SAINT ALBERT THE GREAT

On the Predicables

De Praedicabilibus

VOLUME II · II

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Saint Albert the Great (1200–1280)
De Praedicabilibus · On the Predicables

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CAPUT I — *De intentione libri, et ordine, et modo et aliis quæ quæri consueverunt.*

In ante habitis dictum est quod logica est scientia per quam docetur qualiter per cognitum deveniatur ad notitiam incogniti. Et hoc duobus fit modis, secundum quod duo sunt quæ quando sunt incognita desideramus cognoscere, scilicet complexum et incomplexum. Et incomplexum incognitum cognosci non potest nisi diffinitione, vel quacumque notione. Complexum autem incognitum cognosci non potest nisi argumentatione. Dictum est etiam ad hoc, quod ratio (quæ est virtus unum cum alio complectens) non potest devenire ad instrumentum quo cognitionem incogniti eliciat ex cognito, nisi tribus actibus, qui sunt ordinare unum ad alterum, componere unum cum altero, et colligere composita secundum discursum qui fit ex uno in alterum. Sic enim et non aliter accipiet cognitionem incogniti per id quod est cognitum.

Primus igitur actus qui est ordinare unum componibile cum alio, perficitur duobus modis : et ordo ipse duobus fit modis. Primum quod exigitur ad actum rationis ordinantis est ratio quæ sumitur ex ipsa forma ordinabilium, et hæc ratio trahitur ex universali et particulari : per hoc enim quod universale est quod est in multis, et de multis, ratio ordinis accipitur prædicati ad subjectum : et de hoc jam quantum ad præsentem spectat intentionem determinatum est. Sequitur igitur nunc determinare de his quæ secundum rationem præmissam ad se invicem sunt ordinanda secundum genera, species, differentias, propria, et accidentia : hoc enim solum est in quo perficitur rationis ordinatio. Et ideo hic ordinabilia ad subjici et prædicari sunt ordinanda et determinanda secundum omnem sui diversitatem, quæ consistit in decem generibus prædicabilium sive prædicamentorum.

Quia autem jam in antecedentibus ad logicam probatum est, quod ad scientiam incogniti per cognitum non devenitur, nisi per dispositum sermonem ad signifi-

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BOOK II — ON THE PREDICAMENTS.

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TRACT I — ON THE ANTECEDENTS TO THE SCIENCE OF THE BOOK OF PREDICAMENTS.

<!-- cap:2.1.1 -->

CHAPTER I — *On the intention of the book, and the order, and the mode and other things which are accustomed to be asked.*

In the things previously had it was said that logic is a science by which it is taught how through a known thing one may arrive at the notion of an unknown thing. And this happens in two modes, according as there are two things which when they are unknown we desire to know, namely a complex thing and an incomplex thing. And an unknown incomplex thing cannot be known except by a definition, or by whatever notion. But an unknown complex thing cannot be known except by argumentation. It was said also to this, that reason (which is a power complexing one thing with another) cannot arrive at an instrument by which it may elicit the cognition of an unknown thing from a known thing, except by three acts, which are to ordinate one thing to another, to compose one thing with another, and to collect composed things according to a discourse which is made from one thing into another. For thus and not otherwise it will take the cognition of an unknown thing through that which is known.

The first act therefore which is to ordinate one composable thing with another, is perfected in two modes: and the order itself is made in two modes. The first thing which is demanded to the act of ordinating reason is the reason which is taken from the form itself of the ordinable things, and this reason is drawn from a universal and a particular: for through this that a universal is that which is in multiple things, and of multiple things, the reason of the order of a predicate to a subject is taken: and concerning this already as much as pertains to the present intention it has been determined. It follows therefore now to determine concerning those things which according to the premised reason are to be ordinated to each other according to genera, species, differences, properties, and accidents: for this alone is in which the ordination of reason is perfected. And therefore here the ordinable things to be subjected and to be predicated are to be ordinated and determined according to all their diversity, which consists in the ten genera of predicable things or predicaments.

But since already in the antecedents to logic it was proved, that to the science of an unknown thing through a known thing one does not arrive, except through an ordinated speech to signify-

candum, sive homo inquirat apud seipsum per interius dispositum sermonem, sive inquirat apud alium per sermonem exterius prolatum, sequitur de necessitate, quod ordo prædicabilium non potest determinari, nisi secundum quod sub voce habet prædicabile designari. Rebus enim inquisitive incognitis uti non possumus, eo quod nec finitæ sunt nobis, nec præsentes : et ideo signis et vocibus uti oportet. Propter quod prædicabilia oportet considerare secundum quod vocibus significantur : propter quod dicit Boetius quod hæc scientia, scilicet libri prædicamentorum, est de decem primis vocibus prima genera rerum significantibus : ordo enim non est in rebus ipsis, sed oportet quod ratio ponat ordinem, sicut et facit complexionem et collectionem compositorum.

Et ex his planum est quid sit hujus libri subjectum : est enim subjectum ordinabile in ratione prædicabilis vel subjicibilis, secundum quod stat sub voce talem ordinem signante. Et sic patet qualiter ista scientia est una ab uno subjecto.

Partes autem hujus subjecti sunt ordinabilia secundum diversum modum prædicandi in substantia, et accidente, et in accidentibus secundum omnia novem genera accidentium. Et sic multitudo infinita restringitur in decem genera, ut dicit Boetius : decem autem in duo prædicabilia, substantiam scilicet et accidens : et duo in unum prædicabile, scilicet ordinatum ad compositionem secundum rationem prædicabilis, vel determinatum ex universali et particulari, vel subjicibili et prædicabili. Ex hoc etiam patet quæ sit causa suscepti operis : non enim est componibile prædicabile cum subjicibili, nisi per ordinem unius ad alterum, et ideo de ipsis ordinabilibus in genere et specie oportuit determinare.

Patet etiam quis finis ultimus et quis est finis propinquus. Ultimus enim est ut ex ordinatis ratio accipiatur compositionis ad enuntiationem, quæ sola inter orationes verum significat : et ulterior adhuc finis est, ut ex compositis eliciatur collectio consequentiæ unius ex altero, per quam accipiatur scientia complexi quod ignotum est. Finis autem propinquus est, qui est terminus operis, ut scientia habeatur ordinabilium secundum omne genus, secundum quod potest esse diversus modus prædicandi, vel diversus ordo prædicabilis ad subjectum de quo prædicatur : quæ scientia libri Prædicamentorum est proprius finis.

inquiring, whether a man inquires within himself through interiorly disposed speech, or inquires with another through speech exteriorly brought forth, it follows of necessity, that the order of predicables cannot be determined, except according as a predicable has to be designated under a word. For we cannot use things that are inquisitively unknown, because they are neither finite to us, nor present: and therefore it is necessary to use signs and words. On account of which it is necessary to consider the predicables according as they are signified by words: on account of which Boethius says that this science, namely of the book of the Categories, is concerning the ten first words signifying the first genera of things: for order is not in the things themselves, but it is necessary that reason posit the order, just as it also makes the complexion and collection of composites.

And from these it is plain what the subject of this book is: for the subject is that which is orderable in the notion of a predicable or subjectible, according as it stands under a word signifying such an order. And thus it is patent how this science is one from one subject.

But the parts of this subject are the orderable things according to the diverse mode of predicating in substance, and accident, and in accidents according to all nine genera of accidents. And thus an infinite multitude is restricted into ten genera, as Boethius says: but the ten into two predicables, namely substance and accident: and the two into one predicable, namely ordered to composition according to the notion of a predicable, or determined from universal and particular, or subjectible and predicable. From this also it is patent what the cause of the undertaken work is: for a predicable is not composable with a subjectible, except through the order of one to the other, and therefore it was necessary to determine concerning the orderable things themselves in genus and species.

It is also patent what the ultimate end is and what the proximate end is. For the ultimate is so that from ordered things the notion of composition for an enunciation may be taken, which alone among orations signifies the true: and a further end still is, so that from composites the collection of a consequence of one from another may be elicited, through which the science of the complex which is unknown may be taken. But the proximate end is, which is the term of the work, so that science may be had of orderable things according to every genus, according to which there can be a diverse mode of predicating, or a diverse order of a predicable to the subject of which it is predicated: which science of the book of Categories is the proper end.

Modus autem istius scientiæ oportet quod ex fine sumatur : est enim ille modus eligendus, quo in materia proposita potest devenire quis ad finem intentionis. Est igitur (cum sit de incomplexis) diffinitivus quidem secundum quod ex prioribus secundum naturam procedit : divisivus autem secundum quod notificat quod est prius per sua posteriora quæ sunt in ipso. Et primus quidem, scilicet diffinitivus, notificat rei substantiam et esse. Secundus autem, scilicet divisivus, notificat rei posse : quia non perfecte cognoscitur res, nisi cognoscatur secundum esse et secundum posse. Tertius autem modus, non propter scibile, sed propter eum qui scire quærit, apponetur a nobis, et appositus est ab antecessoribus ut facilior sit doctrina, et ille est exemplorum positivus.

Est autem dubitatio quorumdam, utrum de generibus (quæ ut dicit Porphyrius sunt prima rerum principia) possit haberi scientia? eo quod scientia est habitus conclusionis per causas et principia demonstratus. Cum igitur ista sint principia prima rerum, non sunt alia priora eis per quæ demonstrentur de eis passiones. Et sic de istis non videtur posse dari scientia, sed in scientia debent esse supposita. Sed hoc solvere non est difficile : hæc enim secundum rem, et secundum quod sunt naturæ quædam et partes entis sunt prima principia : secundum quod sunt aliquid prædicabile vel ordinabile in genere secundum hunc vel illum modum prædicandi vel subjiciendi, sic non considerantur ut principia, et habent multas.

proprietates et passiones quæ sunt demonstrabiles de ipsis : et hoc modo agemus de ipsis hic. Prout autem sunt partes entis et principia diversitatis rerum, sic de ipsis agit primus Philosophus, sicut scire potest, qui in Metaphysica studendi ponit intentionem : quod non pertinet ad præsens negotium quod Logicus habet considerare.

[Modus procedendi Auctoris.] Sic ergo tractantes de prædicabili secundum quod stat sub voce designativa prædicabilis secundum modum prædicandi diversum in genere et specie ordinabilis, sequimur sicut in aliis sectam Philosophorum qui Peripatetici vocantur, et maxime Aristotelem qui hujus sectæ princeps et primus inventor fuisse perhibetur, nihilominus apponentes quæcumque bene dicta a posterioribus poterimus invenire : procedemus enim et per modum scientiæ et per modum artis.

But the mode of this science must be taken from the end: for that mode is to be chosen, by which in the proposed matter one can arrive at the end of the intention. It is therefore (since it is concerning incomplexes) definitive indeed according as it proceeds from things prior according to nature: but divisive according as it notifies that which is prior through its posterior things which are in it. And the first indeed, namely the definitive, notifies the substance and being of a thing. But the second, namely the divisive, notifies the power of a thing: because a thing is not perfectly known, unless it be known according to being and according to power. But the third mode, not on account of the scible, but on account of him who seeks to know, will be added by us, and was added by predecessors so that the doctrine may be easier, and that is positive of examples.

But there is a doubt of certain people, whether concerning genera (which as Porphyry says are the first principles of things) science can be had? because science is the habit of a conclusion demonstrated through causes and principles. Since therefore these are the first principles of things, there are not others prior to them through which passions may be demonstrated of them. And thus concerning these it does not seem that science can be given, but in science they ought to be suppositions. But to solve this is not difficult: for these according to the thing, and according as they are certain natures and parts of being are first principles: according as they are something predicable or orderable in a genus according to this or that mode of predicating or subjecting, thus they are not considered as principles, and they have many.

properties and passions which are demonstrable of them: and in this mode we will deal with them here. But insofar as they are parts of being and principles of the diversity of things, the first Philosopher deals with them thus, as he who posits his intention in studying Metaphysics can know: which does not pertain to the present business which the Logician has to consider.

[The Author's mode of proceeding.] Thus therefore treating of the predicable according as it stands under a word designative of the predicable orderable according to a diverse mode of predicating in genus and species, we follow as in others the sect of the Philosophers who are called Peripatetics, and especially Aristotle who is reported to have been the prince and first inventor of this sect, nonetheless adding whatever well-said things we shall be able to find from those [who came] after: for we will proceed both through the mode of science and through the mode of art.

Per modum quidem scientiæ in hoc quod considerabimus subjectum et partes principales subjecti, ostendentes quæ passiones insunt eis, et proprietates ex principiis huic scientiæ propriis. Viam autem artis tenebimus in hoc quod colligemus principia ad unum finem operis tendentia : quod opus quidem est ordinatio prædicabilium ad finem compositionis et intellectionis syllogismi, per quem per scientiam cogniti potest quis devenire ad notitiam incogniti, sicut sæpe diximus. Jam autem ad propositum accedamus, sufficit enim et multa prælibasse.

<!-- cap:1.1.2 -->

CAPUT II. Qualiter præmittitur de æquivocis, univocis, et denominativis, et quæ sint æquivoca.

[Quare oporteat de æquivocis, univocis et denominativis tractare.] Cum igitur in hoc agendum sit de prædicabili qualiter ordinandum sit in genere, et prædicabile in triplex commune reducatur, scilicet in ens et unum, in quæ secundum unam rationem reduci non potest : et in commune quod est commune sicut genus quod recipit prædicationem sui universalis secundum nomen et rationem, quod quidem est univocum : et tertio in id quod est commune sicut subjectum de quo prædicatur accidens, quod de subjecto non prædicatur, nisi secundum denominationem : oportet nos de istis tribus præmittere, ut postea facilius videri possit quid in quo sicut in genere contineatur, vel quid ad aliud sicut ad subjectum reducatur, vel quid nominis et rei suscipiat prædicationem.

[Quare primo de æquivocis, secundo de univocis, et tertio de denominativis agit.] Quia autem primum omnium quod prædicatur est ens, quod univoce de omnibus non prædicatur, ut in scientia universalium dictum est, ideo primo de æquivocis dici oportet. Et iterum propter hoc ut sciatur quid de quo ut genus, vel species, vel differentia, vel proprium, vel accidens non prædicatur, quamvis univocum sit ante æquivocum, sicut unum ante multa : tamen secundum intentionem hujus doctrinæ æquivocum est ante univocum, quia per æquivocum prædicabile reducitur ad ens et unum quod est ante omne genus. Per univocum autem reducitur ad omne quod est commune ut genus. Per denominativum autem vel per ejus rationem omnia accidentis prædicata respiciunt substantiam. Et per istas tres communitates, omnium prædicabilium universitas redit ad unius communis aliquo modo prædicationem, et omnia quæ ad unum subjicibile respiciunt, oportet quod id respiciant ad aliquem trium modorum.

In the mode of science indeed in this that we will consider the subject and the principal parts of the subject, showing what passions are in them, and properties from principles proper to this science. But we will hold the way of art in this that we will collect principles tending to one end of the work: which work indeed is the ordering of predicables to the end of composition and the intellection of a syllogism, through which one can arrive at the notice of the unknown through the science of the known, as we have often said. But now let us approach the proposal, for it suffices to have pretasted many things.

<!-- cap:1.1.2 -->

CHAPTER II. How it is premised concerning equivocals, univocals, and denominatives, and what equivocals are.

[Why it is necessary to treat of equivocals, univocals and denominatives.] Since therefore in this [it] must be dealt with concerning the predicable how it is to be ordered in a genus, and the predicable is reduced into a triple common, namely into being and the one, into which it cannot be reduced according to one account: and into a common which is common as a genus which receives the predication of its universal according to name and account, which indeed is univocal: and thirdly into that which is common as a subject of which an accident is predicated, which is not predicated of the subject, except according to denomination: it is necessary for us to premise concerning these three, so that afterwards it can be more easily seen what is contained in what just as in a genus, or what is reduced to another just as to a subject, or what receives the predication of name and thing.

[Why he deals first with equivocals, secondly with univocals, and thirdly with denominatives.] But because the first of all things which is predicated is being, which is not predicated univocally of all things, as was said in the science of universals, therefore first it is necessary to speak of equivocals. And again on account of this so that it may be known what is not predicated of what as genus, or species, or difference, or property, or accident, although the univocal be before the equivocal, as the one before many: nonetheless according to the intention of this doctrine the equivocal is before the univocal, because through the equivocal a predicable is reduced to being and the one which is before every genus. But through the univocal it is reduced to everything which is common as a genus. But through the denominative or through its account all the predicates of an accident regard substance. And through these three commonalities, the universality of all predicables returns to the predication of one common in some mode, and all things which regard one subjectible, it is necessary that they regard it in some of the three modes.

Dico ergo, quia verum est quod in scientia universalium dictum est, quod si quis omnia entia vocet æquivoce, et non univoce nuncupabit, oportet de æquivocis præmittere. **[Æquivoca quid, et quare sic dicuntur : et explanatio diffinitionis illorum.]** Æquivoca ergo dicuntur quorum solum nomen est commune, secundum nomen vero illud ratio substantiæ est diversa. Dicuntur ergo æquivoca quasi nomen (quod secundum vocem est) ex æquo quoad imponentem habentia. Et ideo etiam additur, quod dicuntur et non sunt, quia quod est in dictione commune est eis : in esse autem quod dicitur per nomen, non est communitas secundum.

æquam participationem : quamvis enim æquivocum actuali multiplicitate multa dicat, tamen nihil omnium illorum æqua participatione participatur ab his quæ in nomine significantur : propter quod æquivoca dicuntur, quia æqualiter nomen habentia, esse nominis non æqua suscipiunt participatione.

Propter quod etiam additur, quorum solum nomen est commune : nomen enim quamvis dicatur quasi notamen, eo quod aliquam notam rei facit quantum ad actum significantis et imponentis nomen, eo quod imponens nomen secundum aliquid proprietatis rei affectus est quando nomen imponitur : quia etiam significatio rei quæ intenditur per nomen formam dat nomini. Tamen hæc non sunt de intrinsecis ipsi nomini secundum quod nomen est solum, sed potius intrinseca sunt nomini litteratio talis sive compositio nominis ex littera et syllaba et accentu, quæ sunt intrinseca nomini ut nomen est. Quibus jam perfectis quantum ad substantiam nominis tunc primum refert nomen ad id quo affectus est ille, sive quod concepit ille qui nomen imposuit : et ideo in æquivocis solum nomen secundum quod consistit in sono litterarum et syllabarum et accentu est commune, et absque æqua participatione alicujus rei quæ importatur in nomine : et ideo dicitur æquivocum.

Et quamvis forte principaliter in æquivoco unum importetur, et alia non principaliter tamen, quia non æqua ratione multa dicta in nomine nomen illud participant, est etiam aliqua species æquivocationis : et hoc est quod additur in æquivocorum ratione ibi, ratio substantiæ est diversa secundum id nomen. Omne enim nomen aliquid significat pro substantia, et aliquid pro qualitate, cum omne nomen substantiam significet cum qualitate : et id quidem cui imponitur nomen est significata substantia ipsius : proprietas autem ejusdem rei sive substantiæ quæ afficit imponenten dum nomen imponit, est qualitas significata per nomen.

I say therefore, because it is true what was said in the science of universals, that if anyone calls all beings equivocally, and will not name them univocally, it is necessary to premise concerning equivocals. **[What equivocals are, and why they are so called: and the explanation of their definition.]** Equivocals therefore are called [those] of which only the name is common, but according to that name the account of the substance is diverse. They are therefore called equivocals as if having the name (which is according to the word) equally as far as the imposer is concerned. And therefore it is also added, that they are called and are not, because that which is in the speech is common to them: but in the being which is said through the name, there is no commonality according to.

...an equal participation: for although an equivocal says many things in actual multiplicity, nevertheless nothing of all those is participated in equal participation by those which are signified in the name: for which reason they are called equivocals, because having the name equally, they do not receive the being of the name in equal participation.

For which reason it is also added, *of which only the name is common*: for the name, although it is called as it were a "noting" (*notamen*), because it makes some note of a thing with respect to the act of the one signifying and imposing the name, because the one imposing the name has been affected according to some property of the thing when the name is imposed: because also the signification of the thing which is intended through the name gives form to the name. Nevertheless, these things are not among those intrinsic to the name itself according to what the name is solely, but rather intrinsic to the name are such a lettering or composition of the name out of letter and syllable and accent, which are intrinsic to the name as it is a name. Which things already being perfected with respect to the substance of the name, then first the name refers to that by which he has been affected, or what he who imposed the name conceived: and therefore in equivocals only the name according to what consists in the sound of letters and syllables and accent is common, and without equal participation of any thing which is imported in the name: and for this reason it is called an equivocal.

And although perhaps primarily one thing is imported in an equivocal, and others not primarily, nevertheless, because the many things said in the name do not participate in that name by equal definition, it is also some species of equivocation: and this is what is added in the definition of equivocals there, *the definition of substance is diverse according to that name*. For every name signifies something for substance, and something for quality, since every name signifies substance with quality: and indeed that upon which the name is imposed is its signified substance: but the property of the same thing or substance which affects the imposer while he imposes the name, is the quality signified through the name.

Quando ergo idem est nomen quantum ad ea quæ sunt nominis in littera et accentu : et id quod significatur in nomine, non est idem vel æque participatum ab illis quibus nomen imponitur, nec etiam proprietas a qua impositum est omnino eadem est, quamvis forte referatur ad unum : tunc nomen est æquivocum, quia ratio substantiæ cui nomen imponitur (quæ est ratio substantialis a qua nomen imponitur) sic duobus modis est secundum aliquid vel simpliciter diversa : substantia enim aliqua (ut diximus) est secundum aliquid per modum quo rationi substat, cui nomen ipsum imponitur: et illius ratio diversa est quando non penitus est eadem : et adhuc a quo nomen imponitur quod est nominis qualitas, et substantialis ratio quæ datur de nomine secundum illud quod nomen est. Quando ergo illa etiam non penitus est eadem, iterum ratio substantiæ, hoc est, substantialis ratio nominis est diversa : ita quod nihil rei cui nomen imponitur, æqualiter participant significata per nomen.

Ex quo patet quod æquivocorum multi sunt modi sive species. Sunt enim æquivoca idem quidem secundum rem, sed non æque participantia, hoc est, per eamdem rationem de omnibus æqualiter datam, sed potius quemdam modum illius (de quo datur ratio) habentia : sicut ens dicitur æquivoce de omnibus entibus per se et in alio existentibus, eo quod per se ens solum naturæ est ens, alii autem quædam modi sunt illius entis et non entia vera et principalia. Hoc modo sanum in animali, et urina, et dieta, et medicina dicitur æquivoce : quia sanum naturæ est animalis : alia autem quemdam modum dicunt sanitatis, significativa et conservativa sanitatis, vel ut sanitatis perfectiva, vel aliquo alio modo qui in animali est se habentia. Si enim medicus dicitur æquivoce de eo qui perfecta (quæ in ipso est) medicina operatur, et de vetula medicum imitante, et clystere quod ut instrumentum perficit operationem et actum medici,

et de quibusdam aliis modis aliquem modum participantibus : sic etiam ens et unum dicuntur æquivoce, eo quod ens et unum primo est id quod per se est ens et unum : alia autem dicuntur ens et unum, quia ad id sicut ad subjectum aliquo modo entitatis referuntur, vel sicut mensura illius, vel sicut dispositio, vel sicut respectus, vel aliquo alio modo, quæ sunt in illo sicut in subjecto. Et hic quidem modus vocatur multiplex dictum secundum analogiam, sive proportionem ad unum quod principaliter in nomine significatur.

When therefore the name is the same in respect to those things which belong to the name in letter and accent: and that which is signified in the name is not the same or equally participated by those upon which the name is imposed, nor is even the property from which it is imposed entirely the same, although perhaps it may refer to one thing: then the name is equivocal, because the definition of the substance to which the name is imposed (which is the substantial definition from which the name is imposed) is thus in two ways according to something or simply diverse: for some substance (as we have said) is according to something by the mode that it stands under the definition, to which the name itself is imposed: and its definition is diverse when it is not thoroughly the same: and still that from which the name is imposed, which is the quality of the name, and the substantial definition which is given concerning the name according to that which the name is. When therefore that also is not thoroughly the same, again the definition of substance, that is, the substantial definition of the name, is diverse: so that nothing of the thing to which the name is imposed equally participate in the things signified through the name.

From which it is clear that there are many modes or species of equivocals. For there are equivocals the same indeed according to the thing, but not equally participating, that is, through the same definition equally given concerning all, but rather having a certain mode of it (of which the definition is given): just as being is said equivocally of all beings existing through themselves and in another, because being through itself is alone the being of nature, while the others are certain modes of that being and not true and principal beings. In this mode healthy in an animal, and urine, and diet, and medicine is said equivocally: because healthy is the nature of the animal: but the others say a certain mode of health, significative and conservative of health, or as perfective of health, or having themselves in some other mode which is in the animal. For if a doctor is said equivocally concerning him who operates perfect medicine (which is in him), and concerning the old woman imitating a doctor, and concerning the enema which perfectly executes the operation and act of the doctor as an instrument,

...and concerning certain other modes participating in some mode: thus also being and one are said equivocally, because being and one primarily is that which is through itself being and one: while the others are called being and one because they are referred to it as to a subject in some mode of entity, or as a measure of it, or as a disposition, or as a respect, or in some other mode, which are in it as in a subject. And indeed this mode is called manifoldly said according to analogy, or proportion to one which is principally signified in the name.

Alius autem modus est æquivocorum, quæ Boëtius vocat a casu et fortuna æquivoca, quando scilicet idem nomen casu et fortuna diversis imponitur, quorum substantia cui nomen imponitur, non est una nec unius respicientis ad unum, vel etiam diversorum respicientium ad unum : sed tamen qualitas qua nomen illud diversis imponitur, per similitudinem translationis est una, ut canis quod imponitur latrabili, et marinis, et cælesti : et eorum substantia cui nomen imponitur non est una, sed diversa genere proximo et specie. Et proprietas sive qualitas a qua nomen imponitur, non nisi per similitudinem translationis est una. Verbi gratia mordax esse, quod convenit omni quod dentibus mordet : per translationem autem convenit ei quod mordet qualitate et respectu nocivo. Sic ergo patet qualiter æquivoca sunt, quorum solum nomen commune est, et ratio substantiæ secundum illud nomen, scilicet significata, est diversa, hoc est, non est penitus eadem et æqualiter non secundum magis et minus participata.

Sunt tamen qui contra ea quæ dicta sunt, opponunt sophistice dicentes, quod significatio perfectio nominis est dans ei speciem et esse, ut videtur. Et ideo nomem quasi notamen dicitur, quia notam facit rei, et diffinitur per significare, quando dicitur quod nomen significat substantiam cum qualitate. Si autem sic est, tunc mutata significatione videtur mutari id quod nomini dat speciem et formam : mutata autem specie et forma, mutatur id quod specificatum et formatum est, et sic mutata significatione, videtur quod idem nomen remanere non possit. Et hæc præcipue videntur in his quæ relative dicuntur ad invicem, sicut signum et significatum proprium mutatur, videtur quod signum mutari necesse sit, quia in vanum et in cassum erit significatio ipsius, quando ad significatum non referetur. Hoc autem præcipue in vocibus et nominibus esse videtur : quia voces sunt notæ passionum et conceptionum quæ sunt in anima[1] : res autem sunt causæ passionis et conceptionis animæ : ideo videtur quod passiones et conceptiones animæ mutentur rebus mutatis. Mutatis autem conceptibus et passionibus animæ, videtur quod necesse sit voces (quæ signa conceptuum sunt) mutari. Hoc et hujusmodi plurima possunt objici, quæ omnia levissima solvuntur solutione, dummodo ea quæ dicta sunt bene intelligantur.

Dicendum ergo est, quod nomen habet materiam vocem in qua formatur : habet autem formam litteraturam quam dat actus imponentis ad significandum hoc vel illud. Et hæc materia et hæc forma semper manet in nomine quamdiu est vox et nomen : et hæc manet in æquivoco secundum nomen et materiam nominis eadem semper in communi.

But another mode of equivocals is those which Boethius (Boetius) calls equivocals by chance and fortune, namely when the same name is imposed on diverse things by chance and fortune, the substance of which to which the name is imposed is not one nor of one thing looking to one, or even of diverse things looking to one: but nevertheless the quality by which that name is imposed on diverse things is one through a similitude of translation, like "dog" (*canis*) which is imposed on the barker, and on marine things, and on the celestial: and the substance of them to which the name is imposed is not one, but diverse in proximate genus and species. And the property or quality from which the name is imposed is not one except through a similitude of translation. For example, to be biting, which is fitting for everything that bites with teeth: but through translation it is fitting for that which bites by a hurtful quality and respect. Thus therefore it is clear how they are equivocals, of which only the name is common, and the definition of substance according to that name, namely the thing signified, is diverse, that is, it is not thoroughly the same and equally participated, not according to more and less.

Nevertheless there are those who oppose sophistically against what has been said, saying that the signification of a name is a perfection giving species and being to it, as it seems. And therefore a name is called as it were a "noting" (*notamen*), because it makes a note of a thing, and is defined through signifying, when it is said that a name signifies substance with quality. But if it is so, then when the signification is changed it seems that what gives species and form to the name is changed: but when the species and form are changed, that which is specified and formed is changed, and thus when the signification is changed, it seems that the same name cannot remain. And these things especially seem to be in those that are said relatively to each other, just as when a sign and its proper signified are changed, it seems necessary for the sign to be changed, because its signification will be in vain and empty, when it is not referred to the signified. But this especially seems to be the case in vocal expressions and names: because vocal expressions are notes of passions and conceptions which are in the soul: but things are the causes of the passion and conception of the soul: therefore it seems that the passions and conceptions of the soul are changed when things are changed. But when the concepts and passions of the soul are changed, it seems necessary for the vocal expressions (which are signs of concepts) to be changed. This and very many similar things can be objected, which are all resolved by a very light solution, provided that those things which have been said are well understood.

It must be said therefore that the name has as matter the vocal expression in which it is formed: but it has as form the lettering which the act of the imposer gives for signifying this or that. And this matter and this form always remain in the name as long as it is a vocal expression and a name: and this remains the same always in common in an equivocal according to name and the matter of the name.

Dicitur autem significatum aliquando significatio, et hæc in signis quidem naturalibus manet eadem : in his autem quæ ad placitum sunt, aliquando est diversa, eo quod placitum non est stans et uno modo causas habens : et propter hoc manente nomine eodem secundum propriam materiam et propriam formam, non est necesse quod idem habeat significatum : et ideo non est necesse quod eadem sit relatio talis signi ad significatum, sed potest esse relatio diversa.

Quia tamen quilibet instituens signum ad actum refert significandi, quamvis non referat ad hoc quod idem significet, et nomen est vox ad actum significandi relata, vox autem non habet illam relationem : ideo non dicitur in diffinitione æquivocorum, quod æquivoca dicuntur quorum sola vox communis est, sed quorum solum nomen est commune, ut actus significantis per institutionem importetur per nomen, quod quasi notam faciens dicitur : quod per vocem non importaretur. Et quia significatum est perfectio nominis secunda, ad quam ut signum refertur, ideo mutari potest nomine non mutato : et cum mutatur significatio, necesse est relationem signi mutari ad significatum : et sic nomen erit æquivocum manente nomine uno et eodem secundum primam et substantialem materiam, et secundum primam et substantialem formam, et non diffinitivam substantiæ nominatæ per significatum nominis. Et ratio substantialis data per qualitatem (qua nomen est in tali substantia significata) est alia et alia secundum illud nomen quod ad significandum ista duo refertur ad talia significanda per nomen unum et idem.

Hujus autem exemplum propositæ intentioni conveniens est sicut dicitur homo animal, et sicut dicitur imago quæ picta est ad imaginem hominis vel animalis : quamvis enim dicat Zeno in logica sua, quod multi sunt modi æquivocationis, tamen unus et primus modus est propinquior univoco, qui est multipliciter dicti per analogiam sive proportionem ad unam et ab uno : sicut sunt omnia in ente æquivoca, et sicut est animal homo et quod pingitur : pictum enim animal dicitur, cujus similitudo ab uno eodem transformetur, et quando pictum ad naturale animal refertur secundum repræsentationis quemdam modum, sicut ens vere est unum, et alia sunt entia ab illo dicta, et ad illud secundum aliquem modum entitatis naturæ entis ad illum relata.

Hoc est ergo quod dicit Aristoteles quod æquivoca dicuntur, quorum solum nomen commune est : secundum tamen illud nomen ratio substantiæ diversa est, ut animal homo et quod pingitur : horum enim solum nomen (quod est animal) commune est, secundum nomen vero quod impositum est ad significandum, ratio diffinitiva substantiæ significatæ est diversa :

But what is signified is sometimes called signification, and indeed this remains the same in natural signs: but in those that are according to pleasure (*ad placitum*), it is sometimes diverse, because pleasure is not standing and having causes in one mode: and because of this, although the name remains the same according to its proper matter and proper form, it is not necessary that it have the same signified thing: and therefore it is not necessary that there be the same relation of such a sign to the signified thing, but the relation can be diverse.

Since however anyone instituting a sign refers [it] to the act of signifying, although he does not refer it to this that it signifies the same thing, and a name is a word referred to the act of signifying, but a word [as such] does not have that relation: therefore it is not said in the definition of equivocals, that equivocals are called those of which only the word is common, but of which only the name is common, so that the act of signifying through institution may be imported through the name, which is said as making a mark: which would not be imported through a word. And because the signified is the second perfection of the name, to which it is referred as a sign, therefore it can be changed with the name not changed: and when the signification is changed, it is necessary for the relation of the sign to be changed to the signified: and thus the name will be equivocal with the name remaining one and the same according to the first and substantial matter, and according to the first and substantial form, and not [the form] definitive of the substance named through the signified of the name. And the substantial account given through the quality (by which the name is in such a signified substance) is another and another according to that name which is referred to signifying these two for signifying such things through one and the same name.

But an example of this convenient to the proposed intention is just as an animal is called a man, and as an image is called which is painted to the image of a man or animal: for although Zeno says in his logic, that there are many modes of equivocation, nonetheless one and the first mode is closer to the univocal, which is of the manifoldly said through analogy or proportion to one and from one: just as all things are equivocal in being, and just as an animal is a man and that which is painted: for the painted is called an animal, whose similitude may be transformed from one [and] the same, and when the painted is referred to the natural animal according to a certain mode of representation, just as being is truly one, and others are beings said from that, and to that according to some mode of entity of the nature of being related to that.

This is therefore what Aristotle says, that equivocals are called [those] of which only the name is common: nonetheless according to that name the account of the substance is diverse, as animal [is] a man and that which is painted: for of these only the name (which is animal) is common, but according to the name which was imposed for signifying, the definitive account of the signified substance is diverse:

si enim aliquis assignet per propriam diffinitionem quid secundum quidditatem, et esse utrumque eorum divisim sit, quo sive qua proprietate sunt dicta animalia, propriam utriusque divisim et non unam utrique communem assignabit rationem diffinitivam : de homine enim dicet, quod est animal rationale mortale, de picto autem quod est imago per similitudinem lineamentorum et coloris hominem repræsentans. Et per hoc igitur patet quod prædicabile ad rationem generis reduci non potest, quia transcendit omne genus et est omnium generum principium.

Quod autem hic dicimus quod æquivoca dicuntur, et non dicimus quod æquivocum dicitur in singulari, cum tamen unum nomen sit per propriam formam : ratio est quia hic intendimus de prædicabili sive dicibili incomplexo secundum quod ordinabile est in genus vel commune univocum, vel per denominationem de uno prædicatum : et istæ sunt res non a vocibus vel dictionibus absolutæ, sed per voces significatæ : et quia res multæ sunt ad idem nomen relatæ, ideo magis et competentius dicimus in plurali, quam in singulari : æquivoca enim sunt res sub uno nomine æquivocatæ. Et quod dicitur, solum nomen commune est, intendimus excludere rationem substantiæ designatæ per nomen : quæ ratio substantialis est quando datur per ea quæ sunt substantiæ, quæ sunt genus et differentiæ. Ex his patere potest, quare æquivocatio propter pluralitatem significatorum actualem operatur multiplicitatem : sed de hoc tractabitur in *Elenchis*.

Adhuc autem quia in æquivoco manet eadem forma quæ est actus significandi.

ad placitum instituentis secundum respectum ad aliquid rei signatæ, quod ratio fuit instituendi signum id, de facili patet, quod in omni æquivoco, sicut diximus, aliquid est de univoco per quod æquivocum ad unicum habet reduci : unum enim signum diversis ad significandum ponentes, necesse est ad aliquid unum respicere, quod aliquo modo est in illis, quæ substantia et ratione substantiæ diversa sunt. Hæc igitur sic dicta sunt æquivoca, et de his sufficit quod dictum est, quantum ad præsentem intentionem spectat : pertractabitur autem de aliis in Elenchis. Est autem notandum, quod quamvis in diffinitione æquivocorum dictum sit quod ratio substantiæ sit diversa, non tamen dicitur ratio substantiæ diffinitio vera data per genus et differentiam, sed generaliter dicitur ratio quæcumque notificatio, quæ majoris et melioris declarationis est quam ipsum nomen absolute positum. Et secundum hunc modum accepta ratione, individua habent rationem et æquivocationem in uno nomine : cum tamen ratio eorum a collectione accidentium sumpta non sit una secundum nomen illud in quo communicant.

for if anyone assigns through a proper definition what according to quiddity and being each of them is separately, by which or by what property they are called animals, he will assign a proper definitive account for each separately and not one common to both: for of man he will say, that he is a rational mortal animal, but of the painted that it is an image representing a man through the similitude of lineaments and color. And through this therefore it is patent that the predicable cannot be reduced to the account of a genus, because it transcends every genus and is the principle of all genera.

But what we say here that equivocals are called [in the plural], and we do not say that an equivocal is called in the singular, although yet there be one name through its proper form: the reason is because here we intend concerning the predicable or incomplex speakable according as it is orderable into a genus or a common univocal, or predicated of one through denomination: and these are things not absolute from words or dictions, but signified through words: and because the things are many referred to the same name, therefore we speak more and more competently in the plural, than in the singular: for equivocals are things equivocated under one name. And that it is said, "only the name is common," we intend to exclude the account of the substance designated through the name: which substantial account is when it is given through those things which are of the substance, which are genus and differences. From these it can be patent, why equivocation on account of the actual plurality of signifieds operates multiplicity: but concerning this it will be treated in the *Elenchi*.

Still however because in the equivocal there remains the same form which is the act of signifying.

[the act of signifying] at the pleasure of the institutor according to a respect to something of the signified thing, which was the account for instituting that sign, it is easily patent that in every equivocal, as we have said, there is something of the univocal through which the equivocal has to be reduced to a single thing: for when placing one sign for signifying diverse things, it is necessary to look toward something one, which in some way is in those things which are diverse in substance and in the account of the substance. These things therefore thus said are equivocals, and concerning these what has been said suffices, as far as it pertains to the present intention: but it will be thoroughly treated concerning others in the *Elenchi*. However, it is to be noted that although in the definition of equivocals it was said that the account of the substance is diverse, nonetheless the account of the substance is not called a true definition given through genus and difference, but generally any notification is called an account, which is of greater and better declaration than the name itself placed absolutely. And the account being accepted according to this mode, individuals have an account and equivocation in one name: since nonetheless their account taken from a collection of accidents is not one according to that name in which they communicate.

Hæc sunt igitur æquivoca, per quæ omnia reducuntur non ad genus sed ad transcendentia omne genus, quæ sunt ens et unum, ut dicit Aristoteles.

CAPUT III — *De univocis.*

Univoca autem sunt per quorum rationem prædicabile ordinatur in genere uno, quod sibi subjectis nomen suum dat et diffinitionem : et sine hac ratione univoci non esset reductio prædicabilium ad genus unum prædicatum de omnibus illis quæ sunt generis illius : et ideo diffinitur sic ab Aristotele quod univoca dicuntur quorum nomen commune est, et secundum nomen illud eadem est substantiæ ratio sive diffinitio. Et dicuntur univoca per oppositum modum ad æquivoca, res scilicet univocatæ in nomine uno, ut res ipsa ad dici et ad sermonem referatur, quia aliter non esset logicum quod dicitur : quia res in se considerata, non secundum quod stat sub dictione, non ad logicum, sed ad Philosophum pertinet. Et ideo additur, dicuntur, et non dicitur, univoca sunt. Adhuc autem quia sermones finiti sunt quoad nos, res autem infinitæ, ut dicit Aristoteles, necesse est plures res in genere et specie et numero uno secundum modum significari. Quando ergo plures res in una natura (quæ causa impositionis nominis est) conveniunt in unum nomen, erunt illa univoca. Et quia plura sunt uno nomine nominata, ideo dicuntur magis convenienter in plurali univoca quam in singulari univocum. Quod autem additur, quorum nomen commune est, dicitur nomen quasi notamen, quod est de re quæ est causa impositionis nominis in pluribus illius : hæc enim natura in omnibus illis est una, et non per prius et posterius participata : propter quod nomen tale simpliciter commune est omnibus illis, nihil nominans in uno quod non nominetur in altero.

Quod autem dicitur, et ratio substantiæ est eadem, ratio quidem substantiæ duo dicit, sicut prius in diffinitione æquivocorum : dicit enim ratio non tantum diffinitionem, sed etiam quamcunque declarationem quæ datur de eo quod nominatur per nomen, ut dicit etiam formam a qua nomen ponitur, quam oportet eamdem esse : et ita, et nomen et natura et ratio impositionis nominis erit una in talibus ut sic : et ratio substantiæ est ratio substantialis addens simul in his quæ sunt univoca : et quod illa natura in eis sit participata æqualiter quæ non secundum magis et minus, nec secundum prius aut posterius sit in ipsis, sed uno modo sicut esse est unum. Quod si magis et minus susciperet, non esset unum omnino, sicut in ante habitis.

These are therefore the equivocals, through which all things are reduced not to a genus but to the things transcending every genus, which are being and one, as Aristotle says.

CHAPTER III — *On univocals.*

But univocals are those through whose account the predicable is ordered in one genus, which gives its name and definition to the things subject to it: and without this account of the univocal there would be no reduction of predicables to one genus predicated of all those things which are of that genus: and therefore it is thus defined by Aristotle that univocals are called those of which the name is common, and according to that name the account of the substance or definition is the same. And they are called univocals through the opposite mode to equivocals, namely things univocated in one name, so that the thing itself may be referred to being said and to speech, because otherwise it would not be logical what is said: because the thing considered in itself, not according as it stands under a diction, pertains not to the logician, but to the Philosopher. And therefore it is added, "they are called," and it is not said, "they are univocals." Still however because speeches are finite as far as we are concerned, but things are infinite, as Aristotle says, it is necessary for several things in one genus and species and number to be signified according to a mode. When therefore several things in one nature (which is the cause of the imposition of the name) agree in one name, those will be univocals. And because there are several things named by one name, therefore they are more conveniently called univocals in the plural than univocal in the singular. But as for what is added, "whose name is common," the name is said as a mark [notamen], which is of the thing which is the cause of the imposition of the name in its several [members]: for this nature is one in all of those, and not participated through prior and posterior: on account of which such a name is simply common to all of them, naming nothing in one which is not named in the other.

But as for what is said, "and the account of the substance is the same," the account of the substance indeed says two things, just as before in the definition of equivocals: for the account says not only the definition, but also any declaration whatever which is given concerning that which is named through the name, as it also says the form from which the name is placed, which it is necessary to be the same: and so, both the name and the nature and the account of the imposition of the name will be one in such as such: and the account of the substance is the substantial account adding at the same time in those which are univocals: and that that nature in them be participated equally which is not according to more and less, nor according to prior or posterior in them, but in one way just as being is one. Because if it were to admit of more and less, it would not be one altogether, just as in the things previously held [it was].

determinatum est in libro de *universalibus*. Quamvis enim nulla comparentur, nisi per aliquod unum quod est in illis, tamen illud unum quod est in eis, secundum magis et minus non potest esse de esse ipsorum. Et ideo ratio ipsius non est ratio substantiæ ipsorum. Substantia enim eorum consistit in participatione generis et participatione differentiæ, quæ sunt actus et potentia constituentia substantiam, eo quod termini esse substantialis sunt esse omnium eorum quæ sunt, sicut homo dicitur animal et bos dicitur animal : ita quod animal nomen unius naturæ notam facit quæ æqualiter est in homine et bove, quæ quidem natura est substantia animata sensibilis : et ideo si explicetur natura sive substantia quæ dicitur per nomen sicut nomen commune, sic explicans nomen ratio sive diffinitio erit communis æqualiter utrique : unde si quis assignet utriusque rationem, hominis scilicet et bovis, secundum hoc quod sunt animalia, hoc est, secundum naturam de qua notam facit nomen commune quod est animal, eamdem de necessitate assignabit hominis scilicet et bovis rationem diffinitivam. Et similiter est de Socrate, et Platone in hoc nomine *homo*. Et hic est in omnibus quæ ut genus vel species sunt, vel ut differentia, vel ut proprium, vel ut accidens sub eodem nomine prædicantur, ut dicunt Avicenna et Algazel : si enim dicatur, Socrates est albus et Cicero est albus, si ratio sumatur secundum nomen commune, prædicatum de Socrate et Platone erit una et eadem ratio. Idem si dico Socratem esse risibilem, et idem erit si dicam Socratem esse rationalem : et ut generaliter dicatur, omne quod ut universale de multis et de sibi subjectis prædicatur, univoce dicitur.

autem diversæ sunt formæ, et ideo, ut dicunt, diversa unum nomen habere non possunt. Ad quod levissime respondetur, quod diversorum in eo quod diversa sunt, diversæ sunt formæ, et diversa nomina cum formis illis imposita. Sed nihil prohibet diversa non in eo in quo diversa sunt, sed in eo in quo unum sunt, unum habere nomen, sicut habent unam formam : et ideo diversa individua in forma speciei nihil prohibet habere nomen unum speciei : et quæ diversa sunt specie, nihil prohibet habere unum formam generis, et ideo unum habere nomen generis : et sic est in aliis. Et ideo necesse est, quod secundum illam formam de qua notam facit nomen, diversa habeant unam et eamdem illius substantiæ rationem diffinitivam. Diffinitio enim illa non plura dicit explicite quam nomen id implicite.

Si autem contra hoc aliquis adhuc objiciat dicens, quod impossibile est unam esse naturam sive formam generis in pluribus speciebus, et sic impossibile sit unum esse nomen generis, quod dicatur de pluribus specie differentibus, hoc probatur per hoc quod dicitur, unum idem non simul actu habet contraria.

determined in the book *On Universals*. For although nothing is compared, except through something one which is in them, nonetheless that one which is in them, according to more and less, cannot be of their being. And therefore its account is not the account of their substance. For their substance consists in the participation of a genus and the participation of a difference, which are the act and power constituting the substance, because the terms of substantial being are the being of all those things which are, just as man is called an animal and an ox is called an animal: so that the name animal makes a mark of one nature which is equally in man and ox, which nature indeed is sensible animated substance: and therefore if the nature or substance which is said through a name just as a common name be explained, the account or definition thus explaining the name will be equally common to both: whence if anyone assigns an account of both, namely of man and of ox, according to this that they are animals, that is, according to the nature of which the common name which is animal makes a mark, he will of necessity assign the same definitive account of man namely and of ox. And similarly it is concerning Socrates and Plato in this name *man*. And this is in all things which are predicated under the same name as genus or species, or as difference, or as property, or as accident, as Avicenna and Algazel say: for if it be said, Socrates is white and Cicero is white, if the account be taken according to the common name, the predicated of Socrates and Plato will be one and the same account. The same [is true] if I say Socrates is capable of laughter, and it will be the same if I say Socrates is rational: and that it may be said generally, everything which is predicated as a universal of many and of the things subject to it, is said univocally.

[but there] are diverse forms, and therefore, as they say, diverse things cannot have one name. To which it is most lightly answered, that of diverse things in that they are diverse, there are diverse forms, and diverse names imposed with those forms. But nothing prohibits diverse things, not in that in which they are diverse, but in that in which they are one, from having one name, just as they have one form: and therefore nothing prohibits diverse individuals in the form of a species from having one name of the species: and those which are diverse in species, nothing prohibits from having one form of a genus, and therefore from having one name of the genus: and thus it is in other things. And therefore it is necessary, that according to that form of which the name makes a mark, diverse things have one and the same definitive account of that substance. For that definition does not say more explicitly than that name [says] implicitly.

But if against this anyone still objects saying, that it is impossible for there to be one nature or form of a genus in several species, and thus it be impossible for there to be one name of a genus, which is said of several things differing in species, this is proved through this which is said, one and the same does not have contraries at the same time in act.

Natura autem generis est una et eadem : et ideo si est in pluribus specie differentibus actu, et una eadem ratio, unum et idem actu simul habet contraria : habet enim rationale in homine et irrationale in bove vel asino, et cum hoc esse non possit, non potest esse nomen generis unum in homine et bove. Hæc autem confirmari videntur per hoc quod dicit Aristoteles, quod ratio animalis secundum unumquodque animal est altera et altera : falsum est ergo quod sit nomen unum et ratio una.

Hæc autem et similia non est difficile solvere. Dicimus enim quod una natura generis est in diversis specie differentibus et numero. Et quod dicitur, quod idem non simul habet contraria, intelligitur de eodem numero et non de eodem.

genere vel specie. Et hoc quidem jam in ante habitis in libro de *Prædicabilibus* determinatum est. Et quod dicit Aristoteles quod ratio animalis secundum unumquodque est altera, sic putandum est : ratio animalis secundum unumquodque, hoc est secundum esse quod habet in unoquoque sigillatim, est altera : hoc enim verum est non tantum in specie, sed etiam in individuo : quia sic animal non accipitur ut essentia generis, sed ut habet esse speciale vel singulare in specie vel in individuo : sic autem non est genus, quia est in illo tantum, et non extra illud in alio, et ideo sic non est in esse universali, sed particularis : quia quamvis hoc quod est in uno, sit in alio universali, tamen non secundum quod est in uno, est in alio, ut in tractatu de *Universalibus* est determinatum. Relinquitur ergo univoca esse, quorum et nomen commune est, et ratio substantiæ eadem.

Attendendum autem est, quod quamvis multivoca sive synonima et diversivoca non sunt de his quibus prædicabile ordinatur in linea generis, eo quod synonima respiciunt unum particulare vel speciale per diversas proprietates quæ sunt in illo multis significatæ nominibus : diversivoca autem, sicut diversa sunt nomina, sic diversis attribuuntur ; tamen quia Avicenna et Algazel et Joan. Damascenus in suis prædicamentis ponunt ista, et nos ea hic ponemus non ad necessitatem scientiæ sed ad doctrinæ perfectionem. Sunt igitur multivoca sive synomina, quando multa nomina uni rei attribuuntur, ut ensis, mucro, spata, gladius, vel Marcus, Tullius, Cicero : his enim nominibus idem significatur secundum diversas proprietates quæ sunt in illo. Diversivoca autem sunt, quando diversa nomina diversis attribuuntur, ut lignum, homo, lapis et hujusmodi.

But the nature of a genus is one and the same: and therefore if it is in several things differing in species in act, and [there is] one and the same account, one and the same in act has contraries at the same time: for it has rational in man and irrational in the ox or ass, and since this cannot be, there cannot be one name of a genus in man and ox. But these things seem to be confirmed through this that Aristotle says, that the account of animal according to each animal is another and another: it is false therefore that there is one name and one account.

But it is not difficult to solve these and similar things. For we say that one nature of a genus is in diverse things differing in species and in number. And that it is said, that the same does not have contraries at the same time, is understood of the same in number and not of the same [in].

genus or species. And this indeed has already been determined in the things previously held in the book *On Predicables*. And that Aristotle says that the account of animal according to each is another, is to be thought thus: the account of animal according to each, that is, according to the being which it has in each singly, is another: for this is true not only in a species, but also in an individual: because thus animal is not accepted as the essence of a genus, but as it has a special or singular being in a species or in an individual: but thus it is not a genus, because it is in that only, and not outside it in another, and therefore thus it is not in universal being, but [in] particular: because although this which is in one, be in another [as] universal, nonetheless not according as it is in one is it in another, as has been determined in the treatise *On Universals*. It remains therefore that those are univocals whose name is common and the account of substance the same.

But it is to be attended to, that although multivocals or synonyms and diversivocals are not of those by which a predicable is ordered in the line of a genus, for the reason that synonyms look to one particular or special thing through diverse properties which are signified in it by many names: but diversivocals, just as the names are diverse, so they are attributed to diverse things; nonetheless because Avicenna and Algazel and John Damascene place these in their Categories, we also shall place them here, not for the necessity of the science but for the perfection of doctrine. There are therefore multivocals or synonyms when many names are attributed to one thing, as *ensis, mucro, spata, gladius* [swords], or Marcus, Tullius, Cicero: for by these names the same thing is signified according to diverse properties which are in it. But diversivocals are when diverse names are attributed to diverse things, as wood, man, stone, and the like.

Sed his non indigemus ad istius scientiæ necessitatem, in qua (sicut in geometricis facit Euclides) non præmittimus nisi diffinitiones eorum quæ requiruntur ad ordinationem prædicabilis ad unum quod est in illo ordine prædicabile sive dicibile primo, sicut est principium transcendens quod in omnibus principiis est, et sicut est generalissimum : propter primum enim oportet ponere rationem æquivocorum, propter secundum autem necessaria est univocorum ratio.

CAPUT IV. — *De denominativis.*

Quia vero, sicut dicit Aristoteles, omnia accidentium genera reducuntur ad substantiam, ut ad subjectum unum omnium aliorum per prædicabile quod inter universalia vocatur accidens, et hoc non potest fieri nisi per denominationem factam a principali : propter hoc in scientia ista in qua intendimus de prædicabilium ordine, oportet etiam præmittere diffinitionem denominativorum. Dicimus ergo quod denominativa dicuntur quæcumque ab aliquo principali solo casu differentia secundum nomen ad casum inflexum habent appellationem, ut a grammatica (quæ principale nomen est scientiæ litterarum ad recte loquendum et ad recte scribendum) dicitur grammaticus per inflexionem quæ in finis est mutatione. Cum enim dicitur denominativum, propter compositionem propositionis *de*, notatur transitio sive diversitas quæ est inter essentiam denominantem et inter essentiam denominatam. Et ideo quæ sunt ejusdem naturæ, denominationis non suscipiunt prædicationem vel appellationem, et ideo homo non dicitur humanus ab humanitate, sed dicitur essentialiter homo et animal rationale, et omnia quæ secundum essentiam prædicantur. Et quia etiam proprium essentiale est, quamvis non sit de essentia, ideo.

non congrue dicitur homo risibilitatus. In accidentibus etiam secundum quod ordinata sunt in generibus suis et speciebus, non recipiunt denominationis rationem: albedo enim nec dicitur alba, nec dicitur colorata, sed dicitur color, et sic de omnibus aliis. Sed quando natura aliena quæ est post esse alterius, intelligitur et significatur quasi circumposita, scilicet composita per unius naturæ ad alienam congregationem, tunc fit denominatio, ut dicitur homo albus, vel alba quod est res alba. Hæc igitur sicut univoca et æquivoca, quia multitudinem essentiarum significantur, competentius diffiniuntur in plurali, ut dicantur denominativa, quam singulari ut dicatur denominativum.

But we do not need these for the necessity of this science, in which (just as Euclid does in geometrical things) we do not premise anything except definitions of those things which are required for the ordering of a predicable to the one which is first predicable or speakable in that order, just as is a transcending principle which is in all principles, and just as is the most general: for on account of the first it is necessary to place the account of equivocals, but on account of the second the account of univocals is necessary.

CHAPTER IV. — *On denominatives.*

But because, as Aristotle says, all genera of accidents are reduced to substance, as to the one subject of all others through the predicable which among universals is called an accident, and this cannot be done except through a denomination made from a principal: on account of this, in this science in which we intend [to treat] concerning the order of predicables, it is necessary also to premise the definition of denominatives. We say therefore that denominatives are called whatever things, differing by case only from some principal, have an appellation according to a name inflected to a case, as from grammar (which is the principal name of the science of letters for speaking correctly and for writing correctly) "grammarian" [grammaticus] is said through an inflection which is in the mutation of the end. For when it is called "denominative," on account of the composition of the preposition *de* [from], there is noted the transition or diversity which is between the denominating essence and the denominated essence. And therefore those which are of the same nature do not receive the predication or appellation of denomination, and therefore man is not called "human" from humanity, but is called essentially man and rational animal, and all things which are predicated according to essence. And because also the property is essential, although it be not of the essence, therefore.

...it is not congruously said that a man is "risibilitated" (*risibilitatus*). Also in accidents according as they are ordered in their genera and species, they do not receive the definition of denomination: for whiteness is neither called white, nor is it called colored, but it is called color, and thus of all others. But when an alien nature which is after the being of another, is understood and signified as it were posited around, namely composed by the congregation of one nature to an alien one, then denomination happens, as when it is called a white man, or white, which is a white thing. These therefore, like univocals and equivocals, because a multitude of essences are signified, are more competently defined in the plural, so that they are called denominatives, rather than in the singular, so that it is called a denominative.

Et additur *dicuntur*, quia totum quod hic intendimus, ad dici principaliter et non ad esse refertur, sicut in præhabitis. Et quod additur *quæcumque*, significat indefinitam accidentium multitudinem a quibus sit denominatio. Et quod dicitur *ab aliquo*, denotat nomen accidentis secundum quod in sua puritate et principalitate significatur. Dicit enim Avicenna [1], ubi agit de anima, quod intellectus accidentis est absolutus, quamvis esse accidentis sit dependens. Et quod subditur *solo casu differentia*, dicitur hic *casus* quæcumque inflexio nominis secundum finem nominis sive dictionis: sive fiat per derivationem, sive fiat per declinationem, ut a justitia derivatur justus, vel verius dicendo a justitia formatur justus. Quamvis secundum grammaticam justitia derivetur a justo, tamen secundum naturam et rationem denominationis et denominati, a justitia formatur justus. Grammaticus enim nominum modos et formas attendit: et quia in declinatione sic declinatur justus, justi, addita *tia* fit justitia: ideo dicit justitiam formari vel derivari a justo: hoc enim modo justum a justitia formari non potest. Natura autem denominationis e contrario est: quia denominans est alienam naturam

informans: et ideo nomen illius naturæ præintelligere oportet, ut fine aliter in dictione inflexo denominatio fiat, sicut justus dicitur cadens per inflexionem finis a justitia, et albus ab albedine, et sic est ab omnibus aliis. Fit autem hæc inflexio in fine dictionis, et non in principio, quia inflexio finis principale significatum non mutat, sed modum significandi tantum, ut patet in omni declinatione quando casus declinant a recto, et a se invicem secundum ordinem casuum. Casus autem a principio dictionis mutaret totum significatum et non tantum significandi modum: sicut si diceretur justitia, prudentia, et hujusmodi, in quibus idem terminus est et principium diversum, et ideo diversum significatum. Et hoc notatur per hoc quod dicitur *solo casu differentia*: per hoc enim non differunt in principali significato, sed in modo significandi tantum. In denominatione ergo hæc tria necessaria sunt, scilicet natura aliena, subjecto extrinsecus aptata et circumposita, in principali et denominativo eadem res significata, et diversi modi significandi.

And it is added, *they are called*, because the whole of what we intend here is referred principally to the saying and not to being, just as in the preceding matters. And what is added *whatever*, signifies the indefinite multitude of accidents from which there is denomination. And what is said *from some*, denotes the name of the accident according as it is signified in its purity and principality. For Avicenna says [1], where he treats of the soul, that the intellect of an accident is absolute, although the being of an accident is dependent. And what is subjoined, *differing only in case*, here *case* is called any inflection of a name according to the end of the name or diction: whether it is made by derivation, or it is made by declension, as from justice (*justitia*) is derived just (*justus*), or saying it more truly, from justice is formed just. Although according to grammar justice is derived from just, nevertheless according to the nature and definition of denomination and the denominated, just is formed from justice. For the grammarian attends to the modes and forms of names: and because in declension "just" (*justus, justi*) is thus declined, by adding *tia* it becomes justice: therefore he says justice is formed or derived from just: for in this mode just cannot be formed from justice. But the nature of denomination is on the contrary: because the denominating thing is an alien nature...

...informing: and therefore the name of that nature must be pre-understood, so that by the end being otherwise inflected in the diction a denomination is made, just as just is called falling through the inflection of the end from justice, and white from whiteness, and thus it is from all others. But this inflection is made at the end of the diction, and not at the beginning, because the inflection of the end does not change the principal signified thing, but only the mode of signifying, as is clear in every declension when cases decline from the nominative (straight), and from each other according to the order of cases. But a case at the beginning of the diction would change the whole signified thing and not only the mode of signifying: just as if it were said justice, prudence, and the like, in which there is the same termination but a diverse beginning, and therefore a diverse signified thing. And this is noted by this that is said *differing only in case*: for through this they do not differ in the principal signified thing, but in the mode of signifying only. In denomination therefore these three are necessary, namely an alien nature proportionally fitted and posited around a subject from without, the same thing signified in the principal and the denominative, and diverse modes of signifying.

Quod autem additur *secundum nomen*, intelligitur secundum modum nominis qui est inflexio finis, qui casus vocatur. Et quod additur *habent appellationem*, per hoc quod dicitur *habent*, notatur habitus extra applicatus. Et quod dicitur *appellationem* (quæ dicitur quasi ad pulsum, et componitur ab a præpositione et *pello, pellis*) notat, quod alienum pulsum sit ad id quod denominatur, sicut et nomen proprium appellatio vocatur proprie, quia ex collectione accidentium ad id significandum appulsum est. Nomen enim commune propter hoc dicitur appellativum, eo quod in eo multa pelluntur in unum, et ideo est commune multorum. Verius autem exemplum est, ut a grammatica quod est nomen principale, grammaticus formatur per finis inflexionem, et a fortitudine formatur fortis, et sic est in omnibus aliis accidentalibus denominationibus.

Ex his autem quæ dicta sunt patet, quod in substantialibus non potest esse denominatio : substantialia enim sola pertinent ad objectio eamdem naturam. Et si objicitur quod in substantialibus quædam significantur concrete, quædam autem abstracte, ut homo et humanitas : in quo videtur homo per inflexionem casus derivari ab humanitate. Dicendum quod hæc inflexio facta est ad similitudinem accidentis et non de ipsa rei natura : homo enim non prædicatur de sibi subjectis, ut ab alio derivatum, sed prædicatur ut esse substantiale ejus de quo prædicatur : et ideo iste modus intelligendi in re non potest poni, sed per simulationem ad accidens est imaginatus et fictus, ut forma significetur, et formatum in eo quod est formatum per formam, hoc igitur est denominativum.

CAPUT V. — *De divisione ordinabilium et non ordinabilium in prædicamento.*

Cum autem quædam sint ordinabilia in prædicamento, quædam autem non in uno, sed in pluribus, quædam vero neque in uno, neque in pluribus, oportet nos hic divisionem ponere, ut sciamus quæ pertinent ad prædicabilium ordinem, et quæ ad prædicabilium non ordinem, sed compositionem. Sunt enim prædicabilia per intellectum accepta. Hic ergo intellectus potest esse simplex intelligentia, sive simplex per intellectum intuitus : vel compositus intellectus, unum cum alio jungens et componens. Et penes hæc duo sumitur divisio, quod eorum quæ di-

But as to what is added *according to name*, it is understood according to the mode of the name which is the inflection of the end, which is called case. And as to what is added *they have an appellation*, through this that is said *they have*, a habit applied extrinsically is noted. And what is called *appellation* (which is called as it were an appulse, and is composed from the preposition *a* and *pello, pellis* "push, strike") notes that an alien strike is upon that which is denominated, just as a proper name is properly called an appellation, because it is pushed to signify it from a collection of accidents. For a common name is called appellative on account of this, because in it many are pushed into one, and therefore it is common of many. But a truer example is, as from grammar (*grammatica*) which is the principal name, a grammarian (*grammaticus*) is formed through the inflection of the end, and from fortitude (*fortitudo*) fort (*fortis*) is formed, and thus it is in all other accidental denominations.

From these things however which have been said it is patent, that in substantials there cannot be denomination: for substantials alone pertain to the same nature [of the subject]. And if it is objected that in substantials some things are signified concretely, but some abstractly, as man and humanity: in which man seems to be derived from humanity through the inflection of a case. It must be said that this inflection has been made to the similitude of an accident and not from the nature of the thing itself: for man is not predicated of the things subject to it as derived from another, but is predicated as the substantial being of that of which it is predicated: and therefore this mode of understanding cannot be placed in the thing, but is imagined and feigned through simulation to an accident, so that the form may be signified, and the formed in that which is formed through the form; this therefore is the denominative.

CHAPTER V. — *On the division of orderables and non-orderables in a category.*

But since some things are orderable in a category, but some not in one but in several, but some indeed neither in one nor in several, it behooves us here to place a division, so that we may know which things pertain to the order of predicables, and which to the non-order, but composition, of predicables. For predicables are things accepted through the intellect. This intellect therefore can be simple intelligence, or a simple intuition through the intellect: or a composite intellect, joining and composing one thing with another. And the division is taken according to these two, that of those things which [are]

cuntur et stant sub dictione intellectus, alia quidem sine complexione dicuntur, alia vero dicuntur cum complexione. Quamvis enim res omnes incomplexæ sint, tamen compositionem formæ cum materia vel prædicati cum subjecto non potest significare intellectus, nisi per notam complexionem. Complexio autem est designatio unius cum altero vel in altero : sicut cum dicitur, homo currit vel homo vincit : in his enim vocibus notatur cursus inesse homini et victoria, ut actus inest agenti. Et hanc complexionem componens facit intellectus : et non est in re per modum compositionis, quæ media sit inter hominem agentem et actum ejusdem. Ea vero quæ sine complexione sunt, exemplariter sunt, sicut cum per se dicimus homo, et per se vincit, per se currit, ut in tractatu de antecedentibus ad logicam satis dictum est, ubi diffinitum est complexum et incomplexum. Incomplexum autem sub voce conceptum, est ordinabile in prædicamento aliquo. Complexum autem pertinet ad intellectum componentem secundum naturam compositionis.

Aliam autem præmittemus divisionem secundum rationem illam dictam, secundum quam aliud ponitur in eodem vel diverso prædicamento. Et hanc dabimus quadrimembrem super duas divisiones bimembres fundatam. Est enim prædicabilium quæ in prædicamento vel ad subjectum unum ordinantur aliud substantia, aliud accidens, aliud universale, aliud particulare. Et est accidens universale, et accidens particulare : et est substantia universale, et est substantia quæ est particulare per conjunctionem membrorum dividentium in duabus divisionibus inductis. Et ideo egreditur quadrimembris divisio, quod eorum quæ sunt in natura et quidditate sua, alia de subjecto quodam dicuntur, et non sunt in subjecto aliquo, sicut substantia universalis, sicut homo universale vel species de subjecto,

hoc est, sibi secundum totam lineam jacto dicitur, quando homo dicitur de aliquo homine, sicut cum dicitur per individuum vagum, aliquis homo est homo : vel per individuum significatum, sicut cum dicitur, Socrates est homo. In subjecto vero nullo est, sicut accidens in subjecto est quod sui esse causam habet subjectum : quando enim homo prædicatur de aliquo homine, prædicatum est causa et essentia subjecti, et non accipit sui esse causam a subjecto. Alia autem per oppositionem ad ista in subjecto quidem sunt, sed de nullo dicuntur ut de subjecto, ordinata prædicatione : sed si dicuntur de aliquo, est sicut individuum quod prædicatur de seipso.

Et ut melius intelligatur explanando dicimus quid est esse in subjecto. In subjecto enim sunt, quorum dependentia secundum esse est ad subjectum : et hæc sunt quæ cum in aliquo sunt, non sunt in eo sicut quædam pars essentialis vel integralis : quia nihil conferunt ad esse subjecti in quo sunt : et impossibile est aliquid hujusmodi esse secundum actum sine eo in quo est, quia ab eo in quo est, accipit esse quod non habet extra ipsum, sicut accidens quod potius est esse quam essentia.

are said and stand under a diction of the intellect, some indeed are said without complexity, but others indeed are said with complexity. For although all things are incomplex, nonetheless the intellect cannot signify the composition of form with matter or of predicate with subject, except through a marked complexity. But complexity is the designation of one thing with another or in another: as when it is said, "man runs" or "man conquers": for in these voices is noted that running is in the man and victory, as an act is in an agent. And the composing intellect makes this complexity: and it is not in the thing by way of composition, which would be intermediate between the acting man and his act. But those things which are without complexity are exemplary, as when we say by itself "man", and by itself "conquers", by itself "runs", as has been sufficiently said in the treatise on the antecedents to logic, where the complex and incomplex were defined. But the incomplex conceived under a voice is orderable in some category. But the complex pertains to the composing intellect according to the nature of composition.

But we shall premise another division according to that account mentioned, according to which one thing is placed in the same or a diverse category. And we shall give this fourfold [division] founded upon two twofold divisions. For of the predicables which are ordered in a category or to one subject, one is substance, another accident, another universal, another particular. And there is universal accident, and particular accident: and there is universal substance, and there is substance which is particular through the conjunction of the dividing members in the two divisions introduced. And therefore there results a fourfold division, that of those things which are in their nature and quiddity, some are said of a certain subject and are not in any subject, as universal substance, as universal man or a species [said] of a subject,

that is, it is said of that which is cast according to its whole line, when man is said of some man, as when it is said through a vague individual, "some man is a man": or through a signified individual, as when it is said, "Socrates is a man." But it is in no subject, just as an accident is in a subject which has the subject as the cause of its being: for when man is predicated of some man, the predicate is the cause and essence of the subject, and does not receive the cause of its being from the subject. But others through opposition to these are indeed in a subject, but are said of none as of a subject in an ordered predication: but if they are said of any, it is as an individual which is predicated of itself.

And so that it may be better understood, in explaining we say what it is to be in a subject. For those are in a subject whose dependence according to being is on the subject: and these are those which when they are in something, are not in it as a certain essential or integral part: because they contribute nothing to the being of the subject in which they are: and it is impossible for anything of this kind to be in act without that in which it is, because from that in which it is, it receives being which it does not have outside it, just as an accident which rather is being than essence.

Et hujus exemplum est accidens particulare, quod non individuatur nisi per subjectum, sicut quædam hæc grammatica, quæ ut in subjecto est in anima, sive in quadam anima grammaticam in se habente scientiam. De subjecto vero nullo dicitur, quia non prædicatur nisi particulari prædicatione quæ non est ordinata prædicatio. Et similiter quoddam album vel hoc album ut in subjecto est in corpore vel quodam corpore. Omnis enim color in corpore est determinado : quia, sicut dicitur in libro *de sensu et sensato*, color est extremitas perspicui in determinato corpore. De subjecto vero nullo dicitur cum sit particulare. Alia vero de subjecto quodam dicuntur et in subjecto quodam.

sunt, ut accidens universale, ut scientia in subjecto est in anima, quia est accidens animæ : de subjecto vero dicitur ut de grammatica de qua prædicatur sicut genus de specie. Alia vero neque in subjecto quidem sunt, neque de subjecto dicuntur, sicut substantia particularis, ut aliquis homo vel aliquis equus : nihil enim horum quæ sunt particulares substantiæ, neque in subjecto est, neque de subjecto dicitur : simpliciter enim et universaliter quæ sunt individua et secundum numerum singularia, hoc est, quæ sunt unum numero, non dicuntur de aliquo ut de subjecto, cum in descendendo ultima sint nec habeant sub se de quo dicantur. Nihil tamen prohibet quin quædam eorum in subjecto sint, quando accidentia particularia sunt : quædam enim grammatica, ut Donati, in subjecto est in anima Donati. Hac igitur divisione cognoscuntur quæ in genere sunt universalia, et particularia in eodem, quæ prædicantur ut accidentia in utrisque generibus, et quæ prædicantur ut particularia.

