέλλει, τὸ πλῆθος, τὸ δ’ ἄνισον τῷ ἴσῳ καὶ τὸ ἕτερον τῷ [30] ταὐτῷ καὶ τὸ ἄλλο αὐτῷ, μάλιστα μὲν οἱ τὸ ἓν τῷ πλήθει ἀντιτιθέντες ἔχονταί τινος δόξης, οὐ μὴν οὐδ’ οὗτοι ἱκανῶς· ἔσται γὰρ τὸ ἓν ὀλίγον· πλῆθος μὲν γὰρ ὀλιγότητι τὸ δὲ πολὺ τῷ ὀλίγῳ ἀντίκειται.—τὸ δ’ ἓν ὅτι μέτρον σημαίνει, φανερόν. καὶ ἐν παντὶ ἔστι τι ἕτερον ὑποκείμενον, οἷον ἐν [35] ἁρμονίᾳ δίεσις, ἐν δὲ μεγέθει δάκτυλος ἢ ποὺς ἤ τι τοιοῦτον, ἐν δὲ ῥυθμοῖς βάσις ἢ συλλαβή· ὁμοίως δὲ καὶ ἐν βάρει σταθμός τις ὡρισμένος ἐστίν· καὶ κατὰ πάντων δὲ τὸν αὐτὸν τρόπον, [1] ἐν μὲν τοῖς ποιοῖς ποιόν τι, ἐν δὲ τοῖς ποσοῖς ποσόν τι, καὶ ἀδιαίρετον τὸ μέτρον, τὸ μὲν κατὰ τὸ εἶδος τὸ δὲ πρὸς τὴν αἴσθησιν, ὡς οὐκ ὄντος τινὸς τοῦ ἑνὸς καθ’ αὐτὸ οὐσίας. καὶ τοῦτο κατὰ λόγον· σημαίνει γὰρ τὸ ἓν ὅτι μέτρον [5] πλήθους τινός, καὶ ὁ ἀριθμὸς ὅτι πλῆθος μεμετρημένον καὶ πλῆθος μέτρων (διὸ καὶ εὐλόγως οὐκ ἔστι τὸ ἓν ἀριθμός· οὐδὲ γὰρ τὸ μέτρον μέτρα, ἀλλ’ ἀρχὴ καὶ τὸ μέτρον καὶ τὸ ἕν). δεῖ δὲ ἀεὶ τὸ αὐτό τι ὑπάρχειν πᾶσι τὸ μέτρον, οἷον εἰ ἵπποι, τὸ μέτρον ἵππος, καὶ εἰ ἄνθρωποι, ἄνθρωπος. [10] εἰ δ’ ἄνθρωπος καὶ ἵππος καὶ θεός,

ζῷον ἴσως, καὶ ὁ ἀριθμὸς αὐτῶν ἔσται ζῷα. εἰ δ’ ἄνθρωπος καὶ λευκὸν καὶ βαδίζον, ἥκιστα μὲν ἀριθμὸς τούτων διὰ τὸ ταὐτῷ πάντα ὑπάρχειν καὶ ἑνὶ κατὰ ἀριθμόν, ὅμως δὲ γενῶν ἔσται ὁ ἀριθμὸς ὁ τούτων, ἤ τινος ἄλλης τοιαύτης προσηγορίας.

[15] οἱ δὲ τὸ ἄνισον ὡς ἕν τι, τὴν δυάδα δὲ ἀόριστον ποιοῦντες μεγάλου καὶ μικροῦ, πόρρω λίαν τῶν δοκούντων καὶ δυνατῶν λέγουσιν· πάθη τε γὰρ ταῦτα καὶ συμβεβηκότα μᾶλλον ἢ ὑποκείμενα τοῖς ἀριθμοῖς καὶ τοῖς μεγέθεσίν ἐστι, τὸ πολὺ καὶ ὀλίγον ἀριθμοῦ, καὶ μέγα καὶ μικρὸν μεγέθους, ὥσπερ [20] ἄρτιον καὶ περιττόν, καὶ λεῖον καὶ τραχύ, καὶ εὐθὺ καὶ καμπύλον· ἔτι δὲ πρὸς ταύτῃ τῇ ἁμαρτίᾳ καὶ πρός τι ἀνάγκη εἶναι τὸ μέγα καὶ τὸ μικρὸν καὶ ὅσα τοιαῦτα· τὸ δὲ πρός τι πάντων ἥκιστα φύσις τις ἢ οὐσία τῶν κατηγοριῶν ἐστι, καὶ ὑστέρα τοῦ ποιοῦ καὶ ποσοῦ· καὶ πάθος τι τοῦ ποσοῦ [25] τὸ πρός τι, ὥσπερ ἐλέχθη, ἀλλ’ οὐχ ὕλη, εἴ τι ἕτερον καὶ τῷ ὅλως κοινῷ πρός τι καὶ τοῖς μέρεσιν αὐτοῦ καὶ εἴδεσιν. οὐθὲν γάρ ἐστιν οὔτε μέγα οὔτε μικρόν, οὔτε πολὺ οὔτε ὀλίγον, οὔτε ὅλως πρός τι, ὃ οὐχ ἕτερόν τι ὂν πολὺ ἢ ὀλίγον ἢ μέγα ἢ μικρὸν ἢ πρός τί ἐστιν. σημεῖον δ’ ὅτι ἥκιστα οὐσί [30] τις καὶ ὄν τι τὸ πρός τι τὸ μόνου μὴ εἶναι γένεσιν αὐτοῦ μηδὲ φθορὰν μηδὲ κίνησιν ὥσπερ κατὰ τὸ ποσὸν αὔξησις καὶ φθίσις, κατὰ τὸ ποιὸν ἀλλοίωσις, κατὰ τόπον φορά, κατὰ τὴν οὐσίαν ἡ ἁπλῆ γένεσις καὶ φθορά,—ἀλλ’ οὐ κατὰ τὸ πρός τι· ἄνευ γὰρ τοῦ κινηθῆναι ὁτὲ μὲν μεῖζον ὁτὲ δὲ [35] ἔλαττον ἢ ἴσον ἔσται θατέρου κινηθέντος κατὰ τὸ ποσόν. [1] ἀνάγκη τε ἑκάστου ὕλην εἶναι τὸ δυνάμει τοιοῦτον, ὥστε καὶ οὐσίας· τὸ δὲ πρός τι οὔτε δυνάμει οὐσία οὔτε ἐνεργείᾳ. ἄτοπον οὖν, μᾶλλον δὲ ἀδύνατον, τὸ οὐσίας μὴ οὐσίαν ποιεῖν στοιχεῖον καὶ πρότερον· ὕστερον γὰρ πᾶσαι αἱ κατηγορίαι. ἔτι δὲ τὰ [5] στοιχεῖα οὐ κατηγορεῖται καθ’ ὧν στοιχεῖα, τὸ δὲ πολὺ καὶ ὀλίγον καὶ χωρὶς καὶ ἅμα κατηγορεῖται ἀριθμοῦ, καὶ τὸ μακρὸν καὶ τὸ βραχὺ γραμμῆς, καὶ ἐπίπεδόν ἐστι καὶ πλατὺ καὶ στενόν. εἰ δὲ δὴ καὶ ἔστι τι πλῆθος οὗ τὸ μὲν ἀεί, τὸ ὀλίγον, οἷον ἡ δυάς (εἰ γὰρ πολύ, τὸ ἓν ἂν ὀλίγον εἴη), [10] κἂν πολὺ ἁπλῶς εἴη, οἷον ἡ δεκὰς πολύ, καὶ εἰ ταύτης μή ἐστι πλεῖον, ἢ τὰ μύρια. πῶς οὖν ἔσται οὕτως ἐξ ὀλίγου καὶ πολλοῦ ὁ ἀριθμός; ἢ γὰρ ἄμφω ἔδει κατηγορεῖσθαι ἢ μηδέτερον· νῦν δὲ τὸ ἕτερον μόνον κατηγορεῖται.

ἁπλῶς δὲ δεῖ σκοπεῖν, ἆρα δυνατὸν τὰ ἀΐδια ἐκ [15] στοιχείων συγκεῖσθαι; ὕλην γὰρ ἔξει· σύνθετον γὰρ πᾶν τὸ ἐκ στοιχείων. εἰ τοίνυν ἀνάγκη, ἐξ οὗ ἐστιν, εἰ καὶ ἀεὶ ἔστι, κἄν, εἰ ἐγένετο, ἐκ τούτου γίγνεσθαι, γίγνεται δὲ πᾶν ἐκ τοῦ δυνάμει ὄντος τοῦτο ὃ γίγνεται (οὐ γὰρ ἂν ἐγένετο ἐκ τοῦ ἀδυνάτου οὐδὲ ἦν), τὸ δὲ δυνατὸν ἐνδέχεται καὶ ἐνεργεῖν [20] καὶ μή, εἰ καὶ ὅτι μάλιστα ἀεὶ ἔστιν ὁ ἀριθμὸς ἢ ὁτιοῦν ἄλλο ὕλην ἔχον, ἐνδέχοιτ’ ἂν μὴ εἶναι, ὥσπερ καὶ τὸ μίαν ἡμέραν ἔχον καὶ τὸ ὁποσαοῦν ἔτη· εἰ δ’ οὕτω, καὶ τὸ τοσοῦτον χρόνον οὗ μὴ ἔστι πέρας. οὐκ ἂν τοίνυν εἴη ἀΐδια, εἴπερ μὴ ἀΐδιον τὸ ἐνδεχόμενον μὴ εἶναι, καθάπερ ἐν ἄλλοις λόγοις [25] συνέβη πραγματευθῆναι. εἰ δέ ἐστι τὸ λεγόμενον νῦν ἀληθὲς καθόλου, ὅτι οὐδεμία ἐστὶν ἀΐδιος οὐσία ἐὰν μὴ ᾖ ἐνέργεια, τὰ δὲ στοιχεῖα ὕλη τῆς οὐσίας, οὐδεμιᾶς ἂν εἴη ἀϊδίου οὐσίας στοιχεῖα ἐξ ὧν ἐστιν ἐνυπαρχόντων. εἰσὶ δέ τινες οἳ δυάδα μὲν ἀόριστον ποιοῦσι τὸ μετὰ τοῦ ἑνὸς στοιχεῖον, τὸ δ’ ἄνισον [30] δυσχεραίνουσιν εὐλόγως διὰ τὰ συμβαίνοντα ἀδύνατα· οἷς τοσαῦτα μόνον ἀφῄρηται τῶν δυσχερῶν ὅσα διὰ τὸ ποιεῖν τὸ ἄνισον καὶ τὸ πρός τι στοιχεῖον ἀναγκαῖα συμβαίνει τοῖς λέγουσιν· ὅσα δὲ χωρὶς ταύτης τῆς δόξης, ταῦτα κἀκείνοις ὑπάρχειν ἀναγκαῖον, ἐάν τε τὸν εἰδητικὸν ἀριθμὸν ἐξ αὐτῶν [35] ποιῶσιν ἐάν τε τὸν μαθηματικόν.—πολλὰ μὲν οὖν τὰ αἴτια τῆς ἐπὶ ταύτας τὰς αἰτίας ἐκτροπῆς, [1] μάλιστα δὲ τὸ ἀπορῆσαι ἀρχαϊκῶς. ἔδοξε γὰρ αὐτοῖς πάντ’ ἔσεσθαι ἓν τὰ ὄντα, αὐτὸ τὸ ὄν, εἰ μή τις λύσει καὶ ὁμόσε βαδιεῖται τῷ Παρμενίδου λόγῳ οὐ γὰρ μήποτε τοῦτο δαμῇ, εἶναι μὴ ἐόντα, [5] ἀλλ’ ἀνάγκη εἶναι τὸ μὴ ὂν δεῖξαι ὅτι ἔστιν· οὕτω γάρ, ἐκ τοῦ ὄντος καὶ ἄλλου τινός, τὰ ὄντα ἔσεσθαι, εἰ πολλά ἐστιν. καίτοι πρῶτον μέν, εἰ τὸ ὂν πολλαχῶς (τὸ μὲν γὰρ ὅτι οὐσίαν σημαίνει, τὸ δ’ ὅτι ποιόν, τὸ δ’ ὅτι ποσόν, καὶ τὰς ἄλλας δὴ κατηγορίας), ποῖον οὖν τὰ ὄντα πάντα ἕν, εἰ μὴ [10] τὸ μὴ ὂν ἔσται; πότερον αἱ οὐσίαι, ἢ τὰ

πάθη καὶ τὰ ἄλλα δὴ ὁμοίως, ἢ πάντα, καὶ ἔσται ἓν τὸ τόδε καὶ τὸ τοιόνδε καὶ τὸ τοσόνδε καὶ τὰ ἄλλα ὅσα ἕν τι σημαίνει; ἀλλ’ ἄτοπον, μᾶλλον δὲ ἀδύνατον, τὸ μίαν φύσιν τινὰ γενομένην αἰτίαν εἶναι τοῦ τοῦ ὄντος τὸ μὲν τόδε εἶναι τὸ δὲ τοιόνδε τὸ δὲ [15] τοσόνδε τὸ δὲ πού. ἔπειτα ἐκ ποίου μὴ ὄντος καὶ ὄντος τὰ ὄντα; πολλαχῶς γὰρ καὶ τὸ μὴ ὄν, ἐπειδὴ καὶ τὸ ὄν· καὶ τὸ μὲν μὴ ἄνθρωπον εἶναι σημαίνει τὸ μὴ εἶναι τοδί, τὸ δὲ μὴ εὐθὺ τὸ μὴ εἶναι τοιονδί, τὸ δὲ μὴ τρίπηχυ τὸ μὴ εἶναι τοσονδί. ἐκ ποίου οὖν ὄντος καὶ μὴ ὄντος πολλὰ τὰ ὄντα; [20] βούλεται μὲν δὴ τὸ ψεῦδος καὶ ταύτην τὴν φύσιν λέγειν τὸ οὐκ ὄν, ἐξ οὗ καὶ τοῦ ὄντος πολλὰ τὰ ὄντα, διὸ καὶ ἐλέγετο ὅτι δεῖ ψεῦδός τι ὑποθέσθαι, ὥσπερ καὶ οἱ γεωμέτραι τὸ ποδιαίαν εἶναι τὴν μὴ ποδιαίαν· ἀδύνατον δὲ ταῦθ’ οὕτως ἔχειν, οὔτε γὰρ οἱ γεωμέτραι ψεῦδος οὐθὲν ὑποτίθενται (οὐ γὰρ [25] ἐν τῷ συλλογισμῷ ἡ πρότασις), οὔτε ἐκ τοῦ οὕτω μὴ ὄντος τὰ ὄντα γίγνεται οὐδὲ φθείρεται. ἀλλ’ ἐπειδὴ τὸ μὲν κατὰ τὰς πτώσεις μὴ ὂν ἰσαχῶς ταῖς κατηγορίαις λέγεται, παρὰ τοῦτο δὲ τὸ ὡς ψεῦδος λέγεται τὸ μὴ ὂν καὶ τὸ κατὰ δύναμιν, ἐκ τούτου ἡ γένεσίς ἐστιν, ἐκ τοῦ μὴ ἀνθρώπου δυνάμει δὲ ἀνθρώπου [30] ἄνθρωπος, καὶ ἐκ τοῦ μὴ λευκοῦ δυνάμει δὲ λευκοῦ λευκόν, ὁμοίως ἐάν τε ἕν τι γίγνηται ἐάν τε πολλά.—φαίνεται δὲ ἡ ζήτησις πῶς πολλὰ τὸ ὂν τὸ κατὰ τὰς οὐσίας λεγόμενον· ἀριθμοὶ γὰρ καὶ μήκη καὶ σώματα τὰ γεννώμενά ἐστιν. ἄτοπον δὴ τὸ ὅπως μὲν πολλὰ τὸ ὂν τὸ τί ἐστι ζητῆσαι, [35] πῶς δὲ ἢ ποιὰ ἢ ποσά, μή. οὐ γὰρ δὴ ἡ δυὰς ἡ ἀόριστος αἰτία οὐδὲ τὸ μέγα καὶ τὸ μικρὸν τοῦ δύο λευκὰ ἢ πολλὰ εἶναι χρώματα ἢ χυμοὺς ἢ σχήματα· [1] ἀριθμοὶ γὰρ ἂν καὶ ταῦτα ἦσαν καὶ μονάδες. ἀλλὰ μὴν εἴ γε ταῦτ’ ἐπῆλθον, εἶδον ἂν τὸ αἴτιον καὶ τὸ ἐν ἐκείνοις· τὸ γὰρ αὐτὸ καὶ τὸ ἀνάλογον αἴτιον. αὕτη γὰρ ἡ παρέκβασις αἰτία καὶ τοῦ τὸ [5] ἀντικείμενον ζητοῦντας τῷ ὄντι καὶ τῷ ἑνί, ἐξ οὗ καὶ τούτων τὰ ὄντα, τὸ πρός τι καὶ τὸ ἄνισον ὑποθεῖναι, ὃ οὔτ’ ἐναντίον οὔτ’ ἀπόφασις ἐκείνων, μία τε φύσις τῶν ὄντων ὥσπερ καὶ τὸ τί καὶ τὸ ποῖον. καὶ ζητεῖν ἔδει καὶ τοῦτο, πῶς πολλὰ τὰ πρός τι ἀλλ’ οὐχ ἕν· νῦν δὲ πῶς μὲν πολλαὶ μονάδες [10] παρὰ τὸ πρῶτον ἓν ζητεῖται, πῶς δὲ πολλὰ ἄνισα παρὰ τὸ ἄνισον οὐκέτι. καίτοι χρῶνται καὶ λέγουσι μέγα μικρόν, πολὺ ὀλίγον, ἐξ ὧν οἱ ἀριθμοί, μακρὸν βραχύ, ἐξ ὧν τὸ μῆκος, πλατὺ στενόν, ἐξ ὧν τὸ ἐπίπεδον, βαθὺ ταπεινόν, ἐξ ὧν οἱ ὄγκοι· καὶ ἔτι δὴ πλείω εἴδη λέγουσι τοῦ πρός τι· [15] τούτοις δὴ τί αἴτιον τοῦ πολλὰ εἶναι;—ἀνάγκη μὲν οὖν, ὥσπερ λέγομεν, ὑποθεῖναι τὸ δυνάμει ὂν ἑκάστῳ (τοῦτο δὲ προσαπεφήνατο [17] ὁ ταῦτα λέγων, τί τὸ δυνάμει τόδε καὶ οὐσία, μὴ ὂν δὲ καθ’ αὑτό, ὅτι τὸ πρός τι, ὥσπερ εἰ εἶπε τὸ ποιόν, ὃ οὔτε δυνάμει ἐστὶ τὸ ἓν ἢ τὸ ὂν οὔτε ἀπόφασις τοῦ ἑνὸς οὐδὲ [20] τοῦ ὄντος ἀλλ’ ἕν τι τῶν ὄντων), πολύ τε μᾶλλον, ὥσπερ ἐλέχθη, εἰ ἐζήτει πῶς πολλὰ τὰ ὄντα, μὴ τὰ ἐν τῇ αὐτῇ κατηγορίᾳ ζητεῖν, πῶς πολλαὶ οὐσίαι ἢ πολλὰ ποιά, ἀλλὰ πῶς πολλὰ τὰ ὄντα· τὰ μὲν γὰρ οὐσίαι τὰ δὲ πάθη τὰ δὲ πρός τι. ἐπὶ μὲν οὖν τῶν ἄλλων κατηγοριῶν ἔχει τινὰ [25] καὶ ἄλλην ἐπίστασιν πῶς πολλά (διὰ γὰρ τὸ μὴ χωριστὰ εἶναι τῷ τὸ ὑποκείμενον πολλὰ γίγνεσθαι καὶ εἶναι ποιά τε πολλὰ εἶναι καὶ ποσά· καίτοι δεῖ γέ τινα εἶναι ὕλην ἑκάστῳ γένει, πλὴν χωριστὴν ἀδύνατον τῶν οὐσιῶν)· ἀλλ’ ἐπὶ τῶν τόδε τι ἔχει τινὰ λόγον πῶς πολλὰ τὸ τόδε τι, [30] εἰ μή τι ἔσται καὶ τόδε τι καὶ φύσις τις τοιαύτη· αὕτη δέ ἐστιν ἐκεῖθεν μᾶλλον ἡ ἀπορία, πῶς πολλαὶ ἐνεργείᾳ οὐσίαι ἀλλ’ οὐ μία. ἀλλὰ μὴν καὶ εἰ μὴ ταὐτόν ἐστι τὸ τόδε καὶ τὸ ποσόν, οὐ λέγεται πῶς καὶ διὰ τί πολλὰ τὰ ὄντα, ἀλλὰ πῶς ποσὰ πολλά. ὁ γὰρ ἀριθμὸς πᾶς ποσόν τι σημαίνει, [35] καὶ ἡ μονάς, εἰ μὴ μέτρον καὶ τὸ κατὰ τὸ ποσὸν ἀδιαίρετον. εἰ μὲν οὖν ἕτερον τὸ ποσὸν καὶ τὸ τί ἐστιν, οὐ λέγεται τὸ τί ἐστιν ἐκ τίνος οὐδὲ πῶς πολλά· [1] εἰ δὲ ταὐτό, πολλὰς ὑπομένει ὁ λέγων ἐναντιώσεις.—ἐπιστήσειε δ’ ἄν τις τὴν σκέψιν καὶ περὶ τῶν ἀριθμῶν πόθεν δεῖ λαβεῖν τὴν πίστιν ὡς εἰσίν. τῷ μὲν γὰρ ἰδέας τιθεμένῳ παρέχονταί τιν’ αἰτίαν [5] τοῖς οὖσιν, εἴπερ ἕκαστος τῶν ἀριθμῶν ἰδέα τις ἡ δ’ ἰδέα τοῖς ἄλλοις αἰτία τοῦ εἶναι ὂν δή ποτε τρόπον (ἔστω γὰρ ὑποκείμενον αὐτοῖς τοῦτο)· τῷ δὲ τοῦτον μὲν τὸν τρόπον οὐκ οἰομένῳ διὰ τὸ τὰς ἐνούσας δυσχερείας ὁρᾶν περὶ τὰς ἰδέας ὥστε διά γε ταῦτα μὴ ποιεῖν ἀριθμούς, ποιοῦντι δὲ ἀριθμὸν [10] τὸν μαθηματικόν, πόθεν τε χρὴ πιστεῦσαι

ὡς ἔστι τοιοῦτος ἀριθμός, καὶ τί τοῖς ἄλλοις χρήσιμος; οὐθενὸς γὰρ οὔτε φησὶν ὁ λέγων αὐτὸν εἶναι, ἀλλ᾽ ὡς αὐτήν τινα λέγει καθ᾽ αὑτὴν φύσιν οὖσαν, οὔτε φαίνεται ὢν αἴτιος· τὰ γὰρ θεωρήματα τῶν ἀριθμητικῶν πάντα καὶ κατὰ τῶν αἰσθητῶν [15] ὑπάρξει, καθάπερ ἐλέχθη.

οἱ μὲν οὖν τιθέμενοι τὰς ἰδέας εἶναι, καὶ ἀριθμοὺς αὐτὰς εἶναι, τῷ κατὰ τὴν ἔκθεσιν ἑκάστου παρὰ τὰ πολλὰ λαμβάνειν τὸ ἕν τι ἕκαστον πειρῶνταί γε λέγειν πως διὰ τί ἔστιν, οὐ μὴν ἀλλὰ ἐπεὶ οὔτε ἀναγκαῖα οὔτε δυνατὰ ταῦτα, [20] οὐδὲ τὸν ἀριθμὸν διά γε ταῦτα εἶναι λεκτέον· οἱ δὲ Πυθαγόρειοι διὰ τὸ ὁρᾶν πολλὰ τῶν ἀριθμῶν πάθη ὑπάρχοντα τοῖς αἰσθητοῖς σώμασιν, εἶναι μὲν ἀριθμοὺς ἐποίησαν τὰ ὄντα, οὐ χωριστοὺς δέ, ἀλλ᾽ ἐξ ἀριθμῶν τὰ ὄντα· διὰ τί δέ; ὅτι τὰ πάθη τὰ τῶν ἀριθμῶν ἐν ἁρμονίᾳ ὑπάρχει καὶ ἐν [25] τῷ οὐρανῷ καὶ ἐν πολλοῖς ἄλλοις. τοῖς δὲ τὸν μαθηματικὸν μόνον λέγουσιν εἶναι ἀριθμὸν οὐθὲν τοιοῦτον ἐνδέχεται λέγειν κατὰ τὰς ὑποθέσεις, ἀλλ᾽ ὅτι οὐκ ἔσονται αὐτῶν αἱ ἐπιστῆμαι ἐλέγετο. ἡμεῖς δέ φαμεν εἶναι, καθάπερ εἴπομεν πρότερον. καὶ δῆλον ὅτι οὐ κεχώρισται τὰ μαθηματικά· οὐ γὰρ [30] ἂν κεχωρισμένων τὰ πάθη ὑπῆρχεν ἐν τοῖς σώμασιν. οἱ μὲν οὖν Πυθαγόρειοι κατὰ μὲν τὸ τοιοῦτον οὐθενὶ ἔνοχοί εἰσιν, κατὰ μέντοι τὸ ποιεῖν ἐξ ἀριθμῶν τὰ φυσικὰ σώματα, ἐκ μὴ ἐχόντων βάρος μηδὲ κουφότητα ἔχοντα κουφότητα καὶ βάρος, ἐοίκασι περὶ ἄλλου οὐρανοῦ λέγειν καὶ σωμάτων ἀλλ᾽ [35] οὐ τῶν αἰσθητῶν· οἱ δὲ χωριστὸν ποιοῦντες, ὅτι ἐπὶ τῶν αἰσθητῶν οὐκ ἔσται τὰ ἀξιώματα, ἀληθῆ δὲ τὰ λεγόμενα καὶ σαίνει τὴν ψυχήν, εἶναί τε ὑπολαμβάνουσι καὶ χωριστὰ εἶναι· ὁμοίως δὲ καὶ τὰ μεγέθη τὰ μαθηματικά. [1] δῆλον οὖν ὅτι καὶ ὁ ἐναντιούμενος λόγος τἀναντία ἐρεῖ, καὶ ὃ ἄρτι ἠπορήθη λυτέον τοῖς οὕτω λέγουσι, διὰ τί οὐδαμῶς ἐν τοῖς αἰσθητοῖς ὑπαρχόντων τὰ πάθη ὑπάρχει αὐτῶν ἐν τοῖς αἰσθητοῖς. [5] εἰσὶ δέ τινες οἳ ἐκ τοῦ πέρατα εἶναι καὶ ἔσχατα τὴν στιγμὴν μὲν γραμμῆς, ταύτην δ᾽ ἐπιπέδου, τοῦτο δὲ τοῦ στερεοῦ, οἴονται εἶναι ἀνάγκην τοιαύτας φύσεις εἶναι. δεῖ δὴ καὶ τοῦτον ὁρᾶν τὸν λόγον, μὴ λίαν ᾖ μαλακός. οὔτε γὰρ οὐσίαι εἰσὶ τὰ ἔσχατα ἀλλὰ μᾶλλον πάντα ταῦτα πέρατα [10] (ἐπεὶ καὶ τῆς βαδίσεως καὶ ὅλως κινήσεως ἔστι τι πέρας· τοῦτ᾽ οὖν ἔσται τόδε τι καὶ οὐσία τις· ἀλλ᾽ ἄτοπον)·—οὐ μὴν ἀλλὰ εἰ καὶ εἰσί, τῶνδε τῶν αἰσθητῶν ἔσονται πάντα (ἐπὶ τούτων γὰρ ὁ λόγος εἴρηκεν)· διὰ τί οὖν χωριστὰ ἔσται;—ἔτι δὲ ἐπιζητήσειεν ἄν τις μὴ λίαν εὐχερὴς ὢν περὶ μὲν τοῦ ἀριθμοῦ [15] παντὸς καὶ τῶν μαθηματικῶν τὸ μηθὲν συμβάλλεσθαι ἀλλήλοις τὰ πρότερα τοῖς ὕστερον (μὴ ὄντος γὰρ τοῦ ἀριθμοῦ οὐθὲν ἧττον τὰ μεγέθη ἔσται τοῖς τὰ μαθηματικὰ μόνον εἶναι φαμένοις, καὶ τούτων μὴ ὄντων ἡ ψυχὴ καὶ τὰ σώματα τὰ αἰσθητά· οὐκ ἔοικε δ᾽ ἡ φύσις ἐπεισοδιώδης οὖσα ἐκ τῶν [20] φαινομένων, ὥσπερ μοχθηρὰ τραγῳδία)· τοῖς δὲ τὰς ἰδέας τιθεμένοις τοῦτο μὲν ἐκφεύγει—ποιοῦσι γὰρ τὰ μεγέθη ἐκ τῆς ὕλης καὶ ἀριθμοῦ, ἐκ μὲν τῆς δυάδος τὰ μήκη, ἐκ τριάδος δ᾽ ἴσως τὰ ἐπίπεδα, ἐκ δὲ τῆς τετράδος τὰ στερεὰ ἢ καὶ ἐξ ἄλλων ἀριθμῶν· διαφέρει γὰρ οὐθέν—, ἀλλὰ ταῦτά [25] γε πότερον ἰδέαι ἔσονται, ἢ τίς ὁ τρόπος αὐτῶν, καὶ τί συμβάλλονται τοῖς οὖσιν; οὐθὲν γάρ, ὥσπερ οὐδὲ τὰ μαθηματικά, οὐδὲ ταῦτα συμβάλλεται. ἀλλὰ μὴν οὐδ᾽ ὑπάρχει γε κατ᾽ αὐτῶν οὐθὲν θεώρημα, ἐὰν μή τις βούληται κινεῖν τὰ μαθηματικὰ καὶ ποιεῖν ἰδίας τινὰς δόξας. ἔστι δ᾽ οὐ χαλεπὸν [30] ὁποιασοῦν ὑποθέσεις λαμβάνοντας μακροποιεῖν καὶ συνείρειν. οὗτοι μὲν οὖν ταύτῃ προσγλιχόμενοι ταῖς ἰδέαις τὰ μαθηματικὰ διαμαρτάνουσιν· οἱ δὲ πρῶτοι δύο τοὺς ἀριθμοὺς ποιήσαντες, τόν τε τῶν εἰδῶν καὶ τὸν μαθηματικόν, οὔτ᾽ εἰρήκασιν οὔτ᾽ ἔχοιεν ἂν εἰπεῖν πῶς καὶ ἐκ τίνος ἔσται ὁ [35] μαθηματικός. ποιοῦσι γὰρ αὐτὸν μεταξὺ τοῦ εἰδητικοῦ καὶ τοῦ αἰσθητοῦ. εἰ μὲν γὰρ ἐκ τοῦ μεγάλου καὶ μικροῦ, ὁ αὐτὸς ἐκείνῳ ἔσται τῷ τῶν ἰδεῶν (ἐξ ἄλλου δέ τινος μικροῦ καὶ μεγάλου τὰ γὰρ μεγέθη ποιεῖ)· [1] εἰ δ᾽ ἕτερόν τι ἐρεῖ, πλείω τὰ στοιχεῖα ἐρεῖ· καὶ εἰ ἕν τι ἑκατέρου ἡ ἀρχή, κοινόν τι ἐπὶ τούτων ἔσται τὸ ἕν, ζητητέον τε πῶς καὶ ταῦτα πολλὰ τὸ ἓν καὶ ἅμα τὸν ἀριθμὸν γενέσθαι ἄλλως ἢ ἐξ [5] ἑνὸς καὶ δυάδος ἀορίστου ἀδύνατον κατ᾽ ἐκεῖνον. πάντα δὴ ταῦτα ἄλογα, καὶ μάχεται καὶ αὐτὰ ἑαυτοῖς καὶ τοῖς εὐλόγοις, καὶ ἔοικεν ἐν αὐτοῖς εἶναι ὁ Σιμωνίδου μακρὸς λόγος· γίγνεται γὰρ ὁ μακρὸς

λόγος ὥσπερ ὁ τῶν δούλων ὅταν μηθὲν ὑγιὲς λέγωσιν. φαίνεται δὲ καὶ αὐτὰ τὰ στοιχεῖα [10] τὸ μέγα καὶ τὸ μικρὸν βοᾶν ὡς ἑλκόμενα· οὐ δύναται γὰρ οὐδαμῶς γεννῆσαι τὸν ἀριθμὸν ἀλλ’ ἢ τὸν ἀφ’ ἑνὸς διπλασιαζόμενον.—ἄτοπον δὲ καὶ γένεσιν ποιεῖν ἀϊδίων ὄντων, μᾶλλον δ’ ἔν τι τῶν ἀδυνάτων. οἱ μὲν οὖν Πυθαγόρειοι πότερον οὐ ποιοῦσιν ἢ ποιοῦσι γένεσιν οὐδὲν δεῖ διστάζειν· [15] φανερῶς γὰρ λέγουσιν ὡς τοῦ ἑνὸς συσταθέντος, εἴτ’ ἐξ ἐπιπέδων εἴτ’ ἐκ χροιᾶς εἴτ’ ἐκ σπέρματος εἴτ’ ἐξ ὧν ἀποροῦσιν εἰπεῖν, εὐθὺς τὸ ἔγγιστα τοῦ ἀπείρου ὅτι εἵλκετο καὶ ἐπεραίνετο ὑπὸ τοῦ πέρατος. ἀλλ’ ἐπειδὴ κοσμοποιοῦσι καὶ φυσικῶς βούλονται λέγειν, δίκαιον αὐτοὺς ἐξετάζειν τι περὶ [20] φύσεως, ἐκ δὲ τῆς νῦν ἀφεῖναι μεθόδου· τὰς γὰρ ἐν τοῖς ἀκινήτοις ζητοῦμεν ἀρχάς, ὥστε καὶ τῶν ἀριθμῶν τῶν τοιούτων ἐπισκεπτέον τὴν γένεσιν.

τοῦ μὲν οὖν περιττοῦ γένεσιν οὔ φασιν, ὡς δηλονότι τοῦ [24] ἀρτίου οὔσης γενέσεως· τὸν δ’ ἄρτιον πρῶτον ἐξ ἀνίσων τινὲς [25] κατασκευάζουσι τοῦ μεγάλου καὶ μικροῦ ἰσασθέντων. ἀνάγκη οὖν πρότερον ὑπάρχειν τὴν ἀνισότητα αὐτοῖς τοῦ ἰσασθῆναι· εἰ δ’ ἀεὶ ἦσαν ἰσασμένα, οὐκ ἂν ἦσαν ἄνισα πρότερον (τοῦ γὰρ ἀεὶ οὐκ ἔστι πρότερον οὐθέν), ὥστε φανερὸν ὅτι οὐ τοῦ θεωρῆσαι ἕνεκεν ποιοῦσι τὴν γένεσιν τῶν ἀριθμῶν.—ἔχει δ’ [30] ἀπορίαν καὶ εὐπορήσαντι ἐπιτίμησιν πῶς ἔχει πρὸς τὸ ἀγαθὸν καὶ τὸ καλὸν τὰ στοιχεῖα καὶ αἱ ἀρχαί· ἀπορίαν μὲν ταύτην, πότερόν ἐστί τι ἐκείνων οἷον βουλόμεθα λέγειν αὐτὸ τὸ ἀγαθὸν καὶ τὸ ἄριστον, ἢ οὔ, ἀλλ’ ὑστερογενῆ. παρὰ μὲν γὰρ τῶν θεολόγων ἔοικεν ὁμολογεῖσθαι τῶν νῦν τισίν, οἳ οὔ [35] φασιν, ἀλλὰ προελθούσης τῆς τῶν ὄντων φύσεως καὶ τὸ ἀγαθὸν καὶ τὸ καλὸν ἐμφαίνεσθαι (τοῦτο δὲ ποιοῦσιν εὐλαβούμενοι ἀληθινὴν δυσχέρειαν ἣ συμβαίνει τοῖς λέγουσιν, ὥσπερ ἔνιοι, τὸ ἓν ἀρχήν· [1] ἔστι δ’ ἡ δυσχέρεια οὐ διὰ τὸ τῇ ἀρχῇ τὸ εὖ ἀποδιδόναι ὡς ὑπάρχον, ἀλλὰ διὰ τὸ τὸ ἓν ἀρχὴν καὶ ἀρχὴν ὡς στοιχεῖον καὶ τὸν ἀριθμὸν ἐκ τοῦ ἑνός),—οἱ δὲ ποιηταὶ οἱ ἀρχαῖοι ταύτῃ ὁμοίως, ᾗ βασιλεύειν καὶ [5] ἄρχειν φασὶν οὐ τοὺς πρώτους, οἷον νύκτα καὶ οὐρανὸν ἢ χάος ἢ ὠκεανόν, ἀλλὰ τὸν Δία· οὐ μὴν ἀλλὰ τούτοις μὲν διὰ τὸ μεταβάλλειν τοὺς ἄρχοντας τῶν ὄντων συμβαίνει τοιαῦτα λέγειν, ἐπεὶ οἵ γε μεμιγμένοι αὐτῶν καὶ τῷ μὴ μυθικῶς πάντα λέγειν, οἷον Φερεκύδης καὶ ἕτεροί τινες, [10] τὸ γεννῆσαν πρῶτον ἄριστον τιθέασι, καὶ οἱ Μάγοι, καὶ τῶν ὑστέρων δὲ σοφῶν οἷον Ἐμπεδοκλῆς τε καὶ Ἀναξαγόρας, ὁ μὲν τὴν φιλίαν στοιχεῖον ὁ δὲ τὸν νοῦν ἀρχὴν ποιήσας. τῶν δὲ τὰς ἀκινήτους οὐσίας εἶναι λεγόντων οἱ μέν φασιν αὐτὸ τὸ ἓν τὸ ἀγαθὸν αὐτὸ εἶναι· οὐσίαν μέντοι τὸ ἓν αὐτοῦ [15] ᾠοντο εἶναι μάλιστα.—ἡ μὲν οὖν ἀπορία αὕτη, ποτέρως δεῖ λέγειν· θαυμαστὸν δ’ εἰ τῷ πρώτῳ καὶ ἀϊδίῳ καὶ αὐταρκεστάτῳ τοῦτ’ αὐτὸ πρῶτον οὐχ ὡς ἀγαθὸν ὑπάρχει, τὸ αὔταρκες καὶ ἡ σωτηρία. ἀλλὰ μὴν οὐ δι’ ἄλλο τι ἄφθαρτον ἢ διότι εὖ ἔχει, οὐδ’ αὔταρκες, ὥστε τὸ μὲν φάναι τὴν [20] ἀρχὴν τοιαύτην εἶναι εὔλογον ἀληθὲς εἶναι, τὸ μέντοι ταύτην εἶναι τὸ ἕν, ἢ εἰ μὴ τοῦτο, στοιχεῖόν γε καὶ στοιχεῖον ἀριθμῶν, ἀδύνατον. συμβαίνει γὰρ πολλὴ δυσχέρεια—ἢν ἔνιοι φεύγοντες ἀπειρήκασιν, οἱ τὸ ἓν μὲν ὁμολογοῦντες ἀρχὴν εἶναι πρώτην καὶ στοιχεῖον, τοῦ ἀριθμοῦ δὲ τοῦ μαθηματικοῦ [25] —ἅπασαι γὰρ αἱ μονάδες γίγνονται ὅπερ ἀγαθόν τι, καὶ πολλή τις εὐπορία ἀγαθῶν. ἔτι εἰ τὰ εἴδη ἀριθμοί, τὰ εἴδη πάντα ὅπερ ἀγαθόν τι· ἀλλὰ μὴν ὅτου βούλεται τιθέτω τις εἶναι ἰδέας· εἰ μὲν γὰρ τῶν ἀγαθῶν μόνον, οὐκ ἔσονται οὐσίαι αἱ ἰδέαι, εἰ δὲ καὶ τῶν οὐσιῶν, πάντα τὰ ζῷα καὶ [30] τὰ φυτὰ ἀγαθὰ καὶ τὰ μετέχοντα. ταῦτά τε δὴ συμβαίνει ἄτοπα, καὶ τὸ ἐναντίον στοιχεῖον, εἴτε πλῆθος ὂν εἴτε τὸ ἄνισον καὶ μέγα καὶ μικρόν, τὸ κακὸν αὐτό (διόπερ ὁ μὲν ἔφευγε τὸ ἀγαθὸν προσάπτειν τῷ ἑνὶ ὡς ἀναγκαῖον ὄν, ἐπειδὴ ἐξ ἐναντίων ἡ γένεσις, τὸ κακὸν τὴν τοῦ πλήθους φύσιν [35] εἶναι· οἱ δὲ λέγουσι τὸ ἄνισον τὴν τοῦ κακοῦ φύσιν)· συμβαίνει δὴ πάντα τὰ ὄντα μετέχειν τοῦ κακοῦ ἔξω ἑνὸς αὐτοῦ τοῦ ἑνός, καὶ μᾶλλον ἀκράτου μετέχειν τοὺς ἀριθμοὺς ἢ τὰ μεγέθη, [1] καὶ τὸ κακὸν τοῦ ἀγαθοῦ χώραν εἶναι, καὶ μετέχειν καὶ ὀρέγεσθαι τοῦ φθαρτικοῦ· φθαρτικὸν γὰρ τοῦ ἐναντίου τὸ ἐναντίον. καὶ εἰ ὥσπερ ἐλέγομεν ὅτι ἡ ὕλη ἐστὶ τὸ δυνάμει ἕκαστον, οἷον πυρὸς τοῦ ἐνεργείᾳ τὸ δυνάμει [5] πῦρ, τὸ κακὸν ἔσται αὐτὸ τὸ δυνάμει ἀγαθόν. ταῦτα δὴ πάντα

συμβαίνει, τὸ μὲν ὅτι ἀρχὴν πᾶσαν στοιχεῖον ποιοῦσι, τὸ δ’ ὅτι τἀναντία ἀρχάς, τὸ δ’ ὅτι τὸ ἓν ἀρχήν, τὸ δ’ ὅτι τοὺς ἀριθμοὺς τὰς πρώτας οὐσίας καὶ χωριστὰ καὶ εἴδη.

εἰ οὖν καὶ τὸ μὴ τιθέναι τὸ ἀγαθὸν ἐν ταῖς ἀρχαῖς καὶ [10] τὸ τιθέναι οὕτως ἀδύνατον, δῆλον ὅτι αἱ ἀρχαὶ οὐκ ὀρθῶς ἀποδίδονται οὐδὲ αἱ πρῶται οὐσίαι. οὐκ ὀρθῶς δ’ ὑπολαμβάνει οὐδ’ εἴ τις παρεικάζει τὰς τοῦ ὅλου ἀρχὰς τῇ τῶν ζῴων καὶ φυτῶν, ὅτι ἐξ ἀορίστων ἀτελῶν τε ἀεὶ τὰ τελειότερα, διὸ καὶ ἐπὶ τῶν πρώτων οὕτως ἔχειν φησίν, ὥστε μηδὲ [15] ὄν τι εἶναι τὸ ἓν αὐτό. εἰσὶ γὰρ καὶ ἐνταῦθα τέλειαι αἱ ἀρχαὶ ἐξ ὧν ταῦτα· ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ, καὶ οὐκ ἔστι τὸ σπέρμα πρῶτον. ἄτοπον δὲ καὶ τὸ τόπον ἅμα τοῖς στερεοῖς τοῖς μαθηματικοῖς ποιῆσαι (ὁ μὲν γὰρ τόπος τῶν καθ’ ἕκαστον ἴδιος, διὸ χωριστὰ τόπῳ, τὰ δὲ μαθηματικὰ [20] οὐ πού), καὶ τὸ εἰπεῖν μὲν ὅτι ποὺ ἔσται, τί δέ ἐστιν ὁ τόπος μή.—ἔδει δὲ τοὺς λέγοντας ἐκ στοιχείων εἶναι τὰ ὄντα καὶ τῶν ὄντων τὰ πρῶτα τοὺς ἀριθμούς, διελομένους πῶς ἄλλο ἐξ ἄλλου ἐστίν, οὕτω λέγειν τίνα τρόπον ὁ ἀριθμός ἐστιν ἐκ τῶν ἀρχῶν. πότερον μίξει; ἀλλ’ οὔτε πᾶν [25] μικτόν, τό τε γιγνόμενον ἕτερον, οὐκ ἔσται τε χωριστὸν τὸ ἓν οὐδ’ ἑτέρα φύσις· οἱ δὲ βούλονται. ἀλλὰ συνθέσει, ὥσπερ συλλαβή; ἀλλὰ θέσιν τε ἀνάγκη ὑπάρχειν, καὶ χωρὶς ὁ νοῶν νοήσει τὸ ἓν καὶ τὸ πλῆθος. τοῦτ’ οὖν ἔσται ὁ ἀριθμός, μονὰς καὶ πλῆθος, ἢ τὸ ἓν καὶ ἄνισον. καὶ ἐπεὶ τὸ ἐκ τινῶν [30] εἶναι ἔστι μὲν ὡς ἐνυπαρχόντων ἔστι δὲ ὡς οὔ, ποτέρως ὁ ἀριθμός; οὕτως γὰρ ὡς ἐνυπαρχόντων οὐκ ἔστιν ἀλλ’ ἢ ὧν γένεσις ἔστιν. ἀλλ’ ὡς ἀπὸ σπέρματος; ἀλλ’ οὐχ οἷόν τε τοῦ ἀδιαιρέτου τι ἀπελθεῖν. ἀλλ’ ὡς ἐκ τοῦ ἐναντίου μὴ ὑπομένοντος; ἀλλ’ ὅσα οὕτως ἔστι, καὶ ἐξ ἄλλου τινός ἐστιν [35] ὑπομένοντος. ἐπεὶ τοίνυν τὸ ἓν ὁ μὲν τῷ πλήθει ὡς ἐναντίον τίθησιν, [1] ὁ δὲ τῷ ἀνίσῳ, ὡς ἴσῳ τῷ ἑνὶ χρώμενος, ὡς ἐξ ἐναντίων εἴη ἂν ὁ ἀριθμός· ἔστιν ἄρα τι ἕτερον ἐξ οὗ ὑπομένοντος καὶ θατέρου ἐστὶν ἢ γέγονεν. ἔτι τί δή ποτε τὰ μὲν ἄλλ’ ὅσα ἐξ ἐναντίων ἢ οἷς ἔστιν ἐναντία φθείρεται κἂν ἐκ [5] παντὸς ᾖ, ὁ δὲ ἀριθμὸς οὔ; περὶ τούτου γὰρ οὐθὲν λέγεται. καίτοι καὶ ἐνυπάρχον καὶ μὴ ἐνυπάρχον φθείρει τὸ ἐναντίον, οἷον τὸ νεῖκος τὸ μῖγμα (καίτοι γε οὐκ ἔδει· οὐ γὰρ ἐκείνῳ γε ἐναντίον).—οὐθὲν δὲ διώρισται οὐδὲ ὁποτέρως οἱ ἀριθμοὶ αἴτιοι τῶν οὐσιῶν καὶ τοῦ εἶναι, πότερον ὡς ὅροι (οἷον αἱ [10] στιγμαὶ τῶν μεγεθῶν, καὶ ὡς Εὔρυτος ἔταττε τίς ἀριθμὸς τίνος, οἷον ὁδὶ μὲν ἀνθρώπου ὁδὶ δὲ ἵππου, ὥσπερ οἱ τοὺς ἀριθμοὺς ἄγοντες εἰς τὰ σχήματα τρίγωνον καὶ τετράγωνον, οὕτως ἀφομοιῶν ταῖς ψήφοις τὰς μορφὰς τῶν φυτῶν), ἢ ὅτι ὁ λόγος ἡ συμφωνία ἀριθμῶν, ὁμοίως δὲ καὶ ἄνθρωπος [15] καὶ τῶν ἄλλων ἕκαστον; τὰ δὲ δὴ πάθη πῶς ἀριθμοί, τὸ λευκὸν καὶ γλυκὺ καὶ τὸ θερμόν; ὅτι δὲ οὐχ οἱ ἀριθμοὶ οὐσία οὐδὲ τῆς μορφῆς αἴτιοι, δῆλον· ὁ γὰρ λόγος ἡ οὐσία, ὁ δ’ ἀριθμὸς ὕλη. οἷον σαρκὸς ἢ ὀστοῦ ἀριθμὸς ἡ οὐσία οὕτω, τρία πυρὸς γῆς δὲ δύο· καὶ ἀεὶ ὁ ἀριθμὸς ὃς ἂν ᾖ [20] τινῶν ἐστιν, ἢ πύρινος ἢ γήϊνος ἢ μοναδικός, ἀλλ’ ἡ οὐσία τὸ τοσόνδ’ εἶναι πρὸς τοσόνδε κατὰ τὴν μῖξιν· τοῦτο δ’ οὐκέτι ἀριθμὸς ἀλλὰ λόγος μίξεως ἀριθμῶν σωματικῶν ἢ ὁποιωνοῦν. οὔτε οὖν τῷ ποιῆσαι αἴτιος ὁ ἀριθμός, οὔτε ὅλως ὁ ἀριθμὸς οὔτε ὁ μοναδικός, οὔτε ὕλη οὔτε λόγος καὶ εἶδος [25] τῶν πραγμάτων. ἀλλὰ μὴν οὐδ’ ὡς τὸ οὗ ἕνεκα.

ἀπορήσειε δ’ ἄν τις καὶ τί τὸ εὖ ἐστὶ τὸ ἀπὸ τῶν ἀριθμῶν τῷ ἐν ἀριθμῷ εἶναι τὴν μῖξιν, ἢ ἐν εὐλογίστῳ ἢ ἐν περιττῷ. νυνὶ γὰρ οὐθὲν ὑγιεινότερον τρὶς τρία ἂν ᾖ τὸ [29] μελίκρατον κεκραμένον, ἀλλὰ μᾶλλον ὠφελήσειεν ἂν ἐν [30] οὐθενὶ λόγῳ ὂν ὑδαρὲς δὲ ἢ ἐν ἀριθμῷ ἄκρατον ὄν. ἔτι οἱ λόγοι ἐν προσθέσει ἀριθμῶν εἰσὶν οἱ τῶν μίξεων, οὐκ ἐν ἀριθμοῖς, οἷον τρία πρὸς δύο ἀλλ’ οὐ τρὶς δύο. τὸ γὰρ αὐτὸ δεῖ γένος εἶναι ἐν ταῖς πολλαπλασιώσεσιν, ὥστε δεῖ μετρεῖσθαι τῷ τε Α τὸν στοῖχον ἐφ’ οὗ ΑΒΓ καὶ τῷ Δ τὸν [35] ΔΕΖ· ὥστε τῷ αὐτῷ πάντα. οὔκουν ἔσται πυρὸς ΒΕΓΖ καὶ ὕδατος ἀριθμὸς δὶς τρία. [1] —εἰ δ’ ἀνάγκη πάντα ἀριθμοῦ κοινωνεῖν, ἀνάγκη πολλὰ συμβαίνειν τὰ αὐτά, καὶ ἀριθμὸν τὸν αὐτὸν τῷδε καὶ ἄλλῳ. ἆρ’ οὖν τοῦτ’ αἴτιον καὶ διὰ τοῦτό ἐστι τὸ πρᾶγμα, ἢ ἄδηλον; οἷον ἔστι τις τῶν τοῦ ἡλίου [5] φορῶν ἀριθμός, καὶ πάλιν τῶν τῆς σελήνης, καὶ τῶν ζῴων γε ἑκάστου τοῦ βίου καὶ ἡλικίας· τί οὖν κωλύει ἐνίους μὲν τούτων

τετραγώνους εἶναι ἐνίους δὲ κύβους, καὶ ἴσους τοὺς δὲ διπλασίους; οὐθὲν γὰρ κωλύει, ἀλλ᾽ ἀνάγκη ἐν τούτοις στρέφεσθαι, εἰ ἀριθμοῦ πάντα ἐκοινώνει. ἐνεδέχετό τε τὰ [10] διαφέροντα ὑπὸ τὸν αὐτὸν ἀριθμὸν πίπτειν· ὥστ᾽ εἴ τισιν ὁ αὐτὸς ἀριθμὸς συνεβεβήκει, ταὐτὰ ἂν ἦν ἀλλήλοις ἐκεῖνα τὸ αὐτὸ εἶδος ἀριθμοῦ ἔχοντα, οἷον ἥλιος καὶ σελήνη τὰ αὐτά. ἀλλὰ διὰ τί αἴτια ταῦτα; ἑπτὰ μὲν φωνήεντα, ἑπτὰ δὲ χορδαὶ ἡ ἁρμονία, ἑπτὰ δὲ αἱ πλειάδες, ἐν ἑπτὰ [15] δὲ ὀδόντας βάλλει (ἔνιά γε, ἔνια δ᾽ οὔ), ἑπτὰ δὲ οἱ ἐπὶ Θήβας. ἆρ᾽ οὖν ὅτι τοιοσδὶ ὁ ἀριθμὸς πέφυκεν, διὰ τοῦτο ἢ ἐκεῖνοι ἐγένοντο ἑπτὰ ἢ ἡ πλειὰς ἑπτὰ ἀστέρων ἐστίν; ἢ οἱ μὲν διὰ τὰς πύλας ἢ ἄλλην τινὰ αἰτίαν, τὴν δὲ ἡμεῖς οὕτως ἀριθμοῦμεν, τὴν δὲ ἄρκτον γε δώδεκα, οἱ δὲ πλείους· [20] ἐπεὶ καὶ τὸ ΞΨΖ συμφωνίας φασὶν εἶναι, καὶ ὅτι ἐκεῖναι τρεῖς, καὶ ταῦτα τρία· ὅτι δὲ μυρία ἂν εἴη τοιαῦτα, οὐθὲν μέλει (τῷ γὰρ Γ καὶ Ρ εἴη ἂν ἓν σημεῖον)· εἰ δ᾽ ὅτι διπλάσιον τῶν ἄλλων ἕκαστον, ἄλλο δ᾽ οὔ, αἴτιον δ᾽ ὅτι τριῶν ὄντων τόπων ἓν ἐφ᾽ ἑκάστου ἐπιφέρεται τῷ σίγμα, διὰ τοῦτο [25] τρία μόνον ἐστὶν ἀλλ᾽ οὐχ ὅτι αἱ συμφωνίαι τρεῖς, ἐπεὶ πλείους γε αἱ συμφωνίαι, ἐνταῦθα δ᾽ οὐκέτι δύναται. ὅμοιοι δὴ καὶ οὗτοι τοῖς ἀρχαίοις Ὁμηρικοῖς, οἳ μικρὰς ὁμοιότητας ὁρῶσι μεγάλας δὲ παρορῶσιν. λέγουσι δέ τινες ὅτι πολλὰ τοιαῦτα, οἷον αἵ τε μέσαι ἡ μὲν ἐννέα ἡ δὲ ὀκτώ, [30] καὶ τὸ ἔπος δεκαεπτά, ἰσάριθμον τούτοις, βαίνεται δ᾽ ἐν μὲν τῷ δεξιῷ ἐννέα συλλαβαῖς, ἐν δὲ τῷ ἀριστερῷ ὀκτώ· [1] καὶ ὅτι ἴσον τὸ διάστημα ἔν τε τοῖς γράμμασιν ἀπὸ τοῦ Α πρὸς τὸ Ω, καὶ ἀπὸ τοῦ βόμβυκος ἐπὶ τὴν ὀξυτάτην νεάτην ἐν αὐλοῖς, ἧς ὁ ἀριθμὸς ἴσος τῇ οὐλομελείᾳ τοῦ οὐρανοῦ. [5] ὁρᾶν δὲ δεῖ μὴ τοιαῦτα οὐθεὶς ἂν ἀπορήσειεν οὔτε λέγειν οὔθ᾽ εὑρίσκειν ἐν τοῖς ἀϊδίοις, ἐπεὶ καὶ ἐν τοῖς φθαρτοῖς. ἀλλ᾽ αἱ ἐν τοῖς ἀριθμοῖς φύσεις αἱ ἐπαινούμεναι καὶ τὰ τούτοις ἐναντία καὶ ὅλως τὰ ἐν τοῖς μαθήμασιν, ὡς μὲν λέγουσί τινες καὶ αἴτια ποιοῦσι τῆς φύσεως, ἔοικεν οὑτωσί [10] γε σκοπουμένοις διαφεύγειν (κατ᾽ οὐδένα γὰρ τρόπον τῶν διωρισμένων περὶ τὰς ἀρχὰς οὐδὲν αὐτῶν αἴτιον)· ἔστιν ὡς μέντοι ποιοῦσι φανερὸν ὅτι τὸ εὖ ὑπάρχει καὶ τῆς συστοιχίας ἐστὶ τῆς τοῦ καλοῦ τὸ περιττόν, τὸ εὐθύ, τὸ ἰσάκις ἴσον, αἱ δυνάμεις ἐνίων ἀριθμῶν· ἅμα γὰρ ὧραι καὶ ἀριθμὸς τοιοσδί· [15] καὶ τὰ ἄλλα δὴ ὅσα συνάγουσιν ἐκ τῶν μαθηματικῶν θεωρημάτων πάντα ταύτην ἔχει τὴν δύναμιν. διὸ καὶ ἔοικε συμπτώμασιν· ἔστι γὰρ συμβεβηκότα μέν, ἀλλ᾽ οἰκεῖα ἀλλήλοις πάντα, ἓν δὲ τῷ ἀνάλογον· ἐν ἑκάστῃ γὰρ τοῦ ὄντος κατηγορίᾳ ἐστὶ τὸ ἀνάλογον, ὡς εὐθὺ ἐν μήκει οὕτως [20] ἐν πλάτει τὸ ὁμαλόν, ἴσως ἐν ἀριθμῷ τὸ περιττόν, ἐν δὲ χροιᾷ τὸ λευκόν.—ἔτι οὐχ οἱ ἐν τοῖς εἴδεσιν ἀριθμοὶ αἴτιοι τῶν ἁρμονικῶν καὶ τῶν τοιούτων (διαφέρουσι γὰρ ἐκεῖνοι ἀλλήλων οἱ ἴσοι εἴδει· καὶ γὰρ αἱ μονάδες)· ὥστε διά γε ταῦτα εἴδη οὐ ποιητέον. τὰ μὲν οὖν συμβαίνοντα ταῦτά [25] τε κἂν ἔτι πλείω συναχθείη· ἔοικε δὲ τεκμήριον εἶναι τὸ πολλὰ κακοπαθεῖν περὶ τὴν γένεσιν αὐτῶν καὶ μηδένα τρόπον δύνασθαι συνεῖραι τοῦ μὴ χωριστὰ εἶναι τὰ μαθηματικὰ τῶν αἰσθητῶν, ὡς ἔνιοι λέγουσι, μηδὲ ταύτας εἶναι τὰς ἀρχάς.

English translation

[21] All men naturally desire knowledge. An indication of this is our esteem for the senses; for apart from their use we esteem them for their own sake, and most of all the sense of sight. Not only with a view to action, but even when no action is contemplated, we prefer sight, generally speaking, to all the other senses.

The reason of this is that of all the senses sight best helps us to know things, and reveals many distinctions.

Now animals are by nature born with the power of sensation, and from this some acquire the faculty of memory, whereas others do not. [21] Accordingly the former are more intelligent and capable of learning than those which cannot remember.

Such as cannot hear sounds (as the bee, and any other similar type of creature) are intelligent, but cannot learn; those only are capable of learning which possess this sense in addition to the faculty of memory.

Thus the other animals live by impressions and memories, and have but a small share of experience; but the human race lives also by art and reasoning.

It is from memory that men acquire experience, because the numerous memories of the same thing eventually produce the effect of a single experience. [1] Experience seems very similar to science and art,

but actually it is through experience that men acquire science and art; for as Polus rightly says, experience produces art, but inexperience chance. Art is produced when from many notions of experience a single universal judgement is formed with regard to like objects.

To have a judgement that when Callias was suffering from this or that disease this or that benefited him, and similarly with Socrates and various other individuals, is a matter of experience; but to judge that it benefits all persons of a certain type, considered as a class, who suffer from this or that disease (e.g. the phlegmatic or bilious when suffering from burning fever) is a matter of art.

It would seem that for practical purposes experience is in no way inferior to art; indeed we see men of experience succeeding more than those who have theory without experience.

The reason of this is a that experience is knowledge of particulars, but art of universals; and actions and the effects produced are all concerned with the particular. For it is not man that the physician cures, except incidentally, but Callias or Socrates or some other person similarly named, who is incidentally a man as well.

[20] So if a man has theory without experience, and knows the universal, but does not know the particular contained in it, he will often fail in his treatment; for it is the particular that must be treated.

Nevertheless we consider that knowledge and proficiency belong to art rather than to experience, and we assume that artists are wiser than men of mere experience (which implies that in all cases wisdom depends rather upon knowledge);

and this is because the former know the cause, whereas the latter do not. For the experienced know the fact, but not the wherefore; but the artists know the wherefore and the cause. For the

same reason we consider that the master craftsmen in every profession are more estimable and know more and are wiser than the artisans, [1] because they know the reasons of the things which are done; but we think that the artisans, like certain inanimate objects, do things, but without knowing what they are doing (as, for instance, fire burns);

only whereas inanimate objects perform all their actions in virtue of a certain natural quality, artisans perform theirs through habit. Thus the master craftsmen are superior in wisdom, not because they can do things, but because they possess a theory and know the causes.

In general the sign of knowledge or ignorance is the ability to teach, and for this reason we hold that art rather than experience is scientific knowledge; for the artists can teach, but the others cannot.

Further, we do not consider any of the senses to be Wisdom. They are indeed our chief sources of knowledge about particulars, but they do not tell us the reason for anything, as for example why fire is hot, but only that it is hot.

It is therefore probable that at first the inventor of any art which went further than the ordinary sensations was admired by his fellow-men, not merely because some of his inventions were useful, but as being a wise and superior person.

And as more and more arts were discovered, some relating to the necessities and some to the pastimes of life, the inventors of the latter were always considered wiser than those of the former, [20] because their branches of knowledge did not aim at utility.

Hence when all the discoveries of this kind were fully developed, the sciences which relate neither to pleasure nor yet to the necessities of life were invented, and first in those places where men had leisure. Thus the mathematical sciences originated in the neighborhood of Egypt, because there the priestly class was allowed leisure.

The difference between art and science and the other kindred mental activities has been stated in theEthics; the reason for our present discussion is that it is generally assumed that what is called Wisdom is concerned with the primary causes and principles, so that, as has been already stated, the man of experience is held to be wiser than the mere possessors of any power of sensation, the artist than the man of experience, the master craftsman than the artisan; and the speculative sciences to be more learned than the productive. [1] Thus it is clear that Wisdom is knowledge of certain principles and causes.

Since we are investigating this kind of knowledge, we must consider what these causes and principles are whose knowledge is Wisdom. Perhaps it will be clearer if we take the opinions which we hold about the wise man.

We consider first, then, that the wise man knows all things, so far as it is possible, without having knowledge of every one of them individually; next, that the wise man is he who can comprehend difficult things, such as are not easy for human comprehension (for sense-perception, being common to all, is easy, and has nothing to do with Wisdom); and further that in every branch of knowledge a man is wiser in proportion as he is more accurately informed and better able to expound the causes.

Again among the sciences we consider that that science which is desirable in itself and for the sake of knowledge is more nearly Wisdom than that which is desirable for its results, and that the superior is more nearly Wisdom than the subsidiary; for the wise man should give orders,

not receive them; nor should he obey others, but the less wise should obey him.

Such in kind [20] and in number are the opinions which we hold with regard to Wisdom and the wise. Of the qualities there described the knowledge of everything must necessarily belong to him who in the highest degree possesses knowledge of the universal, because he knows in a sense all the particulars which it comprises. These things, viz. the most universal, are perhaps the hardest for man to grasp, because they are furthest removed from the senses.

Again, the most exact of the sciences are those which are most concerned with the first principles; for those which are based on fewer principles are more exact than those which include additional principles; e.g., arithmetic is more exact than geometry.

Moreover, the science which investigates causes is more instructive than one which does not, for it is those who tell us the causes of any particular thing who instruct us. Moreover, knowledge and understanding which are desirable for their own sake are most attainable in the knowledge of that which is most knowable. For the man who desires knowledge for its own sake will most desire the most perfect knowledge, [1] and this is the knowledge of the most knowable, and the things which are most knowable are first principles and causes; for it is through these and from these that other things come to be known, and not these through the particulars which fall under them.

And that science is supreme, and superior to the subsidiary, which knows for what end each action is to be done; i.e. the Good in each particular case, and in general the highest Good in the whole of nature.

Thus as a result of all the above considerations the term which we are investigating falls under the same science, which must speculate about first principles and causes; for the Good, i.e. the end , is one of the causes.

That it is not a productive science is clear from a consideration of the first philosophers.

It is through wonder that men now begin and originally began to philosophize; wondering in the first place at obvious perplexities, and then by gradual progression raising questions about the greater matters too, e.g. about the changes of the moon and of the sun, about the stars and about the origin of the universe.

Now he who wonders and is perplexed feels that he is ignorant (thus the myth-lover is in a sense a philosopher, since myths are composed of wonders); [20] therefore if it was to escape ignorance that men studied philosophy, it is obvious that they pursued science for the sake of knowledge, and not for any practical utility.

The actual course of events bears witness to this; for speculation of this kind began with a view to recreation and pastime, at a time when practically all the necessities of life were already supplied. Clearly then it is for no extrinsic advantage that we seek this knowledge; for just as we call a man independent who exists for himself and not for another, so we call this the only independent science, since it alone exists for itself.

For this reason its acquisition might justly be supposed to be beyond human power, since in many respects human nature is servile; in which case, as Simonides says, God alone can have this privilege, and man should only seek the knowledge which is within his reach.

Indeed if the poets are right and the Deity is by nature jealous, [1] it is probable that in this case

He would be particularly jealous, and all those who excel in knowledge unfortunate. But it is impossible for the Deity to be jealous (indeed, as the proverb says, poets tell many a lie), nor must we suppose that any other form of knowledge is more precious than this; for what is most divine is most precious.

Now there are two ways only in which it can be divine. A science is divine if it is peculiarly the possession of God, or if it is concerned with divine matters. And this science alone fulfils both these conditions; for (a) all believe that God is one of the causes and a kind of principle, and (b) God is the sole or chief possessor of this sort of knowledge. Accordingly, although all other sciences are more necessary than this, none is more excellent.

The acquisition of this knowledge, however, must in a sense result in something which is the reverse of the outlook with which we first approached the inquiry. All begin, as we have said, by wondering that things should be as they are, e.g. with regard to marionettes, or the solstices, or the incommensurability of the diagonal of a square; because it seems wonderful to everyone who has not yet perceived the cause that a thing should not be measurable by the smallest unit.

But we must end with the contrary and (according to the proverb) the better view, as men do even in these cases when they understand them; [20] for a geometrician would wonder at nothing so much as if the diagonal were to become measurable.

Thus we have stated what is the nature of the science which we are seeking, and what is the object which our search and our whole investigation must attain.

It is clear that we must obtain knowledge of the primary causes, because it is when we think that we understand its primary cause that we claim to know each particular thing. Now there are four recognized kinds of cause. Of these we hold that one is the essence or essential nature of the thing (since the reason why of a thing is ultimately reducible to its formula, and the ultimate reason why is a cause and principle); another is the matter or substrate; the third is the source of motion; and the fourth is the cause which is opposite to this, namely the purpose or good;

for this is the end of every generative or motive process. We have investigated these sufficiently in the Physics; [1] however, let us avail ourselves of the evidence of those who have before us approached the investigation of reality and philosophized about Truth. For clearly they too recognize certain principles and causes, and so it will be of some assistance to our present inquiry if we study their teaching; because we shall either discover some other kind of cause, or have more confidence in those which we have just described.

Most of the earliest philosophers conceived only of material principles as underlying all things. That of which all things consist, from which they first come and into which on their destruction they are ultimately resolved, of which the essence persists although modified by its affections—this, they say, is an element and principle of existing things. Hence they believe that nothing is either generated or destroyed, since this kind of primary entity always persists. Similarly we do not say that Socrates comes into being absolutely when he becomes handsome or cultured, nor that he is destroyed when he loses these qualities; because the substrate, Socrates himself, persists.

In the same way nothing else is generated or destroyed; for there is some one entity (or more than one) which always persists and from which all other things are generated.

All are not agreed, however, [20] as to the number and character of these principles. Thales, the

founder of this school of philosophy, says the permanent entity is water (which is why he also propounded that the earth floats on water). Presumably he derived this assumption from seeing that the nutriment of everything is moist, and that heat itself is generated from moisture and depends upon it for its existence (and that from which a thing is generated is always its first principle). He derived his assumption, then, from this; and also from the fact that the seeds of everything have a moist nature, whereas water is the first principle of the nature of moist things.

There are some who think that the men of very ancient times, long before the present era, who first speculated about the gods, also held this same opinion about the primary entity. For they represented Oceanus and Tethys to be the parents of creation, and the oath of the gods to be by water— Styx, as they call it. Now what is most ancient is most revered, and what is most revered is what we swear by.

[1] Whether this view of the primary entity is really ancient and time-honored may perhaps be considered uncertain; however, it is said that this was Thales' opinion concerning the first cause. (I say nothing of Hippo, because no one would presume to include him in this company, in view of the paltriness of his intelligence.)

Anaximenes and Diogenes held that air is prior to water, and is of all corporeal elements most truly the first principle. Hippasus of Metapontum and Heraclitus of Ephesus hold this of fire; and Empedocles—adding earth as a fourth to those already mentioned—takes all four. These, he says, always persist, and are only generated in respect of multitude and paucity, according as they are combined into unity or differentiated out of unity.

Anaxagoras of Clazomenae—prior to Empedocles in point of age, but posterior in his activities—says that the first principles are infinite in number. For he says that as a general rule all things which are, like fire and water, homoeomerous, are generated and destroyed in this sense only, by combination and differentiation; otherwise they are neither generated nor destroyed, but persist eternally.

From this account it might be supposed that the only cause is of the kind called material. But as men proceeded in this way, the very circumstances of the case led them on and compelled them to seek further; because if it is really true [20] that all generation and destruction is out of some one entity or even more than one, why does this happen, and what is the cause?

It is surely not the substrate itself which causes itself to change. I mean, e.g., that neither wood nor bronze is responsible for changing itself; wood does not make a bed, nor bronze a statue, but something else is the cause of the change. Now to investigate this is to investigate the second type of cause: the source of motion, as we should say.

Those who were the very first to take up this inquiry, and who maintained that the substrate is one thing, had no misgivings on the subject; but some of those who regard it as one thing, being baffled, as it were, by the inquiry, say that that one thing (and indeed the whole physical world) is immovable in respect not only of generation and destruction (this was a primitive belief and was generally admitted) but of all other change. This belief is peculiar to them.

[1] None of those who maintained that the universe is a unity achieved any conception of this type of cause, except perhaps Parmenides; and him only in so far as he admits, in a sense, not one cause only but two.

But those who recognize more than one entity, e.g. hot and cold, or fire and earth, are better able to give a systematic explanation, because they avail themselves of fire as being of a kinetic nature, and of water, earth, etc., as being the opposite.

After these thinkers and the discovery of these causes, since they were insufficient to account for the generation of the actual world, men were again compelled (as we have said) by truth itself to investigate the next first principle.

For presumably it is unnatural that either fire or earth or any other such element should cause existing things to be or become well and beautifully disposed; or indeed that those thinkers should hold such a view. Nor again was it satisfactory to commit so important a matter to spontaneity and chance.

Hence when someone said that there is Mind in nature, just as in animals, and that this is the cause of all order and arrangement, he seemed like a sane man in contrast with the haphazard statements of his predecessors.

We know definitely that Anaxagoras adopted this view; but Hermotimus [20] of Clazomenae is credited with having stated it earlier. Those thinkers, then, who held this view assumed a principle in things which is the cause of beauty, and the sort of cause by which motion is communicated to things.

It might be inferred that the first person to consider this question was Hesiod, or indeed anyone else who assumed Love or Desire as a first principle in things; e.g. Parmenides. For he says, where he is describing the creation of the universe,

Love she created first of all the gods . . .

And Hesiod says,

First of all things was Chaos made, and then/Broad-bosomed Earth . . ./And Love, the foremost of immortal beings,

thus implying that there must be in the world some cause to move things and combine them.

The question of arranging these thinkers in order of priority may be decided later. Now since it was apparent that nature also contains the opposite of what is good, i.e. not only order and beauty, but disorder and ugliness; [1] and that there are more bad and common things than there are good and beautiful: in view of this another thinker introduced Love and Strife as the respective causes of these things—

because if one follows up and appreciates the statements of Empedocles with a view to his real meaning and not to his obscure language, it will be found that Love is the cause of good, and Strife of evil. Thus it would perhaps be correct to say that Empedocles in a sense spoke of evil and good as first principles, and was the first to do so—that is, if the cause of all good things is absolute good.

These thinkers then, as I say, down to the time of Empedocles, seem to have grasped two of the causes which we have defined in the Physics: the material cause and the source of motion; but only vaguely and indefinitely. They are like untrained soldiers in a battle, who rush about and often strike good blows, but without science; in the same way these thinkers do not seem to understand their own statements, since it is clear that upon the whole they seldom or never apply them.

Anaxagoras avails himself of Mind as an artificial device for producing order, and drags it in whenever he is at a loss to explain [20] some necessary result; but otherwise he makes anything rather than Mind the cause of what happens. Again, Empedocles does indeed use causes to a greater degree than Anaxagoras, but not sufficiently; nor does he attain to consistency in their use.

At any rate Love often differentiates and Strife combines: because whenever the universe is differentiated into its elements by Strife, fire and each of the other elements are agglomerated into a unity; and whenever they are all combined together again by Love, the particles of each element are necessarily again differentiated.

Empedocles, then, differed from his predecessors in that he first introduced the division of this cause, making the source of motion not one but two contrary forces.

Further, he was the first to maintain that the so-called material elements are four—not that he uses them as four, but as two only, [1] treating fire on the one hand by itself, and the elements opposed to it—earth, air and water—on the other, as a single nature. This can be seen from a study of his writings.

Such, then, as I say, is his account of the nature and number of the first principles.

Leucippus, however, and his disciple Democritus hold that the elements are the Full and the Void—calling the one what is and the other what is not. Of these they identify the full or solid with what is, and the void or rare with what is not (hence they hold that what is not is no less real than what is, because Void is as real as Body); and they say that these are the material causes of things.

And just as those who make the underlying substance a unity generate all other things by means of its modifications, assuming rarity and density as first principles of these modifications, so these thinkers hold that the differences are the causes of everything else.

These differences, they say, are three: shape, arrangement, and position; because they hold that what is differs only in contour, inter-contact, and inclination .(Of these contour means shape, inter-contact arrangement, and inclination position.) Thus, e.g., A differs from N in shape, AN from NA in arrangement, and Z from N in position.

As for motion, whence and how it arises in things, [20] they casually ignored this point, very much as the other thinkers did. Such, then, as I say, seems to be the extent of the inquiries which the earlier thinkers made into these two kinds of cause.

At the same time, however, and even earlier the so-called Pythagoreans applied themselves to mathematics, and were the first to develop this science; and through studying it they came to believe that its principles are the principles of everything.

And since numbers are by nature first among these principles, and they fancied that they could detect in numbers, to a greater extent than in fire and earth and water, many analogues of what is and comes into being—such and such a property of number being justice , and such and such soul or mind , another opportunity , and similarly, more or less, with all the rest—and since they saw further that the properties and ratios of the musical scales are based on numbers, and since it seemed clear that all other things have their whole nature modelled upon numbers, and that numbers are the ultimate things in the whole physical universe, [1] they assumed the elements of numbers to be the elements of everything, and the whole universe to be a proportion or

number. Whatever analogues to the processes and parts of the heavens and to the whole order of the universe they could exhibit in numbers and proportions, these they collected and correlated;

and if there was any deficiency anywhere, they made haste to supply it, in order to make their system a connected whole. For example, since the decad is considered to be a complete thing and to comprise the whole essential nature of the numerical system, they assert that the bodies which revolve in the heavens are ten; and there being only nine that are visible, they make the antichthon the tenth.

We have treated this subject in greater detail elsewhere; but the object of our present review is to discover from these thinkers too what causes they assume and how these coincide with our list of causes.

Well, it is obvious that these thinkers too consider number to be a first principle, both as the material of things and as constituting their properties and states. The elements of number, according to them, are the Even and the Odd. Of these the former is limited and the latter unlimited; Unity consists of both [20] (since it is both odd and even); number is derived from Unity; and numbers, as we have said, compose the whole sensible universe.

Others of this same school hold that there are ten principles, which they enunciate in a series of corresponding pairs: (1.) Limit and the Unlimited; (2.) Odd and Even; (3.) Unity and Plurality; (4.) Right and Left; (5.) Male and Female; (6.) Rest and Motion; (7.) Straight and Crooked; (8.) Light and Darkness; (9.) Good and Evil; (10.) Square and Oblong.

Apparently Alcmaeon of Croton speculated along the same lines, and either he derived the theory from them or they from him; for [Alcmaeon was contemporary with the old age of Pythagoras, and] his doctrines were very similar to theirs. He says that the majority of things in the world of men are in pairs; but the contraries which he mentions are not, as in the case of the Pythagoreans, carefully defined, but are taken at random, e.g. white and black, sweet and bitter, good and bad, great and small.

Thus Alcmaeon only threw out vague hints with regard to the other instances of contrariety, [1] but the Pythagoreans pronounced how many and what the contraries are. Thus from both these authorities we can gather thus much, that the contraries are first principles of things; and from the former, how many and what the contraries are.

How these can be referred to our list of causes is not definitely expressed by them, but they appear to reckon their elements as material; for they say that these are the original constituents of which Being is fashioned and composed.

From this survey we can sufficiently understand the meaning of those ancients who taught that the elements of the natural world are a plurality. Others, however, theorized about the universe as though it were a single entity; but their doctrines are not all alike either in point of soundness or in respect of conformity with the facts of nature.

For the purposes of our present inquiry an account of their teaching is quite irrelevant, since they do not, while assuming a unity, at the same time make out that Being is generated from the unity as from matter, as do some physicists, but give a different explanation; for the physicists assume motion also, at any rate when explaining the generation of the universe; but these thinkers hold that it is immovable. Nevertheless thus much is pertinent to our present

inquiry.

It appears that Parmenides conceived of the Unity as one in definition, [20] but Melissus as materially one. Hence the former says that it is finite, and the latter that it is infinite. But Xenophanes, the first exponent of the Unity (for Parmenides is said to have been his disciple), gave no definite teaching, nor does he seem to have grasped either of these conceptions of unity; but regarding the whole material universe he stated that the Unity is God.

This school then, as we have said, may be disregarded for the purposes of our present inquiry; two of them, Xenophanes and Melissus, may be completely ignored, as being somewhat too crude in their views. Parmenides, however, seems to speak with rather more insight. For holding as he does that Not-being, as contrasted with Being, is nothing, he necessarily supposes that Being is one and that there is nothing else (we have discussed this point in greater detail in the Physics); but being compelled to accord with phenomena, and assuming that Being is one in definition but many in respect of sensation, he posits in his turn two causes, i.e. two first principles, Hot and Cold; or in other words, Fire and Earth. [1] Of these he ranks Hot under Being and the other under Not-being.

From the account just given, and from a consideration of those thinkers who have already debated this question, we have acquired the following information. From the earliest philosophers we have learned that the first principle is corporeal (since water and fire and the like are bodies); some of them assume one and others more than one corporeal principle, but both parties agree in making these principles material. Others assume in addition to this cause the source of motion, which some hold to be one and others two.

Thus down to and apart from the Italian philosophers the other thinkers have expressed themselves vaguely on the subject, except that, as we have said, they actually employ two causes, and one of these—the source of motion —some regard as one and others as two. The Pythagoreans, while they likewise spoke of two principles, made this further addition, which is peculiar to them: they believed, not that the Limited and the Unlimited are separate entities, like fire or water or some other such thing, but that the Unlimited itself and the One itself are the essence of those things of which they are predicated, and hence that number is the essence of all things.

[20] Such is the nature of their pronouncements on this subject. They also began to discuss and define the what of things; but their procedure was far too simple. They defined superficially, and supposed that the essence of a thing is that to which the term under consideration first applies—e.g. as if it were to be thought that double and 2 are the same, because 2 is the first number which is double another.

But presumably to be double a number is not the same as to be the number 2. Otherwise, one thing will be many—a consequence which actually followed in their system. This much, then, can be learned from other and earlier schools of thought.

The philosophies described above were succeeded by the system of Plato, which in most respects accorded with them, but contained also certain peculiar features distinct from the philosophy of the Italians.

In his youth Plato first became acquainted with Cratylus and the Heraclitean doctrines—that the whole sensible world is always in a state of flux, and that there is no scientific knowledge of it—and in after years he still held these opinions. [1] And when Socrates, disregarding the

physical universe and confining his study to moral questions, sought in this sphere for the universal and was the first to concentrate upon definition, Plato followed him and assumed that the problem of definition is concerned not with any sensible thing but with entities of another kind; for the reason that there can be no general definition of sensible things which are always changing.

These entities he called Ideas, and held that all sensible things are named after them sensible and in virtue of their relation to them; for the plurality of things which bear the same name as the Forms exist by participation in them. (With regard to the participation, it was only the term that he changed; for whereas the Pythagoreans say that things exist by imitation of numbers, Plato says that they exist by participation—merely a change of term.

As to what this participation or imitation may be, they left this an open question.)

Further, he states that besides sensible things and the Forms there exists an intermediate class, the objects of mathematics, which differ from sensible things in being eternal and immutable, and from the Forms in that there are many similar objects of mathematics, whereas each Form is itself unique.

Now since the Forms are the causes of everything else, he supposed that their elements are the elements of all things. [20] Accordingly the material principle is the Great and Small, and the essence or formal principle is the One, since the numbers are derived from the Great and Small by participation in the the One.

In treating the One as a substance instead of a predicate of some other entity, his teaching resembles that of the Pythagoreans, and also agrees with it in stating that the numbers are the causes of Being in everything else; but it is peculiar to him to posit a duality instead of the single Unlimited, and to make the Unlimited consist of the Great and Small. He is also peculiar in regarding the numbers as distinct from sensible things, whereas they hold that things themselves are numbers, nor do they posit an intermediate class of mathematical objects.

His distinction of the One and the numbers from ordinary things (in which he differed from the Pythagoreans) and his introduction of the Forms were due to his investigation of logic (the earlier thinkers were strangers to Dialectic); his conception of the other principle as a duality to the belief that numbers other than primes can be readily generated from it, as from a matrix.

[1] The fact, however, is just the reverse, and the theory is illogical; for whereas the Platonists derive multiplicity from matter although their Form generates only once, it is obvious that only one table can be made from one piece of timber, and yet he who imposes the form upon it, although he is but one, can make many tables. Such too is the relation of male to female: the female is impregnated in one coition, but one male can impregnate many females. And these relations are analogues of the principles referred to.

This, then, is Plato’s verdict upon the question which we are investigating. From this account it is clear that he only employed two causes: that of the essence, and the material cause; for the Forms are the cause of the essence in everything else, and the One is the cause of it in the Forms.

He also tells us what the material substrate is of which the Forms are predicated in the case of sensible things, and the One in that of the Forms—that it is this the duality, the Great and Small. Further, he assigned to these two elements respectively the causation of good and of evil; a

problem which, as we have said, had also been considered by some of the earlier philosophers, e.g. Empedocles and Anaxagoras.

We have given only a concise and summary account of those thinkers who have expressed views about the causes [20] and reality, and of their doctrines. Nevertheless we have learned thus much from them: that not one of those who discuss principle or cause has mentioned any other type than those which we we have distinguished in the Physics. Clearly it is after these types that they are groping, however uncertainly.

Some speak of the first principle as material, whether they regard it as one or several, as corporeal or incorporeal: e.g. Plato speaks of the Great and Small; the Italians of the Unlimited; Empedocles of Fire, Earth, Water and Air; Anaxagoras of the infinity of homoeomeries.

All these have apprehended this type of cause; and all those too who make their first principle air or water or something denser than fire but rarer than air(for some have so described the primary element). These, then, apprehended this cause only, but others apprehended the source of motion—e.g. all such as make Love and Strife, or Mind, or Desire a first principle.

As for the essence or essential nature, nobody has definitely introduced it; [1] but the inventors of the Forms express it most nearly. For they do not conceive of the Forms as the matter of sensible things (and the One as the matter of the Forms), nor as producing the source of motion (for they hold that they are rather the cause of immobility and tranquillity); but they adduce the Forms as the essential nature of all other things, and the One as that of the Forms.

The end towards which actions, changes and motions tend they do in a way treat as a cause, but not in this sense, i.e. not in the sense in which it is naturally a cause. Those who speak of Mind or Love assume these causes as being something good; but nevertheless they do not profess that anything exists or is generated for the sake of them, but only that motions originate from them.

Similarly also those who hold that Unity or Being is an entity of this kind state that it is the cause of existence, but not that things exist or are generated for the sake of it. So it follows that in a sense they both assert and deny that the Good is a cause; for they treat it as such not absolutely, but incidentally.

It appears, then, that all these thinkers too (being unable to arrive at any other cause) testify that we have classified the causes rightly, as regards both number and nature. Further, it is clear that all the principles must be sought either along these lines or in some similar way.

[20] Let us next examine the possible difficulties arising out of the statements of each of these thinkers, and out of his attitude to the first principles.

All those who regard the universe as a unity, and assume as its matter some one nature, and that corporeal and extended, are clearly mistaken in many respects. They only assume elements of corporeal things, and not of incorporeal ones, which also exist. They attempt to state the causes of generation and destruction, and investigate the nature of everything; and at the same time do away with the cause of motion.

Then there is their failure to regard the essence or formula as a cause of anything; and further their readiness to call any one of the simple bodies—except earth—a first principle, without inquiring how their reciprocal generation is effected. I refer to fire, water, earth and air. Of these some are generated from each other by combination and others by differentiation;

and this difference is of the greatest importance in deciding their relative priority. In one way it might seem that the most elementary body is that from which first other bodies are produced by combination; [1] and this will be that body which is rarest and composed of the finest particles.

Hence all who posit Fire as first principle will be in the closest agreement with this theory. However, even among the other thinkers everyone agrees that the primary corporeal element is of this kind. At any rate none of the Monists thought earth likely to be an element—obviously on account of the size of its particles—

but each of the other three has had an advocate; for some name fire as the primary element, others water, and others air. And yet why do they not suggest earth too, as common opinion does? for people say Everything is earth.

And Hesiod too says that earth was generated first of corporeal things—so ancient and popular is the conception found to be. Thus according to this theory anyone who suggests any of these bodies other than fire, or who assumes something denser than air but rarer than water, will be wrong.

On the other hand if what is posterior in generation is prior in nature, and that which is developed and combined is posterior in generation, then the reverse will be the case; water will be prior to air, and earth to water. So much for those who posit one cause such as we have described.

[20] The same will apply too if anyone posits more than one, as e.g. Empedocles says that matter consists of four bodies;

objections must occur in his case also, some the same as before, and some peculiar to him. First, we can see things being generated from each other in a way which shows that fire and earth do not persist as the same corporeal entity. (This subject has been treated in my works on Natural Science.) Again with regard to the cause of motion in things, whether one or two should be assumed, it must not be thought that his account is entirely correct or even reasonable.

And in general those who hold such views as these must of necessity do away with qualitative alteration; for on such a theory cold will not come from hot nor hot from cold, because to effect this there must be something which actually takes on these contrary qualities: some single element which becomes both fire and water—which Empedocles denies.

If one were to infer that Anaxagoras recognized two elements, the inference would accord closely with a view which, although he did not articulate it himself, he must have accepted as developed by others.

To say that originally everything was a mixture is absurd for various reasons, [1] but especially since (a) it follows that things must have existed previously in an unmixed state; (b) it is contrary to nature for anything to mix with anything ; (c) moreover affections and attributes would then be separable from their substances (because what is mixed can also be separated). At the same time, if one were to follow his doctrine carefully and interpret its meaning, perhaps it would be seen to be more up-to-date;

because when nothing was yet differentiated, obviously nothing could be truly predicated of that substance—e.g. that it was white or black or buff or any other color. It must necessarily have been colorless, since otherwise it would have had one of these colors.

Similarly by the same argument it had no taste or any other such attribute; for it cannot have had any quality or magnitude or individuality. Otherwise some particular form would have belonged to it; but this is impossible on the assumption that everything was mixed together, for then the form would have been already differentiated, whereas he says that everything was mixed together except Mind, which alone was pure and unmixed.

It follows from this that he recognizes as principles the One (which is simple and unmixed) and the Other, which is such as we suppose the Indeterminate to be before it is determined and partakes of some form. Thus his account is neither correct nor clear, [20] but his meaning approximates to more recent theories and what is now more obviously true.

However, these thinkers are really concerned only with the theories of generation and destruction and motion (for in general it is only with reference to this aspect of reality that they look for their principles and causes).

Those, however, who make their study cover the whole of reality, and who distinguish between sensible and non-sensible objects, clearly give their attention to both kinds; hence in their case we may consider at greater length what contributions, valuable or otherwise, they make to the inquiry which is now before us.

The so-called Pythagoreans employ abstruser principles and elements than the physicists. The reason is that they did not draw them from the sensible world; for mathematical objects, apart from those which are connected with astronomy, are devoid of motion.

Nevertheless all their discussions and investigations are concerned with the physical world. They account for the generation of the sensible universe, [1] and observe what happens in respect of its parts and affections and activities, and they use up their principles and causes in this connection, as though they agreed with the others—the physicists—that reality is just so much as is sensible and is contained in the so-called heavens.

All the same, as we have said, the causes and principles which they describe are capable of application to the remoter class of realities as well, and indeed are better fitted to these than to their physical theories.

But as to how there is to be motion, if all that is premissed is Limit and the Unlimited, and Odd and Even, they do not even hint; nor how, without motion and change, there can be generation and destruction, or the activities of the bodies which traverse the heavens.

And further, assuming that it be granted to them or proved by them that magnitude is composed of these factors, yet how is it to be explained that some bodies are light, and others have weight? For in their premisses and statements they are speaking just as much about sensible as about mathematical objects; and this is why they have made no mention of fire or earth or other similar bodies, because, I presume, they have no separate explanation of sensible things.

Again, how are we to understand that number and the modifications of number are the causes [20] of all being and generation, both in the beginning and now, and at the same time that there is no other number than the number of which the universe is composed?

Because when they make out that Opinion and Opportunity are in such and such a region, and a little above or below them Injustice and Separation or Mixture, and when they state as proof of this that each of these abstractions is a number; and that also in this region there is already a

plurality of the magnitudes composed of number, inasmuch as these modifications of number correspond to these several regions,—is the number which we must understand each of these abstractions to be the same number which is present in the sensible universe, or another kind of number?

Plato at least says that it is another. It is true that he too supposes that numbers are both these magnitudes and their causes; but in his view the causative numbers are intelligible and the others sensible.

The Pythagoreans, then, may be dismissed for the present, for it is enough to touch upon them thus briefly. [1] As for those who posit the Forms as causes, in the first place in their attempt to find the causes of things in our sensible world, they introduced an equal number of other entities—as though a man who wishes to count things should suppose that it would be impossible when they are few, and should attempt to count them when he has added to them. For the Forms are as many as, or not fewer than, the things in search of whose causes these thinkers were led to the Forms; because corresponding to each thing there is a synonymous entity apart from the substances (and in the case of non-substantial things there is a One over the Many), both in our everyday world and in the realm of eternal entities.

Again, not one of the arguments by which we try to prove that the Forms exist demonstrates our point: from some of them no necessary conclusion follows, and from others it follows that there are Forms of things of which we hold that there are no Forms.

For according to the arguments from the sciences there will be Forms of all things of which there are sciences; and according to the One-over-Many argument, of negations too; and according to the argument that we have some conception of what has perished, of perishable things; because we have a mental picture of these things. Again, of Plato's more exact arguments some establish Ideas of relations, which we do not hold to form a separate genus;

and others state the Third Man. And in general the arguments for the Forms do away with things which are more important to us exponents of the Forms than the existence of the Ideas; [20] for they imply that it is not the Dyad that is primary, but Number; and that the relative is prior to the absolute; and all the other conclusions in respect of which certain persons, by following up the views held about the Ideas, have gone against the principles of the theory.

Again, according to the assumption by which we hold that the Ideas exist, there will be Forms not only of substances but of many other things (since the concept is one not only in the case of substances, but also in the case of all other things; and there are sciences not only of substances but of other things as well; and there are a thousand other similar consequences); but according to logical necessity, and from the views generally held about them, it follows that if the Forms are participated in, then there can only be Ideas of substances. For they are not participated in qua accidents; each Form can only be participated in in so far as it is not predicated of a subject.

I mean, e.g., that if anything participates in absolute Doubleness it participates also in eternal, but only accidentally; because it is an accident of Doubleness to be eternal.

Thus the Forms must be substance. But the same names denote substance in the sensible as in the Ideal world; [1] otherwise what meaning will there be in saying that something exists beside the particulars, i.e. the unity comprising their multiplicity?

If the form of the Ideas and of the things which participate in them is the same, they will have

something in common (for why should Duality mean one and the same thing in the case of perishable twos and the twos which are many but eternal, and not in the case of the Idea of Duality and a particular two?); but if the form is not the same, they will simply be homonyms; just as though one were to call both Callias and a piece of wood man, without remarking any property common to them.

Above all we might examine the question what on earth the Forms contribute to sensible things, whether eternal or subject to generation and decay; for they are not the cause of any motion or change in them.

Again, they are no help towards the knowledge of other things(for they are not the substance of things, otherwise they would be in things), nor to their existence, since they are not present in the things which partake of them. If they were, it might perhaps seem that they are causes, in the sense in which the admixture of white causes a thing to be white;

but this theory, which was first stated by Anaxagoras and later by Eudoxus and others, is very readily refutable, for it is easy to adduce plenty of impossibilities against such a view. Again, other things are not [20] in any accepted sense derived from the Forms.

To say that the Forms are patterns, and that other things participate in them, is to use empty phrases and poetical metaphors; for what is it that fashions things on the model of the Ideas Besides, anything may both be and become like something else without being imitated from it; thus a man may become just like Socrates whether Socrates exists or not,

and even if Socrates were eternal, clearly the case would be the same. Also there will be several patterns, and hence Forms, of the same thing; e.g. animal and two-footed will be patterns of man, and so too will the Idea of Man.

Further, the Forms will be patterns not only of sensible things but of themselves (e.g. genus in the sense of genus of species), and thus the same thing will be both pattern and copy. [1] Further, it would seem impossible that the substance and the thing of which it is the substance exist in separation; hence how can the Ideas, if they are the substances of things, exist in separation from them? It is stated in the Phaedo that the Forms are the causes both of existence and of generation.

Yet, assuming that the Forms exist, still the things which participate in them are not generated unless there is something to impart motion; while many other things are generated (e.g. house, ring) of which we hold that there are no Forms. Thus it is clearly possible that all other things may both exist and be generated for the same causes as the things just mentioned.

Further, if the Forms are numbers, in what sense will they be causes? Is it because things are other numbers, e.g. such and such a number Man, such and such another Socrates, such and such another Callias? then why are those numbers the causes of these? Even if the one class is eternal and the other not, it will make no difference.

And if it is because the things of our world are ratios of numbers (e.g. a musical concord), clearly there is some one class of things of which they are ratios. Now if there is this something, i.e. their matter , clearly the numbers themselves will be ratios of one thing to another.

I mean, e.g., that if Callias is a numerical ratio of fire, earth, water and air, the corresponding Idea too will be a number of certain other things which are its substrate. The Idea of Man, too, whether it is in a sense a number or not, will yet be an arithmetical ratio of certain things, [20]

and not a mere number; nor, on these grounds, will any Idea be a number.

Again, one number can be composed of several numbers, but how can one Form be composed of several Forms? And if the one number is not composed of the other numbers themselves, but of their constituents (e.g. those of the number 10,000), what is the relation of the units? If they are specifically alike, many absurdities will result, and also if they are not (whether (a) the units in a given number are unlike, or (b) the units in each number are unlike those in every other number). For in what can they differ, seeing that they have no qualities? Such a view is neither reasonable nor compatible with our conception of units.

Further, it becomes necessary to set up another kind of number (with which calculation deals), and all the objects which are called intermediate by some thinkers. But how or from what principles can these be derived? or on what grounds are they to be considered intermediate between things here and Ideal numbers? Further, each of the units in the number 2 comes from a prior 2; but this is impossible.

[1] Further, why should a number of units, taken together, be one thing? And further, in addition to the above objections, if the units are unlike, they should be treated as the thinkers who assume two or four elements treat those elements; for not one of them applies the term element to the common substrate, e.g. body, but to fire and earth—whether there is a common substrate (i.e. body) or not.

As it is, the One is spoken of as though it were homogeneous, like fire or water. But if this is so, the numbers will not be substances. And if there is an absolute One which is a principle, clearly the term one is ambiguous; otherwise this is impossible.

When we wish to refer substances to their principles we derive lines from Long and Short, a kind of Great and Small; and the plane from Wide and Narrow, and the solid body from Deep and Shallow. But in this case how can the plane contain a line,

or the solid a line and a plane? for Wide and Narrow and Deep and Shallow are different genera. Nor is Number contained in these objects (because Many and Few is yet another class); and in the same way it is clear that none of the other higher genera will be contained in the lower. Nor, again, is the Broad the genus of which the Deep is a species; for then body would be a kind of plane.

[20] Further, how will it be possible for figures to contain points? Plato steadily rejected this class of objects as a geometrical fiction, but he recognized the beginning of a line, and he frequently assumed this latter class, i.e. the indivisible lines. But these must have some limit; and so by the same argument which proves the existence of the line, the point also exists.

In general, although Wisdom is concerned with the cause of visible things, we have ignored this question (for we have no account to give of the cause from which change arises), and in the belief that we are accounting for their substance we assert the existence of other substances; but as to how the latter are the substances of the former, our explanation is worthless—for participation, as we have said before, means nothing.

And as for that which we can see to be the cause in the sciences, and through which all mind and all nature works—this cause which we hold to be one of the first principles—the Forms have not the slightest bearing upon it either. Philosophy has become mathematics for modern thinkers, although they profess that mathematics is only to be studied as a means to some other

end.

[1] Further, one might regard the substance which they make the material substrate as too mathematical, and as being a predicate and differentia of substance or matter rather than as matter itself, I mean the Great and Small, which is like the Rare and Dense of which the physicists speak, holding that they are the primary differentiae of the substrate; because these qualities are a species of excess and defect.

Also with regard to motion, if the Great and Small is to constitute motion, obviously the Forms will be moved; if not, whence did it come? On this view the whole study of physics is abolished. And what is supposed to be easy, to prove that everything is One, does not follow; because from their exposition it does not follow, even if you grant them all their assumptions that everything is One, but only that there is an absolute One—

and not even this, unless you grant that the universal is a class; which is impossible in some cases. Nor is there any explanation of the lines, planes and solids which come after the Numbers: neither as to how they exist or can exist, nor as to what their importance is. They cannot be Forms (since they are not numbers) or Intermediates (which are the objects of mathematics) or perishables; clearly they form yet another fourth class.

In general, to investigate the elements of existing things without distinguishing the various senses in which things are said to exist is a hopeless task; [20] especially when one inquires along these lines into the nature of the elements of which things are composed. For (a) we cannot surely conceive of the elements of activity or passivity or straightness; this is possible, if at all, only in the case of substances. Hence to look for, or to suppose that one has found, the elements of everything that exists, is a mistake.

(b) How can one apprehend the elements of everything ? Obviously one could not have any previous knowledge of anything; because just as a man who is beginning to learn geometry can have previous knowledge of other facts, but no previous knowledge of the principles of that science or of the things about which he is to learn, so it is in the case of all other branches of knowledge.

Hence if there is a science which embraces everything(as some say), the student of it can have no previous knowledge at all. But all learning proceeds, wholly or in part, from what is already known; whether it is through demonstration or through definition—since the parts of the definition must be already known and familiar. The same is true of induction.

[1] On the other hand, assuming that this knowledge should turn out to be innate, it is astonishing that we should possess unawares the most important of the sciences. Further, how is one to know of what elements things consist? how is it to be established?

Even this presents a difficulty, because the facts might be disputed, as happens in the case of certain syllables—for some say that ZA is composed of S, D and A, while others say that it is a distinct sound and not any one of those which are familiar to us.

Further, how can one gain knowledge of the objects of a particular sense-perception without possessing that sense? Yet it should be possible, that if the elements of which all things consist, as composite sounds consist of their peculiar elements, are the same.

Thus it is obvious, from the statements of earlier thinkers also, that all inquiry is apparently directed towards the causes described in the Physics, and that we cannot suggest any other

cause apart from these. They were, however, only vaguely conceived; and although in one sense they have all been stated before, in another they have not been stated at all.

For the earliest philosophy speaks falteringly, as it were, on all subjects; being new and in its infancy. Even Empedocles says that bone exists by virtue of its ratio, which is the definition or essence of a thing.

But by similar reasoning both flesh and every other thing, [20] or else nothing at all, must be ratio; for it must be because of this, and not because of their matter—which he calls fire, earth, water and air—that flesh and bone and every other thing exists.

If anyone else had stated this, he would necessarily have agreed, but his own statement was not clear.

These and similar points have been explained already. We will now return to the difficulties which might be raised about these same questions, for they may throw some light upon subsequent difficulties.

[30] The study of Truth is in one sense difficult, in another easy. This is shown by the fact that whereas no one person can obtain an adequate grasp of it, we cannot all fail in the attempt; [1] each thinker makes some statement about the natural world, and as an individual contributes little or nothing to the inquiry; but a combination of all conjectures results in something considerable.

Thus in so far as it seems that Truth is like the proverbial door which no one can miss, in this sense our study will be easy; but the fact that we cannot, although having some grasp of the whole, grasp a particular part, shows its difficulty. However, since difficulty also can be accounted for in two ways, its cause may exist not in the objects of our study but in ourselves:

just as it is with bats' eyes in respect of daylight, so it is with our mental intelligence in respect of those things which are by nature most obvious.

It is only fair to be grateful not only to those whose views we can share but also to those who have expressed rather superficial opinions. They too have contributed something; by their preliminary work they have formed our mental experience.

If there had been no Timotheus, we should not possess much of our music; and if there had been no Phrynis, there would have been no Timotheus. It is just the same in the case of those who have theorized about reality: we have derived certain views from some of them, and they in turn were indebted to others.

Moreover, philosophy is rightly called [20] a knowledge of Truth. The object of theoretic knowledge is truth, while that of practical knowledge is action; for even when they are investigating how a thing is so, practical men study not the eternal principle but the relative and immediate application.

But we cannot know the truth apart from the cause. Now every thing through which a common quality is communicated to other things is itself of all those things in the highest degree possessed of that quality (e.g. fire is hottest, because it is the cause of heat in everything else); hence that also is most true which causes all subsequent things to be true.

Therefore in every case the first principles of things must necessarily be true above everything else—since they are not merely sometimes true, nor is anything the cause of their existence, but

they are the cause of the existence of other things,—and so as each thing is in respect of existence, so it is in respect of truth.

[1] Moreover, it is obvious that there is some first principle, and that the causes of things are not infinitely many either in a direct sequence or in kind. For the material generation of one thing from another cannot go on in an infinite progression (e.g. flesh from earth, earth from air, air from fire, and so on without a stop); nor can the source of motion (e.g. man be moved by air, air by the sun, the sun by Strife, with no limit to the series).

In the same way neither can the Final Cause recede to infinity—walking having health for its object, and health happiness, and happiness something else: one thing always being done for the sake of another.

And it is just the same with the Formal Cause. For in the case of all intermediate terms of a series which are contained between a first and last term, the prior term is necessarily the cause of those which follow it; because if we had to say which of the three is the cause, we should say the first. At any rate it is not the last term, because what comes at the end is not the cause of anything. Neither, again, is the intermediate term, which is only the cause of one

(and it makes no difference whether there is one intermediate term or several, nor whether they are infinite or limited in number). But of series which are infinite in this way, and in general of the infinite, all the parts are equally intermediate, down to the present moment. Thus if there is no first term, there is no cause at all.

On the other hand there can be no infinite progression downwards [20] (where there is a beginning in the upper direction) such that from fire comes water, and from water earth, and in this way some other kind of thing is always being produced. There are two senses in which one thing comes from another—apart from that in which one thing is said to come after another, e.g. the Olympian from the Isthmian games—either as a man comes from a child as it develops, or as air comes from water.

Now we say that a man comes from a child in the sense that that which has become something comes from that which is becoming: i.e. the perfect from the imperfect. (For just as becoming is always intermediate between being and not-being, so is that which is becoming between what is and what is not. The learner is becoming informed, and that is the meaning of the statement that the informed person comes from the learner.)

On the other hand A comes from B in the sense that water comes from air by the destruction of B. Hence the former class of process is not reversible [1] (e.g. a child cannot come from a man, for the result of the process of becoming is not the thing which is becoming, but that which exists after the process is complete. So day comes from early dawn, because it is after dawn; and hence dawn does not come from day). But the other class is reversible.

In both cases progression to infinity is impossible; for in the former the intermediate terms must have an end, and in the second the process is reversible, for the destruction of one member of a pair is the generation of the other. At the same time the first cause, being eternal, cannot be destroyed; because, since the process of generation is not infinite in the upper direction, that cause which first, on its destruction, became something else, cannot possibly be eternal.

Further, the Final cause of a thing is an end , and is such that it does not happen for the sake of

some thing else, but all other things happen for its sake. So if there is to be a last term of this kind, the series will not be infinite; and if there is no such term, there will be no Final cause. Those who introduce infinity do not realize that they are abolishing the nature of the Good (although no one would attempt to do anything if he were not likely to reach some limit);

nor would there be any intelligence in the world, because the man who has intelligence always acts for the sake of something, and this is a limit, because the end is a limit.

Nor again can the Formal cause be referred back to another fuller definition;

for the prior definition is always closer, and the posterior is not; and where the original definition does not apply, neither does the subsequent one. [20] Further, those who hold such a view do away with scientific knowledge, for on this view it is impossible to know anything until one comes to terms which cannot be analyzed.

Understanding, too, is impossible; for how can one conceive of things which are infinite in this way? It is different in the case of the line, which, although in respect of divisibility it never stops, yet cannot be conceived of unless we make a stop (which is why, in examining an infinite line, one cannot count the sections).

Even matter has to be conceived under the form of something which changes, and there can be nothing which is infinite. In any case the concept of infinity is not infinite.

Again, if the kinds of causes were infinite in number it would still be impossible to acquire knowledge; for it is only when we have become acquainted with the causes that we assume that we know a thing; and we cannot, in a finite time, go completely through what is additively infinite.

The effect of a lecture depends upon the habits of the listener; because we expect the language to which we are accustomed, [1] and anything beyond this seems not to be on the same level, but somewhat strange and unintelligible on account of its unfamiliarity; for it is the familiar that is intelligible. The powerful effect of familiarity is clearly shown by the laws, in which the fanciful and puerile survivals prevail, through force of habit, against our recognition of them.

Thus some people will not accept the statements of a speaker unless he gives a mathematical proof; others will not unless he makes use of illustrations; others expect to have a poet adduced as witness. Again, some require exactness in everything, while others are annoyed by it, either because they cannot follow the reasoning or because of its pettiness; for there is something about exactness which seems to some people to be mean, no less in an argument than in a business transaction.

Hence one must have been already trained how to take each kind of argument, because it is absurd to seek simultaneously for knowledge and for the method of obtaining it; and neither is easy to acquire. Mathematical accuracy is not to be demanded in everything, but only in things which do not contain matter.

Hence this method is not that of natural science, because presumably all nature is concerned with matter. Hence we should first inquire what nature is; for in this way it will become clear what the objects of natural science are [and whether it belongs to one science or more than one to study the causes [20] and principles of things].

[24] It is necessary, with a view to the science which we are investigating, that we first describe

the questions which should first be discussed. These consist of all the divergent views which are held about the first principles; and also of any other view apart from these which happens to have been overlooked.

Now for those who wish to get rid of perplexities it is a good plan to go into them thoroughly; for the subsequent certainty is a release from the previous perplexities, and release is impossible when we do not know the knot. The perplexity of the mind shows that there is a knot in the subject; for in its perplexity it is in much the same condition as men who are fettered: in both cases it is impossible to make any progress.

Hence we should first have studied all the difficulties, both for the reasons given and also because those who start an inquiry without first considering the difficulties are like people who do not know where they are going; besides, one does not even know whether the thing required has been found or not. [1] To such a man the end is not clear; but it is clear to one who has already faced the difficulties.

Further, one who has heard all the conflicting theories, like one who has heard both sides in a lawsuit, is necessarily more competent to judge.

The first difficulty is concerned with the subjects which we discussed in our prefatory remarks. (1.) Does the study of the causes belong to one science or to more than one?(2.) Has that science only to contemplate the first principles of substance, or is it also concerned with the principles which all use for demonstration—e.g. whether it is possible at the same time to assert and deny one and the same thing, and other similar principles?

And if it is concerned with substance, (3.) is there one science which deals with all substances, or more than one; and if more than one, are they all cognate, or should we call some of them kinds of Wisdom and others something different?

This too is a question which demands inquiry: (iv.) should we hold that only sensible substances exist, or that there are other besides? And should we hold that there is only one class of non-sensible substances, or more than one (as do those who posit the Forms and the mathematical objects as intermediate between the Forms and sensible things)?

These questions, then, as I say, must be considered; and also (v.) whether our study is concerned only with substances, [20] or also with the essential attributes of substance;

and further, with regard to Same and Other, and Like and Unlike and Contrariety, and Prior and Posterior, and all other such terms which dialecticians try to investigate, basing their inquiry merely upon popular opinions; we must consider whose province it is to study all of these.

Further, we must consider all the essential attributes of these same things, and not merely what each one of them is, but also whether each one has one opposite; and (vi.) whether the first principles and elements of things are the genera under which they fall or the pre-existent parts into which each thing is divided; and if the genera, whether they are those which are predicated ultimately of individuals, or the primary genera—e.g., whether animal or man is the first principle and the more independent of the individual.

Above all we must consider and apply ourselves to the question (7.) whether there is any other cause per se besides matter, and if so whether it is dissociable from matter, and whether it is numerically one or several; and whether there is anything apart from the concrete thing (by the concrete thing I mean matter together with whatever is predicated of it) or nothing; or whether

there is in some cases but not in others; and what these cases are.

[1] Further, (8.) we must ask whether the first principles are limited in number or in kind—both those in the definitions and those in the substrate—and (ix.) whether the principles of perishable and of imperishable things are the same or different; and whether all are imperishable, or those of perishable things are perishable.

Further, there is the hardest and most perplexing question of all: (x.) whether Unity and Being (as the Pythagoreans and Plato maintained) are not distinct, but are the substance of things; or whether this is not so, and the substrate is something distinct(as Empedocles holds of Love, another thinker of fire, and another of water or air);

and (xi.) whether the first principles are universal or like individual things; and (12.) whether they exist potentially or actually; and further whether their potentiality or actuality depends upon anything other than motion; for these questions may involve considerable difficulty.

Moreover we must ask (13.) whether numbers and lines and figures and points are substances in any sense, or not; and if they are, whether they are separate from sensible things or inherent in them. With regard to these problems not only is it difficult to attain to the truth, but it is not even easy to state all the difficulties adequately.

(1.) Firstly, then, with respect to the first point raised: whether it is the province of one science or of more than one to study all the kinds of causes. [20] How can one science comprehend the first principles unless they are contraries? Again, in many things they are not all present.

How can a principle of motion be in immovable things? or the nature of the Good? for everything which is good in itself and of its own nature is an end and thus a cause, because for its sake other things come to be and exist; and the end and purpose is the end of some action, and all actions involve motion; thus it would be impossible either for this principle to exist in motionless things or for there to be any absolute Good.

Hence in mathematics too nothing is proved by means of this cause, nor is there any demonstration of the kind because it is better or worse; indeed no one takes any such consideration into account.

And so for this reason some of the sophists, e.g. Aristippus, spurned mathematics, on the ground that in the other arts, even the mechanical ones such as carpentry and cobbling, all explanation is of the kind because it is better or worse, while mathematics takes no account of good and bad.

[1] On the other hand if there are several sciences of the causes, and a different one for each different principle, which of them shall we consider to be the one which we are seeking, or whom of the masters of these sciences shall we consider to be most learned in the subject which we are investigating?

For it is possible for all the kinds of cause to apply to the same object; e.g. in the case of a house the source of motion is the art and the architect; the final cause is the function; the matter is earth and stones, and the form is the definition. Now to judge from our discussion some time ago as to which of the sciences should be called Wisdom, there is some case for applying the name to each of them.

Inasmuch as Wisdom is the most sovereign and authoritative kind of knowledge, which the

other sciences, like slaves, may not contradict, the knowledge of the end and of the Good resembles Wisdom (since everything else is for the sake of the end); but inasmuch as it has been defined as knowledge of the first principles and of the most knowable, the knowledge of the essence will resemble Wisdom.

For while there are many ways of understanding the same thing, we say that the man who recognizes a thing by its being something knows more than he who recognizes it by its not being something; and even in the former case one knows more than another, and most of all he who knows what it is, and not he who knows its size or quality or natural capacity for acting or being acted upon.

Further, in all other cases too, even in such as admit of demonstration, [20] we consider that we know a particular thing when we know what it is (e.g. what is the squaring of a rectangle? answer, the finding of a mean proportional to its sides; and similarly in other instances); but in the case of generations and actions and all kinds of change, when we know the source of motion.

This is distinct from and opposite to the end . Hence it might be supposed that the study of each of these causes pertained to a different science.

(2.) Again, with respect to the demonstrative principles as well, it may be disputed whether they too are the objects of one science or of several.

By demonstrative I mean the axioms from which all demonstration proceeds, e.g. everything must be either affirmed or denied, and it is impossible at once to be and not to be, and all other such premisses. Is there one science both of these principles and of substance, or two distinct sciences? and if there is not one, which of the two should we consider to be the one which we are now seeking?

It is not probable that both subjects belong to one science; for why should the claim to understand these principles be peculiar to geometry rather than to any other science? Then if it pertains equally to any science, and yet cannot pertain to all, [1] comprehension of these principles is no more peculiar to the science which investigates substances than to any other science.

Besides, in what sense can there in be a science of these principles? We know already just what each of them is; at any rate other sciences employ them as being known to us. If, however there is a demonstrative science of them, there will have to be some underlying genus, and some of the principles will be derived from axioms, and others will be unproved

(for there cannot be demonstration of everything), since demonstration must proceed from something, and have some subject matter, and prove something. Thus it follows that there is some one genus of demonstrable things; for all the demonstrative sciences employ axioms.

On the other hand, if the science of substance is distinct from the science of these principles, which is of its own nature the more authoritative and ultimate?

The axioms are most universal, and are the first principles of everything. And whose province will it be, if not the philosopher’s, to study truth and error with respect to them?

(3.) And in general, is there one science of all substances, or more than one? if there is not one, with what sort of substance must we assume that this science is concerned?

On the other hand, it is not probable that there is one science of all substances; for then there would be one demonstrative of all attributes—assuming that every demonstrative science [20] proceeds from accepted beliefs and studies the essential attributes concerned with some definite subject matter.

Thus to study the essential attributes connected with the same genus is the province of the same science proceeding from the same beliefs. For the subject matter belongs to one science, and so do the axioms, whether to the same science or to a different one; hence so do the attributes, whether they are studied by these sciences themselves or by one derived from them.

(v.) Further, is this study concerned only with substances, or with their attributes as well? I mean, e.g., if the solid is a kind of substance, and so too lines and planes, is it the province of the same science to investigate both these and their attributes, in every class of objects about which mathematics demonstrates anything, or of a different science?

If of the same, then the science of substance too would be in some sense demonstrative; but it does not seem that there is any demonstration of the what is it? And if of a different science, what will be the science which studies the attributes of substance? This is a very difficult question to answer.

(iv.) Further, are we to say that only sensible substances exist, or that others do as well? and is there really only one kind of substance, or more than one [1] (as they hold who speak of the Forms and the Intermediates, which they maintain to be the objects of the mathematical sciences)?

In what sense we Platonists hold the Forms to be both causes and independent substances has been stated in our original discussion on this subject. But while they involve difficulty in many respects, not the least absurdity is the doctrine that there are certain entities apart from those in the sensible universe, and that these are the same as sensible things except in that the former are eternal and the latter perishable.

For Platonists say nothing more or less than that there is an absolute Man, and Horse, and Health; in which they closely resemble those who state that there are Gods, but of human form; for as the latter invented nothing more or less than eternal men, so the former simply make the Forms eternal sensibles.

Again, if anyone posits Intermediates distinct from Forms and sensible things, he will have many difficulties;

because obviously not only will there be lines apart from both Ideal and sensible lines, but it will be the same with each of the other classes. Thus since astronomy is one of the mathematical sciences, there will have to be a heaven besides the sensible heaven, and a sun and moon, and all the other heavenly bodies.

But how are we to believe this? Nor is it reasonable that the heaven should be immovable; but that it should move [20] is utterly impossible. It is the same with the objects of optics and the mathematical theory of harmony; these too, for the same reasons, cannot exist apart from sensible objects. Because if there are intermediate objects of sense and sensations, clearly there will also be animals intermediate between the Ideal animals and the perishable animals.

One might also raise the question with respect to what kind of objects we are to look for these sciences. For if we are to take it that the only difference between mensuration and geometry is

that the one is concerned with things which we can perceive and the other with things which we cannot, clearly there will be a science parallel to medicine (and to each of the other sciences), intermediate between Ideal medicine and the medicine which we know.

Yet how is this possible? for then there would be a class of healthy things apart from those which are sensible and from the Ideally healthy. Nor, at the same time, is it true that mensuration is concerned with sensible and perishable magnitudes; for then it would perish as they do. Nor, again, can astronomy be concerned with sensible magnitudes or with this heaven of ours;

[1] for as sensible lines are not like those of which the geometrician speaks (since there is nothing sensible which is straight or curved in that sense; the circle touches the ruler not at a point, but along a line as Protagoras used to say in refuting the geometricians), so the paths and orbits of our heaven are not like those which astronomy discusses, nor have the symbols of the astronomer the same nature as the stars.

Some, however, say that these so-called Intermediates between Forms and sensibles do exist: not indeed separately from the sensibles, but in them. It would take too long to consider in detail all the impossible consequences of this theory, but it will be sufficient to observe the following.

On this view it is not logical that only this should be so; in clearly it would be possible for the Forms also to be in sensible things; for the same argument applies to both. Further, it follows necessarily that two solids must occupy the same space; and that the Forms cannot be immovable, being present in sensible things, which move.

And in general, what is the object of assuming that Intermediates exist, but only in sensible things? The same absurdities as before will result: there will be a heaven besides the sensible one, only not apart from it, but in the same place; which is still more impossible.

[20] Thus it is very difficult to say, not only what view we should adopt in the foregoing questions in order to arrive at the truth, but also in the case of the first principles (vi.) whether we should assume that the genera, or the simplest constituents of each particular thing, are more truly the elements and first principles of existing things. E.g., it is generally agreed that the elements and first principles of speech are those things of which, in their simplest form, all speech is composed; and not the common term speech; and in the case of geometrical propositions we call those the elements whose proofs are embodied in the proofs of all or most of the rest.

Again, in the case of bodies, both those who hold that there are several elements and those who hold that there is one call the things of which bodies are composed and constituted first principles. E.g., Empedocles states that fire and water and the other things associated with them are the elements which are present in things and of which things are composed; he does not speak of them as genera of things.

Moreover in the case of other things too, if a man wishes to examine their nature [1] he observes, e.g., of what parts a bed consists and how they are put together; and then he comprehends its nature. Thus to judge from these arguments the first principles will not be the genera of things.

But from the point of view that it is through definitions that we get to know each particular

thing, and that the genera are the first principles of definitions, the genera must also be the first principles of the things defined.

And if to gain scientific knowledge of things is to gain it of the species after which things are named, the genera are first principles of the species. And apparently some even of those who call Unity or Being or the Great and Small elements of things treat them as genera.

Nor again is it possible to speak of the first principles in both senses.

The formula of substance is one; but the definition by genera will be different from that which tells us of what parts a thing is composed.

Moreover, assuming that the genera are first principles in the truest sense, are we to consider the primary genera to be first principles, or the final terms predicated of individuals? This question too involves some dispute.

For if universals are always more truly first principles, clearly the answer will be the highest genera, since these are predicated of everything. Then there will be as many first principles of things [20] as there are primary genera, and so both Unity and Being will be first principles and substances, since they are in the highest degree predicated of all things.

But it is impossible for either Unity or Being to be one genus of existing things. For there must be differentiae of each genus, and each differentia must be one; but it is impossible either for the species of the genus to be predicated of the specific differentiae, or for the genus to be predicated without its species. Hence if Unity or Being is a genus, there will be no differentia Being or Unity.

But if they are not genera, neither will they be first principles, assuming that it is the genera that are first principles. And further, the intermediate terms, taken together with the differentiae, will be genera, down to the individuals; but in point of fact, although some are thought to be such, others are not. Moreover the differentiae are more truly principles than are the genera; and if they also are principles, we get an almost infinite number of principles, especially if one makes the ultimate genus a principle.