Si autem quæritur, quæ est ista divisio? Dici potest, quod est similis ei quæ est generis in species. Cum autem commune dividitur, potius dicitur eorum quæ sunt quam eorum quæ dicuntur, quia potius sunt ista secundum esse quam secundum dici : quia esse sic vel sic in alio est causa ejus, quod est dici vel prædicari. Et accipiuntur secundum hanc divisionem quæ sunt in linea prædicamentali, ut genus et species, et non individuum. Et accipiuntur etiam ea quæ sunt extra genus, ut accidentia, et quæ secundum accidens prædicantur, sicut ea quæ sunt in generibus accidentium prædicantur de subjecto.

Si autem objicitur, quod subjectum in hac divisione non accipitur in una et eadem ratione, eo quod subjectum accidentis et subjectum universalis non uno modo substant, nec habent unam et eamdem rationem substandi : Dicimus quod una et communis ratio substandi est in utrisque, sed specialis non est una : in hoc enim una est, quod subjectum in se fundat et sustinet prædicatum quoad esse verum : quod est esse actu in natura. Sic enim et substantia secunda est in prima, et accidens in subjecto.

And an example of this is a particular accident, which is not individuated except through a subject, as a certain "this grammar", which as in a subject is in the soul, or in a certain soul having in itself the science of grammar. But of no subject is it said, because it is not predicated except by a particular predication which is not an ordered predication. And similarly a certain white or this white as in a subject is in a body or a certain body. For every color is in a determinate body: because, as is said in the book *On Sense and the Sensate*, color is the extremity of the perspicuous in a determinate body. But of no subject is it said since it is particular. But others are said of a certain subject and [are] in a certain subject.

[They] are, as a universal accident, as science in a subject is in the soul, because it is an accident of the soul: but of a subject it is said as of grammar, of which it is predicated as a genus of a species. But others are neither in a subject, nor are said of a subject, as a particular substance, as some man or some horse: for none of these which are particular substances is either in a subject, or is said of a subject: for simply and universally those which are individuals and singulars according to number, that is, which are one in number, are not said of anything as of a subject, since in descending they are the last nor have they under them [anything] of which they might be said. Nothing however prohibits that some of them be in a subject, when they are particular accidents: for a certain grammar, as that of Donatus, is in a subject in the soul of Donatus. By this division, therefore, are known those things which in a genus are universal, and the particular in the same, which are predicated as accidents in both genera, and those which are predicated as particulars.

But if it is asked, what is this division? It can be said that it is similar to that of a genus into species. But when a common [thing] is divided, it is rather said of those things which are than of those which are said, because those things are rather according to being than according to being said: because to be thus or so in another is the cause of that which is to be said or to be predicated. And those things which are in a predicamental line, as genus and species, and not the individual, are accepted according to this division. And those things which are outside a genus are also accepted, as accidents, and those which are predicated according to accident, just as those things which are in the genera of accidents are predicated of a subject.

But if it is objected that the subject in this division is not accepted in one and the same account, because the subject of an accident and the subject of a universal do not stand under in one way, nor have one and the same account of standing under: We say that one and common account of standing under is in both, but the special [account] is not one: for in this it is one, that the subject founds and sustains the predicate in itself as to true being: which is to be in act in nature. For thus both the second substance is in the first, and the accident in the subject.

Differt autem in speciali quoad hoc, quod secunda substantia est causa essentiæ et esse primæ : subjectum autem est causa accidentis secundum esse quod habet : divisio autem secundum partes quas habet, notificat quæ et qualiter locantur in linea prædicamentali, sicut dictum est.

Hæc igitur omnia ut diffinitiones quædam his quæ dicentur ordini prædicabilium præmissa sunt : quia etiam divisiones ad hoc fiunt ut diffinitiones partium et dividentium habeantur, per quas sciatur qualiter et quo ordine in genere ponenda sunt. CAPUT VI. De principiis vel suppositionibus quæ debent præmitti ordini prædicabilium.

Suppositiones autem sunt duæ quæ pro principiis præmittendæ sunt ordini prædicabilium. Quarum una quidem est, quod quando alterum de altero prædicatur ut de proprio sibi in recta linea subjecto, et directe et substantialiter substante secundum omnium quinque universalium respectum ad ea quæ directe sub ipsis sunt, quæcumque de eo quod prædicatur dicuntur recto ordine et substantiali, omnia etiam dici de subjecto necesse est. Hæc quidem in scientia de universalibus secundum omnem modum prædicandi quinque universalium dedimus exempla, ut homo ut species prædicatur de quodam homine : animal autem in eodem ordine de homine prædicatur ut genus et substantia de animali, necesse est quod animal et substantia de quodam homine ut differentia : sensibile autem et vitale et animatum de rationali ut genera et differentiæ, necesse est quod et hæc de quodam homine prædicentur. Similiter risibile de quodam homine prædicatur ut.

proprium : de risibili autem admirativum ut genus, et de hoc suspensivum ad apprehensa, et ad hoc secundum naturam desiderationis, necesse est quod et hæc de quodam homine prædicantur. Similiter album de quodam homine ut accidens prædicatur : de albo autem coloratum, de colorato autem quale : oportet igitur quod et hæc de quodam homine prædicantur. Et generaliter loquendo quæcumque secundum rectam lineam ordine individui ad speciem et speciei ad genus de prædicato quocumque dici possunt.

Et sicut Avicenna et Algazel dicunt, in negatione est similiter, dummodo negentur ea de prædicato quæcumque sunt secundum formam speciei aut generis prædicato opposita : ut si quidam homo non est lapis, lapis autem est inanimatum, necesse est quod quidam homo non sit inanimatum. Similiter est in ordine differentiarum et propriorum et accidentium: sicut si homo est rationale, rationale autem non est insensibile, et sic de aliis : sequitur quod homo non sit insensibile.

But it differs in the special as to this, that the second substance is the cause of the essence and being of the first: but the subject is the cause of the accident according to the being which it has: but the division according to the parts which it has, makes known which and in what way they are located in the predicamental line, as has been said.

All these things, therefore, as certain definitions, are premised to those things which will be said of the order of the predicables: because divisions are also made for this, that the definitions of the parts and the dividing [members] may be had, through which it may be known in what way and in what order they are to be placed in a genus. CHAPTER VI. On the principles or suppositions which ought to be premised to the order of the predicables.

But there are two suppositions which are to be premised as principles to the order of the predicables. One of which indeed is, that when one thing is predicated of another as of its own subject in a straight line, and standing under directly and substantially according to the respect of all five universals to those things which are directly under them, whatever things are said of that which is predicated in a right and substantial order, it is necessary that all be also said of the subject. We have indeed given examples of these in the science of universals according to every mode of predicating the five universals, as man as a species is predicated of a certain man: but animal in the same order is predicated of man as a genus and substance of animal, it is necessary that animal and substance [be predicated] of a certain man as a difference: but sensible and vital and animate of the rational as genera and differences, it is necessary that these also be predicated of a certain man. Similarly, the capable of laughter (*risibile*) is predicated of a certain man as.

...property: but of the capable of laughter (*risibile*) the capable of admiration (*admirativum*) [is predicated] as a genus, and of this the capable of suspension towards apprehended things (*suspensivum ad apprehensa*), and of this according to the nature of desiring (*secundum naturam desiderationis*), it is necessary that these also be predicated of a certain man. Similarly white is predicated of a certain man as an accident: but of white colored, of colored [what sort] of quality (*quale*): it is necessary therefore that these also be predicated of a certain man. And generally speaking, whatever things according to a straight line in the order of the individual to the species and of the species to the genus can be said of any predicate.

And as Avicenna and Algazel say, it is similar in negation, provided that those things be denied of the predicate which are according to the form of species or genus opposite to the predicate: as if some man is not a stone, but a stone is inanimate, it is necessary that some man not be inanimate. It is similar in the order of differences and properties and accidents: as if man is rational, but rational is not insensible, and so of others: it follows that man is not insensible.

Et hoc est facile videre in omnibus : sicut si homo est risibile, risibile autem non potest esse non admirativum, sequitur quod quidam homo non possit esse non admirativum. Et si homo est : album autem non est non coloratum, sequitur quod homo non est non coloratum : et sic est in omnibus. Et hoc principio utimur ad ponendam rectam lineam prædicamentalem, et ad sciendum quæ extra lineam sunt prædicamentalem.

Ex his autem facile patet quod non sequitur, quidam homo est homo : homo est species : ergo quidam homo est species. Et homo est animal, et animal est genus : ergo homo est genus. Non enim species prædicatur de homine ut subjecto secundum rectum ordinem prædicamentalem, sed prædicatur de ipso ut accidens extraneum ab hoc ordine : et ideo in tali argumento est fallacia accidentis.

Et per hoc etiam principium prima figura invenietur in syllogismis, sicut patebit in doctrina priorum Analyticorum.

Alterum autem principium est, quod diversorum generum, et non subalternatim positorum diversæ sunt species et differentiæ : sicut enim diversa sunt genera, animal et scientia, secundum diversa prædicamenta : unum enim est genus in prædicamento substantiæ, et alterum est genus in prædicamento qualitatis, et non sunt in eadem prædicamenti linea subalternatim posita, ita quod unum sub altero directe contineatur : et ideo habent diversas differentias non ad se invicem ut inferius et superius ordinatas. Animalis enim species sunt homo et equus : differentiæ autem ut gressibile, quadrupes, et volatile. Scientiæ vero nulla harum specierum vel differentiarum est. Hæ species scientiæ sunt grammatica, logica, et physica : differentiæ vero demonstrativum, opinabile, probabile, et hujusmodi. Scientia enim una non differt ab alia in eo quod una bipes sit, et alia non, sed volativum : et similiter est de omnibus generibus non subalternatim positis, quæ non in eadem linea continentur prædicamentali.

Ad hæc tamen quæ dicta sunt, instantiæ feruntur, sed sophisticæ sunt. Quarum prima est de corpore quod ponitur species substantiæ, et species quantitatis, quæ sunt diversa genera, et non subalternatim posita. Secunda est de scientia quæ ponitur et species qualitatis et relationis. Tertia est de quadrato quod est differentia figuræ, ut in secundo Euclidis dicitur et est differentia numeri, ut secundo arithmeticæ. Quarta est de rectangulo quod ponitur differentia trianguli, ut patet in primo Euclidis, et ponitur differentia quadranguli, ut patet in Euclidis secundo.

And this is easy to see in all things: as if man is capable of laughter (*risibile*), but the capable of laughter cannot be non-admiring (*non admirativum*), it follows that some man cannot be non-admiring. And if man is: but white is not non-colored, it follows that man is not non-colored: and so it is in all things. And we use this principle to set the straight predicamental line, and to know what things are outside the predicamental line.

From these things, moreover, it is easily clear that it does not follow: some man is a man; man is a species; therefore some man is a species. And man is an animal, and animal is a genus; therefore man is a genus. For species is not predicated of man as of a subject according to the right predicamental order, but it is predicated of him as an accident extraneous to this order: and therefore in such an argument there is a fallacy of accident.

And through this principle also the first figure will be found in syllogisms, as will be clear in the doctrine of the *Prior Analytics*.

The other principle moreover is, that of diverse genera, and those not placed subalternately, the species and differences are diverse: for as the genera are diverse, animal and science, according to diverse categories: for one is a genus in the category of substance, and the other is a genus in the category of quality, and they are not placed subalternately in the same line of a category, so that one is directly contained under the other: and therefore they have diverse differences not ordered to each other as lower and higher. For the species of animal are man and horse: but the differences as capable of walking (*gressibile*), quadruped, and volatile. Of science, indeed, none of these species or differences is [found]. These species of science are grammar, logic, and physics: but the differences [are] demonstrative, opinable, probable, and of this sort. For one science does not differ from another in that one is biped, and the other not, but volatile: and it is similar for all genera not placed subalternately, which are not contained in the same predicamental line.

To these things however which have been said, instances are brought, but they are sophistical. The first of which is concerning body, which is placed as a species of substance, and a species of quantity, which are diverse genera, and not placed subalternately. The second is concerning science, which is placed as a species of quality and of relation. The third is concerning the square, which is a difference of figure, as is said in the ↠←* [book] of Euclid, and is a difference of number, as in the second [book] of arithmetic. The fourth is concerning the rectangle, which is placed as a difference of triangle, as is clear in the *first* [book] of Euclid, and is placed as a difference of quadrangle, as is clear in Euclid's ↠←* [book].

Omnes autem istæ instantiæ sunt sophisticæ : quia corpus secundum quod est species substantiæ, et secundum quod est species quantitatis, æquivocum est et non sumitur secundum unam rationem. Corpus enim quod est in genere substantiæ, est substantia mensurata tribus diametris ad rectos angulos se secantibus. Secundum autem quod est in.

genere quantitatis, est ipsa trina dimensio. Similiter scientia relata ad scibile, species est relationis, et secundum quod est qualitas scientis, est in genere qualitatis. Quadratum autem non dicitur de numeris, nisi transumptive et non proprie. Similiter autem et rectangulum non eodem modo dicitur de triangulo et de quadrangulo : quadrangulo enim convenit per se et semper, triangulo autem accidit : quæritur enim triangulo et per accidens.

Quidan etiam instant de rationali quod, ut dicunt, convenit mortali et immortali, ut dictum est in scientia de Universalibus. Sed ad hoc quidam dicunt[1], quod alterna et subalterna sunt subalternatim posita, et in eadem linea prædicamentali : quamvis enim unum horum sub altero non ponatur, tamen ambo ponuntur sub eodem genere superiori sicut sub substantia : et ita intelligitur quando dicitur non subalternatim positorum, ita quod sit sensus : diversorum generum et non subalternatim positorum, hoc est, non sub eodem communi, quod supra ipsa sit, positorum : et ita oportet dicere secundum Stoicos et Epicureos. In veritate tamen rationale non convenit incorporeo et corporeo secundum unam et eamdem rationem : sed hoc determinare est in libro Causarum.

Subalternorum vero generum, quorum vel unum ponitur sub altero, vel ambo ponuntur sub uno superiori communi genere, nihil prohibet easdem esse differentias. Superiora enim genera de inferioribus prædicantur : propter quod secundum principium prius inductum quæcumque prædicantur de ipso prædicato differentiæ ut divisivæ, prædicantur etiam de subjecto ut constitutivæ. Sed divisivæ de genere prædicantur sub disjunctione, ut substantia aut corporea aut incorporea : de specie autem supposita altera differentiarum prædicatur ut constitutiva, ut de corpore corporeum, et de animali animatum et sensibile. Hæc igitur sunt quæ ut suppositiones præmittere volumus ordinationi prædicabilium. CAPUT VII. De enumeratione generum in quæ prædicabilia reducuntur.

But all these instances are sophistical: because body according to that which is a species of substance, and according to that which is a species of quantity, is equivocal and is not accepted according to one account. For body which is in the genus of substance is substance measured by three diameters intersecting each other at right angles. But according to that which is in.

...category of quantity, it is the triple dimension itself. Similarly science, related to the knowable, is a species of relation, and according to that which is the quality of the knower, it is in the category of quality. But the square is not said of numbers except metaphorically and not properly. Similarly, moreover, the rectangle is not said in the same way of the triangle and of the quadrangle: for to the quadrangle it belongs per se and always, but to the triangle it happens: for it is sought for the triangle also through accident.

Some also instance the rational, which, as they say, belongs to the mortal and the immortal, as was said in the science of *Universals*. But to this some say that alternate and subaltern are placed subalternately, and in the same predicamental line: for although one of these is not placed under the other, yet both are placed under the same higher genus such as under substance: and it is so understood when it is said of [genera] not placed subalternately, so that the sense is: of diverse genera and not placed subalternately, that is, not placed under the same common [thing] which is above them: and thus it is necessary to say according to the Stoics and Epicureans. In truth, however, rational does not belong to the incorporeal and the corporeal according to one and the same account: but to determine this is in the book *Of Causes*.

Of subaltern genera, indeed, of which either one is placed under the other, or both are placed under one higher common genus, nothing prohibits that the differences be the same. For higher genera are predicated of lower ones: because of which, according to the principle previously introduced, whatever things are predicated of the predicate of difference itself as divisive, are also predicated of the subject as constitutive. But the divisive are predicated of the genus under disjunction, as substance [is] either corporeal or incorporeal: but of the species, one of the differences having been assumed, it is predicated as constitutive, as of body corporeal, and of animal animate and sensible. These, therefore, are the things which we wish to premise as suppositions to the ordering of the predicables. CHAPTER VII. On the enumeration of the genera into which the predicables are reduced.

His ita præmissis, jam genera in quæ prædicabilium universitas reduci habet inveniemus. Dicimus igitur, quod eorum quæ secundum nullam complexionem dicuntur, ita quod nec habent complexionem orationis perfectæ, nec imperfectæ, nec complexionem diffinitionis, sed simpliciter incomplexa sunt, unum tantum significantia, et nihil cum ipso, singulum secundum seipsum in indivisibili acceptum aut substantiam significat, aut quantitatem, aut qualitatem, aut ad aliquid, aut ubi, aut quando, aut situm esse, aut habitum, aut facere, aut pati significat. Horum autem (ut figuraliter sive superficialiter per exemplorum positionem sit manifestatio) est substantia quidem, ut homo et quæcumque res per se existens. Quantitas autem, ut bicubitum, et tricubitum et quodlibet, quod continue vel discrete mensurat magnitudinem vel multitudinem. Qualitas vero est, ut album, vel nigrum et hujusmodi. Ad aliquid autem sive relativum, ut duplum, dimidium, æquale, majus, et minus et hujusmodi. Ubi vero, ut in loco, sicut in foro, vel in theatro, vel sursum, et deorsum et hujusmodi. Quando vero, ut heri, vel hodie, et cras, vel olim, et nunc et hujusmodi. Situm vero esse vel positum esse, ut sedet, jacet, stat et hujusmodi. Habere autem, ut calceatus, tunicatus, armatus et hujusmodi. Facere vero, ut secare, vel urere. Pati vero, ut secari, vel uri, calefieri, infrigidari vel hujusmodi.

Ad hæc omnia habent reduci prædicabilia sicut ad prima suæ coordinationis genera, et prima rerum illius principia : quamvis enim multi laboraverunt ut rationem ponant quare numerus principio-

rum omnium rerum stat in decem, nos, quantum possumus, studebimus ex propriis horum generum modis prædicandi ostendere hujus numeri rationem. Notandum igitur est quod iste numerus non est nisi prædicabilium, quæ ut universalia de subjectis prædicantur. Propter quod si aliquid est quod de nullo prædicatur ut universale, nec de ipso potest aliquid prædicari ut de subjecto et particulari vel specie, illud non est in aliquo istorum generum, sed ante hæc, et causa omnium istorum, sicut causa prima, Deus scilicet excedens omnia, qui nec est universale, nec particulare, nec species, nec genus, nec differentia, nec potentia, nec actus alicujus : et vere non est aliquid ut substantia, vel ut accidens alicujus, sed est omnium efficiens, et tale principium per suam scientiam activam et per intellectum universaliter agentem.

These things having been so premised, now we shall find the genera into which the whole of the predicables has to be reduced. We say, therefore, that of those things which are said according to no complexity, so that they have neither the complexity of a perfect speech, nor an imperfect one, nor the complexity of a definition, but are simply incomplex, signifying only one thing, and nothing with itself, each accepted according to itself in the indivisible signifies either substance, or quantity, or quality, or to something (relation), or where (place), or when (time), or to be in a position (site), or habit (state), or to do (action), or to suffer (passion). Of these, moreover, (so that there may be a manifestation figuratively or superficially through the position of examples) substance indeed is as man and whatever thing exists per se. Quantity, moreover, as a two-cubit [measure], and a three-cubit [measure] and anything which continuously or discretely measures magnitude or multitude. Quality indeed is as white, or black and of this sort. To something, moreover, or relative, as double, half, equal, greater, and lesser and of this sort. Where indeed, as in a place, such as in the forum, or in the theater, or above, and below and of this sort. When indeed, as yesterday, or today, and tomorrow, or formerly, and now and of this sort. To be in a position or to be placed, as he sits, he lies, he stands and of this sort. To have moreover, as shod, tuniced, armed and of this sort. To do indeed, as to cut, or to burn. To suffer indeed, as to be cut, or to be burned, to be heated, to be cooled or of this sort.

To all these the predicables have to be reduced as to the first genera of their coordination, and the first principles of that thing: for although many have labored to give a reason why the number of the principles.

...of all things stands at ten, we, as much as we can, shall strive from the proper modes of predicating of these genera to show the reason for this number. It must be noted, therefore, that this number is only of the predicables which are predicated as universals of subjects. Because of which, if there is something which is predicated of none as a universal, nor can anything be predicated of it as of a subject and particular or species, that is not in any of these genera, but before these, and the cause of all these, as the first cause, namely God exceeding all things, who is neither universal, nor particular, nor species, nor genus, nor difference, nor power, nor the act of anything: and truly is not anything as a substance, or as an accident of anything, but is the efficient [cause] of all, and such a principle through his active science and through the universally acting intellect.

Hæc autem in libro de Causis habent probari. Si quæ etiam sunt formæ separatæ res formantes, et a rebus separatæ nullo modo miscibiles, ad quas ipsæ res sicut ad sigilla quædam formantur, et rebus non insunt, sicut dixit Plato, illæ de rebus non prædicantur, eo quod nihil sunt rerum. Et non potest aliquid de aliquo prædicari, quod nihil ipsius est. Illæ etiam non sunt in genere, nec ad aliquod genus reducibiles. Et si dicuntur substantiæ, erit æquivocum nomen substantiæ ad istas substantias. Hoc autem in prima philosophia habet determinari. Omnia autem quæ universalia sunt, vel universalium subjecta quæcumque aliquo modo sunt in quibusdam, et in quibus ut in subjectis sunt, quocumque modo, illa reducuntur ad ista decem genera quæ sunt numerata, et exeunt ab eis sicut a primis suis essentialibus principiis.

Sunt iterum quædam non ad unum genus reducibilia, sed sunt in omnibus, sicut ens, et unum, et res, et aliquid, quæ dicuntur non genera, sed ut principia quædam per prius et posterius de generibus illis dicta. Et ista genera primæ partes dicuntur illorum, et illa non æqualiter prædicantur de istis, sed secundum prius et posterius dicta : ita quod sunt in uno recte et vere, et non sunt in aliis nisi per analogiam et proportionem habitudinis quia se habent ad unum principium.

Aliqua etiam sunt in pluribus generibus, sed in quocumque sunt vere illius generis, sicut motus qui in loco est ubi fluens, in qualitate quale fluens, in quantitate quantum fluens. Et ipsa mutatio in substantia est aliquo modo substantia fluens.

His ita prælibatis, dicimus quod prædicabile de aliquo, aut est substantia, aut est accidens : et hæc divisio est per opposita immediate, quæ reducuntur ad affirmationem et negationem, sicut ens per se et non per se. Ens autem per se, ut per se ens prædicabile est substantia, et est genus omnium primum, et aliorum omnium quoddam principium. Ens autem non per se prædicabile vel subjicibile, est accidens de necessitate : et hoc est ens in alio ut in subjecto, quod in duo secundum Aristotelem dividi habet. Accidens quidem aut est accidens secundum inesse, aut secundum aliquem modum ad aliud se habere.

Si autem est accidens sive aliquod cadens secundum absolute inesse, tunc aut inest secundum materiam, quæ potentia divisibilis est et extensibilis et numerabilis ad formarum susceptionem, quæ in quantum potentia primo invenitur in materia : aut inest absolute secundum potentiam formæ, quæ est perfectiva materiæ ad actum et operationem. Si primo modo inest, sic est quantitas. Si autem secundo modo inest, tunc est qualitas quæ dispositio est substantiæ ad operationes aliquas et ad actus.

These things, moreover, have to be proved in the book *Of Causes*. If there are also any separate forms forming things, and in no way mixable being separate from things, to which the things themselves are formed as to certain seals, and are not in the things, as Plato said, those are not predicated of things, because they are nothing of the things. And something cannot be predicated of anything which is nothing of it. Those also are not in a genus, nor reducible to any genus. And if they are called substances, the name of substance will be equivocal to those substances. This, moreover, has to be determined in *First Philosophy*. But all those things which are universal, or whatever subjects of universals are in some in some way, and in which they are as in subjects, in whatever way, those are reduced to these ten genera which are numbered, and they issue from them as from their first essential principles.

There are again certain things not reducible to one genus, but they are in all, such as being (*ens*), and one, and thing, and something, which are called not genera, but as certain principles said through prior and posterior of those genera. And these genera are called the first parts of those, and those are not equally predicated of these, but said according to prior and posterior: so that they are in one rightly and truly, and are not in the others except through analogy and proportion of habitude because they relate to one principle.

Some also are in several genera, but in whichever they are they are truly of that genus, as motion which in place is "where flowing" (*ubi fluens*), in quality "quality flowing" (*quale fluens*), in quantity "quantity flowing" (*quantum fluens*). And change itself in substance is in some way "substance flowing".

These things having been so fore-tasted, we say that the predicable of anything is either substance or accident: and this division is through immediate opposites, which are reduced to affirmation and negation, as being per se and not per se. But being per se, as predicable being per se, is substance, and is the first genus of all, and a certain principle of all others. But being not per se, predicable or subjectible, is of necessity an accident: and this is being in another as in a subject, which has to be divided into two according to Aristotle. An accident indeed is either an accident according to in-being (*secundum inesse*), or according to having itself in some mode towards another.

But if it is an accident or something "falling" (*cadens*) according to absolute in-being, then it either is in according to matter, which is potentially divisible and extensible and numerable for the reception of forms, which insofar as it is potential is first found in matter: or it is in absolutely according to the power of the form, which is perfective of matter for act and operation. If it is in in the first way, it is thus quantity. But if it is in in the second way, then it is quality, which is the disposition of a substance for some operations and for acts.

Si autem non est accidens secundum esse absolutum, hoc cadit ab substantiam secundum id quod est aliquo modo habere se substantiam ad aliud : tunc non potest esse nisi duobus modis : aut enim id aliquo modo se habere ad aliud, causatur a substantia comparata ad aliud, aut ab illo extrinseco comparato ad substantiam de qua prædicatur. Si primo modo, tunc iterum non est nisi duobus modis : aut enim est in comparatione simplici ad aliud, aut secundum comparationem partium ad totum in seipso consideratum. Et si est secundo modo, est situs vel positio. Si autem est primo : aut secundum comparationem ortam a forma, aut secundum comparationem ortam a toto simul. Et si est prædicabile secundum comparationem ortam a forma, est actio : unde dicit Averroes[1], quod actio nihil aliud est, nisi comparatio agentis ad patiens. Si autem comparatio illa est orta a materia, tunc est pati : propter quod idem Averroes dicit quod passio est comparatio patientis ad agens secundum quod agens est. Si autem oritur a toto, non potest oriri, nisi per aliquem actum totius, quo innascitur comparatio illa, et tunc est ad aliquid sive relatio. Si autem oritur comparatio ab aliquo extrinseco comparato ad subjectum, de quo fit prædicatio, illud extrinsecum, aut est adjacens tantum, aut adjacens et applicatum. Si autem est adjacens tantum, et ex adjacentia simplici comparatum, aut est adjacens ei quod est esse quod est cum motu et esse distenso. Si primo quidem est ortum ab adjacentia extrinseca, tunc est *ubi*. Si autem comparatio est orta ab adjacentia extrinseci secundo modo, tunc est prædicamentum *quando*. Si autem oritur ab adjacente extrinseco et applicato, tunc est prædicamentum *habitus*. Nec possunt plura prædicari secundum adjacentiam extrinsecam.

Est autem advertendum, quod singula eorum quæ dicta sunt, quando ut singula et incomplexa accipiuntur, in nulla dicuntur affirmatione vel negatione : quia affirmatio non est nisi unius prædicati de aliquo : negatio autem non est nisi divisionis ostensio, divisionis, dico, alicujus ab aliquo : horum enim prædicabilium complexione vel compositione ad invicem fit affirmatio vel negatio, et sine hujusmodi terminus prædicari non potest. Propter quod affirmatio et negatio non sunt formaliter et actualiter in rebus, sed in anima sive intellectu componente aliquid cum aliquo, vel dividente aliquid ab aliquo. Propter quod omnis affirmatio videtur vera esse, vel falsa : et similiter omnis negatio. Propter quod etiam in 6 *primæ philosophiæ*[2] dicitur quod verum et falsum sunt in anima et non in rebus. Et hoc est verum de hoc vero quod est adæquatio rerum complexarum cum intellectu componente vel dividente.

But if it is not an accident according to absolute being, this falls from substance according to that which is in some way for the substance to have itself towards another: then it cannot be except in two ways: for either that having itself towards another in some way is caused by the substance compared to another, or by that extrinsic [thing] compared to the sub.

...stance of which it is predicated. If in the first mode, then again it is only in two modes: for either it is in a simple comparison to another, or according to the comparison of parts to the whole considered in itself. And if it is in the second mode, it is position or situation. But if it is in the first: either according to a comparison arising from form, or according to a comparison arising from the whole simultaneously. And if it is predicable according to a comparison arising from form, it is action: whence Averroes says [1], that action is nothing other than the comparison of an agent to a patient. But if that comparison has arisen from matter, then it is to undergo: on account of which the same Averroes says that passion is the comparison of a patient to an agent according as it is an agent. But if it arises from the whole, it cannot arise except through some act of the whole, by which that comparison is born, and then it is to-something or relation. But if the comparison arises from some extrinsic thing compared to the subject, of which the predication is made, that extrinsic thing either is only adjacent, or adjacent and applied. But if it is only adjacent, and compared from a simple adjacency, either it is adjacent to that which is being which is with motion and extended being. If first indeed it has arisen from an extrinsic adjacency, then it is *where*. But if the comparison has arisen from the adjacency of an extrinsic thing in the second mode, then it is the predicament *when*. But if it arises from an adjacent and applied extrinsic thing, then it is the predicament *having*. Nor can more things be predicated according to extrinsic adjacency.

But it must be noted, that each of the things which have been said, when they are taken as individual and incomplex, are said in no affirmation or negation: because affirmation is only of one predicate concerning something: but negation is only the showing of a division, of a division, I say, of something from something: for from the complexion or composition of these predicables with each other an affirmation or negation comes to be, and without this sort of thing a term cannot be predicated. On account of which affirmation and negation are not formally and actually in things, but in the soul or the intellect composing something with something, or dividing something from something. On account of which every affirmation seems to be true, or false: and similarly every negation. On account of which also in the sixth book of the *First Philosophy* [2] it is said that the true and the false are in the soul and not in things. And this is true concerning that truth which is the adequation of complex things with the intellect composing or dividing.

Ea autem quæ sunt de numero eorum quæ secundum nullam complexionem dicuntur, sed incomplexo et indivisibili intuitu intellectus accipiuntur, hoc modo veritatis vel falsitatis neque vera sunt, neque falsa. Incomplexa autem sunt, ut homo, album, currit. Possunt tamen alio modo esse vera vel falsa, secundum quod verum dicimus purum, alienæ naturæ non permixtum, vel existens et non apparens tantum, sicut dicimus verum aurum, alienæ naturæ non permixtum, et dicimus verum esse et in veritate quod ita existit secundum actum sicut apparet : et dicimus verum phantasma esse, quod apparet et non existit, sicut lemures, et somnia, et melancholicis visa : verum enim sic cum ente convertitur et repugnat impuro et vano. Hinc est, quod Aristoteles[3] dicit, quod intelligentia indivisibilium est in quibus non est verum : in quibus autem verum est et falsum, jam compositio quædam intellectuum est.

stantiam, quod est ex parte illius substantia. In primo quidem modo si id quod est substantia, habeat se ad aliud secundum id quod est, id est, secundum quidditatem et essentiam, sic est ad aliquid. Si autem substantia habet se ad aliud non secundum se, sed secundum aliquid quod est extra eam, tunc est locus vel tempus : quia locus et tempus sunt extra substantiam locati et temporati. Et locus quidem est extra substantiam sicut ambiens ipsam : et sic fundatur ubi. Tempus autem est extra sicut mensura ipsius motus et esse : et sic fundatur quando. Si autem id quod est aliquo modo se habere substantiam ad aliud, causatur ab illo extrinseco ad substantiam, tunc illud extrinsecum aut est ut habitus qui est de genere qualitatis circumdans substantiam et non mensurans eam, aut est ut actus, aut ut passio. Si est ut habitus, sic fundatur prædicamentum habitus : dicitur enim habitus de habitu circumdante, sicut vestitus, vel calceatus et hujusmodi. Si autem est ut actus causatus in substantiam ab agente, tunc est passio. Si autem est ut actus causatus ab ipsa substantia in aliud, tunc est prædicamentum agere. Et in his decem clauditur totus ambitus prædicabilium. Et omnia decem ad duo reducuntur prima, quæ sunt substantia et accidens. Et accidentia omnia ad tria prima, quæ sunt quantitas, qualitas, et ad aliquid. Reliqua enim sex ad aliquid reducuntur per modum habitudinis, qui est in ipsis, ad aliquid extrinsecum a substantia, ut patuit ex eorum descriptionibus quas induximus. Et ista ad aliquid quod est genus, non reducuntur nisi sicut ad id quod in aliis prædicamentis salvatur, sicut et unum et ens salvantur in ipsis. Hæc igitur est ratio numeri generum ad quæ reducuntur prædicabilia, secundum id quod nos potuimus ex verbis Aristotelis elicere. Et hæc sufficiant de anteprædicamentis dicta.

But those things which are of the number of those which are said according to no complexion, but are apprehended by an incomplex and indivisible intuition of the intellect, in this mode of truth or falsity are neither true, nor false. But incomplex things are, as man, white, runs. They can nevertheless be true or false in another mode, according as we call true that which is pure, not commingled with an alien nature, or existing and not merely appearing, just as we say true gold, not commingled with an alien nature, and we say it to be true and in truth which thus exists according to act as it appears: and we say a phantom to be true, which appears and does not exist, like specters, and dreams, and things seen by melancholics: for truth thus is convertible with being and is repugnant to the impure and the vain. Hence it is, that Aristotle [3] says, that the understanding of indivisibles is in those things in which there is no truth: but in those things in which there is truth and falsity, there is now a certain composition of acts of understanding.

...stance, which is on the part of that substance. In the first mode indeed, if that which is a substance should have itself towards another according to that which it is, that is, according to quiddity and essence, it is thus "to something" (relation). But if the substance has itself towards another not according to itself, but according to something which is outside it, then it is place or time: because place and time are outside the substance of the thing placed and timed. And place indeed is outside the substance as surrounding it: and thus is founded "where" (*ubi*). But time is outside as the measure of its motion and being: and thus is founded "when" (*quando*). But if that which is in some way for the substance to have itself towards another is caused by that extrinsic [thing] to the substance, then that extrinsic [thing] is either as a habit which is of the category of quality surrounding the substance and not measuring it, or it is as act, or as passion. If it is as a habit, thus is founded the category of "habit" (*habitus*): for habit is said of a surrounding habit, as clothed, or shod, and of this sort. But if it is as an act caused in the substance by an agent, then it is "passion" (*pati*). But if it is as an act caused by the substance itself in another, then it is the category of "to do" (*facere*). And in these ten is closed the whole ambit of the predicables. And all ten are reduced to two first ones, which are substance and accident. And all accidents to three first ones, which are quantity, quality, and "to something" (relation). For the remaining six are reduced to "to something" through the mode of habitude, which is in them, towards something extrinsic to the substance, as was clear from their descriptions which we introduced. And these are not reduced to "to something" which is a genus, except as to that which is saved in other categories, just as both "one" and "being" are saved in them. This, therefore, is the reason for the number of the genera to which the predicables are reduced, according to what we were able to elicit from the words of Aristotle. And let these things be sufficient said concerning the ante-predicaments.

totum esse secundum primam notionem substantiæ, in qua ratio substantiæ intelligi potest.

Si autem quæritur, quæ sint componentia ipsum, cum nihil habeat ante se ex quo componi possit? Dicendum quod nihil extrinsecum ei ante se habet : intra se tamen habet intellectum componentium ipsum. Est enim ens, et est per se, quod addit super ens intellectualem compositionem : quia ex ente est, et ex eo quod est per se, est hoc. Et, ut dicit Boetius, aliud habet quo est aliquid, aliud habet quo hoc est : et hæc est forma compositionis ejus, quia nihil habet materiæ, quamvis habeat id quod est et esse. Et hæc est prima notio substantiæ quæ de omnibus prædicatur quæ in recta linea prædicamentali sunt in prædicamento substantiæ. Sunt tamen quæ dicuntur substantiæ, non quia hanc substantiæ recipiunt vel participant rationem, sed quia sunt principia essentialiter constituentia substantiam, sicut forma dicitur substantia, et materia dicitur substantia, ut dicit Aristoteles. Sed hæc non sunt in substantia secundum rectum ordinem prædicamenti, sed reducuntur ad substantiam ut principia substantiæ per hanc dignitatem, quod nihil quod per sui essentiam facit substantiam, est non substantia. Hic igitur modo substantia consideratur a logico et est præsentis intentionis.

Tertio autem modo substantia dicitur ab actu substandi, et tunc dicitur substantia quæ per se substat, et omnibus aliis quæ substant, dat quod substant : et hoc modo substantia individua est substantia sola, a qua tamen nulla, ut inferius patebit, est prædicatio : sed omnis subjicibilitas omnium quæ quibuscumque subjiciuntur est ab ipsa. Et quia nos in hoc libro intendimus de prædicabilium secundum suas coordinationes reductione ad unum, ideo hanc substantiam primam oportet ponere : quæ tamen ultima est secundum ordinem primo et secundo modo dictæ substantiæ.

Secundum ergo primam intentionem substantia est essentia, quæ nec genus est, nec species, nec individuum, sed est simplex. Secundo autem modo dicta substantia composita est, et est primum genus omnibus sequentibus differentiis formabile et determinabile ad esse specierum et individuorum. Tertio autem modo dicta substantia est determinata materia et superficie et loco ad hoc singulare vel illud. Et primo quidem modo substantia nec est quale quid, nec hoc aliquid, sed simplex essentia. Secundo autem modo est substantia quale quid, ab eo quod formatur habens quid, et a formante habens quale.

[the] whole being according to the first notion of substance, in which the account of substance can be understood.

But if it is asked, what are the things composing it, since it has nothing before itself from which it could be composed? It must be said that it has nothing extrinsic before itself: yet within itself it has the understanding of the things composing it. For it is being, and it is through itself, which adds an intellectual composition over being: because it is from being, and from that which is through itself, it is this. And, as Boethius says, it has one thing by which it is something, and another thing by which it is this: and this is the form of its composition, because it has nothing of matter, although it has that which it is and being. And this is the first notion of substance which is predicated of all things which are in the straight predicamental line in the category of substance. However, there are some things which are called substances, not because they receive or participate in this account of substance, but because they are principles essentially constituting substance, just as form is called substance, and matter is called substance, as Aristotle says. But these are not in substance according to the straight order of the category, but are reduced to substance as principles of substance through this dignity, that nothing which through its essence makes a substance, is not a substance. In this way, therefore, substance is considered by the logician and is of the present intention.

But in a third way, substance is said from the act of substanding, and then it is called substance which substands through itself, and to all other things which substand, it gives that they substand: and in this way individual substance is substance alone, from which however no predication [comes], as will appear below: but all subjectibility of all things which are subjected to whatever things is from it. And because in this book we intend concerning the reduction of the predicables according to their coordinations to one, therefore it is necessary to posit this first substance: which however is last according to the order of substance said in the first and second way.

According to the first intention, therefore, substance is essence, which is neither genus, nor species, nor individual, but is simple. But in the second way, substance is said [to be] composite, and is the first genus, formable and determinable by all following differences to the being of species and individuals. But in the third way, substance is said [to be] determined matter and surface and place to this singular [thing] or that. And in the first way indeed, substance is neither of what sort somewhat (quale quid), nor this somewhat (hoc aliquid), but simple essence. But in the second way, substance is of what sort somewhat, having from that which is formed the "what" (quid), and from that which forms having the "of what sort" (quale).

Tertio autem modo est hoc aliquid. Principia autem substantiæ propria sunt id quod est quid et formabile, quod est non materia quidem, sed materiæ proportionem habens in eo quod sustinet se formans et in eo quod formabile est, et secundum principium quod est dans esse habens proportionem ad actum formæ, qui est determinare ad esse, et finire, et distinguere, sicut dicunt Avicenna et Alfarabius. Hæc autem quæ dicta sunt valde notanda sunt, quia solvuntur per ea multæ quæstiones. Hic igitur tertio et secundo modo tractabimus de substantia, primum modum primo philosopho relinquentes.

CAPUT II. ### *De substantia prima quid sit, et declaratio diffinitionis ejus.*

Incipientes igitur a prima subjecta, dicimus quod substantia quæ proprie et principaliter et maxime et tertio modo substantia dicitur, est quæ nec de aliquo sibi directo subjecto in quo sit per naturam et intellectum prædicatur, nec est in subjecto aliquo. Et per hoc quod dicitur *proprie* substantia, excluditur substantia quæ non est proprie substantia, sed substantiale primum in quolibet genere, sicut color substantiale est albedini, et mensura substantialis est pedis, vel cubiti, vel alicujus alterius speciei mensuræ. Dicitur autem *principaliter* ad secundæ substantiæ exclusionem, quæ substantia est ab actu substandi dicta per primam substantiam. Et dicitur *maxime* eo quod pluribus substat quam aliqua alia : quia substat communiter accidentibus quæ non sunt nisi accidentia individui. Per hoc autem quod *de subjecto non dicitur*, habet quod est individua vere in natura secundum actum existens, et non habet actu intellectus existentiam ut universale. Per hoc autem quod *non est in subjecto*, habet quod est per se ens, et non in alio nec ab alio existentiam habens. Hæc igitur est prima substantia, cujus exemplum est ut aliquis homo, vel aliquis equus.

Quod autem per negationem diffinitur, cum dicitur quæ neque de subjecto dicitur neque in subjecto est, causa est quia sicut prima est in substando, ita ultima est in essendo. Et ideo in substando per affirmationem affirmantem aliquid quod sibi causa esset substandi diffiniri non potuit. Nec etiam potuit diffiniri per aliquid quod sibi esset causa de aliquo prædicandi, quia de nullo prædicatur : ultimum enim in ordine essendi non potest habere aliquid sub se cui essentialiter insit. Inesse autem essentialiter, causa est quod aliquid de aliquo ut genus vel species essentialiter prædicetur : perfectum autem esse in actu ultimo secundum naturam et sustentans omnia alia, causa est quod in nullo sit ut accidens. His ergo de causis sic per duas negationes oportuit ipsam diffiniri : quæ tamen negationes infinitæ non sunt quia finitæ sunt ab his quæ in eadem diffinitione ponuntur.

But in the third way, it is this somewhat. But the proper principles of substance are that which is the "what" and formable, which is indeed not matter, but having the proportion of matter in that it sustains itself forming and in that it is formable, and according to the principle which is giving being, having proportion to the act of form, which is to determine to being, and to limit, and to distinguish, as Avicenna and Alfarabi say. But these things which have been said are very much to be noted, because through them many questions are solved. Here, therefore, we shall treat of substance in the third and second way, leaving the first mode to the First Philosopher.

CHAPTER II. ### *Concerning what first substance is, and the declaration of its definition.*

Beginning therefore from the first subject, we say that substance which is called substance properly and principally and maximally and in the third way, is that which is predicated neither of any subject directed to itself in which it is through nature and understanding, nor is it in any subject. And through this that it is said *properly* substance, there is excluded substance which is not properly substance, but the first substantial [thing] in any genus, just as color is substantial to whiteness, and measure is substantial to a foot, or a cubit, or of any other species of measure. But it is said *principally* for the exclusion of second substance, which is called substance from the act of substanding through first substance. And it is said *maximally* for the reason that it substands to more things than any other: because it commonly substands to accidents which are not except accidents of the individual. But through this that *it is not said of a subject*, it has that it is truly individual in nature, existing according to act, and it does not have existence by an act of the intellect as a universal. But through this that *it is not in a subject*, it has that it is being through itself, and not having existence in another nor from another. This, therefore, is first substance, whose example is as some man, or some horse.

But that it is defined through negation, when it is said that it is neither said of a subject nor is in a subject, the cause is because just as it is first in substanding, so it is last in being. And therefore in substanding it could not be defined through an affirmation affirming something which would be the cause for its substanding. Nor could it even be defined through something which would be the cause for its being predicated of something, because it is predicated of nothing: for the last in the order of being cannot have something under it in which it may essentially be. But to be in essentially is the cause that something is essentially predicated of something as a genus or species: but to be perfect in the last act according to nature and sustaining all other things, is the cause that it is in nothing as an accident. For these causes, therefore, it was necessary for it to be thus defined through two negations: which negations however are not infinite because they are limited by those things which are placed in the same definition.

Attende autem, quod non est idem *non dici de subjecto* et *dici non de subjecto* : non dici de subjecto enim est quod dici quidem potest et prædicari, sed non habet sub se in quo sit essentialiter secundum ordinem lineæ prædicamenti de quo prædicetur. Dici autem non de subjecto, hoc est quod a prima substantia nulla est ordinata prædicatio : ideo dicitur quod neque de subjecto est. Quia autem nullo modo sibi convenit inesse, cum omnia alia sibi insint, et salventur in esse naturæ per hoc quod sibi insunt aliquo modo, ideo impossibile fuit ipsam primam substantiam inesse alicui. Et sicut diximus, hoc est substantiæ proprie et non appropriate : quod enim non proprie sed appropriate substantia est, et non secundum naturam et secundum essentialitatem suam substantia est, sed habet ad id quod est quædam substantia proportionalitatem, sicut color se habet ad albedinem quando diffinitur albedo : et ideo dicit Aristoteles, quod si quis albedine posita, dixerit per diffinitionem quod positum est, colorem esse, quid est dicit, sed quale significat. Non enim est substantia sed proportionem habet ad substantiam, quæ est causa substantiæ per hoc quod in diffinitione speciei essentialiter est sicut genus in specie, et hoc est per similitudinem proportionis et non per naturæ veritatem.

Cum vero dicitur principaliter substantia, principale dicitur id quod est primum et per se non per aliud neque per accidens substandi et fundandi principium : hoc enim non habet ab alio sicut substantia secunda ab alio habet quod substat, non quidem quod in ea sit nisi in potentia, quia prima substantia non est in secunda, neque secundum actum, neque secundum intellectum : sed habet a prima substantia secundum quod ipsa quæ dicitur secunda substantia, quæ quædam notio est totius primæ substantiæ, totum esse suum dicens in potentia non in actu : in actu enim non dicitur totum esse ipsius nisi nomine individui, potentia autem est ab actu aliquo primo in ordine rerum omnium et generum. Et, sicut diximus, maxime dicitur : quia omnibus quæ insunt, substat quocumque modo aliquid sit in aliquo et salvat in esse omnia secundum naturam, quod solum esse est perfectum et verum : et tale esse non habet secunda substantia, prout secunda substantia est : et ideo in tali esse fundare non potest aliquid.

Quod autem in diffinitione ponitur *dicitur* et non ponitur *est*, causa est quia diffinitio datur de substantia secundum quod inotescit per nomen substantiæ, et non datur secundum principia, quæ substantiam in esse substantiæ constituunt : secundum autem quod innotescit in nomine, magis convenit dici quam esse.

Note, however, that it is not the same *not to be said of a subject* and *to be said not of a subject*: for not to be said of a subject is that which indeed can be said and predicated, but it does not have under itself that in which it essentially is according to the order of the predicamental line of which it is predicated. To be said not of a subject, this is that from first substance there is no ordered predication: therefore it is said that it is neither of a subject. But because to be in in no way belongs to it, since all other things are in it, and are saved in the being of nature through this that they are in it in some way, therefore it was impossible for first substance itself to be in anything. And as we have said, this belongs to substance properly and not appropriately: for that which is not properly but appropriately substance, and is not substance according to nature and according to its essentiality, but has a certain proportionality to that which is a substance, just as color has itself to whiteness when whiteness is defined: and therefore Aristotle says, that if someone, whiteness being posited, should say through the definition that what was posited is color, he says what it is, but signifies of what sort. For it is not substance but has a proportion to substance, which is the cause of substance through this that it is essentially in the definition of the species just as a genus in a species, and this is through the similitude of proportion and not through the truth of nature.

When, however, it is called principally substance, that is called principal which is the first and through itself—not through another nor through accident—principle of substanding and founding: for it does not have this from another as second substance has from another that it substands, not indeed that it is in it except in potency, because first substance is not in second [substance], neither according to act, nor according to understanding: but it has from first substance according as that which is called second substance is a certain notion of the whole first substance, saying its whole being in potency not in act: for in act its whole being is not said except by the name of the individual, but potency is from some first act in the order of all things and genera. And, as we have said, it is called maximally: because to all things which are in, it substands in whatever way something may be in something and saves all things in being according to nature, which being alone is perfect and true: and second substance does not have such being, insofar as it is second substance: and therefore in such being it cannot found anything.

But that in the definition there is placed *it is said* and there is not placed *it is*, the cause is because the definition is given concerning substance according as it becomes known through the name of substance, and it is not given according to the principles which constitute substance in the being of substance: but according as it becomes known in the name, it more properly belongs to it to be said than to be.

Exempla autem non sunt posita de individuo signato sed de individuo vago : ideo quia hoc individuum habet aliquid de natura speciei, ut in scientia de universalibus dicimus, et ideo attingit naturam incorruptionis et æternitatis, et sic magis convenit scientiæ : taliter enim descendente a generalissimis usque ad specialissima jubet Plato quiescere, eo quod de talibus propter suam infinitatem non potest esse disciplina. Hæc etiam individuum vagum aliquid de speciei prædicatione ; propter quod in doctrina prædicabilium convenientius est exemplum per individuum vagum quam per individuum signatum. Hoc est igitur substantia ad quam est omnium aliorum prædicabilium reductio : et non est substantia secunda ad quod omnia reduci possunt, et ideo dicitur esse prima : et in ordine reductionis omnium ad unum, primam ipsam esse necesse est. Hæc igitur sint dicta de prima substantia.

CAPUT III. ### *De secundis substantiis quæ sint, et qualiter ipsæ solæ prædicantur de primis nomine et ratione.*

Secundæ vero substantiæ dicuntur species in quibus illæ quæ principaliter substantiæ dicuntur insunt, sicut contentum est in communi continente, quod supposita sua ut partes continet subjectivas, sicut species continet individua quæ sunt sub ipsa specie. Ergo species sunt secundæ substantiæ, et genera ipsarum, quæ ipsas species continent, sunt secundæ substantiæ : ut aliquis homo in specie quidem est in homine contentum : cum autem sit animal speciei illius genus, erit etiam in animali sicut in genere, et ideo animal est secunda substantia. Secundæ igitur substantiæ dicuntur, ut homo species, et animal genus, et sic est de omnibus aliis speciebus et generibus.

Attendendum autem, quod secundum veritatem sunt tres substantiæ formales. Sunt enim formæ quæ sunt tantum formantes : et illæ sunt primæ formæ procedentes a lumine agentis intellectus ad rei constitutionem, sicut lumen quod est coloris formalis et substantialis causa procedens ad corpus terminatum in perspicuo. Et sunt formæ substantiales quæ sunt cum eo ingredientes in esse rei et constituentes, quæ sunt sicut lumen causa coloris, qui jam diffunditur in superficie perspicui : et illæ sunt conjunctæ substantiæ formales rei ipsius quæ substantialiter est constituta. Et similiter substantiæ formales quæ sunt rem constituentes, quæ sunt sicut color est immutativus visus vel motivus secundum actum lucidi sive perspicui, qui abstractus a colorato corpore determinado secundum esse spirituale est in perspicuo, et secundum esse speciei et animale sive intentionale est in oculo percipiente colorem.

Examples, moreover, have not been posited of a marked individual but of a vague individual: for this reason, because this individual has something of the nature of the species, as we say in the science of universals, and therefore it touches the nature of incorruption and eternity, and thus it more properly belongs to science: for Plato commands [one] to rest when thus descending from the most general down to the most specific, for the reason that concerning such things on account of their infinity there cannot be a discipline. This vague individual also [has] something of the predication of the species; on account of which in the doctrine of the predicables it is more convenient to give an example through a vague individual than through a marked individual. This, therefore, is the substance to which there is the reduction of all other predicables: and it is not second substance to which all things can be reduced, and therefore it is said to be first: and in the order of the reduction of all things to one, it is necessary for it to be first. Let these things, therefore, be said concerning first substance.

CHAPTER III. ### *Concerning second substances, what they are, and how they alone are predicated of first [substances] by name and account.*

Second substances, moreover, are called the species in which those which are called substances principally are in, just as a contained [thing] is in a common container, which contains its suppositions as subjective parts, just as a species contains the individuals which are under the species itself. Therefore species are second substances, and their genera, which contain the species themselves, are second substances: as some man in a species indeed is a contained [thing] in "man": but since "animal" is the genus of that species, he will also be in "animal" just as in a genus, and therefore "animal" is a second substance. Second substances are called, therefore, as "man" the species, and "animal" the genus, and thus it is concerning all other species and genera.

It must be noted, however, that according to truth there are three formal substances. For there are forms which are only forming: and those are the first forms proceeding from the light of the agent intellect to the constitution of the thing, just as the light which is the formal and substantial cause of color proceeding to a body terminated in the diaphanous. And there are substantial forms which are entering with it into the being of the thing and constituting [it], which are just as light is the cause of color, which is already diffused on the surface of the diaphanous: and those are the conjoined formal substances of the thing itself which is substantially constituted. And similarly formal substances which are constituting the thing, which are just as color is disruptive of sight or motive according to the act of the lucid or diaphanous, which being abstracted from a determined colored body according to spiritual being is in the diaphanous, and according to the being of the species and the animal or intentional [being] is in the eye perceiving the color.

Primæ igitur magis sunt facientes, virtutem causativam sive formativam habentes a lumine intellectus agentis, et istæ de re constituta non prædicantur. Secundæ autem formæ sunt materiam et compositum perficientes, in composito quiescentes : et ideo non prædicantur de re in qua sunt sicut nec primæ. Tertiæ sunt a rebus abstractæ, et sunt rerum constitutarum intentiones et notiones, et.

ideo prædicantur de ipsis nomine, et ratione : propter quod etiam secundæ substantiæ dicuntur, non quia simpliciter substantiæ sint sicut primæ, sed quia sunt secundæ, hoc est, hoc secundo loco substantiæ, sicut primæ substantiæ dicuntur primæ, quæ primo loco vel ordine dicuntur substantiæ, perfectam participantes substantiæ rationem.

Ad perfectam autem substantiam et rationem perfectæ substantiæ tria requiruntur : quorum unum et primum est, quod perfectissimum esse in natura et actu habeant, et non esse intentionale vel intellectuale tantum : et hoc esse non habent species et genera secundum quod hujusmodi. Secundum autem est, quod secundum se substet, et in se fundet ad esse quæcumque sunt rerum. Hoc non habent secundæ substantiæ, quia fundantur in primis et non fundant eas in esse. Tertium est, quod aliis fundandi et substandi virtutem tribuant : sicut quod secundæ substantiæ consequenter substant accidentibus, consequenter habent a primis. Consequenter autem dico : quia sicut in generatione hic generat hunc secundum naturam, sed quia hic generans est homo et hic generatus est homo, ideo consequenter sequitur, quod homo generat hominem : ita hic homo est albus, et quia hic est homo, et hoc album est album, ideo sequitur quod homo est albus, cum tamen albedo sit de accidentibus individui, et non de accidentibus speciei, nec accidit speciei nisi differentia individui. Et sic non est de proprio : quia secundum naturam proprii primo accidit speciei, et per speciem venit ad individuum. Sic ergo secunda substantia dicitur, quod secundo stat, ut substantia communis non æqualiter prædicetur de prima substantia et de secundâ : ut cum dicitur, substantiarum alia prima, alia secunda, sit divisio multipliciter dicti secundum hoc quod substantia dicitur ab actu et causa substandi : et in hac intentione hic dicitur substantia, aut sequeretur non esse verum quod in sequentibus probabitur, quod scilicet destructis primis substantiis impossibile sit aliquid aliorum remanere.

The first, therefore, are more "making," having a causative or formative power from the light of the agent intellect, and these are not predicated of the constituted thing. But the second forms are perfecting the matter and the composite, resting in the composite: and therefore they are not predicated of the thing in which they are, just as neither are the first. The third are abstracted from things, and are the intentions and notions of the constituted things, and.

therefore they are predicated of them by name and account: for which reason they are also called second substances, not because they are substances simply just as the first are, but because they are second, that is, in this second place substances, just as first substances are called first, which in the first place or order are called substances, participating in the perfect account of substance.

Moreover, for perfect substance and the account of perfect substance three things are required: one and the first of which is, that they have the most perfect being in nature and in act, and not intentional or intellectual being only: and species and genera, insofar as they are such, do not have this being. The second is, that it substands according to itself, and in itself founds to being whatever things of reality there are. Second substances do not have this, because they are founded in the first and do not found them in being. The third is, that they bestow the power of founding and substanding to others: just as that second substances consequently substand to accidents, they consequently have from the first. And I say "consequently": because just as in generation "this [one] generates this [one]" according to nature, but because this generator is a man and this generated is a man, therefore it consequently follows that "man generates man": so "this man is white," and because this is a man, and this white is white, therefore it follows that "man is white," although nevertheless whiteness is among the accidents of the individual, and not among the accidents of the species, nor does it happen to the species except by the difference of the individual. And it is not thus concerning the proper [attribute]: because according to the nature of the proper, it first happens to the species, and through the species comes to the individual. Thus, therefore, it is called second substance, because it stands secondly, so that common substance is not equally predicated of first substance and of second: so that when it is said, "of substances one is first, another second," it is a division of a multiple-said thing according to this that substance is said from the act and cause of substanding: and in this intention it is here called substance, or it would follow that what will be proved in the following things is not true, namely that first substances being destroyed, it is impossible for anything else to remain.

Objicitur tamen sophistice contra ea quæ dicta sunt, quia prius sunt quæ sunt causæ et diffinientia quam causata et diffinita : secundæ autem substantiæ sunt causæ, quare substantiæ primæ sunt substantiæ, sunt enim genera diffinientia species, species autem sunt totum esse formale et formaliter substantiæ individuorum : videtur ergo quod illæ quæ sunt substantiæ secundæ vocatæ sunt primæ, et quæ sunt primæ vocatæ sunt secundæ. Et ad hoc dicunt sophistice quidam, quod secundum ordinem et rationem essendi procul dubio illæ quæ dicuntur secundæ sunt primæ, sicut probat objectio, et illæ quæ sunt primæ vocatæ sunt secundæ : sed secundum actum substandi et subsistendi individua substantiæ sunt primæ substantiæ, et species et genera sunt secundæ. Sed aliter dicendum est quod hic communis substantia potest esse intentio ejus substantiæ quæ est in re et causa formalis et notio rei, et sic secunda substantia erit prima et prima secunda : vel potest esse universale abstractum a re, et sic est consequens esse rei et universale, et non est subjectum, sed accidens, ut dicit Aristoteles. Sic ergo universale quod est genus et universale quod est species, accepta ut notiones essentiales formæ totius esse rei in potentia vel in actu, secundæ substantiæ sunt, hoc est, secundo substantes, et secundo in esse naturæ et actu subsistentes : et hoc modo intelligit Aristoteles. Substantiam autem quæ communis est ad primam et secundam non diffinit Aristoteles quia multipliciter est dicta de illis.

Ex his autem quæ in præhabitis determinata sunt, manifestum est quia eorum quæ de subjecto dicuntur, necesse est et unum nomen et unam rationem prædicari de subjecto :.

ut de aliquo homine particulari, et ratio diffinitiva et nomen prædicatur hominis : quod exemplo probatur, quia quidam homo homo est et sic nomen prædicatur : et est animal rationale mortale et sic prædicatur ratio. Aliter enim non esset verum quod in præhabitis determinatum est per illud principium : dum alterum de altero ut de subjecto prædicatur, quæcumque de prædicato dicuntur, omnia de subjecto dicuntur : tale enim prædicatum est in diffinitione subjecti, et ideo dat subjecto et nomen et rationem, sicut in physicis ostensum est.

Eorum vero quæ sunt in subjecto directe in linea recta prædicamentali supposito, ut in pluribus neque nomen, neque ratio prædicatur de his quibus insunt subjectis : in abstractis enim neque nomen prædicatur neque ratio, quia corpus non est albedo, neque anima grammatica. In quibusdam vero sicut in concretis nihil prohibet aliquando prædicari nomen accidentaliter de subjectis in quibus sunt, rationem vero diffinitivam ipsorum prædicari de ipsis est impossibile.

However, a sophistic objection is made against those things which have been said, because those things which are causes and defining are prior to the caused and defined: but second substances are the causes why first substances are substances, for they are the genera defining the species, and the species are the whole formal being and formally the substances of individuals: it seems therefore that those which are called second substances are first, and those which are called first are second. And to this some say sophistically, that according to the order and account of being, without doubt those which are called second are first, as the objection proves, and those which are called first are second: but according to the act of substanding and subsisting, the individual substances are the first substances, and the species and genera are second. But it must be said otherwise, that here common substance can be the intention of that substance which is in the thing and the formal cause and notion of the thing, and thus second substance will be first and first will be second: or it can be a universal abstracted from the thing, and thus it is a consequent of the being of the thing and a universal, and is not a subject, but an accident, as Aristotle says. Thus, therefore, the universal which is a genus and the universal which is a species, taken as essential notions of the form of the whole being of the thing in potency or in act, are second substances, that is, second substanding, and second subsisting in the being of nature and in act: and in this way Aristotle understands. But substance which is common to the first and the second Aristotle does not define because it is said in multiple ways of them.

From these things which have been determined in the pre-established things, it is manifest that of those things which are said of a subject, it is necessary for both one name and one account to be predicated of the subject:.

as concerning some particular man, both the definitive account and the name of "man" are predicated: which is proved by an example, because some man is a man and thus the name is predicated: and he is a mortal rational animal and thus the account is predicated. For otherwise it would not be true what was determined in the pre-established things through that principle: while one thing is predicated of another as of a subject, whatever things are said of the predicate, all are said of the subject: for such a predicate is in the definition of the subject, and therefore it gives to the subject both name and account, just as has been shown in the *Physics*.

But of those things which are in a subject directly in the straight predicamental line of the supposition, in most cases neither the name nor the account is predicated of those subjects in which they are: for in abstract things neither the name is predicated nor the account, because a body is not whiteness, nor is a soul grammar. In some things indeed, as in concrete things, nothing prohibits the name from being predicated accidentally at times of the subjects in which they are, but for their definitive account to be predicated of them is impossible.

Cujus exemplum est ut album, quod cum in subjecto sit corpore, prædicatur nomine de subjecto : dicitur enim vera prædicatione accidentali, corpus est album : ratio vero diffinitiva albi nunquam prædicatur de corpore.

Hujus autem causa pro certo est, quod subjectum hinc et inde non dicitur secundum unam et eamdem rationem : cum enim quod est de subjecto, dicatur dare nomen et rationem subjecto, dicitur subjectum in recta linea secundum prædicabilium essentialium ordinem suppositum : cum autem dicitur quod ea quæ sunt in subjecto non dant rationem suam subjecto, quamvis aliquando dent nomen, non dicitur subjectum ens in se perfectum et occasio et aliquo modo causa alterum a substantia existendi in ipso, ut dicit Avicenna. Et quia non eodem modo dicitur subjectum, non est mirabile si diverso modo prædicatur.

Videtur tamen inconveniens quod dicitur, si loco nominis ponatur diffinitio, quod facere licet, ut docet Aristoteles, tunc videbitur quod de necessitate tale prædicatum subjecto suo dat nomen et rationem. Si enim dicatur, corpus est album, et album est coloratum disgregativum visus, videtur sequi quod corpus sit coloratum disgregativum visus. Ad hoc autem quidam respondere nituntur, quod accidens rationem non habet, et quod rationem diffinitivam substantiæ dare non potest. Quod autem rationem non habeat, nituntur probare per Aristotelem, qui videtur hoc idem dicere et probare : quia in diffinitione accidentis præcipue per denominationem prædicati cadit subjectum : est enim album corpus albedine coloratum, et hic diffinitur tale accidens, quod oportet, quod per accidens sibi essentiale diffiniatur sicut album per coloratum. Si ergo in intellectu albi est corpus propter hoc quod accidentis esse est inesse, oportet etiam quod in colorato intelligatur corpus per eamdem rationem : et adhuc tertio intelligatur in eo quod dicitur visus disgregativum, quia etiam hoc est accidens, et sic corpus album erit corpus coloratum et corpus visus disgregativum : talis autem diffinitio in qua idem multoties dicitur, nulla est, nulla ergo est diffinitio accidentis. Sed ista solutio contra Aristotelem est, quia Aristoteles dicit, aliquando nomine, nunquam autem de subjecto cui inest prædicatur ratione : et sic supponit accidens habere rationem. Dicens ergo quod accidens ideo de subjecto cui inest non prædicatur ratione, quia non habet rationem, est contra Aristotelem. Adhuc autem in *primo Topicorum* dicit, quod albedine posita si quis dixerit quod positum est colorem esse, quid etiam dicit : et qui dixerit quod positum est, colorem.

diffusum in clara superficie esse, quid dicit albedinis per diffinitionem : vel si dixerit album esse coloratum disgregativum visus, dicit diffinitionem albi per causam datam : et hæ sunt rationes diffinitivæ.

An example of this is as "white," which although it is in the body as a subject, is predicated by name of the subject: for it is said by a true accidental predication, "the body is white": but the definitive account of "white" is never predicated of the body.

The cause of this for certain is, that "subject" here and there is not said according to one and the same account: for when that which is "of a subject" is said to give name and account to the subject, the subject is said [to be] a supposition in the straight line according to the order of essential predicables: but when it is said that those things which are "in a subject" do not give their account to the subject, although at times they give the name, the subject is not said [to be] a being perfect in itself and an occasion and in some way a cause for something other than substance existing in it, as Avicenna says. And because "subject" is not said in the same way, it is not marvelous if it is predicated in a different way.

It seems however inconvenient what is said, [that] if in place of the name the definition is put, which it is permitted to do, as Aristotle teaches, then it will be seen that by necessity such a predicate gives name and account to its subject. For if it is said, "the body is white," and "white is colored disruptive of sight," it seems to follow that "the body is colored disruptive of sight." To this, however, some strive to respond, that an accident does not have an account, and that it cannot give a definitive account to a substance. But that it does not have an account, they strive to prove through Aristotle, who seems to say and prove this same thing: because in the definition of an accident the subject falls in chiefly through the denomination of the predicate: for "white" is a body colored by whiteness, and here such an accident is defined, because it is necessary that it be defined through an accident essential to itself just as "white" through "colored." If therefore in the understanding of "white" there is "body" because the being of an accident is to be in, it is also necessary that in "colored" there be understood "body" through the same reason: and yet thirdly it is understood in that which is called "disruptive of sight," because this also is an accident, and thus "white body" will be "colored body" and "body disruptive of sight": but such a definition in which the same thing is said many times is nothing, therefore there is no definition of an accident. But this solution is against Aristotle, because Aristotle says, [that it is] sometimes [predicated] by name, but never predicated by account of the subject in which it is: and thus he supposes the accident to have an account. Therefore, saying that an accident for that reason is not predicated by account of the subject in which it is, because it does not have an account, is against Aristotle. Moreover, in the *first [book] of the Topics* he says, that whiteness being posited if someone should say that what was posited is color, he says what it is: and he who should say that what was posited is color.

diffused in a clear surface, he says what the [nature] of whiteness is through the definition: or if he should say that "white" is "colored disruptive of sight," he says the definition of "white" through the given cause: and these are definitive accounts.

Dicendum ergo secundum doctrinam Aristotelis quod accidens habet rationem, etsi non habet rationem secundum perfectam rationem diffinitionis sicut substantia : diffinitio autem accidentis sumitur ex principiis subjecti quæ sunt causa accidentis : et sicut accidens et inest subjecto et demonstratur de subjecto per causam quam dicit accidentis diffinitio. Quando autem dicit Aristoteles quod accidens nomine prædicatur aliquando, nunquam autem ratione, intelligit quod nihil prædicatur ratione nisi quod rationem suam dat subjecto sicut dat nomen : quod scilicet sicut nomen dicit id quod est essentiale subjecto, ita et ratio illius nominis dicat omnia quæ sunt in subjecto essentialia, ita quod nihil ponatur in ratione quod non sit de essentia subjecti, aut sicut potentia, aut sicut actus. Sic autem accidens etsi nomen det, nunquam dat rationem, quia quæ sunt essentialia accidenti sunt accidentalia subjecto, et extra naturam ejus : nulla autem est ratio talis. Nominis autem prædicatio in accidentali non repugnat : sed prædicatio rationis ut ratio est penitus repugnat accidentali prædicationi. Si enim prædicetur diffinitio ut diffinitio, non prædicatur nisi de suo diffinito. De hoc autem non prædicatur, nisi ut substantia ipsius et quidditas. Hic ergo est intellectus, quod dat quidem nomen, cui non repugnat accidentalis prædicatio, quia nomen prout notio potest substantialiter et accidentaliter prædicari : hoc nunquam dat rationem ut rationem, quia ratio accidentali repugnat prædicationi.

CAPUT IV. ### *Quod destructis primis substantiis impossibile sit aliquid aliorum remanere.*

Manifestum est autem ex his quæ dicta sunt, quod cætera prædicabilia omnia sive substantiæ, sive differentiæ, sive accidentia propria, vel communia, aut dicuntur de principalibus et primis substantiis ut de subjectis sibi directe in linea prædicamentali, sicut substantiæ secundæ, aut sunt in eis sicut in subjectis ab accidentibus quæ insunt denominatis. Sequitur igitur hæc consequentia, si secundæ substantiæ sunt de primis et accidentia in primis substantiæ primæ sunt, ergo a destructione consequentis si primæ substantiæ non sunt, impossibile est esse aliquid eorum, sive sit de numero secundarum substantiarum, sive sit de numero accidentium. Hoc autem facile manifestum fiet ex his quæ nunc dicenda sunt. Proponantur igitur singula cæterorum quæ sunt alia a primis substantiis. Et primo proponantur de secundis substantiis quæ prædicantur de primis.