[1] Moreover, if Unity is really more of the nature of a principle, and the indivisible is a unity, and every thing indivisible is such either in quantity or in kind, and the indivisible in kind is prior to the divisible, and the genera are divisible into species, then it is rather the lowest predicate that will be a unity (for man is not the genus of individual men).

Further, in the case of things which admit of priority and posteriority, that which is predicated of the things cannot exist apart from them. E.g., if 2 is the first number, there will be no Number apart from the species of number; and similarly there will be no Figure apart from the species of figures. But if the genera do not exist apart from the species in these cases, they will scarcely do so in others; because it is assumed that genera are most likely to exist in these cases.

In individuals, however, there is no priority and posteriority. Further, where there is a question of better or worse, the better is always prior; so there will be no genus in these cases either.

From these considerations it seems that it is the terms predicated of individuals, rather than the genera, that are the first principles. But again on the other hand it is not easy to say in what sense we are to understand these to be principles;

for the first principle and cause must be apart from the things of which it is a principle, and must

be able to exist when separated from them. But why should we assume that such a thing exists [20] alongside of the individual, except in that it is predicated universally and of all the terms? And indeed if this is a sufficient reason, it is the more universal concepts that should rather be considered to be principles; and so the primary genera will be the principles.

In this connection there is a difficulty which is the hardest and yet the most necessary of all to investigate, and with which our inquiry is now concerned. (7.) If nothing exists apart from individual things, and these are infinite in number, how is it possible to obtain knowledge of the numerically infinite? For we acquire our knowledge of all things only in so far as they contain something universal, some one and identical characteristic.

But if this is essential, and there must be something apart from individual things, it must be the genera; either the lowest or the highest; but we have just concluded that this is impossible.

Further, assuming that when something is predicated of matter there is in the fullest sense something apart from the concrete whole, if there is something, must it exist apart from all concrete wholes, or apart from some but not others, or apart from none?

[1] If nothing exists apart from individual things, nothing will be intelligible; everything will be sensible, and there will be no knowledge of anything—unless it be maintained that sense-perception is knowledge. Nor again will anything be eternal or immovable, since sensible things are all perishable and in motion.

Again, if nothing is eternal, even generation is impossible; for there must be something which becomes something, i.e. out of which something is generated, and of this series the ultimate term must be ungenerated; that is if there is any end to the series and generation cannot take place out of nothing.

Further, if there is generation and motion, there must be limit too. For (a) no motion is infinite, but every one has an end; (b) that which cannot be completely generated cannot begin to be generated, and that which has been generated must be as soon as it has been generated.

Further, if matter exists apart in virtue of being ungenerated, it is still more probable that the substance, i.e. that which the matter is at any given time becoming, should exist. And if neither one nor the other exists, nothing will exist at all. But if this is impossible, there must be something, the shape or form, apart from the concrete whole.

But again, if we assume this, there is a difficulty: in what cases shall we, and in what shall we not, assume it? Clearly it cannot be done in all cases; for we should not assume that a particular house exists apart from particular houses. [20] Moreover, are we to regard the essence of all things, e.g. of men, as one? This is absurd; for all things whose essence is one are one.

Then is it many and diverse? This too is illogical. And besides, how does the matter become each individual one of these things, and how is the concrete whole both matter and form?

(8.) Further, the following difficulty might be raised about the first principles. If they are one in kind, none of them will be one in number, not even the Idea of Unity or of Being. And how can there be knowledge unless there is some universal term?

On the other hand if they are numerically one, and each of the principles is one, and not, as in the case of sensible things, different in different instances (e.g. since a given syllable is always the same in kind, its first principles are always the same in kind, but only in kind, since they are

essentially different in number)—if the first principles are one, not in this sense, but numerically, there will be nothing else apart from the elements; for numerically one and individual are identical in meaning. This is what we mean by individual: the numerically one; but by universal we mean what is predicable of individuals.

[1] Hence just as, if the elements of language were limited in number, the whole of literature would be no more than those elements—that is, if there were not two nor more than two of the same so it would be in the case of existing things and their principles.

(ix.) There is a difficulty, as serious as any, which has been left out of account both by present thinkers and by their predecessors: whether the first principles of perishable and imperishable things are the same or different. For if they are the same, how is it that some things are perishable and others imperishable, and for what cause?

The school of Hesiod, and all the cosmologists, considered only what was convincing to themselves, and gave no consideration to us. For they make the first principles Gods or generated from Gods, and say that whatever did not taste of the nectar and ambrosia became mortal—clearly using these terms in a sense significant to themselves;

but as regards the actual applications of these causes their statements are beyond our comprehension. For if it is for pleasure that the Gods partake of them, the nectar and ambrosia are in no sense causes of their existence; but if it is to support life, how can Gods who require nourishment be eternal?

However, it is not worth while to consider seriously the subtleties of mythologists; we must ascertain [20] by cross-examining those who offer demonstration of their statements why exactly things which are derived from the same principles are some of an eternal nature and some perishable. And since these thinkers state no reason for this view, and it is unreasonable that things should be so, obviously the causes and principles of things cannot be the same.

Even the thinker who might be supposed to speak most consistently, Empedocles, is in the same case; for he posits Strife as a kind of principle which is the cause of destruction, but none the less Strife would seem to produce everything except the One; for everything except God proceeds from it.

At any rate he says

From which grew all that was and is and shall be

In time to come: the trees, and men and women,

The beasts and birds and water-nurtured fish,

And the long-living Gods.

And it is obvious even apart from this; [1] for if there had not been Strife in things, all things would have been one, he says; for when they came together then Strife came to stand outermost. Hence it follows on his theory that God, the most blessed being, is less wise than the others, since He does not know all the elements; for He has no Strife in Him, and knowledge is of like by like:

By earth (he says) we earth perceive, by water water,

By air bright air, by fire consuming fire,

Love too by love, and strife by grievous strife.

But—and this is the point from which we started—thus much is clear: that it follows on his theory that Strife is no more the cause of destruction than it is of Being. Nor, similarly, is Love the cause of Being; for in combining things into one it destroys everything else.

Moreover, of the actual process of change he gives no explanation, except that it is so by nature:

But when Strife waxing great among the members

Sprang up to honor as the time came round

Appointed them in turn by a mighty oath,

as though change were a necessity; but he exhibits no cause for the necessity.

However, thus much of his theory is consistent: he does not represent some things to be perishable and others imperishable, but makes everything [20] perishable except the elements. But the difficulty now being stated is why some things are perishable and others not, assuming that they are derived from the same principles.

The foregoing remarks may suffice to show that the principles cannot be the same.

If however they are different, one difficulty is whether they too are to be regarded as imperishable or as perishable. For if they are perishable, it is clearly necessary that they too must be derived from something else, since everything passes upon dissolution into that from which it is derived. Hence it follows that there are other principles prior to the first principles;

but this is impossible, whether the series stops or proceeds to infinity. And further, how can perishable things exist if their principles are abolished? On the other hand if the principles are imperishable, why should some imperishable principles produce perishable things, and others imperishable things? This is not reasonable; either it is impossible or it requires much explanation.

Further, no one has so much as attempted to maintain different principles; they maintain the same principles for everything. [1] But they swallow down the difficulty which we raised first as though they took it to be trifling.

But the hardest question of all to investigate and also the most important with a view to the discovery of the truth, is whether after all Being and Unity are substances of existing things, and each of them is nothing else than Being and Unity respectively, or whether we should inquire what exactly Being and Unity are, there being some other nature underlying them.

Some take the former, others the latter view of the nature of Being and Unity. Plato and the Pythagoreans hold that neither Being nor Unity is anything else than itself, and that this is their nature, their essence being simply Being and Unity.

But the physicists, e.g. Empedocles, explain what Unity is by reducing it to something, as it were, more intelligible—or it would seem that by Love Empedocles means Unity; at any rate Love is the cause of Unity in all things. Others identify fire and others air with this Unity and Being of which things consist and from which they have been generated.

Those who posit more numerous elements also hold the same view; for they too must identify Unity and Being with all the principles which they recognize. [20] And it follows that unless one assumes Unity and Being to be substance in some sense, no other universal term can be

substance; for Unity and Being are the most universal of all terms,

and if there is no absolute Unity or absolute Being, no other concept can well exist apart from the so-called particulars. Further, if Unity is not substance, clearly number cannot be a separate characteristic of things; for number is units, and the unit is simply a particular kind of one.

On the other hand, if there is absolute Unity and Being, their substance must be Unity and Being; for no other term is predicated universally of Unity and Being, but only these terms themselves. Again, if there is to be absolute Being and absolute Unity, it is very hard to see how there can be anything else besides these; I mean, how things can be more than one.

For that which is other than what is, is not; and so by Parmenides' argument it must follow that all things are one, i.e. Being. [1] In either case there is a difficulty; for whether Unity is not a substance or whether there is absolute Unity, number cannot be a substance.

It has already been stated why this is so if Unity is not a substance; and if it is, there is the same difficulty as about Being. For whence, if not from the absolute One or Unity, can there be another one? It must be not-one; but all things are either one, or many of which each is one. Further, if absolute Unity is indivisible, by Zeno's axiom it will be nothing.

For that which neither when added makes a thing greater nor when subtracted makes it smaller is not an existent thing, he says; clearly assuming that what exists is spatial magnitude. And if it is a spatial magnitude it is corporeal, since the corporeal exists in all dimensions, whereas the other magnitudes, the plane or line, when added to a thing in one way will increase it, but when added in another will not; and the point or unit will not increase a thing in any way whatever.

But since Zeno's view is unsound, and it is possible for a thing to be indivisible in such a way that it can be defended even against his argument (for such a thing when added will increase a thing in number though not in size)—still how can a magnitude be composed of one or more such indivisible things? It is like saying that the line is composed of points.

Moreover, even if one supposes the case to be [20] such that number is generated, as some say, from the One itself and from something else which is not one, we must none the less inquire why and how it is that the thing generated will be at one time number and at another magnitude, if the not-one was inequality and the same principle in both cases. For it is not clear how magnitude can be generated either from One and this principle, or from a number and this principle.

(13.) Out of this arises the question whether numbers, bodies, planes and points are substances or not. If not, the question of what Being is, what the substances of things are, baffles us; for modifications and motions and relations and dispositions and ratios do not seem to indicate the substance of anything; they are all predicated of a substrate, and none of them is a definite thing.

As for those things which might be especially supposed to indicate substance—water, earth, fire and air, of which composite bodies are composed— [1] their heat and cold and the like are modifications, not substances; and it is only the body which undergoes these modifications that persists as something real and a kind of substance.

Again, the body is less truly substance than the plane, and the plane than the line, and the line than the unit or point; for it is by these that the body is defined, and it seems that they are possible without the body, but that the body cannot exist without them.

This is why the vulgar and the earlier thinkers supposed that substance and Being are Body, and everything else the modifications of Body; and hence also that the first principles of bodies are the first principles of existing things; whereas later thinkers with a greater reputation for wisdom supposed that substance and Being are numbers.

As we have said, then, if these things are not substance, there is no substance or Being at all; for the attributes of these things surely have no right to be called existent things. On the other hand, if it be agreed that lines and points are more truly substance than bodies are, yet unless we can see to what kind of bodies they belong (for they cannot be in sensible bodies) there will still be no substance.

Further, it is apparent that all these lines are divisions of Body, either in breadth [20] or in depth or in length. Moreover every kind of shape is equally present in a solid, so that if Hermes is not in the stone, neither is the half-cube in the cube as a determinate shape.

Hence neither is the plane; for if any kind of plane were in it, so would that plane be which defines the half-cube. The same argument applies to the line and to the point or unit. Hence however true it may be that body is substance, if planes, lines and points are more truly substance than Body is, and these are not substance in any sense, the question of what Being is and what is the substance of things baffles us.

Because, in addition to the above arguments, absurd results follow from a consideration of generation and destruction; for it seems that if substance, not having existed before, now exists, or having existed before, subsequently does not exist it suffers these changes in the process of generation and destruction. But points, lines and planes, although they exist at one time and at another do not, cannot be in process of being either generated or destroyed;

for whenever bodies are joined or divided, [1] at one time, when they are joined one surface is instantaneously produced, and at another, when they are divided, two. Thus when the bodies are combined the surface does not exist but has perished; and when they are divided, surfaces exist which did not exist before. (The indivisible point is of course never divided into two.) And if they are generated and destroyed, from what are they generated?

It is very much the same with the present moment in time. This too cannot be generated and destroyed; but nevertheless it seems always to be different, not being a substance. And obviously it is the same with points, lines and planes, for the argument is the same; they are all similarly either limits or divisions.

In general one might wonder why we should seek for other entities apart from sensible things and the Intermediates: e.g., for the Forms which we Platonists assume.

If it is for the reason that the objects of mathematics, while differing from the things in our world in another respect, resemble them in being a plurality of objects similar in form, so that their principles cannot be numerically determined (just as the principles of all language in this world of ours are determinate not in number but in kind—unless one takes such and such a particular syllable [20] or sound, for the principles of these are determinate in number too—

and similarly with the Intermediates, for in their case too there is an infinity of objects similar in form), then if there is not another set of objects apart from sensible and mathematical objects, such as the Forms are said to be, there will be no substance which is one both in kind and in number, nor will the principles of things be determinate in number, but in kind only.

Thus if this is necessarily so, it is necessary for this reason to posit the Forms also. For even if their exponents do not articulate their theory properly, still this is what they are trying to express, and it must be that they maintain the Forms on the ground that each of them is a substance, and none of them exists by accident.

On the other hand, if we are to assume that the Forms exist, and that the first principles are one in number but not in kind, we have already stated the impossible consequences which must follow.

(12.) Closely connected with these questions is the problem whether the elements exist potentially or in some other sense.

If in some other sense, there will be something else prior to the first principles. [1] For the potentiality is prior to the actual cause, and the potential need not necessarily always become actual. On the other hand, if the elements exist potentially, it is possible for nothing to exist; for even that which does not yet exist is capable of existing. That which does not exist may come to be, but nothing which cannot exist comes to be.

(xi.) Besides the foregoing problems about the first principles we must also raise the question whether they are universal or such as we describe the particulars to be. For if they are universal, there will be no substances; for no common term denotes an individual thing, but a type; and substance is an individual thing.

But if the common predicate be hypostatized as an individual thing, Socrates will be several beings: himself, and Man, and Animal—that is, if each predicate denotes one particular thing.

These then are the consequences if the principles are universal. If on the other hand they are not universal but like particulars, they will not be knowable; for the knowledge of everything is universal. Hence there will have to be other universally predicated principles prior to the first principles, if there is to be any knowledge of them.

[21] There is a science which studies Being qua Being, and the properties inherent in it in virtue of its own nature. This science is not the same as any of the so-called particular sciences, for none of the others contemplates Being generally qua Being; they divide off some portion of it and study the attribute of this portion, as do for example the mathematical sciences.

But since it is for the first principles and the most ultimate causes that we are searching, clearly they must belong to something in virtue of its own nature. Hence if these principles were investigated by those also who investigated the elements of existing things, the elements must be elements of Being not incidentally, but qua Being. Therefore it is of Being qua Being that we too must grasp the first causes.

The term being is used in various senses, but with reference to one central idea and one definite characteristic, and not as merely a common epithet. Thus as the term healthy always relates to health (either as preserving it or as producing it or as indicating it or as receptive of it),

[1] and as medical relates to the art of medicine (either as possessing it or as naturally adapted for it or as being a function of medicine)—and we shall find other terms used similarly to these—

so being is used in various senses, but always with reference to one principle. For some things are said to be because they are substances; others because they are modifications of substance;

others because they are a process towards substance, or destructions or privations or qualities of substance, or productive or generative of substance or of terms relating to substance, or negations of certain of these terms or of substance. (Hence we even say that not-being is not-being.)

And so, just as there is one science of all healthy things, so it is true of everything else. For it is not only in the case of terms which express one common notion that the investigation belongs to one science, but also in the case of terms which relate to one particular characteristic; for the latter too, in a sense, express one common notion. Clearly then the study of things which are, qua being, also belongs to one science.

Now in every case knowledge is principally concerned with that which is primary, i.e. that upon which all other things depend, and from which they get their names. If, then, substance is this primary thing, it is of substances that the philosopher must grasp the first principles and causes.

Now of every single class of things, as there is one perception, [20] so there is one science: e.g., grammar, which is one science, studies all articulate sounds.

Hence the study of all the species of Being qua Being belongs to a science which is generically one, and the study of the several species of Being belongs to the specific parts of that science.

Now if Being and Unity are the same, i.e. a single nature, in the sense that they are associated as principle and cause are, and not as being denoted by the same definition (although it makes no difference but rather helps our argument if we understand them in the same sense),

since one man and man and existent man and man are the same thing, i.e. the duplication in the statement he is a man and an existent man gives no fresh meaning (clearly the concepts of humanity and existence are not dissociated in respect of either coming to be or ceasing to be), and similarly in the case of the term one, so that obviously the additional term in these phrases has the same significance, and Unity is nothing distinct from Being;

and further if the substance of each thing is one in no accidental sense, and similarly is of its very nature something which is—then there are just as many species of Being as of Unity. And to study the essence of these species (I mean, e.g., the study of Same and Other and all the other similar concepts—

roughly speaking all the contraries are reducible to this first principle; [1] but we may consider that they have been sufficiently studied in the Selection of Contraries) is the province of a science which is generically one.

And there are just as many divisions of philosophy as there are kinds of substance; so that there must be among them a First Philosophy and one which follows upon it.

For Being and Unity at once entail genera, and so the sciences will correspond to these genera. The term philosopher is like the term mathematician in its uses; for mathematics too has divisions—there is a primary and a secondary science, and others successively, in the realm of mathematics.

Now since it is the province of one science to study opposites, and the opposite of unity is plurality, and it is the province of one science to study the negation and privation of Unity, because in both cases we are studying Unity, to which the negation (or privation) refers, stated either in the simple form that Unity is not present, or in the form that it is not present in a

particular class; in the latter case Unity is modified by the differentia, apart from the content of the negation (for the negation of Unity is its absence); but in privation there is a substrate of which the privation is predicated.—

The opposite of Unity, then, is Plurality; and so the opposites of the above-mentioned concepts—Otherness, Dissimilarity, Inequality and everything else which is derived from these or from Plurality or Unity— [20] fall under the cognizance of the aforesaid science. And one of them is Oppositeness; for this is a form of Difference, and Difference is a form of Otherness.

Hence since the term one is used in various senses, so too will these terms be used; yet it pertains to one science to take cognizance of them all. For terms fall under different sciences, not if they are used in various senses, but if their definitions are neither identical nor referable to a common notion.

And since everything is referred to that which is primary, e.g. all things which are called one are referred to the primary One, we must admit that this is also true of Identity and Otherness and the Contraries. Thus we must first distinguish all the senses in which each term is used, and then attribute them to the primary in the case of each predicate, and see how they are related to it; for some will derive their name from possessing and others from producing it, and others for similar reasons.

Thus clearly it pertains to one science to give an account both of these concepts and of substance (this was one of the questions raised in the Difficulties), and it is the function of the philosopher to be able to study all subjects.

[1] If this is not so, who is it who in will investigate whether Socrates and Socrates seated are the same thing; or whether one thing has one contrary, or what the contrary is, or how many meanings it has? and similarly with all other such questions.

Thus since these are the essential modifications of Unity qua Unity and of Being qua Being, and not qua numbers or lines or fire, clearly it a pertains to that science to discover both the essence and the attributes of these concepts.

And those who investigate them err, not in being unphilosophical, but because the substance, of which they have no real knowledge, is prior. For just as number qua number has its peculiar modifications, e.g. oddness and evenness, commensurability and equality, excess and defect, and these things are inherent in numbers both considered independently and in relation to other numbers; and as similarly other peculiar modifications are inherent in the solid and the immovable and the moving and the weightless and that which has weight; so Being qua Being has certain peculiar modifications, and it is about these that it is the philosopher’s function to discover the truth. And here is evidence of this fact.

Dialecticians and sophists wear the same appearance as the philosopher, for sophistry is Wisdom in appearance only, and dialecticians discuss all subjects, [20] and Being is a subject common to them all; but clearly they discuss these concepts because they appertain to philosophy.

For sophistry and dialectic are concerned with the same class of subjects as philosophy, but philosophy differs from the former in the nature of its capability and from the latter in its outlook on life. Dialectic treats as an exercise what philosophy tries to understand, and sophistry seems to be philosophy; but is not.

Further, the second column of contraries is privative, and everything is reducible to Being and Not being, and Unity and Plurality; e.g. Rest falls under Unity and Motion under Plurality. And nearly everyone agrees that substance and existing things are composed of contraries; at any rate all speak of the first principles as contraries—

some as Odd and Even, some as Hot and Cold, some as Limit and Unlimited, some as Love and Strife. And it is apparent that all other things also are reducible to Unity and Plurality (we may assume this reduction); [1] and the principles adduced by other thinkers fall entirely under these as genera.

It is clear, then, from these considerations also, that it pertains to a single science to study Being qua Being; for all things are either contraries or derived from contraries, and the first principles of the contraries are Unity and Plurality. And these belong to one science, whether they have reference to one common notion or not. Probably the truth is that they have not; but nevertheless even if the term one is used in various senses, the others will be related to the primary sense (and similarly with the contraries)—

even if Being or Unity is not a universal and the same in all cases, or is not separable from particulars (as it presumably is not; the unity is in some cases one of reference and in others one of succession). For this very reason it is not the function of the geometrician to inquire what is Contrariety or Completeness or Being or Unity or Identity or Otherness, but to proceed from the assumption of them.

Clearly, then, it pertains to one science to study Being qua Being, and the attributes inherent in it qua Being; and the same science investigates, besides the concepts mentioned above, Priority and Posteriority, Genus and Species, Whole and Part, and all other such concepts.

We must pronounce whether it pertains to the same science [20] to study both the so-called axioms in mathematics and substance, or to different sciences. It is obvious that the investigation of these axioms too pertains to one science, namely the science of the philosopher; for they apply to all existing things, and not to a particular class separate and distinct from the rest. Moreover all thinkers employ them—because they are axioms of Being qua Being, and every genus possesses Being—

but employ them only in so far as their purposes require; i.e., so far as the genus extends about which they are carrying out their proofs. Hence since these axioms apply to all things qua Being (for this is what is common to them), it is the function of him who studies Being qua Being to investigate them as well.

For this reason no one who is pursuing a particular inquiry—neither a geometrician nor an arithmetician—attempts to state whether they are true or false; but some of the physicists did so, quite naturally; for they alone professed to investigate nature as a whole, and Being.

But inasmuch as there is a more ultimate type of thinker than the natural philosopher (for nature is only a genus of Being), the investigation of these axioms too will belong to the universal thinker who studies the primary reality. [1] Natural philosophy is a kind of Wisdom, but not the primary kind.

As for the attempts of some of those who discuss how the truth should be received, they are due to lack of training in logic; for they should understand these things before they approach their task, and not investigate while they are still learning.

Clearly then it is the function of the philosopher, i.e. the student of the whole of reality in its essential nature, to investigate also the principles of syllogistic reasoning. And it is proper for him who best understands each class of subject to be able to state the most certain principles of that subject; so that he who understands the modes of Being qua Being should be able to state the most certain principles of all things.

Now this person is the philosopher, and the most certain principle of all is that about which one cannot be mistaken; for such a principle must be both the most familiar (for it is about the unfamiliar that errors are always made), and not based on hypothesis.

For the principle which the student of any form of Being must grasp is no hypothesis; and that which a man must know if he knows anything he must bring with him to his task.

Clearly, then, it is a principle of this kind that is the most certain of all principles. Let us next state what this principle is.

It is impossible for the same attribute at once to belong and not to belong [20] to the same thing and in the same relation; and we must add any further qualifications that may be necessary to meet logical objections. This is the most certain of all principles, since it possesses the required definition;

for it is impossible for anyone to suppose that the same thing is and is not, as some imagine that Heraclitus says—for what a man says does not necessarily represent what he believes.

And if it is impossible for contrary attributes to belong at the same time to the same subject (the usual qualifications must be added to this premiss also), and an opinion which contradicts another is contrary to it, then clearly it is impossible for the same man to suppose at the same time that the same thing is and is not; for the man who made this error would entertain two contrary opinions at the same time.

Hence all men who are demonstrating anything refer back to this as an ultimate belief; for it is by nature the starting-point of all the other axioms as well.

There are some, however, as we have said, who both state themselves that the same thing can be and not be, [1] and say that it is possible to hold this view. Many even of the physicists adopt this theory. But we have just assumed that it is impossible at once to be and not to be, and by this means we have proved that this is the most certain of all principles.

Some, indeed, demand to have the law proved, but this is because they lack education; for it shows lack of education not to know of what we should require proof, and of what we should not. For it is quite impossible that everything should have a proof; the process would go on to infinity, so that even so there would be no proof.

If on the other hand there are some things of which no proof need be sought, they cannot say what principle they think to be more self-evident. Even in the case of this law, however, we can demonstrate the impossibility by refutation, if only our opponent makes some statement. If he makes none, it is absurd to seek for an argument against one who has no arguments of his own about anything, in so far as he has none; for such a person, in so far as he is such, is really no better than a vegetable.

And I say that proof by refutation differs from simple proof in that he who attempts to prove might seem to beg the fundamental question, whereas if the discussion is provoked thus by

someone else, refutation and not proof will result.

The starting-point for all such discussions is not the claim that he should state that something is or is not so [20] (because this might be supposed to be a begging of the question), but that he should say something significant both to himself and to another (this is essential if any argument is to follow; for otherwise such a person cannot reason either with himself or with another);

and if this is granted, demonstration will be possible, for there will be something already defined. But the person responsible is not he who demonstrates but he who acquiesces; for though he disowns reason he acquiesces to reason. Moreover, he who makes such an admission as this has admitted the truth of something apart from demonstration [so that not everything will be so and not so].

Thus in the first place it is obvious that this at any rate is true: that the term to be or not to be has a definite meaning; so that not everything can be so and not so. Again, if man has one meaning, let this be two-footed animal.

By has one meaning I mean this: if X means man, then if anything is a man, its humanity will consist in being X. And it makes no difference even if it be said that man has several meanings, provided that they are limited in number; [1] for one could assign a different name to each formula.

For instance, it might be said that man has not one meaning but several, one of which has the formula two-footed animal, and there might be many other formulae as well, if they were limited in number; for a particular name could be assigned to each for formula.

If on the other hand it be said that man has an infinite number of meanings, obviously there can be no discourse; for not to have one meaning is to have no meaning, and if words have no meaning there is an end of discourse with others, and even, strictly speaking, with oneself; because it is impossible to think of anything if we do not think of one thing; and even if this were possible, one name might be assigned to that of which we think.

Now let this name, as we said at the beginning, have a meaning; and let it have one meaning. Now it is impossible that being man should have the same meaning as not being man, that is, if man is not merely predicable of one subject but has one meaning

(for we do not identify having one meaning with being predicable of one subject, since in this case cultured and white and man would have one meaning, and so all things would be one; for they would all have the same meaning). And it will be impossible for the same thing to be and not to be, except by equivocation, as e.g. one whom we call man [20] others might call not-man;

but the problem is whether the same thing can at once be and not be man, not in name , but in fact . If man and not-man have not different meanings, clearly not being a man will mean nothing different from being a man; and so being a man will be not being a man; they will be one.

For to be one means, as in the case of garment and coat, that the formula is one. And if being man and being not-man are to be one, they will have the same meaning; but it has been proved above that they have different meanings. If then anything can be truly said to be man, it must be two-footed animal; for this is what man was intended to mean.

And if this is necessarily so, it is impossible that at the same time the same thing should not be two-footed animal. For to be necessarily so means this: that it is impossible not to be so. Thus it cannot be true to say at the same time that the same thing is and is not man.

And the same argument holds also in the case of not being man; [1] because being man and being not-man have different meanings if being white and being man have different meanings (for the opposition is much stronger in the former case so as to produce different meanings).

And if we are told that white too means one and the same thing, we shall say again just what we said before, that in that case all things, and not merely the opposites, will be one. But if this is impossible, what we have stated follows; that is, if our opponent answers our question; but if when asked the simple question he includes in his answer the negations, he is not answering our question.

There is nothing to prevent the same thing from being man and white and a multitude of other things; but nevertheless when asked whether it is true to say that X is man, or not, one should return an answer that means one thing, and not add that X is white and large. It is indeed impossible to enumerate all the infinity of accidents; and so let him enumerate either all or none.

Similarly therefore, even if the same thing is ten thousand times man and not-man, one should not include in one's answer to the question whether it is man that it is at the same time also not-man, unless one is also bound to include in one's answer all the other accidental things that the subject is or is not. [20] And if one does this, he is not arguing properly.

In general those who talk like this do away with substance and essence,

for they are compelled to assert that all things are accidents, and that there is no such thing as being essentially man or animal. For if there is to be such a thing as being essentially man, this will not be being not-man nor not-being man (and yet these are negations of it); for it was intended to have one meaning, i.e. the substance of something.

But to denote a substance means that the essence is that and nothing else; and if for it being essentially man is the same as either being essentially not-man or essentially not-being man, the essence will be something else.

Thus they are compelled to say that nothing can have such a definition as this, but that all things are accidental; for this is the distinction between substance and accident: white is an accident of man, because although he is white, he is not white in essence.

And since the accidental always implies a predication about some subject, if all statements are accidental, there will be nothing primary about which they are made; [1] so the predication must proceed to infinity. But this is impossible, for not even more than two accidents can be combined in predication. An accident cannot be an accident of an accident unless both are accidents of the same thing.

I mean, e.g., that white is cultured and cultured white merely because both are accidents of a man. But it is not in this sense—that both terms are accidents of something else—that Socrates is cultured. Therefore since some accidents are predicated in the latter and some in the former sense, such as are predicated in the way that white is of Socrates cannot be an infinite series in the upper direction; e.g. there cannot be another accident of white Socrates, for the sum of these predications does not make a single statement.

Nor can white have a further accident, such as cultured; for the former is no more an accident of the latter than vice versa; and besides we have distinguished that although some predicates are accidental in this sense, others are accidental in the sense that cultured is to Socrates; and whereas in the former case the accident is an accident of an accident, it is not so in the latter; and thus not all predications will be of accidents.

Therefore even so there will be something which denotes substance. And if this is so, we have proved that contradictory statements cannot be predicated at the same time.

Again, if all contradictory predications of the same subject at the same time are true, clearly all things will be one.

[20] For if it is equally possible either to affirm or deny anything of anything, the same thing will be a trireme and a wall and a man; which is what necessarily follows for those who hold the theory of Protagoras. For if anyone thinks that a man is not a trireme, he is clearly not a trireme; and so he also is a trireme if the contradictory statement is true.

And the result is the dictum of Anaxagoras, all things mixed together; so that nothing truly exists. It seems, then, that they are speaking of the Indeterminate; and while they think that they are speaking of what exists, they are really speaking of what does not; for the Indeterminate is that which exists potentially but not actually.

But indeed they must admit the affirmation or negation of any predicate of any subject, for it is absurd that in the case of each term its own negation should be true, and the negation of some other term which is not true of it should not be true. I mean, e.g., that if it is true to say that a man is not a man, it is obviously also true to say that he is or is not a trireme.

Then if the affirmation is true, so must the negation be true; but if the affirmation is not true the negation will be even truer than the negation of the original term itself. [1] Therefore if the latter negation is true, the negation of trireme will also be true; and if this is true, the affirmation will be true too.

And not only does this follow for those who hold this theory, but also that it is not necessary either to affirm or to deny a statement.

For if it is true that X is both man and not-man, clearly he will be neither man nor not-man; for to the two statements there correspond two negations, and if the former is taken as a single statement compounded out of two, the latter is also a single statement and opposite to it.

Again, either this applies to all terms, and the same thing is both white and not-white, and existent and non-existent, and similarly with all other assertions and negations; or it does not apply to all, but only to some and not to others.

And if it does not apply to all, the exceptions will be admitted; but if it does apply to all, again either (a) the negation will be true wherever the affirmation is true, and the affirmation will be true wherever the negation is true, or (d) the negation will be true wherever the assertion is true, but the assertion will not always be true where the negation is true.

And in the latter case there will be something which definitely is not, and this will be a certain belief; and if that it is not is certain and knowable, the opposite assertion will be still more knowable. But if what is denied can be equally truly asserted, it must be either true or false to state the predicates separately and say, e.g., [20] that a thing is white, and again that it is

not-white.

And if it is not-true to state them separately, our opponent does not say what he professes to say, and nothing exists; and how can that which does not exist speak or walk? And again all things will be one, as we said before, and the same thing will be man and God and trireme and the negations of these terms.

For if it is equally possible to assert or deny anything of anything, one thing will not differ from another; for if anything does differ, it will be true and unique. And similarly even if it is possible to make a true statement while separating the predicates, what we have stated follows. Moreover it follows that all statements would be true and all false; and that our opponent himself admits that what he says is false. Besides, it is obvious that discussion with him is pointless, because he makes no real statement.

For he says neither yes nor no, but yes and no; and again he denies both of these and says neither yes nor no; otherwise there would be already some definite statement.

Again, if when the assertion is true the negation is false, and when the latter is true the affirmation is false, it will be impossible to assert and deny with truth the same thing at the same time.

[1] But perhaps it will be said that this is the point at issue.

Again, is the man wrong who supposes that a thing is so or not so, and he who supposes both right? If he is right, what is the meaning of saying that such is the nature of reality? And if he is not right, but is more right than the holder of the first view, reality will at once have a definite nature, and this will be true, and not at the same time not-true.

And if all men are equally right and wrong, an exponent of this view can neither speak nor mean anything, since at the same time he says both yes and no. And if he forms no judgement, but thinks and thinks not indifferently, what difference will there be between him and the vegetables?

Hence it is quite evident that no one, either of those who profess this theory or of any other school, is really in this position.

Otherwise, why does a man walk to Megara and not stay at home, when he thinks he ought to make the journey? Why does he not walk early one morning into a well or ravine, if he comes to it, instead of clearly guarding against doing so, thus showing that he does not think that it is equally good and not good to fall in? Obviously then he judges that the one course is better and the other worse.

And if this is so, he must judge that one thing is man and another not man, [20] and that one thing is sweet and another not sweet. For when, thinking that it is desirable to drink water and see a man, he goes to look for them, he does not look for and judge all things indifferently; and yet he should, if the same thing were equally man and not-man.

But as we have said, there is no one who does not evidently avoid some things and not others. Hence, as it seems, all men form unqualified judgements, if not about all things, at least about what is better or worse.

And if they do this by guesswork and without knowledge, they should be all the more eager for truth; just as a sick man should be more eager for health than a healthy man; for indeed the

man who guesses, as contrasted with him who knows, is not in a healthy relation to the truth.

Again, however much things may be so and not so, yet differences of degree are inherent in the nature of things. For we should not say that 2 and 3 are equally even; nor are he who thinks that 4 is 5, and he who thinks it is 1000, equally wrong: hence if they are not equally wrong, the one is clearly less wrong, and so more right.

If then that which has more the nature of something is nearer to that something, [1] there will be some truth to which the more true is nearer. And even if there is not, still there is now something more certain and true, and we shall be freed from the undiluted doctrine which precludes any mental determination.

From the same view proceeds the theory of Protagoras, and both alike must be either true or false. For if all opinions and appearances are true, everything must be at once true and false; for many people form judgements which are opposite to those of others, and imagine that those who do not think the same as themselves are wrong: hence the same thing must both be and not be.

And if this is so, all opinions must be true; for those who are wrong and those who are right think contrarily to each other. So if reality is of this nature, everyone will be right.

Clearly then both these theories proceed from the same mental outlook. But the method of approach is not the same for all cases; for some require persuasion and others compulsion.

The ignorance of those who have formed this judgement through perplexity is easily remedied, because we are dealing [20] not with the theory but with their mental outlook; but those who hold the theory for its own sake can only be cured by refuting the theory as expressed in their own speech and words.

This view comes to those who are perplexed from their observation of sensible things. (1.) The belief that contradictions and contraries can be true at the same time comes to them from seeing the contraries generated from the same thing.

Then if what is not cannot be generated, the thing must have existed before as both contraries equally—just as Anaxagoras says that everything is mixed in everything; and also Democritus, for he too says that Void and Plenum are present equally in any part, and yet the latter is , and the former is not.

To those, then, who base their judgement on these considerations, we shall say that although in one sense their theory is correct, in another they are mistaken. For being has two meanings, so that there is a sense in which something can be generated from not-being, and a sense in which it cannot; and a sense in which the same thing can at once be and not be; but not in the same respect. For the same thing can be contraries at the same time potentially, but not actually.

And further, we shall request them to conceive another kind also of substance of existing things, in which there is absolutely no motion or destruction or generation. [1] And (2.) similarly the theory that there is truth in appearances has come to some people from an observation of sensible things.

They think that the truth should not be judged by the number or fewness of its upholders; and they say that the same thing seems sweet to some who taste it, and bitter to others; so that if all men were diseased or all insane, except two or three who were healthy or sane, the latter would

seem to be diseased or insane, and not the others.

And further they say that many of the animals as well get from the same things impressions which are contrary to ours, and that the individual himself does not always think the same in matters of sense-perception. Thus it is uncertain which of these impressions are true or false; for one kind is no more true than another, but equally so. And hence Democritus says that either there is no truth or we cannot discover it.

And in general it is because they suppose that thought is sense-perception, and sense-perception physical alteration, that they say that the impression given through sense-perception is necessarily true; for it is on these grounds that both Empedocles and Democritus and practically all the rest have become obsessed by such opinions as these.

For Empedocles says that those who change their bodily condition change their thought:

For according to that which is present to them doth thought increase in men.

And in another passage he says:

[20] And as they change into a different nature, so it ever comes to them to think differently.

And Parmenides too declares in the same way:

For as each at any time hath the temperament of his many-jointed limbs, so thought comes to men. For for each and every man the substance of his limbs is that very thing which thinks; for thought is that which preponderates.

There is also recorded a saying of Anaxagoras to some of his disciples, that things would be for them as they judged them to be.

And they say that in Homer too clearly held this view, because he made Hector, when he was stunned by the blow, lie with thoughts deranged—thus implying that even those who are out of their minds still think, although not the same thoughts. Clearly then, if both are kinds of thought, reality also will be both so and not so.

It is along this path that the consequences are most difficult; for if those who have the clearest vision of such truth as is possible (and these are they who seek and love it most) hold such opinions and make these pronouncements about the truth, surely those who are trying to be philosophers may well despair; for the pursuit of truth will be chasing birds in the air.

[1] But the reason why these men hold this view is that although they studied the truth about reality, they supposed that reality is confined to sensible things, in which the nature of the Indeterminate, i.e. of Being in the sense which we have explained, is abundantly present. (Thus their statements, though plausible, are not true;

this form of the criticism is more suitable than that which Epicharmus applied to Xenophanes.) And further, observing that all this indeterminate substance is in motion, and that no true predication can be made of that which changes, they supposed that it is impossible to make any true statement about that which is in all ways and entirely changeable.

For it was from this supposition that there blossomed forth the most extreme view of those which we have mentioned, that of the professed followers of Heraclitus, and such as Cratylus held, who ended by thinking that one need not say anything, and only moved his finger; and who criticized Heraclitus for saying that one cannot enter the same river twice, for he himself

held that it cannot be done even once.

But we shall reply to this theory also that although that which is changeable supplies them, when it changes, with some real ground for supposing that it is not, yet there is something debatable in this; for that which is shedding any quality retains something of that which is being shed, and something of that which is coming to be must already exist.

[20] And in general if a thing is ceasing to be, there will be something there which is ; and if a thing is coming to be, that from which it comes and by which it is generated must be ; and this cannot go on to infinity. But let us leave this line of argument and remark that quantitative and qualitative change are not the same.

Let it be granted that there is nothing permanent in respect of quantity; but it is by the form that we recognize everything. And again those who hold the theory that we are attacking deserve censure in that they have maintained about the whole material universe what they have observed in the case of a mere minority of sensible things.

For it is only the realm of sense around us which continues subject to destruction and generation, but this is a practically negligible part of the whole; so that it would have been fairer for them to acquit the former on the ground of the latter than to condemn the latter on account of the former.

Further, we shall obviously say to these thinkers too the same as we said some time ago; for we must prove to them and convince them that there is a kind of nature that is not moved

(and yet those who claim that things can at once be and not be are logically compelled to admit rather that all things are at rest than that they are in motion; for there is nothing for them to change into, since everything exists in everything). [1] And as concerning reality, that not every appearance is real, we shall say, first, that indeed the perception, at least of the proper object of a sense, is not false, but the impression we get of it is not the same as the perception.

And then we may fairly express surprise if our opponents raise the question whether magnitudes and colors are really such as they appear at a distance or close at hand, as they appear to the healthy or to the diseased; and whether heavy things are as they appear to the weak or to the strong; and whether truth is as it appears to the waking or to the sleeping.

For clearly they do not really believe the latter alternative—at any rate no one, if in the night he thinks that he is at Athens whereas he is really in Africa, starts off to the Odeum. And again concerning the future (as indeed Plato says) the opinion of the doctor and that of the layman are presumably not equally reliable, e.g. as to whether a man will get well or not.

And again in the case of the senses themselves, our perception of a foreign object and of an object proper to a given sense, or of a kindred object and of an actual object of that sense itself, is not equally reliable; but in the case of colors sight, and not taste, is authoritative, and in the case of flavor taste, and not sight. But not one of the senses ever asserts at the same time of the same object that it is so and not so.

Nor even at another time [20] does it make a conflicting statement about the quality, but only about that to which the quality belongs. I mean, e.g., that the same wine may seem, as the result of its own change or of that of one’s body, at one time sweet and at another not; but sweetness, such as it is when it exists, has never yet changed, and there is no mistake about it, and that which is to be sweet is necessarily of such a nature.

Yet all these theories destroy the possibility of anything's existing by necessity, inasmuch as they destroy the existence of its essence; for the necessary cannot be in one way and in another; and so if anything exists of necessity, it cannot be both so and not so.

And in general, if only the sensible exists, without animate things there would be nothing; for there would be no sense-faculty.

That there would be neither sensible qualities nor sensations is probably true(for these depend upon an effect produced in the percipient), but that the substrates which cause the sensation should not exist even apart from the sensation is impossible.

For sensation is not of itself, but there is something else too besides the sensation, which must be prior to the sensation; [1] because that which moves is by nature prior to that which is moved, and this is no less true if the terms are correlative.

But there are some, both of those who really hold these convictions and of those who merely profess these views, who raise a difficulty; they inquire who is to judge of the healthy man, and in general who is to judge rightly in each particular case. But such questions are like wondering whether we are at any given moment asleep or awake;

and all problems of this kind amount to the same thing. These people demand a reason for everything. They want a starting-point, and want to grasp it by demonstration; while it is obvious from their actions that they have no conviction. But their case is just what we have stated before; for they require a reason for things which have no reason, since the starting-point of a demonstration is not a matter of demonstration.

The first class, then, may be readily convinced of this, because it is not hard to grasp. But those who look only for cogency in argument look for an impossibility, for they claim the right to contradict themselves, and lose no time in doing so.

Yet if not everything is relative, but some things are self-existent, not every appearance will be true; for an appearance is an appearance to someone. And so he who says that all [20] appearances are true makes everything relative.

Hence those who demand something cogent in argument, and at the same time claim to make out a case, must guard themselves by saying that the appearance is true; not in itself, but for him to whom it appears, and at, the time when it appears, and in the way and manner in which it appears. And if they make out a case without this qualification, as a result they will soon contradict themselves;

for it is possible in the case of the same man for a thing to appear honey to the sight, but not to the taste, and for things to appear different to the sight of each of his two eyes, if their sight is unequal. For to those who assert (for the reasons previously stated) that appearances are true, and that all things are therefore equally false and true, because they do not appear the same to all, nor always the same to the same person, but often have contrary appearances at the same time

(since if one crosses the fingers touch says that an object is two, while sight says that it is only one), we shall say but not to the same sense or to the same part of it in the same way and at the same time; so that with this qualification the appearance will be true. [1] But perhaps it is for this reason that those who argue not from a sense of difficulty but for argument's sake are compelled to say that the appearance is not true in itself, but true to the percipient;

and, as we have said before, are compelled also to make everything relative and dependent upon opinion and sensation, so that nothing has happened or will happen unless someone has first formed an opinion about it; otherwise clearly all things would not be relative to opinion.

Further, if a thing is one, it is relative to one thing or to something determinate. And if the same thing is both a half and an equal, yet the equal is not relative to the double.

If to the thinking subject man and the object of thought are the same, man will be not the thinking subject but the object of thought; and if each thing is to be regarded as relative to the thinking subject, the thinking subject will be relative to an infinity of specifically different things.

That the most certain of all beliefs is that opposite statements are not both true at the same time, and what follows for those who maintain that they are true, and why these thinkers maintain this, may be regarded as adequately stated. And since the contradiction of a statement cannot be true at the same time of the same thing, it is obvious that contraries cannot apply at the same time to the same thing.

For in each pair of contraries one is a privation no less than it is a contrary—a privation of substance. And privation is the negation of a predicate [20] to some defined genus. Therefore if it is impossible at the same time to affirm and deny a thing truly, it is also impossible for contraries to apply to a thing at the same time; either both must apply in a modified sense, or one in a modified sense and the other absolutely.

Nor indeed can there be any intermediate between contrary statements, but of one thing we must either assert or deny one thing, whatever it may be. This will be plain if we first define truth and falsehood. To say that what is is not, or that what is not is, is false; but to say that what is is, and what is not is not, is true; and therefore also he who says that a thing is or is not will say either what is true or what is false.

But neither what is nor what is not is said not to be or to be. Further, an intermediate between contraries will be intermediate either as grey is between black and white, or as neither man nor horse is between man and horse. If in the latter sense, it cannot change (for change is from not-good to good, or from good to not-good);

but in fact it is clearly always changing; for change can only be into the opposite and the intermediate. And if it is a true intermediate, in this case too there would be a kind of change into white not from not-white; but in fact this is not seen. [1] Further, the understanding either affirms or denies every object of understanding or thought (as is clear from the definition)

whenever it is right or wrong. When, in asserting or denying, it combines the predicates in one way, it is right; when in the other, it is wrong.

Again, unless it is maintained merely for argument's sake, the intermediate must exist beside all contrary terms; so that one will say what is neither true nor false. And it will exist beside what is and what is not; so that there will be a form of change beside generation and destruction.

Again, there will also be an intermediate in all classes in which the negation of a term implies the contrary assertion; e.g., among numbers there will be a number which is neither odd nor not-odd. But this is impossible, as is clear from the definition.

Again, there will be an infinite progression, and existing things will be not only half as many again, but even more.

For again it will be possible to deny the intermediate in reference both to its assertion and to its negation, and the result will be something; for its essence is something distinct.

Again, when a man is asked whether a thing is white and says no, he has denied nothing except that it is white, and its not-being white is a negation.

Now this view has occurred to certain people in just the same way as other paradoxes have also occurred; for when they cannot find a way out from eristic arguments, they submit to the argument and admit that the conclusion is true. [20] Some, then, hold the theory for this kind of reason, and others because they require an explanation for everything. In dealing with all such persons the starting-point is from definition;

and definition results from the necessity of their meaning something; because the formula, which their term implies, will be a definition. The doctrine of Heraclitus, which says that everything is and is not, seems to make all things true; and that of Anaxagoras seems to imply an intermediate in contradiction, so that all things are false; for when things are mixed, the mixture is neither good nor not-good; and so no statement is true.

It is obvious from this analysis that the one-sided and sweeping statements which some people make cannot be substantially true—some maintaining that nothing is true (for they say that there is no reason why the same rule should not apply to everything as applies to the commensurability of the diagonal of a square), and some that everything is true.

These theories are almost the same as that of Heraclitus. For the theory which says that all things are true and all false also makes each of these statements separately; [1] so that if they are impossible in combination they are also impossible individually. And again obviously there are contrary statements, which cannot be true at the same time. Nor can they all be false, although from what we have said, this might seem more possible.

But in opposing all such theories we must demand, as was said in our discussion above, not that something should be or not be, but some significant statement; and so we must argue from a definition, having first grasped what falsehood or truth means. And if to assert what is true is nothing else than to deny what is false, everything cannot be false; for one part of the contradiction must be true.

Further, if everything must be either asserted or denied, both parts cannot be false; for one and only one part of the contradiction is false. Indeed, the consequence follows which is notorious in the case of all such theories, that they destroy themselves;

for he who says that everything is true makes the opposite theory true too, and therefore his own untrue (for the opposite theory says that his is not true); and he who says that everything is false makes himself a liar.

And if they make exceptions, the one that the opposite theory alone is not true, and the other that his own theory alone is not false, [20] it follows none the less that they postulate an infinite number of true and false statements. For the statement that the true statement is true is also true; and this will go on to infinity.

Nor, as is obvious, are those right who say that all things are at rest; nor those who say that all things are in motion. For if all things are at rest, the same things will always be true and false, whereas this state of affairs is obviously subject to change; for the speaker himself once did not exist, and again he will not exist. And if all things are in motion, nothing will be true, so

everything will be false; but this has been proved to be impossible.

Again, it must be that which is that changes, for change is from something into something. And further, neither is it true that all things are at rest or in motion sometimes, but nothing continuously; for there is something which always moves that which is moved, and the prime mover is itself unmoved.

[34] Beginning means: (a) That part of a thing from which one may first move; eg., a line or a journey has one beginning here , and another at the opposite extremity. [1] (b) The point from which each thing may best come into being; e.g., a course of study should sometimes be begun not from what is primary or from the starting-point of the subject, but from the point from which it is easiest to learn. (c) That thing as a result of whose presence something first comes into being; e.g., as the keel is the beginning of a ship, and the foundation that of a house, and as in the case of animals some thinkers suppose the heart to be the beginning, others the brain, and others something similar, whatever it may be. (d) That from which, although not present in it, a thing first comes into being, and that from which motion and change naturally first begin, as the child comes from the father and mother, and fighting from abuse. (e) That in accordance with whose deliberate choice that which is moved is moved, and that which is changed is changed; such as magistracies, authorities, monarchies and despotisms.

(f) Arts are also called beginnings, especially the architectonic arts. (g) Again, beginning means the point from which a thing is first comprehensible, this too is called the beginning of the thing; e.g. the hypotheses of demonstrations. (Cause can have a similar number of different senses, for all causes are beginnings.)

It is a common property, then, of all beginnings to be the first thing from which something either exists or comes into being or becomes known; and some beginnings are originally inherent in things, while others are not. [20] Hence nature is a beginning, and so is element and understanding and choice and essence and final cause—for in many cases the Good and the Beautiful are the beginning both of knowledge and of motion.

Cause means: (a) in one sense, that as the result of whose presence something comes into being—e.g. the bronze of a statue and the silver of a cup, and the classes which contain these; (b) in another sense, the form or pattern; that is, the essential formula and the classes which contain it—e.g. the ratio 2:1 and number in general is the cause of the octave—and the parts of the formula.

(c) The source of the first beginning of change or rest; e.g. the man who plans is a cause, and the father is the cause of the child, and in general that which produces is the cause of that which is produced, and that which changes of that which is changed. (d) The same as end; i.e. the final cause; e.g., as the end of walking is health.

For why does a man walk? To be healthy, we say, and by saying this we consider that we have supplied the cause. (e) All those means towards the end which arise at the instigation of something else, as, e.g. fat-reducing, purging, drugs and instruments are causes of health; [1] for they all have the end as their object, although they differ from each other as being some instruments, others actions.

These are roughly all the meanings of cause, but since causes are spoken of with various meanings, it follows that there are several causes (and that not in an accidental sense) of the same thing. E.g., both statuary and bronze are causes of the statue; not in different connections,

but qua statue. However, they are not causes in the same way, but the one as material and the other as the source of motion. And things are causes of each other; as e.g. labor of vigor, and vigor of labor—but not in the same way; the one as an end , and the other as source of motion .

And again the same thing is sometimes the cause of contrary results; because that which by its presence is the cause of so-and-so we sometimes accuse of being, by its absence, the cause of the contrary—as, e.g., we say that the absence of the pilot is the cause of a capsize, whereas his presence was the cause of safety.

And both, presence and privation, are moving causes.

Now there are four senses which are most obvious under which all the causes just described may be classed.

The components of syllables; the material of manufactured articles; fire, earth and all such bodies; the parts of a whole; [20] and the premisses of a syllogistic conclusion; are causes in the material sense. Of these some are causes as substrate: e.g. the parts; and others as essence : the whole, and the composition, and the form.

The seed and the physician and the contriver and in general that which produces, all these are the source of change or stationariness. The remainder represent the end and good of the others; for the final cause tends to be the greatest good and end of the rest.

Let it be assumed that it makes no difference whether we call it good or apparent good. In kind , then, there are these four classes of cause.

The modes of cause are numerically many, although these too are fewer when summarized.

For causes are spoken of in many senses, and even of those which are of the same kind, some are causes in a prior and some in a posterior sense; e.g., the physician and the expert are both causes of health; and the ratio 2:1 and number are both causes of the octave; and the universals which include a given cause are causes of its particular effects.

Again, a thing may be a cause in the sense of an accident, and the classes which contain accidents; e.g., the cause of a statue is in one sense Polyclitus and in another a sculptor, because it is an accident of the sculptor to be Polyclitus. [1] And the universal terms which include accidents are causes; e.g., the cause of a statue is a man, or even, generally, an animal; because Polyclitus is a man, and man is an animal.

And even of accidental causes some are remoter or more proximate than others; e.g., the cause of the statue might be said to be white man or cultured man, and not merely Polyclitus or man.

And besides the distinction of causes as proper and accidental , some are termed causes in a potential and others in an actual sense; e.g., the cause of building is either the builder or the builder who builds.

And the same distinctions in meaning as we have already described will apply to the effects of the causes; e.g. to this statue, or a statue, or generally an image; and to this bronze, or bronze, or generally material. And it is the same with accidental effects. Again, the proper and accidental senses will be combined; e.g., the cause is neither Polyclitus nor a sculptor but the sculptor Polyclitus.

However, these classes of cause are in all six in number, each used in two senses. Causes are (1.) particular, (2.) generic, (3.) accidental, (4.) generically accidental; and these may be either stated

singly or (5, 6) in combination; [20] and further they are all either actual or potential.

And there is this difference between them, that actual and particular causes coexist or do not coexist with their effects (e.g. this man giving medical treatment with this man recovering his health, and this builder with this building in course of erection); but potential causes do not always do so; for the house and the builder do not perish together.

Element means (a) the primary immanent thing, formally indivisible into another form, of which something is composed. E.g., the elements of a sound are the parts of which that sound is composed and into which it is ultimately divisible, and which are not further divisible into other sounds formally different from themselves. If an element be divided, the parts are formally the same as the whole: e.g., a part of water is water; but it is not so with the syllable.

(b) Those who speak of the elements of bodies similarly mean the parts into which bodies are ultimately divisible, and which are not further divisible into other parts different in form. And whether they speak of one such element or of more than one, this is what they mean.

(c) The term is applied with a very similar meaning to the elements of geometrical figures, and generally to the elements of demonstrations; for the primary demonstrations which are contained in a number of other demonstrations [1] are called elements of demonstrations. Such are the primary syllogisms consisting of three terms and with one middle term.

(d) The term element is also applied metaphorically to any small unity which is useful for various purposes; and so that which is small or simple or indivisible is called an element.

(e) Hence it comes that the most universal things are elements; because each of them, being a simple unity, is present in many things—either in all or in as many as possible. Some too think that unity and the point are first principles.

(f) Therefore since what are called genera are universal and indivisible (because they have no formula), some people call the genera elements, and these rather than the differentia, because the genus is more universal. For where the differentia is present, the genus also follows; but the differentia is not always present where the genus is. And it is common to all cases that the element of each thing is that which is primarily inherent in each thing.

Nature means: (a) in one sense, the genesis of growing things—as would be suggested by pronouncing the υ of φύσις long—and (b) in another, that immanent thing from which a growing thing first begins to grow. (c) The source from which the primary motion in every natural object is induced in that object as such. [20] All things are said to grow which gain increase through something else by contact and organic unity (or adhesion, as in the case of embryos).

Organic unity differs from contact; for in the latter case there need be nothing except contact, but in both the things which form an organic unity there is some one and the same thing which produces, instead of mere contact, a unity which is organic, continuous and quantitative (but not qualitative).

Again, nature means (d) the primary stuff, shapeless and unchangeable from its own potency, of which any natural object consists or from which it is produced; e.g., bronze is called the nature of a statue and of bronze articles, and wood that of wooden ones, and similarly in all other cases.

For each article consists of these natures, the primary material persisting. It is in this sense that men call the elements of natural objects the nature, some calling it fire, others earth or air or water, others something else similar, others some of these, and others all of them.

Again in another sense nature means (e) the substance of natural objects; as in the case of those who say that the nature is the primary composition of a thing, or as Empedocles says: [1] Of nothing that exists is there nature, but only mixture and separation of what has been mixed; nature is but a name given to these by men.

Hence as regards those things which exist or are produced by nature, although that from which they naturally are produced or exist is already present, we say that they have not their nature yet unless they have their form and shape.

That which comprises both of these exists by nature; e.g. animals and their parts. And nature is both the primary matter (and this in two senses: either primary in relation to the thing, or primary in general; e.g., in bronze articles the primary matter in relation to those articles is bronze, but in general it is perhaps water—that is if all things which can be melted are water) and the form or essence, i.e. the end of the process, of generation. Indeed from this sense of nature, by an extension of meaning, every essence in general is called nature, because the nature of anything is a kind of essence.

From what has been said, then, the primary and proper sense of nature is the essence of those things which contain in themselves as such a source of motion; for the matter is called nature because it is capable of receiving the nature, and the processes of generation and growth are called nature because they are motions derived from it. And nature in this sense is the source of motion in natural objects, which is somehow inherent in them, either potentially or actually.

[20] Necessary means: (a) That without which, as a concomitant condition, life is impossible; e.g. respiration and food are necessary for an animal, because it cannot exist without them. (b) The conditions without which good cannot be or come to be, or without which one cannot get rid or keep free of evil—e.g., drinking medicine is necessary to escape from ill-health, and sailing to Aegina is necessary to recover one’s money.

(c) The compulsory and compulsion; i.e. that which hinders and prevents, in opposition to impulse and purpose. For the compulsory is called necessary, and hence the necessary is disagreeable; as indeed Evenus says: For every necessary thing is by nature grievous.

And compulsion is a kind of necessity, as Sophocles says: Compulsion makes me do this of necessity.

And necessity is held, rightly, to be something inexorable; for it is opposed to motion which is in accordance with purpose and calculation. (d) Again, what cannot be otherwise we say is necessarily so.

It is from this sense of necessary that all others are somehow derived; for the term compulsory is used of something which it is necessary for one to do or suffer [1] only when it is impossible to act according to impulse, because of the compulsion: which shows that necessity is that because of which a thing cannot be otherwise; and the same is true of the concomitant conditions of living and of the good. For when in the one case good, and in the other life or existence, is impossible without certain conditions, these conditions are necessary, and the cause is a kind of necessity.

(e) Again, demonstration is a necessary thing, because a thing cannot be otherwise if the demonstration has been absolute. And this is the result of the first premisses, when it is impossible for the assumptions upon which the syllogism depends to be otherwise.

Thus of necessary things, some have an external cause of their necessity, and others have not, but it is through them that other things are of necessity what they are.

Hence the necessary in the primary and proper sense is the simple , for it cannot be in more than one condition. Hence it cannot be in one state and in another; for if so it would ipso facto be in more than one condition. Therefore if there are certain things which are eternal and immutable, there is nothing in them which is compulsory or which violates their nature.

The term one is used (1.) in an accidental, (2.) in an absolute sense. (1.) In the accidental sense it is used as in the case of Coriscus and cultured and cultured Coriscus (for Coriscus and cultured and cultured Coriscus mean the same);

and cultured and upright [20] and cultured upright Coriscus. For all these terms refer accidentally to one thing; upright and cultured because they are accidental to one substance, and cultured and Coriscus because the one is accidental to the other.

And similarly in one sense cultured Coriscus is one with Coriscus, because one part of the expression is accidental to the other, e.g. cultured to Coriscus; and cultured Coriscus is one with upright Coriscus,

because one part of each expression is one accident of one and the same thing. It is the same even if the accident is applied to a genus or a general term; e.g., man and cultured man are the same, either because cultured is an accident of man, which is one substance, or because both are accidents of some individual, e.g. Coriscus.

But they do not both belong to it in the same way; the one belongs presumably as genus in the substance, and the other as condition or affection of the substance. Thus all things which are said to be one in an accidental sense are said to be so in this way.

(2.) Of those things which are said to be in themselves one, (a) some are said to be so in virtue of their continuity; e.g., a faggot is made continuous by its string, and pieces of wood by glue; [1] and a continuous line, even if it is bent, is said to be one, just like each of the limbs; e.g. the leg or arm. And of these things themselves those which are naturally continuous are one in a truer sense than those which are artificially continuous.

Continuous means that whose motion is essentially one, and cannot be otherwise; and motion is one when it is indivisible, i.e. indivisible in time . Things are essentially continuous which are one not by contact only; for if you put pieces of wood touching one another you will not say that they are one piece of wood, or body, or any other continuous thing.

And things which are completely continuous are said to be one even if they contain a joint, and still more those things which contain no joint; e.g., the shin or the thigh is more truly one than the leg, because the motion of the leg may not be one.

And the straight line is more truly one than the bent. We call the line which is bent and contains an angle both one and not one, because it may or may not move all at once; but the straight line always moves all at once, and no part of it which has magnitude is at rest while another moves, as in the bent line.

(b) Another sense of one is that the substrate is uniform in kind.

Things are uniform whose form is indistinguishable to sensation; [20] and the substrate is either that which is primary, or that which is final in relation to the end. For wine is said to be one, and water one, as being something formally indistinguishable. And all liquids are said to be one (e.g. oil and wine), and melted things; because the ultimate substrate of all of them is the same, for all these things are water or vapor.

(c) Things are said to be one whose genus is one and differs in its opposite differentiae. All these things too are said to be one because the genus, which is the substrate of the differentiae, is one (e.g., horse, man and dog are in a sense one, because they are all animals); and that in a way very similar to that in which the matter is one.

Sometimes these things are said to be one in this sense, and sometimes their higher genus is said to be one and the same (if they are final species of their genus)—the genus, that is, which is above the genera of which their proximate genus is one; e.g., the isosceles and equilateral triangles are one and the same figure (because they are both triangles), but not the same triangles.

(d) Again, things are said to be one when the definition stating the essence of one is indistinguishable from a definition explaining the other; for in itself every definition is distinguishable into genus and differentiae. In this way that which increases and decreases is one, because its definition is one; just as in the case of planes the definition of the form is one.

[1] And in general those things whose concept, which conceives the essence, is indistinguishable and cannot be separated either in time or in place or in definition, are in the truest sense one; and of these such as are substances are most truly one. For universally such things as do not admit of distinction are called one in so far as they do not admit of it; e.g., if man qua man does not admit of distinction, he is one man; and similarly if qua animal, he is one animal; and if qua magnitude, he is one magnitude.

Most things, then, are said to be one because they produce, or possess, or are affected by, or are related to, some other one thing; but some are called one in a primary sense, and one of these is substance. It is one either in continuity or in form or in definition; for we reckon as more than one things which are not continuous, or whose form is not one, or whose definition is not one.

Again, in one sense we call anything whatever one if it is quantitative and continuous; and in another sense we say that it is not one unless it is a whole of some kind, i.e. unless it is one in form (e.g., if we saw the parts of a shoe put together anyhow, we should not say that they were one — except in virtue of their continuity; but only if they were so put together as to be a shoe, and to possess already some one form).

Hence the circumference of a circle is of all lines the most truly one, because it is whole and complete.

The essence of one is to be a kind of starting point of number; for the first measure is a starting point, because that by which first we gain knowledge of a thing is the first measure of each class of objects. [20] The one, then, is the starting-point of what is knowable in respect of each particular thing. But the unit is not the same in all classes,

for in one it is the quarter-tone, and in another the vowel or consonant; gravity has another unit,

and motion another. But in all cases the unit is indivisible, either quantitatively or formally.

Thus that which is quantitatively and qua quantitative wholly indivisible and has no position is called a unit; and that which is wholly indivisible and has position, a point; that which is divisible in one sense, a line; in two senses, a plane; and that which is quantitatively divisible in all three senses, a body.

And reversely that which is divisible in two senses is a plane, and in one sense a line; and that which is in no sense quantitatively divisible is a point or a unit; if it has no position, a unit, and if it has position, a point.

Again, some things are one numerically, others formally, others generically, and others analogically; numerically, those whose matter is one; formally, those whose definition is one; generically, those which belong to the same category; and analogically, those which have the same relation as something else to some third object.

In every case the latter types of unity are implied in the former: e.g., all things which are one numerically are also one formally, but not all which are one formally are one numerically; [1] and all are one generically which are one formally, but such as are one generically are not all one formally, although they are one analogically; and such as are one analogically are not all one generically.

It is obvious also that many will have the opposite meanings to one. Some things are called many because they are not continuous; others because their matter (either primary or ultimate) is formally divisible; others because the definitions of their essence are more than one.

Being means (1.) accidental being, (2.) absolute being. (1.) E.g., we say that the upright person is cultured, and that the man is cultured, and that the cultured person is a man; very much as we say that the cultured person builds, because the builder happens to be cultured, or the cultured person a builder; for in this sense X is Y means that Y is an accident of X.

And so it is with the examples cited above; for when we say that the man is cultured and the cultured person is a man or the white is cultured or the cultured is white, in the last two cases it is because both predicates are accidental to the same subject, and in the first case because the predicate is accidental to what is ; and we say that the cultured is a man because the cultured is accidental to a man.

(Similarly not-white is said to be, because the subject of which not-white is an accident, is .) [20] These, then, are the senses in which things are said to be accidentally: either because both predicates belong to the same subject, which is ; or because the predicate belongs to the subject, which is ; or because the subject to which belongs that of which it is itself predicated itself is .

(2.) The senses of essential being are those which are indicated by the figures of predication; for being has as many senses as there are ways of predication. Now since some predicates indicate (a) what a thing is, and others its (b) quality, (c) quantity, (d) relation, (e) activity or passivity, (f) place, (g) time, to each of these corresponds a sense of being.

There is no difference between the man is recovering and the man recovers; or between the man is walking or cutting and the man walks or cuts; and similarly in the other cases.

(3.) Again, to be and is mean that a thing is true, and not to be that it is false.

Similarly too in affirmation and negation; e.g., in Socrates is cultured is means that this is true; or in Socrates is not-white that this is true; but in the diagonal is not commensurableis not means that the statement is false. [1] (4.) Again, to be or is means that some of these statements can be made in virtue of a potentiality and others in virtue of an actuality.

For we say that both that which sees potentially and that which sees actually is a seeing thing. And in the same way we call understanding both that which can use the understanding, and that which does ; and we call tranquil both that in which tranquillity is already present, and that which is potentially tranquil.

Similarly too in the case of substances. For we say that Hermes is in the stone, and the half of the line in the whole; and we call corn what is not yet ripe. But when a thing is potentially existent and when not, must be defined elsewhere.

Substance means (a) simple bodies, e.g. earth, fire, water and the like; and in general bodies, and the things, animal or divine, including their parts, which are composed of bodies. All these are called substances because they are not predicated of any substrate, but other things are predicated of them.

(b) In another sense, whatever, being immanent in such things as are not predicated of a substrate, is the cause of their being; as, e.g., the soul is the cause of being for the animal.

(c) All parts immanent in things which define and indicate their individuality, and whose destruction causes the destruction of the whole; as, e.g., the plane is essential to the body (as some hold) and the line to the plane. [20] And number in general is thought by some to be of this nature, on the ground that if it is abolished nothing exists, and that it determines everything.

(d) Again, the essence , whose formula is the definition, is also called the substance of each particular thing.

Thus it follows that substance has two senses: the ultimate subject, which cannot be further predicated of something else; and whatever has an individual and separate existence. The shape and form of each particular thing is of this nature.

The same means (a) accidentally the same. E.g., white and cultured are the same because they are accidents of the same subject; and man is the same as cultured, because one is an accident of the other; and cultured is the same as man because it is an accident of man; and cultured man is the same as each of the terms cultured and man, and vice versa; for both man and cultured are used in the same way as cultured man, and the latter in the same way as the former.

Hence none of these predications can be made universally. For it is not true to say that every man is the same as the cultured; because universal predications are essential to things, [1] but accidental predications are not so, but are made of individuals and with a single application. Socrates and cultured Socrates seem to be the same; but Socrates is not a class-name, and hence we do not say every Socrates as we say every man.

Some things are said to be the same in this sense, but (b) others in an essential sense, in the same number of senses as the one is essentially one; for things whose matter is formally or numerically one, and things whose substance is one, are said to be the same. Thus sameness is clearly a kind of unity in the being, either of two or more things, or of one thing treated as more

than one; as, e.g., when a thing is consistent with itself; for it is then treated as two.

Things are called other of which either the forms or the matter or the definition of essence is more than one; and in general other is used in the opposite senses to same.

Things are called different which, while being in a sense the same, are other not only numerically, but formally or generically or analogically; also things whose genus is not the same; and contraries; and all things which contain otherness in their essence.

Things are called like which have the same attributes in all respects; or more of those attributes the same than different; or whose quality is one. Also that which has a majority or the more important of those attributes of something else in respect of which change is possible (i.e. the contraries) is like that thing. And unlike is used in the opposite senses to like.

[20] The term opposite is applied to (a) contradiction; (b) contraries; (c) relative terms; (d) privation; (e) state; (f) extremes; e.g. in the process of generation and destruction. And (g) all things which cannot be present at the same time in that which admits of them both are called opposites; either themselves or their constituents. Grey and white do not apply at the same time to the same thing, and hence their constituents are opposite.

Contrary means: (a) attributes, generically different, which cannot apply at the same time to the same thing. (b) The most different attributes in the same genus; or (c) in the same subject; or (d) falling under the same faculty. (e) Things whose difference is greatest absolutely, or in genus, or in species.

Other things are called contrary either because they possess attributes of this kind, or because they are receptive of them, or because they are productive of or liable to them, or actually produce or incur them, or are rejections or acquisitions or possessions or privations of such attributes.

And since one and being have various meanings, all other terms which are used in relation to one and being must vary in meaning with them; and so same, other and contrary must so vary, and so must have a separate meaning in accordance with each category.

Things are called other in species (a) which belong to the same genus and are not subordinate one to the other; [1] or (b) which are in the same genus and contain a differentia; or (c) which contain a contrariety in their essence.

(d) Contraries, too (either all of them or those which are called so in a primary sense), are other in species than one another; and (e) so are all things of which the formulae are different in the final species of the genus (e.g., man and horse are generically indivisible, but their formulae are different); and (f) attributes of the same substance which contain a difference. The same in species has the opposite meanings to these.

Prior and posterior mean: (1.) (a) In one sense (assuming that there is in each genus some primary thing or starting-point) that which is nearer to some starting-point, determined either absolutely and naturally, or relatively, or locally, or by some agency; e.g., things are prior in space because they are nearer either to some place naturally determined, such as the middle or the extreme, or to some chance relation; and that which is further is posterior.

(b) In another sense, prior or posterior in time . Some things are prior as being further from the present, as in the case of past events (for the Trojan is prior to the Persian war, because it is

further distant from the present); and others as being nearer the present, as in the case of future events (for the Nemean are prior to the Pythian games because they are nearer to the present, regarded as a starting-point and as primary).

[20] (c) In another sense, in respect of motion (for that which is nearer to the prime mover is prior; e.g., the boy is prior to the man). This too is a kind of starting point in an absolute sense. (d) In respect of potency; for that which is superior in potency, or more potent, is prior. Such is that in accordance with whose will the other, or posterior, thing must follow, so that according as the former moves or does not move, the latter is or is not moved. And the will is a starting-point.

(e) In respect of order; such are all things which are systematically arranged in relation to some one determinate object. E.g., he who is next to the leader of the chorus is prior to him who is next but one, and the seventh string is prior to the eighth; for in one case the leader is the starting-point, and in the other the middle string.

In these examples prior has this sense; but (2.) in another sense that which is prior in knowledge is treated as absolutely prior; and of things which are prior in this sense the prior in formula are different from the prior in perception . Universals are prior in formula, but particulars in perception. And in formula the attribute is prior to the concrete whole: e.g. cultured to the cultured man; for the formula will not be a whole without the part.

Yet cultured cannot exist apart from some cultured person.

Again, (3.) attributes of prior subjects are called prior; e.g., straightness is prior to smoothness, [1] because the former is an attribute of the line in itself, and the latter of a surface.

Some things, then, are called prior and posterior in this sense; but others (iv.) in virtue of their nature and substance, namely all things which can exist apart from other things, whereas other things cannot exist without them. This distinction was used by Plato.(And since being has various meanings, (a) the substrate, and therefore substance, is prior; (b) potential priority is different from actual priority.

Some things are prior potentially, and some actually; e.g., potentially the half-line is prior to the whole, or the part to the whole, or the matter to the substance; but actually it is posterior, because it is only upon dissolution that it will actually exist.)

Indeed, in a sense all things which are called prior or posterior are so called in this connection; for some things can exist apart from others in generation (e.g. the whole without the parts), and others in destruction (e.g. the parts without the whole). And similarly with the other examples.

Potency means: (a) the source of motion or change which is in something other than the thing changed, or in it qua other. E.g., the science of building is a potency which is not present in the thing built; but the science of medicine, which is a potency, may be present in the patient, although not qua patient.

Thus potency means the source in general of change or motion in another thing, or in the same thing qua other; [20] or the source of a thing's being moved or changed by another thing, or by itself qua other (for in virtue of that principle by which the passive thing is affected in any way we call it capable of being affected; sometimes if it is affected at all, and sometimes not in respect of every affection, but only if it is changed for the better).

(b) The power of performing this well or according to intention; because sometimes we say that those who can merely take a walk, or speak, without doing it as well as they intended, cannot speak or walk. And similarly in the case of passivity.

(c) All states in virtue of which things are unaffected generally, or are unchangeable, or cannot readily deteriorate, are called potencies. For things are broken and worn out and bent and in general destroyed not through potency but through impotence and deficiency of some sort; and things are unaffected by such processes which are scarcely or slightly affected because they have a potency and are potent and are in a definite state.

Since potency has all these meanings, potent (or capable) will mean (a) that which contains a source of motion or change (for even what is static is potent in a sense) which takes place in another thing, or in itself qua other. [1] (b) That over which something else has a potency of this kind. (c) That which has the potency of changing things, either for the worse or for the better (for it seems that even that which perishes is capable of perishing; otherwise, if it had been incapable, it would not have perished. As it is, it has a kind of disposition or cause or principle which induces such an affection.

Sometimes it seems to be such as it is because it has something, and sometimes because it is deprived of something; but if privation is in a sense a state or habit, everything will be potent through having something; and so a thing is potent in virtue of having a certain habit or principle, and also in virtue of having the privation of that habit, if it can have privation; and if privation is not in a sense habit, the term potent is equivocal).

(d) A thing is potent if neither any other thing nor itself qua other contains a potency or principle destructive of it. (e) All these things are potent either because they merely might chance to happen or not to happen, or because they might do so well . Even in inanimate things this kind of potency is found; e.g. in instruments; for they say that one lyre can be played, and another not at all, if it has not a good tone.

Impotence is a privation of potency—a kind of abolition of the principle which has been described—either in general or in something which would naturally possess that principle, or even at a time when it would naturally already possess it (for we should not use impotence—in respect of begetting—in the same sense of a boy, a man and a eunuch). [20] Again, there is an impotence corresponding to each kind of potency; both to the kinetic and to the successfully kinetic.

Some things are said to be impotent in accordance with this meaning of impotence, but others in a different sense, namely possible and impossible. Impossible means: (a) that whose contrary is necessarily true; e.g., it is impossible that the diagonal of a square should be commensurable with the sides, because such a thing is a lie, whose contrary is not only true but inevitable. Hence that it is commensurable is not only a lie but necessarily a lie.

And the contrary of the impossible, i.e. the possible, is when the contrary is not necessarily a lie; e.g., it is possible that a man should be seated, for it is not necessarily a lie that he should not be seated. Possible, then, means in one sense, as we have said, that which is not necessarily a lie; in another, that which is true; and in another, that which may be true.

(The power in geometry is so called by an extension of meaning.)

These are the senses of potent which do not correspond to potency. Those which do correspond

to it all refer to the first meaning, [1] i.e. a source of change which exists in something other than that in which the change takes place, or in the same thing qua other.

Other things are said to be potent because something else has such a potency over them; others because it does not possess it; others because it possesses it in a particular way. The term impotent is similarly used. Thus the authoritative definition of potency in the primary sense will be a principle producing change, which is in something other than that in which the change takes place, or in the same thing qua other.

Quantity means that which is divisible into constituent parts, each or every one of which is by nature some one individual thing. Thus plurality, if it is numerically calculable, is a kind of quantity; and so is magnitude, if it is measurable. Plurality means that which is potentially divisible into non-continuous parts; and magnitude that which is potentially divisible into continuous parts. Of kinds of magnitude, that which is continuous in one direction is length; in two directions, breadth; in three, depth.

And of these, plurality, when limited, is a number; length, a line; breadth, a plane; depth, a body. Again, some things are essentially quantitative, but others only accidentally; e.g. the line is essentially, but cultured accidentally quantitative.

And of the former class some are quantitative in virtue of their substance, e.g. the fine (because the definition which describes it is quantitative in some form); [20] and others are attributes and conditions of a substance of this kind— e.g., much and little, long and short, broad and narrow, deep and shallow, heavy and light, etc.

Moreover, great and small, and greater and smaller, whether used absolutely or relatively to one another, are essential attributes of quantity; by an extension of meaning, however, these terms are also applied to other things.

Of things called quantitative in an accidental sense, one kind is so called in the sense in which we said above that cultured or white is quantitative—because the subject to which they belong is quantitative; and others in the sense that motion and time are so called—for these too are said in a sense to be quantitative and continuous, since the subjects of which they are attributes are divisible. I mean, not the thing moved, but that through or along which the motion has taken place; for it is because the latter is quantitative that the motion is quantitative, and because the motion is quantitative that the time is also.

Quality means (a) in one sense, the differentia of essence; e.g., a man is an animal of a certain quality because he is two-footed; and so is a horse, because it is four-footed. Also a circle is a geometrical figure of a certain quality, because it has no angles; [1] which shows that the essential differentia is quality.

In this one sense, then, quality means differentia of essence; but (b) in another it is used as of immovable and mathematical objects, in the sense that numbers are in a way qualitative—e.g. such as are composite and are represented geometrically not by a line but by a plane or solid (these are products respectively of two and of three factors)—and in general means that which is present besides quantity in the essence. For the essence of each number is that which goes into it once; e.g. that of 6 is not what goes twice or three times, but what goes once; for 6 is once 6.

(c) All affections of substance in motion in respect of which bodies become different when they

(the affections) change—e.g. heat and cold, whiteness and blackness, heaviness and lightness, etc. (d) The term is used with reference to goodness and badness, and in general to good and bad.

Thus there are, roughly speaking, two meanings which the term quality can bear, and of these one is more fundamental than the other. Quality in the primary sense is the differentia of the essence; and quality in numbers falls under this sense, because it is a kind of differentia of essences, but of things either not in motion or not qua in motion. Secondly, there are the affections of things in motion qua in motion, and the differentiae of motions.

Goodness and badness fall under these affections, [20] because they denote differentiae of the motion or functioning in respect of which things in motion act or are acted upon well or badly. For that which can function or be moved in such-and-such a way is good, and that which can function in such-and-such a way and in the contrary way is bad. Quality refers especially to good and bad in the case of living things, and of these especially in the case of such as possess choice.

Things are called relative (a) In the sense that the double is relative to the half, and the triple to the third; and in general the many times greater to the many times smaller, and that which exceeds to the thing exceeded. (b) In the sense that the thing which heats or cuts is relative to the thing heated or cut; and in general the active to the passive. (c) In the sense that the measurable is relative to the measure, and the knowable to knowledge, and the sensible to sensation.

(a) In the first sense they are said to be numerically relative; either simply, or in a definite relation to numbers or to 1. E.g., the double in relation to 1 is a definite number; the many times as great is in a numerical relation to 1, but not in a definite relation such as this or that;

[1] the relation of that which is 1.5 times something else to that something is a definite numerical relation to a number; and that which is (n+1)/n times something else is in an indefinite relation to a number, just as the many times as great is in an indefinite relation to 1.

The relation of that which exceeds to that which is exceeded is numerically quite indefinite, for number is commensurate, and is not predicated of the incommensurate; whereas that which exceeds, in relation to that which is exceeded, is so much plus something more; and this something more is indefinite, for it is indifferently equal or not equal to the so much.

Thus not only are all these things said to be relative in respect of number, but also the equal and like and same, though in another way: for all these terms are used in respect of one. Things are the same whose essence is one; like whose quality is one; equal whose quantity is one. Now one is the starting-point and standard of number; and so all these relations involve number, though not all in the same way.

(b) Active and passive things are called relative in virtue of an active or passive potentiality or actualization of the potentialities; e.g., that which can heat is called relative to that which can be heated, because it can heat; and again the thing heating is called relative to the thing heated, and the thing cutting to the thing cut, because their potentialities are actualized. Numerical relations, on the other hand, are not actualized [20] (except as has been described elsewhere); they have no actualizations in respect of motion.

Of things potentially relative, some are further relative in respect of particular times; as, e.g., that which has made or will make is relative to that which has been or will be made. It is in this

way that a father is called father of a son; the one has acted, and the other has been acted upon, in a particular way. Again, some things are relative in virtue of a privation of their potentiality; such is the impossible and all similar terms, e.g. the invisible.

Thus relative terms which involve number and potentiality are all relative because their very essence contains a reference to something else; but not because something else is related to their essence. But (c) that which is measurable or knowable or thinkable is called relative because something else is related to its essence.

For thinkable signifies that there is a thought which thinks it; but thought is not relative to that of which it is the thought (for then the same thing would have been said twice). And similarly sight is the sight of something; not of that of which it is the sight, although this is of course true—it is relative to some color or other similar thing.

To describe it in the other way—the sight of the object of sight—would be to say the same thing twice. [1] Things, then, which are called relative of their own nature are so called, some in these senses, and others because the classes which contain them are of this kind. E.g., medicine is reckoned as relative because its genus, science, is thought to be a relative thing.

Further, there are the properties in virtue of which the things which possess them are called relative; e.g., equality is relative because the equal is relative, and similarity because the similar is relative. Other things are accidentally relative; e.g., a man is relative because he happens to be double something else, and double is a relative term; or white is relative if the same thing happens to be white as well as double.

Perfect or complete means: (a) That outside which it is impossible to find even a single one of its parts; e.g., the complete time of each thing is that outside which it is impossible to find any time which is a part of it. (b) That which, in respect of goodness or excellence, cannot be surpassed in its kind; e.g., a doctor and a musician are perfect when they have no deficiency in respect of the form of their peculiar excellence.

And thus by an extension of the meaning we use the term in a bad connection, and speak of a perfect humbug and a perfect thief; since indeed we call them good— [20] e.g. a good thief and a good humbug.

(c) And goodness is a kind of perfection. For each thing, and every substance, is perfect when, and only when, in respect of the form of its peculiar excellence, it lacks no particle of its natural magnitude. (d) Things which have attained their end, if their end is good, are called perfect; for they are perfect in virtue of having attained the end.

Hence, since the end is an ultimate thing, we extend the meaning of the term to bad senses, and speak of perishing perfectly or being perfectly destroyed, when the destruction or calamity falls short in no respect but reaches its extremity. Hence, by an extension of the meaning, death is called an end, because they are both ultimate things. And the ultimate object of action is also an end.

Things, then, which are called perfect in themselves are so called in all these senses; either because in respect of excellence they have no deficiency and cannot be surpassed, and because no part of them can be found outside them; or because, in general, they are unsurpassed in each particular class, and have no part outside. [1] All other things are so called in virtue of these, because they either produce or possess something of this kind, or conform to it, or are

referred in some way or other to things which are perfect in the primary sense.

Limit means: (a) The furthest part of each thing, and the first point outside which no part of a thing can be found, and the first point within which all parts are contained. (b) Any form of magnitude or of something possessing magnitude.

(c) The end of each thing. (This end is that to which motion and action proceed, and not the end from which. But sometimes it is both the end from which and the end to which, i.e. the final cause.) (d) The reality or essence of each thing; for this is the limit of our knowledge of it, and if it is a limit of the knowledge, it is also a limit of the thing. Thus it is obvious that limit has not only as many senses as beginning but even more; because the beginning is a kind of limit, but not every limit is a beginning.

That in virtue of which has various meanings. (a) The form or essence of each individual thing; e.g., that in virtue of which a man is good is goodness itself. (b) The immediate substrate in which a thing is naturally produced; as, e.g., color is produced in the surface of things. Thus that in virtue of which in the primary sense is the form , and in the secondary sense, as it were, the matter of each thing, and the immediate substrate.

And in general that in virtue of which will exist in the same number of senses as cause. [20] For we say indifferently in virtue of what has he come? or for what reason has he come? and in virtue of what has he inferred or inferred falsely? or what is the cause of his inference or false inference? (And further, there is the positional sense of καθ’ ő, in which he stands, or in which he walks; all these examples denote place or position.)

Hence in virtue of itself must also have various meanings. It denotes (a) The essence of each particular; e.g., Callias is in virtue of himself Callias and the essence of Callias. (b) Everything contained in the definition; e.g., Callias is in virtue of himself an animal, because animal is present in the definition, since Callias is a kind of animal.

(c) Any attribute which a thing has received directly in itself or in any of its parts; e.g., the surface is white in virtue of itself; and man lives in virtue of himself, because the soul is a part of the man, and life is directly contained in it. (d) That which has no other cause. Man has many causes: animal, twofooted, etc.; but nevertheless man is in virtue of himself man. (e) All things which belong to a thing alone and qua alone; and hence that which is separate is in virtue of itself.

[1] Disposition means arrangement of that which has parts, either in space or in potentiality or in form. It must be a kind of position, as indeed is clear from the word, disposition.

Having means (a) In one sense an activity, as it were, of the haver and the thing had, or as in the case of an action or motion; for when one thing makes and another is made, there is between them an act of making. In this way between the man who has a garment and the garment which is had, there is a having. Clearly, then, it is impossible to have a having in this sense; for there will be an infinite series if we can have the having of what we have.

But (b) there is another sense of having which means a disposition, in virtue of which the thing which is disposed is disposed well or badly, and either independently or in relation to something else. E.g., health is a state, since it is a disposition of the kind described. Further, any part of such a disposition is called a state; and hence the excellence of the parts is a kind of state.

Affection means (a) In one sense, a quality in virtue of which alteration is possible; e.g., whiteness and blackness, sweetness and bitterness, heaviness and lightness, etc. (b) The

actualizations of these qualities; i.e. the alterations already realized. (c) More particularly, hurtful alterations and motions, [20] and especially hurts which cause suffering. (d) Extreme cases of misfortune and suffering are called affections.

We speak of privation: (a) In one sense, if a thing does not possess an attribute which is a natural possession, even if the thing itself would not naturally possess it; e.g., we say that a vegetable is deprived of eyes. (b) If a thing does not possess an attribute which it or its genus would naturally possess. E.g., a blind man is not deprived of sight in the same sense that a mole is; the latter is deprived in virtue of its genus, but the former in virtue of himself.

(c) If a thing has not an attribute which it would naturally possess, and when it would naturally possess it (for blindness is a form of privation; but a man is not blind at any age, but only if he lacks sight at the age when he would naturally possess it), and similarly if it lacks an attribute in the medium and organ and relation and manner in which it would naturally possess it.

(d) The forcible removal of anything is called privation. (e) Privation has as many senses as there are senses of negation derived from the negative affix (ἀ-). For we call a thing unequal because it does not possess equality (though it would naturally do so); and invisible either because it has no color at all or because it has only a faint one; and footless either because it has no feet at all or because it has rudimentary feet.

Again, a negative affix may mean having something in a small degree—e.g. stoneless— [1] that is, having it in some rudimentary manner. Again, it may mean having it not easily or not well; e.g., uncutable means not only that which cannot be cut, but that which cannot be cut easily or well. And again, it may mean not having a thing at all; for it is not the one-eyed man, but the man who lacks sight in both eyes, who is called blind. Hence not every man is good or bad, moral or immoral; there is also the intermediate state.

To have or possess is used in various senses. (a) To direct in accordance with one's own nature or impulse; whence we say that fever possesses a man, and despots possess cities, and people who wear clothes possess them. (b) We speak of anything as having in which, as receptive material, something is present. E.g., the bronze has the shape of the statue, and the body has the disease.

(c) In the sense that the container holds the contained; for when A is contained in B, we say that A is held by B. E.g., we say that the vessel holds the liquid, and the city holds men, and the ship holds sailors, and so too that the whole holds the parts.

(d) The same term is applied to that which prevents anything from moving or acting in accordance with its own impulse; as pillars hold up the weights which are imposed upon them, [20] and as the poets make Atlas hold up the heaven, because otherwise it would fall upon the earth (as some of the physicists maintain also).

It is in this sense that we say that that which holds together holds what it holds together; because otherwise the latter would disperse, each part in accordance with its own impulse.

To be in a thing is used similarly in senses corresponding to those of to have.

To come from something means: (a) In one sense, to come from something as matter, and this in two ways: in respect either of the primary genus or of the ultimate species. E.g., in the one sense everything liquefiable comes from water, and in the other the statue comes from bronze.

(b) To come from something as the first moving principle; e.g., from what comes fighting? From abuse; because this is the beginning of a fight. (c) To come from the combination of matter and form (as the parts come from the whole, and the verse from the Iliad , and the stones from the house); for the shape is an end, and that is a complete thing which has attained its end.

(d) In the sense that the form is made out of the part of its definition; as, e.g., man is made out of two-footed and the syllable out of its element(this is a different way from that in which the statue is made out of the bronze; [1] for the composite entity is made out of perceptible material, but the form is also made out of the material of the form).

These, then, are some of the meanings of from or out of, but (e) sometimes one of these senses only partially applies; e.g., the child comes from the father and mother, and plants from the earth, because they come from some part of those things. (f) It means after in time; e.g., we say that night comes from day, and storm from fine weather, because one comes after the other.

And we speak thus of some of these things in view of their alternation with each other, as in the examples just mentioned, and of others in view merely of their succession in time; e.g., the voyage was made from the equinox, meaning that it was made after it; and the Thargelia are from the Dionysia, meaning after the Dionysia.

Part means: (a) That into which a quantity can be in any way divided; for that which is taken from a quantity qua quantity is always called a part of that quantity—e.g., we call 2 part (in a sense) of 3. (b) In another sense the term is only applied to those parts in sense (a) which measure the whole; hence in one sense we call 2 part of 3, and in another not.

Again, (c) those divisions into which the form, apart from quantity, can be divided, are also called parts of the form. Hence species are called parts of their genus. (d) That into which the whole [20] (either the form or that which contains the form) is divided, or of which it is composed. E.g., of a bronze sphere or cube not only is the bronze

(i.e. the material which contains the form) a part, but also the angle. (e) The elements in the definition of each thing are also called parts of the whole. Hence the genus is even called a part of the species, whereas in another sense the species is part of the genus.

Whole means: (a) That from which no part is lacking of those things as composed of which it is called a natural whole. (b) That which so contains its contents that they form a unity; and this in two ways, either in the sense that each of them is a unity, or in the sense that the unity is composed of them.

For (i) the universal, or term generally applied as being some whole thing, is universal in the sense that it contains many particulars; because it is predicated of each of them, and each and all of them (e.g. man, horse, god) are one; because they are all living things. And (2) that which is continuous and limited is a whole when it is a unity composed of several parts (especially if the parts are only potentially present in it; but otherwise even if they are present actually).

And of these things themselves, those which are so naturally are more truly wholes than those which are so artificially; just as we said of the one, because wholeness is a kind of oneness. [1] Again, since a quantity has a beginning, middle and end, those to which position makes no difference we describe as all, and those to which position makes a difference we describe as whole, and those to which both descriptions can be applied, as both all and whole.

These are all things whose nature remains the same in transposition, but whose shape does not; e.g. wax or a coat. They are described as both whole and all; for they have both characteristics. Water, however, and all liquids, and number, are described as all; we do not speak of a whole number or whole water except by an extension of meaning. Things are described as all in the plural qua differentiated which are described as all in the singular qua one; all this number, all these units.

We do not describe any chance quantity as mutilated; it must have parts, and must be a whole. The number 2 is not mutilated if one of its 1's is taken away—because the part lost by mutilation is never equal to the remainder—nor in general is any number mutilated; because the essence must persist. If a cup is mutilated, it must still be a cup; but the number is no longer the same.

Moreover, not even all things which have dissimilar parts are mutilated; for a number has in a sense dissimilar as well as similar parts—e.g. 2, 3. But in general of things whose position makes no difference, e.g. water or fire, none is mutilated;— [20] to be mutilated, things must be such as have their position according to their essence.

Further, they must be continuous; for a musical scale is composed of dissimilar parts, and has position; but it does not become mutilated. Moreover, even things which are wholes are not mutilated by the removal of any of their parts; the parts removed must be neither proper to their essence nor in any chance location. E.g., a cup is not mutilated if a hole is made in it, but only if the handle or some projection is broken;

and a man is not mutilated if he loses flesh or his spleen, but if he loses some extremity; and not every extremity, but only such as cannot grow again when completely removed. Hence bald people are not mutilated.

The term genus or race is used: (a) When there is a continuous generation of things of the same type; e.g., as long as the human race exists means as long as the generation of human beings is continuous. (b) Of anything from which things derive their being as the prime mover of them into being. Thus some are called Hellenes by race, and others Ionians, because some have Hellen and others Ion as their first ancestor.

(Races are called after the male ancestor rather than after the material. Some derive their race from the female as well; e.g. the descendants of Pyrrha.) [1] (c) In the sense that the plane is the genus of plane figures, and the solid of solids (for each one of the figures is either a particular plane or a particular solid); i.e., that which underlies the differentiae.

(d) In the sense that in formulae the first component, which is stated as part of the essence, is the genus, and the qualities are said to be its differentiae. The term genus, then, is used in all these senses—(a) in respect of continuous generation of the same type; (b) in respect of the first mover of the same type as the things which it moves; (c) in the sense of material. For that to which the differentia or quality belongs is the substrate, which we call material.

Things are called generically different whose immediate substrates are different and cannot be resolved one into the other or both into the same thing. E.g., form and matter are generically different, and all things which belong to different categories of being; for some of the things of which being is predicated denote the essence, others a quality, and others the various other things which have already been distinguished. For these also cannot be resolved either into each other or into any one thing.

False means: (i) false as a thing ; (a) because it is not or cannot be substantiated; such are the statements that the diagonal of a square is commensurable, [20] or that you are sitting. Of these one is false always, and the other sometimes; it is in these senses that these things are not facts.

(b) Such things as really exist, but whose nature it is to seem either such as they are not, or like things which are unreal; e.g. chiaroscuro and dreams. For these are really something, but not that of which they create the impression. Things, then, are called false in these senses: either because they themselves are unreal, or because the impression derived from them is that of something unreal.

(2.) A false statement is the statement of what is not, in so far as the statement is false. Hence every definition is untrue of anything other than that of which it is true; e.g., the definition of a circle is untrue of a triangle. Now in one sense there is only one definition of each thing, namely that of its essence; but in another sense there are many definitions, since the thing itself, and the thing itself qualified (e.g. Socrates and cultured Socrates) are in a sense the same.

But the false definition is not strictly a definition of anything. Hence it was foolish of Antisthenes to insist that nothing can be described except by its proper definition: one predicate for one subject; from which it followed that contradiction is impossible, and falsehood nearly so. But it is possible to describe everything not only by its own definition but by that of something else; quite falsely, and yet also in a sense truly—e.g., 8 may be described as double by the definition of 2.

[1] Such are the meanings of false in these cases. (3.) A false man is one who readily and deliberately makes such statements, for the sake of doing so and for no other reason; and one who induces such statements in others—just as we call things false which induce a false impression. Hence the proof in the Hippias that the same man is false and true is misleading;

for it assumes (a) that the false man is he who is able to deceive, i.e. the man who knows and is intelligent; (b) that the man who is willingly bad is better. This false assumption is due to the induction; for when he says that the man who limps willingly is better than he who does so unwillingly, he means by limping pretending to limp. For if he is willingly lame, he is presumably worse in this case just as he is in the case of moral character.

Accident or attribute means that which applies to something and is truly stated, but neither necessarily nor usually; as if, for example, while digging a hole for a plant one found a treasure. Then the finding of treasure is an accident to the man who is digging the hole; for the one thing is not a necessary consequence or sequel of the other, nor does one usually find treasure while planting.

[20] And a cultured man might be white; but since this does not happen necessarily or usually, we call it an accident. Thus since there are attributes and subjects, and some attributes apply to their subjects only at a certain place and time, any attribute which applies to a subject, but not because it was a particular subject or time or place, will be an accident.

Nor is there any definite cause for an accident, but only a chance, i.e. indefinite, cause. It was by accident that X went to Aegina if he arrived there, not because he intended to go there but because he was carried out of his course by a storm, or captured by pirates.

The accident has happened or exists, but in virtue not of itself but of something else; for it was the storm which was the cause of his coming to a place for which he was not sailing—i.e. Aegina.

Accident has also another sense, namely, whatever belongs to each thing in virtue of itself, but is not in its essence; e.g. as having the sum of its angles equal to two right angles belongs to the triangle. Accidents of this kind may be eternal, but none of the former kind can be. There is an account of this elsewhere.

[3] It is the principles and causes of the things which are that we are seeking; and clearly of the things which are qua being. There is a cause of health and physical fitness; and mathematics has principles and elements and causes; and in general every intellectual science or science which involves intellect deals with causes and principles, more or less exactly or simply considered.

But all these sciences single out some existent thing or class, and concern themselves with that; not with Being unqualified, nor qua Being, nor do they give any account of the essence; but starting from it, some making it clear to perception, and others assuming it as a hypothesis, they demonstrate, more or less cogently, the essential attributes of the class with which they are dealing.

Hence obviously there is no demonstration of substance or essence from this method of approach, but some other means of exhibiting it. And similarly they say nothing as to whether the class of objects with which they are concerned exists or not; because the demonstration of its essence and that of its existence belong to the same intellectual process.

And since physical science also happens to deal with a genus of Being [20] (for it deals with the sort of substance which contains in itself the principle of motion and rest), obviously it is neither a practical nor a productive science.

For in the case of things produced the principle of motion (either mind or art or some kind of potency) is in the producer; and in the case of things done the will is the agent—for the thing done and the thing willed are the same. Thus if every intellectual activity is either practical or productive or speculative, physics will be a speculative science; but speculative about that kind of Being which can be moved, and about formulated substance for the most part only qua inseparable from matter.

But we must not fail to observe how the essence and the formula exist, since without this our inquiry is ineffectual.

Now of things defined, i.e. of essences, some apply in the sense that snub does, and some in the sense that concave does. The difference is that snub is a combination of form with matter; because the snub is a concave nose , whereas concavity is independent of sensible matter.

[1] Now if all physical terms are used in the same sense as snub—e.g. nose, eye, face, flesh, bone, and in general animal; leaf, root, bark, and in general vegetable (for not one of these has a definition without motion; the definition invariably includes matter)—it is clear how we should look for and define the essence in physical things, and why it is the province of the physicist to study even some aspects of the soul, so far as it is not independent of matter.

It is obvious, then, from these considerations, that physics is a form of speculative science. And mathematics is also speculative; but it is not clear at present whether its objects are immutable and separable from matter; it is clear, however, that some branches of mathematics study their objects qua immutable and qua separable from matter. Obviously it is the province of a speculative science to discover whether a thing is eternal and immutable and separable from matter;

not, however, of physics (since physics deals with mutable objects) nor of mathematics, but of a science prior to both. For physics deals with things which exist separately but are not immutable; and some branches of mathematics deal with things which are immutable, but presumably not separable, but present in matter; but the primary science treats of things which are both separable and immutable.

Now all causes must be eternal, but these especially; since they are the causes of what is visible of things divine. Hence there will be three speculative philosophies: mathematics, physics, and theology— [20] since it is obvious that if the divine is present anywhere, it is present in this kind of entity; and also the most honorable science must deal with the most honorable class of subject.

The speculative sciences, then, are to be preferred to the other sciences, and theology to the other speculative sciences. One might indeed raise the question whether the primary philosophy is universal or deals with some one genus or entity; because even the mathematical sciences differ in this respect—geometry and astronomy deal with a particular kind of entity, whereas universal mathematics applies to all kinds alike.

Then if there is not some other substance besides those which are naturally composed, physics will be the primary science; but if there is a substance which is immutable, the science which studies this will be prior to physics, and will be primary philosophy, and universal in this sense, that it is primary. And it will be the province of this science to study Being qua Being; what it is, and what the attributes are which belong to it qua Being.

But since the simple term being is used in various senses, of which we saw that one was accidental , and another true (not-being being used in the sense of false); and since besides these there are the categories, e.g. the what, quality, quantity, place, time, and any other similar meanings; [1] and further besides all these the potential and actual : since the term being has various senses, it must first be said of what is accidentally, that there can be no speculation about it.

This is shown by the fact that no science, whether practical, productive or speculative, concerns itself with it. The man who produces a house does not produce all the attributes which are accidental to the house in its construction; for they are infinite in number. There is no reason why the house so produced should not be agreeable to some, injurious to others, and beneficial to others, and different perhaps from every other existing thing; but the act of building is productive of none of these results.

In the same way the geometrician does not study the accidental attributes of his figures, nor whether a triangle is different from a triangle the sum of whose angles is equal to two right angles. And this accords with what we should reasonably expect, because accident is only, as it were, a sort of name. Hence in a way Plato was not far wrong in making sophistry deal with what is nonexistent;

because the sophists discuss the accident more, perhaps, than any other people—whether cultured and grammatical, and cultured Coriscus and Coriscus, are the same or different; and whether everything that is, but has not always been, has come into being, so that if a man who is cultured has become grammatical, [20] he has also, being grammatical, become cultured; and all other such discussions. Indeed it seems that the accidental is something closely akin to the nonexistent.

This is clear too from such considerations as the following: of things which are in other senses there is generation and destruction, but of things which are accidentally there is not. Nevertheless we must state further, so far as it is possible, with regard to the accidental, what its nature is and through what cause it exists. At the same time it will doubtless also appear why there is no science of it.

Since, then, there are among existing things some which are invariable and of necessity (not necessity in the sense of compulsion, but that by which we mean that it cannot be otherwise), and some which are not necessarily so, nor always, but usually: this is the principle and this the cause of the accidental. For whatever is neither always nor usually so, we call an accident.

E.g., if in the dog-days we have storm and cold, we call it an accident; but not if we have stifling and intense heat, because the latter always or usually comes at this time, but not the former. It is accidental for a man to be white (since this is neither always nor usually so), but it is not accidental for him to be an animal.

[1] It is by accident that a builder restores to health, because it is not a builder but a doctor who naturally does this; but the builder happened accidentally to be a doctor. A confectioner, aiming at producing enjoyment, may produce something health-giving; but not in virtue of his confectioner's art. Hence, we say, it was accidental; and he produces it in a sense, but not in an unqualified sense.

For there are potencies which produce other things, but there is no art or determinate potency of accidents, since the cause of things which exist or come to be by accident is also accidental.

Hence, since not everything is or comes to be of necessity and always, but most things happen usually, the accidental must exist. E.g., the white man is neither always nor usually cultured; but since this sometimes happens, it must be regarded as accidental. Otherwise, everything must be regarded as of necessity.

Therefore the cause of the accidental is the matter, which admits of variation from the usual.

We must take this as our starting-point: Is everything either always or usually? This is surely impossible. Then besides these alternatives there is something else: the fortuitous and accidental. But again, are things usually so, but nothing always , or are there things which are eternal? These questions must be inquired into later; [20] but it is clear that there is no science of the accidental—because all scientific knowledge is of that which is always or usually so. How else indeed can one learn it or teach it to another? For a fact must be defined by being so always or usually; e.g., honey-water is usually beneficial in case of fever.

But science will not be able to state the exception to the rule: when it is not beneficial—e.g. at the new moon; because that which happens at the new moon also happens either always or usually; but the accidental is contrary to this. We have now explained the nature and cause of the accidental, and that there is no science of it.

It is obvious that there are principles and causes which are generable and destructible apart from the actual processes of generation and destruction; for if this is not true, everything will be of necessity: that is, if there must necessarily be some cause, other than accidental, of that which is generated and destroyed. Will A be, or not? Yes, if B happens; otherwise not. And B will happen if C does.

It is clear that in this way, as time is continually subtracted from a limited period, we shall come

to the present. [1] Accordingly So-and-so will die by disease or violence if he goes out; and this if he gets thirsty; and this if something else happens; and thus we shall come to what is the case now, or to something which has already happened. E.g. if he is thirsty; this will happen if he is eating pungent food, and this is either the case or not.

Thus of necessity he will either die or not die. And similarly if one jumps over to the past, the principle is the same; for this—I mean that which has just happened—is already present in something. Everything, then, which is to be, will be of necessity; e.g., he who is alive must die—for some stage of the process has been reached already; e.g., the contraries are present in the same body—but whether by disease or violence is not yet determined; it depends upon whether so-and-so happens.

Clearly, then, the series goes back to some starting-point, which does not go back to something else. This, therefore, will be the starting-point of the fortuitous, and nothing else is the cause of its generation. But to what sort of starting-point and cause this process of tracing back leads, whether to a material or final or moving cause, is a question for careful consideration.

So much, then, for the accidental sense of being; we have defined it sufficiently. As for being qua truth, and not-being qua falsity, since they depend upon combination and separation, [20] and taken together are concerned with the arrangement of the parts of a contradiction (since the true has affirmation when the subject and predicate are combined, and negation where they are divided; but the false has the contrary arrangement.

How it happens that we combine or separate in thought is another question. By combining or separating in thought I mean thinking them not as a succession but as a unity); for falsity and truth are not in things —the good, for example, being true, and the bad false—but in thought ; and with regard to simple concepts and essences there is no truth or falsity even in thought;

—what points we must study in connection with being and not-being in this sense, we must consider later. But since the combination and separation exists in thought and not in things, and this sense of being is different from the proper senses (since thought attaches or detaches essence or quality or quantity or some other category), we may dismiss the accidental and real senses of being.

For the cause of the one is indeterminate and of the other an affection of thought; [1] and both are connected with the remaining genus of being, and do not indicate any objective reality. Let us therefore dismiss them, and consider the causes and principles of Being itself qua Being. [We have made it clear in our distinction of the number of senses in which each term is used that being has several senses.]

[10] The term being has several senses, which we have classified in our discussion of the number of senses in which terms are used. It denotes first the what of a thing, i.e. the individuality; and then the quality or quantity or any other such category. Now of all these senses which being has, the primary sense is clearly the what, which denotes the substance

(because when we describe the quality of a particular thing we say that it is good or bad, and not five feet high or a man; but when we describe what it is, we say not that it is white or hot or five feet high, but that it is a man or a god), and all other things are said to be because they are either quantities or qualities or affections or some other such thing.

[20] Hence one might raise the question whether the terms to walk and to be well and to sit

signify each of these things as being, or not; and similarly in the case of any other such terms; for not one of them by nature has an independent existence or can be separated from its substance. Rather, if anything it is the thing which walks or sits or is well that is existent.

The reason why these things are more truly existent is because their subject is something definite; i.e. the substance and the individual, which is clearly implied in a designation of this kind, since apart from it we cannot speak of the good or sitting. Clearly then it is by reason of the substance that each of the things referred to exists.

Hence that which is primarily, not in a qualified sense but absolutely, will be substance.

Now primary has several meanings; but nevertheless substance is primary in all senses, both in definition and in knowledge and in time. For none of the other categories can exist separately, but substance alone;

and it is primary also in definition, because in the formula of each thing the formula of substance must be inherent; and we assume that we know each particular thing most truly when we know what man or fire is— [1] rather than its quality or quantity or position; because we know each of these points too when we know what the quantity or quality is.

Indeed, the question which was raised long ago, is still and always will be, and which always baffles us—What is Being?—is in other words What is substance? Some say that it is one; others, more than one; some, finite; others, infinite. And so for us too our chief and primary and practically our only concern is to investigate the nature of being in the sense of substance.

Substance is thought to be present most obviously in bodies. Hence we call animals and plants and their parts substances, and also natural bodies, such as fire, water, earth, etc., and all things which are parts of these or composed of these, either of parts or them or of their totality; e.g. the visible universe and its parts, the stars and moon and sun.

We must consider whether (a) these are the only substances, or (b) these and some others, or (c) some of these, or (d) some of these and some others, or (e) none of these, but certain others. Some hold that the bounds of body—i.e. the surface, line, point and unit—are substances, and in a truer sense than body or the solid.

Again, some believe that there is nothing of this kind besides sensible things, while others believe in eternal entities more numerous and more real than sensible things. [20] Thus Plato posited the Forms and the objects of mathematics as two kinds of substance, and as a third the substance of sensible bodies;

and Speusippus assumed still more kinds of substances, starting with the One, and positing principles for each kind: one for numbers, another for magnitudes, and then another for the soul. In this way he multiplies the kinds of substance. Some again hold that the Forms and numbers have the same nature, and that other things—lines and planes—are dependent upon them; and soon back to the substance of the visible universe and sensible things.

We must consider, then, with regard to these matters, which of the views expressed is right and which wrong; and what things are substances; and whether there are any substances besides the sensible substances, or not; and how sensible substances exist; and whether there is any separable substance (and if so, why and how) or no substance besides the sensible ones. We must first give a rough sketch of what substance is.

The term substance is used, if not in more, at least in four principal cases; for both the essence and the universal and the genus are held to be the substance of the particular, and fourthly the substrate. The substrate is that of which the rest are predicated, while it is not itself predicated of anything else. Hence we must first determine its nature, [1] for the primary substrate is considered to be in the truest sense substance.

Now in one sense we call the matter the substrate; in another, the shape ; and in a third, the combination of the two. By matter I mean, for instance, bronze; by shape, the arrangement of the form; and by the combination of the two, the concrete thing: the statue. Thus if the form is prior to the matter and more truly existent, by the same argument it will also be prior to the combination.

We have now stated in outline the nature of substance—that it is not that which is predicated of a subject, but that of which the other things are predicated. But we must not merely define it so, for it is not enough. Not only is the statement itself obscure, but also it makes matter substance; for if matter is not substance, it is beyond our power to say what else is.

For when everything else is removed, clearly nothing but matter remains; because all the other things are affections, products and potencies of bodies, and length, breadth and depth are kinds of quantity, and not substances. For quantity is not a substance; rather the substance is that to which these affections primarily belong.

But when we take away length and breadth and depth we can see no thing remaining, unless it be the something bounded by them; so that on this view matter must appear to be the only substance. [20] By matter I mean that which in itself is neither a particular thing nor a quantity nor designated by any of the categories which define Being.

For there is something of which each of these is predicated, whose being is different from that of each one of the categories; because all other things are predicated of substance, but this is predicated of matter. Thus the ultimate substrate is in itself neither a particular thing nor a quantity nor anything else. Nor indeed is it the negations of these; for the negations too will only apply to it accidentally.

If we hold this view, it follows that matter is substance. But this is impossible; for it is accepted that separability and individuality belong especially to substance. Hence it would seem that the form and the combination of form and matter are more truly substance than matter is.

The substance, then, which consists of both—I mean of matter and form—may be dismissed, since it is posterior and obvious. Matter too is in a sense evident. We must consider the third type, for this is the most perplexing.

Now it is agreed that some sensible things are substances, and so we should begin our inquiry in connection with these.

[1] It is convenient to advance to the more intelligible; for learning is always acquired in this way, by advancing through what is less intelligible by nature to what is more so. And just as in actions it is our task to start from the good of the individual and make absolute good good for the individual, so it is our task to start from what is more intelligible to oneself and make what is by nature intelligible intelligible to oneself.

Now that which is intelligible and primary to individuals is often but slightly intelligible, and contains but little reality; but nevertheless, starting from that which is imperfectly intelligible but

intelligible to oneself, we must try to understand the absolutely intelligible; advancing, as we have said, by means of these very things which are intelligible to us.

Since we distinguished at the beginning the number of ways in which substance is defined, and since one of these appeared to be essence, we must investigate this.

First, let us make certain linguistic statements about it.

The essence of each thing is that which it is said to be per se. To be you is not to be cultured, because you are not of your own nature cultured. Your essence, then, is that which you are said to be

of your own nature. But not even all of this is the essence; for the essence is not that which is said to be per se in the sense that whiteness is said to belong to a surface, because being a surface is not being white.

Nor is the essence the combination of both, being a white surface. Why? Because the word itself is repeated. [20] Hence the formula of the essence of each thing is that which defines the term but does not contain it. Thus if being a white surface is the same as being a smooth surface, white and smooth are one and the same.

But since in the other categories too there are compounds with substance (because there is a substrate for each category, e.g. quality, quantity, time, place and motion), we must inquire whether there is a formula of the essence of each one of them; whether these compounds, e.g. white man, also have an essence.

Let the compound be denoted by X. What is the essence of X?

But this is not even a per se expression. We reply that there are two ways in which a definition can be not per se true of its subject: (a) by an addition, and (b) by an omission.

In one case the definition is not per se true because the term which is being defined is combined with something else; as if, e.g., in defining whiteness one were to state the definition of a white man. In the other, because something else (which is not in the definition) is combined with the subject; as if, e.g., X were to denote white man, and X were defined as white. White man is white, [1] but its essence is not to be white. But is to be X an essence at all?

Surely not. The essence is an individual type; but when a subject has something distinct from it predicated of it, it is not an individual type. E.g., white man is not an individual type; that is, assuming that individuality belongs only to substances. Hence essence belongs to all things the account of which is a definition.

We have a definition, not if the name and the account signify the same (for then all accounts would be definitions; because any account can have a name, so that even the Iliad will be a definition), but if the account is of something primary. Such are all statements which do not involve the predication of one thing of another.

Hence essence will belong to nothing except species of a genus, but to these only; for in these the predicate is not considered to be related to the subject by participation or affection, nor as an accident. But of everything else as well, if it has a name, there will be a formula of what it means—that X belongs to Y; or instead of a simple formula one more exact—but no definition, nor essence.

Or perhaps definition, like the what, has more than one sense. For the what in one sense means

the substance and the individual, [20] and in another each one of the categories: quantity, quality, etc.

Just as is applies to everything, although not in the same way, but primarily to one thing and secondarily to others; so what it is applies in an unqualified sense to substance, and to other things in a qualified sense. For we might ask also what quality is, so that quality also is a what it is; not however without qualification, but just as in the case of not-being some say by a verbal quibble that not-being is—not in an unqualified sense, but is not-being—so too with quality.

Now although we must also consider how we should express ourselves in each particular case, it is still more important to consider what the facts are. Hence now, since the language which we are using is clear, similarly essence also will belong primarily and simply to substance, and secondarily to other things as well; just as the what it is is not essence simply, but the essence of a quality or quantity.

For it must be either by equivocation that we say that these things are , or by adding and subtracting qualifications, as we say that the unknowable is known; since the truth is that we use the terms neither equivocally nor in the same sense, but just as we use the term medical in relation to one and the same thing; [1] but not of one and the same thing, nor yet equivocally. The term medical is applied to a body and a function and an instrument, neither equivocally nor in one sense, but in relation to one thing.

However, in whichever way one chooses to speak of these things, it matters nothing; but this point is clear: that the primary and unqualified definition, and the essence, belong to substances. It is true that they belong equally to other things too, but not primarily . For if we assume this, it does not necessarily follow that there is a definition of anything which means the same as any formula; it must mean the same as a particular kind of formula, i.e. the formula of one thing—

one not by continuity like the Iliad, or things which are arbitrarily combined, but in one of the proper senses of one. And one has the same variety of senses as being. Being means sometimes the individual thing, sometimes the quantity, sometimes the quality. Hence even white man will have a formula and definition; but in a different sense from the definition of whiteness and substance.

The question arises: If one denies that a formula involving an added determinant is a definition, how can there be a definition of terms which are not simple but coupled? Because they can only be explained by adding a determinant.

I mean, e.g., there is nose and concavity and snubness, the term compounded of the two, because the one is present in the other. Neither concavity nor snubness is an accidental, but a per se affection of the nose. [20] Nor are they attributes in the sense that white is of Callias or a man, because Callias is white and is by accident a man; but in the sense that male is an attribute of animal, and equality of quantity, and all other attributes which we say belong per se.

That is, all things which involve the formula or name of the subject of the affection, and cannot be explained apart from it. Thus white can be explained apart from man, but not female apart from animal. Thus either these terms have no essence or definition, or else they have it in a different sense, as we have said.

But there is also another difficulty about them. If snub nose is the same as concave nose, snub

will be the same as concave. But if not, since it is impossible to speak of snub apart from the thing of which it is a per se affection (because snub means a concavity in the nose), either it is impossible to call the nose snub, or it will be a tautology, concave-nose nose because snub nose will equal concave-nose nose.

Hence it is absurd that such terms as these should have an essence. Otherwise there will be an infinite regression; for in snub-nose nose there will be yet another nose. [1] Clearly, then, there is definition of substance alone. If there were definition of the other categories also, it would have to involve an added determinant, as in the case of the qualitative; and of the odd, for this cannot be defined apart from number; nor can female apart from animal.

By involving an added determinant I mean descriptions which involve a tautology, as in the above examples. Now if this is true, there will be no definition of compound expressions either; e.g., odd number. We fail to realize this because our terms are not used accurately. If on the other hand there are definitions of these too, either they are defined in a different way, or, as we have said, definition and essence must be used in more than one sense;

thus in one sense there will be no definition of anything, and nothing will have an essence, except substances; and in another those other things will have a definition and essence. It is obvious, then, that the definition is the formula of the essence, and that the essence belongs either only to substances, or especially and primarily and simply.

We must inquire whether the essence is the same as the particular thing, or different. This is useful for our inquiry about substance; because a particular thing is considered to be nothing other than its own substance, and the essence is called the substance of the thing.

In accidental predications, indeed, the thing itself would seem to be different from its essence; [20] e.g., white man is different from essence of white man. If it were the same, essence of man and essence of white man would be the same. For man and white man are the same, they say, and therefore essence of white man is the same as essence of man.

But perhaps it is not necessarily true that the essence of accidental combinations is the same as that of the simple terms; because the extremes of the syllogism are not identical with the middle term in the same way. Perhaps it might be thought to follow that the accidental extremes are identical; e.g. essence of white and essence of cultured; but this is not admitted.

But in per se expressions, is the thing necessarily the same as its essence, e.g., if there are substances which have no other substances or entities prior to them, such as some hold the Ideas to be?

For if the Ideal Good is to be different from the essence of good, and the Ideal Animal and Being from the essence of animal and being, [1] there will be other substances and entities and Ideas besides the ones which they describe; and prior to them, if essence is substance. And if they are separate from each other, there will be no knowledge of the Ideas, and the essences will not exist

(by being separate I mean if neither the essence of good is present in the Ideal Good, nor being good in the essence of good); for it is when we know the essence of it that we have knowledge of a thing. And it is the same with other essences as with the essence of good; so that if the essence of good is not good, neither will the essence of being be, nor the essence of one be one.

Either all essences exist alike, or none of them; and so if not even the essence of being is,

neither will any other essence exist. Again that to which essentially good does not apply cannot be good. Hence the good must be one with the essence of good, the beautiful with the essence of beauty, and so with all terms which are not dependent upon something else, but self-subsistent and primary.

For it is enough if this is so, even if they are not Forms; or perhaps rather even if they are. (At the same time it is clear also that if the Ideas are such as some hold, the substrate will not be substance; for the Ideas must be substances, but not involving a substrate, because if they did involve one they would exist in virtue of its participation in them.)

That each individual thing is one and the same with its essence, and not merely accidentally so, [20] is apparent, not only from the foregoing considerations, but because to have knowledge of the individual is to have knowledge of its essence; so that by setting out examples it is evident that both must be identical.

But as for the accidental term, e.g. cultured or white, since it has two meanings, it is not true to say that the term itself is the same as its essence; for both the accidental term and that of which it is an accident are white, so that in one sense the essence and the term itself are the same, and in another they are not, because the essence is not the same as the man or the white man, but it is the same as the affection.

The absurdity of separating a thing from its essence will be apparent also if one supplies a name for each essence; for then there will be another essence besides the original one, e.g. the essence of horse will have a further essence. Yet why should not some things be identified with their essence from the outset, if essence is substance? Indeed not only are the thing and its essence one, but their formula is the same, [1] as is clear from what we have just stated; for it is not by accident that the essence of one, and the one, are one.

Moreover, if they are different, there will be an infinite series; for the essence of one and the one will both exist; so that in that case too the same principle will apply. Clearly, then, in the case of primary and self-subsistent terms, the individual thing and its essence are one and the same.

It is obvious that the sophistical objections to this thesis are met in the same way as the question whether Socrates is the same as the essence of Socrates; for there is no difference either in the grounds for asking the question or in the means of meeting it successfully. We have now explained in what sense the essence is, and in what sense it is not, the same as the individual thing.