It must be said, therefore, according to the doctrine of Aristotle, that an accident has an account, although it does not have an account according to the perfect account of a definition just as a substance [does]: but the definition of an accident is taken from the principles of the subject which are the cause of the accident: and just as the accident both is in the subject and is demonstrated of the subject through the cause which the definition of the accident expresses. But when Aristotle says that an accident is predicated sometimes by name, but never by account, he understands that nothing is predicated by account except that which gives its account to the subject just as it gives the name: that namely, just as the name says that which is essential to the subject, so also the account of that name says all things which are essential in the subject, so that nothing is placed in the account which is not of the essence of the subject, either as potency or as act. But an accident, even if it gives the name, never gives the account, because the things which are essential to the accident are accidental to the subject, and outside its nature: but there is no such account. Moreover, the predication of the name in an accidental [predication] is not repugnant: but the predication of the account as an account is utterly repugnant to accidental predication. For if a definition is predicated as a definition, it is not predicated except of its own defined [thing]. But it is not predicated of this, except as its substance and quiddity. This, therefore, is the understanding: that it indeed gives the name, to which accidental predication is not repugnant, because the name insofar as it is a notion can be predicated substantially and accidentally: this never gives the account as an account, because the account is repugnant to accidental predication.

CHAPTER IV. ### *That first substances being destroyed, it is impossible for anything else to remain.*

It is manifest, moreover, from these things which have been said, that all other predicables—whether substances, or differences, or proper or common accidents—either are said of the principal and first substances as of subjects directed to themselves in the predicamental line, just as second substances, or they are in them just as in subjects denominated from the accidents which are in. There follows, therefore, this consequence: if second substances are "of" first [substances] and accidents are "in" first [substances], then from the destruction of the consequent, if first substances are not, it is impossible for there to be any of them, whether it be of the number of second substances, or of the number of accidents. But this will easily become manifest from these things which are now to be said. Let each of the other things which are other than first substances be proposed. And first let them be proposed concerning second substances which are predicated of the first.

Dico quod animal de homine prædicatur ut genus de specie : prædicabitur ergo utrumque istorum, animal scilicet et homo, quæ sunt genus et species et secundæ substantiæ, etiam de quodam homine ut de particulari. Si enim diceretur, quod non de aliquo prædicatur (quod est oppositum contradictorie ejus quod est prædicari de aliquo, cum non de aliquo et de nullo prædicari æquipolleant) sequeretur quod animal de nullo prædicatur homine, et sic non prædicabitur animal de homine : datum autem erat quod de homine prædicaretur, prædicabitur ergo et de quodam homine : non autem prædicabitur aliquid de aliquo, nisi per hoc quod inest illi secundum doctrinam, quæ jam præcessit de *Universalibus* : animal igitur et homo sunt in quodam homine. Similiter probatur de accidente quod.

est in prima substantia : est enim color in corpore, igitur in aliquo corpore. Si autem non in aliquo est singulorum corporum, sequitur quod in nullo est corpore, et sic omnino non est in corpore : datum autem fuerat quod erat in corpore, sequitur igitur quod est in aliquo corpore. Quæcumque autem sunt in aliquo, non habent esse extra illud. Substantiae autem quæ sunt secundæ substantiæ et accidentia sunt in prima substantia secundum esse. Nullum igitur habent esse extra illius esse : omnia igitur alia de substantiis principalibus dicuntur, aut in eis sunt sicut in subjectis : ergo non existentibus primis substantiis, ita quod nulla primarum substantiarum sit, impossibile est esse vel remanere in esse aliquod aliorum. Sed omnia alia aut de subjectis primis substantiis dicuntur, aut in subjectis eis sunt : et quæcumque altero istorum modorum se habent ad primam substantiam, non habent esse nisi in prima substantia, et non habent esse extra ipsam : sed si non sit prima substantia, tunc non habent esse in prima substantia, ergo destructa prima substantia secundum esse, nihil remanet secundarum substantiarum vel accidentium.

Et hoc quidem contrarium videtur ad illud quod in doctrina de *quinque universalibus* dictum est, quod scilicet destructo quolibet homine et qualibet alia specie animalis et quolibet individuo adhuc remanet animal : remanet enim substantia animata sensibilis.

Adhuc autem secundæ substantiæ priora sunt, quia sunt de constitutione ultimorum quæ dicuntur substantiæ primæ. Sed posterioribus destructis non sequitur destructio eorum quæ priora sunt.

Adhuc ab inferioribus non valet ad superius argumentationis processus, nisi affirmando et non negando. Si autem vera sunt quæ hic dicuntur, tunc locus ab inferiori ad superius valet destruendo sive negando, quod est inconveniens : arguitur enim sic, inferius non est, ergo superius non est, quod non sequitur ; sed e converso, superius non est, ergo inferius non est.

I say that "animal" is predicated of "man" as a genus of a species: therefore both of these, namely "animal" and "man," which are genus and species and second substances, will be predicated also of a certain man as of a particular. For if it were said that it is not predicated of any [one] (which is the contradictory opposite of that which is to be predicated of some [one], since "not of any" and "of none" are equivalent), it would follow that "animal" is predicated of no man, and thus "animal" would not be predicated of "man": but it had been given that it was predicated of "man," therefore it will be predicated also of a certain man: but nothing will be predicated of anything, except through this that it is in it according to the doctrine which has already preceded concerning *Universals*: therefore "animal" and "man" are in a certain man. Similarly it is proved concerning an accident that.

is in a first substance: for color is in a body, therefore [it is] in some [particular] body. But if it is not in any one of the individual bodies, it follows that it is in no body, and thus it is not in a body at all: but it had been given that it was in a body, therefore it follows that it is in some [particular] body. Moreover, whatever things are in something do not have being outside of it. But substances which are second substances and accidents are in first substance according to being. Therefore they have no being outside of its being: therefore all other things are either said of principal substances, or they are in them as in subjects: therefore, if first substances do not exist, so that none of the first substances is, it is impossible for any of the others to be or to remain in being. But all other things are either said of first substances as subjects, or they are in them as subjects: and whatever things relate to first substance in either of these two ways do not have being except in first substance, and do not have being outside of it: but if there is no first substance, then they do not have being in first substance; therefore, first substance being destroyed according to being, nothing remains of second substances or accidents.

And this indeed seems contrary to what was said in the doctrine of the *five universals*, namely that if any man and any other species of animal and any individual were destroyed, "animal" would still remain: for animated sensible substance remains.

Furthermore, second substances are prior, because they are of the constitution of the ultimate things which are called first substances. But the destruction of those things which are prior does not follow when posterior things are destroyed.

Furthermore, from inferiors to a superior the process of argumentation is not valid except by affirming and not by denying. But if the things which are said here are true, then the place from the inferior to the superior is valid by destroying or denying, which is inconvenient: for it is argued thus: the inferior is not, therefore the superior is not, which does not follow; but conversely: the superior is not, therefore the inferior is not.

Ad hæc autem dicendum, sicut in doctrina *Universalium* meminimus nos dixisse, quod superiora esse actuale secundum naturam non habent, et esse perfectum ultima perfetione, nisi in individuis, quæ sola perfectum esse in natura attingunt, et quod omnia quæ sunt in genere et specie, esse habent in potentia et indeterminatum et confusum et fluidum quousque illud attingunt : et ideo illis non existentibus, nihil aliorum habet esse actuale in natura et determinatum.

Ad ea autem quæ contra hoc objiciunt, dicendum quod priora secundum naturam non destruuntur ut priora, destructis sequentibus posterioribus, secundum esse priorum : et sic destructis individuis remanet esse eorum quæ natura priora sunt individuis, et destructis speciebus remanet esse eorum quæ speciebus priora sunt secundum esse illud quo priora sunt eis : hoc autem est esse intellectuale quo sunt genera et species, et non est esse actuale perfectum in natura : quo ad hoc enim destruuntur destructis primis, quia tale esse non habent nisi in primis.

Ad hoc autem quod objicitur de loco ab inferiori ad superius, qui non valet nisi affirmando, dicimus quod hoc verum est : sed non est locus ab inferiori, sed est locus a partibus sufficienter enumeratis sicut hic : hoc non habet esse nisi in A, et B et C ; si igitur nec est A, nec B, nec C, sequitur necessario ipsum non esse, et hoc quidem est verum. Sic ergo verum est quantum ad esse actuale in natura perfectum, quod destructis primis et principalibus substantiis impossibile est aliquid aliorum secundum esse tale remanere.

Si quis autem opponat et dicat quod non sequitur quod si non remaneat secundum tale esse, quod non remaneat secundum esse simpliciter. Dicendum quod

tale esse est esse simpliciter, et omne aliud esse est esse secundum quid : unde si secundum tale esse non remaneret, simpliciter quidem non remaneret, sed maneret secundum quid : et sic loquitur Aristoteles.

CAPUT V. ### *Quod species sint magis substantiæ quam genera, non sic autem species specialissima respectu alterius specialissimæ.*

Secundarum vero substantiarum magis sunt substantiæ species quam genera propter eamdem rationem quæ dicta est ; species enim propinquior est primæ substantiæ quam genus secundum descensum in linea prædicamentali : et quia propinquior est, magis determinat de esse ipsius. Et hoc probatur per hoc quod si quis interrogatus de prima substantia quid est, ut quid est aliquis homo, assignet respondens ad quæstionem quid est prima substantia, evidentius et manifestius assignabit quid est prima substantia, speciem proferens in responsione quam proferendo genus :

To these things, however, it must be said, as we remember having said in the doctrine of *Universals*, that superiors do not have actual being according to nature, nor perfect being with the ultimate perfection, except in individuals, which alone attain perfect being in nature, and that all things which are in genus and species have being in potency and [as] indeterminate and confused and fluid until they attain that [individual being]: and therefore, if those [individuals] do not exist, nothing of the others has actual and determinate being in nature.

To those things which they object against this, it must be said that things prior according to nature are not destroyed as prior when the following posterior things are destroyed, according to the being of the prior things: and thus, individuals being destroyed, the being of those things which are prior by nature to individuals remains, and species being destroyed, the being of those things which are prior to species remains according to that being by which they are prior to them: but this is the intellectual being by which they are genera and species, and it is not actual perfect being in nature: for as to this, they are destroyed when the first are destroyed, because they do not have such being except in the first.

As to what is objected concerning the place from the inferior to the superior, which is not valid except by affirming, we say that this is true: but it is not a place from the inferior, but it is a place from parts sufficiently enumerated as here: this does not have being except in A, and B, and C; if therefore it is neither A, nor B, nor C, it follows necessarily that it itself is not, and this indeed is true. Thus, therefore, it is true as to actual perfect being in nature, that first and principal substances being destroyed, it is impossible for anything of the others to remain according to such being.

If anyone, however, should oppose and say that it does not follow that if it does not remain according to such being, it does not remain according to being simply. It must be said that

such being is being simply, and every other being is being in a certain respect: hence if it did not remain according to such being, it would indeed not remain simply, but it would remain in a certain respect: and so Aristotle speaks.

CHAPTER V. ### *That species are more substances than genera, but not thus a most specific species with respect to another most specific [species].*

Of second substances, indeed, species are more [truly] substances than genera for the same reason which has been said; for a species is closer to first substance than a genus according to the descent in the predicamental line: and because it is closer, it more [precisely] determines its being. And this is proved by the fact that if someone, having been asked concerning a first substance "what is it?", as "what is a certain man?", the respondent, assigning [the answer] to the question "what is the first substance?", will assign what the first substance is more evidently and manifestly by proffering the species in the response than by proffering the genus:

species enim est totum formale esse cujusdam hominis : esse autem hominis in genere non est totum sed secundum partem, et est communitate generis confusum : unde sicut determinatius est esse cujusdam hominis in quodam homine quam in homine, sic determinatius est esse cujusdam hominis in specie quam in genere : assignando ergo hominem manifestius assignabis quid est quiddam homo, quam assignando animal esse in specie : sicut esse hominem magis est proprium alicui homini quam esse in genere ut esse animal : esse namque animal est esse communius et magis confusum et indeterminatum quam esse hominem, sicut patet in similibus inducendo. Cum enim interrogatus fueris quid sit aliqua arbor? et dixeris aliquam arborem esse secundum speciem, manifestius et certius quid est quædam arbor assignabis quam si dixeris plantam esse.

Ergo a simili et quemdam hominem assignando dicens esse hominem, manifestius quidem assignabis quid est, quam si dixeris eumdem animal esse.

Amplius hoc quidem probatur alia ratione : principales enim substantiæ ideo principales dicuntur, eo quod omnibus aliis substant et subjectæ sunt, et alia omnia aut de his prædicantur aut sunt in ipsis, sicut dictum est : ideo enim maxime substantiæ in physicis sunt vocatæ. Sicut autem primæ substantiæ in substando et fundando in esse actuali ad omnia alia se habent, sic et species se habent ad genera : subjacet enim generi species ut determinans confusionem ejus ad esse formale ultimum : et hoc probatur ex hoc quod genera de speciebus prædicantur sicut magis commune de minus communi, et sicut totum de parte cujus est totum. Species autem de generibus minime prædicantur, eo quod non convertitur, quod sicut genus de specie universaliter prædicatur, sic prædicetur species de genere. Sequitur ergo ex his quod species magis dicit substantiam et quid est primæ substantiæ quam genus.

Videtur tamen contra hoc objici, quia in quæstione quid est, magis dicit causam qui assignat causam illam quæ per se causa est, quam si assignat causam quæ per illam priorem habet quod est causa : sed generalissimum quod est omnium principium, per seipsum causa est in quæstione quid est, omnia alia inferiora per id sunt causa, et sic magis videtur dicere quid est, assignans genus, quam assignans speciem : quod si concedatur, contrarium est huic quod dictum est.

Adhuc autem cum in inferiori sit superius actu et intellectu, qui assignat id quod inferius est, assignat etiam id quod superius est : qui autem assignat quod superius, nec actu nec intellectu assignat quod inferior est, quia non est in ipso nisi secundum potentiam : plus igitur causam ejus quod quid est assignat qui.

for the species is the whole formal being of a certain man: but the being of man in the genus is not the whole but according to a part, and it is confused by the community of the genus: hence, just as the being of a certain man is more determinate in a certain man than in "man," so the being of a certain man is more determinate in the species than in the genus: therefore, by assigning "man," you will assign what a certain man is more manifestly than by assigning that "animal" is in the species: just as to be a man is more proper to some man than to be in a genus as to be an animal: for to be an animal is to be more common and more confused and indeterminate than to be a man, as is evident by inducing in similar cases. For when you have been asked "what is some tree?", and you have said that some tree is according to its species, you will assign what a certain tree is more manifestly and certainly than if you had said it is a plant.

Therefore, similarly, also in assigning a certain man by saying he is a man, you will indeed assign what he is more manifestly than if you had said the same [man] is an animal.

Moreover, this indeed is proved by another reason: for principal substances are called principal for this reason, that they stand under and are subjects for all other things, and all other things are either predicated of these or are in them, as has been said: for they were called substances most of all in the *Physics*. But just as first substances relate to all other things in standing under and founding them in actual being, so also do species relate to genera: for the species is subject to the genus as determining its confusion toward the ultimate formal being: and this is proved from the fact that genera are predicated of species as the more common of the less common, and as a whole of the part of which it is the whole. But species are predicated of genera least of all, because it is not converted, so that just as a genus is universally predicated of a species, so a species would be predicated of a genus. It follows, therefore, from these things that a species more [truly] expresses the substance and "whatness" of a first substance than a genus.

It seems, however, to be objected against this, because in the question "what is it?", he more [truly] states the cause who assigns that cause which is a cause *per se*, than if he assigns a cause which has its being a cause through that prior one: but the most general, which is the principle of all, is a cause *per se* in the question "what is it?", and all other inferior things are causes through it, and thus it seems more [truly] to say "what it is" by assigning the genus than by assigning the species: which if it be granted, it is contrary to what has been said.

Furthermore, since the superior is in the inferior in act and in intellect, he who assigns that which is inferior also assigns that which is superior: but he who assigns that which is superior assigns that which is inferior neither in act nor in intellect, because it is not in it except according to potency: therefore, he assigns more the cause of "that which it is" who.

assignat speciem quam ille qui assignat genus : et hoc est concedendum. Et quod objicitur quod qui assignat quod inferius est, assignat quod per aliud causa est : Dicendum quod inferius non est per aliud causa quod sit extra ipsum, et ideo non est causa omnino per aliud, sed per seipsum. Si autem esset per aliquid extra seipsum, tunc esset causa omnino per aliud : et ideo in quæstione quid est, melius assignat causam qui dicit speciem quam qui dicit genus. Manifestum est igitur quod inter secundas substantias magis est substantia species quam genus.

Sed ipsarum specierum quæcumque sunt species specialissimæ, ita quod nullo modo possunt esse genera, nihil magis altera quam altera est substantia : quia quælibet illarum æqualiter totum est esse suorum individuorum in forma ultima determinatum, cui in esse individui nihil additur nisi materia et accidens individuans. Quod probatur inducendo : quia si interrogatus fueris de aliquo homine quid est et de aliquo equo quid est, nihil familiarius assignabis ad esse hujus hominis pertinens sive determinans respondendo de aliquo homine ipsum hominem quam de aliquo equo equum : æque enim determinatum et certum est esse cujusdam hominis in homine, et esse cujusdam equi in equo. Æque igitur homo et equus, quæ sunt species specialissimæ, substantiæ sunt quantum ad actum substandi. Similiter autem et principalium substantiarum unius speciei quam alterius speciei, quæ ambæ sunt specialissimæ et non subalternæ subalternatim positæ, nihil magis principalis est substantia unius speciei quam principalis substantia alterius speciei, et magis vel minus substantia principalis quam altera : nihil enim magis est substantia principalis aliquis homo quam aliquis bos vel aliquis equus, sed æque sunt principales substantiæ omnia individua specierum.

Sed non sic est in generibus : quamvis enim genus sit generis superius usque ad generalissimum, non tamen sequitur quod genus generis sit tertia substantia et genus illius generis sit quarta substantia, et sic ascendendo sit quinta, et sexta, ita quod ultima sit generalissimum : quia in formis communibus quæ prædicantur, non est nisi confusum et determinatum per ultimum actum : et ideo non sunt nisi duæ in genere substantiæ secundum magis et minus, determinata quidem quæ est species et indeterminata quæ est genus : sed hoc verum est, quod in confuso est confusum, confusius, et confusissimum : sed hæc non faciunt gradum secundum speciem differentem, quia pluribus illorum confusum est et indeterminatum : merito ergo ea quæ ascendendo post principales substantias sunt inferiorum species et genera dicuntur

...assigns species than he who assigns genus: and this must be conceded. And to what is objected that he who assigns what is inferior, assigns what is a cause through another: It must be said that the inferior is not a cause through another which is outside of it, and therefore it is not a cause entirely through another, but through itself. But if it were through something outside of itself, then it would be a cause entirely through another: and therefore in the question of what something is, he better assigns the cause who says the species than he who says the genus. It is manifest therefore that among the second substances the species is more a substance than the genus.

But of the species themselves whatever are most special species, so that in no way can they be genera, one is no more a substance than another: because each of them equally is the whole being of its individuals determined in the ultimate form, to which in the being of the individual nothing is added except matter and the individuating accident. This is proven by induction: because if you are asked what some man is and what some horse is, you will assign nothing more familiar pertaining to or determining the being of this man responding concerning some man that he is a man than concerning some horse that it is a horse: for equally determinate and certain is the being of a certain man in man, and the being of a certain horse in horse. Therefore equally man and horse, which are most special species, are substances as regards the act of underlying. Similarly also of the principal substances of one species than of another species, which both are most special and are not subalternate placed in subalternation, the principal substance of one species is no more substance than the principal substance of another species, and one principal substance more or less than another: for some man is no more a principal substance than some ox or some horse, but all individuals of species are equally principal substances.

But it is not so in genera: for although a genus is genus of a genus superiorly all the way to the most general, it does not however follow that the genus of a genus is a third substance and the genus of that genus is a fourth substance, and thus ascending there would be a fifth, and sixth, so that the last would be the most general: because in common forms which are predicated, there is nothing but the confused and the determined through the ultimate act: and therefore there are only two substances in the genus according to more and less, the determinate indeed which is the species and the indeterminate which is the genus: but this is true, that in the confused there is the confused, the more confused, and the most confused: but these do not make a grade according to a differing species, because for more of them it is confused and indeterminate: therefore rightly those things which ascending after the principal substances are the species and genera of the inferiors are called

substantiæ, et sola illa sunt substantiæ secundæ : sola enim hæc indicant secundum quæstionem factam per quid est, principalem substantiam confuso esse et indeterminato inter ea quæ de principali substantia prædicantur : omnia enim prædicabilia prædicantur in quale : aliquem enim hominem assignando quid est, demonstrabit aliquid familiarius et certius si speciem et hominem esse dicat quam genus, dicendo quod sit animal. Aliorum vero prædicabilium quæ secundum accidens prædicantur, eo quod in subjecto sunt, quidquid assignaverit respondendo ad interrogationem factam per quid, quilibet assignabit extranee : nec erit de essentia primæ substantiæ, videlicet de quidditate ejus. Ex opposito ergo ista de causa species et genera solum secundæ substantiæ dicuntur.

Amplius autem hoc idem etiam hoc modo probatur : quia principales substantiæ ab actu substandi substantiæ sunt vocatæ, ideo dicuntur principales substantiæ quia omnibus scilicet aliis subjacent prædicatis sive essentialibus sive accidentalibus. Sicut autem primæ substantiæ ad omnia alia prædicata se habent in subjacendo, ita species et genera principalium substantiarum ad reliqua alia accidentia, scilicet prædicata se habent :

quia de speciebus et generibus omnia reliqua accidentalia prædicata, prædicantur per modum qui supra determinatus est : aliquem enim hominem dices esse grammaticum, ergo et hominem et animal grammaticum dicis, sicut nuper ante probatum est : similiter etiam est in aliis accidentalibus prædicatis. Secundum igitur locum in substando species habent et genera : ideo secundæ dicuntur substantiæ, et omnes dicuntur substantiæ, et nullæ tertiæ vel quartæ.

CAPUT VI — *De hoc communi substantiæ quod est in subjecto non esse.*

His determinatis de principalibus et secundis substantiis, jam nunc proprietates sive passiones genus substantiæ consequentes relinquitur determinare. Tangemus igitur prius proprietates quæcumque substantiæ conveniunt in quantum est in prædicabilibus, quia illæ sunt huic nostræ intentioni magis propriæ. Quia vero proprium est conveniens omni et semper, ideo ea quæ proprie dicuntur esse toti generi et toti coordinationi substantiæ, sunt speciebus et generibus communia.

substances, and only those are second substances: for only these indicate according to the question asked through what something is, that the principal substance is in a confused and indeterminate being among those things which are predicated of the principal substance: for all predicables are predicated in the category of quality: for assigning some man what he is, he will demonstrate something more familiar and more certain if he says it is a species and is a man than a genus, saying that it is an animal. But of the other predicables which are predicated according to accident, because they are in a subject, whatever he assigns responding to the question asked through what something is, anyone will assign extrinsically: nor will it be of the essence of primary substance, namely of its quiddity. Therefore from the opposite for this reason species and genera alone are called second substances.

Furthermore this same thing is also proven in this mode: because the principal substances are called substances from the act of underlying, therefore they are called principal substances because they underlie all other predicates whether essential or accidental. But just as primary substances are related to all other predicates in underlying, so species and genera of the principal substances are related to the remaining other accidents, namely predicates:

because all the remaining accidental predicates are predicated of species and genera in the manner which was determined above: for you will say that some [particular] man is a grammarian, therefore you also say that "man" and "animal" are grammarian, as was proved just before: similarly it is also in other accidental predicates. Therefore species and genera have the second place in standing under: for this reason they are called second substances, and all are called substances, and none [are called] third or fourth.

CHAPTER VI — *Concerning this common [property] of substance which is not to be in a subject.*

These things having been determined concerning principal and second substances, it remains now to determine the properties or passions following the genus of substance. We shall touch upon first, therefore, whatever properties belong to substance insofar as it is in the predicables, because those are more proper to our present intention. Since, however, a property is what belongs to all and always, therefore those things which are properly said to belong to the whole genus and to the whole coordination of substance are common to species and genera.

Dicamus igitur quod commune est omni substantiæ in subjecto non esse eo modo quo accidens est in subjecto. Jam enim ante distinximus quod subjectum dicitur secundum nomen, idem quod subtus jactum sive suppositum, et sic natura communis in suo inferiori est sicut in subjecto, sicut genus in specie, et species in individuo, et universaliter secunda substantia in inferiori et particulari. Dicitur autem subjectum ens in se completum, quod est accidentis vel alterius causa existendi in eo : et hoc modo non nisi accidens est in subjecto : et sic omni substantiæ tam secundæ quam primæ commune est in subjecto non esse.

Hoc autem patet inductione. Principalis substantia quæ est particulare substantiæ, neque de subjecto dicitur, quia nihil sibi substat ut suppositum, neque est in subjecto sicut accidens esse est in subjecto esse, quia est per se existens.

Secundarum vero substantiarum similiter manifestum est quod nulla est in subjecto sic dicto subjecto quod est ens completum, quod alii dat esse in seipso, quod esse non habet nisi insit ei : homo enim qui est substantia secunda dicitur quidem de subjecto, prout suppositum dicitur subjectum quando de aliquo homine prædicatur, ut cum dicitur, aliquis homo est homo. Sed non est in aliquo homine ut in subjecto, prout subjectum dicitur ens completum, alii dans esse per hoc quod est in ipso et non haberet esse nisi in ipso esset. Cujus probatio est : quia sicut homo quod est secunda substantia non est in aliquo homine, ita quod accipiat ab aliquo homine esse, quod non haberet nisi in ipso esset : homo enim prout substantia secunda et species est esse individuorum et esse alicujus hominis, dans esse particularibus, et ideo impossibile est quod esse accipiat propter hoc quod insit eis. Similiter autem et animal quod est substantia secunda ut genus, de subjecto quidem dicitur de aliquo homine vel aliquo animali, sed non inest alicui animali vel homini ut accidens in subjecto.

Amplius, sicut ante habitum est, eorum quidem quæ in subjecto sunt ut accidens est in subjecto, nomen quidem nil prohibet aliquando prædicari de subjecto in quo sunt, rationem vero eorum prædicari de subjecto, ita quod prædicetur ut ratio subjecti, est impossibile, sicut ante ostensum est. Secundarum vero substantiarum prædicatur de subjecto quod est suppositum, et nomen et ratio diffinitiva : quod patet, quia nomen hominis quod est substantia secunda prædicatur de aliquo homine, aliquis enim homo est homo : et ratio similiter, quia aliquis homo est animal rationale et mortale : igitur secunda substantia non est de numero eorum quæ in subjecto sunt sicut accidens est in subjecto.

Let us say, therefore, that it is common to every substance not to be in a subject in that way in which an accident is in a subject. For we have already distinguished before that "subject" is said according to the name [to be] the same as that which is "cast under" or the "supposit," and thus a common nature is in its inferior just as in a subject, as a genus in a species, and a species in an individual, and universally a second substance in an inferior and particular. But "subject" is said [to be] a being complete in itself, which is the cause of an accident or of something else existing in it: and in this way nothing except an accident is in a subject: and thus it is common to every substance, both second and first, not to be in a subject.

But this is clear by induction. A principal substance, which is a particular of substance, is neither said of a subject, because nothing stands under it as a supposit, nor is it in a subject just as the being of an accident is to be in a subject, because it is existing through itself.

Similarly, of second substances it is manifest that none is in a subject [when] "subject" is so called as a complete being, which gives being to another in itself, which being it does not have unless it be in it: for "man," which is a second substance, is indeed said of a subject, insofar as the supposit is called a subject when it is predicated of some [particular] man, as when it is said, "some man is a man." But it is not in some man as in a subject, insofar as "subject" is called a complete being, giving being to another through this that it is in it and would not have being unless it were in it. The proof of which is: because just as "man" which is a second substance is not in some man so that it receives being from some man, which it would not have unless it were in him: for "man" insofar as it is a second substance and a species is the being of individuals and the being of some man, giving being to particulars, and therefore it is impossible that it receive being on account of this that it is in them. Similarly also "animal," which is a second substance as a genus, is indeed said of a subject [as] of some man or some animal, but it is not in some animal or man as an accident in a subject.

Moreover, as has been held before, of those things which are in a subject as an accident is in a subject, the name indeed is not prohibited from sometimes being predicated of the subject in which they are, but it is impossible for their account to be predicated of the subject, so that it would be predicated as the account of the subject, as has been shown before. But of second substances, both the name and the definitive account are predicated of the subject which is the supposit: which is evident, because the name of "man," which is a second substance, is predicated of some man, for "some [particular] man is a man": and similarly the account [is predicated], because "some man is a rational and mortal animal": therefore second substance is not of the number of those things which are in a subject just as an accident is in a subject.

Hoc autem quod est in subjecto non esse, est quidem proprium quod convenit omni substantiæ et semper, sed non convenit soli : convenit enim etiam differentiæ quæ in prædicamento substantiæ secundum rectam lineam prædicabilium in superstando et substando non est : differentia enim in subjecto non est : bipes enim et gressibile, quæ sunt differentiæ animalis mobilis divisivæ, et speciei hominis differentiæ constitutivæ, dicuntur et prædicantur de subjecto in quo sunt quod est subjectum, ut suppositum de homine : in subjecto autem nullo sunt, prout subjectum in se completum dat esse accidenti quod est in potentia : differentia enim in specie dat esse actu speciei : quia, sicut in scientia Universalium determinatum est, differentia est quod ad esse conducit et quod ejus quod est esse rei pars est : igitur nec bipes nec gressibile in homine est, ita quod per inesse accipiat quod sit : confert enim speciei esse differentia, et non accipit ab ipsa : si enim acciperet esse a subjecta sibi specie, oporteret quod species acciperetur in diffinitione differentiæ sicut subjectum recipitur in diffinitione accidentis : hoc autem non fit : sed potius differentia recipitur in diffinitione speciei : patet igitur quod non inest speciei ut accidens. Adhuc autem de quocumque prædicatur differentia ut de subjecto nomine, de eodem prædicatur ratio sive diffinitio differentiæ, sicut patet exemplo : quia si gressibile de homine dicitur sive prædicatur, tunc etiam ratio diffinitiva gressibilis de homine prædicatur, quæ est pedibus esse mobile voluntate sive appetitu secundum processivum motum : est enim homo gressibilis, homo mobilis voluntate motu processivo.

Potest autem hic oriri dubium, utrum differentia sit substantia ? Videtur enim ipsam non esse substantiam propter hoc quod dicitur, hoc quod est in subjecto non esse, non soli substantiæ convenit sed etiam differentiæ : per hoc enim videtur differentiam substantiam non esse. Sed hoc jam in scientia Universalium sufficienter determinatum est. Est enim differentia illa quæ magis proprie differentia est, secundum id quod est et secundum suam naturam substantia, quæ est forma substantialis, quæ dat esse actu substantiæ toti, et hoc modo totius esse : quod autem est notio designans totum esse in actu, differentia est, et ideo de toto prædicatur. Si tamen differentia prout relata ad genus consideratur, cujus qualitas est in ipsius potestate consistens, sic se habet ad genus ut perfectum esse generis consequens, et ideo in hac comparatione comparatur ad genus ut qualitas accidentis inseparabilis :

But this [fact], which is not to be in a subject, is indeed a property which belongs to every substance and always, but it does not belong to it alone: for it belongs also to the difference, which is not in the predicament of substance according to the direct line of predicables in standing over and standing under: for the difference is not in a subject: for "biped" and "capable of walking," which are divisive differences of "mobile animal," and constitutive differences of the species "man," are said and predicated of the subject in which they are, which is the subject as a supposit, [namely] of man: but they are in no subject, insofar as a subject complete in itself gives being to an accident which is in potency: for a difference in a species gives being in act to the species: because, as has been determined in the science of *Universals*, a difference is that which leads to being and which is a part of that which is the being of the thing: therefore neither "biped" nor "capable of walking" is in man so that it receives what it is through being in [him]: for the difference confers being upon the species, and does not receive it from it: for if it received being from the species subjected to it, it would be necessary that the species be received in the definition of the difference, just as the subject is received in the definition of an accident: but this does not happen: but rather the difference is received in the definition of the species: it is clear, therefore, that it is not in the species as an accident. Furthermore, of whatever the difference is predicated as of a subject by name, of the same is predicated the account or definition of the difference, as is clear by an example: because if "capable of walking" is said or predicated of man, then also the definitive account of "capable of walking" is predicated of man, which is "to be mobile by feet by will or appetite according to progressive motion": for man is capable of walking, [that is], man is mobile by will with progressive motion.

A doubt can arise here, however: whether the difference is a substance? For it seems not to be a substance because it is said that "this [fact], which is not to be in a subject, does not belong to substance alone but also to the difference": for by this it seems the difference is not a substance. But this has already been sufficiently determined in the science of *Universals*. For that difference which is more properly a difference is, according to what it is and according to its nature, a substance, which is a substantial form, which gives being in act to the whole substance, and in this way is of the being of the whole: but that which is a notion designating the whole being in act is a difference, and therefore it is predicated of the whole. If, however, the difference is considered insofar as it is related to the genus, whose quality it is consisting in its [the genus's] power, it relates to the genus as following the perfect being of the genus, and therefore in this comparison it is compared to the genus as an inseparable quality of an accident:

quæ tamen qualitas secundum naturam qualitatis qualitas non est, sed est qualitas essentialis propter hoc quod generis potentia est potentia imperfecti, cujus imperfectio ad actum perficitur determinata potentia generis per conjunctam sibi differentiam : et hoc modo substantialis forma est habens modum qualitatis. Comparata autem ad speciem quam in suo esse constituit, qualitas est etiam essentialis et substantia, quia nihil constituit in esse nisi substantia : et quia sic habet modum qualitatis et effectum substantiæ, ideo non secundum suam totam rationem substantia est. Et quia est simplex et non composita, ideo in directa linea coordinationis prædicabilium substantiæ cadere non potest secundum ordinem superstandi et substandi : quia non respicit ad genus substantiæ, sicut ad sui esse principium, ideo per se genus esse non potest : prima enim genera sunt prima rerum principia. Respiciens autem ad aliud ut ad sui principium in quo est, primum principium esse non potest, et sic non potest esse genus. Cum ergo respiciat ad genus.

non sicut generi suppositum, sed sicut ad id in quo est sicut in potestate naturali, relinquitur necessario quod sit in linea laterali, et ideo neque in genere est, neque omnino extranea et separata a genere. Et hujus quidem doctrinam in scientia *Universalium* tradidimus in tractatu de *Differentia* : sed in tantum hic dicimus, in quantum intentioni præsenti est necessarium. Quia igitur in genere substantiæ non est, propter hoc dicitur quod in subjecto non esse non solum convenit substantiæ, sed etiam differentiæ.

Sed est aliquid quod conturbare posset secundum hanc doctrinam : ita quod aliquis posset moveri de substantiarum principalium partibus, ut est manus, pes et hujusmodi, vel etiam sicut materia et forma, ex quibus fit substantia composita : illæ enim partes in substantia composita videntur esse sicut in subjecto : non enim habent esse partium nisi in composito, manus enim abscissa non est manus : et ita forte aliquis putaret, quod secundum hanc doctrinam cogamur multipliciter eas dicere non esse substantias et conversim, per hanc rationem quod non sint sicut substantiæ. Ea enim quæ tanquam partes essentiales vel integrales sunt in aliquo, per hoc quod sic sunt in toto, non habent esse in subjecto : est enim alius modus essendi aliquid in aliquo sicut pars in toto, et alius modus essendi in aliquo sicut accidens in subjecto, ut in quarto *Physicorum* determinatur.

which quality, nevertheless, according to the nature of a quality, is not a quality, but is an essential quality because the power of the genus is the power of the imperfect, whose imperfection is perfected toward act by the determinate power of the genus through the difference conjoined to it: and in this way the substantial form has the mode of a quality. But compared to the species which it constitutes in its being, it is also an essential quality and a substance, because nothing constitutes in being except a substance: and because it thus has the mode of a quality and the effect of a substance, therefore it is not a substance according to its whole account. And because it is simple and not composite, therefore it cannot fall in the direct line of coordination of the predicables of substance according to the order of standing over and standing under: because it does not look to the genus of substance as to the principle of its being, therefore it cannot be a genus through itself: for the first genera are the first principles of things. But looking to another as to its principle in which it is, it cannot be a first principle, and thus it cannot be a genus. Since, therefore, it looks to the genus.

not as a supposit for the genus, but as toward that in which it is as in a natural power, it remains necessarily that it be in a lateral line, and therefore it is neither in the genus [directly], nor is it entirely extraneous and separate from the genus. And we have handed down the doctrine of this indeed in the science of *Universals* in the treatise on *Difference*: but we say here only as much as is necessary for the present intention. Because, therefore, it is not in the genus of substance, for this reason it is said that "not to be in a subject" belongs not only to substance, but also to the difference.

But there is something which could cause disturbance according to this doctrine: so that someone could be moved concerning the parts of principal substances, as is a hand, a foot, and the like, or even like matter and form, from which a composite substance is made: for those parts seem to be in the composite substance as in a subject: for they do not have the being of parts except in the composite, for a hand cut off is not a hand: and so perhaps someone would think that according to this doctrine we are forced to say in many ways that they are not substances and conversely, by this reason that they are not like substances. For those things which are in something as essential or integral parts, by the fact that they are thus in the whole, do not have being in a subject: for there is one mode of something's being in something as a part in a whole, and another mode of being in something as an accident in a subject, as is determined in the fourth book of the *Physics*.

Sciendum tamen est quod pars non est in actu nisi quando est in toto : sed est in potentia pars et non secundum actum quando non est in toto, et sic a toto accipit actum et rationem : actus autem ipsius et forma est operatio ipsius quam habet secundum formam, sicut oculi videre, et radicis alimentum trahere, et folii fructum a caumate defendere, et manus opus intellectus imperatum perficere, et hujusmodi : et potestates adhuc partes habent in toto, et non habent quando in toto non sunt :

et ideo abcissæ partes, æquivoce nomina illa recipiunt quæ habent in toto : sed quod in toto aliquo modo recipiunt nomen et rationem, est a toto : hoc autem non facit accidens quando est in toto ut in subjecto. Et ideo æquivocatio est quando dicitur pars in toto, et quando dicitur accidens esse in toto : accidens enim non est forma partis sed totius, quia subjectum accidentis est ens in se completum : completum autem est totum compositum. Est autem adhuc etiam dissimilitudo, quia partes in toto sive sint essentiales sive integrales, totum constituunt secundum esse, et ideo substantiæ sunt totius : accidens enim non est in toto sicut constituens ipsum secundum substantiam, sed est sicut constitutivum in esse quomodocumque per substantiam, et ideo in diffinitione accidentis recipitur subjectum sicut causa est accidentis : in diffinitione autem compositi recipiuntur partes sicut principia cognoscendi totum : quia eadem sunt principia cognoscendi et essendi, sicut dicitur in principio *Physicorum* : dicit autem Aristoteles quod compositum et totum cognoscimus cum scimus ex quibus, et quot, et ex qualibus est.

Ex his autem quidam errantes objiciunt, ut dicit Gregorius Nyssenus, Quæcumque ut endelechia sunt in aliquo, aut ut accidens sunt in aliquo, aut sicut forma materialis quæ habet esse extra ipsam : anima autem ut endelechia habet esse in corpore : aut ergo est in ipso sicut accidens in subjecto, aut sicut forma materialis : et quodcumque horum detur, sequitur quod non habet esse nisi in corpore, et non habet esse extra ipsum. Ad hoc autem quidam respondere nituntur dicentes, quod anima habet esse in corpore sicut motivum in moto, sicut rex in regno, et nauta in navi, et ideo separabilis est a corpore, et separata habet esse in seipsa.

Sed, salva pace istorum, isti non sol-

vunt objectionem, quia objectio sic procedit dicens, quod quæcumque ut endelechia sunt in corpore, etc., motivum autem in moto est sicut endelechia : anima autem in secundo de *Anima* dicitur esse endelechia corporis organici, potentia vitam habentis. Et hoc dictum est de anima, non secundum quod est anima, sed secundum quod est corporis animati forma : et ideo dicit Aristoteles quod sic diffinita anima est in habitu, et sicut somnus, et sicut figura elementalis :

It must be known, however, that a part is not in act except when it is in the whole: but it is a part in potency and not according to act when it is not in the whole, and thus it receives act and account from the whole: but its act and form is its operation which it has according to the form, as of the eye [it is] to see, and of the root to draw nourishment, and of the leaf to defend the fruit from the heat, and of the hand to perform the work commanded by the intellect, and the like: and the powers still have parts in the whole, and they do not have them when they are not in the whole:

and therefore cut-off parts receive those names equivocally which they have in the whole: but that they in the whole receive the name and account in some way is from the whole: but an accident does not do this when it is in the whole as in a subject. And therefore there is an equivocation when it is said "part in a whole," and when it is said that an "accident is in a whole": for an accident is not the form of a part but of the whole, because the subject of an accident is a being complete in itself: but the complete [being] is the composite whole. There is also still a dissimilarity, because parts in a whole, whether they be essential or integral, constitute the whole according to being, and therefore they are substances of the whole: for an accident is not in the whole as constituting it according to substance, but is as constitutive in being in whatever way through the substance, and therefore in the definition of an accident the subject is received as the cause of the accident: but in the definition of the composite the parts are received as principles of knowing the whole: because the principles of knowing and of being are the same, as is said in the beginning of the *Physics*: for Aristotle says that we know the composite and the whole when we know from what things, and how many, and from what sort of things it is.

From these things, however, some, being in error, object, as Gregory of Nyssa says: Whatever things are in something as an entelechy are in it either as an accident or as a material form which has [no] being outside of it: but the soul as an entelechy has being in the body: therefore it is either in it as an accident in a subject, or as a material form: and whichever of these is given, it follows that it does not have being except in the body, and does not have being outside of it. To this, however, some strive to respond, saying that the soul has being in the body as a mover in the moved, like a king in a kingdom, and a sailor in a ship, and therefore it is separable from the body, and when separated it has being in itself.

But, with all due respect to them, these do not sol-

solve the objection, because the objection proceeds thus, saying that whatever things are in a body as an entelechy, etc., and a mover in the moved is as an entelechy: but the soul in the second book of *On the Soul* is said to be the entelechy of an organic body, having life in potency. And this was said concerning the soul, not insofar as it is the soul, but insofar as it is the form of an animated body: and therefore Aristotle says that the soul thus defined is in a habit, and like sleep, and like an elemental figure:

et est diffinitio ad demonstrationem se habens sicut conclusio : et ideo in sequentibus corrigit eam Aristoteles dicens, quod anima secundum substantiam secundum quod anima substantia est, diffinitur sic : Anima est principium et causa vitæ, supple, talis qualis ipsa anima est : vegetabilis enim est causa et principium vitæ vegetabilis, et sensibilis principium et causa vitæ est sensibilis : quæ vitæ non sunt sine corpore : et ideo illæ animæ non sunt principia et causæ talis vitæ, nisi in corpore : anima autem intellectualis principium et causa talis vitæ est sine corpore : intelligentia enim perficitur sine aliquo corpore, et est ab omni corporali subjecto separata : si igitur principium et causa talis vitæ est, et secundum seipsam talis vitæ erit principium et causa : separata igitur a corpore talis vitæ est causa et principium.

Ad objectum autem dicendum quod anima intellectualis non est endelechia corporis, nisi per suum actum, qui est infusio sensus et motus in corpus, et isti sunt actus ipsius secundum id quod est pars et potentia ipsius, sicut vegetabile et sensibile : actus autem et operatio ipsius secundum id quod est in substantia, est secundum id quod intellectualis est : et hic actus et hæc operatio est sine corpore. Hæc autem quamvis ad propositum non sint, tamen propter objectionem removendam posita sunt, ut perfectior sit doctrina.

CAPUT VII. ### *De proprio substantiæ et differentiæ quod est univoce prædicari.*

Adhuc autem est proprium quod convenit semper, sed non soli, neque omni : soli quidem non convenit, quia convenit substantiæ et differentiæ : non autem omni convenit, quia non convenit principali substantiæ. Hoc autem proprium (quod inest quidem ut proprium substantiis quæ a substando et superstando substantiæ dicuntur, et inest differentiis quæ a substando directe in genere esse non dicuntur) est quod omnia prædicata quæ sunt ex ipsis et de numero eorum sunt, univoce prædicantur de his de quibus prædicantur : omnia enim prædicata quæ sunt ab his, hoc est, substantia et differentiis sumpta, aut prædicantur de individuis aut de speciebus, generaliter dicta specie ad subalternam et specialissimam. Hoc autem proprium non omni convenit substantiæ, quia non convenit principali substantiæ quæ est substantia individua. A principali namque substantia nulla est prædicatio, quia individuum de nullo prædicatur : et si nulla est prædicatio sumpta de principali substantia, tunc non prædicatur univoce de aliquo, eo quod de nullo ut sibi subjecto prædicatur ipsa :

and it is a definition relating to a demonstration as a conclusion: and therefore in the following things Aristotle corrects it, saying that the soul according to substance, insofar as the soul is a substance, is defined thus: "The soul is the principle and cause of life," supply, such as the soul itself is: for the vegetative [soul] is the cause and principle of vegetative life, and the sensible [soul] is the principle and cause of sensible life: which lives are not without a body: and therefore those souls are not principles and causes of such life except in a body: but the intellectual soul is the principle and cause of such life without a body: for intelligence is perfected without any body, and is separated from every corporeal subject: if therefore it is the principle and cause of such life, it will also be according to itself the principle and cause of such life: separated therefore from the body it is the cause and principle of such life.

As to the objection, however, it must be said that the intellectual soul is not the entelechy of the body except through its act, which is the infusion of sense and motion into the body, and these are its acts according to that which is its part and potency, just like the vegetative and sensible [parts]: but its act and operation according to that which it is in substance is according to that which is intellectual: and this act and this operation is without a body. These things, although they are not to the purpose [of the present treatise], have nevertheless been set down for the sake of removing the objection, so that the doctrine may be more perfect.

CHAPTER VII. ### *Concerning the property of substance and difference which is to be predicated univocally.*

Furthermore, there is a property which belongs [to something] always, but not to it alone, nor to all [of it]: it indeed does not belong to it alone, because it belongs to substance and difference: but it does not belong to all, because it does not belong to principal substance. This property (which is present indeed as a property in substances which are called substances from standing under and standing over, and is present in differences which are not said to be in a genus directly from standing under) is that all predicates which are from them and are of their number are predicated univocally of those of which they are predicated: for all predicates which are from these, that is, taken from substance and differences, are predicated either of individuals or of species, "species" being said generally of subalternate and most specific [species]. This property, however, does not belong to every substance, because it does not belong to principal substance which is individual substance. For from a principal substance there is no predication, because an individual is predicated of nothing: and if there is no predication taken from a principal substance, then it is not predicated univocally of anything, for the reason that it is predicated of nothing as of a subject for itself:

est enim omnium novissimum subjectum, et ideo habere non potest aliquid quod sibi sit subjectum, prout subjectum dicitur secundum naturam substans suppositum, nec potest dici de subjecto : omne autem quod univoce prædicatur de aliquo, de ipso dicitur ut de subjecto : prima igitur substantia de nullo univoce prædicatur. Et sic habentur duæ conditiones, scilicet quod non prædicatur, et quod non prædicatur univoce.

Huic autem videtur contrarium esse quod in libro de quinque universalibus dicit Porphyrius quod scilicet individuum.

de uno solo, hoc est, de seipso prædicatur. Sed hoc in scientia quam de *Universalibus* scripsimus solutum est. Ibidem enim diximus quod aliquid prædicari de seipso naturali prædicatione non contingit, sive essentiali prædicatione. Quia in tali prædicatione prædicatum debet esse de ratione subjecti et principium constituendi et cognoscendi ipsum. Hoc autem non potest esse quando idem de seipso prædicatur. Eodem modo quando subjectum est de ratione prædicati, tunc subjectum est principium cognoscendi prædicatum : et hoc iterum esse non potest quando idem de se prædicatur : non enim potest esse nisi prædicatio per accidens si prædicatio est : non enim ibi prædicatur proprius effectus de causa. Sed per accidens non est prædicatio, quia nec prædicatum est accidens subjecti, nec subjectum est accidens prædicati. Et sic nec est prædicatio per se, nec per accidens : ergo nulla. Et hoc quidem verum est, quia quando individuum de se prædicatur, significatur idem sibi inesse : quod nullo modo potest intelligi : quia nihil inest sibiipsi, ut dicit Aristoteles. Sed quod dicit Porphyrius, intelligendum est de inordinata prædicatione, quæ non est universalis alicujus prædicatio : et tunc illa prædicatio reducitur ad artem, ut idem secundum id quo est intelligatur prædicari, et hoc est cum dicitur, hic homo est hic homo, vel Socrates est Socrates, ut sensus sit, quia hic homo secundum id quod est res naturæ est hic homo quo habet esse hominis, vel Socrates secundum quod est hic Socrates, est Socrates quo habet esse Socratis, hoc est, secundum quod est sub individuantibus significantibus ipsum esse Socratem. De talibus prædicationibus hic non loquimur.

Hoc autem modo loquendo, ut dicit Boetius, nullæ sunt propositiones veriores his, in quibus idem de seipso prædicatur : quia in talibus idem secundum id quo est de eo quod est prædicatur, esse

enim quo est id quod est, ab eo quod est, inseparabile est per intellectum : et ideo semper est vera, et ut quidam dicunt, a nullo nisi a seipsa talis propositio suam habet veritatem : semper enim verum est hoc, homo est homo, domus est domus, quia esse in eo quod est, semper accipitur per intellectum, et ideo æterna est talium veritas propositionum, ut dicunt quidam.

for it is the most recent subject of all, and therefore it cannot have anything which would be a subject for it, insofar as "subject" is said according to nature [to be] a standing-under supposit, nor can it be said of a subject: but everything which is predicated univocally of anything is said of it as of a subject: therefore first substance is predicated univocally of nothing. And thus two conditions are held, namely that it is not predicated, and that it is not predicated univocally.

To this, however, it seems to be contrary what Porphyry says in the book on the *five universals*, namely that an individual.

is predicated of only one, that is, of itself. But this was solved in the science which we wrote concerning *Universals*. For in that place we said that it does not happen that something is predicated of itself by a natural predication, or by an essential predication. Because in such a predication the predicate ought to be of the account of the subject and a principle of constituting and knowing it. But this cannot be when the same is predicated of itself. In the same way, when the subject is of the account of the predicate, then the subject is a principle of knowing the predicate: and this again cannot be when the same is predicated of itself: for there cannot be [anything] except a predication by accident if there is predication: for a proper effect is not there predicated of a cause. But it is not a predication by accident, because neither is the predicate an accident of the subject, nor is the subject an accident of the predicate. And thus it is neither a predication *per se*, nor by accident: therefore none. And this indeed is true, because when an individual is predicated of itself, it is signified that the same is in itself: which can in no way be understood: because nothing is in itself, as Aristotle says. But what Porphyry says is to be understood concerning inordinate predication, which is not a universal predication of something: and then that predication is reduced to art, so that the same is understood to be predicated according to that which it is, and this is when it is said, "this man is this man," or "Socrates is Socrates," so that the sense is, that "this man insofar as he is a thing of nature is this man by which he has the being of man," or "Socrates insofar as he is this Socrates is the Socrates by which he has the being of Socrates," that is, according as he is under the individuating [traits] signifying that he is Socrates. Concerning such predications we do not speak here.

But speaking in this way, as Boethius says, no propositions are truer than those in which the same is predicated of itself: because in such things the same is predicated according to that which it is of that which it is, for being

whereby it is that which it is, is inseparable through the intellect from that which it is: and therefore it is always true, and as some say, such a proposition has its truth from none but itself: for this is always true, "man is man," "house is house," because being in that which it is, is always accepted through the intellect, and therefore the truth of such propositions is eternal, as some say.

Patet igitur qualiter est et qualiter non est a prima et principali substantia prædicatio. Quod autem univoce non prædicatur, facile probatur per hoc quod non habet aliquid sub se suppositum, in quo sit ut genus, vel differentia, quod causa est univocæ prædicationis. Cum autem aliquo modo de se prædicatur, non tamen prædicatur ut ens de ratione suiipsius, et sic univoce de se non potest prædicari.

Quod autem omnis prædicatio quæ sumitur de secundis substantiis et differentiis sit univoca, probatur per inductionem : quia quæcumque sunt de numero secundarum substantiarum, sunt species vel genera : et species quidem essentialiter prædicatur de pluribus differentibus numero solo, et hæc sunt individua : genera autem prædicantur et de speciebus et de individuis substantiali prædicatione, quia genus prædicatur de pluribus differentibus specie. Similiter etiam differentiæ prædicantur de speciebus et individuis specierum quas constituunt, sicut essentiæ formales quæ insunt speciebus et individuis : et quando species de primis substantiis prædicantur, tunc primæ substantiæ suscipiunt rationem specierum, quia species individuo dat nomen suum et rationem : et similiter quando genera de speciebus prædicantur et individuis, species suscipiunt rationes generum propter eamdem causam, quia per hoc quod genus essentialiter est in specie et actu et intellectu, genus speciei dat nomen suum et suam rationem per illam quæ præmissa est dignitatem, scilicet quod quando al-.

terum de altero prædicatur ut de subjecto, quæcumque substantialiter de prædicato prædicantur, omnia de subjecto dicuntur eodem modo et ordine prædicationis. Similiter autem quando differentia prædicatur de speciebus et individuis, per hoc quod essentialiter ut actus est in illis, tunc diffinitivam rationem differentiæ suscipiunt et species et individua, quia ipsa differentia, ut actus et ut forma est essentialiter in illis. Sed jam habitum est quod univoca sunt, quorum nomen est commune et unum, et ratio diffinitiva secundum id nomen data est eadem. Nomine autem uno et ratione una prædicantur secundæ substantiæ et differentiæ : ergo omnia prædicata quæ a substantiis secundis et differentiis ordinata prædicatione sumpta sunt, univoce dicuntur sive prædicantur.

Attende autem, quod quamvis differentia non sumatur ut genus, et subjectum in recta linea standi supra et subtus non habeat, sed sit a latere respiciens talem lineam, tamen differentia subjectum habet cui inest, de quo est ut prædicabile et ut quoddam universale, et sic de illo prædicatur univoce.

It is clear therefore how there is and how there is not predication from a first and principal substance. But that it is not predicated univocally is easily proved by the fact that it does not have anything subjected under it as a supposit, in which it would be as a genus or difference, which is the cause of univocal predication. Since, however, it is predicated of itself in some way, nevertheless it is not predicated as a being of the account of itself, and thus it cannot be predicated univocally of itself.

But that every predication which is taken from second substances and differences is univocal is proved by induction: because whatever things are of the number of second substances are species or genera: and a species indeed is essentially predicated of many differing in number alone, and these are individuals: but genera are predicated both of species and of individuals by a substantial predication, because a genus is predicated of many differing in species. Similarly also differences are predicated of the species and individuals of the species which they constitute, as formal essences which are in species and individuals: and when species are predicated of first substances, then first substances receive the account of the species, because the species gives its name and account to the individual: and similarly when genera are predicated of species and individuals, the species receive the accounts of the genera for the same reason, because through the fact that the genus is essentially in the species both in act and in intellect, the genus gives its name and its account to the species through that dignity which was premised, namely that when one.

other is predicated of another as of a subject, whatever things are substantially predicated of the predicate are all said of the subject in the same manner and order of predication. Similarly, moreover, when a difference is predicated of species and individuals, through the fact that it is essentially in them as act, then both species and individuals receive the definitive account of the difference, because the difference itself is essentially in them as act and as form. But it has already been held that those things are univocal whose name is common and one, and the definitive account given according to that name is the same. But by one name and one account are second substances and differences predicated: therefore all predicates which are taken from second substances and differences in an ordered predication are said or predicated univocally.

Attend, however, to the fact that although a difference is not taken as a genus, and does not have a subject in a direct line of standing above and below, but is from the side looking to such a line, nevertheless the difference has a subject in which it is, of which it is [predicated] as a predicable and as a certain universal, and thus it is predicated of it univocally.

Adhuc autem notandum est, quod quamvis differentia non habeat genus quod in ipsa sit per intellectum, et sic non habeat veram diffinitionem qua prædicetur, tamen habet assignatum nomen suum per essentialia sua formativa per causam essentialem, sicut quod dicitur quod ad esse conducit, et quod ejus quod est esse rei pars est. Hæc enim assignatio per causam data est, secundum quod ipsa differentia est causa esse, et per hanc univoce habet prædicari : et cui convenit prædicatio sui nominis, in ipso est differentia per hanc eamdam rationem completam, scilicet quod differentia id ad esse conducit, et quod ipsa differentia esse illius rei pars est essentialis. Sic enim intelligitur quid prædicari nomine et ratione, sic scilicet ut subjectum de quo prædicatio fit, sicut participat prædicatum nomine, sic participet ipsum ratione.

CAPUT VIII — *De proprio substantiæ quod est significare hoc aliquid.*

Omnibus autem jam habitis proprietatibus quæ substantiam secundum quod est unum prædicabilium consequuntur, nunc restat videre de proprietatibus ipsius secundum quod ipsa est substantia absque hoc quod consideretur ut prædicabile vel unum prædicabilium sive prædicamentorum. Dico igitur, quod omnis substantia videtur hoc aliquid significare : hoc autem aliquid significare convenit quidem soli substantiæ, sed non convenit omni, quia sicut univoce prædicari convenit secundæ substantiæ et non primæ, ita hoc aliquid significare convenit primæ substantiæ et non secundæ, quamvis convenire videatur etiam ipsi substantiæ secundæ. Et in primis quidem indubitabile est et verum universaliter, quoniam primæ substantiæ hoc aliquid significant : quia habent materiam terminatam et signatam accidentibus et individuantibus, per quæ sunt hic et nunc, et per quæ singula earum est unum numero, et hic et nunc, in quo, ut dicit Boetius, non invenitur diversitas in numerando : quod non convenit ei quod est specie vel genere unum, quod nec habet materiam determinatam neque signatam, et ideo divisione materiæ agit in individuorum pluralitatem, et divisione differentiarum genus dividentium in specierum pluralitatem, ita quod unitas numeri non servatur in ipsis. Prima igitur substantia quod sit hæc, habet ab individuatione et terminatione individuantium, quod autem aliquid in forma, habet a specie quæ est in ipsa, et est esse ipsius, et sic proprie dicitur hoc aliquid : unde dicit Boetius in libro de Hebdomadibus : Omne quod est, ab alio habet quod est, et ab alio quod hoc est : quod enim hoc est, per designationem est hujus, quia hoc est : quod au-.

tem est, non potest esse nisi per hoc quod est sibi causa essendi.

Furthermore, it must be noted that although a difference does not have a genus which would be in it through the intellect, and thus does not have a true definition by which it would be predicated, nevertheless it has its name assigned through its essential formatives through an essential cause, such as what is said: "that which leads to being," and "that which is a part of that which is the being of the thing." For this assignment was given through a cause, according as the difference itself is a cause of being, and through this it has to be predicated univocally: and in whatever the predication of its name belongs, the difference is in it through this same complete account, namely that the difference leads that [thing] to being, and that the difference itself is an essential part of the being of that thing. For thus it is understood what it is to be predicated by name and account, namely so that the subject of which the predication is made, just as it participates in the predicate by name, so it participates in it by account.

CHAPTER VIII — *Concerning the property of substance which is to signify "this somewhat" (hoc aliquid).*

All the properties having now been held which follow substance insofar as it is one of the predicables, it remains now to see concerning its properties insofar as it is substance without being considered as a predicable or as one of the predicables or predicaments. I say, therefore, that every substance seems to signify "this somewhat": but to signify "this somewhat" belongs indeed to substance alone, but it does not belong to all [substance], because just as to be predicated univocally belongs to second substance and not to the first, so to signify "this somewhat" belongs to first substance and not to the second, although it seems to belong also to second substance itself. And in first [substances] indeed it is indubitable and universally true, since first substances signify "this somewhat": because they have matter terminated and marked by accidents and individuating [traits], through which they are here and now, and through which each of them is one in number, and [is] here and now, in which, as Boethius says, diversity is not found in numbering: which does not belong to that which is one in species or genus, which has neither determinate nor marked matter, and therefore by division of matter it acts toward a plurality of individuals, and by division of the differences dividing the genus [it acts] toward a plurality of species, so that the unity of number is not preserved in them. Therefore first substance has its being "this" from the individuation and termination of individuating [traits], but its being "somewhat" in form it has from the species which is in it and is its being, and thus it is properly called "this somewhat": hence Boethius says in the book *On the Hebdome*: Everything that is, has from another that it is, and from another that it is "this": for what is "this," is through the designation of this, because it is "this": but what.

tem is, it cannot be except through this, that it is for itself the cause of being.

In secundis autem substantiis videtur quidem sub appellationis figura similiter nomen hoc aliquid significare, quando aliquis dixerit nominans hominem vel animal : non tamen verum est, quod nomen substantiæ secundæ significet hoc aliquid, sed nomen secundæ substantiæ magis significat quale aliquid et non hoc aliquid. Id enim quod ut subjectum in nomine significatur, neque unum est numero, quemadmodum unum numero est quod nomine primæ substantiæ subjectum significatur : subjectum enim nominis speciei prædicatur de pluribus numero in quibus actu esse et simul significatur, et animal quod est subjectum nominis generis, et de pluribus dicitur specie differentibus et numero in quibus est actu et simul.

Dico autem *appellationis figuram*, non ut quidam dicunt nominis institutionem, quam dicunt primo in individuis factam esse, eo quod nomina prius dicunt instituta fuisse ad individuorum significationem. Sed dico appellationis figuram similem nominis formationem ad significandam speciem et ad significandum individuum. Natura enim, ut dicit Damascenus, dupliciter consideratur, in se scilicet, et in atomo sive individuo, et in utraque consideratione simili nomine natura designatur. Natura enim communis in se considerata homo dicitur, et considerata in atomo hic homo dicitur : et quia una est, non differens nisi communi et determinato, propter hoc uno nomine designari eam oportuit : et hoc vocatur appellationis figura. Et hæc appellationis figura nobis etiam causa deceptionis est in fallacia figuræ dictionis, quia sæpe quale quid ut hoc aliquid interpretamur.

Hujus autem figuræ appellationis causa est : quia et genus et differentia et species et individuum videntur idem et eamdem naturam significare. Genus enim dicit formam in materia indeterminata dif-.

fusam, et talis esse compositi ipsum genus est notio quædam : et ideo prædicatur de toto, quia totum dicit modo qui dictus est. Differentia autem dicit formam et actum ad materiam indeterminate relatam et inclinatam, et quasi ad talem materiam reflexam : propter quod et hæc dicit totum esse totius compositi, et ideo etiam ipsa de toto prædicatur. Species autem dicit formam in materia quæ ad actum ultimum stat ut perfecta, sed non est terminis limitata et loco et tempore determinata : et ideo et hæc dicit totum esse, et est notio totius et non partis, et ideo de toto prædicatur.

In second substances, however, it seems indeed under a figure of appellation that the name similarly signifies "this somewhat," when someone has spoken naming "man" or "animal": nevertheless it is not true that the name of a second substance signifies "this somewhat," but the name of a second substance signifies rather a "certain quality" (*quale aliquid*) and not "this somewhat." For that which is signified as a subject in the name is not one in number, in the manner that that which is signified as a subject by the name of a first substance is one in number: for the subject of the name of a species is predicated of many in number in which being in act and simultaneously is signified, and "animal," which is the subject of the name of a genus, is both said of many differing in species and in number in which it is in act and simultaneously.

I say, however, "figure of appellation," not as some say the institution of the name, which they say was first made in individuals, for the reason that they say names were first instituted for the signification of individuals. But I call "figure of appellation" a similar formation of the name for signifying the species and for signifying the individual. For nature, as Damascene says, is considered in two ways: namely, in itself, and in the atom or individual, and in both considerations the nature is designated by a similar name. For the common nature considered in itself is called "man," and considered in the atom it is called "this man": and because it is one, not differing except by the common and the determinate, for this reason it was necessary that it be designated by one name: and this is called a "figure of appellation." And this figure of appellation is also for us a cause of deception in the fallacy of the "figure of speech," because we often interpret a "certain quality" (*quale quid*) as "this somewhat" (*hoc aliquid*).

Moreover, the cause of this figure of appellation is: because genus and difference and species and individual seem to signify the same thing and the same nature. For genus expresses form in indeterminate matter dif-.

...fused, and such a being of the composite is the genus itself as a certain notion: and therefore it is predicated of the whole, because it expresses the whole in the manner which has been said. The difference, however, expresses the form and act in relation to matter indeterminately related and inclined, and as if reflected toward such matter: for which reason this also expresses the whole being of the entire composite, and therefore it too is predicated of the whole. But the species expresses the form in matter which stands as perfected toward the ultimate act, but is not limited by terms and determined by place and time: and therefore this too expresses the whole being, and is a notion of the whole and not of a part, and therefore it is predicated of the whole.

Individuum autem dicit formam in materia determinata, limitantibus locis et differentia temporis et septem individuantibus designatam, quæ in scientia de *Universalibus* determinata sunt. Et quia sic unum in omnibus est secundis et primis substantiis et differentiis, oportuit quod similis esset appellationis figura.

Quamvis autem unum sit in omnibus quod sub appellationis figura designatur per nomen, non tamen unus est ipsius modus quo est in omnibus aliis : non enim idem modus confusi est et stantis ad actum ultimum, nec idem modus est communis indeterminati limitibus substantiæ numeri et terminis. Et ideo non semper est verum hoc sub appellationis figura designari. Propterea secunda substantia quamvis significare videatur hoc aliquid, attamen non significat hoc aliquid sed quale quid, scilicet quid per id quod primum formabile subjicitur in ipso quod est indeterminatum et confusum : et quod sit quale, per qualitatem essentialem habet, aut secundum potestatem, aut secundum actum differentiæ determinantis ipsum ad actum, sed non determinantis ipsum limitibus temporalibus vel corporalibus, sicut linea, et superficies, et locus, et tempus, et patria, et parentela, et nomen et hujusmodi, quibus aliquid diffinitum et determinatum hoc aliquid efficitur, et hic et nunc circumscriptum vel diffinitum suæ existentiæ limitibus, ultra quod nihil est de sua substantia. Aliter autem aliquantulum differentia significat quale quid, quod dicit Avicenna, hæc enim suo nomine dicit quale, quid autem quod est subjectum formabile, non dicit nisi per effectum, quia scilicet in actu facit ipsum.

Sed hic adhuc surgit quæstio de generalissimo : hoc enim in se non habet differentiam, et sic videtur dicere quid et non quale quid. Sed ad hoc respondetur, quod differentiam qua formabile est, in se habet per potestatem, et sic aliquo modo habet eam : et in quantum habet eam, in tantum quale quid significat.

Cum autem dicimus quod substantia secunda et differentia significat quale quid sub appellationis figura, non intelligimus quod sic significet quale quid, sicut album quod sub appellationis figura videtur qualitatem circa substantiam significare : quia album per qualitatem quam circa substantiam significat non significat nisi qualitatem quæ vere et secundum se qualitas est, et accidens subjecti illius circa quod ponitur qualitas illa in figura appellationis per denominationem significatur :

The individual, however, expresses the form in determinate matter, designated by limiting places and the difference of time and the seven individuating [traits], which have been determined in the science of *Universals*. And because thus the one is in all second and first substances and differences, it was necessary that there be a similar figure of appellation.

Although, however, that which is designated by the name under a figure of appellation is one in all, nevertheless the mode by which it is in all others is not one: for the mode of the confused and of that which stands at the ultimate act is not the same, nor is the mode of the common indeterminate [the same as that of] the substance limited by number and terms. And therefore it is not always true that this is designated under a figure of appellation. Therefore second substance, although it may seem to signify "this somewhat," nevertheless does not signify "this somewhat" but a "certain quality" (*quale quid*), namely a "what" through that which is first subjected as formable in it, which is indeterminate and confused: and that it is "of what sort" (*quale*), it has through an essential quality, either according to power, or according to the act of the difference determining it to act, but not determining it by temporal or corporeal limits, such as line, and surface, and place, and time, and homeland, and parentage, and name and the like, by which something defined and determined is made "this somewhat," and circumscribed here and now or defined by the limits of its existence, beyond which there is nothing of its substance. But in a slightly different way the difference signifies a "certain quality," which Avicenna says, for this says "of what sort" (*quale*) by its name, but it does not say "what" (*quid*), which is the formable subject, except through the effect, because namely it makes it in act.

But here there still arises a question concerning the most general [genus]: for this does not have a difference in itself, and thus seems to say "what" and not "certain quality." But to this it is replied, that it has in itself the difference by which it is formable through power, and thus in some way it has it: and insofar as it has it, to that extent it signifies a "certain quality."

When, however, we say that second substance and difference signify a "certain quality" under a figure of appellation, we do not understand that it signifies "certain quality" in the same way as "white" which under a figure of appellation seems to signify a quality about a substance: because "white," through the quality which it signifies about a substance, signifies nothing but a quality which truly and according to itself is a quality, and an accident of that subject about which that quality is placed is signified in a figure of appellation through denomination:

quale autem quod significat animal vel homo vel rationale, est qualitas essentialis quæ significat quamdam substantiam illa qualitate perfectam. Sed per illam qualitatem in genere secundum appellationis figuram signatam fit plus in hoc determinatio, quia determinatur genus ad plura significanda quoad ambitum communitatis quam in specie : tam enim species quam genus qualitate differentiæ determinantur, sed genus per suam qualitatem determinatur ad significandum plus quam species, quia genus sua qualitate determinat sibi subjecta differentia specie et numero, qualitas autem quæ speciei communitatem determinat, non determinat speciem nisi ad hoc ut contineat differentia solo numero. Et ideo dicens animal plus complectitur in animalis qualitate, quam dicens hominem complectitur in hominis essentiali qualitate : quamvis utriusque qualitas communis sit multorum.

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CAPUT IX.

De proprio substantiæ quod est substantiæ nihil esse contrarium.

Nunc dicendum videtur de proprietatibus substantiæ secundum quod substat accidentibus, et est subjectum generum aliorum : quia enim, ut dicit Aristoteles, subjectum nullum est contrarium et ideo subjectum est contrariorum : sic inest substantiæ et proprium ejus nihil illi esse contrarium. Hoc autem probatur inductione, quia nihil potest esse contrarium primæ substantiæ eo quod maxime substat, et ei quod substat utrique contrario, nullum potest esse contrarium, sequitur quod nec fingi posset (si fingere liceret) primæ et principali substantiæ aliquid esse contrarium, ut alicui homini nihil est vel potest esse contrarium. At vero nec homini qui est substantia secunda et generaliter secundæ substantiæ aliquid potest esse contrarium, nec animali quod est genus aliquod est contrarium.