Of things which are generated, some are generated naturally, others artificially, and others spontaneously; but everything which is generated is generated by something and from something and becomes something. When I say becomes something I mean in any of the categories; it may come to be either a particular thing or of some quantity or quality or in some place.

Natural generation is the generation of things whose generation is by nature.

That from which they are generated is what we call matter; that by which, is something which exists naturally; and that which they become is a man or a plant or something else of this kind, which we call substance in the highest degree. [20] All things which are generated naturally or artificially have matter; for it is possible for each one of them both to be and not to be, and this possibility is the matter in each individual thing.

And in general both that from which and that in accordance with which they are generated, is nature; for the thing generated, e.g. plant or animal, has a nature. And that by which they are generated is the so-called formal nature, which has the same form as the thing generated (although it is in something else); for man begets man.

Such is the generation of things which are naturally generated; the other kinds of generation are called productions. All productions proceed from either art or potency or thought.

Some of them are also generated spontaneously and by chance in much the same way as things which are naturally generated; for sometimes even in the sphere of nature the same things are generated both from seed and without it. We shall consider cases of this kind later. [1] Things are generated artificially whose form is contained in the soul (by form I mean the essence of each thing, and its primary substance);

for even contraries have in a sense the same form. For the substance of the privation is the opposite substance; e.g., health is the substance of disease; for disease is the absence of health, and health is the formula and knowledge in the soul. Now the healthy subject is produced as the result of this reasoning: since health is so-and-so, if the subject is to be healthy, it must have such-and-such a quality, e.g. homogeneity; and if so, it must have heat.

And the physician continues reasoning until he arrives at what he himself finally can do; then the process from this point onwards, i.e. the process towards health, is called production. Therefore it follows in a sense that health comes from health and a house from a house; that which has matter from that which has not (for the art of medicine or of building is the form of health or the house). By substance without matter I mean the essence.

In generations and motions part of the process is called cogitation, and part production—that which proceeds from the starting-point and the form is cogitation, and that which proceeds from the conclusion of the cogitation is production. Each of the other intermediate measures is carried out in the same way. I mean, e.g., that if A is to be healthy, his physical condition will have to be made uniform. What, then, does being made uniform entail? So-and-so; [20] and this will be achieved if he is made hot. What does this entail? So-and-so; now this is potentially present, and the thing is now in his power.

The thing which produces, and from which the process of recovering health begins, is the form in the soul, if the process is artificial; if spontaneous, it is whatever is the starting-point of the production for the artificial producer; as in medical treatment the starting-point is, perhaps, the heating of the patient; and this the doctor produces by friction. Heat in the body, then, is either a part of health, or is followed (directly or through several intermediaries) by something similar which is a part of health. This is the ultimate thing, namely that produces, and in this sense is a part of, health—or of the house

(in the form of stones) or of other things. Therefore, as we say, generation would be impossible if nothing were already existent. It is clear, then, that some part must necessarily pre-exist; because the matter is a part, since it is matter which pre-exists in the product and becomes something. [1] But then is matter part of the formula? Well, we define bronze circles in both ways; we describe the matter as bronze, and the form as such-and-such a shape; and this shape is the proximate genus in which the circle is placed.

The bronze circle, then, has its matter in its formula. Now as for that from which, as matter, things are generated, some things when they are generated are called not so-and-so, but made

of so-and-so; e.g., a statue is not called stone, but made of stone. But the man who becomes healthy is not called after that from which he becomes healthy. This is because the generation proceeds from the privation and the substrate, which we call matter (e.g., both the man and the invalid become healthy),

but it is more properly said to proceed from the privation; e.g., a man becomes healthy from being an invalid rather than from being a man. Hence a healthy person is not called an invalid, but a man, and a healthy man. But where the privation is obscure and has no name—e.g. in bronze the privation of any given shape, or in bricks and wood the privation of the shape of a house—the generation is considered to proceed from these materials, as in the former case from the invalid.

Hence just as in the former case the subject is not called that from which it is generated, so in this case the statue is not called wood, but is called by a verbal change not wood, but wooden; not bronze, but made of bronze; not stone, but made of stone; and the house is called not bricks, but made of bricks. [20] For if we consider the matter carefully, we should not even say without qualification that a statue is generated from wood, or a house from bricks; because that from which a thing is generated should not persist, but be changed. This, then, is why we speak in this way.

Now since that which is generated is generated by something (by which I mean the starting-point of the process of generation), and from something (by which let us understand not the privation but the matter; for we have already distinguished the meanings of these), and becomes something (i.e. a sphere or circle or whatever else it may be); just as the craftsman does not produce the substrate, i.e. the bronze, so neither does he produce the sphere; except accidentally, inasmuch as the bronze sphere is a sphere, and he makes the former.

For to make an individual thing is to make it out of the substrate in the fullest sense. I mean that to make the bronze round is not to make the round or the sphere, but something else; i.e. to produce this form in another medium. For if we make the form, we must make it out of something else; for this has been assumed. [1] E.g., we make a bronze sphere; we do this in the sense that from A, i.e. bronze, we make B, i.e. a sphere.

If, then, we make the spherical form itself, clearly we shall have to make it in the same way; and the processes of generation will continue to infinity.

It is therefore obvious that the form (or whatever we should call the shape in the sensible thing) is not generated—generation does not apply to it— nor is the essence generated; for this is that which is induced in something else either by art or by nature or by potency.

But we do cause a bronze sphere to be, for we produce it from bronze and a sphere; we induce the form into this particular matter, and the result is a bronze sphere. But if the essence of sphere in general is generated, something must be generated from something; for that which is generated will always have to be divisible, and be partly one thing and partly another; I mean partly matter and partly form.

If then a sphere is the figure whose circumference is everywhere equidistant from the center, part of this will be the medium in which that which we produce will be contained, and part will be in that medium; and the whole will be the thing generated, as in the case of the bronze sphere. It is obvious, then, from what we have said, that the thing in the sense of form or essence is not generated, whereas the concrete whole which is called after it is generated; and

that in everything that is generated matter is present, and one part is matter and the other form.

[20] Is there then some sphere besides the particular spheres, or some house besides the bricks? Surely no individual thing would ever have been generated if form had existed thus independently. Form means of such a kind; it is not a definite individual, but we produce or generate from the individual something of such a kind; and when it is generated it is an individual of such a kind.

The whole individual, Callias or Socrates, corresponds to this bronze sphere, but man and animal correspond to bronze sphere in general.

Obviously therefore the cause which consists of the Forms (in the sense in which some speak of them, assuming that there are certain entities besides particulars), in respect at least of generation and destruction, is useless; nor, for this reason at any rate, should they be regarded as self-subsistent substances.

Indeed in some cases it is even obvious that that which generates is of the same kind as that which is generated—not however identical with it, nor numerically one with it, but formally one—e.g. in natural productions (for man begets man), unless something happens contrary to nature, as when a horse sires a mule. And even these cases are similar; for that which would be common to both horse and ass, the genus immediately above them, has no name; but it would probably be both, just as the mule is both.

[1] Thus obviously there is no need to set up a form as a pattern (for we should have looked for Forms in these cases especially, since living things are in a special sense substances); the thing which generates is sufficient to produce, and to be the cause of the form in the matter. The completed whole, such-and-such a form induced in this flesh and these bones, is Callias or Socrates. And it is different from that which generated it, because the matter is different but identical in form, because the form is indivisible.

The question might be raised why some things are generated both artificially and spontaneously—e.g. health—and others not; e.g. a house. The reason is that in some cases the matter—which is the starting-point of the process in the production and generation of artificial things, and in which some part of the result is already existent—is such that it can initiate its own motion, and in other cases it is not; and of the former kind some can initiate motion in a particular way, and some cannot. For many things can move themselves, but not in a particular way, e.g. so as to dance.

It is impossible, then, for any things whose matter is of this kind (e.g. stones) to be moved in this particular way except by something else; but in that particular way it is possible. And it is so with fire. For this reason some things cannot exist apart from the possessor of the art, and others can; [20] because the motion can be initiated by those things which do not indeed possess the art, but can themselves be moved either by other things which do not possess the art, or by the motion from the part of the product which pre-exists in them.

It is clear also from what we have said that in a sense all artificial things are generated either from something which bears the same name (as is the case with natural objects) or from a part of themselves which bears the same name as themselves (e.g. a house from a house, inasmuch as it is generated by mind; for the art is the form), or from something which contains some part; that is if the generation is not accidental; for the direct and independent cause of the production

is a part of the product.

Heat in the motion produces heat in the body; and either this is health or a part of health, or a part of health or health accompanies it. And this is why heat is said to produce health, because it produces that of which health is a concomitant and consequence. Therefore as essence is the starting-point of everything in syllogisms (because syllogisms start from the what of a thing), so too generation proceeds from it.

And it is the same with natural formations as it is with the products of art. For the seed produces just as do those things which function by art. It contains the form potentially, [1] and that from which the seed comes has in some sense the same name as the product (for we must not expect that all should have the same name in the sense that man is produced by man—since woman is also produced by man); unless the product is a freak. This is why a mule is not produced by a mule.

Those natural objects which are produced, like artificial objects, spontaneously, are those whose matter can also initiate for itself that motion which the seed initiates. Those whose matter cannot do this cannot be generated otherwise than by their proper parents.

It is not only with reference to substance that our argument shows that the form is not generated; the same argument is common in its application to all the primary divisions, i.e. quantity, quality and the other categories.

For just as the bronze sphere is generated, but not the sphere nor the bronze; and as in the case of bronze, if it is generated the form and matter are not (because they must always pre-exist), so it is too with the what and the quality and quantity and the other categories similarly; for it is not the quality that is generated, but the wood of that quality; nor is it the size, but the wood or animal of that size.

But a peculiarity of substance may be gathered from this: that some other substance must pre-exist in actuality which produces it; e.g. an animal, if an animal is being generated; but a quality or quantity need not pre-exist otherwise than potentially.

[20] Since a definition is a formula, and every formula has parts; and since the formula is related to the thing in the same way as the part of the formula to the part of the thing, the question now arises: Must the formula of the parts be contained in the formula of the whole, or not? It seems clear that it is so in some cases, but not in others.

The formula of the circle does not include that of the segments, but the formula of the syllable includes that of the letters. And yet the circle is divisible into its segments in just the same way as the syllable into its letters.

Again, if the parts are prior to the whole, and the acute angle is part of the right angle, and the finger part of the animal, the acute angle will be prior to the right angle, and the finger to the man.

But it is considered that the latter are prior; for in the formula the parts are explained from them; and the wholes are prior also in virtue of their ability to exist independently. The truth probably is that part has several meanings, one of which is that which measures in respect of quantity. However, let us dismiss this question and consider of what, in the sense of parts, substance consists.

[1] If then matter, form, and the combination of the two are distinct, and if both matter and form and their combination are substance, there is one sense in which even matter may be called part of a thing; and another in which it is not, but the only parts are those elements of which the formula of the form consists. E.g., flesh is not a part of concavity, because flesh is the matter in which concavity is induced; but it is a part of snubness. And bronze is part of the statue as a concrete whole, but not of the statue in the sense of form.

We may speak of the form (or the thing as having a form) as an individual thing, but we may never so speak of that which is material by itself. This is why the formula of the circle does not contain that of the segments, whereas the formula of the syllable does contain that of the letters; for the letters are parts of the formula of the form; they are not matter; but the segments are parts in the sense of matter in which the form is induced. They approximate, however, more closely to the form than does the bronze when roundness is engendered in bronze.

But there is a sense in which not even all the letters will be contained in the formula of the syllable; e.g. particular letters on wax or sounds in the air; for these too are part of the syllable in the sense that they are its sensible matter.

For even if the line is divided and resolved into its halves, or if the man is resolved into bones and muscles and flesh, [20] it does not follow that they are composed of these as parts of their essence, but as their matter; and these are parts of the concrete whole, but not of the form, or that to which the formula refers. Hence they are not in the formulae.

Accordingly in some cases the formula will include the formula of such parts as the above, but in others it need not necessarily contain their formula, unless it is the formula of the concrete object. It is for this reason that some things are composed of parts in the sense of principles into which they can be resolved, while others are not.

All things which are concrete combinations of form and matter (e.g. the snub or the bronze circle) can be resolved into form and matter, and the matter is a part of them; but such as are not concrete combinations with matter, but are without matter—whose formulae refer to the form only—cannot be resolved; either not at all, or at least not in this way.

Thus these material components are principles and parts of the concrete objects, but they are neither parts nor principles of the form. For this reason the clay statue can be resolved into clay, and the sphere into bronze, and Callias into flesh and bones, and the circle too into segments, because it is something which is combined with matter. [1] For we use the same name for the absolute circle and for the particular circle, since there is no special name for the particular circles.

We have now stated the truth; nevertheless let us recapitulate and state it more clearly. All constituents which are parts of the formula, and into which the formula can be divided, are prior to their wholes—either all or some of them. But the formula of the right angle is not divisible into the formula of an acute angle, but vice versa; since in defining the acute angle we use the right angle, because the acute angle is less than a right angle.

It is the same with the circle and the semicircle; for the semicircle is defined by means of the circle. And the finger is defined by means of the whole body; for a finger is a particular kind of part of a man. Thus such parts as are material, and into which the whole is resolved as into matter, are posterior to the whole; but such as are parts in the sense of parts of the formula and

of the essence as expressed in the formula, are prior; either all or some of them.

And since the soul of animals (which is the substance of the living creature) is their substance in accordance with the formula, and the form and essence of that particular kind of body (at least each part, if it is to be properly defined, will not be defined apart from its function; and this will not belong to it apart from perception); therefore the parts of the soul are prior, either all or some of them, to the concrete animal; and similarly in other individual cases.

[20] But the body and its parts are posterior to this substance, and it is not the substance, but the concrete whole, which is resolved into these parts as into matter. Therefore in one sense these parts are prior to the concrete whole, and in another not; for they cannot exist in separation. A finger cannot in every state be a part of a living animal; for the dead finger has only the name in common with the living one.

Some parts are contemporary with the whole: such as are indispensable and in which the formula and the essence are primarily present; e.g. the heart or perhaps the brain, for it does not matter which of them is of this nature. But man and horse and terms which are applied in this way to individuals, but universally, are not substance, but a kind of concrete whole composed of this particular formula and this particular matter regarded as universal. But individually Socrates is already composed of ultimate matter; and similarly in all other cases.

A part, then, may be part of the form (by form I mean essence), or of the concrete whole composed of form and matter, or of the matter itself. But only the parts of the form are parts of the formula, and the formula refers to the universal; [1] for circle is the same as essence of circle, and soul the same as essence of soul.

But when we come to the concrete thing, e.g. this circle—which is a particular individual, either sensible or intelligible (by intelligible circles I mean those of mathematics, and by sensible those which are of bronze or wood)—of these individuals there is no definition;

we apprehend them by intelligence or perception; and when they have passed from the sphere of actuality it is uncertain whether they exist or not, but they are always spoken of and apprehended by the universal formula. But the matter is in itself unknowable. Some matter is sensible and some intelligible; sensible, such as bronze and wood and all movable matter; intelligible, that which is present in sensible things not qua sensible, e.g. the objects of mathematics.

We have now discussed the case of the whole and part, and of prior and posterior. But we must answer the question, when we are asked which is prior—the right angle and circle and animal, or that into which they are resolved and of which they are composed, i.e. their parts—by saying that neither is absolutely prior.

For if the soul also is the animal or living thing, or the soul of the individual is the individual, and being a circle is the circle, and being a right angle or the essence of the right angle is the right angle, then we must admit that the whole in one sense is posterior to the part in one sense: [20] e.g. to the parts in the formula and the parts of a particular right angle

(since both the material right angle of bronze and the right angle included by individual lines are posterior to their parts), but the immaterial angle is posterior to the parts in the formula, but prior to the parts in the individual. We must not give an unqualified answer. And if the soul is not the animal but something else, even so we must say that some wholes are prior and some are

not, as has been stated.

The question naturally presents itself, what sort of parts belong to the form and what sort belong not to it but to the concrete object. Yet if this is not plain it is impossible to define the particular; because the definition refers to the universal and the form. Therefore if it is not clear what kind of parts are material and what kind are not, the formula of the thing will not be clear either.

In the case of things which can be seen to be induced in specifically different materials, as, e.g., a circle is in bronze and stone and wood, it seems clear that these things, the bronze and the stone, are in no sense part of the essential substance of the circle, because it is separable from them.

As for things which are not visibly separable, there is no reason why the same should not apply to them; e.g., if all the circles that had ever been seen were bronze; [1] for the bronze would be none the less no part of the form, but it is difficult to separate it in thought.

For example, the form of man is always manifested in flesh and bones and elements of this kind; then are these actually parts of the form and formula, or are they not so, but matter, though since the form is not induced in other materials, we cannot separate it?

Now since this seems to be possible, but it is not clear when, some thinkers are doubtful even in the case of the circle and the triangle, considering that it is not proper to define them by lines and continuous space, but that all these are to the circle or triangle as flesh or bone is to man, and bronze or stone to the statue; and they reduce everything to numbers, and say that the formula of line is the formula of 2.

And of the exponents of the Forms, some make 2 the Ideal line, and some the form of the line; for they say that in some cases the form and that of which it is the form, e.g. 2 and the form of 2, are the same; but in the case of line this is no longer so.

It follows, then, that there is one form of many things whose form is clearly different (a consequence which confronted the Pythagoreans too), and that it is possible to make one supreme Form of everything, and not to regard the rest as forms. [20] In this way, however, all things would be one.

Now we have stated that the question of definitions involves some difficulty, and have shown why this is so. Hence to reduce everything in this way and to dispose of the matter is going too far; for some things are presumably a particular form in particular matter, or particular things in a particular state.

And the analogy in the case of the living thing which the younger Socrates used to state is not a good one; for it leads one away from the truth, and makes one suppose that it is possible for a man to exist without his parts, as a circle does without the bronze. But the case is not similar; for the animal is sensible and cannot be defined without motion, and hence not unless its parts are in some definite condition;

for it is not the hand in any condition that is a part of a man, but only when it can perform its function, and so has life in it. Without life in it it is not a part.

And with respect to mathematical objects, why are the formulae of the parts not parts of the formulae of the whole; e.g., why are the formulae of the semicircles not parts of the formula of

the circle? for they are not sensible.

Probably this makes no difference; because there will be matter even of some things which are not sensible. [1] Indeed there will be matter in some sense in everything which is not essence or form considered independently, but a particular thing. Thus the semicircles will be parts not of the universal circle but of the particular circles, as we said before—for some matter is sensible, and some intelligible.

It is clear also that the soul is the primary substance, and the body matter; and man or animal is the combination of both taken universally. And Socrates or Coriscus has a double sense, that is if the soul too can be called Socrates (for by Socrates some mean the soul and some the concrete person); but if Socrates means simply this soul and this body, the individual is composed similarly to the universal.

Whether there is some other material component of these substances besides their matter, and whether we should look for some further substance in them, such as numbers or something of that kind, must be considered later. It is with a view to this that we are trying to determine the nature of sensible substances, since in a sense the study of sensible substances belongs to physics or secondary philosophy; for the physicist must know not only about the matter, but also about the substance according to the formula; this is even more essential.

And in the case of definitions, in what sense the elements in the formula are parts of the definition, and why the definition is one formula (for the thing is clearly one, [20] but in virtue of what is it one, seeing that it has parts?); this must be considered later.

We have stated, then, in a general account which covers all cases, what essence is, and how it is independent; and why the formula of the essence of some things contains the parts of the thing defined, while that of others does not; and we have shown that the material parts of a thing cannot be present in the formula of the substance (since they are not even parts of the substance in that sense, but of the concrete substance; and of this in one sense there is a formula, and in another sense there is not.

There is no formula involving the matter, for this is indeterminate; but there is a formula in accordance with the primary substance, e.g., in the case of a man, the formula of the soul; because the substance is the indwelling form, of which and of the matter the so called concrete substance is composed. E.g., concavity is such a form, since from this and nose is derived snub nose and snubness—for nose will be present twice over in these expressions);

but in the concrete substance, e.g. snub nose or Callias, matter will be present too. We have stated also that the essence and the individual are in some cases the same, [1] as in the case of the primary substances; e.g. crookedness and essence of crookedness, if this is primary.

By primary I mean that which does not imply the presence of something in something else as a material substrate. But such things as are material or are compounded with matter are not the same as their essence; not even if they are accidentally one, e.g. Socrates and cultured; for these are only accidentally the same.

Now let us first deal with definition, in so far as it has not been dealt with in the Analytics; for the problem stated there has a bearing upon our discussion of substance. The problem I mean is this: what constitutes the unity of the thing of which we say that the formula is a definition? E.g., in the case of man, two-footed animal; for let us take this as the formula of man.

Why, then, is this a unity and not a plurality, animal and two-footed? For in the case of man and white we have a plurality when the latter does not refer to the former, but a unity when it does refer to it, and the subject, man, has an attribute; for then they become a unity and we have the white man.

But in the case before us one term does not partake of the other; the genus is not considered to partake of its differentiae, for then the same thing would be partaking simultaneously of contraries, [20] since the differentiae by which the genus is distinguished are contrary. And even if it does partake of them, the same argument applies, since the differentiae are many; e.g. terrestrial, two-footed, wingless.

Why is it that these are a unity and not a plurality? Not because they are present in one genus, for in that case all the differentiae of the genus will form a unity. But all the elements in the definition must form a unity, because the definition is a kind of formula which is one and defines substance, so that it must be a formula of one particular thing; because the substance denotes one thing and an individual, as we say.

We must first examine definitions which are reached by the process of division.

For there is nothing else in the definition but the primary genus and the differentiae; the other genera consist of the primary genus together with the differentiae which are taken with it. E.g., the primary genus is animal; the next below it, two-footed animal; and again, two-footed wingless animal; and similarly also if the expression contains more terms still.

[1] In general it does not matter whether it contains many or few terms, nor, therefore, whether it contains few or two. Of the two one is differentia and the other genus; e.g., in two-footed animal animal is genus, and the other term differentia.

If, then, the genus absolutely does not exist apart from the species which it includes, or if it exists, but only as matter (for speech is genus and matter, and the differentiae make the species, i.e. the letters, out of it), obviously the definition is the formula composed of the differentiae.

But further we must also divide by the differentia of the differentia. E.g., having feet is a differentia of animal; then in turn we must discover the differentia of animal having feet qua having feet. Accordingly we should not say that of that which has feet one kind is winged and another wingless, (that is if we are to speak correctly; if we say this it will be through incapability), but only that one kind is cloven-footed and another not; because these are differentiae of foot, since cloven-footedness is a kind of footedness.

And thus we tend always to progress until we come to the species which contain no differentiae. At this point there will be just as many species of foot as there are differentiae, and the kinds of animals having feet will be equal in number to the differentiae. Then, if this is so, [20] obviously the ultimate differentia will be the substance and definition of the thing, since we need not state the same things more than once in definitions, because this is superfluous.

However, it does happen; for when we say footed two-footed animal we have simply said animal having feet, having two feet. And if we divide this by its proper division, we shall be stating the same thing several times, as many times as there are differentiae.

If, then, we keep on taking a differentia of a differentia, one of them, the last, will be the form and the substance. But if we proceed with reference to accidental qualities—e.g. if we divide that

which has feet into white and black—there will be as many differentiae as there are divisions. It is therefore obvious that the definition is the formula derived from the differentiae, and strictly speaking from the last of them.

This will be clear if we change the order of such definitions, e.g. that of man, saying two-footed footed animal; for footed is superfluous when we have already said two-footed. But there is no question of order in the substance; for how are we to think of one part as posterior and the other prior?

With regard, then, to definitions by division, let this suffice as a preliminary statement of their nature.

[1] Since the subject of our inquiry is substance, let us return to it. Just as the substrate and the essence and the combination of these are called substance, so too is the universal. With two of these we have already dealt, i.e. with the essence and the substrate; of the latter we have said that it underlies in two senses—either being an individual thing (as the animal underlies its attributes), or as matter underlies the actuality.

The universal also is thought by some to be in the truest sense a cause and a principle. Let us therefore proceed to discuss this question too; for it seems impossible that any universal term can be substance.

First, the substance of an individual is the substance which is peculiar to it and belongs to nothing else; whereas the universal is common; for by universal we mean that which by nature appertains to several things.

Of what particular, then, will the universal be the substance? Either of all or of none. But it cannot be the substance of all; while, if it is to be the substance of one, the rest also will be that one; because things whose substance is one have also one essence and are themselves one.

Again, substance means that which is not predicated of a subject, whereas the universal is always predicated of some subject.

But perhaps although the universal cannot be substance in the sense that essence is, it can be present in the essence, as animal can be present in man and horse.

Then clearly there is in some sense a formula of the universal. It makes no difference [20] even if there is not a formula of everything that is in the substance; for the universal will be none the less the substance of something; e.g., man will be the substance of the man in whom it is present. Thus the same thing will happen again; e.g. animal will be the substance of that in which it is present as peculiar to it.

Again, it is impossible and absurd that the individual or substance, if it is composed of anything, should be composed not of substances nor of the individual, but of a quality; for then non-substance or quality will be prior to substance or the individual. Which is impossible; for neither in formula nor in time nor in generation can the affections of substance be prior to the substance, since then they would be separable.

Again, a substance will be present in Socrates, who is a substance; so that it will be the substance of two things. And in general it follows that if man and all terms used in this way are substance, none of the elements in the formula is the substance of anything, nor can it exist apart from the species or in anything else; I mean, e.g., that neither animal nor any other

element of the formula can exist apart from the particular species.

If we look at the question from this standpoint it is obvious that no universal attribute is substance; and it is also clear from the fact that none of the common predicates means so-and-so, [1] but such and-such. Otherwise amongst many other awkward consequences we have the third man.

Again, it is clear in this way too. Substance can not consist of substances actually present in it; for that which is actually two can never be actually one, whereas if it is potentially two it can be one. E.g., the double consists of two halves—that is, potentially; for the actualization separates the halves.

Thus if substance is one, it cannot consist of substances present in it even in this sense, as Democritus rightly observes; he says that it is impossible for two to come from one, or one from two, because he identifies substance with the atoms.

Clearly then the same will also hold good in the case of number (assuming that number is a composition of units, as it is said to be by some); because either 2 is not 1, or there is not actually a unit in it.

The consequence involves a difficulty; for if no substance can consist of universals, because they mean of such a kind, and not a particular thing; and if no substance can be actually composed of substances, every substance will be incomposite, and so there will be no formula of any substance.

But in point of fact it is universally held, and has been previously stated, [20] that substance is the only or chief subject of definition; but on this showing there is no definition even of substance. Then there can be no definition of anything; or rather in a sense there can, and in a sense cannot. What this means will be clearer from what follows later.

From these same considerations it is clear also what consequence follows for those who maintain that the Forms are substances and separable, and who at the same time make the species consist of the genus and the differentiae. If there are Forms, and if animal is present in the man and the horse, it is either numerically one and the same with them, or not.

(In formula they are clearly one; for in each case the speaker will enunciate the same formula.) If, then, there is in some sense an Absolute Man, who is an individual and exists separately, then the constituents, e.g. animal and two-footed, must have an individual meaning and be separable and substances. Hence there must be an Absolute Animal too.

(i) Then if the animal which is in the horse and the man is one and the same, as you are one and the same with yourself, [1] how can the one which in things that exist separately be one, and why should not this animal also be separated from itself? Again, if it is to partake of two-footed and of many-footed, an impossibility follows; for contrary attributes will belong to it although it is one and individual.

But if it does not, in what sense is it that one calls an animal two-footed or terrestrial? Perhaps the terms are combined and in contact or mixed. But all these expressions are absurd.

(2) But there is a different animal in each species. Then there will be practically an infinity of things of which animal is the substance, since it is not in an accidental sense that man is derived from animal.

Again, the Absolute Animal will be a plurality. For (a) the animal in each species will be the substance of that species, since the species is called after it and no other thing. Otherwise man would be derived from that other thing, which would be the genus of man. (b) Further, all the constituents of man will be Ideas. Then, since nothing can be the Idea of one thing and the substance of another (for this is impossible),

each and every animal in the various species will be the Absolute Animal.

Further, from what will these Forms be derived, and how can they be derived from the Absolute Animal? Or how can the animal, whose very essence is animal, exist apart from the Absolute Animal? And further, in the case of sensible things both these and still more absurd consequences follow. If, then, these consequences are impossible, clearly there are not Forms of sensible things in the sense in which some hold that there are.

[20] Since substance is of two kinds, the concrete thing and the formula (I mean that one kind of substance is the formula in combination with the matter, and the other is the formula in its full sense), substances in the former sense admit of destruction, for they also admit of generation. But the formula does not admit of destruction in the sense that it is ever being destroyed, since neither does it so admit of generation (for the essence of house is not generated, but only the essence of this house); formulae are , and are not, independently of generation and destruction; for it has been shown that no one either generates or creates them.

For this reason also there is no definition or demonstration of particular sensible substances, because they contain matter whose nature is such that it can both exist and not exist. Hence all the individual instances of them are perishable.

If, then, the demonstration and definition of necessary truths requires scientific knowledge, and if, just as knowledge cannot be sometimes knowledge and sometimes ignorance (it is opinion that is of this nature), so too demonstration and definition cannot vary (it is opinion that is concerned with that which can be otherwise than it is)— [1] then clearly there can be neither definition nor demonstration of individual sensible substances.

For (a) things which perish are obscure to those who have knowledge of them when they are removed from the sphere of their perception, and (b) even though their formulae are preserved in the soul, there will no longer be either definition or demonstration of them. Therefore in cases relating to definition, when we are trying to define any individual, we must not fail to realize that our definition may always be upset; because it is impossible to define these things.

Nor, indeed, can any Idea be defined; for the Idea is an individual, as they say, and separable; and the formula must consist of words, and the man who is defining must not coin a word, because it would not be comprehensible. But the words which are in use are common to all the things which they denote; and so they must necessarily apply to something else as well. E.g., if a man were to define you, he would say that you are an animal which is lean or white or has some other attribute, which will apply to something else as well.

And if it should be said that there is no reason why all the attributes separately should not belong to several things, and yet in combination belong to this alone, we must reply, (1.) that they also belong to both the elements; e.g., two-footed animal belongs both to animal and to two-footed (and in the case of eternal elements this is even necessarily so; since they are prior to the compound, and parts of it.

Indeed they are also separable, if the term man is separable—for either neither can be separable, or both are so. [20] If neither, the genus will not exist apart from the species, or if it is so to exist, so will the differentia); (2.) that animal and two-footed are prior in being to two-footed animal, and that which is prior to something else is not destroyed together with it.

Again, if the Ideas are composed of Ideas (for constituents are less composite than that which they compose), still the elements of which the Idea is composed (e.g. animal and two-footed) will have to be predicated of many particulars. Otherwise, how can they be known? For there would be an Idea which cannot be predicated of more than one thing. But this is not considered possible; every Idea is thought to admit of participation.

Thus, as we have said, the impossibility of defining individuals is hard to realize when we are dealing with eternal entities, especially in the case of such as are unique, e.g. the sun and moon. For people go wrong not only by including in the definition attributes on whose removal it will still be sun—e.g., that which goes round the earth, or night-hidden (for they suppose that if it stops or becomes visible it will no longer be sun; but it is absurd that this should be so, since the sun denotes a definite substance)—they also mention attributes which may apply to something else; e.g., if another thing with those attributes comes into being, clearly it will be a sun. The formula, then, is general; [1] but the sun was supposed to be an individual, like Cleon or Socrates.

Why does not one of the exponents of the Ideas produce a definition of them? If they were to try, it would become obvious that what we have just said is true.

It is obvious that even of those things which are thought to be substances the majority are potentialities; both the parts of living things (for none of them has a separate substantial existence; and when they are separated, although they still exist, they exist as matter), and earth, fire and air; for none of these is one thing —they are a mere aggregate before they are digested and some one thing is generated from them.

It might be supposed very reasonably that the parts of living things and the corresponding parts of their vital principle are both, i.e. exist both actually and potentially, because they contain principles of motion derived from something in their joints; and hence some animals live even when they are divided. Nevertheless it is only potentially that all of them will exist when they are one and continuous by nature and not by force or concretion; for this sort of thing is malformation.

And since unity has the same variety of senses as being, and the substance of Unity is one, and things whose substance is numerically one are numerically one, evidently neither Unity nor Being can be the substance of things, just as neither being an element or principle can be the substance; [20] but we ask what the principle is so that we may refer to something more intelligible.

Now of these concepts Being and Unity are more nearly substance than are principle, element and cause; but not even the former are quite substance, since nothing else that is common is substance; for substance belongs to nothing except itself and that which contains it and of which it is the substance.

Again, Unity cannot exist in many places at the same time, but that which is common is present in many things at the same time. Hence it is clear that no universal exists in separation apart from its particulars. The exponents of the Forms are partly right in their account when they

make the Forms separate; that is, if the Forms are substances, but they are also partly wrong, since by Form they mean the one-over-many.

The reason for this is that they cannot explain what are the imperishable substances of this kind which exist besides particular sensible substances; so they make them the same in kind as perishable things (for these we know); i.e., they make Ideal Man and Ideal Horse, adding the word Ideal to the names of sensible things.

However, I presume that even if we had never seen the stars, [1] none the less there would be eternal substances besides those which we knew; and so in the present case even if we cannot apprehend what they are, still there must be eternal substances of some kind.

It is clear, then, both that no universal term is substance and that no substance is composed of substances.

As for what and what sort of thing we mean by substance, let us explain this by making, as it were, another fresh start. Perhaps in this way we shall also obtain some light upon that kind of substance which exists in separation from sensible substances. Since, then, substance is a kind of principle and cause, we had better pursue our inquiry from this point.

Now when we ask why a thing is, it is always in the sense why does A belong to B?

To ask why the cultured man is a cultured man is to ask either, as we have said, why the man is cultured, or something else. Now to ask why a thing is itself is no question; because when we ask the reason of a thing the fact must first be evident; e.g., that the moon suffers eclipse;

and because it is itself is the one explanation and reason which applies to all questions such as why is man man? or why is the cultured person cultured? (unless one were to say that each thing is indivisible from itself, and that this is what being one really means); [20] but this, besides being a general answer, is a summary one. We may, however, ask why a man is an animal of such-and-such a kind.

It is clear, then, that we are not asking why he who is a man is a man; therefore we are asking why A, which is predicated of B, belongs to B. (The fact that A does belong to B must be evident, for if this is not so, the question is pointless.) E.g., Why does it thunder? means why is a noise produced in the clouds? for the true form of the question is one thing predicated in this way of another.

Or again, why are these things, e.g. bricks and stones, a house? Clearly then we are inquiring for the cause (i.e., to speak abstractly, the essence); which is in the case of some things, e.g. house or bed, the end , and in others the prime mover—for this also is a cause. We look for the latter kind of cause in the case of generation and destruction, but for the former also in the case of existence.

What we are now looking for is most obscure when one term is not predicated of another; [1] e.g. when we inquire what man is; because the expression is a simple one not analyzed into subject and attributes. We must make the question articulate before we ask it; otherwise we get something which shares the nature of a pointless and of a definite question.

Now since we must know that the fact actually exists, it is surely clear that the question is why is the matter so-and-so? e.g. why are these materials a house? Because the essence of house is present in them. And this matter, or the body containing this particular form, is man. Thus what

we are seeking is the cause (i.e. the form) in virtue of which the matter is a definite thing; and this is the substance of the thing.

Clearly then in the case of simple entities inquiry and explanation are impossible; in such cases there is a different mode of inquiry.

Now since that which is composed of something in such a way that the whole is a unity; not as an aggregate is a unity, but as a syllable is—the syllable is not the letters, nor is BA the same as B and A; nor is flesh fire and earth; because after dissolution the compounds, e.g. flesh or the syllable, no longer exist; but the letters exist, and so do fire and earth.

Therefore the syllable is some particular thing; not merely the letters, vowel and consonant, but something else besides. And flesh is not merely fire and earth, or hot and cold, but something else besides.

Since then this something else must be either an element or composed of elements, [20] (a) if it is an element, the same argument applies again; for flesh will be composed of this and fire and earth, and again of another element, so that there will be an infinite regression. And (b) if it is composed of elements, clearly it is composed not of one (otherwise it will itself be that element) but of several; so that we shall use the same argument in this case as about the flesh or the syllable.

It would seem, however, that this something else is something that is not an element, but is the cause that this matter is flesh and that matter a syllable, and similarly in other cases.

And this is the substance of each thing, for it is the primary cause of its existence. And since, although some things are not substances, all substances are constituted in accordance with and by nature, substance would seem to be this nature, which is not an element but a principle. An element is that which is present as matter in a thing, and into which the thing is divided; e.g., A and B are the elements of the syllable.

[3] We must now draw our conclusions from what has been said, and after summing up the result, bring our inquiry to a close. We have said that the objects of our inquiry are the causes and principles and elements of substances. Now some substances are agreed upon by all; but about others certain thinkers have stated individual theories.

Those about which there is agreement are natural substances: e.g. fire, earth, water, air and all the other simple bodies; next, plants and their parts, and animals and the parts of animals; and finally the sensible universe and its parts; and certain thinkers individually include as substances the Forms and the objects of mathematics.

And arguments show that there are yet other substances: the essence and the substrate. Again, from another point of view, the genus is more nearly substance than the species, and the universal than the particulars; and there is a close connection between the universal and genus and the Ideas, for they are thought to be substance on the same grounds.

And since the essence is substance, and definition is the formula of the essence, we have therefore systematically examined definition and essential predication. And since the definition is a formula, and the formula has parts, [20] we have been compelled to investigate parts, and to discover what things are parts of the substance, and what are not; and whether the parts of the substance are also parts of the definition. Further, then, neither the universal nor the genus is substance.

As for the Ideas and the objects of mathematics (for some say that these exist apart from sensible substances) we must consider them later. But now let us proceed to discuss those substances which are generally accepted as such.

Now these are the sensible substances, and all sensible substances contain matter.

And the substrate is substance; in one sense matter (by matter I mean that which is not actually, but is potentially, an individual thing); and in another the formula and the specific shape (which is an individual thing and is theoretically separable); and thirdly there is the combination of the two, which alone admits of generation and destruction, and is separable in an unqualified sense—for of substances in the sense of formula some are separable and some are not.

That matter is also substance is evident; for in all opposite processes of change there is something that underlies those processes; e.g., if the change is of place , that which is now in one place and subsequently in another; and if the change is of magnitude , that which is now of such-and-such a size, and subsequently smaller or greater; and if the change is of quality , that which is now healthy and subsequently diseased.

[1] Similarly, if the change is in respect of being , there is something which is now in course of generation, and subsequently in course of destruction, and which is the underlying substrate, now as this individual thing, and subsequently as deprived of its individuality. In this last process of change the others are involved, but in either one or two of the others it is not involved; for it does not necessarily follow that if a thing contains matter that admits of change of place, it also contains matter that is generable and destructible. The difference between absolute and qualified generation has been explained in the Physics.

Since substance in the sense of substrate or matter is admittedly substance, and this is potential substance, it remains to explain the nature of the actual substance of sensible things. Now Democritus apparently assumes three differences in substance; for he says that the underlying body is one and the same in material, but differs in figure, i.e. shape; or inclination, i.e. position; or intercontact, i.e. arrangement.

But evidently there are many differences; e.g. some things are defined by the way in which their materials are combined, as, for example, things which are unified by mixture, as honey-water; or by ligature, as a faggot; or by glue, as a book; or by clamping, as a chest; or by more than one of these methods. Other things are defined by their position, e.g. threshold and lintel (for these differ in being situated in a particular way); [20] and others by place or direction, e.g. the winds; others by time, e.g. dinner and breakfast; and others by the attributes peculiar to sensible things, e.g. hardness and softness, density and rarity, dryness and humidity. Some are distinguished by some of these differences, and others by all of them; and in general some by excess and some by defect.

Hence it is clear that is has the same number of senses; for a thing is a threshold because it is situated in a particular way, and to be a threshold means to be situated in this particular way, and to be ice means to be condensed in this particular way. Some things have their being defined in all these ways: by being partly mixed, partly blended, partly bound, partly condensed, and partly subjected to all the other different processes; as, for example, a hand or a foot.

We must therefore comprehend the various kinds of differences—for these will be principles of being—i.e. the differences in degree, or in density and rarity, and in other such modifications, for they are all instances of excess and defect.

And if anything differs in shape or in smoothness or roughness, all these are differences in straightness and curvature. For some things mixture will constitute being, [1] and the opposite state not-being.

From this it is evident that if substance is the cause of the existence of each thing, we must look among these differences for the cause of the being of each thing.

No one of them, nor the combination of any two of them, is substance, but nevertheless each one of them contains something analogous to substance. And just as in the case of substances that which is predicated of the matter is the actuality itself, so in the other kinds of definition it is the nearest approximation to actuality. E.g., if we have to define a threshold, we shall call it a piece of wood or stone placed in such-and-such a way; and we should define a house as bricks and timber arranged in such-and-such a way;

or again in some cases there is the final cause as well. And if we are defining ice, we shall describe it as water congealed or condensed in such-and-such a way; and a harmony is such-and-such a combination of high and low; and similarly in the other cases.

From this it is evident that the actuality or formula is different in the case of different matter; for in some cases it is a combination, in others a mixture, and in others some other of the modes which we have described.

Hence in defining the nature of a house, those who describe it as stones, bricks and wood, describe the potential house, since these things are its matter; those who describe it as a receptacle for containing goods and bodies, or something else to the same effect, describe its actuality; but those who combine these two definitions describe the third kind of substance, that which is composed of matter and form.

For it would seem that the formula which involves the differentiae is that of the form and the actuality, [20] while that which involves the constituent parts is rather that of the matter. The same is true of the kind of definitions which Archytas used to accept; for they are definitions of the combined matter and form. E.g., what is windlessness? Stillness in a large extent of air; for the air is the matter, and the stillness is the actuality and substance.

What is a calm? Levelness of sea. The sea is the material substrate, and the levelness is the actuality or form.

From the foregoing account it is clear what sensible substance is, and in what sense it exists; either as matter, or as form and actuality, or thirdly as the combination of the two.

We must not fail to realize that sometimes it is doubtful whether a name denotes the composite substance or the actuality and the form—e.g. whether house denotes the composite thing, a covering made of bricks and stones arranged in such-and-such a way, or the actuality and form, a covering; and whether line means duality in length or duality; and whether animal means a soul in a body or a soul; for the soul is the substance and actuality of some body.

The term animal would be applicable to both cases; not as being defined by one formula, but as relating to one concept. These distinctions are of importance from another point of view, but unimportant for the investigation of sensible substance; [1] because the essence belongs to the form and the actualization.

Soul and essence of soul are the same, but man and essence of man are not, unless the soul is

also to be called man; and although this is so in one sense, it is not so in another.

It appears, then, upon inquiry into the matter, that a syllable is not derived from the phonetic elements plus combination, nor is a house bricks plus combination. And this is true; for the combination or mixture is not derived from the things of which it is a combination or mixture,

nor, similarly, is any other of the differences. E.g., if the threshold is defined by its position, the position is not derived from the threshold, but rather vice versa. Nor, indeed, is man animal plus two-footed; there must be something which exists besides these, if they are matter; but it is neither an element nor derived from an element, but the substance; and those who offer the definition given above are omitting this and describing the matter.

If, then, this something else is the cause of a man's being, and this is his substance, they will not be stating his actual substance.

Now the substance must be either eternal or perishable without ever being in process of perishing, and generated without ever being in process of generation. It has been clearly demonstrated elsewhere that no one generates or creates the form; it is the individual thing that is created, and the compound that is generated.

But whether the substances of perishable things are separable or not is not yet at all clear; only it is clear that this is impossible in some cases, [20] i.e. in the case of all things which cannot exist apart from the particular instances; e.g. house or implement. Probably, then, neither these things themselves, nor anything else which is not naturally composed, are substances; for their nature is the only substance which one can assume in the case of perishable things.

Hence the difficulty which perplexed the followers of Antisthenes and others similarly unlearned has a certain application; I mean the difficulty that it is impossible to define what a thing is (for the definition, they say, is a lengthy formula), but it is possible actually to teach others what a thing is like; e.g., we cannot say what silver is, but we can say that it is like tin.

Hence there can be definition and formula of one kind of substance, i.e. the composite, whether it is sensible or intelligible; but not of its primary constituents, since the defining formula denotes something predicated of something, and this must be partly of the nature of matter and partly of the nature of form.

It is also obvious that, if numbers are in any sense substances, they are such in this sense, and not, as some describe them, aggregates of units. For (a) the definition is a kind of number, since it is divisible, and divisible into indivisible parts (for formulae are not infinite); and number is of this nature.

And (b) just as when any element which composes the number is subtracted or added, it is no longer the same number but a different one, however small the subtraction or addition is; [1] so neither the definition nor the essence will continue to exist if something is subtracted from or added to it. And (c) a number must be something in virtue of which it is a unity (whereas our opponents cannot say what makes it one); that is, if it is a unity.

For either it is not a unity but a kind of aggregate, or if it is a unity, we must explain what makes a unity out of a plurality. And the definition is a unity; but similarly they cannot explain the definition either. This is a natural consequence, for the same reason applies to both, and substance is a unity in the way which we have explained, and not as some thinkers say: e.g. because it is a kind of unit or point; but each substance is a kind of actuality and nature.

Also (d) just as a number does not admit of variation in degree, so neither does substance in the sense of form; if any substance does admit of this, it is substance in combination with matter.

Let this suffice as a detailed account of the generation and destruction of so-called substances, in what sense they are possible and in what sense they are not; and of the reference of things to number.

As regards material substance, we must not fail to realize that even if all things are derived from the same primary cause, or from the same things as primary causes; i.e. even if all things that are generated have the same matter for their first principle, nevertheless each thing has some matter peculiar to it; e.g., the sweet or the viscous is the proximate matter of mucus, and the bitter or some such thing is that of bile— [20] although probably mucus and bile are derived from the same ultimate matter.

The result is that there is more than one matter of the same thing, when one thing is the matter of the other; e.g., mucus is derived from the viscous; and from the sweet, if the viscous is derived from the sweet; and from bile, by the analysis of bile into its ultimate matter. For there are two senses in which X comes from Y; either because X will be found further on than Y in the process of development, or because X is produced when Y is analyzed into its original constituents.

And different things can be generated by the moving cause when the matter is one and the same, e.g. a chest and a bed from wood. But some different things must necessarily have different matter; e.g., a saw cannot be generated from wood, nor does this lie in the power of the moving cause, for it cannot make a saw of wool or wood.

If, then, it is possible to make the same thing from different matter, clearly the art, i.e. the moving principle, is the same; for if both the matter and the mover are different, so too is the product.

So whenever we inquire what the cause is, since there are causes in several senses, we must state all the possible causes.

E.g., what is the material cause of a man? The menses. What is the moving cause? The semen. What is the formal cause? The essence. What is the final cause? The end. [1] (But perhaps both the latter are the same.) We must, however, state the most proximate causes. What is the matter? Not fire or earth, but the matter proper to man.

Thus as regards generable natural substances we must proceed in this manner, if we are to proceed correctly; that is, if the causes are these and of this number, and it is necessary to know the causes. But in the case of substances which though natural are eternal the principle is different. For presumably some of them have no matter; or no matter of this kind, but only such as is spatially mobile.

Moreover, things which exist by nature but are not substances have no matter; their substrate is their substance. E.g., what is the cause of an eclipse; what is its matter? It has none; it is the moon which is affected. What is the moving cause which destroys the light? The earth. There is probably no final cause. The formal cause is the formula; but this is obscure unless it includes the efficient cause.

E.g., what is an eclipse? A privation of light; and if we add caused by the earth’s intervention, this is the definition which includes the efficient cause. In the case of sleep it is not clear what it is

that is proximately affected. Is it the animal? Yes; but in respect of what, and of what proximately? The heart, or some other part. Again, by what is it affected? Again, what is the affection which affects that part, and not the whole animal? A particular kind of immobility? [20] Yes; but in virtue of what affection of the proximate subject is it this?

Since some things both are and are not, without being liable to generation and destruction—e.g. points, if they exist at all; and in general the forms and shapes of things (because white does not come to be, but the wood becomes white, since everything which comes into being comes from something and becomes something)—not all the contraries can be generated from each other. White is not generated from black in the same way as a white man is generated from a black man; nor does everything contain matter, but only such things as admit of generation and transformation into each other.

And such things as, without undergoing a process of change, both are and are not, have no matter.

There is a difficulty in the question how the matter of the individual is related to the contraries. E.g., if the body is potentially healthy, and the contrary of health is disease, is the body potentially both healthy and diseased? And is water potentially wine and vinegar? Probably in the one case it is the matter in respect of the positive state and form, and in the other case in respect of privation and degeneration which is contrary to its proper nature.

There is also a difficulty as to why wine is not the matter of vinegar, nor potentially vinegar (though vinegar comes from it), and why the living man is not potentially dead. In point of fact they are not; their degeneration is accidental, [1] and the actual matter of the living body becomes by degeneration the potentiality and matter of the dead body, and water the matter of vinegar; for the one becomes the other just as day becomes night.

All things which change reciprocally in this way must return into the matter; e.g., if a living thing is generated from a dead one, it must first become the matter, and then a living thing; and vinegar must first become water, and then wine.

With regard to the difficulty which we have described in connection with definitions and numbers, what is the cause of the unification? In all things which have a plurality of parts, and which are not a total aggregate but a whole of some sort distinct from the parts, there is some cause ; inasmuch as even in bodies sometimes contact is the cause of their unity, and sometimes viscosity or some other such quality.

But a definition is one account, not by connection, like the Iliad , but because it is a definition of one thing.

What is it, then, that makes man one thing, and why does it make him one thing and not many, e.g. animal and two-footed, especially if, as some say, there is an Idea of animal and an Idea of two-footed?

Why are not these Ideas man, and why should not man exist by participation, not in any man, but in two Ideas, those of animal and two-footed? [20] And in general man will be not one, but two things—animal and two-footed. Evidently if we proceed in this way, as it is usual to define and explain, it will be impossible to answer and solve the difficulty.

But if, as we maintain, man is part matter and part form—the matter being potentially, and the form actually man—, the point which we are investigating will no longer seem to be a difficulty.

For this difficulty is just the same as we should have if the definition of X were round bronze; for this name would give a clue to the formula, so that the question becomes what is the cause of the unification of round and bronze?

The difficulty is no longer apparent, because the one is matter and the other form. What then is it (apart from the active cause) which causes that which exists potentially to exist actually in things which admit of generation? There is no other cause of the potential sphere's being an actual sphere; this was the essence of each.

Some matter is intelligible and some sensible, and part of the formula is always matter and part actuality; e.g., the circle is a plane figure. But such thing as have no matter, neither intelligible nor sensible, are ipso facto each one of them essentially something one; [1] just as they are essentially something existent: an individual substance, a quality, or a quantity. Hence neither existent nor one is present in their definitions. And their essence is ipso facto something one, just as it is something existent.

Hence also there is no other cause of the unity of any of these things, or of their existence; for each one of them is one and existent not because it is contained in the genus being or unity, nor because these genera exist separately apart from their particulars, but ipso facto.

It is because of this difficulty that some thinkers speak of participation, and raise the question of what is the cause of participation, and what participation means; and others speak of communion; e.g., Lycophron says that knowledge is a communion of the soul with knowing; and others call life a combination or connection of soul with body.

The same argument, however, applies in every case; for being healthy will be the communion or connection or combination of soul and health; and being a bronze triangle a combination of bronze and triangle; and being white a combination of surface and whiteness. The reason for this is that people look for a unifying formula, and a difference, between potentiality and actuality.

But, as we have said, the proximate matter and the shape are one and the same; the one existing potentially, and the other actually. [20] Therefore to ask the cause of their unity is like asking the cause of unity in general; for each individual thing is one, and the potential and the actual are in a sense one. Thus there is no cause other than whatever initiates the development from potentiality to actuality. And such things as have no matter are all, without qualification, essential unities.

[27] We have now dealt with Being in the primary sense, to which all the other categories of being are related; i.e. substance. For it is from the concept of substance that all the other modes of being take their meaning; both quantity and quality and all other such terms; for they will all involve the concept of substance, as we stated it in the beginning of our discussion.

And since the senses of being are analyzable not only into substance or quality or quantity, but also in accordance with potentiality and actuality and function, let us also gain a clear understanding about potentiality and actuality; and first about potentiality in the sense which is most proper to the word, but not most useful for our present purpose— [1] for potentiality and actuality extend beyond the sphere of terms which only refer to motion.

When we have discussed this sense of potentiality we will, in the course of our definitions of actuality, explain the others also.

We have made it plain elsewhere that potentiality and can have several senses.

All senses which are merely equivocal may be dismissed; for some are used by analogy, as in geometry, and we call things possible or impossible because they are or are not in some particular way. But the potentialities which conform to the same type are all principles, and derive their meaning from one primary sense of potency, which is the source of change in some other thing, or in the same thing qua other.

One kind of potentiality is the power of being affected; the principle in the patient itself which initiates a passive change in it by the action of some other thing, or of itself qua other. Another is a positive state of impassivity in respect of deterioration or destruction by something else or by itself qua something else; i.e. by a transformatory principle—for all these definitions contain the formula of the primary sense of potentiality.

Again, all these potentialities are so called either because they merely act or are acted upon in a particular way, or because they do so well . Hence in their formulae also the formulae of potentiality in the senses previously described are present in some degree.

Clearly, then, in one sense the potentiality for acting and being acted upon is one [20] (for a thing is capable both because it itself possesses the power of being acted upon, and also because something else has the power of being acted upon by it);

and in another sense it is not; for it is partly in the patient (for it is because it contains a certain principle, and because even the matter is a kind of principle, that the patient is acted upon; i.e., one thing is acted upon by another: oily stuff is inflammable, and stuff which yields in a certain way is breakable, and similarly in other cases)—

and partly in the agent; e.g. heat and the art of building: the former in that which produces heat, and the latter in that which builds. Hence in so far as it is a natural unity, nothing is acted upon by itself; because it is one, and not a separate thing.

Incapacity and the incapable is the privation contrary to capacity in this sense; so that every capacity has a contrary incapacity for producing the same result in respect of the same subject.

Privation has several senses—it is applied (1.) to anything which does not possess a certain attribute; (2.) to that which would naturally possess it, but does not; either (a) in general, or (b) when it would naturally possess it; and either (1) in a particular way, e.g. entirely, or (2) in any way at all. And in some cases if things which would naturally possess some attribute lack it as the result of constraint, we say that they are deprived.

Since some of these principles are inherent in inanimate things, and others in animate things and in the soul and in the rational part of the soul, [1] it is clear that some of the potencies also will be irrational and some rational. Hence all arts, i.e. the productive sciences, are potencies; because they are principles of change in another thing, or in the artist himself qua other.

Every rational potency admits equally of contrary results, but irrational potencies admit of one result only. E.g., heat can only produce heat, but medical science can produce disease and health. The reason of this is that science is a rational account, and the same account explains both the thing and its privation, though not in the same way; and in one sense it applies to both, and in another sense rather to the actual fact.

Therefore such sciences must treat of contraries—essentially of the one, and non-essentially of

the other; for the rational account also applies essentially to the one, but to the other in a kind of accidental way, since it is by negation and removal that it throws light on the contrary. For the contrary is the primary privation, and this is the removal of that to which it is contrary.

And since contrary attributes cannot be induced in the same subject, and science is a potency which depends upon the possession of a rational formula, and the soul contains a principle of motion, it follows that whereas the salutary can only produce health, and the calefactory only heat, and the frigorific only cold, [20] the scientific man can produce both contrary results.

For the rational account includes both, though not in the same way; and it is in the soul, which contains a principle of motion, and will therefore, by means of the same principle, set both processes in motion, by linking them with the same rational account. Hence things which have a rational potency produce results contrary to those of things whose potency is irrational; for the results of the former are included under one principle, the rational account.

It is evident also that whereas the power of merely producing (or suffering) a given effect is implied in the power of producing that effect well , the contrary is not always true; for that which produces an effect well must also produce it, but that which merely produces a given effect does not necessarily produce it well.

There are some, e.g. the Megaric school, who say that a thing only has potency when it functions, and that when it is not functioning it has no potency. E.g., they say that a man who is not building cannot build, but only the man who is building, and at the moment when he is building; and similarly in the other cases.

It is not difficult to see the absurd consequences of this theory. Obviously a man will not be a builder unless he is building, because to be a builder is to be capable of building; and the same will be true of the other arts.

If, therefore, it is impossible to possess these arts without learning them at some time and having grasped them, [1] and impossible not to possess them without having lost them at some time (through forgetfulness or some affection or the lapse of time; not, of course, through the destruction of the object of the art, because it exists always), when the artist ceases to practice his art, he will not possess it;

and if he immediately starts building again, how will he have re-acquired the art?

The same is true of inanimate things. Neither the cold nor the hot nor the sweet nor in general any sensible thing will exist unless we are perceiving it (and so the result will be that they are affirming Protagoras' theory). Indeed, nothing will have the faculty of sensation unless it is perceiving, i.e. actually employing the faculty.

If, then, that is blind which has not sight, though it would naturally have it, and when it would naturally have it, and while it still exists, the same people will be blind many times a day; and deaf too.

Further, if that which is deprived of its potency is incapable, that which is not happening will be incapable of happening; and he who says that that which is incapable of happening is or will be, will be in error, for this is what incapable meant.

Thus these theories do away with both motion and generation; for that which is standing will always stand, and that which is sitting will always sit; because if it is sitting it will not get up,

since it is impossible that anything which is incapable of getting up should get up.

Since, then, we cannot maintain this, obviously potentiality and actuality are different. But these theories make potentiality and actuality identical; [20] hence it is no small thing that they are trying to abolish.

Thus it is possible that a thing may be capable of being and yet not be, and capable of not being and yet be; and similarly in the other categories that which is capable of walking may not walk, and that which is capable of not walking may walk.

A thing is capable of doing something if there is nothing impossible in its having the actuality of that of which it is said to have the potentiality. I mean, e.g., that if a thing is capable of sitting and is not prevented from sitting, there is nothing impossible in its actually sitting; and similarly if it is capable of being moved or moving or standing or making to stand or being or becoming or not being or not becoming.

The term actuality, with its implication of complete reality, has been extended from motions, to which it properly belongs, to other things; for it is agreed that actuality is properly motion.

Hence people do not invest non-existent things with motion, although they do invest them with certain other predicates. E.g., they say that non-existent things are conceivable and desirable, but not that they are in motion. This is because, although these things do not exist actually, they will exist actually; [1] for some non-existent things exist potentially; yet they do not exist, because they do not exist in complete reality.

Now if, as we have said, that is possible which does not involve an impossibility, obviously it cannot be true to say that so-and-so is possible, but will not be, this view entirely loses sight of the instances of impossibility. I mean, suppose that someone—i.e. the sort of man who does not take the impossible into account—were to say that it is possible to measure the diagonal of a square, but that it will not be measured, because there is nothing to prevent a thing which is capable of being or coming to be from neither being nor being likely ever to be.

But from our premisses this necessarily follows: that if we are to assume that which is not, but is possible, to be or to have come to be, nothing impossible must be involved. But in this case something impossible will take place; for the measuring of the diagonal is impossible.

The false is of course not the same as the impossible; for although it is false that you are now standing, it is not impossible.

At the same time it is also clear that if B must be real if A is, then if it is possible for A to be real, it must also be possible for B to be real; for even if B is not necessarily possible, there is nothing to prevent its being possible. Let A, then, be possible. Then when A was possible, if A was assumed to be real, nothing impossible was involved; but B was necessarily real too. [20] But ex hypothesi B was impossible. Let B be impossible.

Then if B is impossible, A must also be impossible. But A was by definition possible. Therefore so is B.

If, therefore, A is possible, B will also be possible; that is if their relation was such that if A is real, B must be real.

Then if, A and B being thus related, B is not possible on this condition, A and B will not be related as we assumed; and if when A is possible B is necessarily possible, then if A is real B must be real

too. For to say that B must be possible if A is possible means that if A is real at the time when and in the way in which it was assumed that it was possible for it to be real, then B must be real at that time and in that way.

Since all potencies are either innate, like the senses, or acquired by practice, like flute-playing, or by study, as in the arts, some—such as are acquired by practice or a rational formula—we can only possess when we have first exercised them; in the case of others which are not of this kind and which imply passivity, this is not necessary.

[1] Since anything which is possible is something possible at some time and in some way, and with any other qualifications which are necessarily included in the definition; and since some things can set up processes rationally and have rational potencies, while others are irrational and have irrational potencies; and since the former class can only belong to a living thing, whereas the latter can belong both to living and to inanimate things: it follows that as for potencies of the latter kind, when the agent and the patient meet in accordance with the potency in question, the one must act and the other be acted upon; but in the former kind of potency this is not necessary, for whereas each single potency of the latter kind is productive of a single effect, those of the former kind are productive of contrary effects, so that one potency will produce at the same time contrary effects.

But this is impossible. Therefore there must be some other deciding factor, by which I mean desire or conscious choice. For whichever of two things an animal desires decisively it will do, when it is in circumstances appropriate to the potency and meets with that which admits of being acted upon. Therefore everything which is rationally capable, when it desires something of which it has the capability, and in the circumstances in which it has the capability, must do that thing.

Now it has the capability when that which admits of being acted upon is present and is in a certain state; otherwise it will not be able to act. (To add the qualification if nothing external prevents it is no longer necessary; because the agent has the capability in so far as it is a capability of acting; and this is not in all, but in certain circumstances, in which external hindrances will be excluded; [20] for they are precluded by some of the positive qualifications in the definition.)

Hence even if it wishes or desires to do two things or contrary things simultaneously, it will not do them, for it has not the capability to do them under these conditions, nor has it the capability of doing things simultaneously, since it will only do the things to which the capability applies and under the appropriate conditions.

Since we have now dealt with the kind of potency which is related to motion, let us now discuss actuality; what it is, and what its qualities are. For as we continue our analysis it will also become clear with regard to the potential that we apply the name not only to that whose nature it is to move or be moved by something else, either without qualification or in some definite way, but also in other senses; and it is on this account that in the course of our inquiry we have discussed these as well.

Actuality means the presence of the thing, not in the sense which we mean by potentially. We say that a thing is present potentially as Hermes is present in the wood, or the half-line in the whole, because it can be separated from it; and as we call even a man who is not studying a scholar if he is capable of studying. That which is present in the opposite sense to this is present

actually.

What we mean can be plainly seen in the particular cases by induction; we need not seek a definition for every term, but must comprehend the analogy: that as that which is actually building is to that which is capable of building, [1] so is that which is awake to that which is asleep; and that which is seeing to that which has the eyes shut, but has the power of sight; and that which is differentiated out of matter to the matter; and the finished article to the raw material.

Let actuality be defined by one member of this antithesis, and the potential by the other.

But things are not all said to exist actually in the same sense, but only by analogy—as A is in B or to B, so is C in or to D; for the relation is either that of motion to potentiality, or that of substance to some particular matter.

Infinity and void and other concepts of this kind are said to be potentially or actually in a different sense from the majority of existing things, e.g. that which sees, or walks, or is seen.

For in these latter cases the predication may sometimes be truly made without qualification, since that which is seen is so called sometimes because it is seen and sometimes because it is capable of being seen; but the Infinite does not exist potentially in the sense that it will ever exist separately in actuality; it is separable only in knowledge. For the fact that the process of division never ceases makes this actuality exist potentially, but not separately.

Since no action which has a limit is an end, but only a means to the end, as, e.g., the process of thinning; [20] and since the parts of the body themselves, when one is thinning them, are in motion in the sense that they are not already that which it is the object of the motion to make them, this process is not an action, or at least not a complete one, since it is not an end; it is the process which includes the end that is an action.

E.g., at the same time we see and have seen, understand and have understood, think and have thought; but we cannot at the same time learn and have learnt, or become healthy and be healthy. We are living well and have lived well, we are happy and have been happy, at the same time; otherwise the process would have had to cease at some time, like the thinning-process; but it has not ceased at the present moment; we both are living and have lived.

Now of these processes we should call the one type motions, and the other actualizations.

Every motion is incomplete—the processes of thinning, learning, walking, building—these are motions, and incomplete at that. For it is not the same thing which at the same time is walking and has walked, or is building and has built, or is becoming and has become, or is being moved and has been moved, but two different things; and that which is causing motion is different from that which has caused motion.

But the same thing at the same time is seeing and has seen, is thinking and has thought. The latter kind of process, then, is what I mean by actualization, and the former what I mean by motion.

What the actual is, then, and what it is like, may be regarded as demonstrated from these and similar considerations.

We must, however, distinguish when a particular thing exists potentially, and when it does not; for it does not so exist at any and every time. [1] E.g., is earth potentially a man? No, but rather

when it has already become semen, and perhaps not even then; just as not everything can be healed by medicine, or even by chance, but there is some definite kind of thing which is capable of it, and this is that which is potentially healthy.

The definition of that which as a result of thought comes, from existing potentially, to exist actually, is that, when it has been willed, if no external influence hinders it, it comes to pass; and the condition in the case of the patient, i.e. in the person who is being healed, is that nothing in him should hinder the process. Similarly a house exists potentially if there is nothing in X, the matter, to prevent it from becoming a house, i.e., if there is nothing which must be added or removed or changed; then X is potentially a house;

and similarly in all other cases where the generative principle is external. And in all cases where the generative principle is contained in the thing itself, one thing is potentially another when, if nothing external hinders, it will of itself become the other. E.g., the semen is not yet potentially a man; for it must further undergo a change in some other medium. But when, by its own generative principle, it has already come to have the necessary attributes, in this state it is now potentially a man, whereas in the former state it has need of another principle;

just as earth is not yet potentially a statue, because it must undergo a change before it becomes bronze.

It seems that what we are describing is not a particular thing, but a definite material; e.g., a box is not wood, but wooden material, [20] and wood is not earth, but earthen material; and earth also is an illustration of our point if it is similarly not some other thing, but a definite material—it is always the latter term in this series which is, in the fullest sense, potentially something else.

E.g., a box is not earth, nor earthen, but wooden; for it is this that is potentially a box, and this is the matter of the box—that is, wooden material in general is the matter of box in general, whereas the matter of a particular box is a particular piece of wood.

If there is some primary stuff, which is not further called the material of some other thing, this is primary matter. E.g., if earth is made of air, and air is not fire, but made of fire, then fire is primary matter, not being an individual thing.

For the subject or substrate is distinguishable into two kinds by either being or not being an individual thing. Take for example as the subject of the attributes man, or body or soul, and as an attribute cultured or white. Now the subject, when culture is induced in it, is called not culture but cultured, and the man is called not whiteness but white; nor is he called ambulation or motion, but walking or moving; just as we said that things are of a definite material.

Thus where subject has this sense, the ultimate substrate is substance; but where it has not this sense, and the predicate is a form or individuality, the ultimate substrate is matter or material substance. It is quite proper that both matter and attributes should be described by a derivative predicate, [1] since they are both indefinite.

Thus it has now been stated when a thing should be said to exist potentially, and when it should not.

Now since we have distinguished the several senses of priority, it is obvious that actuality is prior to potentiality. By potentiality I mean not that which we have defined as a principle of change which is in something other than the thing changed, or in that same thing qua other, but in general any principle of motion or of rest; for nature also is in the same genus as potentiality,

because it is a principle of motion, although not in some other thing, but in the thing itself qua itself.

To every potentiality of this kind actuality is prior, both in formula and in substance; in time it is sometimes prior and sometimes not.

That actuality is prior in formula is evident; for it is because it can be actualized that the potential, in the primary sense, is potential, I mean, e.g., that the potentially constructive is that which can construct, the potentially seeing that which can see, and the potentially visible that which can be seen.

The same principle holds in all other cases too, so that the formula and knowledge of the actual must precede the knowledge of the potential.

In time it is prior in this sense: the actual is prior to the potential with which it is formally identical, but not to that with which it is identical numerically.

What I mean is this: [20] that the matter and the seed and the thing which is capable of seeing, which are potentially a man and corn and seeing, but are not yet so actually, are prior in time to the individual man and corn and seeing subject which already exist in actuality.

But prior in time to these potential entities are other actual entities from which the former are generated; for the actually existent is always generated from the potentially existent by something which is actually existent—e.g., man by man, cultured by cultured—there is always some prime mover; and that which initiates motion exists already in actuality.

We have said in our discussion of substance that everything which is generated is generated from something and by something; and by something formally identical with itself.

Hence it seems impossible that a man can be a builder if he has never built, or a harpist if he has never played a harp; because he who learns to play the harp learns by playing it, and similarly in all other cases.

This was the origin of the sophists' quibble that a man who does not know a given science will be doing that which is the object of that science, because the learner does not know the science. But since something of that which is being generated is already generated, and something of that which is being moved as a whole is already moved (this is demonstrated in our discussion on Motion), [1] presumably the learner too must possess something of the science.

At any rate from this argument it is clear that actuality is prior to potentiality in this sense too, i.e. in respect of generation and time.

But it is also prior in substantiality; (a) because things which are posterior in generation are prior in form and substantiality; e.g., adult is prior to child, and man to semen, because the one already possesses the form, but the other does not;

and (b) because everything which is generated moves towards a principle, i.e. its end . For the object of a thing is its principle; and generation has as its object the end . And the actuality is the end, and it is for the sake of this that the potentiality is acquired; for animals do not see in order that they may have sight, but have sight in order that they may see.

Similarly men possess the art of building in order that they may build, and the power of speculation that they may speculate; they do not speculate in order that they may have the power of speculation—except those who are learning by practice; and they do not really

speculate, but only in a limited sense, or about a subject about which they have no desire to speculate.

Further, matter exists potentially, because it may attain to the form; but when it exists actually, it is then in the form. The same applies in all other cases, including those where the end is motion.

Hence, just as teachers think that they have achieved their end when they have exhibited their pupil performing, so it is with nature. For if this is not so, [20] it will be another case of Pauson's Hermes; it will be impossible to say whether the knowledge is in the pupil or outside him, as in the case of the Hermes. For the activity is the end, and the actuality is the activity; hence the term actuality is derived from activity, and tends to have the meaning of complete reality.

Now whereas in some cases the ultimate thing is the use of the faculty, as, e.g., in the case of sight seeing is the ultimate thing, and sight produces nothing else besides this; but in other cases something is produced, e.g. the art of building produces not only the act of building but a house; nevertheless in the one case the use of the faculty is the end, and in the other it is more truly the end than is the potentiality. For the act of building resides in the thing built; i.e., it comes to be and exists simultaneously with the house.

Thus in all cases where the result is something other than the exercise of the faculty, the actuality resides in the thing produced; e.g. the act of building in the thing built, the act of weaving in the thing woven, and so on; and in general the motion resides in the thing moved. But where there is no other result besides the actualization, the actualization resides in the subject; e.g. seeing in the seer, and speculation in the speculator, and life in the soul

[1] (and hence also happiness, since happiness is a particular kind of life). Evidently, therefore, substance or form is actuality. Thus it is obvious by this argument that actuality is prior in substantiality to potentiality; and that in point of time, as we have said, one actuality presupposes another right back to that of the prime mover in each case.

It is also prior in a deeper sense; because that which is eternal is prior in substantiality to that which is perishable, and nothing eternal is potential. The argument is as follows. Every potentiality is at the same time a potentiality for the opposite. For whereas that which is incapable of happening cannot happen to anything, everything which is capable may fail to be actualized.

Therefore that which is capable of being may both be and not be. Therefore the same thing is capable both of being and of not being. But that which is capable of not being may possibly not be; and that which may possibly not be is perishable; either absolutely, or in the particular sense in which it is said that it may possibly not be; that is, in respect either of place or of quantity or of quality. Absolutely means in respect of substance.

Hence nothing which is absolutely imperishable is absolutely potential (although there is no reason why it should not be potential in some particular respect; e.g. of quality or place); therefore all imperishable things are actual. Nor can anything which is of necessity be potential; and yet these things are primary, for if they did not exist, nothing would exist. [20] Nor can motion be potential, if there is any eternal motion. Nor, if there is anything eternally in motion, is it potentially in motion (except in respect of some starting-point or destination), and there is no reason why the matter of such a thing should not exist.

Hence the sun and stars and the whole visible heaven are always active, and there is no fear that

they will ever stop—a fear which the writers on physics entertain. Nor do the heavenly bodies tire in their activity; for motion does not imply for them, as it does for perishable things, the potentiality for the opposite, which makes the continuity of the motion distressing; this results when the substance is matter and potentiality, not actuality.

Imperishable things are resembled in this respect by things which are always undergoing transformation, such as earth and fire; for the latter too are always active, since they have their motion independently and in themselves. Other potentialities, according to the distinctions already made, all admit of the opposite result; for that which is capable of causing motion in a certain way can also cause it not in that way; that is if it acts rationally.

The same irrational potentialities can only produce opposite results by their presence or absence.

Thus if there are any entities or substances such as the dialecticians describe the Ideas to be, there must be something which has much more knowledge than absolute knowledge, and much more mobility than motion; [1] for they will be in a truer sense actualities, whereas knowledge and motion will be their potentialities. Thus it is obvious that actuality is prior both to potentiality and to every principle of change.

That a good actuality is both better and more estimable than a good potentiality will be obvious from the following arguments. Everything of which we speak as capable is alike capable of contrary results; e.g., that which we call capable of being well is alike capable of being ill, and has both potentialities at once; for the same potentiality admits of health and disease, or of rest and motion, or of building and of pulling down, or of being built and of falling down.

Thus the capacity for two contraries can belong to a thing at the same time, but the contraries cannot belong at the same time; i.e., the actualities, e.g. health and disease, cannot belong to a thing at the same time. Therefore one of them must be the good; but the potentiality may equally well be both or neither. Therefore the actuality is better.

Also in the case of evils the end or actuality must be worse than the potentiality; for that which is capable is capable alike of both contraries.

Clearly, then, evil does not exist apart from things ; for evil is by nature posterior to potentiality. [20] Nor is there in things which are original and eternal any evil or error, or anything which has been destroyed—for destruction is an evil.

Geometrical constructions, too, are discovered by an actualization, because it is by dividing that we discover them. If the division were already done, they would be obvious; but as it is the division is only there potentially. Why is the sum of the interior angles of a triangle equal to two right angles? Because the angles about one point in a straight line are equal to two right angles. If the line parallel to the side had been already drawn, the answer would have been obvious at sight.

Why is the angle in a semicircle always a right angle? If three lines are equal, the two forming the base, and the one set upright from the middle of the base, the answer is obvious to one who knows the former proposition. Thus it is evident that the potential constructions are discovered by being actualized. The reason for this is that the actualization is an act of thinking. Thus potentiality comes from actuality (and therefore it is by constructive action that we acquire knowledge). But this is true only in the abstract, for the individual actuality is posterior in

generation to its potentiality.

The terms being and not-being are used not only with reference to the types of predication, and to the potentiality or actuality, or non-potentiality and non-actuality, of these types, [1] but also (in the strictest sense) to denote truth and falsity. This depends, in the case of the objects, upon their being united or divided; so that he who thinks that what is divided is divided, or that what is united is united, is right; while he whose thought is contrary to the real condition of the objects is in error. Then when do what we call truth and falsity exist or not exist? We must consider what we mean by these terms.

It is not because we are right in thinking that you are white that you are white; it is because you are white that we are right in saying so. Now if whereas some things are always united and cannot be divided, and others are always divided and cannot be united, others again admit of both contrary states, then to be is to be united, i.e. a unity; and not to be is to be not united, but a plurality.

Therefore as regards the class of things which admit of both contrary states, the same opinion or the same statement comes to be false and true, and it is possible at one time to be right and at another wrong; but as regards things which cannot be otherwise the same opinion is not sometimes true and sometimes false, but the same opinions are always true or always false.

But with regard to incomposite things, what is being or not-being, and truths or falsity? Such a thing is not composite, so as to be when it is united and not to be when it is divided, [20] like the proposition that the wood is white, or the diagonal is incommensurable; nor will truth and falsity apply in the same way to these cases as to the previous ones.

In point of fact, just as truth is not the same in these cases, so neither is being. Truth and falsity are as follows: contact and assertion are truth (for assertion is not the same as affirmation), and ignorance is non-contact. I say ignorance, because it is impossible to be deceived with respect to what a thing is, except accidentally;

and the same applies to incomposite substances, for it is impossible to be deceived about them. And they all exist actually, not potentially; otherwise they would be generated and destroyed; but as it is, Being itself is not generated (nor destroyed); if it were, it would be generated out of something. With respect, then, to all things which are essences and actual, there is no question of being mistaken, but only of thinking or not thinking them.

Inquiry as to what they are takes the form of inquiring whether they are of such-and-such a nature or not.

As for being in the sense of truth, and not-being in the sense of falsity, a unity is true if the terms are combined, and if they are not combined it is false. Again, if the unity exists, it exists in a particular way, and if it does not exist in that way, it does not exist at all.

[1] Truth means to think these objects, and there is no falsity or deception, but only ignorance—not, however, ignorance such as blindness is; for blindness is like a total absence of the power of thinking. And it is obvious that with regard to immovable things also, if one assumes that there are immovable things, there is no deception in respect of time.

E.g., if we suppose that the triangle is immutable, we shall not suppose that it sometimes contains two right angles and sometimes does not, for this would imply that it changes; but we may suppose that one thing has a certain property and another has not; e.g., that no even

number is a prime, or that some are primes and others are not. But about a single number we cannot be mistaken even in this way, for we can no longer suppose that one instance is of such a nature, and another not, but whether we are right or wrong, the fact is always the same.

[15] That one has several meanings has been already stated in our distinction of the various meanings of terms. But although it has a number of senses, the things which are primarily and essentially called one, and not in an accidental sense, may be summarized under four heads:

(1.) That which is continuous, [20] either absolutely or in particular that which is continuous by natural growth and not by contact or ligature; and of these things those are more strictly and in a prior sense one whose motion is more simple and indivisible.

(2.) Of this kind in a still higher degree is that which is a whole and has a definite shape or form, particularly that which is such by nature and not by constraint (like things which are joined by glue or nails or by being tied together), but which contains in itself the cause of its continuity.

A thing is of this kind if its motion is one and indivisible in respect of place and time; so that clearly if a thing has as its principle of motion the primary kind of motion (i.e. locomotion) in its primary form (i.e. circular locomotion), it is in the primary sense one spatial magnitude.

Some things, then, are one in this sense, qua continuous or whole; the other things which are one are those whose formula is one.

Such are the things of which the concept is one, i.e. of which the concept is indivisible; and this is indivisible when the object is indivisible (3.) in form or (4.) in number. Now in number the individual is indivisible, and in form that which is indivisible in comprehension and knowledge; so that that which causes the unity of substances must be one in the primary sense.

Such, then, in number are the meanings of one: the naturally continuous, the whole, the individual, and the universal. All these are one because they are indivisible; some in motion, and others in concept or formula. [1] But we must recognize that the questions, What sort of things are called one? and What is essential unity, and what is the formula? must not be taken to be the same.

One has these several meanings, and each thing to which some one of these senses applies will be one; but essential unity will have now one of these senses and now something else, which is still nearer to the term one, whereas they are nearer to its denotation . This is also true of element and cause, supposing that one had to explain them both by exhibiting concrete examples and by giving a definition of the term.

There is a sense in which fire is an element (and no doubt so too is the indeterminate or some other similar thing, of its own nature), and there is a sense in which it is not; because to be fire and to be an element are not the same. It is as a concrete thing and as a stuff that fire is an element; but the term element denotes that it has this attribute: that something is made of it as a primary constituent.

The same is true of cause or one and all other such terms.

Hence to be one means to be indivisible (being essentially a particular thing, distinct and separate in place or form or thought), or to be whole and indivisible; but especially to be the first measure of each kind, and above all of quantity; for it is from this that it has been extended to the other categories.

[20] Measure is that by which quantity is known, and quantity qua quantity is known either by unity or by number, and all number is known by unity. Therefore all quantity qua quantity is known by unity, and that by which quantities are primarily known is absolute unity.

Thus unity is the starting point of number qua number. Hence in other cases too measure means that by which each thing is primarily known, and the measure of each thing is a unit—in length, breadth, depth, weight and speed.

(The terms weight and speed are common to both contraries, for each of them has a double meaning; e.g., weight applies to that which has the least amount of gravity and also to that which has excess of it, and speed to that which has the least amount of motion and also to that which has excess of it; for even the slow has some speed, and the light some weight.)

In all these cases, then, the measure and starting-point is some indivisible unit (since even in the case of lines we treat the one-foot line as indivisible). For everywhere we require as our measure an indivisible unit; i.e., that which is simple either in quality or in quantity.

Now where it seems impossible to take away or add, there the measure is exact. [1] Hence the measure of number is most exact, for we posit the unit as in every way indivisible; and in all other cases we follow this example, for with the furlong or talent or in general with the greater measure an addition or subtraction would be less obvious than with a smaller one.

Therefore the first thing from which, according to our perception, nothing can be subtracted is used by all men as their measure of wet and dry, weight and magnitude; and they think that they know the quantity only when they know it in terms of this measure. And they know motion too by simple motion and the most rapid, for this takes least time.

Hence in astronomy a unit of this kind is the starting point and measure; for they assume that the motion of the heavens is uniform and the most rapid, and by it they judge the others. In music the measure is the quarter tone, because it is the smallest interval; and in language the letter. All these are examples of units in this sense—not in the sense that unity is something common to them all, but in the sense which we have described.

The measure is not always numerically one, but sometimes more than one; e.g., there are two quarter tones, distinguished not by our hearing but by their theoretical ratios; and the articulate sounds by which we measure speech are more than one; and the diagonal of a square is measured by two quantities, and so are all magnitudes of this kind. Thus unity is the measure of all things, because we learn of what the substance is composed by dividing it, [20] in respect of either quantity or form.

Hence unity is indivisible, because that which is primary in each class of things is indivisible. But not every unit is indivisible in the same sense—e.g. the foot and the arithmetical unit; but the latter is absolutely indivisible, and the former must be classed as indivisible with respect to our power of perception, as we have already stated; since presumably everything which is continuous is divisible.

The measure is always akin to the thing measured. The measure of magnitude is magnitude, and in particular the measure of length is a length; of breadth, a breadth; of sounds, a sound; of weight, a weight; of units, a unit; for this is the view that we must take, and not that the measure of numbers is a number. The latter, indeed, would necessarily be true, if the analogy held good; but the supposition is not analogous—it is as though one were to suppose that the measure of

units is units, and not a unit; for number is a plurality of units.

We also speak of knowledge or sense perception as a measure of things for the same reason, because through them we come to know something; whereas really they are measured themselves rather than measure other things. But our experience is as though someone else measured us, and we learned our height by noticing to what extent he applied his foot-rule to us.

Protagoras says that man is the measure of all things, meaning, as it were, the scholar or the man of perception; [1] and these because they possess, the one knowledge, and the other perception, which we hold to be the measures of objects. Thus, while appearing to say something exceptional, he is really saying nothing.

Obviously, then, unity in the strictest sense, if we make our definition in accordance with the meaning of the term, is a measure; particularly of quantity, and secondarily of quality. Some things will be of this kind if they are indivisible in quantity, and others if in quality. Therefore that which is one is indivisible, either absolutely or qua one.

We must inquire, with regard to the substance and nature of unity, in which sense it exists. This is the same question which we approached in our discussion of difficulties: what unity is, and what view we are to take of it; whether that unity itself is a kind of substance—as first the Pythagoreans, and later Plato, both maintain—or whether rather some nature underlies it, and we should give a more intelligible account of it, and more after the manner of the physicists; for of them one holds that the One is Love, another Air, and another the Indeterminate.

Now if no universal can be a substance (as we have stated in our discussion of substance and being), and being itself cannot be a substance in the sense of one thing existing alongside the many (since it is common to them), but only as a predicate, [20] then clearly neither can unity be a substance; because being and unity are the most universal of all predicates.

Therefore (a) genera are not certain entities and substances separate from other things; and (b) unity cannot be a genus, for the same reasons that being and substance cannot.

Further, the nature of unity must be the same for all categories.

Now being and unity have the same number of meanings; so that since in the category of qualities unity is something definite, i.e. some definite entity, and similarly in the category of quantity, clearly we must also inquire in general what unity is, just as in the case of being; since it is not enough to say that its nature is simply unity or being.

But in the sphere of colors unity is a color, e.g. white; that is if all the other colors are apparently derived from white and black, and black is a privation of white, as darkness is of light. Thus if all existing things were colors, all existing things would be a number; but of what?

Clearly of colors. And unity would be some one color, e.g. white. Similarly if all existing things were tunes, there would be a number—of quarter-tones; but their substance would not be a number; and unity would be something whose substance is not unity but a quarter-tone. [1] Similarly in the case of sounds, existing things would be a number of letters, and unity would be a vowel;

and if existing things were right-lined figures, they would be a number of figures, and unity would be a triangle. And the same principle holds for all other genera. Therefore if in the

categories of passivity and quality and quantity and motion there is in every category a number and a unity, and if the number is of particular things and the unity is a particular unity, and its substance is not unity, then the same must be true in the case of substances, because the same is true in all cases.

It is obvious, then, that in every genus one is a definite entity, and that in no case is its nature merely unity; but as in the sphere of colors the One-itself which we have to seek is one color, so too in the sphere of substance the One-itself is one substance.

And that in a sense unity means the same as being is clear (a) from the fact that it has a meaning corresponding to each of the categories, and is contained in none of them—e.g., it is contained neither in substance nor in quality, but is related to them exactly as being is; (b) from the fact that in one man nothing more is predicated than in man(just as Being too does not exist apart from some thing or quality or quantity); and (c) because to be one is to be a particular thing.

[20] One and Many are opposed in several ways. Unity and Plurality are opposed as being indivisible and divisible; for that which is divided or divisible is called a plurality, and that which is indivisible or undivided is called one. Then since opposition is of four kinds, and one of the present pairs of opposites is used in a privative sense, they must be contraries, and neither contradictories nor relative terms.

Unity is described and explained by its contrary—the indivisible by the divisible—because plurality, i.e. the divisible, is more easily perceptible than the indivisible; and so in formula plurality is prior to the indivisible, on account of our powers of perception.

To Unity belong (as we showed by tabulation in our distinction of the contraries) Identity, Similarity and Equality; and to Plurality belong Otherness, Dissimilarity and Inequality.

Identity has several meanings. (a) Sometimes we speak of it in respect of number. (b) We call a thing the same if it is one both in formula and in number, e.g., you are one with yourself both in form and in matter; [1] and again (c) if the formula of the primary substance is one, e.g., equal straight lines are the same, and equal quadrilaterals with equal angles, and there are many more examples; but in these equality means unity.

Things are similar(a) if, while not being the same absolutely or indistinguishable in respect of their concrete substance, they are identical in form; e.g the larger square is similar to the smaller, and unequal straight lines are similar. These are similar, but not absolutely the same. (b) If, having the same form, and being capable of difference in degree, they have no difference of degree.

(c) If things have an attribute which is the same and one in form—e.g. white—in different degrees, we say that they are similar because their form is one. (d) If the respects in which they are the same are more than those in which they differ, either in general or as regards their more prominent qualities; e.g., tin is similar to silver, as being white; and gold to fire, as being yellow or flame-colored.

Thus it is obvious that Other and Unlike also have several meanings. (a) In one sense other is used in the sense opposite to the same; thus everything in relation to every other thing is either the same or other. (b) In another sense things are other unless both their matter and their formula are one; thus you are other than your neighbor. (c) The third sense is that which is

found in mathematics. Therefore everything in relation to everything else is called either other or the same; that is, in the case of things of which unity and being are predicated;

[20] for other is not the contradictory of the same, and so it is not predicated of non-existent things (they are called not the same), but it is predicated of all things which exist; for whatever is by nature existent and one is either one or not one with something else.

Other and same, then, are opposed in this way; but difference is distinct from otherness.

For that which is other than something need not be other in a particular respect, since everything which is existent is either other or the same. But that which is different from something is different in some particular respect, so that that in which they differ must be the same sort of thing; i.e. the same genus or species.

For everything which is different differs either in genus or in species—in genus, such things as have not common matter and cannot be generated into or out of each other, e.g. things which belong to different categories; and in species, such things as are of the same genus (genus meaning that which is predicated of both the different things alike in respect of their substance).

The contraries are different, and contrariety is a kind of difference. That this is rightly premissed is made clear by induction; for the contraries are obviously all different, since they are not merely other, but some are other in genus, and others are in the same line of predication, [1] and so are in the same genus and the same in genus. We have distinguished elsewhere what sort of things are the same or other in genus.

Since things which differ can differ from one another in a greater or less degree, there is a certain maximum difference, and this I call contrariety. That it is the maximum difference is shown by induction. For whereas things which differ in genus have no means of passing into each other, and are more widely distant, and are not comparable, in the case of things which differ in species the contraries are the extremes from which generation takes place;

and the greatest distance is that which is between the extremes, and therefore also between the contraries. But in every class the greatest thing is complete. For (a) that is greatest which cannot be exceeded, and (b) that is complete outside which nothing proper to it can be found. For complete difference implies an end, just as all other things are called complete because they imply an end.

And there is nothing beyond the end; for in everything the end is the last thing, and forms the boundary. Thus there is nothing beyond the end, and that which is complete lacks nothing.

From this argument, then, it is clear that contrariety is maximum difference; and since we speak of contraries in various senses, the sense of completeness will vary in accordance with the sense of contrariety which applies to the contraries.

[20] This being so, evidently one thing cannot have more than one contrary (since there can be nothing more extreme than the extreme, nor can there be more than two extremes of one interval); and in general this is evident, if contrariety is difference, and difference (and therefore complete difference) is between two things.

The other definitions of contraries must also be true, for (1.) complete difference is the maximum difference; since (a) we can find nothing beyond it, whether things differ in genus or in species (for we have shown that difference in relation to things outside the genus is

impossible; this is the maximum difference between them); and (b) the things which differ most in the same genus are contraries; for complete difference is the maximum difference between these.

(2.) The things which differ most in the same receptive material are contraries; for contraries have the same matter. (3.) The most different things which come under the same faculty are contraries; for one science treats of one class of things, in which complete difference is the greatest.

Positive state and Privation constitute primary contrariety—not every form of privation (for it has several senses), but any form which is complete. All other contraries must be so called with respect to these; some because they possess these, others because they produce them or are productive of them, and others because they are acquisitions or losses of these or other contraries.

Now if the types of opposition are contradiction, privation, contrariety and relation, [1] and of these the primary type is contradiction, and an intermediate is impossible in contradiction but possible between contraries, obviously contradiction is not the same as contrariety; and privation is a form of contradiction;

for it is either that which is totally incapable of possessing some attribute, or that which would naturally possess some attribute but does not, that suffers privation—either absolutely or in some specified way. Here we already have several meanings, which we have distinguished elsewhere. Thus privation is a kind of contradiction or incapacity which is determinate or associated with the receptive material.

This is why though there is no intermediate in contradiction there is one in some kinds of privation. For everything is either equal or not equal, but not everything is either equal or unequal; if it is, it is only so in the case of a material which admits of equality. If, then, processes of material generation start from the contraries, and proceed either from the form and the possession of the form, or from some privation of the form or shape, clearly all contrariety must be a form of privation, although presumably not all privation is contrariety.

This is because that which suffers privation may suffer it in several senses; for it is only the extremes from which changes proceed that are contraries.

This can also be shown by induction. Every contrariety involves privation as one of its contraries, but not always in the same way: [20] inequality involves the privation of equality, dissimilarity that of similarity, evil that of goodness.

And the differences are as we have stated: one case is, if a thing is merely deprived; another, if it is deprived at a certain time or in a certain part—e.g. at a certain age or in the important part—or entirely. Hence in some cases there is an intermediate (there are men who are neither good nor bad), and in others there is not—a thing must be either odd or even.

Again, some have a determinate subject, and others have not. Thus it is evident that one of a pair of contraries always has a privative sense; but it is enough if this is true of the primary or generic contraries, e.g. unity and plurality; for the others can be reduced to them.

Since one thing has one contrary, it might be asked in what sense unity is opposed to plurality, and the equal to the great and to the small. For if we always use the word whether in an antithesis—e.g., whether it is white or black, or whether it is white or not (but we do not ask

whether it is a man or white, unless we are proceeding upon some assumption, and asking, for instance, whether it was Cleon who came or Socrates.

This is not a necessary disjunction in any class of things, but is derived from the use in the case of opposites—for it is only opposites that cannot be true at the same time—and we have this same use here in the question which of the two came? [1] for if both alternatives were possible, the question would be absurd; but even so the question falls into an antithesis: that of one or many—i.e., whether both came, or one)—

if, then, the question whether is always concerned with opposites, and we can ask whether it is greater or smaller, or equal, what is the nature of the antithesis between equal and greater or smaller? It is contrary neither to one only, nor to both: for (a) it is no more contrary to the greater than to the smaller; (b) equal is contrary to unequal, and thus it will be contrary to more than one thing;

(c) if unequal means the same as both greater and smaller at the same time, equal must still be opposed to them both: This difficulty supports the theory that the unequal is a duality. But the result is that one thing is contrary to two; which is impossible.

Further, it is apparent that equal is intermediate between great and small, but it is not apparent that any contrariety is intermediate, nor can it be, by definition; for it could not be complete if it were the intermediate of something, but rather it always has something intermediate between itself and the other extreme.

It remains, then, that it is opposed either as negation or as privation. Now it cannot be so opposed to one of the two, for it is no more opposed to the great than to the small.

Therefore it is a privative negation of both. For this reason we say whether with reference to both, and not to one of the two—e.g., whether it is greater or equal, or whether it is equal or smaller; [20] there are always three alternatives. But it is not a necessary privation; for not everything is equal which is not greater or smaller, but only things which would naturally have these attributes.

The equal, then, is that which is neither great nor small, but would naturally be either great or small; and it is opposed to both as a privative negation, and therefore is intermediate between them. And that which is neither good nor bad is opposed to both, but it has no name (for each of these terms has several meanings, and there is no one material which is receptive of both); that which is neither white nor black is better entitled to a name,

although even this has no single name, but the colors of which this negation is privatively predicated are to a certain extent limited; for it must be either grey or buff or something similar.

Therefore those persons are wrong in their criticism who imagine that all terms are used analogously, so that that which is neither a shoe nor a hand will be intermediate between shoe and hand, because that which is neither good nor bad is intermediate between good and bad—as though there must be an intermediate in all cases; but this does not necessarily follow.

For the one is a joint negation of opposites where there is an intermediate and a natural interval; [1] but in the other case there is no question of difference, since the joint negation applies to things which are in different genera, and therefore the substrate is not one.

A similar question might be raised about one and many. For if many is absolutely opposed to

one, certain impossibilities result. (1) One will be few; for many is also opposed to few.

(2) Two will be many; since twofold is manifold, and twofold is derived from two. Therefore one will be few; for in what relation can two be many if not in relation to one, which must therefore be few? for there can be nothing less. (3) If much and little are in plurality what long and short are in length, and if whatever is much is also many,

and many is much (unless indeed there is a difference in the case of a plastic continuum), few will be a plurality. Therefore one will be a plurality, if it is few; and this necessarily follows if two is many. Presumably, however, although many in a sense means much, there is a distinction; e.g., water is called much but not many.

To all things, however, which are divisible the term many is applicable: in one sense, if there is a plurality which involves excess either absolutely or relatively (and similarly few is a plurality involving defect); and in another in the sense of number, in which case it is opposed to one only. [20] For we say one or many just as if we were to say one and ones, or white thing and white things, or were to compare the things measured with the measure.

Multiples, too, are spoken of in this way; for every number is many, because it consists of ones, and because every number is measurable by one; and also as being the opposite of one, and not of few. In this sense even two is many; but as a plurality involving excess either relatively or absolutely it is not many, but the first plurality. Two is, however, absolutely few; because it is the first plurality involving defect

(hence Anaxagoras was not right in leaving the subject by saying all things were together, infinite both in multitude and in smallness; instead of in smallness he should have said in fewness, for things cannot be infinite in fewness), since fewness is constituted not by one, as some hold, but by two.

In the sphere of numbers one is opposed to many as the measure to the measurable, i.e., as relative terms are opposed which are not of their own nature relative. We have distinguished elsewhere that things are called relative in two senses—either as being contraries, or as knowledge is related to the knowable, A being related to B because B is described in relation to A.

[1] There is no reason why one should not be fewer than something, e.g. two; for if it is fewer it is not therefore few. Plurality is, as it were, a genus of number, since number is a plurality measurable by one. And in a sense one and number are opposed; not, however, as being contrary, but as we have said some relative terms to be; for it is qua measure and measurable that they are opposed.

(Hence not everything which is one is a number—e.g., a thing which is indivisible.) But although the relation between knowledge and the knowable is said to be similar to this, it turns out not to be similar. For it would seem that knowledge is a measure, and the knowable that which is measurable by it; but it happens that whereas all knowledge is knowable, the knowable is not always knowledge, because in a way knowledge is measured by the knowable.

Plurality is contrary neither to the few (whose real contrary is the many, as an excessive plurality to an exceeded plurality) nor in all senses to one; but they are contrary in one sense (as has been said) as being the one divisible and the other indivisible; and in another as being relative (just as knowledge is relative to the knowable) if plurality is a number and one is the measure.

Since there can be, and in some cases is, an intermediate between contraries, intermediates must be composed of contraries; [20] for all intermediates are in the same genus as the things between which they are intermediate.

By intermediates we mean those things into which that which changes must first change. E.g., if we change from the highest string to the lowest by the smallest gradations we shall first come to the intermediate notes; and in the case of colors if we change from white to black we shall come to red and grey before we come to black; and similarly in other cases.

But change from one genus into another is impossible except accidentally; e.g., from color to shape. Therefore intermediates must be in the same genus as one another and as the things between which they are intermediate.

But all intermediates are between certain opposites, for it is only from these per se that change is possible.

Hence there can be no intermediate between things which are not opposites; for then there would be change also between things which are not opposites. Of things which are opposites, contradiction has no intermediate term (for contradiction means this: an antithesis one term of which must apply to any given thing, and which contains no intermediate term); of the remaining types of opposites some are relative, others privative, and others contrary.

Those relative opposites which are not contrary have no intermediate. The reason for this is that they are not in the same genus— [1] for what is intermediate between knowledge and the knowable?—but between great and small there is an intermediate. Now since intermediates are in the same genus, as has been shown, and are between contraries, they must be composed of those contraries. For the contraries must either belong to a genus or not. And if there is a genus in such a way

that it is something prior to the contraries, then the differentiae which constitute the contrary species (for species consist of genus and differentiae) will be contraries in a prior sense.

E.g., if white and black are contraries, and the one is a penetrative and the other a compressive color, these differentiae, penetrative and compressive, are prior, and so are opposed to each other in a prior sense.

But it is the species which have contrary differentiae that are more truly contraries; the other, i.e. intermediate, species will consist of genus and differentiae. E.g., all colors which are intermediate between white and black should be described by their genus (i.e. color) and by certain differentiae.

But these differentiae will not be the primary contraries; otherwise every thing will be either white or black. Therefore they will be different from the primary contraries. Therefore they will be intermediate between them, and the primary differentiae will be the penetrative and the compressive. [20] Thus we must first investigate the contraries which are not contained in a genus, and discover of what their intermediates are composed.

For things which are in the same genus must either be composed of differentiae which are not compounded with the genus, or be incomposite. Contraries are not compounded with one another, and are therefore first principles; but intermediates are either all incomposite or none of them. Now from the contraries something is generated in such a way that change will reach it before reaching the contraries themselves (for there must be something which is less in degree

than one contrary and greater than the other). Therefore this also will be intermediate between the contraries.

Hence all the other intermediates must be composite; for that which is greater in degree than one contrary and less than the other is in some sense a compound of the contraries of which it is said to be greater in degree than one and less than the other. And since there is nothing else homogeneous which is prior to the contraries, all intermediates must be composed of contraries.

Therefore all the lower terms, both contraries and intermediates, must be composed of the primary contraries. Thus it is clear that intermediates are all in the same genus, and are between contraries, and are all composed of contraries.

That which is other in species than something else is other in respect of something and that something must apply to both. E.g., if an animal is other in species than something else, they must both be animals. Hence things which are other in species must be in the same genus. The sort of thing I mean by genus is that in virtue of which two things are both called the same one thing; [1] and which is not accidentally differentiated, whether regarded as matter or otherwise.

For not only must the common quality belong to both, e.g., that they are both animals, but the very animality of each must be different; e.g., in one case it must be equinity and in the other humanity. Hence the common quality must for one be other in species than that which it is for the other. They must be, then, of their very nature, the one this kind of animal, and the other that ; e.g., the one a horse and the other a man.

Therefore this difference must be otherness of genus (I say otherness of genus because by difference of genus I mean an otherness which makes the genus itself other); this, then, will be a form of contrariety. This is obvious by induction. For all differentiation is by opposites, and we have shown that contraries are in the same genus, because contrariety was shown to be complete difference. But difference in species is always difference from something in respect of something; therefore this is the same thing, i.e. the genus, for both.

(Hence too all contraries which differ in species but not in genus are in the same line of predication, and are other than each other in the highest degree; for their difference is complete, and they cannot come into existence simultaneously.) Hence the difference is a form of contrariety.

To be other in species, then, means this: to be in the same genus and involve contrariety, while being indivisible

(and the same in species applies to all things which do not involve contrariety, while being indivisible); [20] for it is in the course of differentiation and in the intermediate terms that contrariety appears, before we come to the indivisibles.

Thus it is evident that in relation to what is called genus no species is either the same or other in species (and this is as it should be, for the matter is disclosed by negation, and the genus is the matter of that of which it is predicated as genus; not in the sense in which we speak of the genus or clan of the Heraclidae, but as we speak of a genus in nature); nor yet in relation to things which are not in the same genus. From the latter it will differ in genus, but in species from things which are in the same genus. For the difference of things which differ in species must be a contrariety; and this belongs only to things which are in the same genus.

The question might be raised as to why woman does not differ in species from man, seeing that female is contrary to male, and difference is contrariety; and why a female and a male animal are not other in species, although this difference belongs to animal per se, and not as whiteness or blackness does; male and female belong to it qua animal.

This problem is practically the same as why does one kind of contrariety (e.g. footed and winged) make things other in species, while another (e.g. whiteness and blackness) does not? The answer may be that in the one case the attributes are peculiar to the genus, and in the other they are less so; [1] and since one element is formula and the other matter, contrarieties in the formula produce difference in species, but contrarieties in the concrete whole do not.

Hence the whiteness or blackness of a man does not produce this, nor is there any specific difference between a white man and a black man; not even if one term is assigned to each. For we are now regarding man as matter, and matter does not produce difference; and for this reason, too, individual men are not species of man, although the flesh and bones of which this and that man consist are different. The concrete whole is other, but not other in species, because there is no contrariety in the formula, and this is the ultimate indivisible species.

But Callias is definition and matter. Then so too is white man, because it is the individual, Callias, who is white. Hence man is only white accidentally. Again, a bronze circle and a wooden one do not differ in species; and a bronze triangle and a wooden circle differ in species not because of their matter, but because there is contrariety in their formulae.

But does not matter, when it is other in a particular way, make things other in species? Probably there is a sense in which it does. Otherwise why is this particular horse other in species than this particular man, although the definitions involve matter? Surely it is because there is contrariety in the definition, for so there also is in white man and black horse; [20] and it is a contrariety in species, but not because one is white and the other black; for even if they had both been white, they would still be other in species.

Male and female are attributes peculiar to the animal, but not in virtue of its substance; they ar material or physical. Hence the same semen may, as the result of some modification, become either female or male.

We have now stated what to be other in species means, and why some things differ in species and others do not.

Since contraries are other in form, and the perishable and imperishable are contraries (for privation is a definite incapacity), the perishable must be other in kind than the imperishable. But so far we have spoken only of the universal terms; and so it might appear to be unnecessary that anything perishable and imperishable should be other in form, just as in the case of white and black.

For the same thing may be both at the same time, if it is a universal (e.g, man may be both white and black); and it may still be both if it is a particular, for the same person may be white and black, although not at the same time. Yet white is contrary to black. But although some contraries

(e.g. those which we have just mentioned, and many others) can belong to certain things accidentally, others cannot; [1] and this applies to the perishable and the imperishable. Nothing is accidentally perishable; for that which is accidental may not be applicable; but perishability is

an attribute which applies necessarily when it is applicable at all. Otherwise one and the same thing will be imperishable as well as perishable, if it is possible for perishability not to apply to it.

Thus perishability must be either the substance or in the substance of every perishable thing. The same argument also applies to the imperishable; for both perishability and imperishability are attributes which are necessarily applicable. Hence the characteristics in respect of which and in direct consequence of which one thing is perishable and another imperishable are opposed; and therefore they must be other in kind.

Thus it is obvious that there cannot be Forms such as some thinkers maintain; for then there would be both a perishable and an imperishable man. Yet the Forms are said to be the same in species as the particulars, and not merely to share a common predicate with them; but things which are other in genus differ more widely than things which are other in species.

[18] That wisdom is a science of first principles is clear from our Introductory remarks, in which we of raised objections to the statements of other thinkers about the first principles. [20] It might be asked, however, whether we should regard Wisdom as one science or as more than one. If as one, it may be objected that the objects of one science are always contraries; but the first principles are not contraries. And if it is not one, what sort of sciences are we to suppose them to be?

Again, is it the province of one science, or of more than one, to study the principles of demonstration? If of one, why of it rather than of any other? And if of more than one, of what sort are we to suppose them to be?

Again, are we to suppose that Wisdom deals with all substances or not? If not with all, it is hard to lay down with what kind it does deal; while if there is one science of them all, it is not clear how the same science can deal with more than one subject.

Again, is this science concerned only with substances, or with attributes as well? For if it is a demonstration of attributes, it is not concerned with substances; and if there is a separate science of each, what is each of these sciences, and which of them is Wisdom? qua demonstrative, the science of attributes appears to be Wisdom; but qua concerned with that which is primary, the science of substances.

Nor must we suppose that the science which we are seeking is concerned with the causes described in the Physics. It is not concerned with the final cause; for this is the Good, and this belongs to the sphere of action and to things which are in motion; and it is this which first causes motion (for the end is of this nature); but there is no Prime Mover in the sphere of immovable things.

And in general it is a difficult question whether the science which we are now seeking is concerned with sensible substances, [1] or not with sensible substances, but with some other kind. If with another kind, it must be concerned either with the Forms or with mathematical objects. Now clearly the Forms do not exist. (But nevertheless, even if we posit them, it is a difficult question as to why the same rule does not apply to the other things of which there are Forms as applies to the objects of mathematics.

I mean that they posit the objects of mathematics as intermediate between the Forms and sensible things, as a third class besides the Forms and the things of our world; but there is no third man or horse besides the Ideal one and the particulars. If on the other hand it is not as

they make out, what sort of objects are we to suppose to be the concern of the mathematician? Not surely the things of our world; for none of these is of the kind which the mathematical sciences investigate.)

Nor indeed is the science which we are now seeking concerned with the objects of mathematics; for none of them can exist separately. But it does not deal with sensible substances either; for they are perishable.

In general the question might be raised, to what science it pertains to discuss the problems concerned with the matter of mathematical objects.

It is not the province of physics, because the whole business of the physicist is with things which contain in themselves a principle of motion and rest; nor yet of the science which inquires into demonstration and

scientific knowledge, [20] for it is simply this sort of thing which forms the subject of its inquiry. It remains, therefore, that it is the science which we have set ourselves to find that treats of these subjects.

One might consider the question whether we should regard the science which we are now seeking as dealing with the principles which by some are called elements. But everyone assumes that these are present in composite things; and it would seem rather that the science which we are seeking must be concerned with universals, since every formula and every science is of universals and not of ultimate species; so that in this case it must deal with the primary genera.

These would be Being and Unity; for these, if any, might best be supposed to embrace all existing things, and to be most of the nature of first principles, because they are by nature primary; for if they are destroyed, everything else is destroyed with them, since everything exists and is one.

But inasmuch as, if Being and Unity are to be regarded as genera, they must be predicable of their differentiae, whereas no genus is predicable of any of its differentiae, from this point of view it would seem that they should be regarded neither as genera nor as principles.

Further, since the more simple is more nearly a principle than the less simple, and the ultimate subdivisions of the genus are more simple than the genera (because they are indivisible), and the genera are divided into a number of different species, it would seem that species are more nearly a principle than genera.

On the other hand, inasmuch as species are destroyed together with their genera, it seems more likely that the genera are principles; [1] because that which involves the destruction of something else is a principle. These and other similar points are those which cause us perplexity.

Again, ought we to assume the existence of something else besides particular things, or are they the objects of the science which we are seeking? It is true that they are infinite in number; but then the things which exist besides particulars are genera or species, and neither of these is the object of the science which we are now seeking. We have explained why this is impossible.

Indeed, in general it is a difficult question whether we should suppose that there is some substance which exists separately besides sensible substances (i.e. the substances of our world),

or that the latter constitute reality, and that it is with them that Wisdom is concerned. It seems that we are looking for some other kind of substance, and that this is the object of our undertaking: I mean, to see whether there is anything which exists separately and independently, and does not appertain to any sensible thing.

But again, if there is another kind of substance besides sensible substances, to what kind of sensible things are we to suppose that it corresponds? Why should we suppose that it corresponds to men or horses rather than to other animals, or even to inanimate objects in general? And yet to manufacture a set of eternal substances equal in number to those which are sensible and perishable would seem to fall outside the bounds of plausibility.

Yet if the principle which we are now seeking does not exist in separation from bodies, [20] what can we suppose it to be if not matter? Yes, but matter does not exist actually, but only potentially. It might seem rather that a more appropriate principle would be form or shape; but this is perishable; and so in general there is no eternal substance which exists separately and independently.

But this is absurd, because it seems natural that there should be a substance and principle of this kind, and it is sought for as existing by nearly all the most enlightened thinkers. For how can there be any order in the universe if there is not something eternal and separate and permanent?

Again, if there is a substance and principle of such a nature as that which we are now seeking, and if it is one for all things, i.e. the same for both eternal and perishable things, it is a difficult question as to why, when the principle is the same, some of the things which come under that principle are eternal, and others not; for this is paradoxical.

But if there is one principle of perishable things, and another of eternal things, if the principle of perishable things is also eternal, we shall still have the same difficulty; because if the principle is eternal, why are not the things which come under that principle eternal? And if it is perishable, it must have another principle behind it, and that principle must have another behind it; and the process will go on to infinity.

On the other hand, if we posit the principles which seem most unchangeable, Being and Unity,(a) unless each of them denotes a particular thing and a substance, [1] how can they be separate and independent? but the eternal and primary principles for which we are looking are of this nature.

(b) If, however, each of them denotes a particular thing and a substance, then all existing things are substances; for Being is predicated of everything, and Unity also of some things.

But that all things are substances is false. (c) As for those who maintain that Unity is the first principle and a substance, and who generate number from Unity and matter as their first product, and assert that it is a substance, how can their theory be true? How are we to conceive of 2 and each of the other numbers thus composed, as one? On this point they give no explanation; nor is it easy to give one.

But if we posit lines or the things derived from them (I mean surfaces in the primary sense) as principles, these at least are not separately existing substances, but sections and divisions, the former of surfaces and the latter of bodies (and points are sections and divisions of lines); and further they are limits of these same things. All these things are integral parts of something

else, and not one of them exists separately.

Further, how are we to suppose that there is a substance of unity or a point? for in the case of every substance there is a process of

generation, but in the case of the point there is not; for the point is a division.

[20] It is a perplexing fact also that whereas every science treats of universals and types, substance is not a universal thing, but rather a particular and separable thing; so that if there is a science that deals with first principles, how can we suppose that substance is a first principle?

Again, is there anything besides the concrete whole (I mean the matter and the form in combination) or not? If not, all things in the nature of matter are perishable; but if there is something, it must be the form or shape. It is hard to determine in what cases this is possible and in what it is not; for in some cases, e.g. that of a house, the form clearly does not exist in separation.

Again, are the first principles formally or numerically the same? If they are numerically one, all things will be the same.

Since the science of the philosopher is concerned with Being qua Being universally, and not with some part of it, and since the term Being has several meanings and is not used only in one sense, if it is merely equivocal and has no common significance it cannot fall under one science (for there is no one class in things of this kind); but if it has a common significance it must fall under one science.

Now it would seem that it is used in the sense which we have described, like medical and healthy, for we use each of these terms in several senses; [1] and each is used in this way because it has a reference, one to the science of medicine, and another to health, and another to something else; but each refers always to the same concept. A diagnosis and a scalpel are both called medical, because the one proceeds from medical science and the other is useful to it.

The same is true of healthy; one thing is so called because it is indicative, and another because it is productive, of health; and the same applies to all other cases. Now it is in this same way that everything which exists is said to be ; each thing is said to be because it is a modification or permanent or temporary state or motion or some other such affection of Being qua Being.

And since everything that is can be referred to some one common concept, each of the contrarieties too can be referred to the primary differentiae and contrarieties of Being—whether the primary differentiae of Being are plurality and unity, or similarity and dissimilarity, or something else; for we may take them as already discussed.

It makes no difference whether that which is is referred to Being or Unity; for even if they are not the same but different, they are in any case convertible, since that which is one also in a sense is , and that which is is one.

Now since the study of contraries pertains to one and the same science, [20] and each contrary is so called in virtue of privation (although indeed one might wonder in what sense they can be called contraries in virtue of privation when they admit of a middle term—e.g. unjust and just), in all such cases we must regard the privation as being not of the whole definition but of the ultimate species. E.g., if the just man is one who is obedient to the laws in virtue of some

volitional state, the unjust man will not be entirely deprived of the whole definition, but will be one who is in some respect deficient in obedience to the laws; and it is in this respect that the privation of justice will apply to him (and the same holds good in all other cases).

And just as the mathematician makes a study of abstractions (for in his investigations he first abstracts everything that is sensible, such as weight and lightness, hardness and its contrary, and also heat and cold and all other sensible contrarieties, leaving only quantity and continuity—sometimes in one, sometimes in two and sometimes in three dimensions—and their affections qua quantitative and continuous, and does not study them with respect to any other thing; and in some cases investigates the relative positions of things and the properties of these, [1] and in others their commensurability or incommensurability, and in others their ratios; yet nevertheless we hold that there is one and the same science of all these things, viz. geometry), so it is the same with regard to Being.

For the study of its attributes in so far as it is Being, and of its contrarieties qua Being, belongs to no other science than Philosophy; for to physics one would assign the study of things not qua Being but qua participating in motion, while dialectics and sophistry deal with the attributes of existing things, but not of things qua Being, nor do they treat of Being itself in so far as it is Being.

Therefore it remains that the philosopher is the man who studies the things which we have described, in so far as they are Being. And since everything that is , although the term has several meanings, is so described in virtue of some one common concept, and the same is true of the contraries (since they can be referred to the primary contrarieties and differences of Being), and since things of this kind can fall under one science, the difficulty which we stated at the beginning may be regarded as solved—I mean the problem as to how there can be one science of several things which are different in genus.

Since even the mathematician uses the common axioms only in a particular application, it will be the province of Primary Philosophy to study the principles of these as well.

[20] That when equals are taken from equals the remainders are equal is an axiom common to all quantities; but mathematics isolates a particular part of its proper subject matter and studies it separately; e.g. lines or angles or numbers or some other kind of quantity, but not qua Being, but only in so far as each of them is continuous in one, two or three dimensions. But philosophy does not investigate particular things in so far as each of them has some definite attribute, but studies that which is , in so far as each particular thing is .

The same applies to the science of physics as to mathematics, for physics studies the attributes and first principles of things qua in motion, and not qua Being; but Primary Science, as we have said, deals with these things only in so far as the subjects which underlie them are existent, and not in respect of anything else. Hence we should regard both physics and mathematics as subdivisions of Wisdom.

There is a principle in existing things about which we cannot make a mistake; of which, on the contrary, we must always realize the truth—viz. that the same thing cannot at one and the same time be and not be, [1] nor admit of any other similar pair of opposites. Of such axioms although there is a proof ad hominem, there is no absolute proof;

because there is no principle more convincing than the axiom itself on which to base an argument, whereas there must be such a principle if there is to be absolute proof.

But he who wants to convince an opponent who makes opposite statements that he is wrong must obtain from him an admission which shall be identical with the proposition that the same thing cannot at one and the same time be and not be, but shall seem not to be identical with it. This is the only method of proof which can be used against one who maintains that opposite statements can be truly made about the same subject.

Now those who intend to join in discussion must understand one another to some extent; for without this how can there be any common discussion between them? Therefore each of the terms which they use must be intelligible and signify something; not several things, but one only; or if it signifies more than one thing, it must be made clear to which of these the term is applied.

Now he who says that A is and is not denies what he asserts, and therefore denies that the term signifies what it does signify. But this is impossible. Therefore if to be so-and-so has a definite meaning, the opposite statement about the same subject cannot be true.

[20] Again, if the term has a definite significance and this is truly stated, it must of necessity be so. But that which of necessity is can never not be. Hence opposite statements about the same subject cannot be true.

Again, if the assertion is no more true than the negation, it will be no more true to say A is man than to say A is not man.

But it would also be admitted that it is more or at least not less true to say that a man is not a horse than to say that he is not a man; and therefore, since it was assumed that opposite statements are equally true, it will be true to say that the same person is also a horse. It follows therefore, that the same person is a man and a horse, or any other animal.

Thus, although there is no absolute proof of these axioms, there is an ad hominem proof where one's opponent makes these assumptions. Perhaps even Heraclitus himself, if he had been questioned on these lines, would have been compelled to admit that opposite statements can never be true of the same subjects; as it is, he adopted this theory through ignorance of what his doctrine implied.

In general, if what he says is true, not even this statement itself [1] (I mean that the same thing can at one and the same time be and not be) will be true;

because just as, when they are separated, the affirmation is no more true than the negation, so in the same way, if the complex statement is taken as a single affirmation, the negation will be just as true as the whole statement regarded as an affirmation.

And further, if nothing can be truly affirmed, then this very statement—that there is no such thing as a true affirmation—will be false. But if there is such a thing, the contentions of those who raise objections of this kind and utterly destroy rational discourse may be considered to be refuted.

Very similar to the views which we have just mentioned is the dictum of Protagoras; for he said that man is the measure of all things, by which he meant simply that each individual's impressions are positively true.

But if this is so, it follows that the same thing is and is not, and is bad and good, and that all the other implications of opposite statements are true; because often a given thing seems beautiful

to one set of people and ugly to another, and that which seems to each individual is the measure.

[20] This difficulty will be solved if we consider the origin of the assumption. It seems probable that it arose in some cases from the doctrine of the natural philosophers, and in others from the fact that everyone does not form the same opinion about the same things, but to some a given thing seems sweet and to others the contrary.

For that nothing comes from what is not, but everything from what is, is a doctrine common to nearly all natural philosophers. Since, then, a thing does not become white which was before completely white and in no respect not-white, that which becomes white must come from what was not-white. Hence according to this theory there would be generation from what is not, unless the same thing were originally white and not-white.

However, it is not hard to solve this difficulty. We have explained in the Physics in what sense things which are generated are generated from what is not, and in what sense from what is.

But to attach equal importance to the opinions and impressions of opposing parties is foolish, because clearly one side or the other must be wrong.

This is evident from what happens in the sphere of sensation; [1] for the same thing never seems to some people sweet and to others to the contrary unless one of the parties has the organ of sense which distinguishes the said flavors injured or impaired. Such being the case, the one party should be taken as the measure, and the other not.

And I hold the same in the case of good and bad, and of beautiful and ugly, and of all other such qualities. For to maintain this view is just the same as to maintain that what appears to us when we press the finger below the eye and make a thing seem two instead of one must be two because it appears to be so, and then afterwards that it must be one; because if we do not interfere with our sight that which is one appears to be one.

And in general it is absurd to form our opinion of the truth from the appearances of things in this world of ours which are subject to change and never remain in the same state; for it is by reference to those things which are always the same state and undergo no change that we should prosecute our search for truth.

Of this kind are the heavenly bodies; for these do not appear to be now of one nature and subsequently of another, but are manifestly always the same and have no change of any kind.

Again, if there is motion there is also something which is moved; and everything is moved from something and into something. Therefore that which is moved must be in that from which it is to be moved, [20] and must also not be in it; and must be moved into so-and-so and must also come to be in it; but the contradictory statements cannot be true at the same time, as our opponents allege.

And if the things of our world are in a state of continuous flux and motion in respect of quantity, and we assume this although it is not true, why should they not be constant in respect of quality? It appears that not the least reason why our opponents predicate opposite statements of the same thing is that they start with the assumption that quantity is not constant in the case of bodies; hence they say that the same thing is and is not six feet long.

But essence depends upon quality, and this is of a determinate, whereas quantity is of an

indeterminate nature.

Again, when the doctor orders them to adopt some article of diet, why do they adopt it? For on their view it is no more true that a thing is bread than that it is not; and therefore it would make no difference whether they ate it or not. But as it is, they adopt a particular food as though they knew the truth about it and it were the food prescribed;

yet they ought not to do so if there were no fixed and permanent nature in sensible things and everything were always in a state of motion and flux.

Again, if we are always changing and never remain the same, is it any wonder that to us, as to the diseased, things never appear the same?

[1] For to the diseased, since they are not in the same physical condition as when they were well, sensible qualities do not appear to be the same; although this does not mean that the sensible things themselves partake of any change, but that they cause different, and not the same, sensations in the diseased. Doubtless the same must be true if the change which we have referred to takes place in us.