Objiciunt autem quidam quod non corrumpitur aliquid nisi contrarium contrario : substantia autem corrumpitur : ergo contrarium habet a quo corrumpatur. Adhuc autem ut in secundo de Generatione habetur, ignis aquæ contrarius est, et aer terræ : hæc autem substantiæ : Multa autem talia sophistica objici possunt, quæ omnia solvit Aristoteles. Subjecto enim communi nihil potest esse contrarium secundum seipsum, sed contrarietatem habet in dispositionibus suarum qualitatum, et sic unum corrumpitur ab alio, et contrarium agit in contrarium, ut grossum in subtile, et grave in leve, et calidum in frigidum, et sic de aliis. Hæc autem contrarietas non est substantiæ quæ subjectum est, quia si esset alicui contrarium, non posset utrique contrariorum esse subjectum.

but the "of what sort" which "animal" or "man" or "rational" signifies, is an essential quality which signifies a certain substance perfected by that quality. But through that quality in the genus marked according to a figure of appellation, a further determination occurs in this, because the genus is determined to signify more things as regards the ambit of commonality than in the species: for both the species and the genus are determined by the quality of the difference, but the genus is determined through its quality to signify more than the species, because the genus by its quality determines for itself subjects differing in species and number, while the quality which determines the commonality of the species does not determine the species except to the end that it contains things differing in number alone. And therefore he who says "animal" encompasses more in the quality of the animal than he who says "man" encompasses in the essential quality of the man: although the quality of both is common to many.

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CHAPTER IX.

Concerning the property of substance which is that nothing is contrary to substance.

Now it seems necessary to speak concerning the properties of substance according as it substands accidents, and is the subject of other genera: for because, as Aristotle says, the subject is not any contrary and for that reason is the subject of contraries: so it is in substance and its property that nothing is contrary to it. This, however, is proved by induction, because nothing can be contrary to first substance for the reason that it most of all substands, and to that which substands each contrary, nothing can be contrary, it follows that something could not even be imagined (if imagining were permitted) to be contrary to first and principal substance, as to any man nothing is or can be contrary. But indeed neither to man, who is a second substance, and generally to second substances can anything be contrary, nor is anything contrary to animal, which is some genus.

Certain people, however, object that nothing is corrupted except a contrary by a contrary: but substance is corrupted: therefore it has a contrary by which it is corrupted. Furthermore, as is held in the second book of *On Generation*, fire is contrary to water, and air to earth: these however are substances: moreover many such sophistic things can be objected, all of which Aristotle solves. For to a common subject nothing can be contrary according to itself, but it has contrariety in the dispositions of its qualities, and thus one thing is corrupt-

...upted by another, and a contrary acts upon a contrary, as the thick upon the subtle, and the heavy upon the light, and the hot upon the cold, and so with the others. This contrariety, however, is not of the substance which is the subject, because if it were contrary to anything, it could not be the subject of both contraries.

Et attende, quod multipliciter dicitur contrarietas : primo perfecta distantia oppositarum differentiarum in eodem genere, cujus subjectum est primum genus, ad quod illa contraria sicut ad unum genus reducuntur, et sicut ad unum subjectum, in quo illa contraria sunt potestate et non actu, sicut videtur Aristoteles [1] dicere, quod in omni genere primo est una contrarietas prima. Et secundum hanc contrarietatem proprium est substantiæ (secundum quod substat et subjectum est) non habere contrarium. Secundum autem quod substantia dicitur essentialis forma quæ est differentia, sic habet contrarium : quia una differentia est alii contraria. Sed hoc modo de substantia non loquimur hic, quia non ponimus differentia esse in genere substantiæ, secundum quod de substantiis loquimur ut de substare et de subjecto.

Primam autem Philosophus hoc modo dictam contrarietatem considerat, qui ad unum genus reducit ea quæ sunt ejusdem rationis substantiæ aliquo modo. Dicitur etiam contrarietas habitus et privatio, sive contrariæ formæ circa eamdem materiam quæ substat utrique : et est substantia a substando dicta, et illi iterum convenit neutri esse contraria, ut probatur in fine primi *Physicorum* [2]. Dicitur etiam contrarietas distantia completa passionum et qualitatum circa idem subjectum, quod manens unum et idem, receptibile est utriusque contrariorum, ut albi et nigri, et calidi et frigidi, et hujusmodi : et iterum ei quod utrique contrariorum substat, convenit nulli esse contrarium : et iste est verus intellectus Aristotelis qui hæc omnia dicit et probat rationibus quæ inductæ sunt.

Quamvis hoc autem substantiæ proprium sit et conveniat omni substantiæ substanti, non est tamen conveniens soli substantiæ, sed est proprium multorum aliorum : quantitas enim nihil habet contrarium, neque linea, neque superficies, neque corpus, et sic de aliis. Simili inductione probatur in discretis. Nihil est numero denario contrarium, neque quinario, et sic de aliis.

Habent tamen hæc omnia vel habere videntur sophisticas instantias : quia aliquis forte in discretis multa paucis diceret esse contraria, vel magnum parvo, vel breve longo : quæ qualiter opponantur, in decimo *primæ philosophiæ* determinari habet. Sed hic dicendum quod hæc oppositam quantitatem non dicunt, sed qualitates circa quantitatem dictas. Quod autem quantitas nihil habeat contrarium, a simili probatur, sicut probatum est de substantia : quantitas enim his subjicitur, vel substantia gratia quantitatis suæ secundum quod est quanta : sic nulli istorum est contrarium.

And note, that contrariety is spoken of in many ways: first, the perfect distance of opposite differences in the same genus, whose subject is the first genus, to which those contraries are reduced as to one genus, and as to one subject, in which those contraries exist in power and not in act, as Aristotle seems to say, that in every first genus there is one first contrariety. And according to this contrariety, it is a property of substance (according as it substands and is a subject) not to have a contrary. According, however, to that by which substance is called an essential form which is a difference, in that way it has a contrary: because one difference is contrary to another. But we do not speak of substance in this way here, because we do not posit the difference to be in the genus of substance, according as we speak of substances as concerning substanding and concerning the subject.

The Philosopher, moreover, considers the first contrariety spoken of in this way, who reduces to one genus those things which are of the same account of substance in some way. Contrariety is also called habit and privation, or contrary forms about the same matter which substands both: and it is substance called from substanding, and to it again it belongs to be contrary to neither, as is proved at the end of the first book of the *Physics*. Contrariety is also called the complete distance of passions and qualities about the same subject, which remaining one and the same, is receptive of both contraries, as of white and black, and hot and cold, and the like: and again to that which substands each of the contraries, it belongs to be contrary to none: and this is the true understanding of Aristotle, who says all these things and proves them by the reasons which have been brought forward.

Although, however, this is a property of substance and belongs to every substanding substance, it is not nevertheless appropriate to substance alone, but is a property of many others: for quantity has nothing contrary, nor line, nor surface, nor body, and so with the others. By a similar induction it is proved in discrete [quantities]. Nothing is contrary to the number ten, nor to five, and so with the others.

All these things, however, have or seem to have sophistic instances: because someone perhaps in discrete things would say many are contrary to few, or great to small, or short to long: how these are opposed is to be determined in the tenth book of the *First Philosophy* (Metaphysics). But here it must be said that these do not express opposite quantity, but qualities spoken of about quantity. But that quantity has nothing contrary is proved by a similar [reasoning] as was proved concerning substance: for quantity is subjected to these, or substance by reason of its quantity according as it is a quantum: thus to none of these is it a contrary.

Unde concluditur generaliter quod determinatorum ad naturam et speciem quantitatis, nullum penitus nulli ad quantitatis naturam et speciem quantitatis determinato est vel esse potest contrarium : sed hoc modo possit esse contrarium, sicut et solo illo modo substantiæ detur habere contrarium : sed prout substantia subjectum et substans potest habere contrarium : quod esse non potest, sicut probatum est hic. Hoc igitur modo et non aliter intelligenda sunt dicta Aristotelis.

<!-- cap:1.1.10 -->

CAPUT X — *De proprio substantiæ quod est non recipere magis et minus.*

Est iterum aliquid substantiæ proprium, quod quidem omni, sed non soli convenit : videtur enim substantia nec magis nec minus suscipere per intensionem et remissionem. Hoc autem ideo non dico quod una substantia a substando dicta non magis sit substantia quam alia : hoc enim in ante habitis jam dictum est, quia prima substantia magis est substantia quam secunda. Sed ideo dicimus illud proprium omni substantiæ conveniens esse, quia unaquæque substantia, sive secunda, sive prima sit, hoc ipsum quod est, non dicitur magis nunc esse et minus tunc vel alio tempore, per hoc quod est secundum esse substantiale intendi et remitti : homo enim nec ipse a se, nec alter homo ab altero per intensionem et remissionem dicitur magis et minus homo, sicut bonum et album et idem a se in diversis temporibus, et unum ab altero dicitur magis et minus album, et bonum per intensionem et remissionem dicitur magis et minus bonum. Substantia vero sive prima sive secunda, hoc modo per intensionem non dicitur magis et minus substantia : hæc enim nihil penitus dicitur nunc magis et minus homo per intensionem et remissionem quam prius homo fuit : propter quod generaliter concluditur quod substantia in hoc quod substantia est, non suscipit magis et minus.

Hujus autem causa est, quod præhabitum est, quod substantiæ non convenit habere contrarium : minus enim secundum intensionem est habens de contrario plus, et magis est de contrario minus habens : ita quod contrarium large accipiat. In quibusdam enim est oppositio ut privatio et habitus, sicut inter bonum et malum : in quibusdam tamen duo motus oppositi ad idem et ab eodem sunt contrarii, et sic suscipit magis et minus, secundum quod ista adverbia sunt bonum et malum, et hoc modo intensa et remissa intercipiunt de contrario : in quibusdam sunt contraria per formas contrarias, et illis est intensio et remissio per hoc quod intercipiunt motum in omni medio de extremis contrariis abjiciendo unum et accipiendo reliquum, secundum quod dicit Aristoteles [1], albius est nigro impermixtius.

Whence it is concluded generally that of things determined to the nature and species of quantity, none at all is or can be contrary to any other determined to the nature and species of quantity: but it might be a contrary in this way, just as in that way alone it is granted to substance to have a contrary: but insofar as substance is a subject and substanding, it can have a contrary: which cannot be, as has been proved here. In this way therefore, and not otherwise, are the words of Aristotle to be understood.

<!-- cap:1.1.10 -->

CHAPTER X — *Concerning the property of substance which is not to receive more and less.*

There is again something proper to substance, which indeed to all, but not only...

...belongs: for it seems that substance receives neither more nor less through intension and remission. This, however, I do not say because one substance, called so from substanding, may not be more a substance than another: for this has already been said in the preceding parts, because first substance is more a substance than second substance. But for this reason we say that that property belongs to every substance, because each and every substance, whether it be second or first, is not said to be more now and less then or at another time in respect of that very thing which it is, by the fact that it is intended and remitted according to substantial being: for a man is called neither more nor less a man than himself, nor is one man called more or less a man than another through intension and remission, in the way that "good" and "white" [are]: and the same thing is called more or less white than itself at different times, and one thing is called more or less white than another, and "good" is called more or less good through intension and remission. But substance, whether first or second, is not called more or less substance in this way through intension: for this thing is called now not at all more or less a man through intension and remission than it was previously a man: for which reason it is generally concluded that substance, in that it is substance, does not admit of more and less.

The cause of this is what has been previously stated, that it does not belong to substance to have a contrary: for that which is "less" according to intension is that which has more of the contrary, and "more" is that which has less of the contrary: such that "contrary" is taken broadly. For in some things there is opposition as privation and habit, as between good and evil: in some things, however, two opposite motions toward the same thing and from the same thing are contraries, and thus it admits of more and less, according as those adverbs "good" and "evil" are, and in this way intended and remitted things intercept [something] of the contrary: in some things there are contraries through contrary forms, and in those there is intension and remission by the fact that they intercept motion in every medium from the contrary extremes by casting off one and receiving the other, according to what Aristotle says, that the whiter is the less mixed with black.

Et hoc modo substantia non potest suscipere magis et minus : cujus causa in scientia de universalibus reddita est a Porphyrio : quia omne esse substantiale semper idem et simul est, et ideo non potest suscipere magis et minus : quia, sicut probat Avicenna, si magis susciperet, sequeretur quod ipsum esse substantiale plus formæ substantiali appropinquareet per ipsius formæ adeptionem, quod falsum est, cum nihil medium habeat, inter esse enim et non esse nihil est medium, sicut inter album et nigrum multa sunt media : et ideo secundum esse substantiale non potest esse intensio neque remissio in aliquo.

Adhuc cum opponitur, quia generatio et corruptio sunt mutationes in substantia : omnis autem motio successiva est sicut tempus, quod est mensuratio ipsius : in tali autem successione est recessus ab uno fine, et accessus ad alium continue : hoc autem magis et minus esse videtur secundum intensionem et remissionem : ergo in esse substantiali videtur esse intensio et remissio.

Adhuc autem una substantia miscibilis est cum altera, ut dicit Aristoteles [2], quod et probat. Mixta autem necessario intenduntur et remittuntur, ut ex dictis ejus habetur ibidem. Substantia ergo recipere videtur magis et minus, et intensum et remissum.

Hæc omnia et similia sophistice objiciuntur, quia de necessitate est concludens illa probatio quæ probat substantiam non recipere magis et minus, per hoc quod non habet contrarium. Ad hoc ergo quod dicitur de mutatione, dicendum quod mutatio et generatio et corruptio dicuntur uno quidem modo ut utrumque est mutatio simplex, quæ (ut dicit Averroes super lib. de sensu et sen-

sato) est finis motus et non motus. Finis autem motus est, in quo motus est in motum esse et non in moveri : et hæc mutatio est simplex inter esse et non esse, inter quæ nihil potest esse medium, et ideo in hoc non est intensio et remissio. Et ideo dicit Aristoteles [1], quod generatio et corruptio non sunt motus sed mutationes. Est autem mutatio modo dicta sive generatio et corruptio immixta motui, qui est alteratio, sicut quando de semine alterato paulatim fit animal vel homo : et tunc intensio et remissio non refertur ad esse et non esse substantiæ, sed potius ad qualitates activas vel passivas quibus perficitur talis generatio. Et hoc est quando qualitates activæ et passivæ materiam alterant et movent prout sunt instrumenta substantialis formæ, quæ ut formans et artifex est in semine. Et tunc forma substantialis dicitur etiam in successione non gratia sui, sed gratia instrumentorum suorum quæ sunt qualitates activæ vel passivæ agentes vel patientes in materia seminis.

And in this way substance cannot admit of more and less: the cause of which has been given in the science of universals by Porphyry: because every substantial being is always the same and simultaneous, and therefore it cannot admit of more and less: because, as Avicenna proves, if it did admit of "more," it would follow that the substantial being itself would approach closer to the substantial form through the acquisition of that form, which is false, since it has no medium; for between being and non-being there is no medium, just as between white and black there are many media: and therefore according to substantial being there can be neither intension nor remission in anything.

Furthermore, when it is opposed that generation and corruption are changes in substance: and every motion is successive like time, which is its measurement: and in such a succession there is a recession from one limit and an approach to another continuously: this however seems to be "more" and "less" according to intension and remission: therefore in substantial being there seems to be intension and remission.

Furthermore, one substance is miscible with another, as Aristotle says and also proves. But mixed things are necessarily intended and remitted, as is held from his words in the same place. Substance therefore seems to receive more and less, and intension and remission.

All these and similar things are objected sophistically, because that proof which proves that substance does not receive more and less by the fact that it has no contrary is necessarily concluding. To that therefore which is said concerning change, it must be said that change and generation and corruption are spoken of in one way as each is a simple change, which (as Averroes says on the book *On Sense and the Sensible*)

...sible) is the limit of motion and not motion. But the limit of motion is that in which motion has [attained] to having been moved and not to being moved: and this change is simple between being and non-being, between which nothing can be a medium, and therefore in this there is neither intension nor remission. And therefore Aristotle says that generation and corruption are not motions but changes. There is however change spoken of in this way, or generation and corruption, mixed with motion, which is alteration, as when from altered seed gradually an animal or a man is made: and then intension and remission are not referred to the being and non-being of the substance, but rather to the active or passive qualities by which such generation is completed. And this is when active and passive qualities alter and move the matter insofar as they are instruments of the substantial form, which exists in the seed as the forming and craftsmanlike principle. And then the substantial form is said [to be] also in succession not for its own sake, but for the sake of its instruments which are the active or passive qualities acting or suffering in the matter of the seed.

Et hoc modo dicit Aristoteles [2], quod non est vivum et animal simul, et quod non est animal et homo simul : non quod aliquid sit medium inter vivum et non vivum, vel inter esse animal et non esse animal, et inter esse hominem et non esse hominem : sed quia actione primarum qualitatum prout instrumenta cæli sunt, vel formativæ virtutis quæ est in semine, materia prius accedit ad potentiam et ad actum unius quod est vivum, et postea ad potentiam et ad actum alterius quod est animal : et hoc non est intendi et remitti, sed potius in eadem forma secundum potentiam et actum plus et minus accedere ad veram nominis impositionem.

Quod autem objicitur de mixtione substantiarum animalis, nihil penitus facit ad propositum, quia in mixto non sit intensio et remissio secundum substantias mixtorum, sed secundum qualitates illarum substantiarum. Et ideo intensio refertur ad qualitates et non ad substantias. Patet igitur quod substantiæ convenit nec magis nec minus recipere.

<!-- cap:2.2.11 -->

CAPUT XI.

De proprietate substantiæ quæ est, quod substantia secundum sui mutationem eadem numero manens, susceptibilis est contrariorum.

Maxime autem substantiæ proprium esse videtur, quod et proprie proprium est, et convenit omni et soli et semper, cum unum et idem numero sit contrariorum susceptivum, vel susceptibile esse. Dico autem quod cum unum sit a quo sit contraria potentia suscipiendi. Hoc autem habet substantia ab eo quod ipsa est subjectum ens in se completum : et hoc habet a specie in quantum est substantia, et hoc est in quantum est substantia : quia prima substantia est ex eo quod jam substat accidentibus individuantibus. Et ideo dico numero propter primam substantiam in qua est secunda, et in qua veritatem accipit substandi et habet.

Ex hoc patet quod substantia secunda in quantum est in prima, est ens universale perfectum, et ex genere formato et differentia ad perfectum esse formantem consistit. Ex hoc autem virtutem accipit substandi accidentibus, quod non haberet si in seipsa ens perfectum non esset, quia quod in se perfectum non est, alii dare non potest esse per hoc quod existit in eo. Sic igitur ens in se perfectum et idem numero est per materiæ individuantis divisionem : ita quod in quantum secunda substantia est in prima, sit unum perfectum : in quantum est individuata per indivisam et unam materiam, sit idem numero. Sic esse unum et idem numero subjicible propriis contrariis est proprie proprium substantiæ secundum quod dicitur

And in this way Aristotle says that something is not living and animal at the same time, and that something is not animal and man at the same time: not that something is a medium between living and non-living, or between being an animal and not being an animal, and between being a man and not being a man: but because by the action of the first qualities insofar as they are instruments of heaven, or of the formative power which is in the seed, the matter first approaches toward the power and toward the act of the one which is living, and afterward toward the power and toward the act of the other which is animal: and this is not to be intended and remitted, but rather, in the same form according to power and act, to approach more and less toward the true imposition of the name.

As for what is objected concerning the mixture of the substances of an animal, it does nothing at all for the purpose, because in a mixture there is no intension and remission according to the substances of the mixed things, but according to the qualities of those substances. And therefore intension is referred to the qualities and not to the substances. It is clear therefore that it belongs to substance to receive neither more nor less.

<!-- cap:2.2.11 -->

CHAPTER XI.

Concerning the property of substance which is, that substance remaining the same in number through its own change, is susceptive of contraries.

Most of all, however, it seems to be proper to substance, which is also a "proper property," and belongs to every [substance] and only [to substance] and always, that while it is one and the same in number, it is susceptive of contraries, or [is capable] of being susceptive. I say, however, that while it is one, there is a contrary power of receiving. This, however, substance has from the fact that it is a subject being complete in itself: and this it has from the species insofar as it is substance, and this exists insofar as it is substance: because first substance is from the fact that it already substands individuating accidents. And therefore I say "in number" on account of first substance in which second substance is, and in which it receives and has the truth of substanding.

From this it is clear that second substance, insofar as it is in first substance, is a perfect universal being, and consists of a formed genus and a difference forming [it] toward a perfect being. From this, however, it receives the power of substanding accidents, which it would not have if it were not in itself a perfect being, because what is not perfect in itself cannot give being to another by the fact that it exists in it. Thus therefore, a being perfect in itself and the same in number exists through the division of individuating matter: such that insofar as second substance is in first, it is one perfect [being]: insofar as it is individuated through undivided and one matter, it is the same in number. Thus to be one and the same in number subjectible to its own contraries is a proper property of substance according as it is called...

substantia ab actu substandi, sicut in ante habitis dictum est. Et in aliis quidem rebus aliorum prædicamentorum non habebit nec inveniet quis quod proferat cui hoc proprium conveniat. Quæcumque res generum aliorum non sunt substantiæ ab actu substandi dictæ, ita scilicet quod res alterius generis sit contrariorum susceptibilis, cum sit in se manens unum et idem numero. Velut si quæramus in rebus quæ sunt in genere qualitatis, et dicamus quod color cum sit manens unum et idem numero, non erit album et nigrum per successionem, ut videlicet sit actu album, et postea actu nigrum.

Sed forte si est color medius, in se habebit album et nigrum permixta : sed hoc est contraria permixta et in potentia habere, et non habere actum utrumque per successionem manente eodem subjecto. Similiter si quis proferat de genere actionis aliquid, quod contrariorum videatur esse susceptivum, et dicat quod eadem actio prava sit et studiosa, sicut actio voluntatis deliberativæ, dicimus quod eadem actio numero manens una numero, non potest esse per successionem prava modo, et postea studiosa : quia pravum et studiosum sunt accidentia inseparabilia ab actione : et ideo actio prava eadem manens nunquam erit studiosa, sed alia similitudinis illi in causa (in eo quod est voluntaria) potest esse studiosa. Similiter una et eadem numero linea non erit recta et curva per successionem : et similiter est in omnibus aliis rebus aliorum generum quæ non sunt substantia. Sola autem substantia cum sit una et eadem numero manens in subjecto quod est substantia, capax est contrariorum, ut modo sit sub uno et postea ipsa eadem numero sit sub alio, ut patet inductione, ut quidam homo qui est prima substantia cum sit unus et idem numero, aliquando quidem est albus, aliquando autem niger ; et aliquando calidus, et aliquando frigidus. Similiter secundum contraria morum aliquando quidem pravus et postea studiosus, et non simul pravus studiosus.

In aliis autem prædicamentis nullum tale ens invenitur.

Forsitan autem aliquis instans contra ea quæ dicta sunt, dicet orationem quæ est in genere discretæ quantitatis, vel visum sive opinionem quæ est in genere qualitatis, tale aliquid esse secundum quod eadem oratio manens numero eadem, videtur esse vera et postea falsa per successionem, et sic suscipere contraria. Nec modo fiat vis utrum verum et falsum contrarie vel privative opposita sunt : velut si dicamus in exemplo, quod hæc oratio aliquem sedere dum sedet est vera, et eadem oratio manens eadem numero per syllabas et dictionum operationem falsa erit illo non sedente.

...substance from the act of substanding, as has been said in the preceding parts. And in other things of other categories, one will not have nor find anything to bring forward to which this property belongs. Whatever things of other genera are not substances called so from the act of substanding, [it is] not in such a way namely that a thing of another genus is susceptive of contraries, while remaining in itself one and the same in number. As if we should seek in things which are in the genus of quality, and say that a color while remaining one and the same in number, will not be white and black through succession, as namely to be actually white, and afterward actually black.

But perhaps if it is a medium color, it will have in itself white and black mixed: but this is to have contraries mixed and in power, and not to have both in act through succession while the same subject remains. Similarly if someone should bring forward something from the genus of action, which seems to be susceptive of contraries, and say that the same action is depraved and virtuous, such as an action of the deliberative will, we say that the same action remaining numerically one, cannot be through succession depraved now, and afterward virtuous: because depravity and virtue are accidents inseparable from the action: and therefore a depraved action while remaining the same will never be virtuous, but another [action] of likeness to it in cause (in that it is voluntary) can be virtuous. Similarly one and the same numerical line will not be straight and curved through succession: and similarly it is in all other things of other genera which are not substance. Only substance, however, since it remains one and the same in number in a subject which is substance, is capable of contraries, such that it is now under one and afterward the same numerical [substance] is under another, as is clear by induction, as a certain man who is a first substance, since he is one and the same in number, is sometimes indeed white, and sometimes however black; and sometimes hot, and sometimes cold. Similarly according to contraries of morals, sometimes indeed depraved and afterward virtuous, and not depraved and virtuous at the same time.

In other categories, however, no such being is found.

But perhaps someone, insisting against what has been said, will say that a proposition which is in the genus of discrete quantity, or a vision or an opinion which is in the genus of quality, is such a thing according to which the same proposition remaining numerically the same, seems to be true and afterward false through succession, and thus to receive contraries. Nor should stress be laid now on whether truth and falsehood are opposed contrarily or privatively: as if we should say in an example, that this proposition "someone is sitting" while he sits is true, and the same proposition remaining the same in number through syllables and the operation of words will be false with him not sitting.

Similiter autem est de visu opinantis alicujus. Si quis enim opinetur sedere aliquem, dum sedet, verum opinabitur : quæ opinio manens eadem in anima opinantis, falsa erit illo surgente, si ejusdem opinionis visum de eodem surgente retineat, quem prius illo sedente habuit.

Sed ad hoc dicendum quod etiam si quis hoc suscipiens concedat eamdem orationem esse, vel eamdem opinionem, quæ sic contraria suscipiat, quod tamen falsum est, sicut inferius patebit, quia verum et falsum est in talibus sicut in signo, et non in subjecto. Dicimus tamen quod hoc dato differentia est in modo suscipiendi contraria. Nam ea quæ in substantiis sunt, ipsa quidem mutata et alterata secundum seipsa susceptibilia sunt contrariorum : quando enim id modo quod est frigidum, est factum de eo quod prius erat calidum, ipsum subjectum secundum seipsum mutatum est, alteratum enim est : et quod ex albo fit nigrum, ipsum alterum et alteratum est factum. Similiter est quando ex pravo per alterationem fit studiosum, et similiter est in omnibus aliis quæ de contrario mutantur in contrarium. Unde id quod mutationem secundum seipsum suscipiens est, susceptibile fit contrariorum : sed oratio quidem et opinio, in quibus est verum et falsum sicut in signo ex ratione alterius ad ipsa,

ipsa quidem immobilia perseverant, et in nullo mutata. Cum vero res movetur et mutatur, ex cujus relatione ad ipsa vera vel falsa efficiuntur, fit contrarium circa orationem et opinionem ; oratio enim quæ est, quod sedet aliquis vel opinio, manente eadem oratione et opinione, re autem mutata, facta est falsa, quæ prius erat vera. Similiter autem est si res moveatur ad id quod prius non erat, tunc oratio vel opinio quæ prius erat falsa, fit vera, nulla sui facta mutatione. In substantiis autem non est sic, sed ipsa secundum seipsa mutata, sunt susceptibilia contrariorum.

Et hoc modo accipit Aristoteles [1] hanc proprietatem, quod unum et idem numero manens secundum sui mutationem susceptibilis est contrariorum. Et hoc modo convenit omni et soli et semper substantiæ. Dico autem omni, prout est substantia sub prædicamento, quoniam illi convenit secundum seipsam mutari. Et dico soli, quia licet oratio et opinio videantur suscipere contraria, non tamen secundum sui mutationem, sed secundum alterius. Et dico semper, quia hoc convenit substantiæ dum est substantia.

Similarly however it is concerning the vision of someone opining. For if someone should opine that someone is sitting, while he sits, he will opine truly: which opinion remaining the same in the soul of the one opining, will be false with him rising, if he retains the vision of the same opinion concerning the same one rising, which he previously had while he was sitting.

But to this it must be said that even if someone receiving this should grant that it is the same proposition, or the same opinion, which thus receives contraries, which is nevertheless false, as will appear below, because truth and falsehood are in such things as in a sign, and not in a subject. We say nevertheless that, this being granted, there is a difference in the mode of receiving contraries. For those things which are in substances, being themselves changed and altered according to themselves, are susceptive of contraries: for when that which is now cold has been made from that which was previously hot, the subject itself is changed according to itself, for it has been altered: and that which from white becomes black, has been made other and altered. Similarly it is when from depraved through alteration it becomes virtuous, and similarly it is in all other things which are changed from a contrary into a contrary. Whence that which is receiving change according to itself, becomes susceptive of contraries: but a proposition indeed and an opinion, in which truth and falsehood are as in a sign from the account of another toward them

...they indeed remain immobile, and changed in nothing. But when the thing is moved and changed, from whose relation toward them they are made true or false, a contrary occurs concerning the proposition and opinion; for the proposition which is "that someone is sitting," or the opinion, while the same proposition and opinion remains, but the thing being changed, has become false, which was previously true. Similarly however it is if the thing be moved toward that which previously it was not, then the proposition or opinion which was previously false, becomes true, with no change of itself having occurred. In substances, however, it is not so, but they themselves being changed according to themselves, are susceptive of contraries.

And in this way Aristotle accepts this property, that [substance] remaining one and the same in number is susceptive of contraries through its own change. And in this way it belongs to every and only and always to substance. I say however "to every," insofar as it is substance under the category, since it belongs to it to be changed according to itself. And I say "to only," because although a proposition and an opinion seem to receive contraries, yet not according to their own change, but according to that of another. And I say "always," because this belongs to substance while it is substance.

Sed contra hoc videntur esse tria. Unum est de intelligentiis quas quidam in prædicamento substantiæ ponunt, et tamen non videntur secundum sui mutationem esse susceptibiles contrariorum. Secundum est de corporibus cælestibus, quæ licet sint in prædicamento substantiæ, non tamen videntur susceptibilia contrariorum secundum sui mutationem : nihil enim est cælo contrarium, ut probatur in primo de Cælo et Mundo [2]. Tertium est, quod quædam oratio vel opinio videtur esse mutata secundum seipsam, ut videlicet ipsa eadem numero manens secundum sui mutationem sit susceptibilis contrariorum.

Dicamus ergo ad primum, quod intelligentiæ nullo modo sunt in prædicamento substantiæ, sicut probat Avicenna, et nos in prima philosophia probavimus. Ens enim in prædicamento per hoc quod est in prædicamento, habet aliquid de potentialitate, quoniam generis natura materialis est ad differentiam : et ideo ens in prædicamento non est simplex : intelligentia autem penitus simplex est, sicut infra ostendetur : et ideo non est in prædicamento.

Adhuc autem si daretur eas esse in prædicamento, dicendum quod substantia tripliciter dicitur : uno modo ens per se non in subjecto, et hoc modo dicitur de Deo et de omnibus substantiis : alio modo dicitur secundum quod ipsa est aliquid compositum ens in se perfectum sicut hoc aliquid : et hoc modo non dicitur de intelligentiis : tertio modo dicitur de ea quæ mutabilis est secundum seipsam, et hoc modo accipit hic Aristoteles substantiam, et dicit quod hæc secundum sui mutationem susceptibilis est contrariorum.

Similiter corpora cælestia quæ directe cadunt in prædicamento ut composita substantia sunt, et tamen secundum sui mutationem non sunt susceptibilia contrariorum, ut videtur : quia corpus cæ-

leste, ut dicit Averroes, non est susceptibile contrariorum.

Adhuc etiam quod dicitur quod substantiæ nihil est contrarium, videtur habere instantiam, quia differentia est substantia et tamen habet contrarium. Quod enim differentia sit substantia, supra probatum est : quod autem habeat contrarium, patet, quoniam rationale et irrationale in genere animali sunt contrariæ differentiæ.

Ad secundum dicamus, sicut dicit Averroes, quod corpus cæleste non est in prædicamento substantiæ nisi equivoce : quoniam non habet materiam ejusdem rationis cum materia generabilium et corruptibilium : et ideo non est compositum ex materia et forma sicut ista substantia : et ideo non est susceptibile contrariorum.

Ad tertium autem dicemus infra, quod oratio et opinio nullo modo secundum sui mutationem sunt susceptibiles contrariorum.

But against this there seem to be three [objections]. One is concerning intelligences, which some place in the category of substance, and yet they do not seem to be susceptive of contraries according to their own change. The second is concerning celestial bodies, which although they are in the category of substance, yet do not seem susceptive of contraries according to their own change: for nothing is contrary to heaven, as is proved in the first book of *On the Heavens and the World*. The third is, that a certain proposition or opinion seems to be changed according to itself, so that namely while remaining the same in number it is susceptive of contraries through its own change.

Let us say therefore to the first, that intelligences are in no way in the category of substance, as Avicenna proves, and as we have proved in the first philosophy. For a being in a category, by the fact that it is in a category, has something of potentiality, since the nature of the genus is material toward the difference: and therefore a being in a category is not simple: but an intelligence is entirely simple, as will be shown below: and therefore it is not in a category.

Furthermore, even if it were granted that they are in a category, it must be said that substance is spoken of in three ways: in one way, a being through itself not in a subject, and in this way it is said of God and of all substances: in another way it is spoken of according as it is something composite, a being perfect in itself like "this somewhat": and in this way it is not said of intelligences: in a third way it is spoken of concerning that which is changeable according to itself, and in this way Aristotle here accepts substance, and says that this is susceptive of contraries according to its own change.

Similarly celestial bodies, which fall directly into the category as composite substance, and yet according to their own change they are not susceptive of contraries, as it seems: because a celestial

...body, as Averroes says, is not susceptive of contraries.

Furthermore, also what is said that nothing is contrary to substance, seems to have an instance, because the difference is substance and yet it has a contrary. For that the difference is substance, has been proved above: that however it has a contrary is clear, since rational and irrational are contrary differences in the genus of animal.

To the second let us say, as Averroes says, that the celestial body is not in the category of substance except equivocally: since it does not have matter of the same account with the matter of things generable and corruptible: and therefore it is not composite of matter and form like this [terrestrial] substance: and therefore it is not susceptive of contraries.

To the third we shall say below, that a proposition and an opinion are in no way susceptive of contraries according to their own change.

Quod autem objicitur de differentiis, dicendum quod differentiæ sunt substantiæ prout sunt partes et principia substantiæ, et non prout sunt subjectum et substans : et ideo licet differentiæ habeant contrarium, non tamen habent contrarium prout sunt substantes.

Quod autem quidam de intelligentiis dicunt, quod secundum sui mutationem sunt susceptibiles contrariorum, dicentes intelligentiam posse esse pravam et studiosam, sicut de Angelis dicunt qui per voluntatem facti sunt mali, dicimus quod hoc nullo modo potest probari ex principiis alicujus philosophiæ : quoniam intelligentia secundum quod intelligentia est, est ens in actu, et non habet aliquid de potentia : et ideo non est susceptibilis contrariorum.

Quidam autem Arabes et quidam Judæi de intelligentiis secundum rationem suæ legis loquuntur, quod nullo modo probare possunt ex alicujus philosophiæ principiis, dicentes intelligentias Angelos esse, qui localiter moventur et mittuntur ad homines [1], quod a Stoiciis secundo et ab Epicureis primo ortum habuit et assumpsit, et ab his qui leges posuerunt. Et secundum istos intelligentia habens est genus et speciem et individuum. Et genus quidem est in intelligentia omne id quod est in ea potentiale, sicut est id quod est in ipsa de natura universalis lucis agentis : species autem est id quod est in ea de natura ipsius formæ determinantis : individuum autem est id quod est in ea de natura ipsius esse singularis et occulti quod habet in seipsa. Et secundum istos intelligentia est susceptibilis contrariorum secundum sui mutationem, quia dicunt eam posse mutari de bono in malum, et de vero in falsum. Sed hoc totum est extra philosophiæ terminos, sicut infra patebit.

Redeamus ergo ad propositum et dicamus, quod licet oratio et opinio videantur esse susceptibiles contrariorum, non tamen secundum sui mutationem. Oratio enim quæ est, quod sedet aliquis, eadem numero manens secundum sui mutationem non est susceptibilis contrariorum : quoniam oratio ipsa in se nihil mutata est, sed re mutata facta est contraria habitudo orationis ad rem : et ideo oratio non secundum sui mutationem susceptibilis est contrariorum. Similiter est de opinione.

In substantiis autem non est sic, sed ipsa eadem numero manens secundum sui mutationem susceptibilis est contrariorum : ut idem numero homo secundum sui mutationem aliquando fit albus, et aliquando niger. Et hoc modo proprium est substantiæ, quod unum et idem numero manens secundum sui mutationem susceptibilis est contrariorum.

Hoc autem non convenit differentiis : differentiæ enim oppositæ natæ sunt fieri circa idem genus, et non possunt simul esse actu in illo, genus enim proportionatur materiæ, sicut olim sæpius dictum est.

As for what is objected concerning differences, it must be said that differences are substances insofar as they are parts and principles of substance, and not insofar as they are the subject and substanding [thing]: and therefore although differences have a contrary, they do not nevertheless have a contrary insofar as they are substanding.

As for what some say concerning intelligences, that they are susceptive of contraries according to their own change, saying that an intelligence can be depraved and virtuous, just as they say concerning the Angels who through will were made evil, we say that this can in no way be proved from the principles of any philosophy: since an intelligence, according as it is an intelligence, is a being in act, and does not have anything of potency: and therefore it is not susceptive of contraries.

Certain Arabs and certain Jews, however, speak of intelligences according to the account of their own law, which they can in no way prove from the principles of any philosophy, saying that the intelligences are Angels, who are locally moved and sent to men, which [opinion] had its origin and was assumed secondarily from the Stoics and primarily from the Epicureans, and from those who established laws. And according to these, the intelligence possessing [it] is a genus and species and individual. And the genus indeed is in the intelligence everything which is potential in it, just as is that which is in it of the nature of the universal agent light: the species however is that which is in it of the nature of the determining form itself: while the individual is that which is in it of the nature of its own singular and occult being which it has in itself. And according to these, the intelligence is susceptive of contraries according to its own change, because they say it can be changed from good into evil, and from true into false. But all this is outside the limits of philosophy, as will appear below.

Let us return therefore to the purpose and say, that although a proposition and an opinion seem to be susceptive of contraries, yet not according to their own change. For the proposition which is "that someone is sitting," while remaining numerically the same, is not susceptive of contraries according to its own change: since the proposition itself has been changed in nothing in itself, but the thing being changed, a contrary habituation of the proposition toward the thing has been made: and therefore the proposition is not susceptive of contraries according to its own change. Similarly it is concerning opinion.

In substances however it is not so, but [substance] itself remaining numerically the same is susceptive of contraries according to its own change: as the numerically same man through his own change sometimes becomes white, and sometimes black. And in this way it is proper to substance, that remaining one and the same in number it is susceptive of contraries through its own change.

This, however, does not belong to differences: for opposite differences are by nature made to occur about the same genus, and cannot be in act in it at the same time, for the genus is proportioned to matter, as has already been said very often.

Ex his ergo manifestum est, quod proprie proprium substantiæ est secundum sui mutationem susceptibile esse contrariorum, et quod hæc convenit omni et soli et semper illi substantiæ quæ cadit in genere substantiæ, prout ipsa est ens constitutum et non absolutum a ratione prædicamentali.

De hoc etiam quod dictum est quod oratio susceptibilis est veri et falsi, una et eadem manens ad rei significatæ mutationem, multæ sunt dubitationes, quæ videlicet sit res significata, et qualiter significatum sit in oratione. Est enim oratio hæc quæ verum et falsum significat, sola oratio quæ enuntiatio vel interpretatio vocatur.

Videtur enim quod oratio in significando non mutatur per hoc quod res mutatur significata: hæc enim oratio, ego sedeo, significat me sedere dum sedeo: nec minus significat me sedere dum non sedeo, sed æqualiter et semper significat me sedere. ergo in significando quod significat nunquam mutatur, facit enim semper quod a prima institutione accepit significare, quod ego sedeo, et hoc semper et immobiliter agit. uno ergo modo se habet ad hoc significandum, sive ego sedeam sive non sedeam. Quod autem uno modo se habet in significando, non modo est verum et modo falsum secundum rei mutationem. Videtur igitur quod oratio non est susceptiva veri et falsi ad rei mutationem.

Adhuc, Omne signum est verum, quando ita significat prout est institutum significare. Sed hæc oratio, ego sedeo, instituta est ut significet me sedere, sive sedeam sive non sedeam. Sive ergo sedeam, sive non, facit quod incepit facere a prima institutione: sed tunc est significativa veri, quando significat sicut incepit significare: igitur sive sedeam, sive non, hæc oratio, ego sedeo, semper est vera significando.

Adhuc, Sicut oratio est significativa rei, ita significativa est conceptus sive cogitationis sive opinionis ejus qui profert orationem illam, eo quod voces sunt notæ passionum quæ sunt in anima. Ergo sicut est susceptiva veri et falsi ad rei mutationem, ita est susceptiva veri et falsi ad conceptus vel cogitationis sive opinionis mutationem illius qui profert orationem. sicut enim est verum quod est adæquatio vocum et rerum significatarum per voces, sic est verum quod est adæquatio vocum et conceptus prolati per voces. Videtur ergo quod hæc oratio, ego sedeo, mutetur de vero in falsum, et e converso, quando ille qui profert eam mutatur secundum opinionem, quod sedeam, vel quod non sedeam. Et hoc jam in hac oratione dixit Pythagoras, qui posuit verum et falsum in dictione opinando vel non opinando id quod dictum est in voce significante.

From these things therefore it is manifest, that the proper property of substance is according

...its own change being susceptive of contraries, and that this belongs to every and only and always to that substance which falls under the genus of substance, insofar as it is a constituted being and not absolved from the predicamental account.

Concerning what has been said, that a proposition is susceptive of truth and falsehood, remaining one and the same through the change of the signified thing, there are many doubts — namely, what the signified thing is, and in what manner the signified is in the proposition. For the proposition which signifies truth and falsehood is solely the proposition which is called an enunciation or interpretation.

For it seems that a proposition in signifying is not changed by the fact that the signified thing is changed: for this proposition, "I am sitting," signifies that I am sitting while I sit; nor does it signify any less that I am sitting while I am not sitting, but equally and always signifies that I am sitting. Therefore in signifying what it signifies, it is never changed, for it always does what it received from the first institution to signify — namely, that I am sitting — and this it always and immovably does. Therefore it is disposed in one way toward signifying this, whether I sit or do not sit. But what is disposed in one way in signifying is not now true and now false according to the change of the thing. It seems therefore that a proposition is not susceptive of truth and falsehood according to a change of the thing.

Furthermore, every sign is true when it signifies in the way it was instituted to signify. But this proposition, "I am sitting," was instituted to signify that I am sitting, whether I sit or do not sit. Therefore whether I sit or not, it does what it began to do from the first institution: but it is significative of truth when it signifies as it began to signify; therefore whether I sit or not, this proposition, "I am sitting," is always true in signifying.

Furthermore, just as a proposition is significative of a thing, so it is significative of the concept or thought or opinion of the one who utters that proposition, since words are marks of the affections which are in the soul. Therefore just as it is susceptive of truth and falsehood according to the change of the thing, so it is susceptive of truth and falsehood according to the change of concept or thought or opinion of the one who utters the proposition. For just as truth is the adequation of words and things signified by the words, so truth is the adequation of words and the concept expressed by the words. It seems therefore that this proposition, "I am sitting," changes from true to false and conversely when the one who utters it changes according to the opinion that I am sitting or that I am not sitting. And Pythagoras already said this about this proposition, who posited truth and falsehood in speech by opining or not opining that which is said in the signifying word.

Secundum autem eumdem modum videtur Anselmus probare: quia verum in signo est immobile et unum in omni signo significante: signum enim verum est quando significat hoc quod significare accipit in primæ sapientiæ veritate. sed signum semper hoc significat quod accipit in prima veritate significare: ergo quando significat hoc, sive res sit, sive non sit, semper est verum in significando. sive ergo res sit, sive non sit, oratio quæ est signum, semper vera est in significando: non ergo ad rei mutationem oratio susceptibilis est veri vel falsi, ut videtur.

Adhuc autem secundum hoc videtur, quod una veritas significetur et sit in omnibus veris: omne enim signum significat quod significare accipit in prima veritate: quod autem in prima veritate est, unum et idem est, non diversum: idem

ergo et unum significatur in omnibus veris, ut videtur.

Sexta. Adhuc, Idem est et unum quod immobile est ad omnium rerum mutationem : significare autem hoc quod accipit significare in prima veritate, immobile est ad omnium rerum mutationem : ergo idem et unum est, quod significatur in omni signo significante : hoc autem non potest nisi veritas prima, ut videtur : videtur ergo, quod veritas prima significetur in omni oratione significante, et sic totum falsum esse videtur quod dictum est, quod scilicet oratio verum et falsum significat in eo quod res significata est, vel non est. Hæc et hujusmodi sophismata multa induci possunt contra ea quæ determinata sunt, si rationes Heracliti et Pythagoræ et Anselmi in libro de *Veritate* considerentur.

Solutio. Ad hæc ergo et hujusmodi dicendum videtur, quod veritas signi, quod est enuntiatio vel dictum enuntiationis, est adæquatio vocis significantis et rei significatæ per vocem, et ideo verum et falsum in voce est sicut in signo relato ad rem significatam : propter quod etiam mutatur significatio ad rei significatæ mutationem, sicut superius dictum est : et nunc manente oratione una et eadem ad rei mutationem, mutatur de vero in falsum, et e converso de falso in verum.

Ad primam. Ad id autem quod objicitur quod idem semper significat, sive sit res, sive non sit, dicendum quod hoc verum est : sed significatio non est vera vel falsa in hoc quod ipsa idem significet, sed in hoc est significatio vera vel falsa, quod rei adæquatur vel non adæquatur significatio, et ideo inæquali facta re cui signum non adæquatur, falsa est oratio.

But in the same manner Anselm seems to prove: because truth in a sign is immobile and one in every sign that signifies: for a sign is true when it signifies that which it received to signify in the truth of the first wisdom. But a sign always signifies that which it received in the first truth to signify; therefore when it signifies this, whether the thing exists or does not exist, it is always true in signifying. Therefore whether the thing exists or does not exist, the proposition which is a sign is always true in signifying. Therefore a proposition is not susceptive of truth or falsehood according to a change of the thing, as it seems.

Furthermore, according to this it seems that one truth is signified and exists in all true things: for every sign signifies what it received to signify in the first truth; but what is in the first truth is one and the same, not diverse; the same

therefore and one is signified in all true things, as it seems.

Sixth. Furthermore, the same and one is that which is immobile at the change of all things: but to signify this which it receives to signify in the first truth, is immobile at the change of all things: therefore the same and one is that which is signified in every signifying sign: but this can only be the first truth, as it seems: it seems therefore, that the first truth is signified in every signifying speech, and thus the whole seems to be false which was said, namely that speech signifies true and false in that the thing signified is, or is not. These and many such sophisms can be brought in against those things which have been determined, if the reasons of Heraclitus and Pythagoras and Anselm in the book *On Truth* are considered.

Solution. To these things therefore and the like it seems it must be said, that the truth of a sign, which is an enunciation or the saying of an enunciation, is the adequation of the signifying voice and the thing signified through the voice, and therefore truth and falsehood is in the voice as in a sign related to the signified thing: on account of which also the signification changes at the change of the signified thing, as was said above: and now the speech remaining one and the same at the change of the thing, it changes from true into false, and conversely from false into true.

To the first. But to that which is objected that it always signifies the same, whether it be the thing or be not, it must be said that this is true: but the signification is not true or false in that it signifies the same, but the signification is true or false in this, that the signification is equated or not equated to the thing, and therefore the thing having become unequal to which the sign is not equated, the speech is false.

Ad secun- dam. Ad hoc autem quod objicitur, quod significat quod accipit a prima institutione, dicendum quod a prima institutione accepit ut rem per sui adæquationem ad rem significaret : et quando non adæquatur rei, tunc non facit signum illud quod facere accipit a prima institutione : nemo enim signum sic instituit significare ut vagam et non rei significatæ æquatam habeat significationem : unde quando rei non adæquatur, tunc fallit ab hoc quod accepit a prima institutione : non enim instituta est tantum significare, sed instituta est ut per significationis adæquationem significet rem ut est, nec magis nec minus. Ad hoc enim sermo inventus est, ut dum rebus in communicando nobis invicem uti non possumus propter rerum infinitatem, et propter hoc quod plures res non semper habemus, sermonibus pro rebus uteremur, quando conceptus et affectiones quas de rebus habemus nobis invicem pandere et communicare volumus [1].

Quod autem objicitur de hoc quod ser- **Ad tertiam.** mo semper significat hoc quod in prima veritate significare accepit, dicendum quod in ordinatione primæ veritatis non accepit significare vaga tantum significatione, sed significare rem sicut est ratione rei, significatione rei adæquata : et hoc dico salva fide Anselmi [2]. Et ideo falsi et veri susceptiva efficitur per mutationem rei. Si autem non accepisset nisi adæquationem instituentis et signi instituti ad significandum, tunc aliquo modo esset verum quod dicitur, sed hoc meo judicio non est verum.

Ad hoc autem quod dicitur quod ve- **Ad quar-** rum est in adæquatione intellectus vel **tam.** conceptus ad signum quod conceptum significat, dicendum quod conceptus vel intellectus vel opinio vel quocumque modo dici possit id quod est in anima (cujus voces prolatæ signa sunt) non absolvitur a rebus quæ sunt causa conceptuum : et ideo illis prout conceptæ sunt res adæquatur : non enim sermo inventus est ad significandum conceptum fictum, qui non est nisi in concipiente, quia sermo inutilis esset, quia per sermonem

audiens nullam de re conciperet veritatem vel significationem. Et ideo dictum Pythagoræ et Heracliti non habet veritatem: quia dixerunt, quod verum est in apprehendendo vel opinando secundum quod opinio est opinantis passio. sed hoc verum est, quod verum est in opinando vel concipiendo secundum quod conceptus vel opinio est rei significatæ æquata passio vel conceptio: et ideo sermo talis conceptui æquatus, æquatus est etiam rei. et ideo dicit Aristoteles quod veritas est adæquatio rei ad intellectum.

To the second. But to this which is objected, that it signifies what it receives from the first institution, it must be said that from the first institution it received that it should signify the thing through its adequation to the thing: and when it is not equated to the thing, then it does not make that sign which it receives to make from the first institution: for no one instituted a sign to signify such that it has a vague signification and one not equated to the signified thing: whence when it is not equated to the thing, then it fails from this which it received from the first institution: for it was not instituted only to signify, but it was instituted so that through the adequation of the signification it might signify the thing as it is, neither more nor less. For to this end speech was invented, that while we cannot use the things themselves in communicating with each other on account of the infinity of things, and on account of this that we do not always have many things, we might use words for things, when we wish to open and communicate to each other the concepts and affections which we have about things.

But that which is objected about this that speech always signifies this which it received in the first truth to signify, it must be said that in the ordination of the first truth it did not receive to signify only by a vague signification, but to signify the thing as it is by the account of the thing, with the signification equated to the thing: and this I say saving the faith of Anselm. And therefore it is made susceptive of false and true through the change of the thing. But if it had not received except the adequation of the institutor and the sign instituted for signifying, then in some way it would be true what is said, but this in my judgment is not true.

But to this which is said that the true is in the adequation of the intellect or concept to the sign which signifies the concept, it must be said that the concept or intellect or opinion or in whatever way that which is in the soul may be called (whose uttered voices are signs) is not absolved from the things which are the cause of the concepts: and therefore the thing is equated to them insofar as they are conceived: for speech was not invented for signifying a feigned concept, which is not except in the conceiver, because the speech would be useless, because through speech

the hearer would conceive no truth or signification concerning the thing. And therefore the saying of Pythagoras and Heraclitus does not hold truth: for they said that truth is in apprehending or opining insofar as the opinion is a passion of the one opining. But this is true — that truth is in opining or conceiving insofar as the concept or opinion is a passion or conception adequated to the signified thing. And therefore speech adequated to such a concept is also adequated to the thing. And therefore Aristotle says that truth is the adequation of the thing to the intellect.

Ad hoc autem quod dicit quod omnia sunt vera prima veritate, quia signa sunt primæ veritatis in hoc quod significant quod in prima veritate acceperunt significare, dicendum ut prius, quod in prima veritate acceperunt, quod significent res, et adæquata significatione significent verum, et non adæquata significent falsum. Et ideo mutata significatione signi mutatur adæquatio. Et quod dicunt de immobilitate veritatis, dicendum quod illa immobilitas non est nisi circa significandum relatum ad significandum, et non circa signum rei significatæ æquatum vel non æquatum. et ideo signo illo manente immobilis est veritas: sed illa prima veritas esse potest, quia corrumpitur et mutatur mutato signo.

Ad id autem quod dicitur, quod omne signum significat id ad quod significare ordinatum est in prima veritate, dicendum quod quamvis hoc concedatur, non sequitur quod omnia sint vera prima veritate, quia in prima veritate ordinatur quod oratio significet res per æqualitatem ad ipsas prout sunt vel non sunt. et sic in prima veritate voces ad res significandas referuntur. Si autem veritas non esset nisi adæquatio vocis ad primam veritatem in significando tantum, tunc posset aliquo modo verum esse quod dicitur.

Hæc igitur de prædicamento substantiæ dicta sufficiant.

Inter prædicabilia quæ sunt de natura accidentium substantiæ, primum occurrit prædicabile quod est quantitas, eo quod hoc immediate sequitur, ut dicit Rabbi Moyses. cum enim substantia potentia divisibilis sit secundum id quod est ex parte subjecti et materiæ quæ substat et secundis substantiis et accidentibus: potentia autem divisibile non reducitur ad actum ut actu divisibile fiat sive efficiatur nisi per quantitatem, oportet quod primum quod accidit substantiæ sit quantitas.

Adhuc, Cum materia, ut dicit Avicenna, in sufficientia sua subjiciatur generationi et generaliter mutationi in quantum potentia est trinæ dimensionis, et non actu formata ad aliquod esse, per generationem actu fiet trinæ dimensionis: oportet quod id quod primum ad materiam accidit ut formarum motus, et ipsius motus sit receptibile, et sit quantitas, quia aliter mobile non esset nisi esset quantum. eo quod Aristoteles probat in sexto Physicorum quod nihil est mobile nisi quantum. His igitur rationibus immediate post substantiam quantitas est ordinanda.

Adhuc autem propter hoc quod formarum alterationis non est receptibilis nisi per quantitatem, quia in ipsa substantia existentes, quantæ efficiuntur per quantitatem quæ jam inest subjecto, sicut albedo et caliditas et hujusmodi. His rationibus rationabiliter immediate post substantiam ponitur quantitas: inter accidentium enim genera nullum est penitus absolutum nisi quantitas et qualitas.

But to what is said — that all things are true with the first truth, because they are signs of the first truth insofar as they signify what they received to signify in the first truth — it must be said, as before, that in the first truth they received to signify things, and to signify truth with an adequated signification, and to signify falsehood with a non-adequated signification. And therefore when the signification of the sign is changed, the adequation is changed. And what they say about the immobility of truth, it must be said that that immobility is only about signifying as related to signifying, and not about the sign adequated or not adequated to the signified thing. And therefore while that sign remains, truth is immobile; but that first truth can exist because it is corrupted and changed when the sign is changed.

But to what is said — that every sign signifies that to which it was ordained to signify in the first truth — it must be said that although this be conceded, it does not follow that all things are true with the first truth, because in the first truth it is ordained that a proposition signifies things through equality to them insofar as they are or are not. And thus in the first truth words are referred to signifying things. But if truth were nothing except the adequation of the word to the first truth in signifying only, then what is said could be true in some way.

Let these things said about the category of substance suffice.

Among the predicables which are of the nature of accidents of substance, the first predicable that occurs is quantity, because it immediately follows, as Rabbi Moses says. For since substance is potentially divisible according to that which is on the part of the subject and matter which underlies both the second substances and the accidents — but what is potentially divisible is not reduced to act so as to become or be made actually divisible except through quantity — it is necessary that the first thing which happens to substance be quantity.

Furthermore, since matter, as Avicenna says, in its sufficiency is subject to generation and generally to change insofar as it is potentially of three dimensions and not actually formed to any being, through generation it will actually become of three dimensions. It is necessary that what first happens to matter, so that it may be receptive of the motions of forms and of motion itself, be quantity, because otherwise the mobile would not exist unless it were quantified. Since Aristotle proves in the sixth book of the Physics that nothing is mobile unless it is quantified. For these reasons, therefore, quantity is to be ordered immediately after substance.

Furthermore, because the forms of alteration are not receptible except through quantity, since existing in substance itself, they are made quantified through the quantity which already inheres in the subject, such as whiteness and heat and things of this kind. For these reasons, quantity is reasonably posited immediately after substance: for among the genera of accidents none is entirely absolute except quantity and quality.

Qualitatis autem præcipue quantum ad duas species illius quæ sunt passio vel passibilis qualitas, et forma vel circa aliquid constans figura, non est susceptibilis substantia nisi mediante quantitate, et ideo immediatus adhæret substantiæ quantitas quam aliquod aliorum generum accidentis.

Quia autem quantitas multarum divisionum est, oportet primo nos notificare quantitatem per divisionem ipsius, quia si per diffinitionem notificaremus eam, non possumus dicere nisi quia est mensura substantiæ. et cum ratio mensurandi non sit per unum modum in continuo et discreto, et in habente positionem in partibus et in non habente, non habemus quod una ratio esset quantitati secundum quod in genere accipitur diffinitivum. Cum enim, ut dicit Aristoteles, unumquodque mensuretur sui generis minimo, oportet quod sicut differunt mensurata, sic etiam differunt mensuræ, et eodem modo differat in eis mensurandi ratio: non habentes ergo quantitatis in genere sumptæ diffinitionem, ut aliquo modo declaretur, oportet quod ex posterioribus notificetur per divisionem.

Hac igitur necessitate coacti, dicimus quantitatem in genere per differentias primas dividentes, quod quantitatis aliud continuum, aliud discretum. Non autem

dicimus dividendo, quod quantitas dividitur continuitate et discretione: quia continuitas et discretio non sunt prædicabilia de quantitate, cum sint formæ abstractionis modo significatæ, quæ non sunt in genere quantitatis, sed nominentur qualitates quæ dicuntur circa quantitates.

Sic igitur tangentes quæ in genere sunt quantitatis, dicimus quod quantitatis aliud continuum, aliud discretum. Antequam autem has partes per diffinitiones assignemus quid sunt, oportet aliam subjicere divisionem, cujus partes communicant utrumque istorum dividentium: et hoc est, quod quantitatis aliud quidem est ex habentibus sive de numero eorum quæ habent positionem in partibus, et aliud ex partibus non habentibus positionem, sicut patebit inferius.

Has autem inducentes divisiones, nullam de unitate et puncto faciemus mentionem, quia hæc in genere quantitatis non sunt, nisi per reductionem ad genus, sicut principia generis ad genus reducuntur. Continuum enim habens positionem fluit a puncto sicut ab indivisibili corporali principio. Discretum autem habens ordinem in partibus loco positionis sicut numerus, causatur ab unitate sicut a suæ discretionis essentiali principio. Et hæc omnia inferius erunt manifesta.

Et quia habere positionem in partibus accidit continuis vel continuæ quantitati, et eidem accidit non habere positionem in partibus, ideo explanari non poterant membra primæ divisionis, nisi prius daretur et altera.

But substance is not receptive of quality — especially with respect to two of its species which are passion or passible quality, and form or figure consisting around something — except through the mediation of quantity; and therefore quantity adheres more immediately to substance than any other genus of accident.

But because quantity has many divisions, we must first make quantity known through its division, because if we were to make it known through a definition, we could say nothing except that it is a measure of substance. And since the account of measuring is not through one mode in the continuous and the discrete, and in what has position in its parts and in what does not have position, we do not have one account that would be definitive of quantity as taken in its genus. For since, as Aristotle says, each thing is measured by the smallest of its genus, it is necessary that as the things measured differ, so also the measures differ, and in the same way the account of measuring differs in them. Therefore, not having a definition of quantity taken in its genus, in order that it may be clarified in some way, it is necessary that it be made known from posterior things through division.

Therefore, compelled by this necessity, we say that quantity, divided by its first differences in the genus, is such that some quantity is continuous, and some is discrete. But we do not

say, by dividing, that quantity is divided by continuity and discretion: because continuity and discretion are not predicables of quantity, since they are forms signified in the mode of abstraction, which are not in the genus of quantity, but are named qualities which are said to be around quantities.

Thus therefore, touching upon what is in the genus of quantity, we say that some quantity is continuous and some is discrete. But before we assign what these parts are through definitions, we must introduce another division, whose parts are shared by each of these dividing members: and this is, that some quantity is from among those which have position in their parts, and some has parts not having position, as will be clear below.

But in introducing these divisions, we shall make no mention of unity and the point, because these are not in the genus of quantity except through reduction to the genus, as principles of a genus are reduced to the genus. For the continuous having position flows from the point as from a corporeal indivisible principle. But the discrete having order in its parts in place of position — such as number — is caused by unity as by the essential principle of its discretion. And all these things will be manifest below.

And because having position in parts happens to continuous things or to continuous quantity, and not having position in parts happens to the same, therefore the members of the first division could not be explained unless the second were also given first.

His autem ita per duas divisiones præmissis, est consequens membra istarum explanare sive declarare divisionum: et quia ratio discreti (ut Boëtius in prologo Arithmeticæ dixit, et ante eum dixerat Pythagoras in Consistentia) constat numerorum proportionibus, ideo prius declaranda est discreta quantitas, præcipue propter hoc quod principium istius quod est unitas, simplicius est quam essentiale principium continuæ quantitatis quod est punctum. unitas enim est indivisibile simplex, non habens positionem, punctum autem est indivisibile positum sive positionem habens.

Quod autem diximus dividentes, quod quantitatis aliud est continuum, aliud est discretum, præmisimus continuum discreto quoad nos: quoad nos enim cognoscimus numerum divisione continui, ut dicit Aristoteles; cum tamen unitas cujus iteratio causat essentialiter totum numerum quoad naturam rei simplicior sit quam punctum cujus fluxus causat essentialiter continuum. Hac igitur consideratione dicimus in primis describendo discretum per exemplum, quod discreta quantitas est ut numerus habens ordinem, et oratio habens voces et ordinem et rationem. Continua vero quantitas est, ut exemplariter declaretur, ut linea, superficies et corpus.

Amplius autem præter hæc tempus et locus: hæc enim præter dicta aliam suæ continuitatis habent causam: illa enim habent causam suæ continuitatis inter se et inter suam continuitatem essentialiter contentam, ut linea punctum, et superficies lineam, et corpus superficiem. locus autem in sua continuitate habet terminum corporis locati qui non est locus, et tempus continuatur continuitate motus: motus autem continuatur continuitate mobilis et continuitate magnitudinis inter duos terminos motus existentis. Hac igitur de causa dicitur quod præter hæc sunt tempus et locus. Hæc autem inferius melius patebunt, quando de singulorum istorum sigillatim loquemur continuitatibus.

Quod autem numerus sit quantitas discreta sic probatur: primo quidem quod

sit quantitas, quia quo mensurante redditur quantitas discretorum, illud per se est quantitas : numero autem redditur quantitas ovium, canum, hominum, et de aliis quæ discreta sunt et sub una forma continuitatis non continentur : numerus igitur est quantitas. Et quod sit discreta quantitas, probatur per hoc, quod continuum et discretum sunt oppositæ differentiæ, primo circa primum genus quantitatis : hæc autem sunt quantitates, et non continuæ : ergo discretæ : quia discretionem non cognoscimus nisi privatione continui, oportet quod hoc probetur continuitatis privatione.

But with these things thus premised through two divisions, it follows that we should explain or declare the members of these divisions. And because the account of the discrete (as Boethius said in the prologue of the Arithmetic, and before him Pythagoras had said in the Consistentia) consists in the proportions of numbers, therefore discrete quantity is to be declared first, especially because the principle of this — which is unity — is simpler than the essential principle of continuous quantity — which is the point. For unity is a simple indivisible, not having position, but the point is an indivisible posited or having position.

But when we said in dividing that some quantity is continuous and some is discrete, we placed the continuous before the discrete with respect to us: for with respect to us we know number through the division of the continuous, as Aristotle says; although unity — whose iteration essentially causes the whole number — is with respect to the nature of the thing simpler than the point whose flow essentially causes the continuous. Therefore in this consideration we say, first describing the discrete by example, that discrete quantity is such as number, which has order, and speech, which has words and order and account. But continuous quantity, to be declared by way of example, is such as line, surface, and body.

Furthermore, in addition to these, there are also time and place: for these, beyond the aforesaid, have another cause of their continuity. For the former have the cause of their continuity among themselves and essentially contained within their continuity — as the line has the point, the surface the line, and the body the surface. But place in its continuity has the boundary of the located body, which is not place; and time is continued through the continuity of motion, and motion is continued through the continuity of the mobile and the continuity of the magnitude existing between the two termini of motion. For this reason therefore it is said that besides these there are time and place. But all these things will be more clearly evident below, when we speak about the continuities of each of these individually.

But that number is a discrete quantity is proved thus: first indeed that

is quantity, because that by whose measuring the quantity of discrete things is rendered, that in itself is quantity: but by number the quantity of sheep, dogs, men, and of other things which are discrete and are not contained under one form of continuity, is rendered: therefore number is quantity. And that it is a discrete quantity, is proved by this, that continuous and discrete are opposite differences, first around the first genus of quantity: but these are quantities, and not continuous: therefore discrete: because we do not know discretion except by the privation of the continuous, it is necessary that this be proved by the privation of continuity.

Dico ergo quod partium numeri nullus est continuus terminus indivisibilis, ad quem ut ad unum copulentur, ita quod sit terminus partis unius et finis ad quem finitur continuatio ejus, et sit terminus alterius ut a quo incipit ipsius continuatio. Hoc autem probatur inductive et exemplariter, sicut quinque et quinque si ponantur particulæ numeri decem sive denarii, istæ particulæ nullum habent communem terminum qui sit unius partis finis et alterius principium ut continuans : prima enim quinque in ordine unitatem ad quam finiuntur non habent eamdem a qua inchoantur quinque sequentia secundum substantiam, sed divisim habent eam et discretam ab unitate a qua incipit quinarius sequens : et sic est de omnibus partibus denarii. Semper enim partes denarii quocumque modo accipiantur, semper discretæ sunt, sicut si accipiantur septem et tria, vel duo et octo, vel sex et quatuor, vel decem unitates, semper non copulatæ et non continuatæ accipiunt : ita quod singulæ in suis discretionibus nullo modo continuantur aliquo modo copulatæ. Numerus igitur est discreta quantitas, et iste numerus est formalis, qui est unus, duo, tres, etc., quo reddimus eorum quæ numerantur quantitatem discretionis. De hoc tamen inferius plenius erit manifestum.

Similiter autem et oratio discreta est quantitas, et est de numero discretorum, ita quod omnes ejus particulæ sunt ab invicem separatæ. Quare autem sive propter quid oratio sit in genere quantitatis manifestum est : omne enim cujus quantitas mensurante aliquo et certificante mensuratur, est quantitas et in genere quantitatis. Sonus autem litteræ et syllabæ sive brevis sit vel longa, mora pronuntiationis mensuratur. Ergo oratio consistens ex his, est quantitas et in genere quantitatis. Dico autem orationem cum voce prolatam, sive, quod idem est, prolatione vocis sive vocali pronuntiatione : sic enim non est unus sonus vel vox continue sonans vel vocans, sed est aggregata et discreta vocatione sonorum, qui sonus discretorum elementorum in litteris et syllabis sua multitudine et ordine conficiunt hoc totum quod est dictio vel oratio. Sic enim divisio litteræ cum divisione litteræ non est continuum, sed ab eo discretum, et cum eo compositum conficit syllabas, et syllaba cum syllaba composita conficit dictionem, et eo modo dictio cum dictione conficit orationem : in omnibus enim his syllaba, dictione, et oratione constitutio fit totius, discretorum congregatione et ordine. Quod manifestum est ex hoc quod soni elementorum et syllabarum et dictionum et orationum ad nullum communem terminum copulantur.

I say therefore that of the parts of number no one is a continuous indivisible terminus, to which as to one they might be coupled, so that it might be the terminus of one part and the end at which its continuation is finished, and be the terminus of the other so that from which its continuation begins. But this is proved inductively and by example, just as if five and five are placed as particles of the number ten or a denarius, those particles have no common terminus which is the end of one part and the beginning of the other as continuing: for the first five in order do not have the unity at which they are finished as the same from which the following five begin according to substance, but they have it dividedly and discrete from the unity from which the following fivefold begins: and thus it is concerning all parts of the denarius. For always the parts of the denarius in whatever way they are taken, are always discrete, just as if seven and three are taken, or two and eight, or six and four, or ten unities, they are always taken not coupled and not continued: so that each in their discretions are in no way continued by being coupled in some way. Therefore number is a discrete quantity, and that number is formal, which is one, two, three, etc., by which we render the quantity of discretion of those things which are numbered. Concerning this however it will be more fully manifest below.

But similarly speech is also a discrete quantity, and is of the number of discrete things, so that all its particles are separated from each other. But why or for what reason speech is in the genus of quantity is manifest: for everything whose quantity is measured by something measuring and certifying, is quantity and in the genus of quantity. But the sound of a letter and a syllable, whether it be short or long, is measured by the duration of pronunciation. Therefore speech consisting of these, is quantity and in the genus of quantity. But I say speech uttered with a voice, or, what is the same, by the uttering of a voice or by vocal pronunciation: for thus it is not one sound or a voice continuously sounding or calling, but it is an aggregated and discrete calling of sounds, which sound of discrete elements in letters and syllables by its multitude and order makes up this whole which is a word or speech. For thus the division of a letter with the division of a letter is not a continuum, but discrete from it, and composed with it makes up syllables, and a syllable composed with another syllable makes up a word, and in that way a word with another word makes up speech: for in all these — syllable, word, and speech — the constitution of the whole occurs by the congregation and order of discrete things. Which is manifest from this, that the sounds of elements and syllables and words and speeches are coupled at no common terminus.

Si enim dicam, baculus vel virga, discrete sonant omnia litteræ elementa, et nihil est continuans inter ea, quo continuante unus sonus alteri copuletur. Et similiter est de sono litterarum in syllaba, et sono syllabarum in dictione, et sono dictionum in oratione : nullus enim terminus est ad quem syllabæ copulentur in pronuntiatione, sed semper unaquæque divisa manet secundum seipsam discreta.

Sed hic advertendum est quod quamvis discretæ maneant omnes particulæ orationis et numeri, tamen sub una forma specifica discretionis vinciuntur, numerus enim unitatis constituitur aggregatione et ordine, et quæcumque unitas est congregationis ordinatæ terminus, in

quo stat aggregatio ut in complente unitate illa, ut finis et complementum est forma numeri illius, ut in quinario quinta, et in denario dena, et sic de aliis. Et ideo dicit Aristoteles [1], quod decem non est tria et septem, aut bis quinque, aut octo et duo : sed oportet accipere formam in unitate ultima prout est finis aggregationis ordinatæ ad unitatem illam quæ complementum est talis aggregationis.

Similiter autem in oratione prout est in litterata pronuntiatione : illa enim est aggregatio sonorum, elementorum, syllabarum et dictionum, ad unum totum complens ordinatam aggregationem, sicut litterarum in syllaba est unum complens, et syllabarum in dictione est complens unum, a quo dicitur dictio una in tota syllabarum aggregatione. Similiter et dictionum in oratione est complens unum, a quo tota illa aggregatio distinctorum et ordinatorum sonorum dicitur oratio una, cum cujuslibet elementi vel syllabæ sonus maneat in se distinctus et nec continuus, nec permixtus, ita quod unus est brevis, et alter longus, et unus est brevi brevior, alter vero longo longior est : et in talibus nihil facit unum nisi ordo ad unum : et ideo ista extensa aggregatio secundum seipsam quantitas est discreta sicut numerus : propter quod oratio est quantitas, cujus indivisibile non est unum, cujus iteratio facit illam aggregationem, sed indivisibilia multa sunt quæ sunt soni elementorum in litteris, et soni syllabarum in dictionibus, et soni dictionum in oratione, sed inter ea solum indivisibile est littera vel litteræ elementum, a quo ordinato cum alio fit syllaba, et e syllaba ordinata cum alia fit dictio, et a dictione ordinata cum alia fit oratio. Sed inter elementa litterarum non est unum indivisibile, quod per substantiam iteratum, totam compleat illam aggregationem, sicut est unitas in numero. Nisi aliquis dicat unum alicujus litteræ elementum esse primum, quod syllabaliter iteretur in omnibus aliarum litterarum elementis, et quod elementa aliarum litterarum constant ex iteratione illius. Sed hoc quamvis aliqui dixerint, tamen falsum est et probari non potest.

For if I say, *baculus* [staff] or *virga* [rod], all the letter elements sound discretely, and there is nothing continuing between them, by whose continuing one sound might be coupled to another. And similarly it is concerning the sound of letters in a syllable, and the sound of syllables in a word, and the sound of words in a speech: for there is no terminus at which syllables are coupled in pronunciation, but always each one remains divided according to itself discrete.

But here it must be noted that although all the particles of speech and number remain discrete, nevertheless they are bound under one specific form of discretion, for the number of unity is constituted by aggregation and order, and whatever unity is the terminus of an ordered congregation, in...

which the aggregation stays as in that completing unity, so that the end and complement is the form of that number — such as the fifth in the group of five, and the tenth in the group of ten, and so on for others. And therefore Aristotle says that ten is not three and seven, or twice five, or eight and two: but it is necessary to take the form in the last unity insofar as it is the end of an aggregation ordered to that unity which is the complement of such an aggregation.

Similarly also in speech insofar as it is in literate pronunciation: for that is an aggregation of sounds, elements, syllables, and words, toward one whole completing the ordered aggregation — just as in the case of letters in a syllable there is one completing, and of syllables in a word there is one completing, from which it is called one word in the whole aggregation of syllables. Similarly also of words in speech there is one completing, from which that whole aggregation of distinct and ordered sounds is called one speech, although the sound of any element or syllable remains distinct in itself and neither continuous nor mixed, so that one is short, and another long, and one is shorter than the short, but another is longer than the long: and in such things nothing makes one except order to the one: and therefore that extended aggregation in itself is a discrete quantity like number: on account of which speech is quantity, whose indivisible is not one, the iteration of which makes that aggregation, but the indivisibles are many, which are the sounds of elements in letters, and the sounds of syllables in words, and the sounds of words in speech, but among these the only indivisible is the letter or the element of the letter, from which, ordered with another, a syllable is made, and from a syllable ordered with another a word is made, and from a word ordered with another a speech is made. But among the elements of letters there is not one indivisible, which being iterated through substance, might complete that whole aggregation, as is unity in number. Unless someone says that some one element of a letter is the first, which is syllabically iterated in all elements of other letters, and that the elements of other letters consist of the iteration of that one. But this, although some have said it, is nevertheless false and cannot be proved.

Ideo nos sic dicimus orationem ordine multorum componi indivisibilium secundum sonum elementorum, et in hoc orationem differre a numero, et esse ab ipso numero diversum secundum speciem quantitatis. Si autem objicitur, quod omnis quantitas procedit ab indivisibili, Dicendum quod hoc verum est, quod sicut numerus ab unitate, et continuum a puncto, et tempus ab instanti, sic oratio procedit ab indivisibili litterati soni : sed hoc indivisibile non est elementum alicujus litteræ, cujus elementum iteratum faciat talem orationis quantitatem, sed indivisibile cujus ratio in quolibet sono servatur cujuslibet litteræ cum alia in tali pronuntiatione aggregatæ. Hinc enim Democritus et Leucippus, et alii quidam atomos ponentes, principium non dixerunt unum atomum aliquod principium, sed multos figura et ordine differentes et sic omnia constituentes. Et suæ rationis dederunt exemplum in litteris : in litterato enim sono sive pronuntiatione non est aliquod unum indivisibile causa aggregationis, sed multa figura, sono et ordine differentia. Sic enim oratio est quantitas mensurata syllaba, vel littera longa vel brevi pronuntiationis, et distincta in tota congerie talis aggregationis, et est quantitas in seipsa, ita quod substantia sua et quidditas quantitas est prædicto modo a numero differens. Istæ sunt ergo duæ primæ species discretæ quantitatis.

CAPUT III. *Qualiter linea, superficies et corpus sunt quantitates continuæ.* Nunc restat dicere qualiter continuæ

quantitates sunt linea, superficies et corpus. De discreta enim prius conveniens fuit dicere, propter hoc quod indivisibile a quo perficitur numerus, et indivisibile a quo perficitur oratio, simpliciora sunt quam indivisibile a quo perficitur continuum: unitas enim est indivisibile, nec possessionem habens in continuo, nec continuans ea quorum est terminus. Litteratus etiam indivisibilis est sonus, nec indivisibile in continuo positum positionem habens, nec continuans ea quorum est terminus vel principium: quia si est principium, non est a quo sit continuatio: et si est medium, non est unum et idem finis unius et principium alterius, sicut est punctum continuans: et si finis est, non est terminus ad quem continue copuletur in forma continuationis continuum: et ideo et ipsum indivisibile soni litterati simplicius est puncto. propter quod naturalis ordo exigit quod prius de numero, et postea de oratione, et tertio de speciebus continuæ quantitatis diceretur.

Quod autem quidam dicunt, quod ideo prius fuit dicendum de numero, quia numerus est in corpore et in incorporeis invenitur, et non continuum, et quod res ab institutione mundi proportionibus numerorum factæ sunt. Rationes istæ non sunt veræ, nec ad propositum facientes, et fundatæ super falsum: sed de illis videatur quod tales asserunt rationes.

Therefore we say thus: that speech is composed by the order of many indivisibles according to the sound of elements, and in this speech differs from number, and is diverse from number itself according to the species of quantity. But if it is objected, that every quantity proceeds from an indivisible, it must be said that this is true, that just as number from unity, and the continuous from the point, and time from the instant, so speech proceeds from the indivisible of literate sound: but this indivisible is not the element of some letter, whose element iterated makes such a quantity of speech, but the indivisible whose account is preserved in any sound of any letter aggregated with another in such a pronunciation. For from this Democritus and Leucippus, and certain others positing atoms, did not call one certain atom a principle, but many atoms differing in figure and order and thus constituting all things. And they gave an example of their reason in letters: for in literate sound or pronunciation there is not some one indivisible cause of aggregation, but many things differing in figure, sound, and order. For thus speech is a quantity measured by a syllable, or a long or short letter of pronunciation, and distinct in the whole heap of such an aggregation, and it is quantity in itself, so that its substance and quiddity is quantity, differing in the aforesaid way from number. These are therefore the two first species of discrete quantity.

CHAPTER III. *In what way line, surface and body are continuous quantities.* Now it remains to say in what way continuous

quantities are line, surface, and body. For it was fitting to speak first about the discrete, because the indivisible from which number is perfected and the indivisible from which speech is perfected are simpler than the indivisible from which the continuous is perfected. For unity is an indivisible, neither having position in the continuous nor continuing those things of which it is the terminus. The literate sound is also indivisible, neither an indivisible posited in the continuous having position, nor continuing those things of which it is the terminus or principle: because if it is a principle, it is not one from which there is continuation; and if it is a middle, it is not one and the same end of one and beginning of another, as the point is that continues; and if it is an end, it is not a terminus to which a continuous is continuously joined in the form of continuation. And therefore the indivisible of literate sound is also simpler than the point. On account of which the natural order demands that first about number, then about speech, and third about the species of continuous quantity should be said.

But what some say — that it was necessary to speak first about number because number is found in body and in incorporeal things, and the continuous is not, and that things from the institution of the world were made by the proportions of numbers — these reasons are not true, nor relevant to the matter, and are founded upon something false. But about those things let those who assert such reasons see.

Hac igitur quam nos dicimus necessitate, post numerum et orationem dicimus, quod linea de numero continuorum est: potest enim a quolibet sumi continuus terminus, ad quem omnes quæ sub una forma continuitatis sunt particulæ lineæ copulantur. Hic autem communis terminus est punctum, cujus fluxus in continuum vel ductus facit lineam. et ideo linea quamvis in puncto non dividatur, tamen non potest dividi nisi in puncto, quia linea ubique substantialiter punctum est: substantialiter, dico, a substantia quæ est quasi materia: punctum enim extensum sive protensum in continuum est linea, cujus ipsa protensio quantitas est et substantia protensa punctum est. Et sic linea est ex uno substantiali quasi subjecto quod est punctum, et ex uno formali quod est protensio extensa in continuum quod est continuatio: et hoc quidem est linea, et ideo quia ubique substantia lineæ materialis est punctum, ubicumque sumatur punctum non absolutum ab extensione in continuum, ibi punctum est in ratione finis et principii: finis quidem ad anterius, et principium ad posterius. Communis ergo terminus est istius copulationis partis anterioris cum sequente per totum continuum, et quia punctum est indivisibile positum, ideo tota intellectualis et realis ejus extensio in tota longitudine substantiæ servat indivisibilitatem. Propter quod linea secundum latitudinem et profunditatem est indivisibilis, solum divisibilis longitudine, quam causat non punctum, sed puncti extensio et fluxus in continuum, quia ista extensio formam continuitatis dat, quæ secundum seipsam divisibilis est semper.

Similiter superficies quantitas est continua: generatur enim expansione lineæ ad latum in continuum, sive ex fluxu lineæ vel ex ductu lineæ, ut dicit Euclides: et sic erit latitudo sine profunditate, ubique ex duabus lineis ad rectum angulum se secantibus mensurata. quæ quia fluit ab indivisibili secundum profundum, ideo profundum non habet: quia autem fluit a divisibili secundum longum, ideo secundum longum habet divisibilitatem: et quia fluxus illius lineæ est ad latus et non ad punctum quod est terminus lineæ, et fluxus est continuus, ideo continuitatem habet superficies in latum, et ex illa superficies est. continuitas enim quæ est in longum in superficie, est ex linea: et ideo substantia superficiei est linea, sicut punctum est substantia lineæ: propter quod undecumque dividitur superficies, erit linea dividens ipsam sicut punctum dividit lineam, et ubicumque accipiantur duæ partes in superficie, erit linea copu-

Therefore, by the necessity we state, after number and speech we say that the line is among the number of continuous things: for a continuous terminus can be taken from any point, to which all the parts of the line which are under one form of continuity are joined. This common terminus is the point, whose flow or drawing into the continuous makes the line. And therefore the line, although it is not divided at a point, nevertheless cannot be divided except at a point, because the line everywhere is substantially a point — substantially, I say, from the substance which is like matter: for a point extended or protracted into the continuous is a line, whose protraction itself is the quantity and whose protracted substance is the point. And thus the line is from one substantial quasi-subject which is the point, and from one formal thing which is the protraction extended into the continuous which is the continuation. And this indeed is the line. And therefore, because everywhere the material substance of the line is the point, wherever a point is taken that is not absolved from extension into the continuous, there the point is in the account of end and beginning: of end indeed with respect to what is anterior, and of beginning with respect to what is posterior. Therefore the common terminus of this joining of the anterior part with the following through the whole continuous is the point. And because the point is an indivisible having position, therefore its whole intellectual and real extension throughout the whole length of its substance preserves indivisibility. On account of which the line according to breadth and depth is indivisible, divisible solely in length — which is caused not by the point, but by the extension and flow of the point into the continuous, because this extension gives the form of continuity, which according to itself is always divisible.

Similarly, a surface is a continuous quantity: for it is generated by the expansion of a line to the side into the continuous, or from the flow or drawing of a line, as Euclid says. And so it will be a breadth without depth, everywhere measured by two lines cutting each other at a right angle. Because it flows from an indivisible according to depth, therefore it does not have depth; but because it flows from a divisible according to length, therefore according to length it has divisibility. And because the flow of that line is to the side and not to the point which is the terminus of the line, and the flow is continuous, therefore the surface has continuity in breadth, and from this the surface exists. For the continuity which is in length in a surface is from the line; and therefore the substance of the surface is the line, just as the point is the substance of the line. On account of which, wherever a surface is divided, a line will be the thing dividing it, just as a point divides a line; and wherever two parts are taken in a surface, a line will be the join-

lans partes illas, et est communis terminus copulationis earum : est enim principium unius ex quo est continuitas ejus, et est finis alterius ad quem est continuatio ejus : planum namque est quod superficiei particulæ ad quemdam communem terminum dicto modo copulantur. Dicitur planum superficies, eo quod fluxu lineæ intelligatur sterni sicut in planum, nulla partium ejus super alteram eminente. Talis igitur est intellectus superficiei secundum quod est species continui.

Similiter autem et in corpore est sumere communem terminum particulas corporis copulantem : corpus enim est ipsa trina dimensio, quæ sit tribus diametris in omni parte corporis ad rectum angulum se contingentibus et se secantibus, una in longum, et altera in latum a puncto præcedentis, et tertia in profundum ab angulo prædictarum protractis generatur enim ex fluxu vel protensione superficiei, non in longum vel in latum, sed in profundum mota vel protensa superficie. Et ideo dicebat Plato quod substantia corporis secundum id quod est, est superficies, sicut punctum est substantia lineæ et linea substantia superficiei : et ideo dividitur corpus ut corpus est superficie, sicut superficies linea, et linea puncto, et ubicumque partes duas accipias corporis, illæ habent superficiem ad quam est continuitas præcedentis, et a qua incipit continuitas sequentis. Est ergo illa superficies in corpore communis terminus, qui est finis unius et principium alterius : et ideo est aliquid unius, et aliquid alterius : propter quod communis terminus continuorum vocatur. Si autem communem in corpore terminum accipere vis secundum latum, tunc, ut jam ante dictum est, sumes terminum copulationis lineam. Si autem vis terminum communem copulationis accipere in longum, necesse est quod accipias commune punctum, qui copulat partes in longum.

Punctum igitur quamvis nulla pars sit lineæ, tamen est aliquid lineæ, quia est terminus lineæ, et copulans partes ejus : et secundum id quod punctum positionem habet in continuo, sic est substantia lineæ, sed formale esse est continuitas in longum, et illa est a fluxu intellectuali puncti in continuum. Et omni eodem modo se habet linea ad superficiem, ita quod non est pars aliqua superficiei, et tamen est aliquid ejus, tum quia est terminus ejus copulationis, tum etiam in hoc quod est substantia superficiei, et forma continuitatis quam ponit circa substantiam est ab intellectuali fluxu lineæ ad latus lineæ, et non ad punctum. Secundum eumdem modum etiam se habet superficies ad corpus, et in hoc quod est communis copulationis terminus, et in hoc quod est corporis substantia materialis, circa quam ponitur forma continuitatis corporis ex fluxu intellectuali superficiei in profundum.

connecting those parts, and is the common terminus of their coupling: for it is the principle of one from which its continuity is, and is the end of the other at which its continuation is finished: for it is plain that the particles of a surface are coupled in the aforesaid way at some common terminus. A surface is called a plane, for the reason that it is understood to be spread out like a plane by the flow of a line, with none of its parts protruding above another. Such therefore is the understanding of a surface according to what is a species of the continuous.

Similarly also in a body it is possible to take a common terminus coupling the particles of the body: for a body is the triple dimension itself, which is generated by three diameters in every part of the body touching and intersecting each other at right angles — one in length, another in breadth protracted from the point of the preceding, and a third in depth protracted from the angle of the aforesaid — for it is generated from the flow or extension of a surface, moved or extended not in length or breadth, but in depth. And therefore Plato used to say that the substance of a body according to that which it is, is a surface, just as a point is the substance of a line and a line the substance of a surface: and therefore a body insofar as it is a body is divided by a surface, just as a surface by a line, and a line by a point; and wherever you take two parts of a body, those have a surface at which there is the continuity of the preceding, and from which the continuity of the following begins. That surface is therefore a common terminus in the body, which is the end of one and the beginning of the other: and therefore it is something of the one, and something of the other: on account of which it is called the common terminus of continuous things. If however you wish to take a common terminus in the body according to breadth, then, as was already said before, you will take a line as the terminus of coupling. But if you wish to take a common terminus of coupling in length, it is necessary that you take a common point, which couples the parts in length.

Therefore although the point is no part of a line, nevertheless it is something of a line, because it is the terminus of the line, and coupling its parts: and according to that which the point has position in the continuous, so it is the substance of the line, but the formal being is continuity in length, and that is from the intellectual flow of a point into the continuous. And in all the same way the line relates to the surface, so that it is not some part of the surface, and yet it is something of it, both because it is the terminus of its coupling, and also in this that it is the substance of the surface; and the form of continuity which it places around the substance is from the intellectual flow of the line to the side of the line, and not to the point. According to the same mode also the surface relates to the body, both in that which is the common terminus of coupling, and in that which is the material substance of the body, around which the form of continuity of the body is placed from the intellectual flow of the surface into depth.

Ex hoc patet quod continuum dividitur in infinitum in quantum continuum est : in quocumque enim termino accipiatur indivisibile, terminus est copulationis : erit ergo per consequens causa continuitatis, eo quod intelligitur in ratione finis et principii, quod non potest intelligi nisi per hoc quod fluit ex uno in alterum : ratio ergo divisionis non aufert formam continuitatis : remanente forma continuitatis ponitur divisibile : quæcumque ergo dividi intelligantur, semper ponitur ad hoc indivisible.

Non autem moveat quemquam, quod hoc dicimus fieri secundum intellectum, cum in hoc libro loquimur de decem generibus rerum principiis, ad quæ omnia prædicabilia reducuntur : omnia enim abstracta et mathematica sunt accepta secundum intellectum : secundum enim esse in natura hoc vel hoc non invenitur nisi in sola luce, ut quidam dicunt, quamvis dictum eorum cum Philosophis non concordet. Quamvis ergo ista accepta sint secundum intellectum, iste tamen intellectus a specialibus rebus causatus est et ad esse refertur : quia dicit naturam et esse rei ut est hoc quod est, ut est significatum

per nomen quod est notio prædicabilis: et ideo dicit Aristoteles sic, Abstrahentium non est mendacium. Quinimo est certissime verum, quamvis secundum esse ista non inveniantur distincta in natura: insunt enim hoc modo quo determinata sunt in ipsa substantia quantorum.

Attendendum etiam quod non potest esse quarta species quantitatis continuæ habentis in partibus positionem et ex seipsa continuitatem et substantiam circa quam ponit formam communitatis et continuitatis: quia non est motum intelligere alicujus aliquo modo indivisibilis, nisi vel in longum, vel in latum, vel in profundum: altum enim est a profundo terminis tantum differens. et ideo non sunt nisi tres species hujus quantitatis, a quibus prædicabilia sumi possint.

Sciendum est etiam, quod linea est quantitas unius divisibilitatis, superficies autem est quantitas duarum divisionum, et corpus quantitas est trium divisionum propter causas quæ in ante habitis sunt determinatæ.

Est autem de numero talium quantitatum continuarum et tempus et locus: præsens enim tempus copulatur et ad præteritum et ad futurum per instans medium quod est terminus talis copulationis. Accipimus autem hic præsens, tempus divisibile quod adjacet motui et actioni præsenti. Præteritum autem dicimus, quod terminatur ad præsens per instans quod est præteriti finis et principium præsentis. et præsens etiam copulatur ad futurum per instans quod est finis præsentis et principium futuri: et sic totum tempus continuum est. Sicut enim in aliis continuis fluxus continui est ab uno aliquo secundum aliquem modum indivisibili, ita est etiam in tempore.

From this it is clear that the continuous is divided into infinity insofar as it is continuous: for in whatever terminus an indivisible is taken, it is the terminus of coupling: it will therefore consequently be the cause of continuity, for the reason that it is understood in the account of end and principle, which cannot be understood except through this that it flows from one into the other: therefore the account of division does not take away the form of continuity: while the form of continuity remains, the divisible is posited: whatever things therefore are understood to be divided, an indivisible is always posited for this.

But let it move no one, that we say this happens according to the intellect, since in this book we speak about the ten genera of principles of things, to which all predicables are reduced: for all abstracted and mathematical things are received according to the intellect: for according to being in nature this or that is not found except in light alone, as some say, although their saying does not agree with the Philosophers. Therefore although these things are received according to the intellect, nevertheless that intellect is caused by specific things and is referred to being: because it says the nature and being of the thing as it is this which it is, as it is signified

...by the name which is the notion of the predicable. And therefore Aristotle says thus: there is no falsehood in those who abstract. Indeed it is most certainly true, although according to being these things are not found distinct in nature: for they are present in this way, as determined in the very substance of quantified things.

It must also be noted that there cannot be a fourth species of continuous quantity having position in its parts and having from itself continuity and substance around which it places the form of commonality and continuity: because it is not possible to understand the motion of anything indivisible in any way except in length, or in breadth, or in depth. For "high" differs from "deep" only in termini. And therefore there are only three species of this quantity, from which predicables can be taken.

It should also be known that a line is a quantity of one divisibility, a surface is a quantity of two divisions, and a body is a quantity of three divisions, for the causes which have been determined in the preceding.

But time and place are also among the number of such continuous quantities: for the present time is joined both to the past and to the future through the intermediate instant which is the terminus of such a joining. But we take here the present as the divisible time which is adjacent to the present motion and action. And we call the past that which is terminated at the present through the instant which is the end of the past and the beginning of the present. And the present is also joined to the future through the instant which is the end of the present and the beginning of the future. And thus the whole time is continuous. For just as in other continuous things the flow of the continuous is from some one thing indivisible in some manner, so also it is in time.

Intelligendum igitur est, quod si non esset motus, non esset tempus, et motus extensio est causa extensionis temporis, sicut motus etiam est causa temporis. Motus autem est in eo quod movetur sicut in subjecto. Est autem id quod fertur sive movetur, idem secundum substantiam in toto motu: secundum esse autem ipsius secundum quod motus est in ipso, protensum et procedens est de ante in spatio in post, sive de anteriori parte spatii in posteriorem non interrumpendo. Protensio autem, ut sæpe diximus, causa est quantitatis. Protensum est partim hic et partim ibi, continua et non interrupta protensione. Quod autem sic divisibile est, continuum est. Motus igitur (qui secundum esse potensum inest ei quod movetur) est continuus, non ex seipso, sed ex spatio distantiæ quæ est inter duo motus extrema. Cum autem sit continuum et quantum aliquo modo, sequitur quod sit ejus aliquid mensura: et quia omne quantum habet mensurans proprium secundum propriam divisionem, sicut secundum spatium continuum ad modum lineæ vel superficiei vel corporis, habet ulnam vel palmam vel pedem, vel decempedam et aliquid talium: propter quod in omnem diametrum certa reddi-

tur quantitas ipsius, nec certificari potest nisi secundum hoc quod dividitur. Oportet igitur, quod per hunc modum mensurans motum, secundum esse quod habet in eo quod movetur, sit certificans quantitatem ipsius.

In eo autem quod movetur secundum quod motus est actus ejus sunt tria, scilicet indivisibilis substantia ipsius quod movetur, quæ eadem manet in toto motu : et esse protensum in spatio continuo : et divisio prioris quod accipit in spatio quod derelinquit continue, a posteriori quod jam accepit in illo protendendo. Si ergo sic debeat mensurari, tria sunt in mensura reddente quantitatem ipsius : quia aliter mensura rei mensuratæ non esset adæquata : mensurans autem ipsum sic non potest sibi esse intrinsecum, eo quod intrinsecum est alterius generis : est enim in motu locali intrinsecum motui ubi fluens, et hoc non est secundum sui naturam in genere quantitatis, sed in genere ubi : et ideo motus in ubi non est in genere quantitatis, sed est in genere ubi. In alteratione autem est quale fluens quod per fluxum non amittit proprii generis naturam : et ideo sicut quale est in qualitate, sic et motus in qualitate. Similiter et motus augmenti quamvis sit in quantitate, non tamen sic est in quantitate, quod motus faciat ipsum in quantitate esse tanquam in genere, sed potius per hoc est in genere quia est quantum continuum positionem habens in partibus fluens, sicut corpus quod per fluxum non amittit naturam corporis.

It must therefore be understood that if there were no motion, there would be no time; and the extension of motion is the cause of the extension of time, just as motion also is the cause of time. But motion is in that which is moved as in a subject. And that which is carried or moved is the same according to substance throughout the whole motion; but according to its being insofar as motion is in it, it is protracted and proceeding from the anterior in space to the posterior, or from the anterior part of space to the posterior without interruption. But protraction, as we have often said, is the cause of quantity. What is protracted is partly here and partly there, by a continuous and uninterrupted protraction. But what is thus divisible is continuous. Therefore motion (which according to protracted being inheres in that which is moved) is continuous — not from itself, but from the space of distance which is between the two extremes of motion. But since it is continuous and quantified in some way, it follows that there is some measure of it. And because every quantified thing has its own proper measure according to its proper division — just as according to continuous space in the manner of a line or surface or body, it has the ell or the palm or the foot, or the ten-foot measure and something of this kind — on account of which in every diameter a certain render-

its quantity is rendered, nor can it be certified except according to this that it is divided. It is necessary therefore, that by this mode the thing measuring motion, according to the being which it has in that which is moved, be certifying its quantity.

However, in that which is moved according to which motion is its act, there are three things, namely: the indivisible substance of the very thing which is moved, which remains the same in the whole motion; and being protracted in continuous space; and the division of the prior which it receives in the space which it leaves behind continuously, from the posterior which it has already received in protracting it. If therefore it ought to be measured thus, there are three things in the measure rendering its quantity: because otherwise the measure of the measured thing would not be equated: but the thing measuring it thus cannot be intrinsic to it, for the reason that the intrinsic is of another genus: for in local motion the intrinsic to the motion is a flowing "where," and this is not according to its own nature in the genus of quantity, but in the genus of "where": and therefore motion in "where" is not in the genus of quantity, but is in the genus of "where." But in alteration it is a flowing quality which through the flow does not lose the nature of its proper genus: and therefore just as the quality is in quality, so also motion is in quality. Similarly even the motion of augmentation, although it is in quantity, is not however so in quantity that motion makes it to be in quantity as in a genus, but rather it is in the genus because it is a flowing continuous quantum having position in its parts, just as a body which through the flow does not lose the nature of a body.

Et ideo motus non per partem motus vel per substantiam est in genere vel specie quantitatis, sed per hoc quod est quantum fluens quod fluxu non amittit naturam fluentis. Similiter est in generatione et corruptione, quæ sunt mutationes in substantia : propter quod dicit Aristoteles [1], quod via in naturam dicitur natura, cum motus et mutatio non possit habere mensurans circa quod sit substantia motus, et circa quod ponat motus suam continuitatem. Relinquitur igitur quod habeat mensurans extrinsecum adjacens, et hoc vocatur tempus, et tempus in sua substantia et suo esse diversum et linea et superficie et corpore.

Quod ergo per intellectum adjacet ei quod defertur et in toto motu est idem per substantiam, cum hoc semper objiciatur præsentiæ accipientis ipsum, est præsens quod vocatur instans quasi non stans, sicut et id quod movetur, non stat quamdiu motus est ejus actus. Quod autem adjacet protensioni ejus, quod secundum quod movetur, est continue protensum a retro in ante, illud est et vocatur tempus. Et id quod adjacet ei quod est in spatio accepto in retro, vocatur in tempore prius vel præteritum. Et quod adjacet ei quod in motu est in spatio accepto in ante, est et vocatur futurum. Et quod adjacet ei quod objicitur præsentiæ accipientis in protensione motus et spatii, vocatur præsens tempus. Cum tamen tria ista, præteritum, præsens et futurum non sunt diversa et separata, non sunt discreta sed sunt simul copulata. Copulatorum autem semper est communis terminus, qui est finis unius et principium alterius, et est aliquod utriusque et neutrius per se, id copulans particulas temporis vocatur indivisibile instans, quod quidem secundum se est substantia temporis, sicut punctum est substantia lineæ, qui fluxu suo causa est continuitatis quæ est forma successionis continuæ quæ ponitur circa substantiam instantis, sicut dictum est in aliis continuis. Sicut autem ulna iterata est numerus reddens quantitatem continui, ita instans distinguens prius et posterius in motu protensum super partes motus, iteratur et certificat quantitatem motus. Et ideo dicit Aristoteles [2] quod tempus est numerus motus propter prius et posterius. Et ideo non est inconveniens quod tempus sit continuum, et tamen sit numerus : quia est numerus sicut ulna panni, vel alterius mensurati per ulnam. Et quando dicitur quod tempus est continuum, et

And therefore motion is not in the genus or species of quantity through a part of motion or through substance, but through this that it is a flowing quantum which by the flow does not lose the nature of a flowing thing. It is similar in generation and corruption, which are changes in substance: on account of which Aristotle says that the way into nature is called nature, since motion and change cannot have a measuring thing around which the substance of motion might be, and around which motion might place its continuity. It remains therefore that it have an adjacent extrinsic measuring thing, and this is called time, and time in its substance and its being is diverse from a line and a surface and a body.

That which therefore through the intellect is adjacent to that which is carried and is the same through substance in the whole motion, since this is always objectified to the presence of the one receiving it, is a present which is called an instant, as if not standing (*non stans*), just as also that which is moved does not stand as long as motion is its act. But that which is adjacent to its protraction, which according as it is moved, is continuously protracted from the rear to the front, that is and is called time. And that which is adjacent to that which is in the space received in the rear, is called in time "prior" or "past." And that which is adjacent to that which in motion is in the space received in the front, is and is called "future." And that which is adjacent to that which is objectified to the presence of the receiver in the protraction of motion and space, is called "present time." Since however these three — past, present, and future — are not diverse and separate, they are not discrete but are coupled together. But of coupled things there is always a common terminus, which is the end of one and the beginning of the other, and is something of both and of neither in itself; that which couples the particles of time is called the indivisible instant, which indeed according to itself is the substance of time, just as a point is the substance of a line, which by its flow is the cause of continuity, which is the form of continuous succession which is placed around the substance of the instant, as was said in other continuous things. But just as an iterated ell is a number rendering the quantity of a continuum, so the instant distinguishing prior and posterior in motion protracted over the parts of motion, is iterated and certifies the quantity of motion. And therefore Aristotle says that time is the number of motion on account of the prior and posterior. And therefore it is not inconvenient that time be continuous, and yet be a number: because it is a number just as an ell of cloth, or of another thing measured by an ell. And when it is said that time is continuous, and...

tempus est numerus, non intelligitur quod secundum unum et idem sit continuum et numerus: secundum enim quod adjacet protensioni ejus quod movetur est continuum, secundum autem quod instanti copulante distinguitur id quod est ante ab eo quod est post, et iteratur hoc in toto motu, sic est numerus. Et quando dicitur quod est numerus, non dicitur nec intelligitur quod simpliciter sit numerus, sed quod est numerus motus per esse motus: sed motus per prius et posterius, quod iteratur in motu sicut id quod movetur in toto spatio motus. Propter quod non sequitur quod tempus sit simpliciter continua quantitas. Et ideo manifestum est quod non est in duobus generibus primis quantitatis ex æquo, scilicet in genere continui et in genere discreti, sed simpliciter est in genere continui et secundum aliquid accipit formam discreti. Patet etiam qualiter fluit tempus ab hoc indivisibili quod est instans.

Sed remanet quæstio, quare motus non ponatur esse in genere quantitatis sicut tempus? præcipue cum multis rationibus probet Aristoteles motum esse divisibilem in infinitum, et cum expresse dicat motum esse speciem quantitatis in quinto primæ philosophiæ. Sed ad hoc per ante dicta facilis est responsio: si enim consideretur id quod dat motui speciem et nomen, et per consequens dat ei genus, eo quod species et genus ad unam pertinent naturam: tunc videbitur causa ejus quod quæritur: quale enim dat alterationi nomen et speciem, propter quod dicitur in genere alteratio, et secundum speciem calefactio, vel albatio. Et sic similiter est ubi quod motui locali dat nomen et speciem et genus. Et similiter in augmentatione. Et facile est videre in omnibus aliis sicut motus per accidens qui in omnibus est generibus. Continuitas autem motus non est a natura illa quæ fluit, sed potius est causata a processione illius in quo est motus ut in subjecto: subjectum autem non est aliquid de essentia illius quod est in ipso, et ideo motus proprium et sibi determinatum genus non habet. Alia autem quæ dicenda erant de tempore, vel ad physicum pertinent, vel ad metaphysicum, et ideo illuc differantur: in quarto enim Physicorum determinabitur natura temporis: in parte autem illa primæ philosophiæ quæ est de causis determinabitur qualiter tempus se habet ad æternitatem, et qualiter se habet nunc temporis ad nunc æternitatis. Quantum autem pertinet ad intentionem logicam de tempore sufficere videtur quod modo dictum est.

Nunc autem videndum est qualiter locus est continua quantitas.

time is a number, it is not understood that it is continuous and a number according to one and the same: for according as it is adjacent to the protraction of that which is moved it is continuous, but according as that which is before is distinguished from that which is after by the joining instant, and this is iterated in the whole motion, thus it is a number. And when it is said that it is a number, it is neither said nor understood that it is simply a number, but that it is the number of motion through the being of motion: but motion through before and after, which is iterated in motion just as that which is moved in the whole space of motion. On account of which it does not follow that time is simply a continuous quantity. And therefore it is manifest that it is not in the two first genera of quantity equally — namely, in the genus of the continuous and in the genus of the discrete — but simply it is in the genus of the continuous and according to something takes the form of the discrete. It is also clear how time flows from this indivisible which is the instant.

But the question remains: why is motion not posited to be in the genus of quantity just as time? especially since Aristotle proves with many reasons that motion is divisible to infinity, and since he expressly says that motion is a species of quantity in the fifth book of the First Philosophy. But to this, through the things said before, the response is easy: for if that which gives motion its species and name — and consequently gives it its genus, because species and genus pertain to one nature — is considered, then the cause of what is asked will be seen: for a "what-kind" gives to alteration its name and species, on account of which it is called alteration in genus, and heating or whitening according to species. And thus it is similarly "where" that gives local motion its name and species and genus. And similarly in augmentation. And it is easy to see in all others, just as accidental motion which is in all genera. However, the continuity of motion is not from that nature which flows, but rather is caused by the procession of that in which motion is as in a subject: but the subject is not something of the essence of that which is in it, and therefore motion does not have a proper and determined genus for itself. As for other things that were to be said about time, they either pertain to the physicist or to the metaphysician, and therefore let them be deferred to there: for in the fourth book of the Physics the nature of time will be determined. And in that part of the First Philosophy which is about causes it will be determined how time relates to eternity, and how the "now" of time relates to the "now" of eternity. But insofar as it pertains to the logical intention about time, what has just been said seems to suffice.

But now we must see how place is a continuous quantity.

Locus est quidem ubi continentur corporis locali particulæ, qui locus distantia est in qua distenditur tota corporis quantitas, ita quod nihil corporis vel partium corporis est extra illam distantiam secundum longum, latum et profundum corporis: est enim tanta illa distantia, quantum est corpus, et nec minor nec major, sed in toto est corpore commensurata: sicut distantia diametrorum corporum quæ sit protensa inter spatium diametrorum loci et corporis, secundum esse quidem est una et eadem, ut probatur, distantiæ locali. Et hæc quidem distantia loci et corporis secundum esse quidem est una et eadem, ut probat Aristoteles contra Philosophum loquens qui Xutos vocatur. Quamvis autem secundum esse sit eadem, differt tamen superficiebus continentibus, et differt actu mensuræ et ratione mensurandi. Superficie quidem: quia loci superficies est extra locatum, et continens et tangens undique locatum. Superficies

autem locati est intra locatum, et est aliquid ejus, et est contenta non continens. Actu autem mensurandi : quia omnes diametri distantiæ quæ vocatur locus, sunt mensuræ mensurantes in longum, latum et profundum, et nulla est mensurata. Omnes autem diametri ejus quod locatum est, sunt diametri mensuratæ et contentæ, et sic mensuratum non mensurat distantiam loci, sed quantitatem corporis non ut locatam sed secundum quod ipsum est quantum.

Sic autem accipiendo locum, est locus mathematica quantitas, copulata punctis usque ad centrum locati ejus ; quia diametri secundum esse sunt eædem cum diametris ad idem centrum copulatis : quia centrum loci et centrum locati idem sunt secundum esse, differunt autem secundum actum et rationem : et quia distantia locati est continua quantitas, necesse est quod locus sit continua quantitas in hoc differens ab aliis quod non ex se, sed ex distantia diametrorum corporis usque ad centrum suam habet copulationem. Aliæ autem distantiæ linearum et superficierum et corporum ex seipsis et inter seipsa suam habent copulationem et suas copulationes. Sunt enim diametri secundum aliquid differentes quæ diversa habent suæ protractionis principia : diameter enim distantiæ loci suæ productionis principium habet superficiem extra continentem : diameter autem distantiæ quæ est distantia locati, suæ protractionis principium habet superficiem locati intra locatum existentem : unum autem est centrum utrorumque secundum esse et non secundum actum, ut dictum est.

Place is indeed the "where" the parts of a local body are contained, which place is the distance in which the whole quantity of the body is distended, so that nothing of the body or of the parts of the body is outside that distance according to the length, breadth, and depth of the body: for that distance is as great as the body is, and neither less nor greater, but in the whole it is commensurate to the body. Just as the distance of the diameters of the bodies which is protracted between the space of the diameters of the place and of the body, according to being indeed is one and the same, as is proved, with the local distance. And this distance of the place and of the body according to being is indeed one and the same, as Aristotle proves speaking against the Philosopher who is called Xuthus. Although however it is the same according to being, nevertheless it differs by the containing surfaces, and differs by the act of measuring and by the account of measuring. By the surface indeed: because the surface of the place is outside the located thing, and contains and touches the located thing from all sides. But the surface

however of the located thing is within the located thing, and is something of it, and is contained not containing. But in the act of measuring: because all diameters of distance which is called place, are measures measuring in length, breadth and depth, and no one is measured. But all diameters of that which is located, are diameters measured and contained, and thus the measured thing does not measure the distance of the place, but the quantity of the body not as located but according to that which it itself is quantum.

But taking place thus, place is a mathematical quantity, coupled to the points all the way to the center of its located thing; because the diameters according to being are the same with the diameters coupled to the same center: because the center of place and the center of the located thing are the same according to being, but they differ according to act and account: and because the distance of the located thing is a continuous quantity, it is necessary that place be a continuous quantity, differing in this from others that not from itself, but from the distance of the diameters of the body all the way to the center it has its coupling. But other distances of lines and surfaces and bodies have their coupling and their couplings from themselves and among themselves. For there are diameters differing according to something which have diverse principles of their protraction: for the diameter of the distance of place has the principle of its production the surface containing outside: but the diameter of the distance which is the distance of the located thing, has the principle of its protraction the surface of the located thing existing within the located thing: but the center of both is one according to being and not according to act, as was said.

Et sic locus erit diversa secundum modum istum quantitas ab omnibus aliis speciebus continuæ quantitatis : sic enim mathematica abstractione separatur loci quantitas a quantitate locati. Et sic est verum quod dicitur, quod singulæ particulæ loci continent singulas particulas corporis locati. Et ideo tam loci quam corporis locati particulæ ad unum terminum copulantur. Et sic loquendo de loco mathematicis dandus est locus, ut in prima philosophia dicit Aristoteles.

Est autem aliter consideratus locus quando est de consideratione naturalis Philosophi, secundum quod scilicet locus est, ad quem et ex quo est motus : sic enim est superficies continentis corporis habens in se virtutes omnium continentium tam cœlorum quam elementorum circumdantium, per quas virtutes generat et salvat id quod locatum est in ipso : et de hoc loco hic Aristoteles non loquitur, quia per illas proprietates non est in genere quantitatis, quamvis in seipso sit quantus. Primo igitur modo considerando locum continua quantitas erit locus, eo quod particulæ ejus quæcumque ad unum communem terminum copulantur, et est speciale genus quantitatis propter causam in ante habitis assignatam.

CAPUT VI. *Qualiter quædam quantitates habent positionem in partibus, et quædam non.*

Amplius autem aliqua de numero specierum quantitatis continuæ ex particulis quæ in eis sunt, constant ex talibus positionem habentibus in continuo cujus sunt particulæ. Alia vero quæ sunt de genere et de numero quantitatum, constant etiam ex particulis positionem non habentibus in continuo vel discreto, cujus sunt particulæ.

Positionem autem habere tria concernit, scilicet ut assignetur ubi in continuo sita sit particula, et ut una pars permaneat stans in eodem continuo cum altera, et ut teneatur cum altera copulatione. Et quodcumque horum trium deficiat, non habebit in partibus positionem. Positio enim dicit ordinem, et propter hoc oportet ut assignetur ubi in continuo posita sit. Positio autem in continuo dicit permanentiam, quia positum est fixum immobile secundum esse, et ideo oportet ut dicat permanentiam. Positio autem in continuo dicit copulationem unius cum

alio, et ideo oportet ut dicat copulatorum connexionem per communem terminum, qui aliquid est utriusque copulatorum. Ex his patet quod lineæ quidem particulæ positionem habent in continuo quod est linea, et ad se invicem sunt habentes positionem.

And thus place will be a diverse quantity according to this mode from all other species of continuous quantity: for thus by mathematical abstraction the quantity of place is separated from the quantity of the located thing. And thus it is true what is said, that the individual particles of place contain the individual particles of the located body. And therefore the particles of both the place and the located body are coupled to one terminus. And thus speaking about place, place must be given to mathematical things, as Aristotle says in the *First Philosophy*.

But place is considered otherwise when it is from the consideration of the natural Philosopher, according to which namely place is that toward which and from which there is motion: for thus it is the surface of the containing body having in itself the virtues of all containers, both of the heavens and of the surrounding elements, through which virtues it generates and saves that which is located in it: and Aristotle does not speak about this place here, because through those properties it is not in the genus of quantity, although in itself it is quantum. In the first mode therefore, considering place, place will be a continuous quantity, for the reason that any of its particles are coupled to one common terminus, and it is a special genus of quantity on account of the cause assigned in the things held before.

CHAPTER VI. *In what way certain quantities have position in their parts, and certain ones not.*

Furthermore, some from the number of species of continuous quantity from the particles which are in them, consist of such things having position in the continuous of which they are particles. Others however which are of the genus and of the number of quantities, consist also of particles not having position in the continuous or discrete, of which they are particles.

But to have position concerns three things, namely that it be assigned where in the continuous the particle is situated, and that one part remain standing in the same continuous with the other, and that it be held with the other by a coupling. And whichever of these three is lacking, it will not have position in its parts. For position says order, and on account of this it is necessary that it be assigned where in the continuous it may be placed. But position in the continuous says permanence, because what is placed is fixed immobile according to being, and therefore it is necessary that it say permanence. But position in the continuous says the coupling of one with...

another, and therefore it is necessary that it say the connection of the coupled things through a common terminus, which is something of both of the coupled things. From these it is clear that the particles of a line indeed have position in the continuous which is a line, and they are having position in relation to each other.

Singulum namque signatum in particulis lineæ situm est alicubi, vel ante in linea, vel post : et permanentibus partibus sic positis sic habes unde sumas partem permanentem, et assignes in continuo unumquodque quod est de numero particularum, ubi sive in qua parte ordine partium in loco situm est suppositum : et hoc planum est valde et facile ad intelligendum. Et habes unde assignes ad quam particulam, et per quem communem terminum cæteræ quæcumque particulæ sumptæ fuerint, copulantur : quod planissimum est ex prædictis. Similiter autem et particulæ plani sive superficiei quamdam secundum latitudinem habent positionem. Similiter namque sicut et in linea facile ostenditur, ubi jacent in superficie positæ, et quæ sunt quæ copulantur ad invicem, et quo copulante ut communi termino. In linea enim copulat punctum : in superficie autem copulat linea et communis terminus. Soliditatis quoque sive corporis particulæ eodem modo et eadem de causa habent positionem et permanentiam et copulationem. Et loci particulæ secundum quod mathematice sumitur locus, talem in partibus habent positionem et permanentiam et copulationem.

In numero autem in partibus positionem et permanentiam et copulationem non potest quisquam per intellectum perspicere : cujus causa est, quod natura partium numeri repugnat ad tria quæ dicta sunt : et ideo non invenitur quod particulæ numeri positionem habeant ad invicem. Primo enim deficit situs in continuo alicubi, quia unitas (cujus iteratio facit numerum) non est indivisibile habens in continuo positionem, sed potius a natura positionis penitus separatum : et ideo non potest dici quod unitas vel pars numeri sit sita alicubi in continuo. Nec potest dici quod aliquæ particulæ numeri ad se invicem in aliquo (quod aliquid utriusque sit) habeant connexionem sive copulationem, sicut in capitulo de discretione numeri est probatum : sed omnes particulæ manentes discretæ et separatæ ab invicem, ad unum ultimum habent ordinem, cujus additione perficitur species numeri. Sed nec ea quæ sunt particulæ temporis habent in suis partibus positionem, quia quamvis habeant connexionem et terminum communem in quo connectuntur et continuantur, tamen nullam habent in esse permanentiam : quod autem in esse non permanet, de illo non potest dici ubi situm sit. Nusquam enim situm est, quod secundum esse non est. Sed secundum hoc videtur, quod non habeat copulationem vel connexionem, quia quod secundum esse non est, nulli potest copulari. Sed ad hoc dicendum est, quod in successione est quod copulatur, et in successione esse, est secundum aliquid esse.

For each marked individual in the particles of a line is situated somewhere, either before in the line, or after: and with the parts remaining thus placed, thus you have whence you may take a permanent part, and assign in the continuous each thing which is from the number of particles, where or in which part by the order of parts in place the subject is situated: and this is very plain and easy to understand. And you have whence you may assign to which particle, and through which common terminus any other particles that have been taken are coupled: which is very plain from the aforesaid. Similarly also the particles of a plane or surface have a certain position according to breadth. For similarly just as in a line it is easily shown where they lie placed in the surface, and which are those which are coupled to each other, and by what coupling as a common terminus. For in a line a point couples: but in a surface a line and a common terminus couples. The particles of solidity or body in the same way and for the same reason have position and permanence and coupling. And the particles of place according to which place is taken mathematically, have such position and permanence and coupling in their parts.

But in number no one can perceive by the intellect position and permanence and coupling in its parts: the cause of which is, that the nature of the parts of number is repugnant to the three things which have been said: and therefore it is not found that the particles of number have position in relation to each other. For first it lacks a site somewhere in the continuous, because unity (whose iteration makes number) is not an indivisible having position in the continuous, but rather is entirely separated from the nature of position: and therefore it cannot be said that unity or a part of number is situated somewhere in the continuous. Nor can it be said that any particles of number have connection or coupling to each other in something (which might be something of both), just as was proved in the chapter on the discretion of number: but all particles remaining discrete and separated from each other, have an order toward one last thing, by whose addition the species of number is perfected. But neither do those things which are particles of time have position in their parts, because although they have connection and a common terminus in which they are connected and continued, nevertheless they have no permanence in being: but of that which does not remain in being, it cannot be said where it is situated. For that which according to being is not, is situated nowhere. But according to this it seems, that it does not have coupling or connection, because that which according to being is not, can be coupled to nothing. But to this it must be said, that it is in succession that what is coupled exists, and to be in succession is to be according to something.

Est et præteriti in hoc quod copulat usque ad quid sicut ad finem (quem intra se ut aliquid sui habet) ipsa successio et similiter futurum cui copulantur est secundum successionis principium : quod iterum ipsa successio futuri intra se habet ut aliquid sui, quia est successionis principium : et sic in instanti (quod est medium, scilicet finis præteriti et principium futuri) copulantur præteritum et futurum [1]. Et aliquo modo est præteriti successio in præsenti ut in termino, et successio futuri est in eodem sicut in principio. Sic ergo copulationem habent partes temporis, et tamen nullam habent permanentiam neque possessionem. Sed in hoc conveniunt cum partibus numeri, quod ordinem quemdam dices

habere particulas temporis in eo quod quædam sunt priores et quædam posteriores tam in præterito quam in futuro, sed priores in præterito sunt a præsenti longinquiores, priores autem in futuro sunt quæ ad præsens sunt priores: et sic aliquid particularum temporis est prius, et aliquid suarum particularum est posterius. Sic etiam de numero similiter est, quod scilicet in particulis numeri non est positio, sed ordo enumerationis: quia prius enumeratur unus quam duo, et prius duo quam tres, et sic de aliis numeri partibus: et sic est in numero quod unitati quæ iteratur in numero est propinquius: et sic ordinem quemdam habebunt numeri partes, positionem vero non habebunt aliquo modo, nec etiam copulationem sive connexionem, nec communem terminum, qui aliquid sit utriusque partis, prioris scilicet et posterioris, et ideo manent partes divisæ discretæ. Quod etiam ostendit ratio nominis numeri. Numerus enim dicitur quasi numus verus, hoc est, divisionis: quia quæque unitates in partibus numeri inveniuntur divisæ et segregatæ. Patet igitur quod nullam hujusmodi partes perficiunt positionem.

Similiter et oratio se habet in partibus suis: hæc enim in discretione partium convenit cum numero, in successione autem convenit cum tempore quo pronuntiatur orationis pronuntiatio, et ideo partes ejus discretæ sunt et non permanentes. Oratio igitur est de numero eorum quæ dicta sunt, quæ scilicet in partibus non habent positionem. Nihil enim permanent particulæ orationis et minus stare possunt quam particulæ temporis, quia ad minus in tempore est accipere nunc vel præsens instans, in quo aliquo modo est præteritum, et aliquo modo est futurum.

There is also of the past in this that it couples all the way to something as to an end (which it has within itself as something of itself) the succession itself, and similarly the future to which they are coupled is according to the principle of succession: which again the succession of the future has within itself as something of itself, because it is the principle of succession: and thus in the instant (which is the middle, namely the end of the past and the beginning of the future) the past and the future are coupled. And in some way the succession of the past is in the present as in a terminus, and the succession of the future is in the same as in a principle. Thus therefore the parts of time have coupling, and yet they have no permanence nor possession. But in this they agree with the parts of number, that you say a certain order...

to have in the fact that certain ones are prior and certain ones are posterior both in the past and in the future; but the prior ones in the past are farther from the present, while the prior ones in the future are those which are prior toward the present. And thus something of the parts of time is prior, and something of its parts is posterior. Thus also concerning number it is similar: namely, that in the parts of number there is no position, but rather an order of enumeration: because one is enumerated before two, and two before three, and so on for the other parts of number. And thus it is in number that it is closer to the unity which is iterated in the number. And thus the parts of numbers will have a certain order, but they will not have position in any way, nor even joining or connection, nor a common terminus which is something of both parts (namely, of the prior and the posterior); and therefore the parts remain divided and discrete. This is also shown by the rationale of the name "number." For "number" (numerus) is said as if "true coin" (numus verus), that is, of division: because whatever unities are found in the parts of a number are divided and segregated. Therefore it is clear that they do not perfect any position of this kind.

Similarly also speech has itself in its parts: for this agrees with number in the discretion of parts, but it agrees with time in succession, by which the pronunciation of speech is pronounced, and therefore its parts are discrete and not permanent. Speech, therefore, is of the number of those things which have been mentioned, namely those which do not have position in their parts. For none of the parts of speech remain, and they can stand even less than the parts of time: because at least in time it is possible to take the "now" or present instant, in which in some way the past is, and in some way the future is.

Sed in oratione nihil est accipere aliquo modo: cum omnia indivisibilia elementorum discreta sunt et in nullo connexa, sed quodlibet eorum dictum est et transit, et ideo non potest amplius sumi ut denominetur permanens: propter quod nulla erit positio particularum orationis: propter quod nihil re permanet particularum ejus. Et sic probatum est inducendo quod intendimus, quod scilicet alia de genere quantitatis constant ex particulis quæ in eis sunt essentialiter positionem habentibus ad se invicem, alia autem ejusdem generis constant ex particulis non habentibus ad se invicem positionem.

Quia autem quantitates de quibus dictum est sunt mensuræ substantiæ, antequam dicamus de proprietatibus, in se habent dubitationes quæ sunt circa ipsas determinatæ. Et primo de linea: hæc enim videtur extensio infinita secundum longitudinem, cum dicat Euclides quod licet lineam protrahere in infinitum et continuum et directum. Adhuc cursus puncti, qui mathematicam facit lineam, non sistit in continuo. Videtur ergo quod procedat in infinitum. Sed contra hoc videtur esse, quod natura et intellectus abhorrent infinitum. Ergo videtur quod linea sit de his quæ abhorret intellectus.

Sed quæstio penitus nulla est, quia linea non est infinita in actu, sed secundum potentiam, per hoc solum quod in continuo secundum quod continuum est, assignari non potest ei terminus ad quem stat protractio ipsius. Et propterea dicit Euclides quia licet lineam in infinitum producere in continuum et directum, tale autem infinitum aliquid potentia est, nec natura abhorret neque intellectus.

Adhuc autem dubitant quidam utrum linea sit mensura substantiæ corporalis? si enim non est mensura, cum per nullam aliam dispositionem possit reduci ad subjectum quod est substantia, videbitur quod non sit accidens: constat autem, quod nec est substantia: ergo nihil est quod stare non potest. Si autem est mensura, tunc videtur quod sit imperfecta : quia corpus mensuratur longo, lato et profundo : linea autem est longitudo tantum. Ad hoc autem dicendum quod linea est prima et perfecta mensura substantiæ. Est enim linea mensurans in longum, et mensurans in latum, et mensurans in profundum. Dicit autem Avicenna in Sufficientia quod corpus mensuratur tribus diametris. Diametri autem lineæ sunt. Ergo corpus mensuratur lineis, et incrementum omnis corporis naturalis est secundum extensionem trium diametrorum et omnium natura constantium terminus est et ratio magnitudinis et augmenti.

But in speech there is nothing to take in any way: since all the indivisibles of its elements are discrete and connected in nothing, but whatever of them is spoken also passes, and therefore it cannot be taken further so as to be denominated permanent: on account of which there will be no position of the parts of speech; on account of which nothing of its parts remains in reality. And thus it has been proved by inducing what we intended, namely that some [species] of the genus of quantity consist of parts which in them essentially have position with respect to one another, but others of the same genus consist of parts not having position with respect to one another.

But because the quantities about which it was spoken are measures of substance, before we speak about properties, they have in themselves doubts which are determined concerning them. And first concerning the line: for this seems to be an infinite extension according to length, since Euclid says that it is permissible to protract a line to infinity continuously and directly. Furthermore, the course of the point, which makes the mathematical line, does not stop in the continuous. Therefore it seems that it proceeds to infinity. But against this seems to be the fact that nature and intellect abhor the infinite. Therefore it seems that the line is among those things which the intellect abhors.

But there is no question at all, because the line is not infinite in act, but according to potency, through this alone: that in the continuous insofar as it is continuous, there cannot be assigned a terminus to which its protraction stands. And therefore Euclid says that it is permissible to produce a line to infinity continuously and directly; but such an infinite is something in potency, and neither nature nor the intellect abhors it.

Furthermore, certain ones doubt whether the line is the measure of corporeal substance? For if it is not a measure, since through no other disposition can it be reduced to the subject which is substance, it will seem that it is not an accident; but it is established that it is not a substance; therefore it is nothing, which cannot stand. But if it is a meas-

... if then it seems to be imperfect: because a body is measured by length, width, and depth: but a line is length only. To this, however, it must be said that the line is the first and perfect measure of substance. For it is the line measuring in length, and measuring in width, and measuring in depth. Avicenna says in the *Sufficientia* that a body is measured by three diameters. But diameters are lines. Therefore a body is measured by lines, and the growth of every natural body is according to the extension of three diameters, and the terminus of all things constant by nature is both the account of magnitude and of augmentation.

Quod autem superficies mensuratur, hoc est secundum totam corporis extensionem inter diametros mensurantes in altum, in latum, in profundum ; et quod corporea quantitas mensurat corpoream substantiam, hoc est secundum repletionem quantitativam quæ secundum intellectum est inter omnes superficies : et sic dicendum est de istis mensuris substantiæ. Nec dicendum, ut quidam male dicunt, quod linea sit mensura non separata a superficie actu vel corporea quantitate, et ideo juncta cum aliis fit mensura perfecti corporis, quamvis in esse non sit separata a superficie et corpore, tamen in actu mensurandi secundum naturam et intellectum separata in eo modo quo diximus : et ideo specialis species est quantitatis continuæ.

Dubitant etiam quidam quid linea habeat pro materia et pro forma, dicentes quod in linea non sunt nisi duæ partes, scilicet lineæ quæ copulantur et communis terminus copulationis ; aut ergo erunt ei partes pro materia aut terminus copulans. Dicunt autem quod terminus copulans non potest esse lineæ pro materia, eo quod terminus copulans est punctum : linea autem non est ex punctis, ut probat Aristoteles [1]. Si autem partes copulatæ erunt pro materia, adhuc sequitur major abusio : partes enim lineæ sunt lineæ : ergo linea est materia lineæ : et illa linea iterum habet materiam : ergo illius lineæ erunt materia lineæ, et ibitur in infinitum, aut erit idem materia sui ipsius, quod absurdum est : ergo videtur quod nullo modo possunt esse lineæ. Adhuc autem si punctum dicatur forma lineæ, videtur inconveniens esse : quia ea quæ sunt ex materia et forma, non possunt intelligi id quod sunt sine forma : potest autem intelligi linea sine puncto si intelligatur longitudo infinita ex utraque parte.

Ulterius etiam quæritur, utrum linea possit esse ex punctis, et videtur per Aristotelem [2] quod non, quia non se tangentium non est continuatio, punctum autem non tangit punctum. Aut enim tangeret secundum partem aut secundum totum. Si secundum partem, sequitur quod punctum habet partem, quod falsum est : quia dicit Euclides quod punctum est cujus pars non est. Si autem secundum totum tangitur, hoc est iterum impossibile, quia contactus est eorum quorum ultima sunt simul, et sic puncta se tangentia haberent ultima : sed quidquid habet ultimum, aliud est ipsum, et aliud est ultimum ipsius : igitur punctum est aliud ab ultimo ipsius : et sic iterum sequitur quod punctum secundum quantitatem partes habet : ultimum scilicet et id quod habet ultimum : non ergo linea componitur ex punctis.

Si hoc autem conceditur, tunc quæritur quare numerus componitur ex indivisibilibus, et continuum ex indivisibilibus componi non potest ?

But that a surface is measured, this is according to the whole extension of the body between the diameters measuring in height, in width, in depth; and that corporeal quantity measures corporeal substance, this is according to the quantitative repletion which according to the intellect is between all surfaces: and thus it must be said of these measures of substance. Nor should it be said, as some wrongly say, that the line is a measure not separated from the surface in act or from corporeal quantity, and therefore joined with others it becomes the measure of a perfect body, although in being it is not separated from the surface and the body, yet in the act of measuring according to nature and intellect it is separated in that way which we have said: and therefore it is a special species of continuous quantity.

Some also doubt what the line has for matter and for form, saying that in the line there are only two parts, namely the lines which are coupled and the common terminus of coupling; therefore either its parts will be for matter or the coupling terminus. But they say that the coupling terminus cannot be for matter to the line, because the coupling terminus is a point: but a line is not out of points, as Aristotle proves. But if the coupled parts will be for matter, a greater abuse follows: for the parts of a line are lines: therefore the line is the matter of the line: and that line again has matter: therefore of that line the matter will be lines, and it will go to infinity, or it will be the matter of itself, which is absurd: therefore it seems that in no way can they be lines. Furthermore, if a point is said to be the form of a line, it seems to be inconvenient: because those things which are out of matter and form cannot be understood as what they are without the form: but a line can be understood without a point if an infinite length is understood on both sides.

Furthermore, it is asked whether a line can be out of points, and it seems through Aristotle that it cannot, because there is no continuation of those things which do not touch each other, but a point does not touch a point. For it would either touch according to a part or according to the whole. If according to a part, it follows that a point has a part, which is false: because Euclid says that a point is that whose part is not. If, however, it is touched according to the whole, this is again impossible, because contact is of those whose extremes are together, and thus points touching each other would have extremes: but whatever has an extreme, the thing itself is one thing, and its extreme is another: therefore the point is other than its extreme: and thus again it follows that a point according to quantity has parts: namely the extreme and that which has the extreme: therefore a line is not composed of points.

If this, however, is granted, then it is asked why number is composed of indivisibles, and the continuous cannot be composed of indivisibles?

Hoc autem facile est solvere si ad memoriam revocentur quæ de natura continuæ quantitatis dicta sunt. Dicendum enim pro certo, quod linea forma est et non habet materiam ex qua fit : et ideo quæstio nulla est. Si autem sic formaretur quæstio, quid habeat linea pro substantia secundum id quod est, et quid pro formali principio ? tunc quæstio valet : et quod dicatur, quod partes lineæ sunt in-

ea ut substantia materialis, omnino est impossibile et stultum dicere : quia, sicut objectum est, partes lineæ sunt lineæ et oportet de illis idem quærere : unde hoc est stultum. Sed dicendum quod sicut in tempore substantia temporis est nunc, ita in linea mathematice per intellectum generata et constituta, substantia lineæ punctum est fluens in continuum : et sicut esse temporis fluens successio est, ita in linea esse formale lineæ est continuitas circa puncta copulativa posita per fluxum puncti intellectualem. Cujus probatio est, quia id est formale principium in quolibet, per quod in sui generis specie ponitur : linea autem ponitur in specie quantitatis per longitudinis continuum : longitudinis igitur continuum est forma ipsius. Continuum autem non fit nisi ad unum communem terminum copulatione : et copulatio non fit nisi fluxu extenso ; fluxus ergo intellectualis puncti facit continuitatem in linea, et punctum est substantia ipsius, et hoc est verum. Et dicere quod punctum est forma, et partes materia, deliramentum est : nec punctum nisi fluens ponitur in diffinitione lineæ secundum quod linea est longitudo, cujus medium non exit ab extremis, cujus extrema sunt duo puncta.

Adhuc autem quod quæritur utrum linea sit ex punctis, Dicendum quod hoc est impossibile, sicut probatur quod linea constet ex punctis integraliter componentibus lineam ; quia ex indivisibilibus non fit continuum divisibile : sed hoc modo quo dictum est, non est impossibile, quia secundum hoc puncta sunt substantiæ positæ in linea, circa quæ ponitur continuatio, sicut circa terminum in quo fit copulatio : et hoc modo fit omne continuum ex indivisibili in se posito, circa quod (sicut terminum in quo fit copulatio) ponitur forma continui.

Ad hoc autem quod quæritur quare numerus fit ex indivisibilibus et non linea, vel aliud continuum, Dicendum quod sicut in ante habitus dictum est, hoc est ideo, quia numerus est discretum, et indivisibilia in numero manent discreta et non faciunt unum nisi aggregatione ad unum complens summam ordinatam ad id, sicut superius dictum est.

CAPUT VIII. *De dubitationibus quæ sunt circa dicta de superficie et corpore.*

This, however, is easy to solve if those things which were said about the nature of continuous quantity are recalled to memory. For it must be said for certain, that the line is a form and does not have matter out of which it is made: and therefore the question is null. But if the question were formed thus, what does the line have for substance according to what it is, and what for a formal principle? then the question is valid: and that it be said, that the parts of the line are in-

... them as material substance, is entirely impossible and foolish to say: because, as it was objected, the parts of a line are lines and it is necessary to ask the same about them: hence this is foolish. But it must be said that just as in time the substance of time is the *now*, so in a line mathematically generated and constituted by the intellect, the substance of the line is the point flowing into a continuum: and just as the being of time is a flowing succession, so in a line the formal being of the line is the continuity placed around the coupling points through the intellectual flux of the point. The proof of which is, because that is the formal principle in anything, through which it is placed in the species of its genus: but the line is placed in the species of quantity through the continuum of length: therefore the continuum of length is its form. But a continuum is not made except by coupling to one common terminus: and coupling is not made except by an extended flux; therefore the intellectual flux of the point makes continuity in the line, and the point is its substance, and this is true. And to say that the point is form, and the parts matter, is a delusion: nor is the point except as flowing placed in the definition of a line according to which a line is length, whose middle does not exit from the extremes, whose extremes are two points.

Furthermore, as to what is asked whether a line is out of points, it must be said that this is impossible, just as it is proved that a line consists of points as integrally composing the line; because out of indivisibles a divisible continuum is not made: but in this way which has been said, it is not impossible, because according to this points are substances placed in the line, around which continuation is placed, just as around a terminus in which coupling is made: and in this way every continuum is made out of an indivisible placed in itself, around which (as a terminus in which coupling is made) the form of the continuum is placed.

As to this, however, which is asked why number is made out of indivisibles and not a line, or another continuum, it must be said that just as was said in what was held before, this is therefore because number is discrete, and indivisibles in number remain discrete and do not make one except by aggregation to a one completing the ordered sum for it, as was said above.

CHAPTER VIII. *On the doubts which are about what was said of the surface and body.*

Eodem modo quæritur, utrum superficies habeat lineam pro materia, et sit materiale principium ad corpus, sicut videtur Plato dicere et quidam alii Philosophorum ? Hoc enim videtur ex modo loquendi : quia superficies est longitudo et latitudo sine profunditate : et constat quod latitudo dat speciem superficiei : quod autem ante speciem est, materiale totum est : longitudo igitur materialis est ad latitudinem, et per idem concluditur quod superficies est materialis ad quantitatem corporis. Adhuc autem quæritur mathematice loquendo, an superficies prodicitur ex linea et corpus ex superficie? Si enim unum ex alio producatur, videtur, quod unum sit materiale ad aliud.

Adhuc autem quæritur, an ista simul et secundum actum possunt esse in eodem : quia si linea inest, tunc inest longitudo sine latitudine et sic cum superficies latitudo sit, videtur non posse inesse superficies. Et similiter eadem ratione superficies si insit, videtur quod non possit inesse profunditas.

Adhuc autem quæritur, quare profundum non est sine longitudine, sicut longitudo sine latitudine, et latitudo sine profunditate ?

Quærunt etiam quidam, propter quid non sunt nisi tres dimensiones ?

Quæritur etiam in quo differt corpus quod est substantia a corpore quod est quantitas ?

Adhuc autem ulterius quærunt, utrum quantitas sit in substantia ex parte, materiæ, vel ex parte formæ, vel ex parte-

compositi? Non enim videtur advenire ex parte materiæ: non enim possibile est aliquid esse substantiam in potentia et quantum esse in actu. Materia autem est substantia in potentia: non ergo erit in actu quanta. Adhuc autem esse receptibile alicujus diminuit et privatum est a forma recipienda: materia autem receptibilis est quantitatis: ergo in seipsa ab omni quantitate est privata. Hæc et hujusmodi sunt quæ quæruntur a quibusdam.

Ad hæc autem et hujusmodi solvendo, dicendum est quod linea pro certo materialis est ad superficiem, hoc modo quo superficies quæ formalis essentia est, potest habere materiale principium, ex quo mathematice generetur: fit enim superficies ex motu lineæ ad latus. Et attende quod superficies secundum quod superficies est, non fit ex linea ducta in seipsam: ex linea enim ducta in seipsam, sive ex ductu lineæ in seipsam, fit hæc superficies secundum speciem determinata quæ est quadratum, et ex tali ductu non fit superficies secundum quod est superficies in genere sumpta: nec iterum ex ductu lineæ finitæ in continuum ad latus lineæ facto non fit superficies secundum quod superficies est in genere, sed ex talis lineæ ductu vel motu fit superficies finita tantæ mensuræ in latum, quantæ mensuræ est linea in longum: relinquitur igitur quod superficies secundum quod superficies, fiat ex motu lineæ secundum latus in continuum.

In the same way it is asked, whether a surface has a line for matter, and it be a material principle to the body, as Plato and certain others of the philosophers seem to say? For this seems from the mode of speaking: because a surface is length and width without depth: and it is clear that width gives the species to the surface: but what is before the species is entirely material: length therefore is material to width, and by the same it is concluded that the surface is material to the quantity of the body. Furthermore, it is asked mathematically speaking, whether a surface is produced from a line and a body from a surface? For if one be produced from another, it seems that one is material to the other.

Furthermore, it is asked whether these can be together and according to act in the same thing: because if a line is in it, then length is in it without width and thus since a surface is width, it seems that a surface cannot be in it. And similarly by the same reason if a surface is in it, it seems that depth cannot be in it.

Furthermore, it is asked why depth is not without length, just as length without width, and width without depth?

Some also ask, why there are only three dimensions?

It is also asked in what a body which is substance differs from a body which is quantity?

Furthermore, they ask further, whether quantity is in substance from the part of matter, or from the part of form, or from the part-

of the composite? For it does not seem to supervene from the part of matter: for it is not possible for something to be a substance in potency and a quantified thing in act. But matter is a substance in potency: therefore it will not be quantified in act. Furthermore, to be receptive of something is diminished and privately distant from the form to be received: but matter is receptive of quantity: therefore in itself it is deprived of all quantity. These and things of this kind are what are asked by certain ones.

But solving these and things of this kind, it must be said that a line for certain is material to a surface, in the way in which a surface which is a formal essence can have a material principle, from which it is generated mathematically: for a surface is made from the motion of a line to the side. And note that a surface according as it is a surface is not made from a line drawn into itself: for from a line drawn into itself, or from the drawing of a line into itself, is made this surface determinate according to species which is a square, and from such a drawing a surface is not made according as it is a surface taken in genus: nor again from the drawing of a finite line in a continuum to the side of a line that has been made is a surface made according as surface is in genus, but rather from the drawing or motion of such a line a finite surface is made, of as much measure in breadth as the line is of measure in length: it remains therefore that a surface according as it is a surface is made from the motion of a line according to the side in a continuous [manner].

Si autem objicitur, quod terminus communis in quo copulantur superficiei partes, est linea, et ille terminus est habens actum formæ, quia copulare actus formæ est, Dicendum quod, sicut de puncto diximus, quod superficies non habet materiam ex qua fit, sed ipsam punctum et ipsa linea dupliciter considerantur, scilicet prout substantiæ positæ in continuo, et sic accipit linea a puncto, et superficies a linea substantiam quæ est

id quod est. Possunt et hæc considerari prout termini copulantes, et sic accipitur ab eis esse formale quantitatis illius quæ est linea, vel illius quæ est superficies, et sic habet actum formæ qui est copulare: et non est inconveniens, quod unum et idem utrumque horum perficiat in consideratione diversa.