If, however, we do not change but remain always the same, there must be something permanent.

As for those who raise the aforesaid difficulties on dialectical grounds, it is not easy to find a solution which will convince them unless they grant some assumption for which they no longer require an explanation; for every argument and proof is possible only in this way. If they grant no assumption, they destroy discussion and reasoning in general.

Thus there is no arguing with people of this kind; but in the case of those who are perplexed by the traditional difficulties it is easy to meet and refute the causes of their perplexity. This is evident from what has been already said.

Thus from these considerations it is obvious that opposite statements cannot be true of the same thing at one time; nor can contrary statements, since every contrariety involves privation. This is clear if we reduce the formulae of contraries to their first principles.

Similarly no middle term can be predicated of one and the same thing [20] of which one of the contraries is predicated.

If, when the subject is white, we say that it is neither white nor black, we shall be in error; for it follows that it is and is not white, because the first of the two terms in the complex statement will be true of the subject, and this is the contradictory of white.

Thus we cannot be right in holding the views either of Heraclitus or of Anaxagoras.

If we could, it would follow that contraries are predicable of the same subject; for when he says that in everything there is a part of everything, he means that nothing is sweet any more than it is bitter, and similarly with any of the other pairs of contraries; that is, if everything is present in everything not merely potentially but actually and in differentiation.

Similarly all statements cannot be false, nor all true. Among many other difficulties which might be adduced as involved by this supposition there is the objection that if all statements were false, not even this proposition itself would be true; while if they were all true it would not be false to say that they are all false.

Every science inquires for certain principles and causes with respect to every knowable thing which comes within its scope; [1] e.g., the sciences of medicine and physical culture do this, and so does each of the other productive and mathematical sciences. Each one of these marks out for itself some class of objects, and concerns itself with this as with something existent and real, but not qua real; it is another science distinct from these which does this.

Each of the said sciences arrives in some way at the essence in a particular class of things, and then tries to prove the rest more or less exactly. Some arrive at the essence through sense-perception, and some by hypothesis; hence it is obvious from such a process of induction that there is no demonstration of the reality or essence.

Now since there is a science of nature, clearly it must be different from both practical and productive science. In a productive science the source of motion is in the producer and not in the thing produced, and is either an art or some other kind of potency; and similarly in a practical science the motion is not in the thing acted upon but rather in the agent.

But the science of the natural philosopher is concerned with things which contain in themselves a source of motion. From this it is clear that natural science must be neither practical nor productive, but speculative; since it must fall under one of these classes.

And since every science must have some knowledge of the essence [20] and must use it as a starting-point, we must be careful to observe how the natural philosopher should define, and how he should regard the formula of essence—whether in the same way as the term snub, or rather as the term concave.

For of these the formula of snub is stated in conjunction with the matter of the object, whereas that of concave is stated apart from the matter; since snubness is only found in the nose, which is therefore included in the formula, for the snub is a concave nose . Thus it is obvious that the formula of flesh and eye and the other parts of the body must always be stated in conjunction with their matter.

Since there is a science of Being qua Being and separately existent, we must inquire whether this should be regarded as identical with natural science or rather as a distinct branch of knowledge. Physics deals with things which contain a source of motion in themselves, and mathematics is speculative and is a science which deals with permanent things, but not with things which can exist separately.

Hence there is a science distinct from both of these, which deals with that which exists separately and is immovable; that is, if there really is a substance of this kind—I mean separately existent and immovable—as we shall endeavor to prove. And if there is an entity of this kind in the world of reality, here surely must be the Divine, and this must be the first and most fundamental principle.

[1] Evidently, then, there are three kinds of speculative science: physics, mathematics, and theology. The highest class of science is the speculative, and of the speculative sciences themselves the highest is the last named, because it deals with the most important side of reality; and each science is reckoned higher or lower in accordance with the object of its study.

The question might be raised as to whether the science of Being qua Being should be regarded as universal or not.

Each of the mathematical sciences deals with some one class of things which is determinate, but

universal mathematics is common to all alike. If, then, natural substances are the first of existing things, physics will be the first of the sciences; but if there is some other nature and substance which exists separately and is immovable, then the science which treats of it must be different from and prior to physics, and universal because of its priority.

Since the term Being in its unqualified sense is used with several meanings, of which one is accidental Being, we must first consider Being in this sense. Clearly none of the traditional sciences concerns itself with the accidental; the science of building does not consider what will happen to the occupants of the house, [20] e.g. whether they will find it unpleasant or the contrary to live in; nor does the science of weaving or of shoemaking or of confectionery.

Each of these sciences considers only what is proper to it, i.e. its particular end. As for the question whether the cultured is also the lettered, or the quibble that the man who is cultured, when he has become lettered, will be both at once although he was not before; but that which is but was not always so must have come to be; therefore he must have become at the same time cultured and lettered

—none of the recognized sciences considers this, except sophistry. This is the only science which concerns itself with the accidental, and hence Plato was not far wrong in saying that the sophist spends his time in the study of unreality. But that it is not even possible for there to be a science of the accidental will be apparent if we try to see what the accidental really is.

Of some things we say that they are so always and of necessity (necessity having the sense not of compulsion, but that which we use in logical demonstration), and of others that they are so usually, but of others that they are so neither usually nor always and of necessity, but fortuitously. E.g., there might be a frost at midsummer, although this comes about neither always and of necessity nor usually; [1] but it might happen sometimes.

The accidental, then, is that which comes about, but not always nor of necessity nor usually. Thus we have now stated what the accidental is; and it is obvious why there can be no science of such a thing, because every science has as its object that which is so always or usually, and the accidental falls under neither of these descriptions.

Clearly there can be no causes and principles of the accidental such as there are of that which is per se; otherwise everything would be of necessity. For if A is when B is, and B is when C is, and C is not fortuitously but of necessity, then that of which C was the cause will also be of necessity, and so on down to the last causatum , as it is called.

(But this was assumed to be accidental.) Therefore everything will be of necessity, and the element of chance, i.e. the possibility of a thing’s either happening or not, is entirely banished from the world of events. Even if we suppose the cause not to exist already but to be coming to be, the result will be the same; for everything will come to be of necessity.

The eclipse tomorrow will come about if A does, and A will if B does, and B if C does; and in this way if we keep on subtracting time from the finite time between now and to-morrow, we shall at some point arrive at the present existing condition. [20] Therefore since this exists, everything subsequent to it will happen of necessity, and so everything happens of necessity.

As for what is in the sense of what is true or what is accidental , the former depends upon a combination in thought, and is an affection of thought (hence we do not look for the principles of Being in this sense, but only for those of objective and separable Being) the latter is not

necessary but indeterminate (I mean the accidental); and of such a thing the causes are indefinite and cannot be reduced to a system.

Teleology is found in events which come about in the course of nature or as a result of thought. It is chance or luck when one of these comes about by accident; for a thing may be a cause, just as it may exist, either per se or accidentally. Chance is an accidental cause of normally purposive teleological events.

Hence chance and thought have the same sphere of action, for there is no purpose without thought. Causes from which chance results may come about are indeterminate; hence chance is inscrutable to human calculation, and is a cause only accidentally, but in the strictest sense is a cause of nothing.

It is good or bad luck when the result is good or bad, [1] and good or bad fortune when the result is on a large scale.

Since nothing accidental is prior to that which is per se, neither are accidental causes prior. Therefore if chance or spontaneity is the cause of the universe, mind and nature are prior causes.

A thing may exist only actually or potentially, or actually and potentially; it may be a substance or a quantity or one of the other categories. There is no motion apart from things, for change is always in accordance with the categories of Being; and there is nothing which is common to these and in no one category. Each category belongs to all its members in two ways—e.g. substance, for this is sometimes the form of the thing and sometimes its privation;

and as regards quality there is white and black; and as regards quantity, complete and incomplete; and as regards spatial motion there is up and down or light and heavy—so that there are as many forms of motion and change as there are of Being.

Now since every kind of thing is divided into the potential and the real, I call the actualization of the potential as such, motion.

That this is a true statement will be clear from what follows. When the buildable in the sense in which we call it such exists actually, it is being built; and this is the process of building. The same is true of the processes of learning, healing, walking, [20] jumping, ageing, maturing. Motion results when the complete reality itself exists, and neither sooner nor later.

The complete reality, then, of that which exists potentially, when it is completely real and actual, not qua itself but qua movable, is motion. By qua I mean this. The bronze is potentially a statue; but nevertheless the complete reality of the bronze qua bronze is not motion. To be bronze is not the same as to be a particular potentiality; since if it were absolutely the same by definition the complete reality of the bronze would be a kind of motion; but it is not the same.

(This is obvious in the case of contraries; for the potentiality for health and the potentiality for illness are not the same—for if they were, health and illness would be the same too—but the substrate which becomes healthy or ill, whether it is moisture or blood, is one and the same.) And since it is not the same, just as color and visible are not the same, it is the complete reality of the potential qua potential that is motion.

It is evident that it is this, and that motion results when the complete reality itself exists, and neither sooner nor later. [1] For everything may sometimes be actual, and sometimes not; e.g.

the buildable qua buildable; and the actualization of the buildable qua buildable is the act of building.

For the actualization is either this—the act of building—or a house. But when the house exists, it will no longer be buildable; the buildable is that which is being built. Hence the actualization must be the act of building, and the act of building is a kind of motion. The same argument applies to the other kinds of motion.

That this account is correct is clear from what the other authorities say about motion, and from the fact that it is not easy to define it otherwise. For one thing, it could not be placed in any other class; this is clear from the fact that some people identify it with otherness and inequality and not-being, none of which is necessarily moved;

moreover change is no more into these or out of them than into or out of their opposites. The reason for placing motion in this class is that it is considered to be indeterminate, and the principles in one of the columns of contraries are indeterminate, being privative; for none of them is a determinate thing or quality or any of the other categories.

The reason for considering motion to be indeterminate is that it cannot be associated either with the potentiality or with the actuality of things; for neither that which is potentially [20] nor that which is actually of a certain size is necessarily moved.

And motion is considered to be a kind of actualization, but incomplete; the reason of this is that the potential, of which it is the actualization, is incomplete.

Thus it is difficult to comprehend what motion is; for we must associate it either with privation or with potentiality or with absolute actuality; and apparently none of these is possible.

There remains, then, the account which we have given; that it is an actuality, and an actuality of the kind which we have described, which is hard to visualize but capable of existing.

That motion is in the movable is evident; for it is the complete realization of the movable by that which is capable of causing motion, and the actualization of that which is capable of causing motion is identical with that of the movable.

For it must be a complete realization of them both; since a thing is capable of moving because it has the potentiality, but it moves only when it is active; but it is upon the movable that it is capable of acting. Thus the actuality of both alike is one; just as there is the same interval from one to two as from two to one, and the hill up and the hill down are one, although their being is not one; the case of the mover and the thing moved is similar.

The infinite is either (a) that which cannot be traversed because it is not its nature to be traversed (just as sound is by nature invisible); or (b) that which admits of an endless traverse; or (c) scarcely admits of traverse; or (d) which, though it would naturally admit of traverse or limit, does not do so. [1] Further, it may be infinite in respect of addition or of subtraction or of both.

That the infinite should be a separate independent entity, and yet imperceptible, is impossible.

For if it is neither magnitude nor plurality, but infinity itself is the essence of it, and not merely an accident, it must be indivisible; because that which is divisible is either magnitude or plurality. And if it is indivisible it cannot be infinite, except in the same way as sound is invisible. But this is not what people mean by infinite; and it is not the infinite in this sense that we are investigating, but the infinite in the sense of the untraversable.

Again, how can the infinite exist independently unless number and magnitude, of which infinity is an attribute, also exist independently? And further, if the infinite is accidental, it cannot, qua infinite, be an element of things; just as the invisible is not an element of speech, although sound is invisible. It is clear also that the infinite cannot exist actually.

Otherwise any part of it which we might take would be infinite; for infinity and the infinite are the same, if the infinite is substance and is not predicated of a subject. Therefore it is either indivisible, or if it is partible, the parts into which it is divisible are infinite. But the same thing cannot be many infinites; for just as a part of air is air, so a part of the infinite will be infinite, if the infinite is a substance and principle.

Therefore it is impartible and indivisible. But this is impossible of the actually infinite, because it must be some quantity. Therefore infinity is an accidental attribute. But if so, [20] as we have said, it cannot be it that is a principle, but that of which it is an accident: air or the even.

The foregoing inquiry is general; but what follows will show that the infinite does not exist in sensible things.

If the definition of a body is that which is bounded by surfaces, then no body, whether sensible or intelligible, can be infinite nor can there be any separate and infinite number, since number or that which involves number is numerable. This is clearly shown by the following concrete argument. The infinite can neither be composite nor simple. For (a) it cannot be a composite body if the elements are limited in number;

for the contraries must be equal, and no one of them must be infinite; for if the potency of one of the two corporeal elements is in any way inferior, the finite element will be destroyed by the infinite. And every element cannot be infinite, because body is that which has extension in all directions, and the infinite is that which is extended without limit; so that if the infinite is corporeal it will be infinite in all directions.

Nor (b) can the infinite be any simple body; neither, as some hold, something which is apart from the elements and from which they suppose the elements to be generated (for there is no such body apart from the elements; everything can be resolved into that of which it consists, but we do not see things resolved into anything apart from the simple bodies), [1] nor fire nor any other element.

Apart from the question of how any of them could be infinite, the All, even if it is finite, cannot be or become any one of the elements, as Heraclitus says all things at certain times become fire. The same argument applies as to the One which the physicists posit besides the elements; for all change proceeds from the contrary, e.g. from hot to cold.

Again, a sensible body is in some region, and the region of the whole and of the part (e.g. of the earth) is the same. Therefore if the infinite body is homogeneous, it will be immovable or will always be in motion; but this is impossible, for why should there be rest or motion below rather than above or in any other region? E.g., if there were a clod, in what region would it move or be at rest?

The region proper to the body which is homogeneous with the clod is infinite. Then will the clod occupy the whole of that region? How can it? Then what of its rest or motion? It will either rest everywhere—in which case it cannot move—or move everywhere; in which case it cannot rest. And if the whole is not alike throughout, the regions proper to its parts are unlike also; and (a)

the body of the whole is not one, except in virtue of contact; (b) the parts will be either finite or infinite in kind.

Finite they cannot be, for then those of one kind would be infinite and those of another would not (if the whole is infinite); e.g., fire or water would be infinite. [20] But such a condition would involve the destruction of the contraries. But if the parts are infinite and simple, the regions proper to them are infinite and the elements will be infinite. And since this is impossible, the regions are finite and the whole must be finite.

In general, there cannot be an infinite body and a place for bodies if every body which is sensible has either weight or lightness; for it will have to move either towards the center or upwards, and the infinite—either the whole or the half—cannot do either; for how can you divide it? How can the infinite be part up and part down, or part extreme and part center?

Further, every sensible body is in some place, and of place there are six kinds, but these cannot exist in an infinite body. In general, if an infinite place is impossible, so is an infinite body; because that which is in a place is somewhere, and this means either up or down or one of the other kinds of place, and each of these is a limit.

The infinite is not the same in the sense that it is one nature whether it applies to magnitude or to motion or to time; the posterior is derived from the prior sense, e.g. motion is called infinite in virtue of the magnitude involved when a thing is moved or changed or increased, and time is so called on account of motion.

[1] That which changes either changes accidentally, as when the cultured walks; or is said to change in general because something in it changes, as in the case of things which change in their parts; the body becomes healthy because the eye does.

But there is something which is moved directly per se, i.e. the essentially movable. The same applies to that which moves, for it moves sometimes accidentally, sometimes partially, and sometimes per se. There is something that moves directly, and something that is moved; and also a time in which, and something from which, and something into which it is moved. But the forms and modifications and place into which moving things are moved are immovable; e.g. knowledge and warmth. It is not warmth that is motion, but the process of warming.

Non-accidental change is not found in all things, but only between contraries and intermediates and contradictories. We can convince ourselves of this by means of induction. That which changes changes either from positive into positive, or from negative into negative, or from positive into negative, or from negative into positive.

By positive I mean that which is denoted by an affirmation. Thus there must be three forms of change; [20] for that which is from negative into negative is not change, because they are neither contraries nor contradictories, since they entail no opposition. The change from the negative into its contradictory positive is generation—absolute change absolute generation, and qualified change qualified generation; and the change from the positive to the negative is destruction—absolute change absolute destruction, and qualified change qualified destruction.

Now if what is not has several meanings, and neither that which implies a combination or separation of terms, nor that which relates to potentiality and is opposed to unqualified Being, admits of motion (not-white or not-good, however, admits of motion accidentally, because not-white may be a man; but that which is not so-and-so in an absolute sense does not admit of

it at all), then what is not cannot be moved. If this is so, generation cannot be motion; for it is what is not that is generated.

For even if the generation is in the highest degree accidental, still it is true to say that not-being is predicable of that which is generated absolutely. And the argument applies similarly to rest. Thus not only do these difficult conclusions follow, but also that everything which is moved is in a place, whereas what is not is not in a place; for then it would be somewhere. Nor is destruction motion; for the contrary of motion is motion or rest, but the contrary of destruction is generation.

[1] And since every motion is a kind of change, and the three kinds of change are those which we have described, and of these those which relate to generation and destruction are not motions, and these are the changes between contradictories, the change from positive to positive must alone be motion. The subjects are either contraries or intermediates (for privative terms may also be regarded as contraries) and are denoted by a positive term—e.g. naked or toothless or black.

Now since the categories are distinguished as substance, quality, place, activity or passivity, relation and quantity, there must be three kinds of motion, in respect of quality, quantity and place. There is no motion in respect of substance, because substance has no contrary; nor of the relative, because it is possible that when one of two related things changes the relation to it of the other thing, even though the thing itself does not change, may become untrue; therefore the motion of these related things is accidental.

Nor is there motion of the agent or patient, or of the mover and the thing moved, because there is no motion of motion nor no generation of generation, nor in general is there change of change. There are two ways in which there might be motion of motion: (1) Motion might be the subject of motion, as, e.g., a man is moved because he changes from white to black; in this way motion might be heated or cooled or might change its place or increase.

[20] But this is impossible, because the change is not a subject. Or (2) some other subject might change from change to some other form of existence, as, e.g., a man changes from sickness to health. But this is also impossible except accidentally.

Every motion is a change from one thing into something else; and the same is true of generation and destruction, except that these are changes into opposites in one sense, while the other, i.e. motion, is a change into opposites in another sense. Hence a thing changes at the same time from health to sickness, and from this change itself into another.

Now clearly if it has fallen ill it will be already changed (for it cannot remain at rest) into that other change, whatever it may be; and further this cannot be, in any given case, any chance change; and it also must be from something into something else. Therefore it will be the opposite change, viz. becoming healthy. But this is so accidentally; just as there is change from recollecting to forgetting because the subject changes, now in the direction of knowledge and now in that of ignorance.

Further, we shall have an infinite series if there is to be change of change and becoming of becoming, because if the latter of two becomings comes to be from the former, the former must come to be too. [1] E.g., if simple becoming was once coming to be, that which comes to be something was also once coming to be. Therefore that which simply comes to be was not yet, but there was already something coming to be coming to be something.

But this too was at one time coming to be, and therefore it was not at that time coming to be something. But in infinite series there is no first term, and therefore in this series the first term cannot exist, nor can any subsequent term. Therefore nothing can be either generated or moved or changed.

Further, the same thing which admits of motion admits also of the contrary motion and of rest, and that which admits of generation admits also of destruction.

Therefore that which comes to be, when it has come to be coming to be, is then in course of perishing; for it does not perish as soon as it is coming to be coming to be, nor afterwards, because that which is perishing must exist .

Further, there must be some matter underlying that which is coming to be or changing. What then will it be? What is it that becomes motion or generation in the same way as it is body or soul that undergoes change? And moreover what is that which is the terminus of the motion? For that which we are considering must be a motion or generation of A from B into C.

How then can these conditions be fulfilled? There can be no learning of learning, and therefore there can be no generation of generation.

Since there is no motion of substance or of the relative or of activity and passivity, it remains that there is motion in respect of quality, quantity and place; for each of these admits of contrariety. By quality I mean not that which is in the substance (for indeed even the differentia is a quality), [20] but the passive quality in virtue of which a thing is said to be acted upon or to be immune from being acted upon.

The immovable is either that which is wholly incapable of being moved, or that which is scarcely moved in the course of a long time or is slow in starting, or that which would naturally be moved but cannot be moved at the time when and from the place whence and in the way in which it would naturally be moved. This last is the only kind of immovable thing which I recognize as being at rest; for rest is contrary to motion, and so must be a privation of that which admits of motion.

Things are together in place which are in the primary sense in one place, and separate which are in different places. Contrary in place is that which is at a maximum distance in a straight line. Things are said to be in contact whose extremes are together in place. An intermediate is that at which a changing thing which changes continuously in accordance with its nature naturally arrives before it arrives at the extreme into which it is changing. Since all change takes place between opposites, and these are either contraries or contradictories, and contradictories have no middle term, clearly it is to the sphere of contraries that the intermediate belongs.

Successive is that which comes after the beginning (the order being determined by position or form or in some other way) and has nothing of the same class between itself and that which it succeeds; e.g. lines in the case of a line, and units in that of a unit, and a house in the case of a house (but there is nothing to prevent something else from coming between). For that which is successive is a thing which is successive and posterior to some other thing. [1] 1 is not successive to 2, nor is the new moon to the second day of the month.

Contiguous is that which is successive and in contact. The continuous is a species of the contiguous.

I call two things continuous when their respective boundaries, by which they are kept together

in contact, become one and the same; hence clearly the continuous belongs to the sphere of things whose nature it is to become one by contiguity.

Clearly successive is the most ultimate term; for the successive need not be in contact, but contact implies succession; and if there is continuity there is contact, but if there is contact there is not necessarily continuity;

and where there is no contact there is no coalescence. Therefore a point is not the same as a unit; for points admit of contact, whereas units do not, but only of succession; and between points there is something intermediate, but between units there is not.

[18] Our inquiry is concerned with substance; for it is the principles and causes of substances that we are investigating. Indeed if the universe is to be regarded as a whole, [20] substance is its first part; and if it is to be regarded as a succession, even so substance is first, then quality, then quantity. Moreover, the latter hardly exist at all in the full sense, but are merely qualifications and affections of Being. Otherwise not-white and not-straight would also exist; at any rate we say that they too are, e.g., it is not white.

Further, none of the other categories is separately existent. Even the ancients in effect testify to this, for it was of substance that they sought the principles and elements and causes. Present-day thinkers tend to regard universals as substance, because genera are universal, and they hold that these are more truly principles and substances because they approach the question theoretically; but the ancients identified substance with particular things, e.g. fire and earth, and not with body in general.

Now there are three kinds of substance. One is sensible (and may be either eternal or perishable; the latter, e.g. plants and animals, is universally recognized); of this we must apprehend the elements, whether they are one or many.

Another is immutable , which certain thinkers hold to exist separately; some dividing it into two classes, others combining the Forms and the objects of mathematics into a single class, and others recognizing only the objects of mathematics as of this nature. The first two kinds of substance come within the scope of physics, since they involve motion; [1] the last belongs to some other science, if there is no principle common to all three.

Sensible substance is liable to change. Now if change proceeds from opposites or intermediates—not however from all opposites (for speech is not white), but only from the contrary—then there must be something underlying which changes into the opposite contrary; for the contraries do not change.

Further, something persists, whereas the contrary does not persist. Therefore besides the contraries there is some third thing, the matter . Now if change is of four kinds, in respect either of substance or of quality or of quantity or of place, and if change of substance is generation or destruction in the simple sense, and change of quantity is increase or decrease, and change of affection is alteration, and change of place is locomotion, then changes must be in each case into the corresponding contrary state.

It must be the matter, then, which admits of both contraries, that changes. And since that which is is twofold, everything changes from that which is potentially to that which is actually; e.g. from potentially white to actually white. The same applies to increase and decrease. Hence not only may there be generation accidentally from that which is not, but also everything is

generated from that which is, [20] but is potentially and is not actually.

And this is the one of Anaxagoras; for his all things were together, and the mixture of Empedocles and Anaximander and the doctrine of Democritus would be better expressed as all things were together potentially, but not actually.

Hence these thinkers must have had some conception of matter. All things which change have matter, but different things have different kinds; and of eternal things such as are not generable but are movable by locomotion have matter; matter, however, which admits not of generation, but of motion from one place to another.

One might raise the question from what sort of not-being generation takes place; for not-being has three senses. If a thing exists through a potentiality, nevertheless it is not through a potentiality for any chance thing; different things are derived from different things.

Nor is it satisfactory to say that all things were together, for they differ in their matter, since otherwise why did they become an infinity and not one? For Mind is one; so that if matter is also one, only that could have come to be in actuality whose matter existed potentially. The causes and principles, then, are three; two being the pair of contraries, of which one is the formula or form and the other the privation, and the third being the matter.

We must next observe that neither matter nor form (I mean in the proximate sense) is generated. All change is of some subject by some agent into some object. [1] The agent is the immediate mover; the subject is the matter; and the object is the form. Thus the process will go on to infinity if not only the bronze comes to be round, but also roundness or bronze comes to be; there must, then, be some stopping-point.

We must next observe that every substance is generated from something which has the same name (substances including not only natural but all other products). Things are generated either by art or by nature or by chance or spontaneously. Art is a generative principle in something else; nature is a generative principle in the subject itself(for man begets man); the other causes are privations of these.

There are three kinds of substance: (1.) matter, which exists individually in virtue of being apparent(for everything which is characterized by contact and so not by coalescence is matter and substrate; e.g. fire, flesh and head; [20] these are all matter, and the last is the matter of a substance in the strictest sense); (2.) the nature(existing individually)—i.e. a kind of positive state which is the terminus of motion; and (3.) the particular combination of these, e.g. Socrates or Callias. In some cases the individuality does not exist apart from the composite substance (e.g., the form of a house does not exist separately, except as the art of building;

nor are these forms liable to generation and destruction; there is a distinct sense in which house and health and every artificial product, considered in the abstract, do or do not exist); if it does so at all, it does so in the case of natural objects. Hence Plato was not far wrong in saying that there are as many Forms as there are kinds of natural objects; that is if there are Forms distinct from the things of our world.

Moving causes are causes in the sense of pre-existent things, but formal causes coexist with their effects. For it is when the man becomes healthy that health exists, and the shape of the bronze sphere comes into being simultaneously with the bronze sphere.

Whether any form remains also afterwards is another question. In some cases there is nothing

to prevent this, e.g. the soul may be of this nature (not all of it, but the intelligent part; for presumably all of it cannot be). Clearly then there is no need on these grounds for the Ideas to exist; for man begets man, the individual begetting the particular person. And the same is true of the arts, for the art of medicine is the formula of health.

In one sense the causes and principles are different for different things; but in another, if one speaks generally and analogically, they are the same for all. For the question might be raised whether the principles and elements of substances and of relations are the same or different; and similarly with respect to each of the other categories. But it is absurd that they should be the same for all; for then relations and substance would have the same constituents.

[1] What then can their common constituent be? For there is nothing common to and yet distinct from substance and the other predicable categories, yet the element is prior to that of which it is an element. Moreover substance is not an element of relations, nor is any of the latter an element of substance. Further, how can all the categories have the same elements?

For no element can be the same as that which is composed of elements; e.g., neither B nor A can be the same as BA (nor indeed can any of the intelligibles, e.g. Unity or Being, be an element; for these apply in every case, even to composite things); hence no element can be either substance or relation. But it must be one or the other. Therefore the categories have not all the same elements.

The truth is that, as we say, in one sense all things have the same elements and in another they have not. E.g., the elements of sensible bodies are, let us say, (1) as form, the hot, and in another sense the cold, which is the corresponding privation; as matter, that which directly and of its own nature is potentially hot or cold. And not only these are substances, but so are (2) the compounds of which they are principles, and (3) any unity which is generated from hot and cold, e.g. flesh or bone; for the product of hot and cold must be distinct from them.

These things, then, have the same elements and principles, although specifically different things have specifically different elements; we cannot, however, say that all things have the same elements in this sense, but only by analogy: i.e., one might say that there are three principles, form, privation and matter.

But each of these is different in respect of each class of things, [20] e.g., in the case of color they are white, black, surface; or again there is light, darkness and air, of which day and night are composed. And since not only things which are inherent in an object are its causes, but also certain external things, e.g. the moving cause, clearly principle and element are not the same; but both are causes. Principles are divided into these two kinds, and that which moves a thing or brings it to rest is a kind of principle and substance.

Thus analogically there are three elements and four causes or principles; but they are different in different cases, and the proximate moving cause is different in different cases. Health, disease, body; and the moving cause is the art of medicine. Form, a particular kind of disorder, bricks; and the moving cause is the art of building.

And since in the sphere of natural objects the moving cause of man is man, while in the sphere of objects of thought the moving cause is the form or its contrary, in one sense there are three causes and in another four. For in a sense the art of medicine is health, and the art of building is the form of a house, and man begets man; but besides these there is that which as first of all things moves all things.

Now since some things can exist in separation and others cannot, it is the former that are substances. [1] And therefore all things have the same causes, because without substance there can be no affections and motions. Next we shall see that these causes are probably soul and body, or mind, appetite and body. Again, there is another sense in which by analogy the principles are the same viz. actuality and potentiality; but these are different for different things, and apply to them in different ways.

For in some cases the same thing exists now actually and now potentially; e.g. wine or flesh or man (actuality and potentiality also fall under the causes as already described; for the form exists actually if it is separable, and so does the compound of form and matter, and the privation, e.g. darkness or disease; and the matter exists potentially, for it is this which has the potentiality of becoming both;

but the distinction in virtue of actuality and potentiality applies in a different sense to cases where the matter of cause and effect is not the same, in some of which the form is not the same but different. E.g., the cause of a man is (i) his elements: fire and earth as matter, and the particular form; (2) some external formal cause, viz. his father; and besides these (3) the sun and the ecliptic, which are neither matter nor form nor privation nor identical in form with him, but cause motion.

Further, we must observe that some causes can be stated universally, but others cannot.

The proximate principles of all things are the proximate actual individual and another individual which exists potentially. [20] Therefore the proximate principles are not universal. For it is the particular that is the principle of particulars; man in general is the principle of man in general, but there is no such person as man, whereas Peleus is the principle of Achilles and your father of you, and this particular B of this particular BA; but B in general is the principle of BA regarded absolutely.

Again, even if the causes of substances are universal, still, as has been said, different things, i.e. things which are not in the same genus, as colors, sounds, substances and quantity, have different causes and elements, except in an analogical sense; and the causes of things which are in the same species are different, not in species, but because the causes of individuals are different: your matter and form and moving cause being different from mine, although in their universal formula they are the same.

As for the question what are the principles or elements of substances and relations and qualities, whether they are the same or different, it is evident that when the terms principle and element are used with several meanings they are the same for everything; but when the meanings are distinguished, they are not the same but different; except that in a certain sense they are the same for all. In a certain sense they are the same or analogous, because (a) everything has matter, form, privation and a moving cause; (b) the causes of substances may be regarded as the causes of all things, since if substances are destroyed everything is destroyed; and further (c) that which is first in complete reality is the cause of all things.

In another sense, however, proximate causes are different; there are as many proximate causes as there are contraries which are predicated neither as genera nor with a variety of meanings; and further the particular material causes are different. [1] Thus we have stated what the principles of sensible things are, and how many they are, and in what sense they are the same and in what sense different.

Since we have seen that there are three kinds of substance, two of which are natural and one immutable, we must now discuss the last named and show that there must be some substance which is eternal and immutable. Substances are the primary reality, and if they are all perishable, everything is perishable. But motion cannot be either generated or destroyed, for it always existed; nor can time, because there can be no priority or posteriority if there is no time.

Hence as time is continuous, so too is motion; for time is either identical with motion or an affection of it. But there is no continuous motion except that which is spatial, of spatial motion only that which is circular.

But even if we are to suppose that there is something which is kinetic and productive although it does not actually move or produce, there will not necessarily be motion; for that which has a potentiality may not actualize it.

Thus it will not help matters if we posit eternal substances, as do the exponents of the Forms, unless there is in them some principle which can cause change. And even this is not enough, nor is it enough if there is another substance besides the Forms; for unless it actually functions there will not be motion.

And it will still not be enough even if it does function, if its essence is potentiality; for there will not be eternal motion, since that which exists potentially may not exist. [20] Therefore there must be a principle of this kind whose essence is actuality. Furthermore these substances must be immaterial; for they must be eternal if anything is. Therefore they are actuality.

There is a difficulty, however; for it seems that everything which actually functions has a potentiality, whereas not everything which has a potentiality actually functions; so that potentiality is prior. But if this is so, there need be no reality; for everything may be capable of existing, but not yet existent.

Yet if we accept the statements of the cosmologists who generate everything from Night, or the doctrine of the physicists that all things were together, we have the same impossibility; for how can there be motion if there is no actual cause? Wood will not move itself—carpentry must act upon it; nor will the menses or the earth move themselves—the seeds must act upon the earth, and the semen on the menses.

Hence some, e.g. Leucippus and Plato, posit an eternal actuality, for they say that there is always motion; but why there is, and what it is, they do not say; nor, if it moves in this or that particular way, what the cause is. For nothing is moved at haphazard, but in every case there must be some reason present; as in point of fact things are moved in one way by nature, and in another by force or mind or some other agent. And further, what kind of motion is primary? For this is an extremely important point.

[1] Again, Plato at least cannot even explain what it is that he sometimes thinks to be the source of motion, i.e., that which moves itself; for according to him the soul is posterior to motion and coeval with the sensible universe. Now to suppose that potentiality is prior to actuality is in one sense right and in another wrong; we have explained the distinction.

But that actuality is prior is testified by Anaxagoras (since mind is actuality), and by Empedocles with his theory of Love and Strife, and by those who hold that motion is eternal, e.g. Leucippus.

Therefore Chaos or Night did not endure for an unlimited time, but the same things have always existed, either passing through a cycle or in accordance with some other principle—that is, if

actuality is prior to potentiality.

Now if there is a regular cycle, there must be something which remains always active in the same way; but if there is to be generation and destruction, there must be something else which is always active in two different ways. Therefore this must be active in one way independently, and in the other in virtue of something else, i.e. either of some third active principle or of the first.

It must, then, be in virtue of the first; for this is in turn the cause both of the third and of the second. Therefore the first is preferable, since it was the cause of perpetual regular motion, and something else was the cause of variety; and obviously both together make up the cause of perpetual variety. Now this is just what actually characterizes motions; therefore why need we seek any further principles?

Since (a) this is a possible explanation, and (b) if it is not true, we shall have to regard everything as coming from Night and all things together and not-being, [20] these difficulties may be considered to be solved. There is something which is eternally moved with an unceasing motion, and that circular motion. This is evident not merely in theory, but in fact. Therefore the ultimate heaven must be eternal. Then there is also something which moves it.

And since that which is moved while it moves is intermediate, there is something which moves without being moved; something eternal which is both substance and actuality.

Now it moves in the following manner. The object of desire and the object of thought move without being moved. The primary objects of desire and thought are the same. For it is the apparent good that is the object of appetite, and the real good that is the object of the rational will. Desire is the result of opinion rather than opinion that of desire; it is the act of thinking that is the starting-point.

Now thought is moved by the intelligible, and one of the series of contraries is essentially intelligible. In this series substance stands first, and of substance that which is simple and exists actually. (The one and the simple are not the same; for one signifies a measure, whereas simple means that the subject itself is in a certain state.)

But the Good, and that which is in itself desirable, are also in the same series; [1] and that which is first in a class is always best or analogous to the best.

That the final cause may apply to immovable things is shown by the distinction of its meanings. For the final cause is not only the good for something, but also the good which is the end of some action. In the latter sense it applies to immovable things, although in the former it does not; and it causes motion as being an object of love, whereas all other things cause motion because they are themselves in motion.

Now if a thing is moved, it can be otherwise than it is. Therefore if the actuality of the heaven is primary locomotion, then in so far as the heaven is moved, in this respect at least it is possible for it to be otherwise; i.e. in respect of place, even if not of substantiality. But since there is something—X—which moves while being itself unmoved, existing actually, X cannot be otherwise in any respect.

For the primary kind of change is locomotion, and of locomotion circular locomotion; and this is the motion which X induces. Thus X is necessarily existent; and qua necessary it is good, and is in this sense a first principle. For the necessary has all these meanings: that which is by

constraint because it is contrary to impulse; and that without which excellence is impossible; and that which cannot be otherwise, but is absolutely necessary.

Such, then, is the first principle upon which depend the sensible universe and the world of nature.

And its life is like the best which we temporarily enjoy. It must be in that state always (which for us is impossible), since its actuality is also pleasure.(And for this reason waking, sensation and thinking are most pleasant, and hopes and memories are pleasant because of them.) Now thinking in itself is concerned with that which is in itself best, and thinking in the highest sense with that which is in the highest sense best.

[20] And thought thinks itself through participation in the object of thought; for it becomes an object of thought by the act of apprehension and thinking, so that thought and the object of thought are the same, because that which is receptive of the object of thought, i.e. essence, is thought. And it actually functions when it possesses this object. Hence it is actuality rather than potentiality that is held to be the divine possession of rational thought, and its active contemplation is that which is most pleasant and best.

If, then, the happiness which God always enjoys is as great as that which we enjoy sometimes, it is marvellous; and if it is greater, this is still more marvellous. Nevertheless it is so. Moreover, life belongs to God. For the actuality of thought is life, and God is that actuality; and the essential actuality of God is life most good and eternal. We hold, then, that God is a living being, eternal, most good; and therefore life and a continuous eternal existence belong to God; for that is what God is.

Those who suppose, as do the Pythagoreans and Speusippus, that perfect beauty and goodness do

not exist in the beginning (on the ground that whereas the first beginnings of plants and animals are causes, it is in the products of these that beauty and perfection are found) are mistaken in their views.

For seed comes from prior creatures which are perfect, and that which is first is not the seed but the perfect creature. [1] E.g., one might say that prior to the seed is the man—not he who is produced from the seed, but another man from whom the seed comes.

Thus it is evident from the foregoing account that there is some substance which is eternal and immovable and separate from sensible things; and it has also been shown that this substance can have no magnitude, but is impartible and indivisible (for it causes motion for infinite time, and nothing finite has an infinite potentiality; and therefore since every magnitude is either finite or infinite, it cannot have finite magnitude,

and it cannot have infinite magnitude because there is no such thing at all); and moreover that it is impassive and unalterable; for all the other kinds of motion are posterior to spatial motion. Thus it is clear why this substance has these attributes.

We must not disregard the question whether we should hold that there is one substance of this kind or more than one, and if more than one, how many; we must review the pronouncements of other thinkers and show that with regard to the number of the substances they have said nothing that can be clearly stated.

The theory of the Ideas contains no peculiar treatment of the question; for the exponents of the theory call the Ideas numbers, and speak of the numbers [20] now as though they were unlimited and now as though they were limited by the number 10; but as for why there should be just so many numbers, there is no explanation given with demonstrative accuracy.

We, however, must discuss the question on the basis of the assumptions and distinctions which we have already made.

The first principle and primary reality is immovable, both essentially and accidentally, but it excites the primary form of motion, which is one and eternal.

Now since that which is moved must be moved by something, and the prime mover must be essentially immovable, and eternal motion must be excited by something eternal, and one motion by some one thing; and since we can see that besides the simple spatial motion of the universe(which we hold to be excited by the primary immovable substance) there are other spatial motions—those of the planets—which are eternal (because a body which moves in a circle is eternal and is never at rest—this has been proved in our physical treatises); then each of these spatial motions must also be excited by a substance which is essentially immovable and eternal.

For the nature of the heavenly bodies is eternal, being a kind of substance; and that which moves is eternal and prior to the moved; and that which is prior to a substance must be a substance. It is therefore clear that there must be an equal number of substances, in nature eternal, essentially immovable, and without magnitude; for the reason already stated.

[1] Thus it is clear that the movers are substances, and that one of them is first and another second and so on in the same order as the spatial motions of the heavenly bodies.

As regards the number of these motions, we have now reached a question which must be investigated by the aid of that branch of mathematical science which is most akin to philosophy, i.e. astronomy; for this has as its object a substance which is sensible but eternal, whereas the other mathematical sciences, e.g. arithmetic and geometry, do not deal with any substance. That there are more spatial motions than there are bodies which move in space is obvious to those who have even a moderate grasp of the subject, since each of the non-fixed stars has more than one spatial motion.

As to how many these spatial motions actually are we shall now, to give some idea of the subject, quote what some of the mathematicians say, in order that there may be some definite number for the mind to grasp; but for the rest we must partly investigate for ourselves and partly learn from other investigators, and if those who apply themselves to these matters come to some conclusion which clashes with what we have just stated, we must appreciate both views, but follow the more accurate.

Eudoxus held that the motion of the sun and moon involves in either case three spheres, of which the outermost is that of the fixed stars, the second revolves in the circle which bisects the zodiac, [20] and the third revolves in a circle which is inclined across the breadth of the zodiac; but the circle in which the moon moves is inclined at a greater angle than that in which the sun moves.

And he held that the motion of the planets involved in each case four spheres; and that of these the first and second are the same as before (for the sphere of the fixed stars is that which

carries round all the other spheres, and the sphere next in order, which has its motion in the circle which bisects the zodiac, is common to all the planets); the third sphere of all the planets has its poles in the circle which bisects the zodiac; and the fourth sphere moves in the circle inclined to the equator of the third. In the case of the third sphere, while the other planets have their own peculiar poles, those of Venus and Mercury are the same.

Callippus assumed the same arrangement of the spheres as did Eudoxus (that is, with respect to the order of their intervals), but as regards their number, whereas he assigned to Jupiter and Saturn the same number of spheres as Eudoxus, he considered that two further spheres should be added both for the sun and for the moon, if the phenomena are to be accounted for, and one for each of the other planets.

But if all the spheres in combination are to account for the phenomena, [1] there must be for each of the other planets other spheres, one less in number than those already mentioned, which counteract these and restore to the same position the first sphere of the star which in each case is next in order below. In this way only can the combination of forces produce the motion of the planets.

Therefore since the forces by which the planets themselves are moved are 8 for Jupiter and Saturn, and 25 for the others, and since of these the only ones which do not need to be counteracted are those by which the lowest planet is moved, the counteracting spheres for the first two planets will be 6, and those of the remaining four will be 16; and the total number of spheres, both those which move the planets and those which counteract these, will be 55.

If we do not invest the moon and the sun with the additional motions which we have mentioned, there will be 47 (?) spheres in all.

This, then, may be taken to be the number of the spheres; and thus it is reasonable to suppose that there are as many immovable substances and principles,—the statement of logical necessity may be left to more competent thinkers.

If there can be no spatial motion which is not conducive to the motion of a star, [20] and if moreover every entity and every substance which is impassive and has in itself attained to the highest good should be regarded as an end, then there can be no other entity besides these, and the number of the substances must be as we have said. For if there are other substances, they must move something, since they are the end of spatial motion.

But there can be no other spatial motions besides those already mentioned. This is a reasonable inference from a general consideration of spatial motion. For if everything which moves exists for the sake of that which is moved, and every motion for the sake of something which is moved, no motion can exist for the sake of itself or of some other motion, but all motions must exist for the sake of the stars.

For if we are to suppose that one motion is for the sake of another, the latter too must be for the sake of something else; and since the series cannot be infinite, the end of every motion must be one of the divine bodies which are moved through the heavens.

It is evident that there is only one heaven. For if there is to be a plurality of heavens (as there is of men), the principle of each must be one in kind but many in number.

But all things which are many in number have matter (for one and the same definition applies to many individuals, e.g. that of man; but Socrates is one), but the primary essence has no matter,

because it is complete reality. Therefore the prime mover, which is immovable, is one both in formula and in number; and therefore so also is that which is eternally and continuously in motion. Therefore there is only one heaven.

[1] A tradition has been handed down by the ancient thinkers of very early times, and bequeathed to posterity in the form of a myth, to the effect that these heavenly bodies are gods, and that the Divine pervades the whole of nature.

The rest of their tradition has been added later in a mythological form to influence the vulgar and as a constitutional and utilitarian expedient; they say that these gods are human in shape or are like certain other animals, and make other statements consequent upon and similar to those which we have mentioned.

Now if we separate these statements and accept only the first, that they supposed the primary substances to be gods, we must regard it as an inspired saying and reflect that whereas every art and philosophy has probably been repeatedly developed to the utmost and has perished again, these beliefs of theirs have been preserved as a relic of former knowledge. To this extent only, then, are the views of our forefathers and of the earliest thinkers intelligible to us.

The subject of Mind involves certain difficulties. Mind is held to be of all phenomena the most supernatural; but the question of how we must regard it if it is to be of this nature involves certain difficulties. If Mind thinks nothing, where is its dignity? It is in just the same state as a man who is asleep. If it thinks, but something else determines its thinking, then since that which is its essence is not thinking but potentiality, [20] it cannot be the best reality; because it derives its excellence from the act of thinking.

Again, whether its essence is thought or thinking, what does it think? It must think either itself or something else; and if something else, then it must think either the same thing always, or different things at different times. Then does it make any difference, or not, whether it thinks that which is good or thinks at random?

Surely it would be absurd for it to think about some subjects. Clearly, then, it thinks that which is most divine and estimable, and does not change; for the change would be for the worse, and anything of this kind would immediately imply some sort of motion. Therefore if Mind is not thinking but a potentiality, (a) it is reasonable to suppose that the continuity of its thinking is laborious; (b) clearly there must be something else which is more excellent than Mind; i.e. the object of thought;

for both thought and the act of thinking will belong even to the thinker of the worst thoughts. Therefore if this is to be avoided (as it is, since it is better not to see some things than to see them), thinking cannot be the supreme good. Therefore Mind thinks itself, if it is that which is best; and its thinking is a thinking of thinking.

Yet it seems that knowledge and perception and opinion and understanding are always of something else, and only incidentally of themselves.

And further, if to think is not the same as to be thought, in respect of which does goodness belong to thought? for the act of thinking and the object of thought have not the same essence. [1] The answer is that in some cases the knowledge is the object. In the productive sciences, if we disregard the matter, the substance, i.e. the essence, is the object; but in the speculative sciences the formula or the act of thinking is the object. Therefore since thought and the object

of thought are not different in the case of things which contain no matter, they will be the same, and the act of thinking will be one with the object of thought.

There still remains the question whether the object of thought is composite; for if so, thought would change in passing from one part of the whole to another. The answer is that everything which contains no matter is indivisible. Just as the human mind, or rather the mind of composite beings, is in a certain space of time(for it does not possess the good at this or at that moment, but in the course of a certain whole period it attains to the supreme good, which is other than itself), so is absolute self-thought throughout all eternity.

We must also consider in which sense the nature of the universe contains the good or the supreme good; whether as something separate and independent, or as the orderly arrangement of its parts.

Probably in both senses, as an army does; for the efficiency of an army consists partly in the order and partly in the general; but chiefly in the latter, because he does not depend upon the order, but the order depends upon him. All things, both fishes and birds and plants, are ordered together in some way, but not in the same way; and the system is not such that there is no relation between one thing and another; there is a definite connection.

Everything is ordered together to one end; but the arrangement is like that in a household, where the free persons have the least liberty to act at random, [20] and have all or most of their actions preordained for them, whereas the slaves and animals have little common responsibility and act for the most part at random; for the nature of each class is a principle such as we have described.

I mean, for example, that everything must at least come to dissolution; and similarly there are other respects in which everything contributes to the good of the whole.

We must not fail to observe how many impossibilities and absurdities are involved by other theories, and what views the more enlightened thinkers hold, and what views entail the fewest difficulties.

All thinkers maintain that all things come from contraries; but they are wrong both in saying all things and in saying that they come from contraries, nor do they explain how things in which the contraries really are present come from the contraries; for the contraries cannot act upon each other. For us, however, this problem is satisfactorily solved by the fact that there is a third factor. Other thinkers make one of the two contraries matter; e.g., this is done by those who make the Unequal matter for the Equal, or the Many matter for the One.

But this also is disposed of in the same way; for the one matter of two contraries is contrary to nothing. Further, on their view everything except Unity itself will partake of evil; for the Bad is itself one of the elements. The other school does not even regard the Good and the Bad as principles; yet the Good is in the truest sense a principle in all things. The former school is right in holding that the Good is a principle, but they do not explain how it is a principle— [1] whether as an end or as a moving cause or as form.

Empedocles theory is also absurd, for he identifies the Good with Love. This is a principle both as causing motion (since it combines) and as matter (since it is part of the mixture). Now even if it so happens that the same thing is a principle both as matter and as causing motion, still the essence of the two principles is not the same. In which respect, then, is Love a principle? And it is

also absurd that Strife should be imperishable; strife is the very essence of evil.

Anaxagoras makes the Good a principle as causing motion; for Mind moves things, but moves them for some end, and therefore there must be some other Good—unless it is as we say; for on our view the art of medicine is in a sense health. It is absurd also not to provide a contrary for the Good, i.e. for Mind. But all those who recognize the contraries fail to make use of the contraries, unless we systematize their theories.

And none of them explains why some things are perishable and others imperishable; for they make all existing things come from the same first principles. Again, some make existing things come from not-being, while others, to avoid this necessity, make all things one. Again, no one explains why there must always be generation, and what the cause of generation is.

Moreover, those who posit two principles must admit another superior principle, and so must the exponents of the Forms; for what made or makes particulars participate in the Forms? [20] And on all other views it follows necessarily that there must be something which is contrary to Wisdom or supreme knowledge, but on ours it does not. For there is no contrary to that which is primary,

since all contraries involve matter, and that which has matter exists potentially; and the ignorance which is contrary to Wisdom would tend towards the contrary of the object of Wisdom; but that which is primary has no contrary.

Further, if there is to be nothing else besides sensible things, there will be no first principle, no order, no generation, and no celestial motions, but every principle will be based upon another, as in the accounts of all the cosmologists and physicists.

And if the Forms or numbers are to exist, they will be causes of nothing; or if not of nothing, at least not of motion.

Further, how can extension, i.e. a continuum, be produced from that which is unextended? Number cannot, either as a moving or as a formal cause, produce a continuum. Moreover, no contrary can be essentially productive and kinetic, for then it would be possible for it not to exist;

and further, the act of production would in any case be posterior to the potentiality. Therefore the world of reality is not eternal. But there are real objects which are eternal. Therefore one of these premisses must be rejected. We have described how this may be done.

Further, in virtue of what the numbers, or soul and body, or in general the form and the object, are one, no one attempts to explain; nor is it possible to do so except on our theory, that it is the moving cause that makes them one.

As for those who maintain that mathematical number is the primary reality, [1] and so go on generating one substance after another and finding different principles for each one, they make the substance of the universe incoherent (for one substance in no way affects another by its existence or non-existence) and give us a great many governing principles. But the world must not be governed badly:

The rule of many is not good; let one be the ruler.

[8] We have already explained what the substance of sensible things is, dealing in our treatise on physics with the material substrate, and subsequently with substance as actuality.

Now since we are inquiring whether there is or is not some immutable and eternal substance besides sensible substances, and if there is, what it is, we must first examine the statements of other thinkers, so that if they have been mistaken in any respect, we may not be liable to the same mistakes; and if there is any view which is common to them and us, we may not feel any private self-irritation on this score. For we must be content if we state some points better than they have done, and others no worse.

There are two views on this subject. Some say that mathematical objects, i.e. numbers and lines, are substances; and others again that the Ideas are substances.

Now since some recognize these as two classes— [20] the Ideas and the mathematical numbers—and others regard both as having one nature, and yet others hold that only the mathematical substances are substances, we must first consider the mathematical objects, without imputing to them any other characteristic—e.g. by asking whether they are really Ideas or not, or whether they are principles and substances of existing things or not—and merely inquire whether as mathematical objects they exist or not, and if they do, in what sense; then after this we must separately consider the Ideas themselves, simply and in so far as the accepted procedure requires; for most of the arguments have been made familiar already by the criticisms of other thinkers.

And further, the greater part of our discussion must bear directly upon this second question—viz. when we are considering whether the substances and first principles of existing things are numbers and Ideas; for after we have dealt with the Ideas there remains this third question.

Now if the objects of mathematics exist, they must be either in sensible things, as some hold; or separate from them (there are some also who hold this view); or if they are neither the one nor the other, either they do not exist at all, or they exist in some other way. Thus the point which we shall have to discuss is concerned not with their existence, but with the mode of their existence.

That the objects of mathematics cannot be in sensible things, and that moreover the theory that they are is a fabrication, has been observed already in our discussion of difficulties [1] —the reasons being (a) that two solids cannot occupy the same space, and (b) that on this same theory all other potentialities and characteristics would exist in sensible things, and none of them would exist separately. This, then, has been already stated;

but in addition to this it is clearly impossible on this theory for any body to be divided. For it must be divided in a plane, and the plane in a line, and the line at a point; and therefore if the point is indivisible, so is the line, and so on.

For what difference does it make whether entities of this kind are sensible objects, or while not being the objects themselves, are yet present in them? the consequence will be the same, for either they must be divided when the sensible objects are divided, or else not even the sensible objects can be divided.

Nor again can entities of this kind exist separately.

For if besides sensible solids there are to be other solids which are separate from them and prior to sensible solids, clearly besides sensible planes there must be other separate planes, and so too with points and lines; for the same argument applies. And if these exist, again besides the

planes, lines and points of the mathematical solid, there must be others which are separate;

for the incomposite is prior to the composite, and if prior to sensible bodies there are other non-sensible bodies, [20] then by the same argument the planes which exist independently must be prior to those which are present in the immovable solids. Therefore there will be planes and lines distinct from those which coexist with the separately-existent solids; for the latter coexist with the mathematical solids, but the former are prior to the mathematical solids.

Again, in these planes there will be lines, and by the same argument there must be other lines prior to these; and prior to the points which are in the prior lines there must be other points, although there will be no other points prior to these.

Now the accumulation becomes absurd; because whereas we get only one class of solids besides sensible solids, we get three classes of planes besides sensible planes—those which exist separately from sensible planes, those which exist in the mathematical solids, and those which exist separately from those in the mathematical solids—four classes of lines, and five of points;

with which of these, then, will the mathematical sciences deal? Not, surely, with the planes, lines and points in the immovable solid; for knowledge is always concerned with that which is prior. And the same argument applies to numbers; for there will be other units besides each class of points, and besides each class of existing things, first the sensible and then the intelligible; so that there will be an infinite number of kinds of mathematical numbers.

Again, there are the problems which we enumerated in our discussion of difficulties: how can they be solved? [1] For the objects of astronomy will similarly be distinct from sensible things, and so will those of geometry; but how can a heaven and its parts (or anything else which has motion) exist apart from the sensible heaven? And similarly the objects of optics and of harmonics will be distinct, for there will be sound and sight apart from the sensible and particular objects.

Hence clearly the other senses and objects of sense will exist separately; for why should one class of objects do so rather than another? And if this is so, animals too will exist separately, inasmuch as the senses will.

Again, there are certain general mathematical theorems which are not restricted to these substances.

Here, then, we shall have yet another kind of substance intermediate between and distinct from the Ideas and the intermediates, which is neither number nor points nor spatial magnitude nor time. And if this is impossible, clearly it is also impossible that the aforesaid substances should exist separately from sensible objects.

In general, consequences result which are contrary both to the truth and to received opinion if we thus posit the objects of mathematics as definite separately-existent entities. For if they exist in this way, they must be prior to sensible spatial magnitudes, whereas in truth they must be posterior to them; for the incomplete spatial magnitude is in point of generation prior, but in point of substantiality posterior, [20] as the inanimate is to the animate.

Again, in virtue of what can we possibly regard mathematical magnitudes as one? Things in this world of ours may be reasonably supposed to be one in virtue of soul or part of the soul, or some other influence; apart from this they are a plurality and are disintegrated. But inasmuch as

the former are divisible and quantitative, what is the cause of their unity and cohesion?

Again, the ways in which the objects of mathematics are generated prove our point;

for they are generated first in the dimension of length, then in that of breadth, and finally in that of depth, whereupon the process is complete. Thus if that which is posterior in generation is prior in substantiality, body will be prior to plane and line, and in this sense it will also be more truly complete and whole, because it can become animate; whereas how could a line or plane be animate? The supposition is beyond our powers of apprehension.

Further, body is a kind of substance, since it already in some sense possesses completeness; but in what sense are lines substances? Neither as being a kind of form or shape, as perhaps the soul is, nor as being matter, like the body; for it does not appear that anything can be composed either of lines or of planes or of points,

whereas if they were a kind of material substance it would be apparent that things can be so composed. [1] Let it be granted that they are prior in formula; yet not everything which is prior in formula is also prior in substantiality. Things are prior in substantiality which when separated have a superior power of existence; things are prior in formula from whose formulae the formulae of other things are compounded. And these characteristics are not indissociable.

For if attributes, such as moving or white, do not exist apart from their substances, white will be prior in formula to white man, but not in substantiality; for it cannot exist in separation, but always exists conjointly with the concrete whole—by which I mean white man.

Thus it is obvious that neither is the result of abstraction prior, nor the result of adding a determinant posterior—for the expression white man is the result of adding a determinant to white.

Thus we have sufficiently shown (a) that the objects of mathematics are not more substantial than corporeal objects; (b) that they are not prior in point of existence to sensible things, but only in formula; and (c) that they cannot in any way exist in separation.

And since we have seen that they cannot exist in sensible things, it is clear that either they do not exist at all, or they exist only in a certain way, and therefore not absolutely; for exist has several senses.

The general propositions in mathematics are not concerned with objects which exist separately apart from magnitudes and numbers; they are concerned with magnitudes and numbers, [20] but not with them as possessing magnitude or being divisible. It is clearly possible that in the same way propositions and logical proofs may apply to sensible magnitudes; not qua sensible, but qua having certain characteristics.

For just as there can be many propositions about things merely qua movable, without any reference to the essential nature of each one or to their attributes, and it does not necessarily follow from this either that there is something movable which exists in separation from sensible things or that there is a distinct movable nature in sensible things; so too there will be propositions and sciences which apply to movable things, not qua movable but qua corporeal only; and again qua planes only and qua lines only, and qua divisible, and qua indivisible but having position, and qua indivisible only.

Therefore since it is true to say in a general sense not only that things which are separable but

that things which are inseparable exist, e.g., that movable things exist, it is also true to say in a general sense that mathematical objects exist, and in such a form as mathematicians describe them.

And just as it is true to say generally of the other sciences that they deal with a particular subject—not with that which is accidental to it (e.g. not with white if the healthy is white, and the subject of the science is the healthy), but with that which is the subject of the particular science; [1] with the healthy if it treats of things qua healthy, and with man if qua man—so this is also true of geometry. If the things of which it treats are accidentally sensible although it does not treat of them qua sensible, it does not follow that the mathematical sciences treat of sensible things—nor, on the other hand, that they treat of other things which exist independently apart from these.

Many attributes are essential properties of things as possessing a particular characteristic; e.g., there are attributes peculiar to an animal qua female or qua male, although there is no such thing as female or male in separation from animals. Hence there are also attributes which are peculiar to things merely qua lines or planes.

And in proportion as the things which we are considering are prior in formula and simpler, they admit of greater exactness; for simplicity implies exactness. Hence we find greater exactness where there is no magnitude, and the greatest exactness where there is no motion; or if motion is involved, where it is primary, because this is the simplest kind; and the simplest kind of primary motion is uniform motion.

The same principle applies to both harmonics and optics, for neither of these sciences studies objects qua sight or qua sound, but qua lines and numbers; yet the latter are affections peculiar to the former. The same is also true of mechanics.

Thus if we regard objects independently of their attributes and investigate any aspect of them as so regarded, we shall not be guilty of any error on this account, any more than when we draw a diagram on the ground and say that a line is a foot long when it is not; [20] because the error is not in the premisses. The best way to conduct an investigation in every case is to take that which does not exist in separation and consider it separately; which is just what the arithmetician or the geometrician does.

For man, qua man, is one indivisible thing; and the arithmetician assumes man to be one indivisible thing, and then considers whether there is any attribute of man qua indivisible. And the geometrician considers man neither qua man nor qua indivisible, but qua something solid. For clearly the attributes which would have belonged to man even if man were somehow not indivisible can belong to man irrespectively of his humanity or indivisibility.

Hence for this reason the geometricians are right in what they maintain, and treat of what really exists; i.e., the objects of geometry really exist. For things can exist in two ways, either in complete reality or as matter.

And since goodness is distinct from beauty (for it is always in actions that goodness is present, whereas beauty is also in immovable things), they are in error who assert that the mathematical sciences tell us nothing about beauty or goodness;

for they describe and manifest these qualities in the highest degree, since it does not follow, because they manifest the effects and principles of beauty and goodness without naming them,

that they do not treat of these qualities. The main species of beauty are orderly arrangement, proportion, and definiteness; [1] and these are especially manifested by the mathematical sciences.