Si autem objicitur quod materia non coincidit in unam rem cum forma, absurdum est: quia non est materia ex qua fit res, sed tantum est hæc substantia secundum id quod est, et secundum quod est id quod est: et hæc in uno esse possunt secundum diversa quæ sunt in ipso, sicut est expresse exemplum nunc temporis, quod secundum quod adjacet ei quod fertur, est substantia temporis, et secundum quod fluit, causat esse temporis: et per eumdem modum dicimus, quod superficies habet se ad corpus.

Ad hoc autem quod quæritur, utrum simul in uno inveniantur istæ dimensiones, Dicendum quod sic. Et cum infertur, quod aliquid est longum et non latum, Dicendum quod nihil valet: quia affirmationes quæ in harum dimensionum diffinitionibus ponuntur, et negationes non opponuntur, quia non sunt relatæ ad idem et secundum idem. Et quando dicitur quod linea est longitudo sine latitudine, non negatur nisi latitudo lineæ et non superficiei: et ideo dimensiones simul sunt in eodem.

Ad hoc autem quod quæritur, quare ultra tres dimensiones non est quarta dimensio, Dicendum quod hoc ideo est, quia non sunt, nec possunt esse plures quam sex differentiæ positionis, quæ sunt sursum et deorsum, dextrum sinistrum, ante et retro, inter quas non possunt esse nisi tres dimensiones: et hoc jam probavit Aristoteles. Mathematice autem loquendo de propriis quantitatis, dicendum est quod ad unum angulum rectum non possunt convenire sive concurrere nisi tres lineæ rectæ in diversa protractæ,

But if it is objected, that the common terminus in which the parts of a surface are joined is a line, and that terminus has the act of a form, because to join is the act of a form, it must be said that, just as we said concerning the point, that a surface does not have matter from which it is made, but the point itself and the line itself are considered in two ways, namely insofar as they are substances posited in a continuum, and thus the line takes from the point, and the surface from the line the substance which is

that which it is. And these can be considered insofar as they are joining termini, and thus there is taken from them the formal being of that quantity which is a line, or of that which is a surface, and thus it has the act of a form which is to join: and it is not incongruous that one and the same thing perfects both of these in a diverse consideration.

But if it is objected that matter does not coincide in one thing with form, it is absurd: because it is not the matter from which the thing is made, but only is this substance according to that which it is, and according as it is that which it is: and these can be in one thing according to the diverse things which are in it, just as there is expressly the example of the "now" of time, which according as it is adjacent to that which is carried is the substance of time, and according as it flows causes the being of time: and through the same mode we say that the surface has itself to the body.

But to this which is asked, whether these dimensions are found simultaneously in one thing, it must be said yes. And when it is inferred that something is long and not broad, it must be said that it is invalid: because the affirmations which are posited in the definitions of these dimensions and the negations are not opposed, because they are not related to the same thing and according to the same thing. And when it is said that a line is length without breadth, only the breadth of the line is denied, and not of the surface: and therefore the dimensions are simultaneously in the same thing.

But to this which is asked, why beyond three dimensions there is no fourth dimension, it must be said that this is therefore because there are not, nor can there be more than six differences of position, which are up and down, right and left, before and behind, between which there cannot be except three dimensions: and this Aristotle has already proved. But speaking mathematically concerning the proper things of quantity, it must be said that at one right angle there cannot meet or concur except three straight lines protracted in diverse ways,

quarum quælibet directe protrahitur in continuum ad diversa positum, una scilicet secundum longitudinem, et una secundum latitudinem, et tertia secundum altitudinem et profunditatem. Non enim potest intelligi quarta positio continui in quod protrahatur diameter mensurans substantiam: et ideo dicit Aristoteles, quod perfectio est in istis secundum tres cœli motus, ab Austro scilicet in Aquilonem, qui est motus profunditatis, quia ante est nobis in Aquilone et Auster est retro: et iste est motus de tropico in tropicum per æquinoctialem. Et motus a dextro in sinistrum, qui est motus latitudinis cœli et planetarum. Sed planetæ dextrum suum habent in Occidente et sinistrum in Oriente primi cœli. Et motus sursum et deorsum qui est motus totius sphæræ secundum totum luminis et virtutis cœlestis ad centrum: propter quod perfectio est in tribus dimensionibus. Et quia perfectum est, ut dicit Aristoteles, cui nihil addi potest, ideo quarta addi non potest dimensio.

Ad hoc autem quod quærebatur, quare latitudo non est sine longitudine, sicut e contra, Dicendum quod hoc est idem quærere, quare secundum non est sine primo, sicut primum est sine secundo? quia latum et secundum generatur ex longo et primo: et id ex quo generatur, manet in generato, et non e contra: latum enim ad quod oportet latus moveatur, semper in superficie motum facit latum, et nunquam perficiet longitudinem sine latitudine: sed motum extra superficiem, ad aliam positionem movebitur, aut sursum extra superficiem, aut in profundum subtus superficiem, et tunc quia movetur ad aliam positionem, faciet aliam quantitatis speciem: et sic linea non ad positionem longitudinis mota, sed ad aliam positionem faciet superficiem.

Ad hoc autem quod quæritur, in quo differat substantia corpus, et corpus quantitas, superius jam dictum est: quia materia prout est subjectum generationis, est habens potentia et non actu tres dimensiones: corpus autem quantitatis est ipsa trina dimensio.

Ad hoc autem quod quæritur, utrum ex parte materiæ, vel formæ, vel compositi adveniat quantitas substantiæ, Dicendum sicut in ante habitis, quod potentia suscipiendi est a materia, quæ potentia divisibilis est: actus autem disponendi quamlibet partium in situ et dimensione propria ne effluant partes a terminatione totius, est a forma terminante partes materiæ ad situm proprium ordinatæ: ipsa autem dispositio partium in situ et ordine, est totius et utriusque, tam formæ scilicet quam materiæ secundum quod totum sunt. Et sic patet omnium solutio.

each of which is directly protracted in a continuous [manner] placed toward diverse things: one, namely, according to length, and one according to breadth, and a third according to height and depth. For a fourth position of a continuous thing into which a diameter measuring a substance might be protracted cannot be understood: and therefore Aristotle says that perfection is in these according to the three motions of the heaven, namely from the South to the North (which is the motion of depth, because the front is for us in the North and the South is behind: and this is the motion from tropic to tropic through the equinoctial); and the motion from right to left, which is the motion of the breadth of the heaven and of the planets; but the planets have their right in the West and their left in the East of the first heaven. And the motion up and down, which is the motion of the whole sphere according to the whole of the light and celestial virtue to the center: on account of which perfection is in three dimensions. And because it is perfect, as Aristotle says, to which nothing can be added, therefore a fourth dimension cannot be added.

But to this which was asked, why breadth is not without length, just as the inverse, it must be said that this is the same as asking why the second is not without the first, just as the first is without the second? Because the broad and the second is generated from the long and the first: and that from which it is generated remains in the generated thing, and not the inverse: for the broad toward which it is necessary that the side be moved, always makes the broad by motion in the surface, and will never perfect length without breadth: but moved outside the surface, it will be moved to another position, either up outside the surface, or into the depth below the surface, and then because it is moved to another position, it will make another species of quantity: and thus a line not moved to the position of length, but to another position will make a surface.

But to this which is asked, in what a substance-body differs from a quantity-body, it has already been said above: because matter according as it is the subject of generation, is having in potency and not in act three dimensions: but the body of quantity is the trine dimension itself.

But to this which is asked, whether quantity of substance supervenes from the part of matter, or of form, or of the composite, it must be said just as in the things had before, that the potency of receiving is from matter, which potency is divisible: but the act of disposing any of the parts in site and proper dimension lest the parts flow out from the termination of the whole, is from the form terminating the parts of matter ordered to a proper site: but the disposition itself of the parts in site and order, is of the whole and of both, namely of the form as well as of the matter according as they are a whole. And thus the solution of all is clear.

Contra hoc etiam quod tempus dicitur esse quantitas, opponunt quidam dicentes quod cujus partes non sunt, ipsum non est: partes autem temporis non sunt: præteritum namque non est, quia præteriit et abiit in non esse: futurum autem nondum est, sed expectatur: præsens autem est indivisibile nunc, quod non potest esse pars continui si quælibet pars continui divisibilis est sicut ipsum continuum: ergo nulla pars temporis est: et sic ipsum tempus non est: et sic ulterius non continua quantitas est.

Si forte aliquis dicat, quod præsens est pars temporis, in quo tempus habet esse aliquo modo.. Contra hoc esse videtur, quod in aliis continuis id in quo copulantur partes continui, est indivisibile et non pars continui, sicut punctum in linea: præsens autem est in quo copulantur partes temporis, præteritum et futurum: ergo præsens est indivisibile tempus et non pars ipsius.

Tertium. Adhuc autem compositum ex aliquibus ut partibus, est divisibile in his ex quibus ut partibus compositum est: tempus autem non est divisibile in nunc: ergo non est compositum ex nunc sicut ex partibus vel parte.

Quartum. Adhuc quælibet pars continui est alia ab ejusdem continui parte cui continuatur: nunc autem, ut probat Aristoteles, non continuatur cum nunc: ergo nunc præsens non est pars continui.

Quintum. Adhuc autem nunc non potest esse continuum ad nunc, vel cum nunc: continua enim sunt, quorum ultima sunt unum: nunc autem cum sit indivisibile non habet ultimum: igitur cum alio non habebit ultimum idem, et sic nunc non potest esse pars temporis.

Sextum. Adhuc etiam concesso quod nunc est pars temporis, et quod sit id quod de tempore est accipere, adhuc non sequitur, quod tempus sit actu: quia, ut dicit Aristoteles, nunc in tempore non est in actu, sed potentia.

Si propter hoc dicatur quod tempus non est, et ideo non est species continuæ quantitatis, in oppositum objicitur quia constat quod motus est continuus divisibilis, sicut constat ex sexto Physicorum. Aut ergo est mensura, aut mensuratum aliquod. Si est mensura, non potest esse mensura nisi aut ejus quod movetur, aut magnitudinis super quam est motus. Et constat quod neutro modo potest esse mensura: mensura enim et mensuratum sunt ejusdem generis: id autem quod movetur est permanens. Similiter autem et magnitudo de permanentibus est. Motus autem est de numero successivorum.

Against this also that time is said to be a quantity, certain ones oppose saying that what does not have parts, does not exist: but the parts of time do not exist: for the past is not, because it has passed and gone away into non-being: but the future is not yet, but is expected: but the present is the indivisible "now", which cannot be a part of a continuum if any part of a continuum is divisible just as the continuum itself: therefore there is no part of time: and thus time itself does not exist: and thus further it is not a continuous quantity.

If perhaps someone says that the present is a part of time, in which time has being in some way... Against this it seems to be, that in other continua that in which the parts of the continuum are joined is indivisible and not a part of the continuum, just as a point in a line: but the present is [that] in which the parts of time, the past and the future, are joined: therefore the present is indivisible time and not a part of it.

Third. Furthermore a composite from some things as parts is divisible into those things from which it is composed as parts: but time is not divisible into "nows": therefore it is not composed from "nows" as from parts or a part.

Fourth. Furthermore any part of a continuum is other than the part of the same continuum to which it is continued: but a "now", as Aristotle proves, is not continued with a "now": therefore the present "now" is not a part of a continuum.

Fifth. Furthermore a "now" cannot be continuous to a "now", or with a "now": for continuous things are those whose ultimates are one: but a "now", since it is indivisible, has no ultimate: therefore it will not have the same ultimate with another, and thus a "now" cannot be a part of time.

Sixth. Furthermore, even having granted that a "now" is a part of time, and that it is what can be taken of time, it still does not follow that time is in act: because, as Aristotle says, a "now" in time is not in act, but in potency.

If on account of this it is said that time does not exist, and therefore is not a species of continuous quantity, against this it is objected because it is established that motion is a divisible continuum, just as is established from the sixth [book] of the Physics. Therefore either it is a measure, or some measured thing. If it is a measure, it cannot be a measure except either of that which is moved, or of the magnitude over which the motion is. And it is established that in neither way can it be a measure: for a measure and the measured thing are of the same genus: but that which is moved is a permanent thing. Similarly also magnitude is of permanent things. But motion is of the number of successive things.

Si modo dicatur motus mensuratum quoddam esse, tunc erit aliqua mensura mensurans ipsum: sed constat quod nec id quod movetur, nec magnitudo super quam est motus propter causas quæ dictæ sunt: cum ergo non sit invenire mensuram ejusdem generis cum motu nisi tempus, erit tempus mensura ejus successi- -va sicut motus. Ex quo sequitur quod tempus est, quia esse mensuram non est determinatio diminuens ad esse, sed in esse constituens.

Dicimus igitur his consentientes quod tempus est, sed est secundum esse successivi, sicut et motus cujus ipsum est mensura.

Ad id autem quod objicitur de partibus temporis quæ non sunt, dicendum quod totum secundum quod in genere totum accipitur, non dependet ab esse partium actu: hoc enim non habet nisi totum in partibus permanens. Et hoc non habet totum successivum, quod non dependet a constitutione partium nisi secundum quod sunt in ordine. Et tales partes habet tempus. Successivum enim totum est dum fit, et habet esse permixtum potentia, et ideo non oportet quod partes simul actu habeant.

Ad hoc autem quod quæritur, utrum nunc sit pars temporis, Dicendum quod præsens accipitur ut divisibile tempus, de quo dicit Priscianus, quod præsens est cujus pars præteriit, et pars in instanti est, et pars in futuro: et hæc copulantur præterito et futuro. Est etiam præsens nunc indivisibile, et hoc non copulatur sed copulat: et hoc quidem est aliquid temporis, sed non est aliqua pars temporis: et secundum hoc facile est solvere objecta.

Si autem quis objiciat dicens quod tempus est numerus motus, et ita discreta et non continua quantitas: est satis responsum per antedicta. Est enim tempus numerus continui primo numeratus, et postea numerans: numeratus quidem a priori et posteriori in magnitudine et motu: numerans autem et certificans quantitatem motus. Taliter autem numeratus numerus non est discreta quantitas sed continua. Sic ergo tempus est continua quantitas, et non discreta. Multa autem de tempore quæ dicenda videntur, ad naturalem pertinent Philosophum.

Quædam nuper in præ habitis dicta sunt. Hæc igitur ad intentionem istam sufficiant.

Dubitatur etiam de his quæ dicta sunt de loco, et de his quæ dicta sunt de quantitatibus positionem habentibus in suis partibus. De loco quidem dubitatur, quia cum locus sit superficies continentis corporis, videtur quod impossibile sit ad eumdem terminum copulari particulas loci, ad quas particulæ locati copulantur: secundum enim esse non est unus communis finis continentis et contenti.

If now it is said that motion is a certain measured thing, then there will be some measure measuring it: but it is established that [it is] neither that which is moved, nor the magnitude over which the motion is, on account of the causes which were said: therefore since one cannot find a measure of the same genus with motion except time, time will be its succes- -sive measure just as motion [is successive]. From which it follows that time exists, because to be a measure is not a determination diminishing toward being, but constituting in being.

Therefore we say, consenting to these things, that time exists, but it exists according to successive being, just as also motion whose measure it is.

But to that which is objected concerning the parts of time which do not exist, it must be said that a whole according as it is taken as a whole in a genus, does not depend on the being of its parts in act: for nothing has this except a whole permanent in its parts. And a successive whole does not have this, which does not depend on the constitution of its parts except according as they are in order. And time has such parts. For a successive whole is while it is being made, and has being mixed with potency, and therefore it is not necessary that it have its parts simultaneously in act.

But to this which is asked, whether a "now" is a part of time, it must be said that the present is taken as a divisible time, concerning which Priscian says that the present is [that] of which a part is past, and a part is in the instant, and a part in the future: and these are joined to the past and the future. There is also the present indivisible "now", and this is not joined but joins: and this indeed is something of time, but is not any part of time: and according to this it is easy to solve the objections.

But if someone objects saying that time is the number of motion, and thus a discrete and not a continuous quantity: it is sufficiently answered through the aforementioned. For time is the number of a continuum, first numbered, and afterward numbering: numbered indeed a priori and a posteriori in magnitude and motion: but numbering and certifying the quantity of motion. But a number thus numbered is not a discrete quantity but a continuous one. Thus therefore time is a continuous quantity, and not a discrete one. But many things concerning time which seem necessary to say pertain to the natural Philosopher.

Certain things were recently said in the things had before. Let these therefore suffice for that intention.

It is also doubted concerning these things which were said about place, and concerning those things which were said about quantities having position in their parts. Indeed concerning place it is doubted, because since place is the surface of the containing body, it seems that it is impossible for the parts of place to be joined to the same terminus to which the parts of the located thing are joined: for according to being there is not one common end of the containing and the content.

Et si dicatur, ut quidam dicunt, quod superficies ultima corporis continentis est terminus, ad quem sicut ad terminum intrinsecum copulantur partes loci, et eadem superficies est terminus extra ad quem copulantur particulæ locati: hoc videtur absurdum esse, quia ea quæ copulantur in uno communi termino, vel ad unum communem terminum, continuantur in illo et sunt continua ad invicem: locus autem et locatum hoc modo sumpta in communi termino non continuantur: ergo superficies interior corporis continentis non est communis terminus ad quem copulentur loci particulæ et locati, nisi æquivoce terminus accipiatur in loco et in aliis continuis.

Eodem autem modo dubitatur de his quæ positionem dicuntur habere, et de his quæ positionem dicuntur non habere: numerus enim positionem videtur habere, cum habeat partium permanentiam et ordinem.

Adhuc autem non est positio nisi habentium locum: non habent autem locum linea et superficies, quia locus est tantum corporum: videtur igitur quod linea et superficies in partibus positionem non habeant.

Ulterius etiam quæritur, cum in quinto primæ philosophiæ motus dicatur quantitas, videtur quod plures sunt species continuæ quantitatis quam superius assignatæ.

Adhuc autem tempus continuitatem habet a motu: motus autem a spatio in quo est, quod est distantia continua inter duos terminos motus: videtur igitur quod tam motus quam tempus non sunt quantitates continuæ, nisi per aliud et per accidens: non ergo debent poni species continuæ quantitatis, quia species recipit prædicationem generis per se et non secundum accidens, istæ autem sunt per accidens quantitates.

Adhuc autem sicut motus et tempus sunt quantitates per aliud et per accidens, sic etiam albedo est quanta, quia quanta est superficies, tantam albedinem esse dices.

Ad hæc autem et similia dicendum, quod absque dubio, sicut superius ostensum est, duæ sunt loci considerationes. Una quidem mathematica, secundum quam locus est quantitas longum habens et latum et profundum secundum corporis locati dimensiones. Alia est physica de loco consideratio, secundum quod locus quæritur propter motum, ut dicit Aristoteles, et si non esset motus, non quæreretur locus. Et de loco secundum utramque istarum considerationum intentionem dictum est in ante habitis.

And if it is said, as certain ones say, that the ultimate surface of the containing body is the terminus to which, as to an intrinsic terminus, the parts of place are joined, and the same surface is the terminus outside to which the parts of the located thing are joined: this seems to be absurd, because those things which are joined in one common terminus, or to one common terminus, are continued in it and are continuous to one another: but place and the located thing taken in this way are not continued in a common terminus: therefore the interior surface of the containing body is not a common terminus to which the parts of place and of the located thing are joined, unless 'terminus' is taken equivocally in place and in other continua.

But in the same way it is doubted concerning those things which are said to have position, and concerning those things which are said not to have position: for number seems to have position, since it has permanence and order of parts.

Furthermore position is only of those things having place: but a line and a surface do not have place, because place is only of bodies: therefore it seems that a line and a surface do not have position in their parts.

Further it is also asked, since in the fifth [book] of the First Philosophy motion is called a quantity, it seems that there are more species of continuous quantity than those assigned above.

Furthermore time has continuity from motion: but motion from the space in which it is, which is a continuous distance between the two termini of motion: therefore it seems that both motion and time are not continuous quantities, except through another and by accident: therefore they ought not to be posited as species of continuous quantity, because a species receives the predication of the genus per se and not according to accident, but these are quantities by accident.

Furthermore just as motion and time are quantities through another and by accident, thus also whiteness is a quantified thing, because as great as the surface is, so great you will say the whiteness to be.

But to these and similar things it must be said, that without doubt, just as was shown above, there are two considerations of place. Indeed one mathematical, according to which place is a quantity having length and breadth and depth according to the dimensions of the located body. There is another physical consideration of place, according to which place is sought on account of motion, as Aristotle says, and if there were no motion, place would not be sought. And concerning place according to the intention of both of these considerations it has been said in the things had before.

Quia autem dicitur esse communis terminus ad quem particulæ loci et particulæ locati copulantur, superficies interior locantis et exterior locati, hoc potest esse in consideratione loci physica: sed hoc non sufficit in consideratione logica et mathematica: quia procul dubio quæcumque in communi termino copulantur, unum efficiuntur continuitate: locus autem physicus cum locato physico, non efficitur per continuationem unum. Et

ideo oportet dicere, sicut superius dictum est, scilicet quod communis terminus est usque ad quem omnes loci particulæ continuantur sicut centrum loci, in quo etiam solo virtutes loci physici, ut Astronomus dicit, congregantur per lineas a circumferentia loci productas. Ad quem etiam terminum continuantur particulæ locati : propter quod Aristoteles [1] probavit unam numero esse distantiam loci et locati : quod negabant illi qui ponebant vacuum. Dicuntur tamen lineæ sive diameter illius distantiæ aliter esse loci et aliter locati. Loci enim sunt ut continentis, et virtutem continue per diametros illos influentis omnibus locati particulis. Dicuntur autem esse corporis locati sicut contenti, et continue virtutem recipientis, ne defluant particulæ a sitibus et virtutibus suis.

Ad hoc autem quod quæritur de positionem habentibus et non habentibus, dicendum pro certo, quod habens positionem, tria exigit et requirit, scilicet situm, ordinem et permanentiam : et quia numeri partes non habent situm, eo quod unitas est indivisibile non habens positionem vel situm, ideo quamvis habeant permanentiam et ordinem, tamen non dicuntur habere positionem : et quia partes orationis et temporis et motus non habent situm nec permanentiam, quamvis habeant ordinem, non dicuntur habere positionem.

Quod autem objicitur quod situs est habentium locum, hoc verum est. Sed habere locum dupliciter dicitur secundum quod locus est quantitas. Dicitur enim habere locum quod secundum seipsum loco continetur secundum omnes loci differentias, et sic solum corpus locatum habet locum. Dicitur etiam habere locum, cui assignatur principium medium et ultimum secundum aliquas loci demensiones sive distantias, et sic linea et superficies habent situm et positionem in loco : et hoc modo intelligitur quando dicitur quod particulæ lineæ habent in loco positionem, et similiter particulæ superficiei.

But that the interior surface of the locating thing and the exterior of the located thing is said to be the common terminus to which the parts of place and the parts of the located thing are joined, this can be in the physical consideration of place: but this does not suffice in the logical and mathematical consideration: because without doubt whatever things are joined in a common terminus are made one by continuity: but physical place with the physical located thing is not made one through continuation. And

... therefore it is necessary to say, as was said above, namely that there is a common terminus up to which all the particles of place are continued as the center of the place, in which also alone the virtues of the physical place, as the Astronomer says, are gathered through lines produced from the circumference of the place. To which terminus also the particles of the thing located are continued: for which reason Aristotle proved the distance of the place and the thing located to be one in number: which those who posited a vacuum used to deny. However, the lines or diameter of that distance are said to be of the place in one way and of the thing located in another. For they are of the place as of the container, and flowing the power continuously through those diameters to all the particles of the thing located. But they are said to be of the body located as of the thing contained, and receiving power continuously, lest the particles flow away from their sites and powers.

As to this, however, which is asked about those having position and those not having it, it must be said for certain, that what has position requires three things, namely site, order, and permanence: and because the parts of number do not have site, for the reason that a unit is an indivisible not having position or site, therefore although they have permanence and order, yet they are not said to have position: and because the parts of speech and time and motion do not have site nor permanence, although they have order, they are not said to have position.

As to what is objected that site is of those having place, this is true. But to have place is said in two ways according to which place is quantity. For that is said to have place which is contained by the place according to itself according to all the differences of place, and thus only the located body has place. That is also said to have place, to which is assigned a principle, middle, and last according to some dimensions or distances of place, and thus a line and a surface have site and position in place: and in this way it is understood when it is said that the particles of a line have position in place, and similarly the particles of a surface.

Ad id autem quod de motu quæritur, dicendum quod motus est quantitas per accidens, habens continuitatem a spatio quod est inter duos terminos motus : et quamvis sic habeat per accidens, tamen habet eam intra essentiam suam, ita quod sibi est essentialis, et ideo in veritate esse motus ut motus quantitas est. Quantum ad id quod fluit in motu, aliud est quod est ubi, vel quale, vel quantum, et in mutatione est substantia. Ideo motus quantum ad id quod in motu est (ut substantia fluens) non est quantitas : et ideo apud logicum qui considerat secundum suam substantiam ad quod genus reducatur motus non est quantitas, et ideo inter species continuæ quantitatis non ponitur [2].

De his autem quæ quanta dicuntur per accidens, vel quia quantitate distenduntur propter subjecti distensionem, hic notandum est quod secundum suum esse et secundum id quod sunt, non in eis est intrinseca et essentialis quantitas, sicut tempori et motui : quamvis in hoc differant, quod tempori intrinseca est, et secundum id quod est et secundum esse : nunc enim quod est substantia temporis, non est absolutum a distensione fluxus. Motui autem est intrinseca distensio secundum esse motus, et non secundum id quod est. Aliis autem non est sic, quia illa sunt formæ advenientes materiæ non secundum quod simpliciter substantia est, sed secundum quod est materia et subjectum jam actu quantum, et ideo denominationem recipiunt a subjecti quantitate : quia talis forma est in majori major et in minori minor. Quæ autem adveniunt materiæ secundum quod materia est, et non secundum quod est quanta, sicut humanitas, non sunt in majori major et in-

minori minor. In substantialibus autem hoc in sola reperitur materia, quæ in majori major est et in minori minor : et hoc non est in forma substantiali.

Et per hoc etiam patet quod quantitas advenit substantiæ ex parte materiæ et non ex parte formæ : quinimo forma substantialis advenit materiæ secundum ordinem naturæ ante quantitatem, et ideo distribuit partes materiæ secundum diametros a natura determinatos et mensuratos. Hoc igitur est quod dixit Aristoteles de his quæ sunt quantitates per accidens , dicens quod proprie quantitates sunt hæ solæ quas diximus superius.

As to that, however, which is asked about motion, it must be said that motion is a quantity by accident, having continuity from the space which is between the two terms of motion: and although it has it thus by accident, yet it has it within its essence, so that it is essential to it, and therefore in truth the being of motion as motion is quantity. As to that which flows in motion, it is another thing which is the "where," or of what sort, or how much, and in change it is substance. Therefore motion as to that which is in motion (as flowing substance) is not quantity: and therefore with the logician who considers according to its substance to which genus motion should be reduced, it is not quantity, and therefore it is not placed among the species of continuous quantity.

Regarding those which are said to be quanta by accident, either because they are distended by quantity because of the distension of the subject, it must be noted here that according to their being and according to what they are, there is not in them an intrinsic and essential quantity, just as in time and motion: although they differ in this, that in time it is intrinsic, both according to what it is and according to its being: for the *now* which is the substance of time, is not absolute from the distension of flux. But in motion distension is intrinsic according to the being of motion, and not according to what it is. In others, however, it is not so, because those are forms arriving to matter not according to that which is simply substance, but according to that which is matter and subject already actualized as quantum, and therefore they receive their denomination from the quantity of the subject: because such a form is greater in a greater thing and smaller in a smaller thing. But those which arrive to matter according to what is matter, and not according to what is quantum, such as humanity, are not greater in a greater thing and-

... smaller in a smaller thing. But in substantial things this is found only in matter, which is greater in a greater thing and smaller in a smaller thing: and this is not in the substantial form.

And by this it is also clear that quantity arrives to substance from the part of matter and not from the part of form: rather, substantial form arrives to matter according to the order of nature before quantity, and therefore it distributes the parts of matter according to diameters determined and measured by nature. This therefore is what Aristotle said about those things which are quantities by accident, saying that properly quantities are only these which we said above.

Alia vero omnia quæ quanta dicuntur, secundum accidens quanta et quantitates dicuntur. Hujus autem signum est, quod alia quanta non dicimus, nisi aspicientes per intellectum ad hæc quæ proprie sunt et dicuntur quantitates, alia quæ sunt proprie quantitates, alia quæ sunt per accidens quanta denominantes, ut multum dicitur aliquid album et multa albedo, eo quod superficies in qua est albedo est multa. Sic et actio dicitur longa, eo quod tempus mensurans eam et longum et multum sit, et hoc modo dicitur etiam motus multus : quamvis de motu aliter sit quam de aliis, ut patet ex supradictis. Non enim singulum horum per se quantitas dicitur, quod secundum id quod est et secundum suum essentiale esse sit quantitas, sed quia quanta dicuntur his quodammodo dimensa : ut si quis interrogatus fuerit quanta sit actio, assignet quantitatem ejus quantitate temporis, dicens eam esse annuam vel diurnam. Et interrogatus quantum sit album, designabit quantum sit album definiens quantitatem superficiei : quanta enim fuerit superficies, tantum in dimensione album esse dicet. Propterea solæ proprie et secundum se dicuntur quantitates ipsæ quæ in præ habitis dictæ sunt. Aliorum vero nihil per se dicitur quantitas : sed si forte aliquid aliorum dicatur quantitas, hoc erit per accidens sive accidentali denominatione.

CAPUT XI. *De proprio quantitatis quod est non habere contrarium.*

Postquam de speciebus quantitatis quantum ad intentionem logici spectat expeditum est juxta modum quem in declaratione substantiæ tenuimus, sequitur declarar hoc prædicabile quod est quantitas per proprietates ipsum consequentes. Quamvis autem consequatur ipsum ex hoc quod est accidens in subjecto esse, sicut substantiam consequebatur in subjecto non esse, tamen hanc proprietatem non assignamus, quia non convenit quantitati per hoc quod quantitas est, sed convenit ei per hoc quod est accidens, et ideo non potest esse consequens quantitatem secundum quod quantitas est : sed in subjecto non esse proprium est substantiæ, quia consequitur ipsam substantiam secundum quod substantia est.

Adhuc autem univoce prædicari de sibi subjectis, substantiam sequitur per hoc quod substantia est. Sed hoc non assignatur quantitati nec aliis accidentium generibus propter duas rationes : quarum una est communis, quia ex quo univoce prædicari sequitur substantiam, prout est genus prædicabilium suæ coordinationis, ut dicunt quidam, et quod sequitur alia genera in quantum prædicabilium suæ coordinationis sunt principia : et ex quo facile hoc scitur, non oportuit ad hoc studere ut poneretur in aliis generibus hoc consequens proprium.

But all other things which are said to be quanta, are said to be quanta and quantities according to accident. A sign of this is, that we do not say other things are quanta, except by looking through the intellect at those things which properly are and are called quantities, denominating other things which are quanta by accident, as something white is said to be "much" and a "much whiteness," because the surface in which the whiteness is, is "much." So also an action is said to be long, because the time measuring it is both long and much, and in this way motion is also said to be much: although it is otherwise with motion than with others, as is clear from what was said above. For not every single one of these is said to be a quantity by itself, which is a quantity according to what it is and according to its essential being, but because they are said to be quanta as being measured in some way by these: as if someone were asked how much an action is, he would assign its quantity by the quantity of time, saying it is of a year or of a day. And asked how much something white is, he will designate how much the white is by defining the quantity of the surface: for however much the surface was, so much in dimension will he say the white is. Therefore only these themselves which were said in the previous holdings are properly and by themselves called quantities. Of others, however, nothing is called a quantity by itself: but if by chance any of the others is called a quantity, this will be by accident or by accidental denomination.

CHAPTER XI. *On the property of quantity which is to not have a contrary.*

After the species of quantity have been dispatched, as far as concerns the intention of the logician, according to the mode which we held in the declaration of substance, it follows to declare this predicable which is quantity through the properties following it. Although, however, it follows it from this that it is an accident in a subject, just as it followed substance to not be in a subject, yet we do not assign this property, because it does not belong to quantity through this that it is quantity, but it belongs to it through this that it is an accident, and therefore it cannot be a consequence of quantity according to what it is quantity: but to not be in a subject is proper to substance, because it follows substance itself according to what it is substance.

Furthermore, to be predicated univocally of the things subject to it, follows substance through this that it is substance. But this is not assigned to quantity nor to the other genera of accidents for two reasons: one of which is common, because from the fact that to be predicated univocally follows substance, insofar as it is the genus of the predicables of its coordination, as some say, and because it follows other genera insofar as they are principles of the predicables of their coordination: and since this is easily known, it was not necessary to study to place this proper consequence in the other genera.

Secunda ratio melior est, quod accidens proprie perfectam non habet rationem, sed sola substantia : ideo cum univoce prædicari sit prædicari nomine et ratione, non convenit hoc generibus accidentium quæ nec proprie nec perfecte habent rationem.

Convenit autem quantitati secundum id quod quantitas est, quod secundum essentiam quantitatis nihil habet contrarium, ita quod sint in genere quantitatis-

formæ contrariæ, quarum utraque sit quantitas, sicut in genere qualitatis sunt formæ contrariæ, quarum utraque est qualitas. Et hujus causa est, quod materia per hoc quod est substantia simplex, non est susceptibilis contrarietatis, sed per hoc quod est quanta: et nisi sit quanta, non suscipit contraria, quia contraria sunt agentia et patientia, quæ non conveniunt nisi ei quod movetur: non movetur autem nisi divisibile, ut probatur in sexto Physicorum: divisibile autem est quantum actu: non ergo suscipit nisi quod actu quantum est, et ideo oportet quod quantitas sit in materia ante omnem proprie sumptam contrarietatem. Et quod est ante omne contrarium, illud non potest habere contrarium. Igitur quantitas secundum quod quantitas non potest habere contrarium.

Hoc autem non tantum ratione, sed inductione probatur. In definitis enim, hoc est in determinatis per speciem quantitatis hoc quod diximus manifestum est. Determinatis enim nihil est contrarium, ut bicubito, et tricubito, vel lineæ, vel superficiei, vel corpori. His enim et omnibus quæ sunt similia alicui talium in hoc quod determinatæ sunt species quantitatum, nihil est contrarium, sicut patet, quibus nec inveniri potest contrarium in quantitate.

Nisi forte aliquis multa paucis in genere discretæ quantitatis dicat esse contraria, vel magnum parvo dicat esse contrarium in genere quantitatis continuæ. Hoc tamen esse non potest, quia ea quæ sunt contraria, formas habent maxime distantes. Multa autem dicunt multitudinem, et pauca similiter dicunt multitudinem, quamvis non tantam: unde si quæratur in quo ut in genere sit paucum, diceretur quod in genere multitudinis, est enim paucum multitudo reducta vel restricta ad non multos: quoniam utrumque tam multum quam paucum dicunt unum, quamvis non eodem modo.

Similiter autem de magno et parvo, quorum utrumque dicit magnitudinem: sed magnum dicit magnitudinem perfectam, parvum autem dicit magnitudinem imperfectam. Contraria autem quæ vere contraria sunt, non dicunt circa formam unam in specie perfectum et imperfectum: sed utrumque contrariorum ab altero est absolutum, et æque perfectum actu contrarietatis. Et hæc est vera causa quare multum et paucum, et magnum et parvum contraria esse non possunt.

The second reason is better, that an accident properly does not have a perfect account (*ratio*), but only substance: therefore since to be predicated univocally is to be predicated in name and account, this does not belong to the genera of accidents which have neither properly nor perfectly an account.

But it belongs to quantity according to what quantity is, that according to the essence of quantity it has no contrary, so that there be in the genus of quantity-

contrary forms, of which each may be a quantity, just as in the genus of quality there are contrary forms, of which each is a quality. And the cause of this is, that matter through this that it is a simple substance, is not susceptible of contrariety, but through this that it is quantified: and unless it be quantified, it does not receive contraries, because contraries are acting and suffering things, which do not agree except with that which is moved: but nothing is moved except a divisible thing, as is proved in the sixth [book] of the Physics: but a divisible thing is quantified in act: therefore it does not receive except what is quantified in act, and therefore it is necessary that quantity be in matter before every properly taken contrariety. And what is before every contrary, that cannot have a contrary. Therefore quantity according as it is quantity cannot have a contrary.

But this is proved not only by reason, but by induction. For in defined things, that is, in things determined by a species of quantity, this which we have said is manifest. For nothing is contrary to determined things, as to a two-cubit thing, and a three-cubit thing, or a line, or a surface, or a body. For to these and to all things which are similar to any of such in this that they are determined species of quantities, nothing is contrary, as is clear, to which neither can a contrary in quantity be found.

Unless perhaps someone may say that 'many' is contrary to 'few' in the genus of discrete quantity, or may say that 'great' is contrary to 'small' in the genus of continuous quantity. This nevertheless cannot be, because those things which are contrary, have maximally distant forms. But 'many' dictates a multitude, and 'few' similarly dictates a multitude, although not as great: whence if it is asked in what as in a genus 'few' is, it would be said that [it is] in the genus of multitude, for 'few' is a multitude reduced or restricted to not many: since both as well 'much' as 'few' dictate one thing, although not in the same way.

Similarly it is concerning 'great' and 'small', of which each dictates a magnitude: but 'great' dictates a perfect magnitude, but 'small' dictates an imperfect magnitude. But contraries which are truly contraries, do not dictate concerning one form in a species 'perfect' and 'imperfect': but each of the contraries is absolute from the other, and equally perfect by the act of contrariety. And this is the true reason why 'much' and 'few', and 'great' and 'small' cannot be contraries.

Cum autem hoc dicimus quod horum nominum quæ dicta sunt secundum formam significatam in nomine nihil est quantitas: hæc enim nomina non designant formas quantitatis, sed potius formas circa quanta, quibus ipsa sunt ad aliquid secundum veritatem, quamvis in modo significandi non dicant modum dependentiæ secundum modum quo illa quæ dicuntur ad aliquid dependentiam habent ad alia, sicut ipso nomine dependentiam dicunt dominus servus, pater filius: multum enim significat id quod ad alterum est, quamvis in nomine modum non importet quo ad alterum est. Et similiter est in pauco, et eodem modo est in parvo et in magno.

Quod autem ad aliquid sint ea quæ dicuntur magna et parva, probatur inductione: nihil enim invenitur in omnibus magnis et parvis, quod per seipsum absolute semper dicatur magnum et ad omnia magnum: quod enim simpliciter est aliquid, ad omnia est id, sicut simpliciter calidum ad omnia est calidum, et sic de aliis omnibus. Sed magnum non ad omnia magnum est, sed alicui comparatum dicitur non magnum. Sequitur igitur quod magnum non est simpliciter et secundum formam absolutam magnum dictum. Hujus autem probatio est per inductionem in eo quod mons, qui simpliciter magnus videtur, non sit aliquid magnum simpliciter et sine comparatione dictum:

dictum : sed mons dicitur parvus majori comparatus : et granum milii quod simpliciter parvum videtur, dicitur magnum grano papaveris vel rutæ comparatum. Dicitur autem milium magnum, non ideo quod simpliciter magnum sit, sed ideo quod comparatum rebus sui generis, dicatur magnum : et mons parvus dicitur, non quia simpliciter parvus sit et absolute, sed quia comparatus rebus sui generis, hoc est, aliis montibus, ut Caucaso, aut Olympo, parvus sit respectu illorum. Patet igitur quod magnum et parvum talia sunt, quorum est ad aliud relatio secundum veritatem, quamvis modum dependentiæ ad aliud non importent in nomine : nam si per se et absolute magnum et parvum dicerentur, nunquam quidam diceretur mons parvus ad aliquid aliud comparatus, nec milium ad aliud granum comparatum diceretur magnum, sicut album nulli comparatum dicitur nigrum, et calidum nulli comparatum dicitur frigidum.

Et similiter est de multo et pauco : quia iidem secundum numeri quantitatem, id est, homines multi dicuntur et pauci. Si enim in vico sunt, verbi gratia viginti homines, multi homines dicuntur, et si sunt in civitate, dicuntur pauci : quia civitas requirit multo plures habitatores quam vicus, sicut in *Politicis* dicit Aristoteles [1], et iideo qui multi sunt in vico, pauci sunt in civitate, quamvis forte illi qui sunt in civitate, sint multiplices ad illos qui sunt in vico : tripli enim vel quadrupli ad eos qui sunt in vico, adhuc pauci sunt in civitate.

But since we say this, that of these names which were said according to the form signified in the name, none is a quantity: for these names do not designate forms of quantity, but rather forms surrounding quantified things, by which they are toward something [relatives] according to truth, although in the mode of signifying they may not dictate a mode of dependence according to the mode by which those things which are called toward something have a dependence to other things, just as by the name itself 'master' - 'servant', 'father' - 'son', dictate a dependence: for 'much' signifies that which is toward another, although in the name it does not import the mode by which it is toward another. And similarly it is in 'few', and in the same way it is in 'small' and in 'great'.

But that those things which are called great and small are toward something [relatives], is proved by induction: for in all great and small things nothing is found which through itself absolutely is always called great and great toward all things: for what is simply something, that is toward all things, just as what is simply hot is hot toward all things, and thus concerning all other things. But great is not great toward all things, but compared to something it is called not great. It follows therefore that great is not called great simply and according to an absolute form. But the proof of this is through induction in that a mountain, which seems simply great, is not called something great simply and without comparison:

... it was said: but a mountain is called small compared to a greater one: and a grain of millet which simply seems small, is called great compared to a grain of poppy or of rue. But the millet is called great, not because it is simply great, but because compared to things of its own genus, it is called great: and a mountain is called small, not because it is simply and absolutely small, but because compared to things of its own genus, that is, to other mountains, like Caucasus or Olympus, it is small in respect to those. It is clear therefore that great and small are such things whose relation is to another according to truth, although they do not import the mode of dependency on another in the name: for if great and small were said by themselves and absolutely, never would a certain mountain be called small compared to some other thing, nor would millet compared to another grain be called great, just as white compared to nothing is called black, and hot compared to nothing is called cold.

And similarly it is of much and few: because the same ones according to the quantity of number, that is, men are called many and few. For if in a village there are, for example, twenty men, they are called many men, and if they are in a city, they are called few: because a city requires many more inhabitants than a village, as Aristotle says in the *Politics*, and therefore those who are many in a village, are few in a city, although perhaps those who are in the city are manifold to those who are in the village: for being triple or quadruple to those who are in the village, they are still few in the city.

Eodem autem modo de his qui sunt in domo et in theatro, qui est locus ad speculandum ludos et facta tironum : et illa multitudo hominum quæ multa est in domo ultra numerum qui requiritur in patrefamilias et uxore et filiis et clientibus ad domus dispensationem, et hæc eadem multitudo pauca dicitur esse in theatro : quia ad speculandum in theatrum multo plures de diversis domibus et vicis habent convenire et propter hoc si de tribus domibus tantum ad theatrum conveniant, pauci dicuntur, cum tamen sint multo plures ad eos qui in una domo sunt ad dispensationem domus pertinentes. Patet ergo quod multum et paucum, et magnum et parvum, sunt ad aliud comparata, et non dicunt formas specierum quantitatis absolutas, sicut continuum et discretum, et linea et superficies, et tempus et locus, vel sicut bicubitum, vel tricubitum, vel unus, duo, tres, vel aliquid hujusmodi.

Amplius bicubitum et tricubitum et unumquodque eorum quæ numeravimus, significant quantitates sub formis quæ essentialiter sunt quantitates. Multum vero et paucum, et magnum et parvum, secundum nomina sua non significant quantitates principaliter, sed significant ad aliquid circa quantitatem dictum. Multum ergo et paucum, et magnum et parvum, non significant quantitates contrarias.

Amplius hoc etiam ostenditur deducendo ad impossibile. Detur enim ab aliquo quod ea quæ dicta sunt sint quantitates, tunc sequitur quod non sunt contraria : id enim quod non contingit sumere per seipsum et absolute, sed oportet semper sumere ad alterius relationem, quomodo potest intelligi quod sic dependenti aliquid sit contrarium, cum ea quæ vere sunt contraria, maxime distent eorum quæ sunt sub eodem genere, et unum eorum non dependeat ad reliquum, et sit aliud genus oppositionis contrarietas quam est oppositio relativorum ? Propter quod etiamsi concedatur quod quantitates sint ista quæ dicta sunt, adhuc non sequitur quod quantitas habeat contrarium : quia ista non sunt contraria, sed opposita secundum relationem. Et habetur virtute hujus argumentationis non quod quidam dicunt, quod ea quæ sunt ad aliquid, non habeant contrarium, vel quod ea quæ sunt ad aliquid, non suscipiant contrarium : tamen hoc etiam est verum, quod-

quæcumque sunt ad aliquid secundum modum et veritatem simul, non suscipiunt contrarium, sed ea quæ sunt ad aliquid secundum modum, et sunt in alio genere secundum veritatem, possunt habere contrarium.

In the same way also of those who are in a house and in a theater, which is a place for watching games and the deeds of the tirones: and that multitude of men which is many in a house beyond the number which is required in a householder and wife and children and servants for the management of the house, and this same multitude is said to be few in a theater: because for watching in a theater many more from different houses and villages have to convene and because of this if from only three houses they convene to the theater, they are called few, although nevertheless they are many more compared to those who are in one house pertaining to the management of the house. It is clear therefore that much and few, and great and small, are compared to another, and do not say absolute forms of the species of quantity, as do continuous and discrete, and line and surface, and time and place, or as do two-cubit, or three-cubit, or one, two, three, or anything of this sort.

Furthermore two-cubit and three-cubit and each one of those which we have numbered, signify quantities under forms which are essentially quantities. But much and few, and great and small, according to their names do not signify quantities principally, but signify something said about quantity in relation to something else. Much therefore and few, and great and small, do not signify contrary quantities.

Furthermore this is also shown by deducing to the impossible. For let it be granted by someone that those things which were said are quantities, then it follows that they are not contraries: for that which it does not happen to take by itself and absolutely, but it is always necessary to take in relation to another, how can it be understood that to something thus dependent there is a contrary, since those things which are truly contraries, are maximally distant of those which are under the same genus, and one of them does not depend on the other, and contrariety is another genus of opposition than is the opposition of relatives? For which reason even if it be granted that those which were said are quantities, still it does not follow that quantity has a contrary: because those are not contraries, but opposites according to relation. And it is held by the virtue of this argumentation not what some say, that those things which are to something, do not have a contrary, or that those things which are to something, do not admit a contrary: yet this is also true, that-

whatever things are relatives according to both mode and truth simultaneously, do not admit a contrary, but those things which are relatives according to mode, and are in another genus according to truth, can have a contrary.

Amplius adhuc per deductionem ad impossibile idem probatur, quia si detur quod magnum et parvum sint contraria, continget sive sequetur quod idem simul actu recipit contraria, et sequetur quod eadem ipsa sibimet sunt contraria. Contingit enim idem simul esse magnum et parvum : quia aliquid ad hoc quidem comparatum est parvum, ad aliud vero comparatum est magnum : et si est contrarium, ut prius dictum est, semper est contrarium : quia comparatio non dat ei formam contrarietatis, nisi habeat eam. Sequitur ergo quod simpliciter idem erit magnum et parvum si magnum et parvum sint contraria.

Videtur autem forte alicui quod hæc non valeat argumentatio, sed procedit secundum modum sophisticum qui vocatur ignorantia elenchi, sicut hoc est leve ad hoc, et non est leve ad illud : ergo est leve et non leve, vel leve et grave. Sed hoc jam exclusum est per hoc quod diximus, quod contrarium ad hoc sequitur simpliciter esse contrarium, sicut calidum ad hoc sequitur esse simpliciter calidum. Quod autem sequantur prædicta inconvenientia probatur ex hoc, quod contingit aliquid ad hoc quidem comparatum esse magnum, et ad aliud comparatum esse parvum : et si hæc sunt contraria, sequitur quod idem simpliciter est magnum et parvum simul, et sic simul eidem insunt contraria. Sed contra hoc est, quod nihil est quod videtur in eodem tempore simul suscipere contraria posse, cum contraria sint quæ se mutuo expellunt ab eodem susceptibili : quamvis enim substantia susceptibilis sit contrariorum secundum sui mutationem, non tamen in uno eodemque tempore et secundum idem suscipit contraria, sed in diversis temporibus : mutatur enim de uno in aliud per vices temporum : nullus enim simul sanus et æger est, nec albus et niger. Et sic patet inducendo in omnibus aliis, quod nihil simul in eodem tempore contraria suscipit.

Contingit etiam, ut diximus, eadem sibiipsis esse contraria : nam si magnum parvo est contrarium, hoc jam probatum est, quod ipsum simul magnum et parvum est : sequitur quod ipsum sibiipsi contrarium est. Et hoc sequitur ex hoc : quia si comparatum alicui formam recipit contrarii, illud simpliciter habet formam illam, et ut alii comparatum habet formam alterius contrarii, sequitur quod simpliciter etiam habet illam, quia contrariæ formæ quibus insunt simpliciter insunt, eo quod non sunt formæ comparationis, ut dicit Avicenna, sed sunt qualitates absolutæ. Est autem impossibile idem sibiipsis esse contrarium : non enim est magnum parvo contrarium, et per eamdem rationem multum non erit pauco sive exiguo contrarium. Propter quod quamvis quilibet dicat hæc non esse opposita, adhuc stabit hoc quod dictum est, quod quantitati nihil est contrarium : sequitur enim inconveniens, et ostenditur quod non sunt contraria ea quæ in genere quantitatis dixit esse contraria.

Furthermore, the same is proved by a deduction to the impossible, because if it be granted that great and small are contraries, it will happen or follow that the same thing simultaneously in act receives contraries, and it will follow that those same things are contraries to themselves. For it happens that the same thing is simultaneously great and small: because something compared to this indeed is small, but compared to another is great: and if it is a contrary, as was said before, it is always a contrary: because comparison does not give it the form of contrariety, unless it has it. It follows therefore that simply the same thing will be great and small if great and small are contraries.

But it seems perhaps to someone that this argumentation is not valid, but proceeds according to the sophistic mode which is called ignorance of the refutation (ignorantia elenchi), as this is light to this, and is not light to that: therefore it is light and not light, or light and heavy. But this has already been excluded by what we said, that a contrary towards this follows simply to be a contrary, just as hot towards this follows to be simply hot. Moreover, that the aforesaid inconveniences follow is proved from this, that it happens that something compared to this indeed is great, and compared to another is small: and if these are contraries, it follows that the same thing simply is great and small simultaneously, and thus simultaneously contraries are in the same thing. But against this is, that there is nothing that seems to be able to simultaneously admit contraries at the same time, since contraries are those which mutually expel each other from the same susceptible subject: for although the susceptible substance is of contraries according to its change, it does not however admit contraries in one and the same time and according to the same respect, but in different times: for it is changed from one into another through the successions of times: for no one is simultaneously healthy and sick, nor white and black. And thus it is clear by inducing in all others, that nothing simultaneously in the same time admits contraries.

It also happens, as we said, that the same things are contraries to themselves: for if great is contrary to small, this has already been proved, that it itself is simultaneously great and small: it follows that it itself is contrary to itself. And this follows from this: because if compared to someone it receives the form of a contrary, that thing simply has that form, and as compared to another it has the form of another contrary, it follows that simply also it has that one, because contrary forms in which they are inhere simply, because they are not forms of comparison, as Avicenna says, but are absolute qualities. Moreover, it is impossible for the same thing to be contrary to itself: for great is not contrary to small, and by the same reason much will not be contrary to few or small. Because of which although anyone may say these are not opposites, still what was said will stand, that to quantity nothing is contrary: for an inconvenience follows, and it is shown that those things which he said were contraries in the genus of quantity are not contraries.

CAPUT XII.

De dubitationibus quæ sunt circa prædicta.

Contra hæc tamen quidam objiciunt dicentes motum esse in genere quantitatis, qui dicitur esse augmentum vel diminutio. Motus autem est de contrario in contrarium, ut in quinto *Physic.* probat Aristoteles : videtur igitur quod quantitas quantitati sit contraria.

Adhuc autem quia quantitas corrumpitur, arguitur quod quantitati sit contrarium : non autem corrumpitur per se nisi contrarium a contrario : habet igitur quantitas contrarium.

Sed ad hoc dicendum, quod quantitas -

quantitati non est contraria per se, sed circa quantum ratio perfecti et ratio imperfecti sunt contraria. Unde etiam ex libro de Anima habetur, quod termini inter quos est motus augmenti et decrementi, sunt magis relationes quam quantitates, ubi dicit Aristoteles, quod omnium natura constantium est terminus et ratio magnitudinis et augmenti. Nec motus exigit quod sit inter terminos contrarios secundum esse, sed sufficit quod sint contrarii secundum rationem. Unde magnum parvo non contrariatur, nisi in quantum parvum est in ratione imperfecti, magnum autem in ratione perfecti.

Ad aliud autem dicendum quod quantitas non corrumpit quantitatem nisi per contrarias qualitates activas et passivas quæ sunt in quanto, et non per hoc quod utrumque est quantum.

Maxime autem videtur aliquibus quod circa locum quem quantitatem esse diximus sit talis contrarietas quæ sit quantitatis, ita quod locus loco sit contrarius : sursum enim prout locus est et loci differentia, ponunt antiqui Philosophi contrarium esse ad locum qui in medio est, quem deorsum dicunt. Ratio autem quare hæc duo loca dicuntur esse contraria, est ex eo quod multa et maxima distantia sit ad mundi terminos : quia circa circumferentiam est ubique sursum, et circa centrum similiter ubique deorsum : et ideo videntur antiqui Philosophi etiam aliorum contrariorum diffinitionem per hoc quod contraria maxime distant transumendo distantiam ad diffinitionem aliorum contrariorum proferre ab his quæ loco distant ad illa quæ non loco, sed essentiali distant repugnantia et sunt de numero eorum quæ sunt sub eodem genere. Et hanc quidem instantiam contra dicta sua ponit Aristoteles, sed non eam determinat : sed oportet nos investigare utrum instantia vera sit aut non, et quæ sit causa quod eam tangit Aristoteles, et non solvit neque determinat.

CHAPTER XII.

On the doubts which are around the aforesaid.

Against these, however, some object saying that motion is in the genus of quantity, which is said to be increase or decrease. But motion is from a contrary into a contrary, as Aristotle proves in the fifth book of the *Physics*: it seems therefore that quantity is contrary to quantity.

Furthermore, because quantity is corrupted, it is argued that there is a contrary to quantity: but nothing is corrupted per se except a contrary by a contrary: therefore quantity has a contrary.

But to this it must be said, that quantity -

quantity is not contrary to quantity per se, but concerning quantum the account of the perfect and the account of the imperfect are contraries. Whence also it is held from the book on the *Soul*, that the terms between which there is motion of increase and decrease, are rather relations than quantities, where Aristotle says, that of all things standing by nature there is a term and an account of magnitude and increase. Nor does motion require that it be between contrary terms according to being, but it suffices that they be contraries according to account. Whence great is not contrary to small, except in so far as small is in the account of the imperfect, and great in the account of the perfect.

To the other, however, it must be said that quantity does not corrupt quantity except through contrary active and passive qualities which are in the quantum, and not through the fact that each is a quantum.

But it most seems to some that concerning place, which we said to be a quantity, there is such a contrariety which is of quantity, so that place is contrary to place: for up, as it is a place and a difference of place, the ancient philosophers posit to be contrary to the place which is in the middle, which they call down. The reason why these two places are said to be contraries, is because there is much and maximal distance to the terms of the world: because around the circumference it is everywhere up, and around the center similarly everywhere down: and therefore the ancient philosophers seem also to bring forth the definition of other contraries through this, that contraries are maximally distant, by transferring distance to the definition of other contraries from those things which are distant in place to those which are not in place, but are distant by an essential repugnance and are of the number of those which are under the same genus. And Aristotle indeed poses this objection against his own words, but he does not determine it: but it is necessary for us to investigate whether the objection be true or not, and what is the cause that Aristotle touches upon it, and does not resolve nor determine it.

Ad hoc autem quidam dicunt quod instantia non valet multipliciter. Et quia hoc patere omnibus dicunt, ideo eamdem Aristotelem non dicunt determinare. Dicunt autem primam causam esse quare non valet, quia falsum supponit in hoc quod multa vel maxima distantia sit circumferentiæ ad medium ; hæc enim distantia non est nisi semidiametri: maxima autem distantia est secundum totam diametrum quæ producitur de summo circumferentiæ, sicut ad multum ejusdem, sicut de cœli distantia usque ad cœlum. Dicunt etiam quod secunda causa est quare non valet, quia distantia in loco et distantia essentialis repugnantiæ in contrariis non est sumpta univoce. Unde sic transferentes peccant secundum æquivocationem, quod verum dicunt etiam parum peritis manifestum esse : propter quod dicunt Aristotelem hanc instantiam ut eam quæ manifeste nulla sit transire.

Sed hoc dictum procedit ex magno errore. Si enim taceamus de antiquis, Averroes in duobus locis, scilicet super Physicam et super primam philosophiam [2] dicit ad contrariorum diffinitionem ab his quæ in loco sunt contraria, distantiam esse transumptam. Et si forte hoc non curetur nec attendatur, quid dicetur de omnium contrariorum vera diffinitione, cum dicantur contraria esse, quæ maxime distant eorum quæ sunt sub eodem genere ? Scimus quod distantia proprie est in loco primo. Si ergo transferatur ad alia, constat quod a loco transfertur ad illa : primum enim transfertur ad secundum propter aliquam similitudinem et non secundum ad primum : quia sic translationis esset translatio, quod est inconveniens. Adhuc autem quod maxime distent medium et circumferentia, in multis locis dicit Aristoteles, et quod ubique circa circumferentiam est locus sursum. Igitur circa hemisphærium esse sursum, et circa hemisphærium esse sub-

terra, non distant penes sursum et deorsum, quia utrumque est sursum: nec tota diameter distinguit sursum et deorsum, sed semidiameter. Scimus autem quod in loco maxime distant sursum et deorsum, sicut dextrum et sinistrum, et sicut ante et retro: et ideo dicta ista valde sunt erronea. Scimus enim quod in libro de Cœlo et Mundo probatur, quod ad medium motus contrarius est ei qui est a medio ad circumferentiam: et sunt motus contrarii qui sunt ad contraria: ergo locus circa medium contrarius est ei qui est circa circumferentiam, et sic adhuc stat dictum Antiquorum. Adhuc prima contraria probantur esse ea quæ in loco sunt contraria (quæ sunt causa omnium aliorum) in metaphysicis et in physica. Videtur ergo quod stet et perfecta sit ista instantia, et ab Aristotele per hoc quod contra eam nihil dicit, videtur esse approbata.

To this, however, some say that the objection is not valid in multiple ways. And because they say this is clear to all, therefore they say that Aristotle does not determine the same. Moreover, they say that the first cause why it is not valid, is because it supposes a falsehood in this, that there is much or maximal distance of the circumference to the middle; for this distance is nothing but the semi-diameter: but the maximal distance is according to the whole diameter which is produced from the top of the circumference, as to much of the same, as from the distance of heaven even unto heaven. They say also that the second cause why it is not valid, is because distance in place and distance of essential repugnance in contraries is not taken univocally. Whence those thus transferring err according to equivocation, which truth they say is manifest even to the little skilled: because of which they say that Aristotle passes over this objection as one which is manifestly null.

But this saying proceeds from a great error. For if we were silent about the ancients, Averroes in two places, namely upon the *Physics* and upon the *First Philosophy*, says that for the definition of contraries distance was transferred from those things which are contraries in place. And if perhaps this is not cared for nor attended to, what will be said about the true definition of all contraries, when they are said to be contraries which are maximally distant of those which are under the same genus? We know that distance properly is in place first. If therefore it be transferred to other things, it is established that it is transferred from place to them: for the first is transferred to the second because of some similarity and not the second to the first: because thus of the translation there would be a translation, which is inconvenient. Furthermore, that the middle and the circumference are maximally distant, Aristotle says in many places, and that everywhere around the circumference is the place up. Therefore around the hemisphere to be up, and around the hemisphere to be sub-

earth, do not distance [themselves] by means of 'up' and 'down', because both are 'up': nor does the whole diameter distinguish 'up' and 'down', but the semidiameter. But we know that in place 'up' and 'down' maximally distance [themselves], just as 'right' and 'left', and just as 'before' and 'behind': and therefore those sayings are very erroneous. For we know that in the book On the Heaven and the World it is proved, that to the middle a motion is contrary to that which is from the middle to the circumference: and there are contrary motions which are to contraries: therefore the place around the middle is contrary to that which is around the circumference, and thus still the saying of the Ancients stands. Furthermore the first contraries are proved to be those which are contraries in place (which are the cause of all others) in the metaphysic [books] and in the physic [books]. It seems therefore that this instance stands and is perfect, and by Aristotle through this that he says nothing against it, it seems to be approved.

Adhuc autem quod in veritate dictum est de quantitatis proprietate, stat immobili veritate, et instantia prima est bona valde et subtilis: et verum est quod distantia a contrariis in loco ad aliorum contrariorum diffinitionem est transumpta, sicut Antiqui dixerunt: sed quod locus sursum est contrarius loco deorsum, non ex natura est qua locus est locus, sed ex hac natura qua locus distat a loco: locus enim non distat a loco per hoc quod locus est, sed per hoc quod distantia a principio facit contrariam naturam et formam in ipsa, sicut natura densi et gravis et frigidi et aliorum, quæ ut dicit Avicenna, si abscindantur, sistunt motum et faciunt immobilitatem in his quæ ibi sunt: sursum autem cum sit circa principium motus propter prope esse ad principium, in his qui sursum, oppositas inducunt naturas et formas. Non ergo sequitur ex dicta instantia, quod quantitas secundum quod quantitas est suscipiat contrarium, sed circa differentias situs ejusdem quantitatis quæ locus est, sunt ratio- nes et formæ contrariæ, propter quas inter tales differentias loci motus est. Et hoc quidem non solvit Aristoteles; quia ante solutum est in simili de magno et parvo, prout magnum et parvum sunt rationes perfecti et imperfecti circa motum augmenti et diminutionis.

Quod enim sursum et deorsum non maxime distent secundum loci proprietates et motus, error intolerabilis est et destruens totam philosophiam quæ est de mobili recto, quæ in tertio et quarto Cœli et Mundi determinatur.

Ad hoc autem quod dicunt, quod distantia æquivoce sumitur in loco et aliis contrariis, dicendum quod non sumitur omnino æquivoce, sed distantia est per se in loco, in aliis autem quæ distant essentiali repugnantia est distantia per comparationem ad illam: et sic est de multis, ut probat Aristoteles. Sic ergo intelligenda est dicta instantia.

Sed adhuc non videtur quantitas suscipere magis et minus, sive intensionem et remissionem, sicut nec substantia, ut patet inductione et exemplari declaratione, ut bicubitum: neque enim est unum alio magis vel minus bicubitum: neque in numero est magis vel minus, unus enim trinarius non est magis unus trinarius quam alius, nec tria dicuntur magis vel minus tria quam quinque dicuntur quinque: neque tempus unum quodcumque dicitur magis vel minus tempus quam aliud, ut dies non dicitur magis tempus vel dies quam annus dicatur tempus vel annus: neque in his omnibus quæ superius dicta sunt, ut oratio, linea, superficies, et locus, omnino nullum est quod secundum magis et minus dicatur sive secundum intensionem et remissionem:

propter quod quantitas non potest recipere magis et minus.

Furthermore what in truth was said concerning the property of quantity, stands with immobile truth, and the first instance is very good and subtle: and it is true that distance from contraries in place to the definition of other contraries is transumed, just as the Ancients said: but that the place 'up' is contrary to the place 'down', is not from the nature by which a place is a place, but from this nature by which a place distances from a place: for a place does not distance from a place through this that it is a place, but through this that distance from a principle makes a contrary nature and form in it, just as the nature of dense and heavy and cold and others, which as Avicenna says, if they be cut off, they stand motion and make immobility in those which are there: but 'up' since it is around the principle of motion on account of being near to the principle, in those which [are] up, they induce opposite natures and forms. Therefore it does not follow from the said instance, that quantity according as it is quantity receives a contrary, but around the differences of position of the same quantity which is place, there are ratios and contrary forms, on account of which between such differences of place there is motion. And this indeed Aristotle does not solve; because it was solved before in the similar [case] of great and small, insofar as great and small are ratios of perfect and imperfect around the motion of augment and diminution.

For that 'up' and 'down' do not maximally distance [themselves] according to the properties of place and motion, is an intolerable error and destroying the whole philosophy which is about the straight mobile [thing], which in the third and fourth [books] of the Heaven and the World is determined.

But to this that they say, that distance is taken equivocally in place and other contraries, it must be said that it is not taken altogether equivocally, but distance is per se in place, but in others which distance [themselves] by essential repugnance there is distance by comparison to that: and thus it is concerning many things, as Aristotle proves. Thus therefore the said instance must be understood.

But still quantity does not seem to receive more and less, or intension and remission, just as neither [does] substance, as is clear by induction and exemplary declaration, as a two-cubit thing: for neither is one more or less a two-cubit thing than another: nor in number is there more or less, for one ternary is not more one ternary than another, nor are three called more or less three than five are called five: nor is whatever one time called more or less time than another, as a day is not called more time or day than a year is called time or year: nor in all these things which were said above, as speech, line, surface, and place, is there altogether anything which according to more and less is said or according to intension and remission:

on account of which quantity cannot receive more and less.

Hujus autem una causa est, quia omne quod suscipit magis et minus, sive intensionem et remissionem, oportet quod sit in eo intensio et remissio ex una duarum causarum, scilicet aut ex actione contrariorum in ipsum, quorum unum confortatur et alterum debilitatur, et sic intenduntur et remittuntur quæ causantur ab actionibus eorum : aut sit intensio et remissio a mixtione contrariorum, sicut in doctrina de *Universalibus* dictum est. Nuper autem in præ habitis diximus quod quantitas est in subjecto secundum naturam antequam substantia sit susceptibilis contrariorum, vel mutationis secundum contraria. Sicut igitur subjectum non intenditur vel remittitur ab actione contrariorum, ita nec quantitas intendi potest vel remitti. Adhuc omne quod intenditur, non intenditur nisi a suo simili, et omne quod remittitur, non remittitur nisi a suo contrario : quantitas autem non habet contrarium, non habet etiam simile quod suo contrario contrarium est ; simile enim dicitur quod in qualitate est unum.

Objiciunt tamen quidam contra hoc dicentes, quod in quacumque natura est maxime, in eadem etiam est magis et minus. In natura autem quantitatis alicujus est maxime : ergo et magis et minus. In quarto enim Euclidis in quo agitur de inscriptione figuræ, dicitur sive ostenditur quod circulus maxime distat a figuris angularibus, et ostenditur quantumcumque figura fiat poligonia, quod usque ad capacitatem circuli non deveniet, etiamsi in infinitum multiplicentur anguli : est ergo in quantitate illa magis et minus secundum accessum ad circuli capacitatem, et sic videtur quantitas suscipere magis et minus. Sed hoc citius solvitur, si bene natura quantitatis secundum quod est quantitas attendatur : circulatio enim et angulatio non sunt quantitates, sed qualitates circa quantitatem dictæ secundum illam qualitatis speciem quæ est forma, seu circa aliquid constans figura : et ideo magis illud et minus non est quantitas sed qualitas, et est secundum majorem vel minorem recessum ab angulatione.

Objiciunt autem quidam quod in multitudine magis est quinque et minus tria, et hæc sunt in numero qui est quantitas : ergo quantitas videtur suscipere magis et minus. Ad quod dicendum quod hic magis et minus est æquivocum ad illud magis et minus quod est secundum intensionem et remissionem : magis enim in multitudine est secundum totius extensionem in plura, magis autem et minus in intensione et remissione est secundum accessum vel recessum a contrario vel ad veram nominis impositionem.

And of this one cause is, that everything which admits more and less, or intension and remission, it is necessary that there be in it intension and remission from one of two causes, namely either from the action of contraries upon it, one of which is strengthened and the other weakened, and thus those things which are caused by their actions are intended and remitted: or let there be intension and remission from a mixture of contraries, as was said in the doctrine of *Universals*. But recently in the preceding things we said that quantity is in a subject according to nature before substance is susceptible of contraries, or of change according to contraries. Just as therefore the subject is not intended or remitted by the action of contraries, so neither can quantity be intended or remitted. Furthermore, everything which is intended, is not intended except by its like, and everything which is remitted, is not remitted except by its contrary: but quantity has no contrary, it does not even have a like which is contrary to its contrary; for like is said of that which is one in quality.

Some however object against this saying, that in whatever nature there is a maximum, in the same also there is more and less. But in the nature of some quantity there is a maximum: therefore also more and less. For in the fourth book of Euclid, in which the inscription of a figure is treated, it is said or shown that a circle is maximally distant from angular figures, and it is shown that however much a figure becomes polygonal, it will not arrive at the capacity of a circle, even if the angles be multiplied unto infinity: therefore in that quantity there is more and less according to the approach to the capacity of the circle, and thus quantity seems to admit more and less. But this is more quickly resolved, if the nature of quantity according to which it is quantity be well attended to: for circularity and angularity are not quantities, but qualities said about quantity according to that species of quality which is form, or about something standing in a figure: and therefore that more and less is not quantity but quality, and is according to a greater or lesser departure from angularity.

But some object that in multitude five is more and three is less, and these are in number which is quantity: therefore quantity seems to admit more and less. To which it must be said that here more and less is equivocal to that more and less which is according to intension and remission: for more in multitude is according to the extension of the whole into more things, but more and less in intension and remission is according to approach or departure from a contrary or towards the true imposition of the name.

Attendendum autem quod quamvis quantitas subjiciatur contrarietati quæ facit magis et minus, tamen non potest esse proprium quantitatis, quod sit hoc aliquid et numero unum, sicut hoc convenit primæ substantiæ : et hoc est ideo quia quantitas et universaliter omne accidens non enumeratur, nec efficitur numero unum per aliud quod sit suæ essentiæ, sed potius per hoc quod est in substantia sicut in subjecto : substantia autem numeratur per materiam, et per eamdem efficitur numero una et ipsa est aliquid suæ essentiæ : et propter hoc esse hoc aliquid et numero esse unum remanet proprium proprie substantiæ.

Adhuc autem intelligendum est quod quamvis substantia contrarietati subjiciatur mediante qualitate, et similiter mediante quantitate subjiciatur motui, tamen secundum sui mutationem suscipere contraria, non potest esse proprium quantitatis sed solius substantiæ. Et hujus causa est, quia quantitas nec una numero, nec una specie ultima sive specialissima, subjicitur contrariis : quod patet in curvo et recto, quibus non subjicitur nec una numero linea, nec una specie ultima. Et similiter est in numero pari et impari circa numerum, quibus nec unus numero, nec unus specie ultima subjicitur numerus, sed unus tantum genere vel specie -

subalterna. Substantia autem una et eadem numero secundum sui mutationem subjicitur contrariis.

Est igitur proprium substantiæ et non quantitatis : quamvis enim hoc accidens quod est quantitas sit juxta substantiam propinquissimum, tamen non est substantia : sed substantia mediante eo quibusdam aliis substat accidentibus : et hæc efficiuntur quanta per accidens, per hoc quod sunt in majori subjecto majora et in minori minora. Sunt autem et alia multa quantitatem consequentia, sicut dividi vel augeri in infinitum : in continuo quidem dividi, in numero autem augeri : quia enim continuum dividitur in infinitum, et quia divisum additur partibus acceptis per divisionem, ideo, ut dicit Aristoteles, numerus augetur in infinitum. Quæ quidem consequentia quia non sunt quantitatis ut est prædicabile, sed ut est quædam natura, hic non ponuntur a nobis.

CAPUT XIV.

De proprio quantitatis quod est secundum eam æquale vel inæquale dici.

Proprium autem maxime quantitatis est, quia æquale et inæquale secundum eam dicuntur quæcumque ejusdem sunt quantitatis sive discretæ sive continuæ : unde hoc est proprium quod convenit omni soli et semper. Hoc autem inductione probatur, quia singulum eorum quæ proprie quantitates sunt dictæ secundum diversas quantitatis species in præcedentibus, dicitur æquale et inæquale.

Moreover, it must be noted that although quantity be subjected to contrariety which makes more and less, yet it cannot be a property of quantity that it be this somewhat and numerically one, as this belongs to first substance: and this is because quantity and universally every accident is not enumerated, nor is it made numerically one through something else which is of its essence, but rather through the fact that it is in substance as in a subject: but substance is numbered through matter, and through the same it is made numerically one and it itself is something of its essence: and because of this to be this somewhat and to be numerically one remains proper specifically to substance.

Furthermore, it must be understood that although substance be subjected to contrariety by means of quality, and similarly be subjected to motion by means of quantity, nevertheless to admit contraries according to its change cannot be a property of quantity but of substance alone. And the cause of this is, because quantity is subjected to contraries neither as numerically one, nor as one in the ultimate or most specific species: which is clear in curved and straight, to which neither a line numerically one is subjected, nor one in the ultimate species. And similarly it is in even and odd number around number, to which neither a number one in number, nor one in the ultimate species is subjected, but one only in genus or species -

subaltern. But substance, one and the same numerically, is subjected to contraries according to its change.

It is therefore a property of substance and not of quantity: for although this accident which is quantity is closest next to substance, nevertheless it is not substance: but substance by means of it stands under certain other accidents: and these are made quanta by accident, through the fact that in a greater subject they are greater and in a lesser smaller. Moreover, there are also many other things following quantity, such as to be divided or increased unto infinity: in the continuous indeed to be divided, but in number to be increased: for because the continuous is divided unto infinity, and because the divided is added to the parts received through division, therefore, as Aristotle says, number is increased unto infinity. Which consequences, because they are not of quantity as it is a predicable, but as it is a certain nature, are not placed here by us.

CHAPTER XIV.

On the property of quantity which is to be called equal or unequal according to it.

But the property most of quantity is, that equal and unequal are said according to it of whatever things are of the same quantity, whether discrete or continuous: whence this is a property which belongs to all, to it alone, and always. This moreover is proved by induction, because each of those which were properly called quantities according to the different species of quantity in the preceding, is called equal and unequal.

Similiter autem et in aliis quæ sunt quantitates per accidens, quæ supradicta sunt, in singulis sigillatim dicitur æquale vel inæquale secundum quod referuntur ad quantitatem : nam affectio quæ est corporis vel animæ passio, et dispositio quæ est qualitatis passio animalis vel corporalis, non multum dicitur æqualis vel inæqualis : non enim proprie dicitur quod æquales sint duo in actione, quando circa idem sunt affecti, nisi affectio referatur ad tempus. Similiter etiam de duobus dispositis ad idem non multum proprie dicitur quod æqualiter dispositi sint, vel inæqualiter. Sed proprie dicitur, similiter sunt affecti et similiter sunt dispositi. Similiter album æquale et inæquale secundum seipsum, nisi referatur ad quantitatem superficiei, non multum dicitur, quia non dicitur nisi per accidens : secundum seipsum enim proprie dicitur simile vel dissimile : quia, ut dicit Aristoteles in primo *primæ philosophiæ*, unum in substantia facit idem, unum autem in quantitate facit æquale, et unum in qualitate facit simile. Propter quod quantitatis est proprium secundum se æquale vel inæquale dici.

Cum autem, ut dictum est, unum in substantia faciat idem, sicut unum in quantitate facit æquale, debet etiam substantiæ proprium esse secundum eam dici idem vel diversum : quod non videtur esse verum, cum etiam idem inveniatur in accidente sicut in substantia, sicut idem genere, et idem specie, et idem numero, ut album et visus disgregativum. Adhuc autem secundum hoc secundum qualitatem simile vel dissimile dici, videtur esse proprium qualitatis : quod iterum non videtur convenire, cum homines sint similes in rationalitate et similes in humanitate, cum dicat Boetius quod species similitudo essentialis est individuorum. Adhuc sunt similia in positione et habitu quæcumque nunc habent differentiam in positione vel habitu : non ergo simile vel dissimile dici est secundum solam qualitatem, nec idem vel diversum dici secundum solam est substantiam, et tunc videtur mirabile si æquale vel inæquale dici secundum solam est quantitatem. Adhuc autem secundum virtutem secundum quod virtus est ultimum potentiæ videtur æquale vel inæquale dici : cum tamen virtus sit qualitas : dicitur enim Hercules cum Achille vel Ajace, et-

Socrates cum Platone æqualis virtutis vel honestatis vel inæqualis: et sic non secundum solam quantitatem videtur æquale vel inæquale dici.

Adhuc autem cum æquale vel inæquale sint dicta secundum proportionem, videtur secundum hoc quod proportionale esse quantitatis est proprium, et multi modi proportionum videntur in genere esse: magis ergo proprium quantitatis erit secundum eam proportionale dici, quam æquale vel inæquale: quia proportionale esse in plus est et communius quam esse æquale vel inæquale.

Similarly also in others which are quantities by accident, which were mentioned above, in each individually it is called equal or unequal according as they are referred to quantity: for an affection which is a passion of the body or soul, and a disposition which is a passion of quality, whether animal or corporal, is not much called equal or unequal: for it is not properly said that two are equal in action, when they are affected around the same thing, unless the affection be referred to time. Similarly also concerning two disposed towards the same, it is not much properly said that they are equally disposed, or unequally. But it is properly said, they are similarly affected and similarly disposed. Similarly white, equal and unequal according to itself, unless it be referred to the quantity of surface, is not much said, because it is not said except by accident: for according to itself it is properly called like or unlike: because, as Aristotle says in the first book of the *First Philosophy*, one in substance makes the same, one however in quantity makes equal, and one in quality makes like. Because of which it is a property of quantity to be called equal or unequal according to itself.

Since moreover, as was said, one in substance makes the same, just as one in quantity makes equal, it should also be a property of substance to be called the same or different according to it: which does not seem to be true, since the same is also found in an accident as in substance, such as same in genus, and same in species, and same in number, as white and the disruptive of sight. Furthermore, according to this, to be called like or unlike according to quality, seems to be a property of quality: which again does not seem to fit, since men are like in rationality and like in humanity, while Boethius says that species is the essential similarity of individuals. Furthermore, those things are similar in position and habit which now have a difference in position or habit: therefore to be called like or unlike is not according to quality alone, nor is to be called the same or different according to substance alone, and then it seems wonderful if to be called equal or unequal is according to quantity alone. Furthermore, according to virtue, in so far as virtue is the ultimate of power, it seems to be called equal or unequal: although nevertheless virtue is a quality: for Hercules is said with Achilles or Ajax, and-

Socrates [is said to be] of equal or unequal virtue or honesty with Plato: and thus not according to quantity alone does it seem to be called equal or unequal.

Furthermore since equal or unequal are dictated according to proportion, it seems according to this that to be proportional is proper to quantity, and many modes of proportions seem to be in the genus: therefore it will be more proper to quantity to be called proportional according to it, than equal or unequal: because to be proportional is in more things and more common than to be equal or unequal.

Ad hæc autem et hujusmodi dici potest quod idem vel diversum non potest esse substantiæ proprium propter rationem quæ inducta est, quia secundum quod substantia quæ est quid, est in aliis generibus, ita etiam idem vel diversum est in eis.

Similiter dicendum est de simili in qualitate: est enim qualitas et quale multipliciter dictum, et est qualitas substantialis secundum quam quale dicitur, et similiter in positione et habitu, actione et passione, sicut dictum est: et ideo secundum eam simile vel dissimile dici non est proprium qualitatis secundum quod qualitas est genus determinatum. Sic autem non est in genere quantitatis secundum eam æquale vel inæquale dici: hoc enim soli convenit quantitati proprie, et non multum convenit aliis generibus: quia non convenit eis per se, sed secundum quod referuntur ad quantitatem.

Ad hoc autem quod objicitur de quantitate virtutis, dicendum quod quantitas æquivoce dicitur de quantitate dimensionis et quantitate virtutis, quia utraque mensuratur per partium divisionem; sed quantitas dimensionis mensuratur per dimensionem partium quas habet in seipsa, sicut dicimus spatium habet tricubitum vel tricubitorum longitudinem, quæ est spatium per partes sibi æquales et intrinsecas mensurantes ad certum numerum reddentes: quantitas autem virtutis mensuratur ad partes quas extra se habet in virtutis objecto, sicut si aliquis quærat, quantus est Hercules, vel quantæ est virtutis, dicimus quod potest in decem, et in tot potest Achilles qui æqualem cum Hercule habet virtutem. Sic etiam dicimus de virtute morali, quod tantæ virtutis Socrates est quod etiam sensum vel motum omnis excludit inhonesti. Et dicimus quod Cato secundum eumdem modum est æqualis in virtute Socrati. Hoc autem per similitudinem quamdam dictum est, non enim est proprie æquale sed simile, et attenditur similitudo etiam virtutis extensione vel intensione, seu perfectione, vel radicatione, vel puritate, vel in aliquo talium.

Ad id autem quod de proportionali objicitur, dicendum quod hoc proprium esse non potest, quia non omnis quantitas cuilibet quantitati proportionalis est, sed omnis quantitas cum quantitate (cui comparabilis est) æqualis est vel inæqualis; et quod dicunt quod æquale vel inæquale proprie numeratur, et quod æquale prius est in numero, omnino falsum est: quia dicit Euclides quod æqualia sunt quæ sibi invicem supposita non se excedunt nec exceduntur; et hoc convenit æqualiter continuo sicut discreto.

But to these and things of this sort it can be said that 'the same' or 'diverse' cannot be proper to substance on account of the reason which was induced, because according as substance which is 'what', is in other genera, so also 'the same' or 'diverse' is in them.

Similarly it must be said concerning 'similar' in quality: for quality and 'what sort' is dictated in multiple ways, and there is a substantial quality according to which 'what sort' is dictated, and similarly in position and habit, action and passion, as was said: and therefore to be called similar or dissimilar according to it is not proper to quality according as quality is a determined genus. But thus it is not in the genus of quantity to be called equal or unequal according to it: for this agrees only with quantity properly, and it does not much agree with other genera: because it does not agree with them per se, but according as they are referred to quantity.

But to this that is objected concerning the quantity of virtue, it must be said that quantity is said equivocally concerning the quantity of dimension and the quantity of virtue, because each is measured through the division of parts; but the quantity of dimension is measured through the dimension of parts which it has in itself, just as we say a space has a three-cubit or three-cubit-long length, which is a space [measured] through its equal and intrinsic parts measuring and returning to a certain number: but the quantity of virtue is measured to the parts which it has outside itself in the object of virtue, just as if someone should ask, how great is Hercules, or of how much virtue is he, we say that he is able [to act] upon ten, and upon as many Achilles is able who has equal virtue with Hercules. Thus we also say concerning moral virtue, that Socrates is of so much virtue that he excludes even the sense or motion of all dishonesty. And we say that Cato according to the same mode is equal in virtue to Socrates. But this is dictated through a certain similitude, for it is not properly equal but similar, and the similitude of virtue is attended also in extension or intension, or perfection, or radication, or purity, or in some of such things.

But to that which is objected concerning proportional, it must be said that this cannot be proper, because not every quantity is proportional to whatever quantity, but every quantity with a quantity (to which it is comparable) is equal or unequal; and what they say that equal or unequal is properly numbered, and that equal is prior in number, is altogether false: because Euclid says that equal things are those which when supposed to each other mutually do not exceed nor are they exceeded; and this agrees equally to a continuous [thing] as to a discrete [thing].

Tractaturis nobis de coordinatione prædicabilium quæ sunt in genere ad aliquid, primum occurrit nobis omnium antiquorum dissensio circa prædicamentum ad aliquid. Zeno enim et quidam alii hoc prædicamentum dicebant non esse prædicamentum, sed esse secundum rationem aliis prædicamentis immixtum ex eorum ad invicem comparatione. Et cum prima genera sint voces, primarum rerum genera significantes: cum autem hoc genus non significet ut ens ab aliis separatum, sed ut aliis immixtum, videtur quod significatum ejus non sit ens quod sit de primis partibus entis. Adhuc autem ad idem induxit, quod ad aliquid consistit in comparatione: comparatio autem materiæ inest comparatæ: comparatio ergo secundum intellectum comparata et res in qua est comparatio ponit secundum intellectum ante se: quod autem secundum intellectum aliquid ponit ante se præter subjectum, non est primum genus: videtur ergo quod ad aliquid non sit principium generis alicujus accidentis: id enim in quo fit comparatio et comparationis rationem ponit ante se quæ non est subjectum, sed aliquid de intellectu accidentis in quo fit comparatio. Hoc autem confirmabat per hunc modum: si enim comparetur A, AD, B, oportet quod aut secundum seipsum comparetur ei, aut mediante aliquo quod sit ratio comparationis. Non seipso, quia sic quodlibet ad aliquid comparabitur, et nihil erit absolutum: ergo comparetur A, AD, B, mediante c; oportebit igitur quod c sit ratio comparationis A, AD, B, si ergo non est c, non erit comparatio: intelligitur ergo c, inesse A, et B ante comparationem: nihil autem talium ante quod secundum intellectum est accidens, est genus primum accidentis: ergo ad aliquid non est genus accidentis.

Adhuc nullum generum accidentis est accidens alterius: comparatio autem sive ad aliquid accidit omnibus generibus accidentis, sicut per se patet: igitur ad aliquid non est generalissimum inter genera accidentis.

Adhuc autem ad aliquid coaccidit omnibus ex hoc quod in eis sunt genera et species, et totum et pars; videtur ergo quod ad aliquid sit quoddam coaccidens omnibus aliis ex ipsa coordinatione generum et specierum: non ergo per se constituit genus, ut videtur.

Adhuc quia genus et species sunt in omnibus, non dicimus quia generalitas sit genus, et similiter non dicimus quod specialitas constituat genus, vel etiam differentia, vel proprium, vel accidens: omnia enim hæc circuunt genera ratione modi prædicandi qui invenitur in ipsis: a simili ergo ex quo ad aliquid est accidens commune quod accidit omnibus ex comparatione prædicabilium ad invicem, non debet esse genus, sed generum aliorum quoddam accidens.

To us about to treat concerning the coordination of predicables which are in the genus 'toward something' [relation], first occurs the dissension of all the ancients concerning the predicament 'toward something'. For Zeno and certain others used to say this predicament is not a predicament, but that it is according to reason immixed with other predicaments from their comparison mutually to each other. And since the first genera are voices, signifying the genera of first things: but since this genus does not signify as a being separated from others, but as immixed with others, it seems that its significate is not a being which is of the first parts of being. Furthermore to the same he induced, that 'toward something' consists in comparison: but comparison is in compared matter: therefore comparison according to the intellect posits the compared things and the thing in which the comparison is according to the intellect before itself: but what according to the intellect posits something before itself besides a subject, is not a first genus: it seems therefore that 'toward something' is not a principle of a genus of any accident: for that in which the comparison is made and the ratio of the comparison it posits before itself which is not the subject, but something concerning the intellect of the accident in which the comparison is made. But this he used to confirm through this mode: for if A is compared TO B, it is necessary that either according to itself it be compared to it, or mediating something which is the ratio of the comparison. Not by itself, because thus whatever [thing] will be compared to something, and nothing will be absolute: therefore let A be compared TO B, mediating C; it will be necessary therefore that C be the ratio of the comparison of A TO B, if therefore C is not, the comparison will not be: therefore C is understood to be in A, and B before the comparison: but nothing of such things before which according to the intellect there is an accident, is a first genus of an accident: therefore 'toward something' is not a genus of an accident.

Furthermore no one of the genera of accident is an accident of another: but comparison or 'toward something' happens to all genera of accident, as is clear per se: therefore 'toward something' is not the most general among the genera of accident.

Furthermore 'toward something' co-happens to all from this that in them there are genera and species, and whole and part; it seems therefore that 'toward something' is a certain co-accident to all others from the coordination itself of genera and species: therefore it does not per se constitute a genus, as it seems.

Furthermore because genus and species are in all things, we do not say that generality is a genus, and similarly we do not say that specialty constitutes a genus, or even difference, or property, or accident: for all these encircle the genera by reason of the mode of predicating which is found in them: from a similar [reason] therefore since 'toward something' is a common accident which happens to all from the comparison of predicables mutually to each other, it ought not to be a genus, but a certain accident of other genera.

Adhuc autem fortius objecerunt quidam posteriorum, sicut Avicenna et Alfarabius, dicentes quod nulla forma quæ sit ens, est in re quæ non sit absoluta secundum esse quod habet in ipsa, sicut patet inducendo de calido, frigido, albo, et nigro, et omnibus aliis: sed comparatio quæ fit rerum ad invicem secundum formas quæ sunt in rebus, fit actu rationis, quæ dicit quod in quibus non est una qualitas sunt dissimilia, et in quibus est una sunt similia: comparationis ergo forma quæ est in his quæ sunt ad aliquid, non est res sed ratio, ut videtur, quia nihil est extra animam comparantis unum alteri: generalissima autem prima genera rerum significant: ad aliquid autem non est ens ratum apud naturam extra, sed ens rationis: ad aliquid ergo non potest esse generalissimum de talibus quæ sunt apud animam rebus, quia sic generalissima non significarent prima genera rerum simpliciter.

Ex his et similibus rationibus moti fuerunt Antiqui et fere omnes præter Platonem et Aristotelem qui dixerunt ad aliquid non esse genus quod sit prima pars accidentis vel una de primis, sed dixerunt ipsum ex habitudinibus aliorum generum ad invicem per actum rationis comparantis unum ad alterum omnibus aliis esse immixtum, ita quod dicunt ad aliquid non esse unum de generibus primis, sicut tangit Averroes super quintum primæ philosophiæ Aristotelis .

Nos autem Platoni et Aristoteli consentientes, dicimus ad aliquid esse generalissimum, et esse unum de primis generibus accidentis: eo quod tam Porphyrius quam etiam Aristoteles et Avicenna dicunt, quod accidens duobus modis prædicatur de eo cujus est accidens, et duobus modis causatur a subjecto. Quoddam enim est forma absoluta et non per aliquid est accidens, nisi quia in subjecto sequitur esse perfectum subjecti in suis substantialibus: et ideo est accidens, quia non potest esse de substantia rei quod sequitur perfectum esse, et sic quantitas est accidens, et qualitas et hujusmodi. Quoddam autem est accidens, non quia sequatur esse rei perfectum, nec quia sequitur ad rem nisi gratia substantialium, sed ex aliquo quod est extrinsecus se habens ad rei substantialia, sicut hoc ad hoc quod aliquid sit ejus quod se habet ut primum, aliud ut secundum, vel unum ut totum, et aliud ut pars, vel ut conveniens vel differens ab alio, sequitur ab extrinseco quod unum sit comparabile ad aliquid secundum ipsam rem: quæ comparatio ad actum reducitur quando actu per rationem comparantur, et a tali accidente quod sic accidit rebus proprie causatur ad aliquid:

Furthermore certain ones of the posteriors objected more strongly, as Avicenna and Alfarabi, saying that no form which is a being, is in a thing which is not absolute accor-

ding to the being which it has in it, as is clear by inducing concerning hot, cold, white, and black, and all others: but the comparison which is made of things mutually to each other according to the forms which are in things, is made by an act of reason, which says that [those] in which there is not one quality are dissimilar, and [those] in which there is one are similar: the form of comparison therefore which is in these things which are 'toward something', is not a thing but a ratio [reason], as it seems, because there is nothing outside the soul of the one comparing one to another: but the most general [genera] signify the first genera of things: but 'toward something' is not an established being with nature outside, but a being of reason: therefore 'toward something' cannot be the most general concerning such things which are things in the soul, because thus the most general [genera] would not signify the first genera of things simply.

Moved by these and similar reasons were the Ancients and almost all except Plato and Aristotle who said that 'toward something' is not a genus which is a first part of an accident or one of the first, but they said that it is immixed to all others from the habitudes of other genera mutually through the act of reason comparing one to another, such that they say 'toward something' is not one of the first genera, as Averroes touches upon the fifth [book] of the First Philosophy of Aristotle.

But we consenting to Plato and Aristotle, say that 'toward something' is a most general [genus], and is one of the first genera of accident: from the fact that as much Porphyry as also Aristotle and Avicenna say, that an accident is predicated in two modes of that of which it is an accident, and in two modes it is caused by a subject. For a certain [accident] is an absolute form and is not an accident through something, except because in a subject it follows the perfect being of the subject in its substantials: and therefore it is an accident, because what follows the perfect being cannot be of the substance of a thing, and thus quantity is an accident, and quality and such things. But a certain [accident] is an accident, not because it follows the perfect being of a thing, nor because it follows a thing except for the sake of its substantials, but from something which is having itself extrinsically to the substantials of a thing, just as this to this that something is of that which has itself as first, another as second, or one as whole, and another as part, or as agreeing or differing from another, it follows from an extrinsic [thing] that one is comparable to something according to the thing itself: which comparison is reduced to act when they are compared in act through reason, and from such an accident which thus happens to things properly 'toward something' is caused:

et propter hoc quod tale accidens invenitur in multis, propter hoc putatur esse omnibus aliis immixtum, cum tamen sit modus accidentis ab aliis accidentium modis distinctus: et ideo proprium accidens significat, quod in genere suo est primum. Nec moveat quemquam quod ab omnibus aliis est causatum, et ideo videbitur forte non esse generis unius sed omnium: non enim causatur ab omnibus ut divisa et discreta sunt, sed causatur ab eis ut unum, et una ratione communi est in eis: et hæc comparabilitas vel ratio comparationis, et quod sic sequitur ad rem, est ad aliquid et non absolutum.

Ad hoc quod objicit Zeno, dicendum quod ad aliquid non relinquit ante se aliquid quod sit de intellectu ipsius, sicut genus vel sicut magis commune est de intellectu speciei vel minus communis quod relinquitur ante se: sed relinquit ante se illud quod est causa talis accidentis, et hæc est ratio comparationis, sive id in quo fit comparatio. Hoc autem non impedit quin sit genus speciale accidentis, quia quodlibet genus accidentis ante se relinquit in subjecto causam per quam efficitur in subjecto.

Ad hoc quod dicitur quod nullum genus accidentis est accidens alterius, dicendum quod si dicatur, quod unum genus accidentis non accidit alteri ut subjecto, dicendum quod hoc verum est: sed

quod unum genus non mediante altero fiat in subjecto, hoc est falsum, sicut patet in actione, et passione, et ubi, et quando, et in multis aliis. Et sic similiter nihil prohibet quin ad aliquid in subjecto sit mediante aliquo alio : hoc enim non impedit intellectum generalissimi : generalissimum enim ut generalissimum facit talus modus prædicandi per se vel per accidens qui ad alium nullum modum reduci potest, sed est ipse secundum seipsum modus prædicandi alicujus specialis : et sic patet quod significant generalissima prima rerum principia speciali et distincto modo prædicabilium, et significant prima rerum principia vel per se vel per accidens : quia prædicabilia ut prædicata sunt distincta secundum primos modos prædicabilium.

Ad hoc vero quod objicitur quod coaccidit ad aliquid omnibus generibus, sicut esse genus et esse speciem, est in omnibus, dicendum quod non est verum : quia genus et species accidunt secundum suas rationes ex speciali modo prædicandi universaliter secundum rem ipsam, qui ad alios modos reduci non possit. Ad aliquid autem ponit modum universalem suæ coordinationis, qui ad nullum alium modum reduci potest, et ideo ad aliquid non est coaccidens modus prædicandi, sed est modus prædicandi per se distinctus cujusdam generis accidentis.

and on account of this that such an accident is found in many things, on account of this it is thought to be immixed with all others, although nevertheless it is a mode of accident distinct from other modes of accidents: and therefore it signifies a proper accident, which in its genus is first. Nor let it move anyone that it is caused by all others, and therefore it will strongly seem not to be of one genus but of all: for it is not caused by all as they are divided and discrete, but it is caused by them as one, and by one common reason it is in them: and this comparability or reason of comparison, and that which thus follows a thing, is 'toward something' and not absolute.

To this which Zeno objects, it must be said that 'toward something' does not leave behind before itself something which is of its intellect, just as a genus or as a more common [thing] is of the intellect of a species or a less common [thing] which is left behind before itself: but it leaves behind before itself that which is the cause of such an accident, and this is the reason of comparison, or that in which the comparison is made. But this does not impede that it be a special genus of accident, because whatever genus of accident leaves behind before itself in a subject the cause through which it is effected in the subject.

To this that is said that no genus of accident is an accident of another, it must be said that if it be said, that one genus of accident does not happen to another as to a subject, it must be said that this is true: but

that one genus is not made in a subject by means of another, this is false, as is clear in action, and passion, and where, and when, and in many others. And thus similarly nothing prevents relative from being in a subject by means of something else: for this does not impede the understanding of the most general: for the most general as most general makes such a mode of predicating per se or per accidens which can be reduced to no other mode, but is itself according to itself a mode of predicating something special: and thus it is clear that the most general things signify the first principles of things in a special and distinct mode of predicables, and they signify the first principles of things either per se or per accidens: because predicables as predicates are distinct according to the first modes of predicables.

To that which is objected, however, that relative co-accents to all genera, as to be a genus and to be a species is in all, it must be said that it is not true: because genus and species happen according to their accounts from a special mode of predicating universally according to the thing itself, which cannot be reduced to other modes. But relative posits a universal mode of its coordination, which can be reduced to no other mode, and therefore for relative the mode of predicating is not a co-accident, but is a mode of predicating per se distinct of a certain genus of accident.

Ad hoc autem quod posterius objiciunt, dicendum videtur quod per comparationem dupliciter est considerare, secundum aptitudinem, scilicet et secundum actum. Secundum aptitudinem quidem est in rebus, et jamdudum supra in scientia *Universalium* determinatum est, quod aptitudo sola sufficit ad modum prædicandi, constituendi et causandi. Secundum actum autem comparatio est in ratione vel anima comparantis : et actus ille non facit, quod non secundum aptitudinem sit in rebus comparatis : et ideo secundum aptitudinem quidem est in rebus, secundum perfectionem autem est in ratione. Et hoc multos decipit in isto prædicamento : et est quod dicit Aristoteles quod quædam insunt ut accidens, quædam autem ut quodammodo se habere ad alterum. Et bene concedendum est quod accidens istud minus habet de ente quam aliud quod est absolutum : sed ex hoc non sequitur quod nihil habeat, et secundum quod habet de ente accidentali non ponat modum prædicabilium ab aliis prædicabilibus accidentis distinctum et separatum.

CAPUT II.

Quid hoc genus habeat de ente, et quid in eo sit generalissimum, et quid subalternum, et quid specialissimum, et quid individuum.

Consequenter determinandum est quid de ente significet hoc genus, et quid sit generalissimum, et quid specialissimum, et quid subalternum, et quid individuum. Hæc enim ad omnem coordinationem pertinent generalissimorum : omne enim generalissimum aliquam significat partem entis [1], et in omni coordinatione prædicabilium aliquid est ut generalissimum, et aliquid ut subalternum, et aliquid ut specialissimum, et aliquid ut individuum. Aliter enim modus prædicandi prædicabilium completus non esset nisi distinctus esset ab aliis et non staret in infimo nec staret in summo, nisi per media descenderet ordinate quæ sunt subalterna et specialissima.

Manifestum autem est ex præinductis, quod ad aliquid minus de ente habet quam quantitas vel qualitas, quia illa significant ens actu perfecte quiescens in subjecto quod est substantia, et tale ens non significat ad aliquid, sed potius id quod secundum aptitudinem et causam est in subjecto : perfectio autem ejus est in ratione comparante, propterea non -

quiescit in subjecto, sed habet ad id quod extra subjectum est comparationem, et ideo minus de ente significat quam aliud genus, et præcipue quando non fundatur in substantia nisi per actum substantialem, sicut patet quod nihil fundatur in substantia, et non habet causam nisi actum substantialem qui est activa generatio :

To that, moreover, which they object later, it seems it should be said that by comparison it is to be considered in two ways, namely according to aptitude and according to act. According to aptitude indeed it is in things, and already long ago above in the science of *Universals* it was determined, that aptitude alone suffices for the mode of predicating, constituting, and causing. According to act, however, the comparison is in the reason or soul of the one comparing: and that act does not make it so that it is not according to aptitude in the things compared: and therefore according to aptitude indeed it is in things, but according to perfection it is in reason. And this deceives many in this predicament: and it is what Aristotle says, that some things are in as an accident, some however as being in some way towards another. And it is well to be granted that this accident has less of being than another which is absolute: but from this it does not follow that it has nothing, and according to what it has of accidental being it does not fail to posit a mode of predicables distinct and separate from other predicables of accident.

CHAPTER II.

What this genus has of being, and what in it is the most general, and what subaltern, and what most specific, and what individual.

Consequently it must be determined what this genus signifies concerning being, and what is most general, and what most specific, and what subaltern, and what individual. For these pertain to every coordination of the most general things: for every most general signifies some part of being, and in every coordination of predicables something is as the most general, and something as subaltern, and something as most specific, and something as individual. For otherwise the mode of predicating of predicables would not be complete unless it were distinct from others and did not stand at the lowest nor stand at the highest, unless it descended in an orderly way through means which are subaltern and most specific.

Moreover, it is manifest from the previously induced things, that relative has less of being than quantity or quality, because those signify being in act perfectly resting in a subject which is substance, and such being does not signify relative, but rather that which according to aptitude and cause is in the subject: but its perfection is in comparing reason, therefore not -

it does not rest in the subject, but has a comparison to that which is outside the subject, and therefore it signifies less of being than another genus, and especially when it is not founded in substance except through a substantial act, as it is clear that nothing is founded in substance, and has no cause except a substantial act which is active generation:

et cum actus sit in agente, per hoc quod est ab agente fit propter hoc quod tale ad aliquid in subjecto vel nihil vel parum reducit comparationis : ex hoc enim quod ille generavit, sequitur quod pater sit, et ex hoc quod alter est genitus, sequitur quod sit filius, ita tamen quod neuter nec generans nec genitus formam aliquam receperit, vel aliquid passus sit secundum aliquod accidens : quia per actum substantialem et effectum actus fit hujusmodi comparatio, et quia vel nihil in simplicibus sicut materia, vel parum valde in his quæ materialia sunt inducit comparationis, patet quod minus de ente habet quam significata aliorum generum accidentis : quamvis etiam aliquando fundetur super formam accidentalem in subjecto præsuppositam, cum dicitur quod isti sunt similes, quia uterque albus est; et tunc quidem est relatio compositi ex subjecto et accidente, sed ipsa de se non majorem affert comparationem nisi comparabilitatis illius quæ est secundum aptitudinem, sicut paulo ante diximus : et ideo de se minimum quid significat entis, quod tamen modum specialem importat prædicationis : propter quod oportet ipsum esse distinctum ab aliis prædicamentis : ille enim modus in multis invenitur quæ ordinabilia sunt secundum illum modum in genera et species et individua.

Si autem aliquis objiciat, dicens quod secundum ea quæ dicta sunt, accidens prædicatur per prius et posterius de ad aliquid, et de aliis generibus accidentium, quod videtur inconveniens, cum omnia genera accidentium ex æquo referantur ad unam accidentis divisionem, Dicendum est quod secundum hanc communem rationem accidentis (quod accidens est quod ut consequens substantiale esse cadit ad substantiam ut ad subjectum) sic æqualiter participant accidentis prædicationem omnia genera accidentium : sed secundum hoc quod accidentia primorum generum significant quasdam species vel partes entis primas quæ non sunt de esse substantiæ, sic non participant æqualiter modum accidentis novem genera, quæ accidentium genera dicuntur : sic enim nec entis prædicationem æqualiter participant, quia quælibet sunt entia, et quædam significantia sunt non ens quidem principaliter sed quomodo se habeat ens ad aliud : et illa sunt minus entia quam illa quæ significant ens in aliquo absoluto quiescens, et secundum hunc modum participant entis prædicationem. Accidentis autem prædicationem participant e converso : sicut enim accidens per se minus habet de ratione accidentis quam accidens per accidens, ita plus habet de accidente quod est accidens ex comparabilitate quam id quod solum ex hoc accidit, quia est in alio, non sicut quædam pars esse ipsius : et per prius et per plus accidentalitatis prædicatur accidens de ad aliquid quam de aliis generibus accidentis.

and since the act is in the agent, through the fact that it is from the agent it happens for this reason that such a relative in the subject reduces either nothing or very little of comparison: for from the fact that he generated, it follows that he is a father, and from the fact that another is begotten, it follows that he is a son, so however that neither the generator nor the begotten received any form, or suffered anything according to any accident: because through a substantial act and the effect of the act such a comparison is made, and because either nothing in simples such as matter, or very little indeed in those which are material, does it induce of comparison, it is clear that it has less of being than the significates of other genera of accident: although also sometimes it is founded upon an accidental form presupposed in the subject, when it is said that these are like, because each is white; and then indeed it is a relation of the composite of subject and accident, but it of itself does not bring a greater comparison except of that comparability which is according to aptitude, as we said a little before: and therefore of itself it signifies very little of being, which nevertheless imports a special mode of predication: because of which it is necessary that it be distinct from other predicaments: for that mode is found in many things which are orderable according to that mode into genera and species and individuals.

If however someone should object, saying that according to those things which were said, accident is predicated priorly and posteriorly of relative and of other genera of accidents, which seems inconvenient, since all genera of accidents are equally referred to one division of accident, it must be said that according to this common account of accident (that an accident is what as a consequence of substantial being falls to substance as to a subject), thus all genera of accidents equally participate in the predication of accident: but according to this, that the accidents of the first genera signify certain species or primary parts of being which are not of the being of substance, thus the nine genera, which are called genera of accidents, do not participate equally in the mode of accident: for thus neither do they participate equally in the predication of being, because any are beings, and some are signifying not being indeed principally but how a being has itself towards another: and those are less beings than those which signify being resting in something absolute, and according to this mode they participate in the predication of being. But they participate in the predication of accident conversely: for just as accident per se has less of the account of accident than accident per accidens, so that which is an accident from comparability has more of accident than that which happens only from this, that it is in another, not as a certain part of its being: and accident is predicated of relative priorly and by more of accidentality than of other genera of accident.

Generalissimum autem in hujus prædicabilis coordinatione est ad aliquid, vel relativum, vel minus proprie, ut dicunt quidam, relatio : sed notandum quod nullo nomine ita expresse significatur generalissimum sicut per hoc quod est ad aliquid, quod est præpositio cum casuali : hoc enim duo importat quæ sunt in relativo, diversitatem scilicet per transitionem quam notat præpositio, et terminationem comparationis quam notat casus accusativus, cum dicitur ad aliquid.

Et si objicitur quod in nomine hoc quod est ad aliquid non importatur id quod comparatur ad aliquid, neque etiam ratio comparationis, sed tantum diversitas comparatorum, et id ad quod refertur comparatio, Dicendum quod hoc quod competentius potest importari in nomine comparativo de se et ratione sua formali est -

ad aliud; et id quod comparatur ad aliud, non est nisi materialiter in ipso. Nomina autem imponuntur ab eo quod formaliter significatur in ipsis, et non ab eo quod est in eis ut materiale: ratio autem comparationis, ut ante dictum est, non respicit comparationem nisi ut causa et non ut forma, et ideo etiam non debet significari in nomine, quia est extra formam illam a qua imponitur nomen; et ideo aptius nominatur hoc genus nomine ad aliquid, quam aliquo alio nomine quo possit nominari.

Et sciendum quod, ut dicunt Porphyrius et Alexander, Plato invenit hoc nomen, cum relatio tunc vocaretur. Relatio autem nominari non debet, quia sicut nec alia genera in abstracto significata prædicabilia sunt, ita nec istud: abstracta enim significant essentias simplices quæ secundum hoc quod sic significantur, non sunt formæ totius esse significativæ et notiones alicujus totius esse, ipsius totum essentiale vel accidentale significantes. Ab Antiquis autem relativum dicebatur, quod, ut dictum est, emendavit Plato considerans quod relativum est dictum quasi antecedentis reductivum, ut dicitur in grammaticis, et hoc non consideratur in comparatione nisi materialiter: id autem ad quod refertur, est sicut finis qui formalis est in eo quod terminat et finit comparationem: propter quod melius ad aliquid quam relativum nominatur.

Habet ergo istorum prædicabilium coordinatio ad aliquid pro generalissimo. Ad aliquid autem dici secundum id quod sunt, et ad aliquid dici quomodolibet ad aliud, sunt prima dividentia generalissimum, et cum eo subalterna genera et species constituentia: ut specialissimum autem habet ad aliquid, quorum hoc ipsum quod sunt ad aliquid sunt: ut individua autem habet hoc sic ad aliquid esse et id sic, ut pater, filius, dominus, servus.

Attendendum autem valde est, quod

But the most general in the coordination of this predicable is relative (*ad aliquid*), or relative, or less properly, as some say, relation: but it should be noted that by no name is the most general so expressly signified as by this which is *ad aliquid*, which is a preposition with a case-ending: for this imports two things which are in the relative, namely diversity through the transition which the preposition notes, and the termination of the comparison which the accusative case notes, when it is said *ad aliquid*.

And if it is objected that in this name which is *ad aliquid* there is not imported that which is compared to something, nor even the account of comparison, but only the diversity of the things compared, and that to which the comparison is referred, it must be said that that which can more competently be imported in a comparative name of itself and its formal account is -

to another; and that which is compared to another, is not except materially in it. But names are imposed from that which is formally signified in them, and not from that which is in them as material: but the reason of comparison, as was said before, does not respect the comparison except as a cause and not as a form, and therefore also it ought not to be signified in the name, because it is outside that form from which the name is imposed; and therefore this genus is more aptly named by the name 'toward something', than by any other name by which it could be named.

And it is to be known that, as Porphyry and Alexander say, Plato invented this name, although then it used to be called 'relation'. But it ought not to be named 'relation', because just as other genera signified in the abstract are not predicables, so neither is this: for abstract [words] signify simple essences which according to this that they are thus signified, are not forms significative of the whole being and notions of any whole being, signifying the essential or accidental whole of it. But by the Ancients it was called 'relative', which, as was said, Plato amended considering that 'relative' is dictated as if reductive of an antecedent, as is said in grammatical [works], and this is not considered in comparison except materially: but that to which it refers, is like an end which is formal in that which terminates and finishes the comparison: on account of which it is better named 'toward something' than 'relative'.

The coordination therefore of these predicables has 'toward something' for the most general [genus]. But to be called 'toward something' according to that which they are, and to be called 'toward something' in whatever way to another, are the first [things] dividing the most general [genus], and with it constituting the subalternate genera and species: but for the most special it has 'toward something', of which this itself which they are they are 'toward something': but for individuals it has this thus being 'toward something' and that thus, as father, son, lord, servant.

But it is to be attended very much, that

quædam significant comparationem quæ sunt ad aliquid ut conceptum tantum, et ista dicuntur absoluta, sicut hoc ipsum quod dico relatio, vel comparatio, et ideo illa non referuntur ad aliquid, sed absolutas dicunt suas significationes. Alia significant relationem ut exercitam et secundum actum comparatam, sicut ista ad aliquid vel relativum. Quædam etiam significant eam ut in potentia ad exercendum, sicut hoc ipsum relativum quod potentiam activam ad referendum significat. Et ex hoc iterum est, quod aptissime hoc genus vocatur ad aliquid et minus apte relativum . Sed cum dicitur relatio, minimum habet congruentiæ nomen illud.

Ex hoc iterum ulterius patet ratio ordinis, quod post prædicamentum quantitatis inter genera accidentium prædicamentum hoc est ordinandum, quia scilicet quantitas propinquissima est substantiæ, cum substantia ordinanda est. Propter quod etiam quantitatis diffinitiones quamvis concernant materiam, non tamen concernunt hanc vel illam sensibilem, et sunt propter hoc de necessitate mathematicæ scientiæ. Aliorum autem accidentium diffinitiones et passiones concernunt materiam sensibilem et habent plus de accidentalitate, et minus appropinquant ad substantiam. Et cum inter illa plus habet de accidentalitate ad aliquid, ut dictum est, merito præponitur inter illa. Et hoc dico salva pace Boetii, qui aliam causam assignat hujus ordinationis: dicit enim quod quia in ordine discretæ quantitatis est primum et secundum, quæ relationem et comparationem dicunt, et quia tam in prædicamento substantiæ quam in prædicamento quantitatis resultant genus et species quæ sunt relativa, ideo statim post ista duo ponitur relatio, quamvis qualitas secundum naturam qualitatis sit ante relationem. Quæ ratio non est sufficiens, sicut cuilibet bene consideranti facile patere potest.

Caput III.

De diffinitione dicente quid est ad aliquid secundum Platonem.

Ad aliquid autem secundum diffinitionem quam Plato dedit sic diffinitur: Ad aliquid talia dicuntur quæcumque hoc ipsum quod sunt aliorum dicuntur, vel quomodolibet aliter ad aliud . Et quod dicat Plato, quod ad aliquid talia dicuntur et non dicit hæc vel illa, notat quod ad aliud non refertur substantia sola: quia non est in substantia, ut substantia est, causa relationis, sed substantia cum forma accidentis quæ est causa relationis, refertur ad aliud: et ideo dicit talia et non dicit hæc vel illa.

certain things signify comparison which are 'toward something' as a concept only, and these are called absolute, just as this itself which I say 'relation', or 'comparison', and therefore those are not referred to something, but dictate their significations as absolute. Others signify relation as exercised and compared according to act, just as these 'toward something' or 'relative'. Certain ones also signify it as in potency to be exercised, just as this itself 'relative' which signifies an active potency for referring. And from this again it is, that most aptly this genus is called 'toward something' and less aptly 'relative' . But when it is called 'relation', that name has a minimum of congruency.

From this again further the reason of order is clear, that after the predicament of quantity among the genera of accidents this predicament is to be ordered, because namely quantity is closest to substance, since substance is to be ordered [first]. On account of which also the definitions of quantity although they concern matter, nevertheless they do not concern this or that sensible [matter], and they are on account of this of necessity of mathematical science. But the definitions and passions of other accidents concern sensible matter and have more of accidentality, and approach less to substance. And since among those 'toward something' has more of accidentality, as was said, deservedly it is preposed among those. And this I say saving the peace of Boethius, who assigns another cause of this ordination: for he says that because in the order of discrete quantity there is first and second, which dictate relation and comparison, and because as much in the predicament of substance as in the predicament of quantity there result genus and species which are relatives, therefore immediately after those two relation is posited, although quality according to the nature of quality is before relation. Which reason is not sufficient, as can easily be clear to whoever well considers.

Chapter III.

Concerning the definition dictating what 'toward something' is according to Plato.

But toward something according to the definition which Plato gave is defined thus: 'Toward something' such things are called whatever this itself which they are are called of others, or in whatever other way to another[1]. And that Plato says, that 'toward something' such things are called and does not say these or those, notes that not substance alone is referred to another: because it is not in substance, as it is substance, the cause of relation, but substance with the form of accident which is the cause of relation, is referred to another: and therefore he says 'such things' and does not say 'these' or 'those'.

Quod autem dicit dicuntur, notat quod diffinitur, ut prædicabile, quod per dici, et non per esse habet diffiniri: et ideo dicit dicuntur, et non dicit sunt. Quod autem addit quæcumque, notat quod semper in diversitate et pluralitate eorum quæ ad invicem ad convertentiam dicuntur, consistit relatio. Quod autem addit hoc ipsum quod sunt, notat ea quæ secundum esse sunt relata ad alia. Secundum esse autem relata sunt ad alia, quæ non habent aliud esse quam relationis sive ad aliquid, sicut pater in nullo genere accidentis habet aliud esse nisi paternitatis, cujus esse totum est ad alterum, et non fundatur super aliquod aliud esse accidentis, sicut æqualis vel similis, quod fundatur vel super unam quantitatem quæ est in pluribus, et sicut idem quod præsupponit unam substantiam in qua fundatur. Sed pater, filius, dominus, et servus, et quæcumque ex seipsis non dicunt nisi accidens comparationis ad aliud, illa secundum hoc quod sunt aliorum dicuntur genitive. Quia genitivus secundum suum nomen dicit id quod est alterius sicut finis et terminus in quo finitur generatio, et sic est ad aliquid aliorum, ut patet ex prius habitis. Quod autem addit dicuntur, dicit propter modum prædicandi quem specialem inter genera habet accidentium.

Quia autem non omnia comparata ad aliud sunt hoc modo aliorum, sed etiam dicuntur secundum alios casus ad aliquid ut secundum dativum, accusativum et ablativum, quæ non sunt adeo vere comparata ad aliud secundum totum esse suum, et tamen aliquo modo sunt ad aliquid, sicut illi, vel ad illud, vel ab illo: ideo necessarium fuit per disjunctivam conjunctionem conjunctam et congregatam esse diffinitionem, per quam quidem orationis notaretur conjunctio, sensus vero disjunctio: et sic notaretur divisio eorum quæ sunt ad aliquid, quæ sunt duorum modorum. Et ideo subjungit vel quomodolibet aliter ad aliud dicuntur, hoc est, secundum aliorum casuum habitudinem: et quæ non adeo vere sunt relativa, quod secundum totum esse suum sint ad aliud, sed fundantur in quodam esse quod non est ad aliud, sicut diximus. Hæc autem diffinitio declaratur exemplorum positione et eorum quæ sunt ad aliquid inductione. Eorum enim quæcumque hoc ipsum quod sunt, aliorum vel alterius sunt secundum genitivum casum.

But that he says are called, notes that it is defined, as a predicable, which through 'to be called', and not through 'to be' has to be defined: and therefore he says are called, and does not say 'are'. But that he adds whatever, notes that always in the diversity and plurality of those which mutually to convertence are called, relation consists. But that he adds this itself which they are, notes those which according to being are related to others. But according to being they are related to others, which have no other being than of relation or 'toward something', just as father in no genus of accident has other being except of paternity, whose whole being is to another, and it is not founded upon any other being of an accident, just as equal or similar, which is founded either upon one quantity which is in many, and just as the same which presupposes one substance in which it is founded. But father, son, lord, and servant, and whatever from themselves do not dictate except the accident of comparison to another, those according to this that they are are called of others in the genitive [case]. Because the genitive according to its name dictates that which is of another just as an end and termination in which generation is finished, and thus it is 'toward something' of others, as is clear from what was held before. But that he adds are called, he says on account of the mode of predicating which is special among the genera of accidents.

But because not all things compared to another are in this mode of others, but also they are called according to other cases 'toward something' as according to the dative, accusative and ablative, which are not so truly compared to another according to their whole being, and nevertheless in some mode are 'toward something', just as 'to those', or 'to that', or 'from that': therefore it was necessary through a disjunctive conjunction that the definition be conjoined and congregated, through which indeed the conjunction of speech would be noted, but the disjunction of sense: and thus the division of those which are 'toward something' would be noted, which are of two modes. And therefore he subjoins or in whatever other way to another they are called, that is, according to the habitude of other cases: and which are not so truly relative, that according to their whole being they are to another, but they are founded in a certain being which is not to another, just as we said. But this definition is declared by the position of examples and the induction of those which are 'toward something'. For of those whatever this itself which they are, are of others or of another according to the genitive case.

Exemplum est, ut majus quod ratione comparationis quam dicit, secundum id quod est, alterius est: est enim majus minoris vel minore majus, et minus majoris vel majore minus: quia Græci non habent ablativum, sed genitivo utuntur tam pro genitivo quam pro ablativo. Majus igitur secundum id quod est, est alterius sive dicitur aliquo majus. Secundum exemplum est ut duplum, hoc est secundum id quod est alterius dicitur: alicujus enim sicut dimidii, vel subdupli duplum dicitur. Similiter autem secundum totum esse aliorum sunt, quæcumque sunt hujusmodi sive his similia.

At vero secundum secundum partem diffinitionis et hæc ad aliquid sunt, quamvis non ita vere et ita perfecte sicut alia quæ dicta sunt, dicunturque exempla illorum, ut habitus, affectus, disciplina, positio : hæc enim omnia quæ exemplariter dicta sunt, hoc ipsum quod sunt, secundum ipsam comparationem aliorum dicuntur, et non dicuntur aliter ad aliud per hoc ipsum quod sunt, quia nomina eorum imposita sunt de tali comparatione, sed dicuntur secundum alios casus : habitus enim dicitur secundum genitivum casum : dicitur enim alicujus habitus, eo quod dicitur habentis habitus, et habens habitum, habens dicitur secundum accusativum ; et disciplina alicujus disciplina est, sed convertentia secundum ablativum casum, dicitur enim disciplina disciplinati disciplina, sed disciplinatum non dicitur disciplinæ disciplinatum, sed dicitur disciplinatum disciplina disciplinatum per ablativum per quem notatur habitudo causæ formalis. Similiter positio alicujus positio est : est enim partium ordinatarum positio, et positæ partes sunt positione positæ, quia partes ordinatæ in toto positione sunt ordinatæ : et iterum sit conversio per ablativum, sed et alia similiter relativa se habent.

Concludatur ergo per exempla declarata diffinitio. Ad aliquid ergo sunt quæcumque hoc ipsum quod sunt et quod in eorum nomine importatur, aliorum dicuntur secundum genitivum casum, vel quomodolibet aliter secundum alium casum ad aliud se habent, ut mons magnus, non secundum genitivum, vel dativum, sed secundum accusativum ad alium montem comparatus : magnum enim ad aliud secundum accusativum dicitur, et simile ad aliquid dicitur simile secundum dativum casum, dicitur enim simile simili simile, et æquale æquali æquale, et idem eidem idem, et e converso : et omnia talia quæcumque secundum aliquem casum ad se invicem referuntur, dicuntur ad aliquid secundum similitudinem istorum.

An example is, as greater which by reason of the comparison which it dictates, according to that which it is, is of another: for greater is of a lesser or greater than a lesser, and lesser of a greater or lesser than a greater: because the Greeks do not have the ablative, but they use the genitive as much for the genitive as for the ablative. Greater therefore according to that which it is, is of another or is called greater than something. The second example is as double, this is according to that which it is called of another: for it is called double of something just as of a half, or of a sub-double. But similarly according to [their] whole being they are of others, whatever are of this sort or similar to these.

But indeed according to the second part of the definition also these are 'toward something', al-

although not so truly and so perfectly as the others which were mentioned, and they are called examples of those, such as habit, affection, discipline, position: for all these which were mentioned as examples, that very thing which they are, are said according to the comparison of others, and they are not said otherwise towards another through that very thing which they are, because their names are imposed from such a comparison, but they are said according to other cases: for habit is said according to the genitive case: for it is said to be the habit of someone, in so far as it is said to be the habit of the one having, and the one having a habit, having is said according to the accusative; and discipline is the discipline of someone, but converting according to the ablative case, for discipline is said to be the discipline of the disciplined, but the disciplined is not said to be the disciplined of discipline, but the disciplined is said to be disciplined by discipline through the ablative by which the relation of the formal cause is noted. Similarly position is the position of someone: for it is the position of ordered parts, and the positioned parts are positioned by position, because ordered parts are ordered in a whole by position: and again let there be conversion by the ablative, but also other relatives behave similarly.

Therefore let the definition be concluded through the declared examples. Therefore relatives are whatever things are that very thing which they are and which is imported in their name, are said of others according to the genitive case, or in whatever way otherwise according to another case have themselves towards another, as a great mountain, not according to the genitive or dative, but according to the accusative compared to another mountain: for great is said towards another according to the accusative, and like is said like towards something according to the dative case, for it is said like is like to the like, and equal to the equal equal, and same to the same same, and conversely: and all such things whatever are referred to each other according to some case, are called relatives according to the similarity of these.

Attendendum autem est in quibus dativus habitudinem unam et eamdem dicit cum genitivo, quod in illis in genitivo et dativo unus modus est in relatione sive eorum quæ sunt ad aliquid, ut pater filio vel filii, et filius patri vel patris. In his tamen posset esse deceptio, quia dictum est quod accubitus et statio et sessio et similia, positiones quædam sunt et ordinatio partium in toto, et dictum est quod positio ad aliquid est, sed ab his sumpta quæ sunt jacere et stare et accumbere, quæ dicunt accidens inclinatum ad subjectum verbaliter ut actum significatum, positiones non sunt secundum suum nomen, sed denominative sunt dicta verbaliter ab his quæ sunt positiones veræ, ut sessio statio et accubitus. Sedet enim cui inest sessio, ut actus, et accumbit cui inest accubitus ut actus : cui autem inest per id quod inest, recipit denominationem vel nominaliter vel verbaliter vel participialiter, ut sedet, stat, accumbit, sedens, stans, accumbens : et hæc non dicuntur ad aliquid, quia sedens vel qui sedet ad nullum comparatus sedet et similiter est de aliis quæ per eumdem modum dicuntur.

Hæc igitur diffinitio est Platonis, eorum quæ sunt ad aliud, quam tamen secundum aliquid calumniatus est Aristoteles, sicut patebit in sequentibus : eo quod secundum eam quædam substantiæ videntur esse ad aliquid, sicut in sequentibus hujus tractatus ostendetur.

CAPUT IV — *De proprio ejus quod est ad aliquid, quod est suscipere contrarietatem.*

Sic itaque declarata diffinitione Platonis eorum quæ sunt ad aliquid, manifestandum est hoc prædicamentum per sua propria consequentia ipsum, sive sint communia, non proprie propria sive etiam proprie propria. Dicimus itaque, quod inest contrarietas in relatione, sed non inest his quæ secundum id quod sunt totum et perfectum, sunt aliorum, quæ sola sunt veræ et secundum totum esse ad aliquid : sed est secundum alia -

quæ secundum aliquid sui sunt relativa, et secundum aliquid sunt alterius prædicamenti : et per id quod sunt alterius prædicamenti, inest susceptibile esse contrarietatis. Ut autem hoc pateat in exemplis, virtus vitio contrarium est, cum utrumque eorum, tam virtus scilicet quam vitium, aliquo modo ad aliquid est, est enim virtus virtuosi virtus et virtuosus virtute virtuosus : sic enim disciplina est contraria ignorantiæ, et scientia inscientiæ, cum tam disciplina quam scientia sint ad aliquid, quia disciplina disciplinati est disciplina, et scientia scibilis est scientia, et disciplinatum disciplina est disciplinatum, et scibile scientia scibile.

But it must be noted in which the dative says one and the same relation with the genitive, that in those in the genitive and dative there is one mode in relation or of those which are relatives, as father to the son or of the son, and son to the father or of the father. In these however there could be deception, because it was said that reclining and standing and sitting and the like, are certain positions and an ordering of parts in a whole, and it was said that position is a relative, but taken from these which are to lie and to stand and to recline, which say an accident inclined towards a subject verbally as a signified act, they are not positions according to their name, but are said denominatively and verbally from these which are true positions, such as sitting, standing, and reclining. For he sits in whom there is sitting, as an act, and he reclines in whom there is reclining as an act: but he in whom it is through that which is in him, receives the denomination either nominally or verbally or participially, as he sits, he stands, he reclines, sitting, standing, reclining: and these are not called relatives, because the one sitting or he who sits, compared to none, sits, and similarly it is of others which are said in the same way.

This therefore is the definition of Plato of those things which are towards another, which however Aristotle attacked according to something, as will be clear in the following: because according to it certain substances seem to be relatives, as will be shown in the following of this treatise.

CHAPTER IV — *On the property of that which is relative, which is to admit contrariety.*

Thus therefore the definition of Plato of those things which are relative having been declared, this predicament must be manifested through its own things following it, whether they be common, not properly proper, or even properly proper. We say therefore, that contrariety is in relation, but it is not in those things which according to that which they are whole and perfect, are of others, which alone are truly and according to their whole being relatives: but it is according to others -

which according to something of themselves are relatives, and according to something are of another predicament: and through that which they are of another predicament, there is in them the being susceptible of contrariety. To make this clear in examples, virtue is contrary to vice, although both of them, namely both virtue and vice, are in some way relative, for virtue is the virtue of the virtuous and the virtuous is virtuous by virtue: for thus discipline is contrary to ignorance, and science to lack of knowledge, although both discipline and science are relatives, because discipline is the discipline of the disciplined, and science is the science of the scible, and the disciplined is disciplined by discipline, and the scible is scible by science.

Hujus autem est id quod diximus ratio, quod nec virtus nec disciplina nec scientia secundum totum esse suum sunt alterius vel ad aliquid : virtus siquidem est habitus in mente consistens secundum suum esse, et sic est in prædicamento qualitatis, et hoc modo suscipit contrarietatem. Addit autem supra rationem habitus relativam comparationem ad alterum sicut ad actum, in quo perfecta est virtus secundum optimum, et sic est alicujus virtus, ut comparati ad actum per virtutis habitum, et sic proprie est virtuosi vel studiosi virtus, sicut securis secantis vel ædificantis est securis vel instrumentum. Et similiter sicut disciplina potest considerari secundum quod est habitus cognitivus : et hoc est esse suum per quod in prædicamento qualitatis reponitur, et habet ignorantiam contrariam, et non illam quæ est puræ privationis, sed illam quæ est contrariæ dispositionis secundum principia, hoc est, illius qui dispositus et informatus est contrariis principiorum, et ideo ignorat : et erit tunc disciplina habitus disciplinabilis sicut mathematicorum, et ignorantia contraria dispositio ad eamdem. Scientia autem est habitus conclusionis, et similiter considerata ut habitus intellectus est in prædicamento qualitatis, et sic suscipit contrarium et necessario est necessaria

dispositio circa eamdem. Utrumque autem horum supra esse talis habitus intellectus addit esse virtutis intellectivæ, qua potens efficitur quis ad actum intellectus : et sic est relativum, quia sic scientia est scientis potentia ad scibile, et sic est disciplina disciplinati virtus ad disciplinam perceptibile, et quoad hoc esse non habet contrarium.

Ex hoc patet quod non est simile de albo quod quidam dicunt et de albedine, quod ita possit dici, quod albedo sit albi albedo, et album albedine album, et sic posset dici relative : ex hoc enim quod aliquid sit alicujus ad hoc quod sit relativum, oportet quod ipsius sit ut perfecti vel instrumenti ad alterum, et quod sit ab ipso ut instrumentum vel organum. Sic autem non est albedo albi, sed est albi ut formativum, nec perficit ad actum qui sit ejus quod est album, sed agit in ipso proprium albedinis actum, qui nullo modo est actus ejus quod est album : albedinis enim actus est disgregare visum, et ille actus non est albi, hoc est, ejus quod est album. Sic autem non est de virtute, et disciplina, et scientia, quæ ut virtutes sunt electivæ vel intellectivæ, organa vel instrumenta quædam sunt ad actum rationis vel electivæ voluntatis, et ideo supra esse habitus addunt rationem relationis.

But the reason for this is what we said, that neither virtue nor discipline nor science according to their whole being are of another or relative: for virtue is a habit consisting in the mind according to its being, and thus it is in the predicament of quality, and in this way it admits contrariety. But it adds above the account of habit a relative comparison to another as to an act, in which virtue is perfected according to the best, and thus it is the virtue of something, as compared to the act through the habit of virtue, and thus it is properly the virtue of the virtuous or the studious, just as the axe is the axe or instrument of the one cutting or building. And similarly just as discipline can be considered according as it is a cognitive habit: and this is its being through which it is placed in the predicament of quality, and it has ignorance as its contrary, and not that which is of pure privation, but that which is of a contrary disposition according to principles, that is, of one who is disposed and informed by the contraries of the principles, and therefore is ignorant: and then discipline will be the habit of the disciplinable, such as of mathematicians, and ignorance the contrary disposition to the same. But science is the habit of a conclusion, and similarly considered as a habit of the intellect it is in the predicament of quality, and thus it admits a contrary and necessarily is a necessary

disposition concerning the same. But each of these adds above being such a habit of the intellect the being of an intellectual virtue, by which one is made powerful for the act of the intellect: and thus it is relative, because thus science is the power of the one knowing towards the scible, and thus discipline is the virtue of the disciplined towards the perceptible discipline, and as to this being it does not have a contrary.

From this it is clear that it is not similar concerning the white that some speak of and concerning whiteness, that it can be said thus, that whiteness is the whiteness of the white, and the white is white by whiteness, and thus it could be said relatively: for from this that something is of something for it to be relative, it is necessary that it be of it as of a perfect [thing] or instrument towards another, and that it be from it as an instrument or organ. But thus whiteness is not of the white, but is of the white as formative, nor does it perfect towards an act which is of that which is white, but it performs in it the proper act of whiteness, which in no way is the act of that which is white: for the act of whiteness is to disrupt the sight, and that act is not of the white, that is, of that which is white. But thus it is not concerning virtue, and discipline, and science, which as virtues are elective or intellectual, are certain organs or instruments for the act of reason or of the elective will, and therefore above being habits they add the account of relation.

Et sic est de affectu ad affectibile : quia affectus dicit instrumentaliter expediens voluntatem ad hoc quod inclinetur ad volitum et inhæreat illi, ideo affectus est affecti ad affectibile affectus, et habet modum ejus quod est aliquid, quamvis non secundum totum esse suum sit ad aliquid.

Sic ergo relativa secundum modum relativa existentia, non secundum veritatem sui esse, suscipiunt contrarietatem : sed hoc proprium nec soli convenit nec omni. Soli quidem non convenit, quia convenit quantitati; non omni autem convenit, quia non convenit relativis quæ secundum esse et secundum veritatem et non secundum solum modum sunt ad aliquid : duplo enim sive duplici, quod -

secundum veritatem est relativum, et similiter triplici et subduplici et hujusmodi nihil est contrarium, neque alicui talium quæ secundum totum id quod sunt, ad aliquid sunt, sicut pater filius, frater soror, dominus servus, et alia his similia. Sic ergo neque omni nec soli convenit ista proprietas, sed convenit quibusdam quæ secundum modum solum sunt ad aliquid.

CAPUT V. ### *De proprio relativorum quod est suscipere magis et minus.*

Alia autem similis huic proprietas nec soli nec omni conveniens proprietas est, quod videntur relativa et magis et minus suscipere, quod inductione probatur et exemplorum positione. Simile enim et magis et minus dicitur : unus enim magis et minus similis est alteri cui similis est et ad quem dicitur. Similiter autem et inæquale magis et minus dicitur. Quamvis enim æquale sit uno modo tantum secundum quod alteri suppositum nec excedit nec exceditur, propter quod æquale secundum veritatem non suscipit magis et minus, tamen inæquale magis vel minus est secundum quod plus vel minus recedit ab æqualitate. Sed simile et dissimile utrumque recipit, scilicet magis et minus, sicut album et nigrum, justum et injustum. Sed non sic rectum et curvum, si vere et proprie sumatur rectum, ut diffinit Plato, cujus medium ab extremis non exit : hoc enim significat ut in termino sicut et æquale : sed contraria illorum suscipiunt magis et minus secundum recessum ab illo quod significat rem suam ut in termino. Simile ergo et inæquale, ut dictum est, magis et minus suscipiunt, cum tamen utrumque sit relativum secundum modum et non secundum esse totum. Simile enim ponit unam qualitatem subjectam similitudini, quæ non est ad aliquid, et æquale ponit unam quantitatem subjectam æqualitati, quæ non est ad aliquid : et per oppositum dissimile et inæquale diversas supponunt qualitates et quantitates, cum sint relativa secundum modum. Simile enim dicitur alicui simile et ad alterum, æquale autem alicui æquale ad aliquid.

And thus it is concerning affection towards the affectible: because affection speaks of that which is instrumentally expedient to the will for this, that it be inclined towards the willed and adhere to it, therefore affection is the affection of the affected towards the affectible, and it has the mode of that which is something, although not according to its whole being is it relative.

Thus therefore relatives existing as relatives according to mode, not according to the truth of their being, admit contrariety: but this property neither convenes to the [relative] alone nor to every [relative]. To the [relative] alone indeed it does not convene, because it convenes to quantity; but it does not convene to every [relative], because it does not convene to relatives which according to being and according to truth and not according to mode alone are relatives: for to the double or the duplicate, which -

according to truth is relative, and similarly to the triple and the sub-double and such like nothing is contrary, nor to any of such things which according to the whole of that which they are, are relative, such as father to son, brother to sister, lord to servant, and other things similar to these. Thus therefore neither to every nor to the relative alone does this property convene, but it convenes to certain things which according to mode alone are relative.

CHAPTER V. ### *On the property of relatives which is to admit more and less.*

But another property similar to this, convening neither to the relative alone nor to every relative, is that relatives seem to admit both more and less, which is proved by induction and by the positioning of examples. For like is said both more and less: for one is more and less like another to whom he is like and towards whom he is said [to be like]. But similarly also unequal is said more and less. For although equal is in one mode only according as it is suppositum to another and neither exceeds nor is exceeded, on account of which equal according to truth does not admit more and less, nevertheless unequal is more or less according as it recedes more or less from equality. But like and unlike each receive, namely more and less, just as white and black, just and unjust. But not thus straight and curved, if straight be taken truly and properly, as Plato defines, whose middle does not go out from the extremes: for this signifies as in a term just as also equal: but their contraries admit more and less according to the recession from that which signifies its thing as in a term. Therefore like and unequal, as was said, admit more and less, since nevertheless each be relative according to mode and not according to the whole being. For like posits one quality subject to likeness, which is not relative, and equal posits one quantity subject to equality, which is not relative: and by the opposite unlike and unequal suppose diverse qualities and quantities, since they are relatives according to mode. For like is said like to someone and towards another, but equal is equal to someone towards something.

Hoc autem proprium non omnibus relativis convenit. Non enim relativa suscipiunt magis et minus, nisi ea sola quæ secundum modum et non secundum totum esse sunt relativa. Unde non omnia relativa secundum unam similitudinem suscipiunt magis et minus, ut duplex, subduplex : nec aliquid talium relativorum quæ secundum veritatem et modum simul sunt reliqua.

Hoc autem proprium causatur ex præcedente, quia minus suscipere est plus habere de contrario, magis vero suscipere est minus habere de contrario. Multa autem accidunt relativis quæ secundum solum modum sunt relativa, quæ non accidunt eis quæ secundum veritatem et modum sunt relativa, propter hoc quod inest eis etiam aliquid quod est alterius prædicamenti, quod non inest aliis quæ secundum totum id quod sunt, relativa sunt, sicut ista duo consequentia de quibus jam pertractatum sunt est. Et similiter quod quædam eorum relativa intrinseca, et quædam extrinseca. Dico autem relativa intrinseca quæ intra se claudunt per significata sua ea ad quæ referuntur, quæ dicuntur sua correlativa, sicut cum dicitur, isti sunt similes, hoc est, iste illi, et ille isti, vel isti sunt æquales : quod non est invenire in his quæ vere et secundum esse et secundum modum relativa sunt, sicut pater et filius, dominus et servus, causa et causatum, principium et principiatum, et alia hujusmodi : non enim dicitur, isti sunt patres, ita quod iste illius et ille istius, et ista sunt dupla, ita quod hoc ad illud et illud ad istud. Objiciunt tamen quidam contra ea quæ -

dicta sunt de contrarietate, dicentes quod Aristoteles dicit, quod motus secundum accidens est in omnibus prædicamentis : ergo motus secundum accidens est etiam in ad aliquid : et ubi est motus, est aliquo modo contrarium : ergo quæ sunt ad aliquid secundum veritatem, etiam aliquo modo suscipiunt contrarium. Ad quod dicendum est quod quamvis motus secundum accidens sit in omnibus, tamen non est uno modo in omnibus. In ad aliquid ergo est motus, ut dicit Aristoteles, quia per motum inducitur, ut pater per generationem et hujusmodi, sicut per motum ad formam alii conformem.

Est autem attendendum quod hæc duo propria, suscipere contrarium, et suscipere magis et minus, ut in pluribus se concomitantur, quia suscipere magis et minus, ut dictum est, causatur ex hoc quod est plus vel minus habere de contrario. Unde contingit quod quamvis oppositio relativa non sit oppositio contrarietatis, nec e converso, quod contraria nunquam possunt simul esse relative opposita (quod ex hoc patet, quia contraria nata sunt fieri circa idem, relative autem opposita circa diversa :

But this property does not convene to all relatives. For relatives do not admit more and less, unless those alone which according to mode and not according to their whole being are relatives. Whence not all relatives according to one likeness admit more and less, as double, sub-double: nor any of such relatives which according to truth and mode together are the rest.

But this property is caused from the preceding, because to admit less is to have more of the contrary, but to admit more is to have less of the contrary. But many things happen to relatives which according to mode alone are relatives, which do not happen to those which according to truth and mode are relatives, on account of this that there is in them also something which is of another predicament, which is not in others which according to the whole of that which they are, are relatives, just as these two following things about which it has already been treated. And similarly that certain of them are intrinsic relatives, and certain extrinsic. But I call intrinsic relatives those which close within themselves through their significates those things to which they are referred, which are called their correlatives, such as when it is said, these are like, that is, this one to that one, and that one to this one, or these are equal: which is not to be found in those which truly and according to being and according to mode are relatives, such as father and son, lord and servant, cause and caused, principle and principiated, and other things of this sort: for it is not said, these are fathers, so that this one is of that one and that one of this one, and these are doubles, so that this is to that and that to this. However, some object against those things which -

were said concerning contrariety, saying that Aristotle says that motion according to accident is in all predicaments: therefore motion according to accident is also in the relative: and where there is motion, there is in some way a contrary: therefore those which are relatives according to truth also in some way admit a contrary. To which it must be said that although motion according to accident be in all, nevertheless it is not in one way in all. Therefore in the relative there is motion, as Aristotle says, because it is induced through motion, as a father through generation and things of this sort, just as through motion towards a form conforming to another.

But it must be noted that these two properties, to admit a contrary and to admit more and less, for the most part accompany each other, because to admit more and less, as was said, is caused from this, which is to have more or less of the contrary. Whence it happens that although relative opposition be not an opposition of contrariety, nor conversely, because contraries can never be at once relatively opposite (which is clear from this, because contraries are by nature made concerning the same thing, but relatively opposite things concerning diverse things:

et contraria non possunt esse in eodem simul actu, relative autem opposita possunt, dummodo respectus fiat ad diversa : est enim idem pater et filius respectu diversorum) tamen relative opposita secundum modum et non secundum esse et veritatem, secundum id quod non sunt relativa, possunt habere contraria et suscipere magis et minus, quia non habent unam simplicem oppositionem, sicut contraria : sed sunt duo, et ratione unius suscipiunt contraria magis et minus, ratione autem alterius non.