And inasmuch as it is evident that these (I mean, e.g., orderly arrangement and definiteness) are causes of many things, obviously they must also to some extent treat of the cause in this sense, i.e. the cause in the sense of the Beautiful. But we shall deal with this subject more explicitly elsewhere.

As regards the objects of mathematics, then, the foregoing account may be taken as sufficient to show that they exist, and in what sense they exist, and in what sense they are prior and in what they are not. But as regards the Ideas we must first consider the actual theory in relation to the Idea, without connecting it in any way with the nature of numbers, but approaching it in the form in which it was originally propounded by the first exponents of the Ideas.

The theory of Forms occurred to those who enunciated it because they were convinced as to the true nature of reality by the doctrine of Heraclitus, that all sensible things are always in a state of flux; so that if there is to be any knowledge or thought about anything, there must be certain other entities, besides sensible ones, which persist. For there can be no knowledge of that which is in flux.

Now Socrates devoted his attention to the moral virtues, and was the first to seek a general definition of these [20] (for of the Physicists Democritus gained only a superficial grasp of the subject and defined, after a fashion, the hot and the cold; while the Pythagoreans at an earlier date had arrived at definitions of some few things—whose formulae they connected with numbers—e.g., what opportunity is, or justice or marriage); and he naturally inquired into the essence of things;

for he was trying to reason logically, and the starting-point of all logical reasoning is the essence. At that time there was as yet no such proficiency in Dialectic that men could study contraries independently of the essence, and consider whether both contraries come under the same science.

There are two innovations which, may fairly be ascribed to Socrates: inductive reasoning and general definition. Both of these are associated with the starting-point of scientific knowledge.

But whereas Socrates regarded neither universals nor definitions as existing in separation, the Idealists gave them a separate existence, and to these universals and definitions of existing things they gave the name of Ideas.

Hence on their view it followed by virtually the same argument that there are Ideas of all terms which are predicated universally; and the result was very nearly the same as if a man who wishes to count a number of things were to suppose that he could not do so when they are few, and yet were to try to count them when he has added to them. For it is hardly an exaggeration to say that there are more Forms than there are particular sensible things [1] (in seeking for whose causes these thinkers were led on from particulars to Ideas); because corresponding to each thing there is a synonymous entity, apart from the substances (and in the case of non-substantial things there is a One over the Many) both in our everyday world and in the realm of eternal entities.

Again, not one of the ways in which it is attempted to prove that the Forms exist demonstrates

their point; from some of them no necessary conclusion follows, and from others it follows that there are Form of things of which they hold that there are no Forms.

For according to the arguments from the sciences, there will be Forms of all things of which there are sciences; and according to the One-over-Many argument, of negations too; and according to the argument that we have some conception of what has perished there will be Forms of perishable things, because we have a mental picture of these things. Further, of the most exact arguments some establish Ideas of relations, of which the Idealists deny that there is a separate genus, and others state the Third Man.

And in general the arguments for the Forms do away with things which are more important to the exponents of the Forms than the existence of the Ideas; for they imply that it is not the Dyad that is primary, but Number; and that the relative is prior to number, and therefore to the absolute; and all the other conclusions in respect of which certain persons by following up the views held about the Forms have gone against the principles of the theory.

Again, according to the assumption by which they hold that the Ideas exist, [20] there will be Forms not only of substances but of many other things (since the concept is one not only in the case of substances but in the case of non-substantial things as well; and there can be sciences not only of substances but also of other things; and there are a thousand other similar consequences);

but it follows necessarily from the views generally held about them that if the Forms are participated in, there can only be Ideas of substances, because they are not participated in accidentally; things can only participate in a Form in so far as it is not predicated of a subject.

I mean, e.g., that if a thing participates in absolute doubleness, it participates also in something eternal, but only accidentally; because it is an accident of doubleness to be eternal. Thus the Ideas will be substance. But the same terms denote substance in the sensible as in the Ideal world; otherwise what meaning will there be in saying that something exists besides the particulars, i.e. the unity comprising their multiplicity?

If the form of the Ideas and of the things which participate in them is the same, they will have something in common (for why should duality mean one and the same thing in the case of perishable 2's and the 2's which are many but eternal, [1] and not in the case of absolute duality and a particular 2?). But if the form is not the same, they will simply be homonyms; just as though one were to call both Callias and a piece of wood man, without remarking any property common to them.

And if we profess that in all other respects the common definitions apply to the Forms, e.g. that plane figure and the other parts of the definition apply to the Ideal circle, only that we must also state of what the Form is a Form, we must beware lest this is a quite meaningless statement.

For to what element of the definition must the addition be made? to center, or plane or all of them? For all the elements in the essence of an Idea are Ideas; e.g. animal and two-footed. Further, it is obvious that being an Idea, just like plane, must be a definite characteristic which belongs as genus to all its species.

Above all we might examine the question what on earth the Ideas contribute to sensible things, whether eternal or subject to generation and decay; for they are not the cause of any motion or change in them.

Moreover they are no help towards the knowledge of other things (for they are not the substance of particulars, otherwise they would be in particulars) or to their existence (since they are not present in the things which participate in them. If they were, they might perhaps seem to be causes, in the sense in which the admixture of white causes a thing to be white.

[20] But this theory, which was stated first by Anaxagoras and later by Eudoxus in his discussion of difficulties, and by others also, is very readily refuted; for it is easy to adduce plenty of impossibilities against such a view). Again, other things are not in any accepted sense derived from the Forms.

To say that the Forms are patterns, and that other things participate in them, is to use empty phrases and poetical metaphors; for what is it that fashions things on the model of the Ideas? Besides, anything may both be and come to be without being imitated from something else; thus a man may become like Socrates whether Socrates exists or not,

and even if Socrates were eternal, clearly the case would be the same. Also there will be several patterns (and therefore Forms) of the same thing; e.g., animal and two-footed will be patterns of man, and so too will the Idea of man.

Further, the Forms will be patterns not only of sensible things but of Ideas; e.g. the genus will be the pattern of its species; hence the same thing will be pattern and copy. Further, it would seem impossible for the substance and that of which it is the substance to exist in separation; [1] then how can the Ideas, if they are the substances of things, exist in separation from them?

In thePhaedo this statement is made: that the Forms are causes both of being and of generation. Yet assuming that the Forms exist, still there is no generation unless there is something to impart motion; and many other things are generated (e.g. house and ring) of which the Idealists say that there are no Forms.

Thus it is clearly possible that those things of which they say that there are Ideas may also exist and be generated through the same kind of causes as those of the things which we have just mentioned, and not because of the Forms. Indeed, as regards the Ideas, we can collect against them plenty of evidence similar to that which we have now considered; not only by the foregoing methods, but by means of more abstract and exact reasoning.

Now that we have dealt with the problems concerning the Ideas, we had better re-investigate the problems connected with numbers that follow from the theory that numbers are separate substances and primary causes of existing things. Now if number is a kind of entity, and has nothing else as its substance, but only number itself, as some maintain; then either (a) there must be some one part of number which is primary, and some other part next in succession, and so on, each part being specifically different—

and this applies directly to units, and any given unit is inaddible to any other given unit; [20] or (b) they are all directly successive, and any units can be added to any other units, as is held of mathematical number; for in mathematical number no one unit differs in any way from another.

Or (c) some units must be addible and others not. E.g., 2 is first after 1, and then 3, and so on with the other numbers; and the units in each number are addible, e.g. the units in the first2 are addible to one another, and those in the first 3 to one another, and so on in the case of the other numbers; but the units in the Ideal 2 are inaddible to those in the Ideal 3;

and similarly in the case of the other successive numbers. Hence whereas mathematical number

is counted thus: after 1, 2 (which consists of another 1 added to the former) and 3 (which consists of another 1 added to these two) and the other numbers in the same way, Ideal number is counted like this: after 1, a distinct 2 not including the original 1; and a 3 not including the 2, and the rest of the numbers similarly.

Or (d) one kind of number must be such as we first described, and another or such as the mathematicians maintain, and that which we have last described must be a third kind.

Again, these numbers must exist either in separation from things, [1] or not in separation, but in sensible things (not, however, in the way which we first considered, but in the sense that sensible things are composed of numbers which are present in them)—either some of them and not others, or all of them.

These are of necessity the only ways in which the numbers can exist. Now of those who say that unity is the beginning and substance and element of all things, and that number is derived from it and something else, almost everyone has described number in one of these ways (except that no one has maintained that all units are inaddible);

and this is natural enough, because there can be no other way apart from those which we have mentioned. Some hold that both kinds of number exist, that which involves priority and posteriority being identical with the Ideas, and mathematical number being distinct from Ideas and sensible things, and both kinds being separable from sensible things; others hold that mathematical number alone exists, being the primary reality and separate from sensible things.

The Pythagoreans also believe in one kind of number—the mathematical; only they maintain that it is not separate, but that sensible substances are composed of it. For they construct the whole universe of numbers, but not of numbers consisting of abstract units; [20] they suppose the units to be extended—but as for how the first extended unit was formed they appear to be at a loss.

Another thinker holds that primary or Ideal number alone exists; and some identify this with mathematical number.

The same applies in the case of lines, planes and solids.

Some distinguish mathematical objects from those which come after the Ideas; and of those who treat the subject in a different manner some speak of the mathematical objects and in a mathematical way—viz. those who do not regard the Ideas as numbers, nor indeed hold that the Ideas exist—and others speak of the mathematical objects, but not in a mathematical way; for they deny that every spatial magnitude is divisible into extended magnitudes, or that any two given units make 2.

But all who hold that Unity is an element and principle of existing things regard numbers as consisting of abstract units, except the Pythagoreans; and they regard number as having spatial magnitude, as has been previously stated.

It is clear from the foregoing account (1.) in how many ways it is possible to speak of numbers, and that all the ways have been described. They are all impossible, but doubtless some are more so than others.

First, then, we must inquire whether the limits are addible or inaddible; [1] and if inaddible, in which of the two ways which we have distinguished. For it is possible either (a) that any one unit

is inaddible to any other, or (b) that the units in the Ideal 2 are inaddible to those in the Ideal 3, and thus that the units in each Ideal number are inaddible to those in the other Ideal numbers.

Now if all units are addible and do not differ in kind, we get one type of number only, the mathematical, and the Ideas cannot be the numbers thus produced;

for how can we regard the Idea of Man or Animal, or any other Form, as a number? There is one Idea of each kind of thing: e.g. one of Humanity and another one of Animality; but the numbers which are similar and do not differ in kind are infinitely many, so that this is no more the Idea of Man than any other 3 is. But if the Ideas are not numbers, they cannot exist at all;

for from what principles can the Ideas be derived? Number is derived from Unity and the indeterminate dyad, and the principles and elements are said to be the principles and elements of number, and the Ideas cannot be placed either as prior or as posterior to numbers.

But if the units are inaddible in the sense that any one unit is inaddible to any other, the number so composed can be neither mathematical number (since mathematical number consists of units which do not differ, [20] and the facts demonstrated of it fit in with this character) nor Ideal number. For on this view 2 will not be the first number generated from Unity and the indeterminate dyad, and then the other numbers in succession, as they say 2, 3, because the units in the primary 2 are generated at the same time, whether, as the originator of the theory held, from unequals(coming into being when these were equalized), or otherwise—

since if we regard the one unit as prior to the other, it will be prior also to the 2 which is composed of them; because whenever one thing is prior and another posterior, their compound will be prior to the latter and posterior to the former.

Further, since the Ideal 1 is first, and then comes a particular 1 which is first of the other 1's but second after the Ideal 1, and then a third 1 which is next

after the second but third after the first 1, it follows that the units will be prior to the numbers after which they are called; e.g., there will be a third unit in 2 before 3 exists, and a fourth and fifth in 3 before these numbers exist.

It is true that nobody has represented the units of numbers as inaddible in this way; but according to the principles held by these thinkers even this view is quite reasonable, [1] although in actual fact it is untenable.

For assuming that there is a first unit or first 1, it is reasonable that the units should be prior and posterior; and similarly in the case of 2's, if there is a first 2. For it is reasonable and indeed necessary that after the first there should be a second; and if a second, a third; and so on with the rest in sequence.

But the two statements, that there is after 1 a first and a second unit, and that there is a first 2, are incompatible. These thinkers, however, recognize a first unit and first 1, but not a second and third; and they recognize a first 2, but not a second and third.

It is also evident that if all units are inaddible, there cannot be an Ideal 2 and 3, and similarly with the other numbers;

for whether the units are indistinguishable or each is different in kind from every other, numbers must be produced by addition; e.g. 2 by adding 1 to another 1, and 3 by adding another 1 to the 2, and 4 similarly.

This being so, numbers cannot be generated as these thinkers try to generate them, from Unity and the dyad; because 2 becomes a part of 3, and 3 of 4, [20] and the same applies to the following numbers.

But according to them 4 was generated from the first 2 and the indeterminate dyad, thus consisting of two 2's apart from the Ideal 2. Otherwise 4 will consist of the Ideal 2 and another 2 added to it, and the Ideal 2 will consist of the Ideal 1 and another 1; and if this is so the other element cannot be the indeterminate dyad, because it produces one unit and not a definite 2.

Again, how can there be other 3's and 2's besides the Ideal numbers 3 and 2, and in what way can they be composed of prior and posterior units? All these theories are absurd and fictitious, and there can be no primary 2 and Ideal 3. Yet there must be, if we are to regard Unity and the indeterminate dyad as elements.

But if the consequences are impossible, the principles cannot be of this nature.

If, then, any one unit differs in kind from any other, these and other similar consequences necessarily follow. If, on the other hand, while the units in different numbers are different, those which are in the same number are alone indistinguishable from one another, even so the consequences which follow are no less difficult.

[1] For example, in the Ideal number 10 there are ten units, and 10 is composed both of these and of two 5's. Now since the Ideal 10 is not a chance number, and is not composed of chance 5's, any more than of chance units, the units in this number 10 must be different;

for if they are not different, the 5's of which the 10 is composed will not be different; but since these are different, the units must be different too. Now if the units are different, will there or will there not be other 5's in this 10, and not only the two? If there are not, the thing is absurd; whereas if there are, what sort of 10 will be composed of them? for there is no other 10 in 10 besides the 10 itself:

Again, it must also be true that 4 is not composed of chance 2's. For according to them the indeterminate dyad, receiving the determinate dyad, made two dyads; for it was capable of duplicating that which it received.

Again, how is it possible that 2 can be a definite entity existing besides the two units, and 3 besides the three units? Either by participation of the one in the other, as white man exists besides white and man, because it partakes of these concepts; or when the one is a differentia of the other, as man exists besides animal and two-footed.

[20] Again, some things are one by contact, others by mixture, and others by position; but none of these alternatives can possibly apply to the units of which 2 and 3 consist. Just as two men do not constitute any one thing distinct from both of them, so it must be with the units.

The fact that the units are indivisible will make no difference; because points are indivisible also, but nevertheless a pair of points is not anything distinct from the two single points.

Moreover we must not fail to realize this: that on this theory it follows that 2's are prior and posterior, and the other numbers similarly.

Let it be granted that the 2's in 4 are contemporaneous; yet they are prior to those in 8, and just as the determinate 2 produced the 2's in 4, so they produced the 4's in 8. Hence if the original 2 is an Idea, these 2's will also be Ideas of a sort.

And the same argument applies to the units, because the units in the original 2 produce the four units in 4; and so all the units become Ideas, and an Idea will be composed of Ideas. Hence clearly those things also of which these things are Ideas will be composite; [1] e.g., one might say that animals are composed of animals, if there are Ideas of animals.

In general, to regard units as different in any way whatsoever is absurd and fictitious (by fictitious I mean dragged in to support a hypothesis). For we can see that one unit differs from another neither in quantity nor in quality; and a number must be either equal or unequal—this applies to all numbers, but especially to numbers consisting of abstract units.

Thus if a number is neither more nor less, it is equal; and things which are equal and entirely without difference we assume, in the sphere of number, to be identical. Otherwise even the 2's in the Ideal 10 will be different, although they are equal; for if anyone maintains that they are not different, what reason will he be able to allege?

Again, if every unit plus another unit makes 2, a unit from the Ideal 2 plus one from the Ideal 3 will make 2—a 2 composed of different units; will this be prior or posterior to 3? It rather seems that it must be prior, because one of the units is contemporaneous with 3, and the other with 2.

We assume that in general 1 and 1, whether the things are equal or unequal, make 2; e.g. good and bad, or man and horse; but the supporters of this theory say that not even two units make 2.

If the number of the Ideal 3 is not greater than that of the Ideal 2, [20] it is strange; and if it is greater, then clearly there is a number in it equal to the 2, so that this number is not different from the Ideal 2.

But this is impossible, if there is a first and second number. Nor will the Ideas be numbers. For on this particular point they are right who claim that the units must be different if there are to be Ideas, as has been already stated. For the form is unique; but if the units are undifferentiated, the 2's and 3's will be undifferentiated.

Hence they have to say that when we count like this, l, 2, we do not add to the already existing number; for if we do, (a) number will not be generated from the indeterminate dyad, and (b) a number cannot be an Idea; because one Idea will pre-exist in another, and all the Forms will be parts of one Form.

Thus in relation to their hypothesis they are right, but absolutely they are wrong, for their view is very destructive, inasmuch as they will say that this point presents a difficulty: whether, when we count and say 1, 2, 3, we count by addition or by enumerating distinct portions. But we do both; and therefore it is ridiculous to refer this point to so great a difference in essence.

[1] First of all it would be well to define the differentia of a number; and of a unit, if it has a differentia. Now units must differ either in quantity or in quality; and clearly neither of these alternatives can be true. But units may differ, as number does, in quantity. But if units also differed in quantity, number would differ from number, although equal in number of units.

Again, are the first units greater or smaller, and do the later units increase in size, or the opposite? All these suggestions are absurd. Nor can units differ in quality; for no modification can ever be applicable to them, because these thinkers hold that even in numbers quality is a later attribute than quantity.

Further, the units cannot derive quality either from unity or from the dyad; because unity has no quality, and the dyad produces quantity, because its nature causes things to be many. If, then, the units differ in some other way, they should most certainly state this at the outset, and explain, if possible, with regard to the differentia of the unit, why it must exist; or failing this, what differentia they mean.

Clearly, then, if the Ideas are numbers, the units cannot all be addible, [20] nor can they all be inaddible in either sense. Nor again is the theory sound which certain other thinkers hold concerning numbers.

These are they who do not believe in Ideas, either absolutely or as being a kind of numbers, but believe that the objects of mathematics exist, and that the numbers are the first of existing things, and that their principle is Unity itself. For it is absurd that if, as they say, there is a 1 which is first of the 1's, there should not be a 2 first of the 2's, nor a 3 of the 3's; for the same principle applies to all cases.

Now if this is the truth with regard to number, and we posit only mathematical number as existing, Unity is not a principle. For the Unity which is of this nature must differ from the other units; and if so, then there must be some 2 which is first of the 2's; and similarly with the other numbers in succession.

But if Unity is a principle, then the truth about numbers must rather be as Plato used to maintain; there must be a first 2 and first 3, and the numbers cannot be addible to each other. But then again, if we assume this, many impossibilities result, as has been already stated. Moreover, the truth must lie one way or the other; so that if neither view is sound, [1] number cannot have a separate abstract existence.

From these considerations it is also clear that the third alternative—that Ideal number and mathematical number are the same—is the worst; for two errors have to be combined to make one theory. (1.) Mathematical number cannot be of this nature, but the propounder of this view has to spin it out by making peculiar assumptions; (2.) his theory must admit all the difficulties which confront those who speak of Ideal number.

The Pythagorean view in one way contains fewer difficulties than the view described above, but in another way it contains further difficulties peculiar to itself. By not regarding number as separable, it disposes of many of the impossibilities; but that bodies should be composed of numbers, and that these numbers should be mathematical, is impossible.

For (a) it is not true to speak of indivisible magnitudes; (b) assuming that this view is perfectly true, still units at any rate have no magnitude; and how can a magnitude be composed of indivisible parts? Moreover arithmetical number consists of abstract units. But the Pythagoreans identify number with existing things; at least they apply mathematical propositions to bodies as though they consisted of those numbers.

Thus if number, [20] if it is a self-subsistent reality, must be regarded in one of the ways described above, and if it cannot be regarded in any of these ways, clearly number has no such nature as is invented for it by those who treat it as separable.

Again, does each unit come from the Great and the Small, when they are equalized; or does one come from the Small and another from the Great? If the latter, each thing is not composed of all the elements, nor are the units undifferentiated; for one contains the Great, and the other the

Small, which is by nature contrary to the Great.

Again, what of the units in the Ideal 3? because there is one over. But no doubt it is for this reason that in an odd number they make the Ideal One the middle unit. If on the other hand each of the units comes from both Great and Small, when they are equalized, how can the Ideal 2 be a single entity composed of the Great and Small? How will it differ from one of its units? Again, the unit is prior to the 2; because when the unit disappears the 2 disappears.

Therefore the unit must be the Idea of an Idea, since it is prior to an Idea, and must have been generated before it. From what, then? for the indeterminate dyad, as we have seen, causes duality.

Again, number must be either infinite or finite (for they make number separable, [1] so that one of these alternatives must be true).

Now it is obvious that it cannot be infinite, because infinite number is neither odd nor even, and numbers are always generated either from odd or from even number. By one process, when 1 is added to an even number, we get an odd number; by another, when 1 is multiplied by 2, we get ascending powers of 2; and by another, when powers of 2 are multiplied by odd numbers, we get the remaining even numbers.

Again, if every Idea is an Idea of something, and the numbers are Ideas, infinite number will also be an Idea of something, either sensible or otherwise. This, however, is impossible, both logically and on their own assumption, since they regard the Ideas as they do.

If, on the other hand, number is finite, what is its limit? In reply to this we must not only assert the fact, but give the reason.

Now if number only goes up to 10, as some hold, in the first place the Forms will soon run short. For example, if 3 is the Idea of Man, what number will be the Idea of Horse? Each number up to 10 is an Idea; the Idea of Horse, then, must be one of the numbers in this series, for they are substances or Ideas.

But the fact remains that they will run short, because the different types of animals will outnumber them. At the same time it is clear that if in this way the Ideal 3 is the Idea of Man, so will the other 3's be also (for the 3's in the same numbers are similar), [20] so that there will be an infinite number of men; and if each 3 is an Idea, each man will be an Idea of Man; or if not, they will still be men.

And if the smaller number is part of the greater, when it is composed of the addible units contained in the same number, then if the Ideal 4 is the Idea of something, e.g. horse or white, then man will be part of horse, if man is 2. It is absurd also that there should be an Idea of 10 and not of 11, nor of the following numbers.

Again, some things exist and come into being of which there are no Forms; why, then, are there not Forms of these too? It follows that the Forms are not the causes of things.

Again, it is absurd that number up to 10 should be more really existent, and a Form, than 10 itself; although the former is not generated as a unity, whereas the latter is. However, they try to make out that the series up to 10 is a complete number;

at least they generate the derivatives, e.g. the void, proportion, the odd, etc., from within the decad. Some, such as motion, rest, good and evil, they assign to the first principles; the rest to

numbers.

Hence they identify the odd with Unity; because if oddness depended on 3, how could 5 be odd?

Again, they hold that spatial magnitudes and the like have a certain limit; [1] e.g. the first or indivisible line, then the 2, and so on; these too extending up to 10.

Again, if number is separable, the question might be raised whether Unity is prior, or 3 or 2.

Now if we regard number as composite, Unity is prior; but if we regard the universal or form as prior, number is prior, because each unit is a material part of number, while number is the form of the units. And there is a sense in which the right angle is prior to the acute angle—since it is definite and is involved in the definition of the acute angle—and another sense in which the acute angle is prior, because it is a part of the other, i.e., the right angle is divided into acute angles.

Thus regarded as matter the acute angle and element and unit are prior; but with respect to form and substance in the sense of formula, the right angle, and the whole composed of matter and form, is prior. For the concrete whole is nearer to the form or subject of the definition, although in generation it is posterior.

In what sense, then, is the One a first principle? Because, they say, it is indivisible.

But the universal and the part or element are also indivisible. Yes, but they are prior in a different sense; the one in formula and the other in time. In which sense, then, is the One a first principle? for, as we have just said, both the right angle seems to be prior to the acute angle, and the latter prior to the former; and each of them is one.

Accordingly the Platonists make the One a first principle in both senses. But this is impossible; for in one sense it is the One qua form or essence, [20] and in the other the One qua part or matter, that is primary. There is a sense in which both number and unit are one; they are so in truth potentially—that is, if a number is not an aggregate but a unity consisting of units distinct from those of other numbers, as the Platonists hold—

but each of the two units is not one in complete reality. The cause of the error which befell the Platonists was that they were pursuing their inquiry from two points of view—that of mathematics and that of general definition—at the same time. Hence as a result of the former they conceived of the One or first principle as a point, for the unit is a point without position. (Thus they too, just like certain others,

represented existing things as composed of that which is smallest.) We get, then, that the unit is the material element of numbers, and at the same time is prior to the number 2; and again we get that it is posterior to 2 regarded as a whole or unity or form. On the other hand, through looking for the universal, they were led to speak of the unity predicated of a given number as a part in the formal sense also. But these two characteristics cannot belong simultaneously to the same thing.

And if Unity itself must only be without position(for it differs only in that it is a principle) and 2 is divisible whereas the unit is not, the unit will be more nearly akin to Unity itself; and if this is so, Unity itself will also be more nearly akin to the unit than to 2. Hence each of the units in 2 will be prior to 2. But this they deny; at least they make out that 2 is generated first. [1] Further, if 2 itself and 3 itself are each one thing, both together make 2. From what, then, does this 2 come?

Since there is no contact in numbers, but units which have nothing between them—e.g. those in 2 or 3—are successive, the question might be raised whether or not they are successive to Unity itself, and whether of the numbers which succeed it 2 or one of the units in 2 is prior.

We find similar difficulties in the case of the genera posterior to number—the line, plane and solid. Some derive these from the species of the Great and Small; viz. lines from the Long and Short, planes from the Broad and Narrow, and solids from the Deep and Shallow. These are species of the Great and Small.

As for the geometrical first principle which corresponds to the arithmetical One, different Platonists propound different views. In these too we can see innumerable impossibilities, fictions and contradictions of all reasonable probability. For (a) we get that the geometrical forms are unconnected with each other, unless their principles also are so associated that the Broad and Narrow is also Long and Short; and if this is so, the plane will be a line and the solid a plane.

[20] Moreover, how can angles and figures, etc., be explained? And (b) the same result follows as in the case of number; for these concepts are modifications of magnitude, but magnitude is not generated from them, any more than a line is generated from the Straight and Crooked, or solids from the Smooth and Rough.

Common to all these Platonic theories is the same problem which presents itself in the case of species of a genus when we posit universals—viz. whether it is the Ideal animal that is present in the particular animal, or some other animal distinct from the Ideal animal. This question will cause no difficulty if the universal is not separable; but if, as the Platonists say, Unity and the numbers exist separately, then it is not easy to solve (if we should apply the phrase not easy to what is impossible).

For when we think of the one in 2, or in number generally, are we thinking of an Idea or of something else?

These thinkers, then, generate geometrical magnitudes from this sort of material principle, but others generate them from the point (they regard the point not as a unity but as similar to Unity) and another material principle which is not plurality but is similar to it; yet in the case of these principles none the less we get the same difficulties.

For if the matter is one, line, plane and solid will be the same; because the product of the same elements must be one and the same. [1] If on the other hand there is more than one kind of matter—one of the line, another of the plane, and another of the solid—either the kinds are associated with each other, or they are not. Thus the same result will follow in this case also; for either the plane will not contain a line, or it will be a line.

Further, no attempt is made to explain how number can be generated from unity and plurality; but howsoever they account for this, they have to meet the same difficulties as those who generate number from unity and the indeterminate dyad. The one school generates number not from a particular plurality but from that which is universally predicated; the other from a particular plurality, but the first; for they hold that the dyad is the first plurality.

Thus there is practically no difference between the two views; the same difficulties will be involved with regard to mixture, position, blending, generation and the other similar modes of combination.

We might very well ask the further question: if each unit is one, of what it is composed; for clearly each unit is not absolute unity. It must be generated from absolute unity and either plurality or a part of plurality.

Now we cannot hold that the unit is a plurality, because the unit is indivisible; but the view that it is derived from a part of plurality involves many further difficulties, because (a) each part must be indivisible; otherwise it will be a plurality and the unit will be divisible, [20] and unity and plurality will not be its elements, because each unit will not be generated from plurality and unity.

(b) The exponent of this theory merely introduces another number; because plurality is a number of indivisible parts.

Again, we must inquire from the exponent of this theory whether the number is infinite or finite.

There was, it appears, a finite plurality from which, in combination with Unity, the finite units were generated; and absolute plurality is different from finite plurality. What sort of plurality is it, then, that is, in combination with unity, an element of number?

We might ask a similar question with regard to the point, i.e. the element out of which they create spatial magnitudes.

This is surely not the one and only point. At least we may ask from what each of the other points comes; it is not, certainly, from some interval and the Ideal point. Moreover, the parts of the interval cannot be indivisible parts, any more than the parts of the plurality of which the units are composed; because although number is composed of indivisible parts, spatial magnitudes are not.

All these and other similar considerations make it clear that number and spatial magnitudes cannot exist separately. [1] Further, the fact that the leading authorities disagree about numbers indicates that it is the misrepresentation of the facts themselves that produces this confusion in their views.

Those who recognize only the objects of mathematics as existing besides sensible things, abandoned Ideal number and posited mathematical number because they perceived the difficulty and artificiality of the Ideal theory. Others, wishing to maintain both Forms and numbers, but not seeing how, if one posits these as first principles, mathematical number can exist besides Ideal number, identified Ideal with mathematical number,—but only in theory, since actually mathematical number is done away with, because the hypotheses which they state are peculiar to them and not mathematical.

And he who first assumed that there are Ideas, and that the Ideas are numbers, and that the objects of mathematics exist, naturally separated them. Thus it happens that all are right in some respect, but not altogether right; even they themselves admit as much by not agreeing but contradicting each other. The reason of this is that their assumptions and first principles are wrong;

and it is difficult to propound a correct theory from faulty premisses: as Epicharmus says, no sooner is it said than it is seen to be wrong.

We have now examined and analyzed the questions concerning numbers to a sufficient extent; for although one who is already convinced might be still more convinced by a fuller treatment,

[20] he who is not convinced would be brought no nearer to conviction.

As for the first principles and causes and elements, the views expressed by those who discuss only sensible substance either have been described in the Physics or have no place in our present inquiry; but the views of those who assert that there are other substances besides sensible ones call for investigation next after those which we have just discussed.

Since, then, some thinkers hold that the Ideas and numbers are such substances, and that their elements are the elements and principles of reality, we must inquire what it is that they hold, and in what sense they hold it.

Those who posit only numbers, and mathematical numbers at that, may be considered later; but as for those who speak of the Ideas, we can observe at the same time their way of thinking and the difficulties which befall them. For they not only treat the Ideas as universal substances, but also as separable and particular.

(That this is impossible has been already shown by a consideration of the difficulties involved.) The reason why those who hold substances to be universal combined these two views was that they did not identify substances with sensible things. [1] They considered that the particulars in the sensible world are in a state of flux, and that none of them persists, but that the universal exists besides them and is something distinct from them.

This theory, as we have said in an earlier passage, was initiated by Socrates as a result of his definitions, but he did not separate universals from particulars; and he was right in not separating them. This is evident from the facts; for without the universal we cannot acquire knowledge, and the separation of the universal is the cause of the difficulties which we find in the Ideal theory.

Others, regarding it as necessary, if there are to be any substances besides those which are sensible and transitory, that they should be separable, and having no other substances, assigned separate existence to those which are universally predicated; thus it followed that universals and particulars are practically the same kind of thing. This in itself would be one difficulty in the view which we have just described.

Let us now mention a point which presents some difficulty both to those who hold the Ideal theory and to those who do not. It has been stated already, at the beginning of our treatise, among the problems. If we do not suppose substances to be separate, that is in the way in which particular things are said to be separate, we shall do away with substance in the sense in which we wish to maintain it; but if we suppose substances to be separable, [20] how are we to regard their elements and principles?

If they are particular and not universal, there will be as many real things as there are elements, and the elements will not be knowable. For let us suppose that the syllables in speech are substances, and that their letters are the elements of substances. Then there must be only one BA, and only one of each of the other syllables; that is, if they are not universal and identical in form, but each is numerically one and an individual, and not a member of a class bearing a common name.

(Moreover, the Platonists assume that each Ideal entity is unique.) Now if this is true of the syllables, it is also true of their letters. Hence there will not be more than one A, nor more than one of any of the other letters, on the same argument by which in the case of the syllable there

cannot be more than one instance of the same syllable. But if this is so, there will be no other things besides the letters, but only the letters.

Nor again will the elements be knowable; for they will not be universal, and knowledge is of the universal. This can be seen by reference to proofs and definitions; for there is no logical conclusion that a given triangle has its angles equal to two right angles unless every triangle has its angles equal to two right angles, or that a given man is an animal unless every man is an animal.

[1] On the other hand, if the first principles are universal, either the substances composed of them will be universal too, or there will be a non-substance prior to substance; because the universal is not substance, and the element or first principle is universal; and the element or first principle is prior to that of which it is an element or first principle.

All this naturally follows when they compose the Ideas of elements and assert that besides the substances which have the same form there are also Ideas each of which is a separate entity.

But if, as in the case of the phonetic elements, there is no reason why there should not be many A's and B's, and no A itself or B itself apart from these many, then on this basis there may be any number of similar syllables.

The doctrine that all knowledge is of the universal, and hence that the principles of existing things must also be universal and not separate substances, presents the greatest difficulty of all that we have discussed; there is, however, a sense in which this statement is true, although there is another in which it is not true.

Knowledge, like the verb to know, has two senses, of which one is potential and the other actual. The potentiality being, as matter, universal and indefinite, has a universal and indefinite object; but the actuality is definite and has a definite object, because it is particular and deals with the particular.

It is only accidentally that sight sees universal color, [20] because the particular color which it sees is color; and the particular A which the grammarian studies is an A. For if the first principles must be universal, that which is derived from them must also be universal, as in the case of logical proofs; and if this is so there will be nothing which has a separate existence; i.e. no substance. But it is clear that although in one sense knowledge is universal, in another it is not.

[29] With regard to this kind of substance, then, let the foregoing account suffice. All thinkers make the first principles contraries; as in the realm of natural objects, so too in respect of the unchangeable substances.

Now if nothing can be prior to the first principle of all things, that first principle cannot be first principle if it is an attribute of something else. This would be as absurd as to say that white is the first principle, not qua anything else but qua white, and yet that it is predicable of a subject, and is white because it is an attribute of something else; because the latter will be prior to it.

Moreover, all things are generated from contraries as from a substrate, and therefore contraries must most certainly have a substrate. [1] Therefore all contraries are predicated of a subject, and none of them exists separately. But there is no contrary to substance; not only is this apparent, but it is borne out by reasoned consideration. Thus none of the contraries is strictly a first principle; the first principle is something different.

But the Platonists treat one of the contraries as matter, some opposing the unequal to Unity (on the ground that the former is of the nature of plurality) and others plurality.

For according to some, numbers are generated from the unequal dyad of the Great and Small; and according to another, from plurality; but in both cases they are generated by the essence of unity. For he who speaks of the unequal and Unity as elements, and describes the unequal as a dyad composed of Great and Small, speaks of the unequal, i.e. the Great and Small, as being one; and does not draw the distinction that they are one in formula but not in number.

Again, they state the first principles, which they call elements, badly; some say that the Great and the Small, together with Unity (making 3 in all), are the elements of numbers; the two former as matter, and Unity as form. Others speak of the Many and Few, because the Great and the Small are in their nature more suited to be the principles of magnitude; and others use the more general term which covers these—the exceeding and the exceeded.

But none of these variations makes any appreciable difference with respect to some of the consequences of the theory; [20] they only affect the abstract difficulties, which these thinkers escape because the proofs which they themselves employ are abstract.

There is, however, this exception: if the exceeding and the exceeded are the first principles, and not the Great and the Small, on the same principle number should be derived from the elements before 2 is derived; for as the exceeding and the exceeded is more universal than the Great and Small, so number is more universal than 2. But in point of fact they assert the one and not the other.

Others oppose the different or other to Unity; and others contrast Plurality and Unity.

Now if, as they maintain, existing things are derived from contraries, and if there is either no contrary to unity, or if there is to be any contrary it is plurality; and if the unequal is contrary to the equal, and the different to the same, and the other to the thing itself then those who oppose unity to plurality have the best claim to credibility—but even their theory is inadequate, because then unity will be few. For plurality is opposed to paucity, and many to few.

That unity denotes a measure is obvious. And in every case there is something else which underlies it; e.g., in the scale there is the quarter-tone; in spatial magnitude the inch or foot or some similar thing; and in rhythms the foot or syllable. Similarly in the case of gravity there is some definite weight. Unity is predicated of all things in the same way; [1] of qualities as a quality, and of quantities as a quantity.

(The measure is indivisible, in the former case in kind, and in the latter to our senses.) This shows that unity is not any independent substance. And this is reasonable; because unity denotes a measure of some plurality, and number denotes a measured plurality and a plurality of measures. (Hence too it stands to reason that unity is not a number; for the measure is not measures, but the measure and unity are starting-points.)

The measure must always be something which applies to all alike; e.g., if the things are horses, the measure is a horse; if they are men, the measure is a man; and if they are man, horse and god, the measure will presumably be an animate being, and the number of them animate beings.

If the things are man, white and walking, there will scarcely be a number of them, because they all belong to a subject which is one and the same in number; however, their number will be a

number of genera, or some other such appellation.

Those who regard the unequal as a unity, and the dyad as an indeterminate compound of great and small, hold theories which are very far from being probable or possible. For these terms represent affections and attributes, rather than substrates, of numbers and magnitudes—many and few applying to number, and great and small to magnitude— [20] just as odd and even, smooth and rough, straight and crooked, are attributes.

Further, in addition to this error, great and small and all other such terms must be relative. And the relative is of all the categories in the least degree a definite entity or substance; it is posterior to quality and quantity. The relative is an affection of quantity, as we have said, and not its matter; since there is something else distinct which is the matter both of the relative in general and of its parts and kinds.

There is nothing great or small, many or few, or in general relative, which is many or few, great or small, or relative to something else without having a distinct nature of its own. That the relative is in the lowest degree a substance and a real thing is shown by the fact that of it alone there is neither generation nor destruction nor change in the sense that in respect of quantity there is increase and decrease, in respect of quality, alteration, in respect of place, locomotion, and in respect of substance, absolute generation and destruction.

There is no real change in respect of the relative; for without any change in itself, one term will be now greater, now smaller or equal, as the other term undergoes quantitative change. [1] Moreover, the matter of every thing, and therefore of substance, must be that which is potentially of that nature; but the relative is neither potentially substance nor actually.

It is absurd, then, or rather impossible, to represent non-substance as an element of substance and prior to it; for all the other categories are posterior to substance. And further, the elements are not predicated of those things of which they are elements; yet many and few are predicated, both separately and together, of number; and long and short are predicated of the line, and the Plane is both broad and narrow.

If, then, there is a plurality of which one term, viz. few, is always predicable, e.g. 2 (for if 2 is many, 1 will be few), then there will be an absolute many; e.g., 10 will be many (if there is nothing more than 10), or 10,000. How, then, in this light, can number be derived from Few and Many? Either both ought to be predicated of it, or neither; but according to this view only one or the other is predicated.

But we must inquire in general whether eternal things can be composed of elements. If so, they will have matter; for everything which consists of elements is composite.

Assuming, then, that that which consists of anything, whether it has always existed or it came into being, must come into being if at all out of that of which it consists; and that everything comes to be that which it comes to be out of that which is it potentially (for it could not have come to be out of that which was not potentially such, nor could it have consisted of it); and that the potential can either be actualized or not; [20] then however everlasting number or anything else which has matter may be, it would be possible for it not to exist, just as that which is any number of years old is as capable of not existing as that which is one day old. And if this is so, that which has existed for so long a time that there is no limit to it may also not exist.

Therefore things which contain matter cannot be eternal, that is, if that which is capable of not

existing is not eternal, as we have had occasion to say elsewhere. Now if what we have just been saying—that no substance is eternal unless it is actuality—is true universally, and the elements are the matter of substance, an eternal substance can have no elements of which, as inherent in it, it consists.

There are some who, while making the element which acts conjointly with unity the indeterminate dyad, object to the unequal, quite reasonably, on the score of the difficulties which it involves. But they are rid only of those difficulties which necessarily attend the theory of those who make the unequal, i.e. the relative, an element; all the difficulties which are independent of this view must apply to their theories also, whether it is Ideal or mathematical number that they construct out of these elements.

There are many causes for their resorting to these explanations, [1] the chief being that they visualized the problem in an archaic form. They supposed that all existing things would be one, absolute Being, unless they encountered and refuted Parmenides' dictum:

It will ne'er be proved that things which are not, are,

i.e., that they must show that that which is not, is; for only so—of that which is, and of something else—could existing things be composed, if they are more than one.

However, (i) in the first place, if being has several meanings (for sometimes it means substance, sometimes quality, sometimes quantity, and so on with the other categories), what sort of unity will all the things that are constitute, if not-being is not to be? Will it be the substances that are one, or the affections (and similarly with the other categories), or all the categories together? in which case the this and the such and the so great, and all the other categories which denote some sense of Being, will be one.

But it is absurd, or rather impossible, that the introduction of one thing should account for the fact that what is sometimes means so-and-so, sometimes such-and-such, sometimes of such-and-such a size, sometimes in such-and-such a place.

(2) Of what sort of not-being and Being do real things consist? Not-being, too, has several senses, inasmuch as Being has; and not-man means not so-and-so, whereas not straight means not such-and-such, and not five feet long means not of such-and-such a size. What sort of Being and not-being, then, make existing things a plurality?

[20] This thinker means by the not-being which together with Being makes existing things a plurality, falsity and everything of this nature; and for this reason also it was said that we must assume something which is false, just as geometricians assume that a line is a foot long when it is not.

But this cannot be so; for (a) the geometricians do not assume anything that is false (since the proposition is not part of the logical inference), and (b) existing things are not generated from or resolved into not-being in this sense. But not only has not-being in its various cases as many meanings as there are categories, but moreover the false and the potential are called not-being; and it is from the latter that generation takes place—man comes to be from that which is not man but is potentially man, and white from that which is not white but is potentially white; no matter whether one thing is generated or many.

Clearly the point at issue is how being in the sense of the substances is many; for the things that are generated are numbers and lines and bodies. It is absurd to inquire how Being as substance

is many, and not how qualities or quantities are many.

Surely the indeterminate dyad or the Great and Small is no reason why there should be two whites or many colors or flavors or shapes; [1] for then these too would be numbers and units. But if the Platonists had pursued this inquiry, they would have perceived the cause of plurality in substances as well; for the cause is the same, or analogous.

This deviation of theirs was the reason why in seeking the opposite of Being and unity, from which in combination with Being and unity existing things are derived, they posited the relative (i.e. the unequal), which is neither the contrary nor the negation of Being and unity, but is a single characteristic of existing things, just like substance or quality. They should have investigated this question also; how it is that relations are many, and not one.

As it is, they inquire how it is that there are many units besides the primary unity, but not how there are many unequal things besides the Unequal. Yet they employ in their arguments and speak of Great and Small, Many and Few (of which numbers are composed), Long and Short (of which the line is composed), Broad and Narrow (of which the plane is composed), Deep and Shallow (of which solids are composed); and they mention still further kinds of relation. Now what is the cause of plurality in these relations?

We must, then, as I say, presuppose in the case of each thing that which is it potentially. The author of this theory further explained what it is that is potentially a particular thing or substance, but is not per se existent—that it is the relative (he might as well have said quality); which is neither potentially unity or Being, nor a negation of unity or Being, [20] but just a particular kind of Being.

And it was still more necessary, as we have said, that, if he was inquiring how it is that things are many, he should not confine his inquiry to things in the same category, and ask how it is that substances or qualities are many, but that he should ask how it is that things in general are many; for some things are substances, some affections, and some relations.

Now in the case of the other categories there is an additional difficulty in discovering how they are many. For it may be said that since they are not separable, it is because the substrate becomes or is many that qualities and quantities are many; yet there must be some matter for each class of entities, only it cannot be separable from substances.

In the case of particular substances, however, it is explicable how the particular thing can be many, if we do not regard a thing both as a particular substance and as a certain characteristic. The real difficulty which arises from these considerations is how substances are actually many and not one.

Again, even if a particular thing and a quantity are not the same, it is not explained how and why existing things are many, but only how quantities are many;

for all number denotes quantity, and the unit, if it does not mean a measure, means that which is quantitatively indivisible. If, then, quantity and substance are different, it is not explained whence or how substance is many; [1] but if they are the same, he who holds this has to face many logical contradictions.

One might fasten also upon the question with respect to numbers, whence we should derive the belief that they exist.

For one who posits Ideas, numbers supply a kind of cause for existing things; that is if each of the numbers is a kind of Idea, and the Idea is, in some way or other, the cause of existence for other things; for let us grant them this assumption.

But as for him who does not hold this belief, because he can see the difficulties inherent in the Ideal theory (and so has not this reason for positing numbers), and yet posits mathematical number, what grounds have we for believing his statement that there is a number of this kind, and what good is this number to other things? He who maintains its existence does not claim that it is the cause of anything, but regards it as an independent entity; nor can we observe it to be the cause of anything; for the theorems of the arithmeticians will all apply equally well to sensible things, as we have said.

Those, then, who posit the Ideas and identify them with numbers, by their assumption (in accordance with their method of abstracting each general term from its several concrete examples) that every general term is a unity, make some attempt to explain why number exists. Since, however, their arguments are neither necessarily true nor indeed possible, [20] there is no justification on this ground for maintaining the existence of number.

The Pythagoreans, on the other hand, observing that many attributes of numbers apply to sensible bodies, assumed that real things are numbers; not that numbers exist separately, but that real things are composed of numbers. But why? Because the attributes of numbers are to be found in a musical scale, in the heavens, and in many other connections.

As for those who hold that mathematical number alone exists, they cannot allege anything of this kind consistently with their hypotheses; what they did say was that the sciences could not have sensible things as their objects. But we maintain that they can; as we have said before. And clearly the objects of mathematics do not exist in separation; for if they did their attributes would not be present in corporeal things.

Thus in this respect the Pythagoreans are immune from criticism; but in so far as they construct natural bodies, which have lightness and weight, out of numbers which have no weight or lightness, they appear to be treating of another universe and other bodies, not of sensible ones.

But those who treat number as separable assume that it exists and is separable because the axioms will not apply to sensible objects; whereas the statements of mathematics are true and appeal to the soul. [1] The same applies to mathematical extended magnitudes.

It is clear, then, both that the contrary theory can make out a case for the contrary view, and that those who hold this theory must find a solution for the difficulty which was recently raised—why it is that while numbers are in no way present in sensible things, their attributes are present in sensible things.

There are some who think that, because the point is the limit and extreme of the line, and the line of the plane, and the plane of the solid, there must be entities of this kind.

We must, then, examine this argument also, and see whether it is not exceptionally weak. For (1.) extremes are not substances; rather all such things are merely limits. Even walking, and motion in general, has some limit; so on the view which we are criticizing this will be an individual thing, and a kind of substance. But this is absurd. And moreover (2.) even if they are substances, they will all be substances of particular sensible things, since it was to these that the argument applied. Why, then, should they be separable?

Again, we may, if we are not unduly acquiescent, further object with regard to all number and mathematical objects that they contribute nothing to each other, the prior to the posterior. For if number does not exist, none the less spatial magnitudes will exist for those who maintain that only the objects of mathematics exist; and if the latter do not exist, the soul and sensible bodies will exist.

But it does not appear, to judge from the observed facts, that the natural system lacks cohesion, [20] like a poorly constructed drama. Those who posit the Ideas escape this difficulty, because they construct spatial magnitudes out of matter and a number—2 in the case of lines, and 3, presumably, in that of planes, and 4 in that of solids; or out of other numbers, for it makes no difference.

But are we to regard these magnitudes as Ideas, or what is their mode of existence? and what contribution do they make to reality? They contribute nothing; just as the objects of mathematics contribute nothing. Moreover, no mathematical theorem applies to them, unless one chooses to interfere with the principles of mathematics and invent peculiar theories of one's own. But it is not difficult to take any chance hypotheses and enlarge upon them and draw out a long string of conclusions.

These thinkers, then, are quite wrong in thus striving to connect the objects of mathematics with the Ideas. But those who first recognized two kinds of number, the Ideal and the mathematical as well, neither have explained nor can explain in any way how mathematical number will exist and of what it will be composed; for they make it intermediate between Ideal and sensible number.

For if it is composed of the Great and Small, it will be the same as the former, i.e. Ideal, number. But of what other Great and Small can it be composed? for Plato makes spatial magnitudes out of a Great and Small. [1] And if he speaks of some other component, he will be maintaining too many elements; while if some one thing is the first principle of each kind of number, unity will be something common to these several kinds.

We must inquire how it is that unity is these many things, when at the same time number, according to him, cannot be derived otherwise than from unity and an indeterminate dyad.

All these views are irrational; they conflict both with one another and with sound logic, and it seems that in them we have a case of Simonides' long story; for men have recourse to the long story, such as slaves tell, when they have nothing satisfactory to say.

The very elements too, the Great and Small, seem to protest at being dragged in; for they cannot possibly generate numbers except rising powers of 2.

It is absurd also, or rather it is one of the impossibilities of this theory, to introduce generation of things which are eternal.

There is no reason to doubt whether the Pythagoreans do or do not introduce it; for they clearly state that when the One had been constituted—whether out of planes or superficies or seed or out of something that they cannot explain—immediately the nearest part of the Infinite began to be drawn in and limited by the Limit.

However, since they are here explaining the construction of the universe and meaning to speak in terms of physics, although we may somewhat criticize their physical theories, [20] it is only fair to exempt them from the present inquiry; for it is the first principles in unchangeable things that

we are investigating, and therefore we have to consider the generation of this kind of numbers.

They say that there is no generation of odd numbers, which clearly implies that there is generation of even ones; and some hold that the even is constructed first out of unequals—the Great and Small—when they are equalized. Therefore the inequality must apply to them before they are equalized. If they had always been equalized they would not have been unequal before; for there is nothing prior to that which has always been.

Hence evidently it is not for the sake of a logical theory that they introduce the generation of numbers

A difficulty, and a discredit to those who make light of the difficulty, arises out of the question how the elements and first principles are related to the the Good and the Beautiful. The difficulty is this: whether any of the elements is such as we mean when we speak of the Good or the Supreme Good, or whether on the contrary these are later in generation than the elements.

It would seem that there is an agreement between the mythologists and some present-day thinkers, who deny that there is such an element, and say that it was only after some evolution in the natural order of things that both the Good and the Beautiful appeared. They do this to avoid a real difficulty which confronts those who hold, as some do, that unity is a first principle.

[1] This difficulty arises not from ascribing goodness to the first principle as an attribute, but from treating unity as a principle, and a principle in the sense of an element, and then deriving number from unity. The early poets agree with this view in so far as they assert that it was not the original forces—such as Night, Heaven, Chaos or Ocean—but Zeus who was king and ruler.

It was, however, on the ground of the changing of the rulers of the world that the poets were led to state these theories; because those of them who compromise by not describing everything in mythological language—e.g. Pherecydes and certain others—make the primary generator the Supreme Good; and so do the Magi, and some of the later philosophers such as Empedocles and Anaxagoras: the one making Love an element, and the other making Mind a first principle.

And of those who hold that unchangeable substances exist, some identify absolute unity with absolute goodness; but they considered that the essence of goodness was primarily unity.

This, then, is the problem: which of these two views we should hold.

Now it is remarkable if that which is primary and eternal and supremely self-sufficient does not possess this very quality, viz. self-sufficiency and immunity, in a primary degree and as something good. Moreover, it is imperishable and self-sufficient for no other reason than because it is good. [20] Hence it is probably true to say that the first principle is of this nature.

But to say that this principle is unity, or if not that, that it is an element, and an element of numbers, is impossible; for this involves a serious difficulty, to avoid which some thinkers have abandoned the theory (viz. those who agree that unity is a first principle and element, but of mathematical number). For on this view all units become identical with some good, and we get a great abundance of goods.

Further, if the Forms are numbers, all Forms become identical with some good. Again, let us assume that there are Ideas of anything that we choose. If there are Ideas only of goods, the Ideas will not be substances; and if there are Ideas of substances also, all animals and plants,

and all things that participate in the Ideas, will be goods.

Not only do these absurdities follow, but it also follows that the contrary element, whether it is plurality or the unequal, i.e. the Great and Small, is absolute badness. Hence one thinker avoided associating the Good with unity, on the ground that since generation proceeds from contraries, the nature of plurality would then necessarily be bad.

Others hold that inequality is the nature of the bad. It follows, then, that all things partake of the Bad except one—absolute unity; and that numbers partake of it in a more unmitigated form than do spatial magnitudes; [1] and that the Bad is the province for the activity of the Good, and partakes of and tends towards that which is destructive of the Good; for a contrary is destructive of its contrary.

And if, as we said, the matter of each thing is that which is it potentially—e.g., the matter of actual fire is that which is potentially fire—then the Bad will be simply the potentially Good.

Thus all these objections follow because (1.) they make every principle an element; (2.) they make contraries principles; (3.) they make unity a principle; and (4.) they make numbers the primary substances, and separable, and Forms.

If, then, it is impossible both not to include the Good among the first principles, and to include it in this way, it is clear that the first principles are not being rightly represented, nor are the primary substances. Nor is a certain thinker right in his assumption when he likens the principles of the universe to that of animals and plants, on the ground that the more perfect forms are always produced from those which are indeterminate and imperfect, and is led by this to assert that this is true also of the ultimate principles; so that not even unity itself is a real thing.

He is wrong; for even in the natural world the principles from which these things are derived are perfect and complete—for it is man that begets man; the seed does not come first. It is absurd also to generate space simultaneously with the mathematical solids (for space is peculiar to particular things, which is why they are separable in space, whereas the objects of mathematics have no position) [20] and to say that they must be somewhere, and yet not explain what their spatial position is.

Those who assert that reality is derived from elements, and that numbers are the primary realities, ought to have first distinguished the senses in which one thing is derived from another, and then explained in what way number is derived from the first principles. Is it by mixture? But (a) not everything admits of mixture; (b) the result of mixture is something different; and unity will not be separable, nor will it be a distinct entity, as they intend it to be.

Is it by composition, as we hold of the syllable? But (a) this necessarily implies position; (b) in thinking of unity and plurality we shall think of them separately. This, then, is what number will be—a unit plus plurality, or unity plus the Unequal.

And since a thing is derived from elements either as inherent or as not inherent in it, in which way is number so derived? Derivation from inherent elements is only possible for things which admit of generation. Is it derived as from seed?

But nothing can be emitted from that which is indivisible. Is it derived from a contrary which does not persist? But all things which derive their being in this way derive it also from something else which does persist. Since, therefore, one thinker regards unity as contrary to plurality, [1]

and another (treating it as the Equal) as contrary to the Unequal, number must be derived as from contraries.

Hence there is something else which persists from which, together with one contrary, number is or has been derived.

Further, why on earth is it that whereas all other things which are derived from contraries or have contraries perish, even if the contrary is exhausted in producing them, number does not perish? Of this no explanation is given; yet whether it is inherent or not, a contrary is destructive; e.g., Strife destroys the mixture. It should not, however, do this; because the mixture is not its contrary.

Nor is it in any way defined in which sense numbers are the causes of substances and of Being; whether as bounds, e.g. as points are the bounds of spatial magnitudes, and as Eurytus determined which number belongs to which thing—e.g. this number to man, and this to horse—by using pebbles to copy the shape of natural objects, like those who arrange numbers in the form of geometrical figures, the triangle and the square.

Or is it because harmony is a ratio of numbers, and so too is man and everything else? But in what sense are attributes—white, and sweet, and hot—numbers? And clearly numbers are not the essence of things, nor are they causes of the form; for the ratio is the essence, and number is matter.

E.g. the essence of flesh or bone is number only in the sense that it is three parts of fire and two of earth. And the number, [20] whatever it is, is always a number of something; of particles of fire or earth, or of units. But the essence is the proportion of one quantity to another in the mixture; i.e. no longer a number, but a ratio of the mixture of numbers, either of corporeal particles or of any other kind. Thus number is not an efficient cause—neither number in general, nor that which consists of abstract units—nor is it the matter, nor the formula or form of things. Nor again is it a final cause.

The question might also be raised as to what the good is which things derive from numbers because their mixture can be expressed by a number, either one which is easily calculable, or an odd number. For in point of fact honey-water is no more wholesome if it is mixed in the proportion three times three; it would be more beneficial mixed in no particular proportion, provided that it be diluted, than mixed in an arithmetical proportion, but strong.

Again, the ratios of mixtures are expressed by the relation of numbers, and not simply by numbers; e.g., it is 3 : 2, not 3 X 2; for in products of multiplication the units must belong to the same genus. Thus the product of 1 x 2 x 3 must be measurable by 1, and the product of 4 X 5 x 7 by 4. Therefore all products which contain the same factor must be measurable by that factor. Hence the number of fire cannot be 2 X 5 X 3 X 7 if the number of water is 2 x 3.

[1] If all things must share in number, it must follow that many things are the same; i.e., that the same number belongs both to this thing and to something else. Is number, then, a cause; i.e., is it because of number that the object exists? Or is this not conclusive? E.g., there is a certain number of the sun’s motions, and again of the moon’s, and indeed of the life and maturity of every animate thing. What reason, then, is there why some of these numbers should not be squares and others cubes, some equal and others double?

There is no reason; all things must fall within this range of numbers if, as was assumed, all

things share in number, and different things may fall under the same number. Hence if certain things happened to have the same number, on the Pythagorean view they would be the same as one another, because they would have the same form of number; e.g., sun and moon would be the same.

But why are these numbers causes? There are seven vowels, seven strings to the scale, seven Pleiads; most animals (though not all) lose their teeth in the seventh year; and there were seven heroes who attacked Thebes. Is it, then, because the number 7 is such as it is that there were seven heroes, or that the Pleiads consist of seven stars? Surely there were seven heroes because of the seven gates, or for some other reason, and the Pleiads are seven because we count them so; just as we count the Bear as 12, whereas others count more stars in both.

[20] Indeed, they assert also that Ξ, Ψ and Z are concords, and that because there are three concords, there are three double consonants. They ignore the fact that there might be thousands of double consonants—because there might be one symbol for ΓP. But if they say that each of these letters is double any of the others, whereas no other is, and that the reason is that there are three regions of the mouth, and that one consonant is combined with σ in each region, it is for this reason that there are only three double consonants, and not because there are three concords—because there are really more than three; but there cannot be more than three double consonants.

Thus these thinkers are like the ancient Homeric scholars, who see minor similarities but overlook important ones.

Some say that there are many correspondences of this kind; e.g., the middle notes of the octave are respectively 8 and 9, and the epic hexameter has seventeen syllables, which equals the sum of these two; [1] and the line scans in the first half with nine syllables, and in the second with eight.

And they point out that the interval from α to ω in the alphabet is equal to that from the lowest note of a flute to the highest, whose number is equal to that of the whole system of the universe. We must realize that no one would find any difficulty either in discovering or in stating such correspondences as these in the realm of eternal things, since they occur even among perishable things.

As for the celebrated characteristics of number, and their contraries, and in general the mathematical properties, in the sense that some describe them and make them out to be causes of the natural world, it would seem that if we examine them along these lines, they disappear; for not one of them is a cause in any of the senses which we distinguished with until respect to the first Principles.

There is a sense, however, in which these thinkers make it clear that goodness is predicable of numbers, and that the odd, the straight, the equal-by-equal, and the powers of certain numbers, belong to the series of the Beautiful. For the seasons are connected with a certain kind of number; and the other examples which they adduce from mathematical theorems all have the same force.

Hence they would seem to be mere coincidences, for they are accidental; but all the examples are appropriate to each other, and they are one by analogy. For there is analogy between all the categories of Being—as straight is in length, [20] so is level in breadth, perhaps odd in number, and white in color.

Again, it is not the Ideal numbers that are the causes of harmonic relations, etc. (for Ideal numbers, even when they are equal, differ in kind, since their units also differ in kind); so on this ground at least we need not posit Forms.

Such, then, are the consequences of the theory, and even more might be adduced. But the mere fact that the Platonists find so much trouble with regard to the generation of Ideal numbers, and can in no way build up a system, would seem to be a proof that the objects of mathematics are not separable from sensible things, as some maintain, and that the first principles are not those which these thinkers assume.