Adhuc autem notandum quod inæquale recipit magis et minus, cum tamen quantitas supra quam fundatur ad aliquid, magis et minus non suscipiat : et hoc ideo quia hoc modo quo ad aliquid fundatur supra quantitatem, est magis et minus in quantitate, sicut in quantitate quæ est numerus, est major et minor, ita inæqualior est quæ in pluribus partibus mensuræ quantitatis ab æquali recedit, et ideo inæquale hoc modo dicitur magis et minus inæquale.

Si autem aliquis sic arguat, ubi est magis et minus, possibilis est motus ; sed in ad aliquid non est motus, ergo etiam in ad aliquid non est magis et minus. Jam autem ad hoc satis responsum est : quia in his quæ sunt vere ad aliquid, non est motus, nisi sicut in his quæ per motum inducuntur, et non sic quod termini motus sint ad aliquid. In his autem quæ sunt ad aliquid secundum solum modum, potest esse motus, non secundum quod sunt ad aliquid, sed secundum quod sunt in genere qualitatis, ut dictum est : in talibus autem ad aliquid aliquando recipit magis et minus secundum genus, et non secundum speciem, quia inæquale est magis et minus : duplum autem et triplum non dicuntur secundum magis et minus, et hoc est ideo quia certa est dispositio in specie quæ non est in genere : non enim dicitur magis et minus duplum, quia certa mensura ponitur in specie quæ non ponebatur in genere inæqualitatis : certa enim mensura est dupli vel subtripli quæ non potest esse magis et minus, incerta autem importatur per inæquale, cui addi potest et minui. Hoc est igitur quod circa ista duo propria est notandum.

CAPUT VI. ### *De proprio relativorum quod est dici ad convertentiam.*

Proprie autem proprium relativorum quod omni et soli et semper convenit ei quod est ad aliquid, sive secundum modum solum, sive secundum modum et veritatem sit ad aliquid, est ad convertentiam dici. Sed convertentia et convertibilitas et conversio in hoc differunt, quod -

and contraries cannot be in the same thing at once in act, but relatively opposite things can, provided that the respect be made to diverse things: for the same person is father and son with respect to diverse persons) nevertheless relatively opposite things according to mode and not according to being and truth, according to that which they are not relatives, can have contraries and admit more and less, because they do not have one simple opposition, just as contraries: but they are two, and by reason of one they admit contraries and more and less, but by reason of the other they do not.

Moreover it is to be noted that unequal receives more and less, since nevertheless the quantity upon which the relative is founded does not admit more and less: and this is for this reason, because in this way in which the relative is founded upon quantity, there is more and less in quantity, just as in quantity which is number, there is greater and lesser, so more unequal is that which in more parts of the measure of quantity recedes from the equal, and therefore unequal is called in this way more and less unequal.

But if anyone should thus argue: where there is more and less, motion is possible; but in the relative there is no motion, therefore also in the relative there is no more and less. Now however enough has been answered to this: because in those which are truly relatives, there is no motion, except as in those which are induced through motion, and not thus that the terms of the motion be relatives. But in those which are relatives according to mode alone, there can be motion, not according as they are relatives, but according as they are in the genus of quality, as was said: in such relatives however sometimes it receives more and less according to the genus, and not according to the species, because unequal is more and less: but double and triple are not said according to more and less, and this is for this reason because certain is the disposition in the species which is not in the genus: for double is not said more and less, because a certain measure is posited in the species which was not posited in the genus of inequality: for there is a certain measure of the double or sub-triple which cannot be more and less, but an uncertain [measure] is imported through the unequal, to which [addition] can be added and [subtraction] diminished. This is therefore what is to be noted concerning these two properties.

CHAPTER VI. ### *On the property of relatives which is to be said in reciprocity.*

But the properly proper [attribute] of relatives which convenes to every, to only, and always to that which is relative, whether it be relative according to mode alone, or according to mode and truth, is to be said in reciprocity. But reciprocity and convertibility and conversion differ in this, that -

convertentia dicitur eorum quæ ad invicem referuntur per habitudinem, ut sicut primum refertur ad secundum, ita secundum refertur ad primum sub eodem casu vel diverso, sicut in ante habitis dictum est. Convertibilitas autem proprii et speciei cujus est proprium est, quod sicut unum sequitur ad alterum, ita sequetur alterum ad primum, ut utrumque sit antecedens et consequens ad alterum. Conversio autem in transpositione subjecti in prædicatum, et e converso, sub eadem qualitate, et quantitate, vel diversis.

Dici autem ad convertentiam convenit his quæ sunt ad aliquid secundum veritatem vel secundum modum tantum: quod convenit omni soli et semper, etiamsi non æqualiter sint ad aliquid, sed unum per se referatur ad aliquid, et aliud non per se sed mediante primo referatur ad primum: sicut scientia ad scibile per se refertur, scibile autem ad scientiam non refertur nisi mediante scientia. Hoc autem inferius declarabitur.

Declaratur autem per exempla et inductionem, quod ad aliquid ad convertentiam dicuntur, et primum in his quæ secundum veritatem sunt ad aliquid: dicitur enim servus domini servus, et dominus servi dominus, et duplum dimidii duplum, et e converso dimidium dupli dimidium: et hoc est secundum casum genitivum qui maxime præpositus est relativis. Quædam etiam ad convertentiam dicuntur secundum ablativum, ut majus minore majus, et minus majore minus.

Similiter autem est in omnibus aliis quæ quocumque modo sunt ad aliquid: omnia enim dicuntur ad convertentiam, quamvis diverso casu referantur in relatione ad invicem secundum figuram locutionis, ut diximus, ut disciplina dicitur disciplinati disciplina secundum genitivum: sed e converso oportet mutare casum, ut dicatur disciplinatum disciplina disciplinatum secundum ablativum: disciplina enim refertur ad disciplinatum in habitudine genitivi, disciplinatum autem ad disciplinam in habitudine ablati-

vi. Et similiter sensus dicitur sensati sensus: e converso autem secundum ablativum dicitur sensatum sensu sensatum, et scientia scibilis scientia, quia scibile non dependet per se ad scientiam nisi in quantum de ipso est scientia, propterea non refertur ad scientiam nisi mediante scientia, ut dicatur scibile scientia scibile. Et similiter se habet sensatum ad sensum, et in aliis talibus est simile.

convertence is called of those which mutually to each other are referred through habitude, as just as the first is referred to the second, so the second is referred to the first under the same case or a diverse [one], just as in what was held before it was said. But convertibility is of a proper [attribute] and of a species whose proper [attribute] it is, that just as one follows to another, so the other will follow to the first, so that each is antecedent and consequent to the other. But conversion is in the transposition of subject into predicate, and conversely, under the same quality, and quantity, or diverse [ones].

But to be called to convertence convenes to those which are 'toward something' according to truth or according to mode only: which convenes to all alone and always, even if they not equally be 'toward something', but one through itself be referred to something, and another not through itself but mediating the first be referred to the first: just as science to the scible through itself is referred, but the scible to science is not referred except mediating science. But this will be declared below.

But it is declared through examples and induction, that 'toward something' they are called to convertence, and first in those which according to truth are 'toward something': for the servant of a lord is called servant, and the lord of a servant lord, and the double of a half double, and conversely the half of a double half: and this is according to the genitive case which chiefly is preposited to relatives. Certain also are called to convertence according to the ablative, as a greater by a lesser greater, and a lesser by a greater lesser.

But similarly it is in all others which in whatever mode are 'toward something': for all are called to convertence, although by a diverse case they be referred in relation mutually to each other according to the figure of locution, as we said, as discipline is called the discipline of the disciplined according to the genitive: but conversely it is necessary to mutate the case, so that it be called the disciplined disciplined by discipline according to the ablative: for discipline is referred to the disciplined in the habitude of the genitive, but the disciplined to discipline in the habitude of the ablati-

ve. And similarly sense is called the sense of the sensed: but conversely according to the ablative the sensed is called sensed by sense, and science the science of the scible, because the scible does not depend through itself to science except inasmuch as of itself there is science, therefore it is not referred to science except mediating science, so that the scible be called scible through science. And similarly the sensed holds itself to sense, and in other such things it is similar.

In relativis enim sic est, quod quandoque unum dependet ad aliud simpliciter, et alterum non secundum seipsum dependeat ad illud, nisi secundum quod stat sub forma primi: eo quod relatio non est æqualiter in utroque extremorum, sed in uno est secundum esse, et in alio non est nisi secundum rationem secundum quam primum refertur ad ipsum, ut dicitur scientia scibilis scientia, et scibile non dicitur scientiæ scibile, sed dicitur scibile scientia scibile: quæ propter diversam habitudinem necesse est mutare genitivum in ablativum. Et similiter sensus sensibilis sensus dicitur, sensibile autem e converso dicitur sensu sensibile.

Quod autem nunquam sub recto ad rectum sit convertentia, ratio est, quia rectus ad rectum non ponit transitum sive diversitatem quam semper exigunt relativa, sed rectus ad obliquum notat diversitatem. Si enim sic diceretur, scientia est scibile, falsa esset locutio, et e converso. Mutationis etiam casuum causa est multitudo habitudinum in casibus diversis assignatarum. Cum enim dicitur, scientia scibilis scientia, notatur quod scientia est scibilis ut subjecti vel objecti. Cum autem convertentia fit, ut dicatur, scibile scientia est scibile ut forma quæ ponitur circa ipsum, vel verius forma quæ a scibili causatur in sciente: quia scibile secundum formam efficitur in intellectu scientis.

Si quis autem objiciat, quod tales modos constructionem considerare habet grammaticus, et ad logicum non pertinet, Dicendum quod secundum quod hujusmodi habitudines ex diversa fiunt con-

structione, considerat eas grammaticus, secundum autem quod voces in hoc significant diversas rerum prædicationes et prædicabilium modos, eas habet considerare logicus. Sic igitur ad convertentiam dicuntur ea quæ sunt ad aliquid.

Est tamen in his aliquando in figura vocis impedimentum, quod aliquando removetur convertentia secundum dictionem : unde aliquoties videbitur esse non verum, quod relativa secundum convertentiam dicantur, nisi convenienter secundum nominis figuram et casum assignetur ad id ad quod dicitur secundum nomen et casum. Nisi ergo peccet is qui assignat, ita quod non referat ad hoc ad quod dicitur secundum nomen et casum, tunc videbitur converti, sicut manifestum est in ala, quæ quia organum volandi dicit ipso nomine, patet quod alterius est quod utitur ea ad volandum et non est absolute dicta :

For in relatives it is thus, that sometimes one depends to another simply, and the other does not according to itself depend to that, except according as it stands under the form of the first: for that relation is not equally in each of the extremes, but in one it is according to being, and in the other it is not except according to reason according to which the first is referred to it, as science is called the science of the scible, and the scible is not called the scible of science, but is called the scible scible by science: which on account of diverse habitude it is necessary to mutate the genitive into the ablative. And similarly the sense of the sensible is called sense, but conversely the sensible is called sensible by sense.

But that never under a direct [case] to a direct [case] there be convertence, the reason is, because a direct [case] to a direct [case] does not posit a transit or diversity which relatives always exact, but a direct [case] to an oblique [case] notes diversity. For if it were called thus, science is the scible, false would be the locution, and conversely. Also of the mutation of cases the cause is the multitude of habitudes in diverse cases assigned. For when it is said, science the science of the scible, it is noted that science is of the scible as of a subject or object. But when convertence is made, so that it be said, the scible by science is scible as a form which is posited concerning it, or more truly a form which from the scible is caused in the knowing [person]: because the scible according to form is effected in the intellect of the knowing [person].

But if someone should object, that such modes of construction the grammarian has to consider, and it does not pertain to the logician, It must be said that according as such habitudes from diverse construction are made, the grammar-

construction, the grammarian considers them, but according as the voices in this signify diverse predications of things and modes of predicables, the logician has to consider them. Thus therefore those things which are relatives are said in reciprocity.

There is however in these sometimes an impediment in the figure of the voice, because sometimes reciprocity according to the diction is removed: whence sometimes it will seem to be not true, that relatives are said according to reciprocity, unless it be assigned conveniently according to the figure of the name and the case to that towards which it is said according to name and case. Unless therefore he who assigns errs, so that he does not refer it to that towards which it is said according to name and case, then it will seem to be reciprocated, just as is manifest in the wing, which because it says an organ of flying by its very name, it is clear that it is of another which uses it for flying and it is not said absolutely:

quia si esset absolute, etiam abscissa adhuc esset ala, quod falsum est. Quia igitur ala non sua sed alterius est, nec sibi sed alteri ala est, si assignetur quod si avis ala, peccatum est in assignatione, et ideo non convertitur : quia prima assignatio non fuit conveniens, quando dicebatur ala avis ala : et ideo non convertitur, ut dicatur, avis alæ avis. Non enim in eo quod avis est, dicitur alæ avis, sed in eo quod alata est : multorum enim etiam animalium aliorum alæ sunt, quæ tamen non sunt aves, nec in genere avium continentur. Propter quod si convenienter secundum nomen et casum assignetur ala ad id cujus est, statim convertitur, ut si ala alati ala dicatur : tunc enim convertitur, ut dicatur secundum ablativum casum, alatum ala alatum.

Unde etiam in talibus in quibus nomina non sunt posita, aliqua necesse est fingere nomina secundum convenientem assignationem, ut in remo patet, quod quia instrumentum dicit id quod alterius est vel alteri est. Si igitur sic assignetur, ut dicatur remus navis remus, non erit secundum rem et nomen et casum conveniens assignatio : neque enim remus di-

citur navis in eo quod navis : sunt enim naves quarum remi non sunt, sicut magnæ naves quas lintres vocant quæ malis moventur et velis, et remis impelli non possunt : et ideo quia non conveniens fuit assignatio, non convertitur, ut dicatur, navis remi navis. Sed forte convenienter erit facta assignatio, si sic dicendo assignetur, remus remitæ rei remus, aut quomodolibet aliter secundum convenientem vocis assignationem dictum sit. ut si remitæ non placet, dicatur rematæ : ad placitum enim fingentis nomina talis fit assignatio, nomen enim in talibus non est positum, sed convertitur si nomen secundum figuram dictionis et secundum convenientem casum assignetur : sicut enim remus remiti remus est, ita remitum remo remitum est. Similiter autem est in aliis, quæ hoc ipsum quod sunt, aliorum sunt, et non absoluta sunt hoc quod sunt, nec sibi in se habent hoc quod sunt : in talibus enim omnibus convertentia fit si convenienter assignetur, ut caput, quod quia membrum et organum est, non sibi sed alteri et alterius est : ideo caput capitati est et non est caput animalis caput, quia non in eo quod aliquid animal est, caput est : multa enim animalia sunt capita non habentia, sicut omnia genera ostreorum conchiliorum, ut purpuræ, murices, et alia multa.

because if it were said absolutely, even if cut off it would still be a wing, which is false. Since therefore the wing is not its own but another's, nor is it a wing to itself but to another, if it be assigned that it is the wing of a bird, there is an error in the assignment, and therefore it is not reciprocated: because the first assignment was not convenient, when it was said the wing of a bird is a wing: and therefore it is not reciprocated, so that it be said, the bird of the wing is a bird. For it is not in that which is a bird, that it is called a bird of a wing, but in that which is winged: for there are wings also of many other animals, which nevertheless are not birds, nor are they contained in the genus of birds. On account of which if it be assigned conveniently according to name and case the wing to that of which it is, immediately it is reciprocated, as if a wing be called the wing of a winged [thing]: for then it is reciprocated, so that it be said according to the ablative case, the winged [thing] is winged by a wing.

Whence also in such things in which names are not posited, it is necessary to feign some names according to a convenient assignment, as is clear in the oar, which because it is an instrument, says that which is of another or is to another. If therefore it be assigned thus, so that it be said the oar of a ship is an oar, it will not be a convenient assignment according to the thing and name and case: for the oar is not

said of the ship in that which it is a ship: for there are ships of which there are no oars, such as great ships which they call boats which are moved by masts and sails, and cannot be impelled by oars: and therefore because the assignment was not convenient, it is not reciprocated, so that it be said, the ship of the oar is a ship. But perhaps the assignment will have been made conveniently, if it be assigned by saying thus, the oar is the oar of an oared thing, or in whatever other way it be said according to a convenient assignment of the voice. as if "remite" does not please, let it be called "remate": for such an assignment is made at the pleasure of the one feigning names, for a name in such things is not posited, but it is reciprocated if the name be assigned according to the figure of the diction and according to a convenient case: for just as the oar is the oar of the oared, so the oared is oared by the oar. But similarly it is in others, which that very thing which they are, are of others, and are not absolute as to that which they are, nor do they have in themselves that which they are: for in all such things reciprocity is made if it be assigned conveniently, as the head, which because it is a member and organ, is not for itself but for another and of another: therefore the head is the head of the headed and the head of an animal is not a head, because it is not in that which is an animal, that it is a head: for many animals are not having heads, such as all genera of oysters and shellfish, as purples, murexes, and many others.

Sic autem fortasse facilius sumitur convertentia, ut quando nomina non sunt posita, vel formetur ab illis quibus nomina posita sunt, vel fingatur et figuretur ab his quæ convertuntur, sicut patet in his quæ dicta sunt, sicut formatum est ab anima animatum et a remo remitum.

Ex his igitur universaliter concluditur, quod omnia quæ dicuntur ad aliquid, si convenienter secundum figuram appellationis et casum assignentur, ad convertentiam dicuntur : nam si ad quodcumque assignentur ad quod non dicuntur, et non assignentur ad id ad quod dicuntur, non fit convertentia. Quod sic probatur per locum a majori : quia etiam in his quæ indubitanter convertibilia dicuntur, et -

quibus nomina posita sunt secundum quæ fit convertentia, non fit convertentia nisi ad eadem quæ sunt, sub convenienti referantur assignatione, ut si assignentur ad ea quæ extrinseca sunt et accidunt his ad quæ sunt per se illa relata, et non assignentur ad ea ad quæ sunt referenda secundum hoc quod sunt aliorum, ut patet. Si enim servus ad hoc quod ad aliquid est indubitanter, si non referatur ad dominum ad quem dicitur et cujus est secundum hoc quod ad aliquid est, sed quia accidit domino hominem esse, referatur ad hominem, ut sic dicatur, servus hominis servus, vel dicatur, servus bipedis servus, vel alicujus talium quod accidit domino ad quæ non per se refertur secundum dependentiam quam important in nomine, non fit convertentia, eo quod ad hoc non erat conveniens assignatio : multi enim sunt homines et bipedalia non habentia servum.

quod jam statim servus ad hominem non dicitur : cum enim dominus non sit, sequitur servum non esse, quia relativa posita se ponunt, et perempta se perimunt, ut in sequentibus erit manifestum. Similiter est de ave, hoc non tribuatur alæ, sed alatam esse, et sic ala est avis ut alata est et non avis. Et hoc patet per antedicta : si enim avi assignetur, tunc jam amplius non erit ala ad aliquid sive alicujus ala, nisi dicatur alati ala, et alatum ala alatum : cum enim ponitur quod nihil est alatum, sequitur quod ala nihil erit, quia hoc erit ala alterius et non suiipsius.

But thus perhaps reciprocity is more easily taken, as when names are not posited, either it be formed from those to which names are posited, or it be feigned and figured from those which are reciprocated, just as is clear in those things which were said, just as from the soul was formed the animated and from the oar the oared.

From these things therefore it is universally concluded, that all things which are called relatives, if they be assigned conveniently according to the figure of appellation and the case, are said in reciprocity: for if they be assigned to whatever they are not said of, and be not assigned to that to which they are said, reciprocity does not happen. Which is thus proved by the locus from the greater: because even in those which are indubitably said to be convertible, and -

to which names are posited according to which reciprocity happens, reciprocity does not happen unless they be referred to those same things which they are, under a convenient assignment, as if they be assigned to those which are extrinsic and happen to those to which those things are per se related, and be not assigned to those to which they are to be referred according to this, that they are of others, as is clear. For if a servant as to this, that he is indubitably a relative, be not referred to the lord towards whom he is said [to be] and of whom he is according to this, that he is a relative, but because it happens to the lord to be a man, he be referred to a man, so that it be said thus, the servant is the servant of a man, or it be said, the servant is the servant of a biped, or of any of such things which happen to the lord to which he is not per se referred according to the dependence which they import in the name, reciprocity does not happen, because for this it was not a convenient assignment: for there are many men and bipeds not having a servant.

because immediately a servant is not said towards a man: for since a lord be not [present], it follows that a servant is not, because relatives posited posit each other, and destroyed destroy each other, as in the following will be manifest. Similarly it is of the bird, this be not attributed to the wing, but to the being winged, and thus the wing is of a bird as it is winged and not as it is a bird. And this is clear through the aforesaid: for if it be assigned to the bird, then already no further will the wing be a relative or the wing of something, unless it be called the wing of a winged [thing], and the winged [thing] winged by a wing: for when it is posited that nothing is winged, it follows that the wing will be nothing, because this will be the wing of another and not of itself.

Ex dictis igitur concluditur, quod id quod est ad aliquid, oportet convenienter assignare ad id quod est et non ad aliud : et sic si utrique est nomen positum, facilis erit assignatio secundum convertentiam : si autem non sit nomen utrique positum relativorum, forte necessarium erit nomina fingere si ad convertentiam dici debeant relativa. Si autem sic secundum figuram appellationis et casus convenienter ad invicem reddantur sive referantur, tunc manifestum est quod omnia relativa conversim, hoc est, secundum convertentiam dicuntur ad invicem.

CAPUT VII. ### *De proprio relativorum quod est simul esse natura.*

Ex his autem quæ dicta sunt, quod scilicet relativa ad convertentiam dicuntur, sequitur aliud proprium relativorum, quod est quod relativa sive ad aliquid videntur simul esse natura. Quod autem secundum convertentiam dicuntur, et quod simul sunt natura, differunt in hoc, quod convertentia est in hoc secundum mutuam relationem eorum ad invicem et appellatione et casu : sed simul sunt natura in hoc, quod secundum quod relata sunt, in esse et non esse, sive in ortu et occasu, ut dicit Avicenna, simul sunt, ita quod posito uno in esse secundum quod -

relativum est, et positum est aliud secundum quod refertur ad illud: et destructo uno secundum quod relativum est, destruitur et aliud secundum relationem secundum quam refertur ad illud. Et in aliis pluribus hoc verum est, quia simul sunt natura secundum dictum modum: et dicitur quod posito uno ponitur et reliquum, et destructo uno destruitur reliquum. Cum enim sit duplum, sequitur quod sit dimidium, et e converso: et cum sit servus ut servus, sequitur quod sit dominus secundum quod dominus, et e converso cum dominus ut dominus est, sequitur quod sit servus ut servus. Similiter autem est in aliis: secundum hoc enim quod relativa sunt, simul se auferunt ab invicem: quia sicut posita se ponunt, sic ablata se auferunt, ut patet inductione et exemplo: cum enim sit duplum, sequitur quod sit dimidium, et cum non sit duplum, sequitur quod non sit dimidium, et e converso. Similiter autem est in omnibus aliis quæcumque talia sunt, quod secundum veritatem et secundum id quod sunt, aliorum sunt.

Et non in omnibus hoc verum esse videtur. In quibusdam enim quæ modum habent relativorum, hoc verum esse non videtur, quod sic simul sint natura, quod posita se ponant et destructa se perimant. Instantia enim esse videtur: quia cum scibile sit, non est scientia: et si sit relatum scibile ad scientiam, videtur tamen scibile non simul natura cum scientia esse, sed natura scibile prius est quam scientia: cujus probatio est, quia

From what has been said therefore it is concluded, that that which is relative, it is necessary to assign conveniently to that which it is and not to another: and thus if a name is posited for both, the assignment according to reciprocity will be easy: but if a name be not posited for both relatives, perhaps it will be necessary to feign names if the relatives ought to be said in reciprocity. But if thus according to the figure of appellation and the cases they be mutually rendered or referred to each other conveniently, then it is manifest that all relatives are said mutually in reciprocity, that is, according to reciprocity.

CHAPTER VII. ### *On the property of relatives which is to be simultaneous by nature.*

But from these things which were said, that namely relatives are said in reciprocity, follows another property of relatives, which is that relatives or toward something seem to be simultaneous by nature. But that they are said according to reciprocity, and that they are simultaneous by nature, differ in this, that reciprocity is in this according to the mutual relation of them towards each other in appellation and case: but they are simultaneous by nature in this, that according as they are related, in being and not being, or in rise and setting, as Avicenna says, they are simultaneous, so that one being posited in being according as -

it is relative, and there is posited another according as it is referred to that: and with one destroyed according as it is relative, there is destroyed also another according to the relation according to which it is referred to that. And in many others this is true, because simultaneous they are by nature according to the said mode: and it is said that one being posited the remainder is posited, and one being destroyed the remainder is destroyed. For when there is a double, it follows that there is a half, and conversely: and when there is a servant as a servant, it follows that there is a lord according as lord, and conversely when a lord as lord is, it follows that there is a servant as a servant. But similarly it is in others: for according to this that they are relatives, simultaneously they remove themselves from each other: because just as the posited posit themselves, so the removed remove themselves, as is clear by induction and example: for when there is a double, it follows that there is a half, and when there is not a double, it follows that there is not a half, and conversely. But similarly it is in all others whatsoever such there are, which according to truth and according to that which they are, are of others.

And not in all does this seem to be true. For in certain [ones] which have the mode of relatives, this does not seem to be true, that thus they be simultaneous by nature, that posited they posit themselves and destroyed they destroy themselves. For there seems to be an instance: because when the scible is, there is not science: and if the scible be related to science, it seems nevertheless the scible not to be simultaneous by nature with science, but by nature the scible is prior than science: the proof of which is,

nos ut in pluribus non accipimus scientias de rebus, nisi rebus jam subsistentibus: eo quod non possumus reales scientias accipere, nisi ex principiis rerum intellectu acceptis, et sic oportet res scibiles prius esse, quam nostra scientia de rebus. Dico autem in pluribus sic esse: quia si aliqua scientia non est de rebus quæ extra nos sunt, sed de rebus quæ sunt a nobis, in his pro certo oportet quod scientia præcedat scibile, sicut est in ethicis, ad quorum essentiam præcedit scire et velle.

Hoc in realibus scientiis generaliter verum est, quod scibile secundum hoc quod est, videtur præcedere nostram scientiam quæ est de scibili ipso. In paucis ergo vel forte nullis potest aliquis recipere simul cum scibile esse scientiam. In paucis autem dico propter moralia: in nullis autem, quod etiam in illis aliquo modo scibile ut conceptum, quamvis non ut in esse positum, est ante scientiam.

Amplius autem hoc idem probatur alio modo: quia a scibili ad scientiam non convertitur consequentia: scibile autem sublatum simul aufert scientiam: nam si scibile non sit, scientia non est, eo quod nulla scientia est quæ non sit de aliquo scibili: si vero e converso scientia non sit, nihil prohibet adhuc scibile esse: ut enim dicit Boetius, multa sunt scibilia quorum scientiæ non sunt inventæ, sicut potest intelligi in circuli quadratura, quod etsi scibile sit, scientia tamen de ea nondum inventa est.

Amplius hoc idem probatur a minori arguendo sic: minus videtur quod animali sublato auferatur scientia, quam quod scibili sublato auferatur scientia: ergo multo magis aufertur ablato scibili: omni enim animali sublato non potest esse scientia: sed posito quod nullum sit animal et nulla sit scientia, adhuc contingit plurima esse quæ sunt de numero scibilium.

Similiter autem his habent se relativa quæ sunt circa sensum et sensibile quod ad sensum refertur. Sensibile enim prius videtur natura esse quam sensus secundum actum factus: quia de hoc sensu loquimur et non de eo qui est potentia sentientis: sensibile enim objectum agens in sensum, prius est sensu et prius secundum naturam quam sensus, et ideo sensibile interemptum simul interimit secundum actum sensum secundum actum factum. Sensus autem secundum actum factus interemptus, sensibile non interimit. Cujus causa est, quia sensus secundum actum factus non est nisi circa corpus quod sensu percipitur, et sensus secun-

because we as in most [cases] do not receive sciences concerning things, unless things already subsisting: for the reason that we cannot receive real sciences, unless from the principles of things received in the intellect, and thus it is necessary the scible things to be prior, than our science concerning things. But I say as in most [cases] to be thus: because if any science is not concerning things which are outside us, but concerning things which are from us, in these for certain it is necessary that science precede the scible, just as it is in ethics, to the essence of which precedes to know and to will.

This in real sciences generally is true, that the scible according to this that it is, seems to precede our science which is concerning the scible itself. In few therefore or perhaps none can anyone receive science to be simultaneous with the scible. But I say in few on account of morals: but in none, that even in those in some mode the scible as a concept, although not as posited in being, is before science.

But further this same [thing] is proved in another mode: because from the scible to science consequence is not converted: but the scible removed simultaneously removes science: for if the scible be not, science is not, for the reason that there is no science which is not concerning some scible: but if conversely science be not, nothing prohibits still a scible to be: for as Boethius says, there are many scibles of which the sciences have not been found, just as can be understood in the quadrature of the circle, which although it be scible, science however concerning it has not yet been found.

Further this same [thing] is proved from the lesser arguing thus: less it seems that an animal being removed science be removed, than that the scible being removed science be removed: therefore much more it is removed, the scible [being] removed: for every animal being removed there cannot be science: but positing that there be no animal and there be no science, still it happens very many things to be which are of the number of scibles.

But similarly to these relatives hold themselves which are concerning sense and the sensible which is referred to sense. For the sensible prior seems to be by nature than sense made according to act: because we speak concerning this sense and not concerning that which is the potency of the sensing [subject]: for the sensible object acting in sense, is prior to sense and prior according to nature than sense, and therefore the sensible destroyed simultaneously destroys sense made according to act. But sense made according to act [being] destroyed, does not destroy the sensible. The cause of which is, because sense made according to act is not except concerning a body which is perceived by sense, and sense accor-

dum actum facti in corpore aliquo sensibili sunt quidem per qualitates sensibiles quæ sensum faciunt secundum actum. Cum ergo corpus sensibile nullum sit, necesse est quod nullus sensus sit secundum actum factus : perempto ergo sensibili perimitur sensus secundum actum factus : ergo sensibile peremptum simul secum perimit sensum. Sensus vero peremptus non necessario perimit sensibile, quia nullo sensu secundum actum existente, multa adhuc sensibilia sunt.

Et hoc patet iterum a minori arguendo : quia minus videtur quod animali perempto remaneat sensibile non peremptum, quam quod perempto sensu sensibile perimatur : animali autem perempto omnis sensus perimitur : sensibile autem adhuc est et permanet : multa enim adhuc remanent corpora calida et dulcia et amara et omnia alia quæ sunt secundum qualitates sensibiles disposita : quæ omnia sunt sensibilia.

Amplius ad hoc idem facit quod sensus fit cum sensato sive cum eo quod habet sensum, hoc enim sensatum dicimus : simul enim fit animal cum sensu, quia propter sensum dicitur et est animal, ut dicit Avicenna. Sensibile autem ante est per naturam quam esset animal vel sensus, quia ex sensibilibus generatur animal et sensus : ignis enim et aqua et hujusmodi elementa ex quibus constat materialiter secundum naturam sunt antequam sit animal. Ergo sensibile videtur esse prius quam sensus.

Attendendum autem quod omnia relativa, sicut dictum est, sunt simul natura secundum quod sunt relativa, quamvis non sint simul secundum quod simpliciter sunt. Sunt enim relativa ea quæ sunt prius et posterius, quæ quidem secundum esse suum nunquam possunt simul esse, tamen prius in ratione prioris simul est cum eo quod eo est posterius in ratione posterioris, et hoc modo posita se ponunt et perempta se perimunt.

Hoc autem quod de scibili et scientia dictum est et de sensibili et sensu, sic intelligendum est quod scibile quidem et sensibile possunt accipi secundum hoc quod stant in esse substantiali, vel secundum hoc quod stant sub forma scientiæ et sensus : et hoc est dicere quod possunt accipi materialiter, vel formaliter. Si accipiuntur materialiter, tunc scibile præcedit scientiam, et sensibile sensum, sicut in ante habitis dictum est, quia scibile est causa scientiæ et sensibile causa est sensus secundum actum facti. Si autem accipiuntur hæc formaliter secundum quod scibile quidem stat sub forma scientiæ, sensibile autem sub forma sensus, sic sunt simul natura, et hoc solo modo sunt correlativa et non aliter. Et similiter est de causa et causato, et principio et principiato, et multis aliis.

ding to act [made] in some sensible body are indeed through sensible qualities which make sense according to act. When therefore there is no sensible body, it is necessary that there be no sense made according to act: therefore the sensible destroyed destroys sense made according to act: therefore the sensible destroyed simultaneously with itself destroys sense. But sense destroyed does not necessarily destroy the sensible, because no sense according to act existing, many sensibles still are.

And this is clear again arguing from the lesser: because less it seems that an animal destroyed there should remain a sensible undestroyed, than that the sense destroyed the sensible should be destroyed: but an animal destroyed all sense is destroyed: but the sensible still is and remains: for many bodies still remain hot and sweet and bitter and all others which are disposed according to sensible qualities: all which are sensibles.

Further to this same [point] it makes [is the fact] that sense is made with the sensed or with that which has sense, for this we call sensed: for simultaneously an animal is made with sense, because on account of sense it is called and is an animal, as Avicenna says. But the sensible is before by nature than an animal or sense would be, because from sensibles an animal and sense are generated: for fire and water and elements of this sort from which it materially consists according to nature are before there is an animal. Therefore the sensible seems to be prior than sense.

But it is to be attended that all relatives, as was said, are simultaneous by nature according as they are relatives, although they be not simultaneous according as they simply are. For those are relatives which are prior and posterior, which indeed according to their being can never be simultaneous, nevertheless the prior in the reason of prior is simultaneous with that which by it is posterior in the reason of posterior, and in this mode posited they posit themselves and destroyed they destroy themselves.

But this which concerning the scible and science was said and concerning the sensible and sense, must thus be understood that indeed the scible and the sensible can be accepted according to this that they stand in substantial being, or according to this that they stand under the form of science and sense: and this is to say that they can be accepted materially, or formally. If they are accepted materially, then the scible precedes science, and the sensible sense, just as in the formerly had was said, because the scible is the cause of science and the sensible is the cause of sense made according to act. But if these are accepted formally according as the scible indeed stands under the form of science, but the sensible under the form of sense, thus they are simultaneous by nature, and in this sole mode they are correlatives and not otherwise. And similarly it is concerning cause and caused, and principle and principled, and many others.

Attendendum etiam est, quod natura (cum dicitur quod relativa sunt simul natura) non supponit nisi formam relationis : unde simul sunt natura, quæ simul sunt secundum formam sive secundum naturam relationis : quia ad naturam eorum quæ sunt relata ad invicem, non sunt simul, et secundum naturam illam aliquando unum est prius, et alterum posterius, ut dictum est de causa et causato, et principio et principiato, et patre et filio, et præcipue in hoc quod est prius et in hoc quod est posterius.

Adhuc autem scias, quod hoc argumentum non valet : scibile dicitur secundum potentiam : potentia refertur ad actum, ut dicit Aristoteles in decimo *primæ philosophiæ* : ergo scibile refertur ad scientiam secundum actum : quia multa sunt relativa in genere, quæ non sunt relativa in specie, ut patet in scientia quæ refertur, et grammatica quæ non est relata.

CAPUT VIII.

De disputatione contra diffinitionem Platonis inductam et correctionem ejus dicti.

Habet autem quæstionem sive dubitationem, utrum secundum superius inductam Platonis diffinitionem nulla substantia ad aliquid dicatur, quemadmodum videtur ex substantiæ ratione quæ est ens per se subsistens : et quod est per se subsistens, est absolutum, et sibi apud seipsum et esse suum non est ex hoc quod sit ad alterum. Sic ergo videtur quod nulla sit ad aliquid, sive sit prima substantia sive secunda : sive significetur substantia de toto sive de parte, suo nomine semper est ens per seipsum et non est alteri. Si autem hoc conceditur esse verum, tunc adhuc remanet ad oppositum disputatio secundum superius inductam diffinitionem, quæ dicit ad aliquid esse, quæcumque hoc ipsum quod sunt, aliorum dicuntur : quia si hæc diffinitio est bene assignata, substantia vitur ad aliquid esse secundum quasdam substantias de parte et non de toto significantes. Cujus probatio est, quia in primis substantiis verum est quod non dicuntur ad aliquid, sive de toto sive de partibus significetur primarum substantiarum : aliquis enim homo non dicitur alicujus aliquis homo, cum tamen per genitivum maxime dicantur ad aliquid in his quæ sunt relativa [1] : neque aliquis bos

Also it is to be attended, that nature (when it is said that relatives are simultaneous by nature) does not suppose except the form of relation: whence simultaneous they are by nature, which are simultaneous according to form or according to the nature of relation: because as to the nature of those which are related mutually to each other, they are not simultaneous, and according to that nature sometimes one is prior, and another posterior, as was said concerning cause and caused, and principle and principled, and father and son, and chiefly in this which is prior and in this which is posterior.

But further you should know, that this argument does not avail: the scible is called according to potency: potency is referred to act, as Aristotle says in the tenth [*book*] of *First Philosophy*: therefore the scible is referred to science according to act: because many are relatives in genus, which are not relatives in species, as is clear in science which is referred, and grammar which is not related.

CHAPTER VIII.

Concerning the disputation against the induced definition of Plato and the correction of his saying.

But it has question or doubt, whether according to the above induced definition of Plato no substance is called 'toward something', as seems from the reason of substance which is being per se subsisting: and what is per se subsisting, is absolute, and to itself in itself and its being is not from this that it be toward another. Thus therefore it seems that none be 'toward something', whether it be a primary substance or a secondary [one]: whether substance be signified concerning the whole or concerning a part, by its name it always is being per itself and is not to another. But if this is conceded to be true, then still there remains to the opposite the disputation according to the above induced definition, which says that to be 'toward something' are, whatever this itself which they are, of others are called: because if this definition is well assigned, substance seems to be 'toward something' according to certain substances signifying concerning a part and not concerning the whole. The proof of which is, because in primary substances it is true that they are not called 'toward something', whether it be signified concerning the whole or concerning the parts of primary substances: for a certain man is not called of someone a certain man, since nevertheless through the genitive chiefly they are called 'toward something' in those which are relatives[1]: neither a certain ox of someone

alicujus aliquis bos, quia homo et bos rationem substantiæ important in nominibus suis, et nihil additum dicunt substantiæ per quod ad aliquid referantur : et ideo etiam non grammatice dicitur, alicujus aliquis bos, nec alicujus aliquis homo : quia genitivus in talibus nullam habet notare habitudinem secundum quam fiat constructio. Similiter autem est etiam in partibus quæ sunt ut primæ substantiæ partes : quædam enim manus non dicitur alicujus quædam manus, sed simpliciter dicitur alicujus manus. Et illius causa est, quia quamvis dicat substantiam quæ est pars alicujus totius, et in nomine manus per rationem manus ut est organum intellectus et organum organorum, importetur comparatio ad motorem manus, per quod efficitur motor, ita quod non absoluta sit a rela-

tione, tamen per hoc quod dicitur quædam manus, fit singularis manus : et est idem quædam manus, quod hæc manus demonstrata, et demonstratione determinatur ad hoc quod sub sensu est, quod secundum quod sub sensu est, non refertur ad alterum : et ideo nihil est dictu, alicujus quædam manus : et hæc est vera causa. Nec est curandum de hoc quod alii dicunt in loco isto.

Per eamdem etiam rationem quoddam caput non dicitur alicujus quoddam caput, quia quamvis caput sit dicens substantiam sub comparatione ad motorem cujus est caput, cum tamen refertur ad hoc singulare per hoc quod dicitur quoddam caput, quod idem est quod hoc caput, non dicitur nisi sub accidentibus quibus demonstratur : et per hoc non dicitur ad aliquid, quia comparatio quam dicit in nomine, non est demonstrabile accidens : et ideo non dicitur alicujus quoddam caput, sed dicitur alicujus caput sine determinatione ad hoc singulare propter comparationem quam importat nomen, quando absque determinatione ponitur ad singulare : tunc enim est nomen organi sive organicæ partis quæ semper secundum rationem sui nominis refertur ad aliquid cujus est organum : talia enim quæ talem in nomine important comparationem dicuntur ad aliquid, ut dixit Plato.

Similiter autem manifestum est in secundis substantiis quæ de toto significant, quod non dicuntur ad aliquid : et hoc patet inducendo in pluribus, ut homo non dicitur secundum nomen alicujus homo : quia homo absolute nominat substantiam, et per rationem nominis nullam addit supra substantiam comparationem quæ in nomine significetur. Et per eamdem rationem non dicitur bos alicujus bos sub nomine bovis, vel lignum alicujus lignum sub nomine ligni, sed hoc si alicujus dicitur, erit sub alio nomine, comparationem ad aliquid in modo signifi-

a certain ox, because man and ox import the reason of substance in their names, and dictate nothing added to substance through which they be referred to something: and therefore also not grammatically is it said, of someone a certain ox, nor of someone a certain man: because the genitive in such [cases] has no habitude to note according to which a construction may be made. But similarly it is also in parts which are as parts of primary substance: for a certain hand is not called of someone a certain hand, but simply it is called of someone the hand. And of this the cause is, because although it dictates a substance which is a part of some whole, and in the name of hand through the reason of hand as it is the organ of the intellect and the organ of organs, there be imported a comparison to the motor of the hand, through which a motor is effected, so that it be not absolute from rela-

tion, nevertheless through this that it is said a certain hand, it becomes a singular hand: and a certain hand is the same, as this demonstrated hand, and by demonstration it is determined to this which is under sense, which according as it is under sense, is not referred to another: and therefore it is nothing to say, of someone a certain hand: and this is the true cause. Nor is it to be cared concerning this which others say in this place.

Through the same reason also a certain head is not called of someone a certain head, because although head be dictating a substance under comparison to a motor whose head it is, since nevertheless it is referred to this singular through this that it is said a certain head, which is the same as this head, it is not said except under accidents by which it is demonstrated: and through this it is not 'toward something', because the comparison which it dictates in the name, is not a demonstrable accident: and therefore it is not called of someone a certain head, but it is called of someone the head without determination to this singular on account of the comparison which the name imports, when without determination it is posited to the singular: for then it is the name of an organ or of an organic part which always according to the reason of its name is referred to something whose organ it is: for such [things] which import such comparison in the name are called 'toward something', as Plato said.

But similarly it is manifest in secondary substances which signify concerning the whole, that they are not called 'toward something': and this is clear by inducing in many, as man is not called according to name of someone a man: because man absolutely names a substance, and through the reason of the name adds no comparison above substance which may be signified in the name. And through the same reason ox is not called of someone the ox under the name of ox, or wood of someone the wood under the name of wood, but this if it be called of someone, it will be under another name, importing comparison to something in the mode of signi-

candi importante, ut si dicatur possessio, quia possessio importat ad possessorem comparationem, dicitur enim possessor possessionis possessor, et possessio possessoris possessio. In his igitur substantiis manifestum est quoniam sub nominibus primæ et secundæ substantiæ non sunt ad aliquid. In aliquibus autem secundis substantiis de parte organica et non de toto significantibus habet aliquam dubitationem propter hoc quod nomen partis organicæ non dicit substantiam nisi stantem sub comparatione, quæ quia importatur in nomine, necesse est quod semper dicatur ad aliquid, quamvis secundum esse suum quod est substantiale, scilicet esse ex carnibus et ossibus non sint ad aliquid : talia ergo dicuntur ad aliquid et non sunt ad aliquid secundum id quod sunt sive secundum esse substantiale a quo imponitur nomen. Sic ergo caput dicitur alicujus caput, et manus alicujus manus, et singula nomina partium organicarum sunt hujusmodi secundum dici relata ad aliquid et non secundum esse : propter quod hoc nomina partium organicarum secundæ substantiæ fortase ad aliquid esse alicui videbitur.

Videtur enim fortase alicui quod sicut est in dici per nomen, ita sit secundum esse, quod tamen non est verum ut patebit inferius : cum hoc fuerit causa deceptionis Platonis, qui omnia talia dicebat esse ad aliquid propter modum eorum quæ sunt ad aliquid quæ important in dictione. Si ergo aliquis concedat quod diffinitio eorum quæ sunt ad aliquid, sufficienter est assignata, ita quod convertibilis sit cum his quæ sunt ad aliquid, aut nimis difficile aut impossibile est solvere quin secundum illam diffinitionem aliqua substantia sit ad aliquid. Si enim quæcumque ad aliquid dicuntur secundum nomen, et ad aliquid sunt secundum esse et veritatem, ut dixit Plato, impossibile est evadere quin pes, manus, et caput (quæ sunt secundæ substantiæ) sint ad aliquid, et præcipue si concedatur quod est idem dici ad aliquid et esse ad aliquid.

Si autem dicatur quod dici ad aliquid secundum nomen connotans relationem, non sit esse ad aliquid secundum veritatem, adhuc difficile erit solvere vel evadere quin aliquæ secundæ substantiæ sint ad aliquid : quia nomen manus et nomen capitis et nomen pedis et hujusmodi, quamvis materialiter dicant substantias tanquam id cui imponitur nomen, tamen formaliter quantum ad proprietatem a qua imponitur nomen, dicunt id quod refertur ad aliud, quia dicunt id quod dicunt per modum organi et officialis membri ad actum aliquem : tale autem nomen dicit relationem ad aliquid, scilicet ad motorem cujus est tale organum.

[signi]-candi importante, as if possession were said, because possession imports a comparison to the possessor, for the possessor is called the possessor of the possession, and the possession the possession of the possessor. In these substances, therefore, it is manifest that under the names of first and second substance they are not 'toward something' (ad aliquid). In some second substances, however, signifying concerning the organic part and not the whole, there is some doubt because the name of the organic part does not say substance except standing under a comparison, which because it is imported in the name, it is necessary that it always be said 'toward something', although according to its being which is substantial, namely, being from flesh and bones, they are not 'toward something': such things therefore are called 'toward something' and are not 'toward something' according to that which they are or according to the substantial being from which the name is imposed. Thus therefore the head is called the head of someone, and the hand the hand of someone, and the individual names of the organic parts are of this kind according to being said relative to something and not according to being: on account of which these names of the organic parts of second substance will perhaps seem to someone to be 'toward something'.

For it perhaps seems to someone that just as it is in being said through the name, so it is according to being, which nevertheless is not true as will appear below: since this was the cause of Plato's deception, who said all such things were 'toward something' on account of the mode of those which are 'toward something' which they import in the speech. If therefore anyone concedes that the definition of those which are 'toward something' is sufficiently assigned, so that it is convertible with those which are 'toward something', it is either too difficult or impossible to solve without some substance being 'toward something' according to that definition. For if whatever are called 'toward something' according to name, are also 'toward something' according to being and truth, as Plato said, it is impossible to escape that the foot, hand, and head (which are second substances) are 'toward something', and especially if it be conceded that to be said 'toward something' and to be 'toward something' are the same.

But if it be said that to be said 'toward something' according to the name connoting relation is not to be 'toward something' according to truth, it will still be difficult to solve or escape that some second substances are 'toward something': because the name of hand and the name of head and the name of foot and such, although materially they say substances as that upon which the name is imposed, yet formally as to the property from which the name is imposed, they say that which is referred to another, because they say that which they say through the mode of an organ and an official member for some act: but such a name says a relation to something, namely to the motor of which such is an organ.

Boetius tamen et Alexander dicere videntur quod cum dicitur, aut nimis difficile, aut impossibile est solvere, quod unum dicitur ad alterius expressionem : ac si diceretur, nimis difficile est et, ut expressius dicatur, impossibile est solvere. Si autem dicatur quod inducta diffinitio non sufficienter sive convertibiliter est assignata, sed sit corrigenda, quia sunt ad aliquid, quibus hoc ipsum esse est ad aliquid quodammodo se habere et non solum dici, tunc fortase aliquid dicetur.

Et dici potest contra illa, scilicet quod substantiæ secundæ sicut substantiæ non sunt ad aliquid nisi secundum modum quemdam qui est in dictione : quia tunc ista nomina, pes, manus, et caput, partes substantiæ principaliter significant, et substantia non est composita nisi ex substantiis, et secundario per modum significandi connotant cum principali significatione id quod dicitur ad aliquid : et hoc quidem est verum. Ea autem quæ sunt ad aliquid, in principali significatione dicunt id quod suum principale esse est ad aliquid, et esse suum habet ab eo ad quod est, et non a seipso, nec in seipso, sicut pater, et filius, et dimidium, et hujusmodi.

Hæc autem diffinitio differt ab alia quæ præinducta est : quia prior diffinitio sequitur omnia relativa, sive secundum -

veritatem sint aliquid, sive secundum modum solum : sed non propter hoc inest omnibus relativis, quod hoc ipsum quod sunt secundum totum suum esse aliorum dicantur : hoc enim non omnibus convenit relativis : quædam enim connotant cum principali significatione modum relativorum, et non secundum veritatem. Hoc Plato videtur ignorare.

Et sic caput et manus connotant id quod dicitur ad aliquid : principali autem significatione dicunt substantiam. Et hæc est vera solutio difficultatis inductæ : quia sic reducitur nomen relationis ad rem quæ est una de rebus primis vel de primis generibus rerum, quæ significare contingit per unam de primis vocibus prædicabilium.

CAPUT IX.

De proprio verorum relativorum quod est si quis noverit unum eorum diffinite, et reliquum noscet diffinite.

Boethius however and Alexander seem to say that when it is said, "either too difficult or impossible to solve," that one is said for the expression of the other: as if it were said, it is too difficult and, to speak more expressly, it is impossible to solve. If however it be said that the introduced definition is not sufficiently or convertibly assigned, but is to be corrected, because they are 'toward something' to which this itself, to be, is in some way to be related to something and not only to be said, then perhaps something will be said.

And it can be said against those, namely that second substances as substances are not 'toward something' except according to a certain mode which is in the speech: because then these names, foot, hand, and head, principally signify parts of substance, and substance is not composed except from substances, and secondarily through the mode of signifying they connote with the principal signification that which is called 'toward something': and this indeed is true. But those which are 'toward something', in the principal signification say that which its principal being is 'toward something', and it has its being from that toward which it is, and not from itself, nor in itself, like father, and son, and half, and such.

But this definition differs from the other which was pre-introduced: because the prior definition follows all relatives, whether according to -

truth they be something, or according to mode only: but not on account of this is it in all relatives, that this itself which they are according to their whole being of others they be called: for this does not convene to all relatives: for certain [ones] connote with principal signification the mode of relatives, and not according to truth. This Plato seems to ignore.

And thus head and hand connote that which is called 'toward something': but by principal signification they say substance. And this is the true solution of the induced difficulty: because thus the name of relation is reduced to a thing which is one of the primary things or of the primary genera of things, which it happens to signify through one of the primary words of predicables.

CHAPTER IX.

Concerning the property of true relatives which is if anyone should know one of them definitely, and the remainder he will know definitely.

Ex his autem potest haberi, quod ex quo eorum quæ sunt vere ad aliquid, esse et quidditas est ad aliquid, quod si quis diffinite, hoc est, determinate per veram diffinitionem, novit unum eorum quæ sunt ad aliquid, sequitur quod id ad quod est et ad quod dicitur, per veram diffinitionem sciturus est : et hoc est unum relativum diffiniri non quidem per reliquum, sed diffiniri ad reliquum : nec intellectus quidditatis sive diffinitionis ejus stat ut determinatus nisi determinari significetur ad alterum, sicut cum dico, pater filii pater, et filius patris filius. Palam ergo hoc est quod dictum est. Si enim novit aliquis diffinite id quod ad aliquid est secundum veritatem et esse suum, hoc est, si esse talis quod ad aliquid est, diffinitum et certum quodammodo habet, hoc est, secundum relationem se habere, ita quod habeat esse principale relationis, necessario sequitur quod etiam novit diffinite ad quod se habet illud quodammodo sive secundum

relationem : et hoc non sequitur nisi quia diffinite non ponitur primum, nisi alterum ponatur determinate secundum vocem secundum esse diffinitam. Si enim non novit hoc ad quod id quodammodo, hoc est, secundum relationem se habet cum diffinite ponatur in diffinitione, idem est sciturus si id quod dicit esse ad aliquid, se habet ad id secundum esse. Hoc autem palam est per inductionem in singulis, ut in hoc quod est duplum : si quis enim diffinite novit, quod hoc est duplum, et diffinite intellectus quidditatis ejus assignatur secundum nomen certum ad id cujus est duplum, sequitur quod mox ipsa assignatione novit et hoc cujus est duplum : quia hoc certa nominatione exprimitur in dupli assignatione, cum dicitur duplum dimidii duplum. Si autem nihil sive nullo modo diffinito et certo novit cujus est duplum, sequitur quod etiam omnino non novit, quod id est duplum quod duplum esse dicebat. Similiter etiam si novit diffinite in comparativo, quod hoc melius vel majus est, sequitur etiam quod diffinite cognovit quo melius est : quia comparatio aliter vaga esset, quæ significatur in comparativo, cum nulla possit esse comparatio nisi finita in terminis : quia aliter comparationis non habet intellectum. Propter quod generaliter concluditur, quod est necessarium, quod si quis diffinite novit unum relativorum, etiam id ad quod dicitur, secundum relationem diffinite cognoscere necessarium est.

But from these it can be had, that since of those which are truly 'toward something', being and quiddity is 'toward something', that if anyone definitely, that is, determinately through true definition, knows one of those which are 'toward something', it follows that that to which it is and to which it is called, through true definition he will know: and this is one relative to be defined not indeed through the remainder, but to be defined toward the remainder: nor does the intellect of quiddity or its definition stand as determined unless to be determined it be signified toward another, as when I say, a father the father of a son, and a son the son of a father. Openly therefore is this which was said. For if anyone knows definitely that which is 'toward something' according to truth and its being, that is, if the being of such that it is 'toward something', definite and certain in some mode he has, that is, according to relation to hold itself, so that it may have the principal being of relation, necessarily it follows that he also knows definitely that to which that [thing] holds itself in some mode or according to

relation: and this does not follow except because definitely the first is not posited, unless the other be posited determinately according to a word definite according to being. For if he does not know this to which that in some mode, that is, according to relation holds itself when it is definitely posited in the definition, the same he is to know if that which he says to be 'toward something', holds itself to that according to being. But this is open through induction in individuals, as in this which is double: for if anyone definitely knows, that this is double, and definitely the intellect of its quiddity is assigned according to a certain name toward that whose double it is, it follows that soon by the assignment itself he knows also this whose double it is: because this by certain nomination is expressed in the assignment of double, when it is called double the double of a half. But if nothing or in no mode definite and certain does he know whose double it is, it follows that also altogether he does not know, that that is double which he was saying to be double. Similarly also if he knows definitely in the comparative, that this is better or greater, it follows also that definitely he cognized than what it is better: because comparison otherwise would be vague, which is signified in the comparative, since no comparison can be unless finite in terms: because otherwise of comparison it has not the intellect. On account of which generally it is concluded, that it is necessary, that if anyone definitely knows one of relatives, also that to which it is called, according to relation definitely to cognize it is necessary.

Si autem objicitur contra hoc quod relativa opposita sunt, opposita enim nata non sunt se invicem diffinire, Dicendum quod uniuscujusque rei debet esse diffinitio secundum modum quidditatis ipsius : esse autem et quidditas relationis non est esse absolutum et quidditas absoluta, nec ex genere et differentia constituitur sicut ens absolutum, sed sicut ens dependens, et quod plus est sicut dependentia quædam ad aliud, et dependentia est ei pro genere, et correlativum ad quod est, sibi est pro differentia fini-

ente ipsum ut actu sit relativum : et ideo sic non per ipsum sed ad ipsum diffinitur, sicut in esse et quidditate est ad ipsum [1], et hoc modo utrumque diffinitur per reliquum. Nec tamen sequitur quod unum sit notius altero, vel prius altero, vel simplicius altero, secundum quod esse utriusque finitur et determinatur per reliquum : nec est inconveniens, quod id quod est ad aliquid, non diffiniatur sicut prædicamenta alia, quia esse suum non est sicut esse aliorum [2].

Ex his autem manifestum est quod manus et caput et similia quæ sunt de numero eorum quæ sunt substantiæ sicut partes substantiæ secundæ, hoc ipsum quod sunt secundum esse substantiale quod in nomine principaliter significatur, potest sciri diffinite secundum quod est pars componens substantiam : et propter hoc non est necessarium scire hoc ad quod dicuntur, quia non habent relationem nisi in connotato in nomine, et non in principali significatione : et ideo in ratione capitis et in ratione manus quantum ad principalem significationem non est dici diffinite cujus est hoc caput et cujus est hæc manus : quia caput et manus diffiniuntur non ad id cujus est caput et cujus est manus [3] : et sic non potest diffiniri pater vel duplum : vel melius propter quod sequitur, quod secundum veritatem et esse suum principale non sunt ad aliquid. Si autem hæc quæ sunt partes substantiæ secundæ, non sunt de numero relativorum, cum de illis magis videatur quam de aliis, necesse est dicere quod nulla substantiarum primarum vel secundarum sit ad aliquid secundum veritatem.

Tamen fortase difficile est de hujusmodi relativis confidenter, hoc est, ratione certa aliquid determinare propter similitudinem eorum quæ dicuntur ad aliquid, ad ea quæ sunt ad aliquid secun-

But if it be objected against this that relatives are opposites, for opposites are not born to define each other mutually, It must be said that of every single thing there ought to be a definition according to the mode of its quiddity: but the being and quiddity of relation is not absolute being and absolute quiddity, nor from genus and difference is it constituted just as absolute being, but just as dependent being, and what is more just as a certain dependence to another, and dependence is to it for genus, and the correlative to which it is, to it is for defining difference-

ng it so that in act it be relative: and therefore thus not through itself but toward itself is it defined, just as in being and quiddity it is toward itself[1], and in this mode each is defined through the remainder. Nor nevertheless does it follow that one be more known than the other, or prior to the other, or simpler than the other, according as the being of each is finished and determined through the remainder: nor is it inconvenient, that that which is 'toward something', be not defined just as other predicaments, because its being is not just as the being of others[2].

But from these it is manifest that a hand and head and similar [things] which are of the number of those which are substances as parts of secondary substance, this itself which they are according to substantial being which in the name principally is signified, can be known definitely according as it is a part composing a substance: and on account of this it is not necessary to know this to which they are called, because they have not relation except in the connoted in the name, and not in the principal signification: and therefore in the reason of head and in the reason of hand as to principal signification it is not to be said definitely whose is this head and whose is this hand: because head and hand are defined not to that whose head it is and whose hand it is[3]: and thus cannot be defined a father or double: or better on account of what follows, that according to truth and their principal being they are not 'toward something'. But if these which are parts of secondary substance, are not of the number of relatives, since concerning those it more seems than concerning others, it is necessary to say that none of primary or secondary substances be 'toward something' according to truth.

However perhaps it is difficult concerning relatives of this sort confidently, that is, by certain reason to determine something on account of the similitude of those which are called 'toward something', to those which are 'toward something' accor-

dum veritatem, nisi sæpe subtiliter pertractata sint, ut distinguantur ea quæ dicuntur ad aliquid ex connotato, ab his quæ dicuntur ad aliquid secundum esse totum et quidditatem et secundum veritatem. Pertractando autem subtiliter dubitate de singulis horum quid hoc vel id sit non erit inutile, quia sic invenitur veritas eorum quæ dicuntur ad aliquid, et eorum quæ sunt ad aliquid secundum esse suæ quidditatis et secundum veritatem. Propter quod dicit Aristoteles [4] quod potentes ad utramque partem dubitare, de facili speculabuntur quid sit verum et quid sit falsum in unoquoque.

Attendendum tamen quod multis modis dicitur ad aliquid, scilicet ut ad finem et actum propter quem est, sicut oculus ad videndum, et securis ad incidendum, et multæ substantiæ sunt ad aliquid. Dicitur etiam ad aliquid ut materia ad formam, et sic propria materia est ad propriam formam. Et dicitur ad aliquid ex connotato cum principali suo esse, sicut caput, et manus. Et dicitur ad aliquid secundum principale et totum esse, sicut pater et duplum : et sic nulla substantia est ad aliquid, ut dictum est. Sic igitur corrigi debet diffinitio : non enim facit esse prædicamentum, habere in aliquo alicujus prædicamenti modum, quia etiam differentiæ substantiales habent qualitatis modum, et non propter hoc sunt de prædicamento qualitatis.

CAPUT X.

De dubitalibus quæ sunt circa prædicta.

Est autem dubitatio quæ oritur ex his quæ dicta sunt : si enim relativa sive ad aliquid sunt quæcumque, hoc ipsum quod sunt, alterius sunt, et ex comparatione ad aliquid habent esse : tunc videtur quod unum accidens aliquo modo habet esse in duobus subjectis, ita tamen quod remanet idem in essentia : qua enim ratione est in uno, eadem ratione est in alio : dicitur enim pater filii pater : nec potest uno subjecto determinari vel diffiniri.

Adhuc autem videtur quod secundum hoc duæ oppositæ relationes sunt una numero relatio, sicut paternitas quæ est in patre respectu filii, et filiatio quæ est in filio respectu patris.

Item videtur quod filiatio et paternitas non differant nisi penes terminos, sicut via quæ est a Thebis ad Athenas, et ab Athenis ad Thebas, quæ eadem est, quamvis terminis differat.

ding to truth, unless often subtly they have been treated, so that those which are called 'toward something' from the connoted, be distinguished from these which are called 'toward something' according to whole being and quiddity and according to truth. But treating subtly to doubt concerning individual [ones] of these what this or that be will not be useless, because thus is found the truth of those which are called 'toward something', and of those which are 'toward something' according to the being of their quiddity and according to truth. On account of which Aristotle says[4] that those potent to doubt toward each part, easily will speculate what is true and what is false in each.

Nevertheless it is to be attended that in many modes it is called 'toward something', namely as to an end and act on account of which it is, just as an eye to seeing, and an axe to cutting, and many substances are 'toward something'. Also it is called 'toward something' as matter to form, and thus proper matter is to proper form. And it is called 'toward something' from the connoted with its principal being, just as a head, and a hand. And it is called 'toward something' according to principal and whole being, just as a father and double: and thus no substance is 'toward something', as was said. Thus therefore the definition ought to be corrected: for it does not make [something] to be a predicament, to have in something the mode of some predicament, because also substantial differences have the mode of quality, and not on account of this are they of the predicament of quality.

CHAPTER X.

Concerning doubts which are concerning the aforesaid [things].

But there is a doubt which arises from these which were said: for if relatives or 'toward something' are whatever, this itself which they are, are of another, and from comparison to something have being: then it seems that one accident in some mode ha-

[ha]-ve being in two subjects, yet in such a way that it remains the same in essence: for by the same reason it is in one, it is in the other by the same reason: for the father is called the father of the son: nor can it be determined or defined by one subject.

Furthermore, it seems that according to this, two opposite relations are one relation in number, such as fatherhood which is in the father with respect to the son, and sonship which is in the son with respect to the father.

Likewise, it seems that sonship and fatherhood do not differ except in terms of their boundaries, just like the way from Thebes to Athens and from Athens to Thebes, which is the same, although it differs in terms.

Adhuc quæcumque comparationes ab eisdem comparatis et eadem causa comparationis sunt, essentialiter illa sunt eadem : sed paternitas et filiatio et universaliter quæcumque relationes vel correlationes ab eisdem comparatis et eadem causa comparationis contrahunt esse : videtur ergo quod eadem sint in essentia.

Adhuc autem quæritur, si paternitas relatio est, ad quid refertur ? si dicatur quod ad filiationem, videtur quod falsum sit, quia relationes generantur ex motu aliquo, sed circa filiationem non fit motus, sed circa filium.

Adhuc filius refertur ad patrem filiatione : si igitur filiatio etiam refertur, aliqua relatione refertur, et relationis est relatio, et hoc procedet in infinitum.

Adhuc generatione activa pater efficitur pater, et fit paternitas in ipso : et si generat alium filium, eadem ratione fit in ipso nova paternitas, et eadem ratio est de tertio, ac deinceps : videtur ergo quod multæ paternitates secundum idem fiunt in eodem. Sed contra hoc est : quia duo accidentia ejusdem speciei non possunt esse simul in eodem secundum idem, sicut duæ albedines : fiunt enim unum accidens, quia nec essentiæ ac substantiæ possunt habere differentiam. Ergo etiam duæ vel plures paternitates in eodem secundum idem esse non possunt.

Si dicatur quod distinguuntur respectu diversorum filiorum, contra hoc est, quia secundum quod sunt in patre, per hoc distingui non possunt. Adhuc autem relatio accidens est genere, quia in subjecto est, et postea est comparatio ad alterum : ergo habet in se duo : et sic generalissimum est compositum, ut videtur.

Ad hæc autem et his similia dicendum videtur quod unum accidens non est in duobus subjectis ut subjectis, sed unum in uno ut subjecto, et in altero non ut in subjecto, sed sicut in termino et fine ad quem sumitur dependentia ipsius, sicut paternitas est in patre ut in subjecto, et in filio ut in termino ad quem sumitur dependentia ipsius : et sic filiatio est in filio ut in subjecto, in patre autem sicut in termino finiente dependentiam ipsius : et hoc est ad patrem et non in patre : et sic pater cadit in diffinitione filii, et e converso. Nec est inconveniens, quod hoc modo diverso unum accidens ad duo se habeat.

Ad aliud dicendum quod duæ oppositæ relationes, sive correlationes non sunt una : comparatio enim relationis in medio duorum relativorum nihil est : quia, sicut jam dictum est, relatio in uno non est, sicut in subjecto, et non extenditur essentialiter ad aliud : sed unum dependet ad ipsum secundum intellectum.

Furthermore, whatever comparisons are from the same compared things and the same cause of comparison, those are essentially the same: but fatherhood and sonship and universally whatever relations or correlations contract being from the same compared things and the same cause of comparison: it seems therefore that they are the same in essence.

Furthermore, it is asked: if fatherhood is a relation, to what is it referred? if it is said that it is to sonship, it seems that it is false, because relations are generated from some motion, but motion does not happen about sonship, but about the son.

Furthermore, the son is referred to the father by sonship: if therefore sonship is also referred, it is referred by some relation, and there is a relation of a relation, and this will proceed to infinity.

Furthermore, by active generation the father is made father, and fatherhood becomes [present] in him: and if he generates another son, by the same reason a new fatherhood becomes [present] in him, and the same reason holds for a third, and so on: it seems therefore that many fatherhoods according to the same thing come to be in the same [subject]. But against this is: because two accidents of the same species cannot be simultaneously in the same [subject] according to the same [respect], like two whitenesses: for they become one accident, because neither essences nor substances can have a difference. Therefore also two or more fatherhoods cannot be in the same [subject] according to the same being.

If it be said that they are distinguished with respect to different sons, against this is that according as they are in the father, they cannot be distinguished by this. Furthermore, relation is an accident in its genus, because it is in a subject, and afterwards it is a comparison to another: therefore it has two things in itself: and thus the most general [genus] is a composite, as it seems.

To these and similar things, it seems it should be said that one accident is not in two subjects as subjects, but one is in one as a subject, and in the other not as in a subject, but as in a boundary and end toward which its dependence is taken, just as fatherhood is in the father as in a subject, and in the son as in a boundary toward which its dependence is taken: and thus sonship is in the son as in a subject, but in the father as in a boundary finishing its dependence: and this is 'toward the father' and not 'in the father': and thus the father falls into the definition of the son, and vice versa. Nor is it inconvenient that in this diverse mode one accident should relate to two.

To the other thing it should be said that two opposite relations, or correlations, are not one: for the comparison of a relation in the middle of two relatives is nothing: because, as has already been said, a relation is not in one as in a subject and is not essentially extended to the other: but one depends toward the other according to the intellect.

Et quod objicitur de eadem via quæ est de Thebis ad Athenas, et e converso, dicendum quod omnino simile non est, nisi in terminis : medium autem extensum non habet, sed per extensionem non habet nisi inclinationem dependentiæ unius ad alterum, et ideo non est omnino simile.

Ad aliud autem dicendum quod paternitas, et relatio, et hujusmodi abstracta, sunt de prædicamento relationis in genere vel in specie, ut concepta et non ut exercita : et ideo talia ad nihil referuntur, sed ipsis ut formis ea quæ referuntur ad invicem, scilicet relativa, referuntur, relatio relatione, et pater paternitate, et -

hujusmodi, et ideo non itur in infinitum.

Ad aliud dicendum quod multæ paternitates non fiunt in uno : cum enim unum sit principium ex quo generat pater, et actus generationis specie unus ad omnes genituras, una erit paternitas ad omnes : sed multi filii multis filiationibus numero referuntur ad istum unum patrem.

Et si objicitur quod mortuo filio non est pater ; et ponamus quod unus filiorum moriatur, tunc videtur semper quod una paternitas destruitur, et manet, Dicendum quod non est verum : non enim facta tali positione destruitur paternitas simpliciter, sed destruitur respectus ejus ad hoc, et hoc non est destrui simpliciter.

Et si secundo objicitur quod paternitas non est nisi respectus, et si destruitur quoad respectum, tunc videtur destrui simpliciter, Dicendum quod hoc non est verum : manet enim adhuc in causa, et ideo non simpliciter destructa est : dico enim, quod manet in causa ad effectum reducta respectu aliorum filiorum.

Ad ultimum dicendum quod relatio est accidens : et ita oportet quod aliquid addatur accidenti per quod fiat hujus generis accidens : et sic omne generalissimum est compositum ex duobus intelligibilibus : propter quod generalissima dicuntur species entis : unde etiam propria non assignantur eis nisi prout sunt species entis : quia omne proprium causatur a specie, ut dicit Boetius ; species autem habet duos intellectus, sicut sæpe in scientia de *Universalibus* dictum est.

Caput I

Quid sit qualitas, et secundum quam intentionem sit unum de decem prædicamentis.

Postquam jam dictum est de quantitate quæ cum substantia proxima ordinanda fuit, eo quod substantia motui et alterationi secundum quam fiunt formæ accidentales multæ in substantia, per quantitatem subjicitur, eo quod non movetur, nisi quantum, ut probat Aristoteles [1] ; postquam etiam ad aliquid determinatum est, quod alteram

And what is objected concerning the same way which is from Thebes to Athens, and vice versa, it should be said that it is not altogether similar, except in the terms: for it does not have an extended medium, but through extension it has nothing but the inclination of dependence of one to the other, and therefore it is not altogether similar.

To the other thing, however, it should be said that fatherhood, and relation, and such abstracts, are of the predicament of relation in genus or in species, as conceived and not as exercised: and therefore such things are referred to nothing, but by them as forms those things which are referred to each other, namely relatives, are referred, relation by relation, and father by fatherhood, and -

of this sort, and therefore it does not go to infinity.

To the other it must be said that many paternities are not made in one [subject]: for since one is the principle from which the father generates, and the act of generation one in species to all begettings, one will be the paternity to all: but many sons by many filiations in number are referred to this one father.

And if it be objected that when a son dies he is not a father; and let us posit that one of the sons dies, then it always seems that one paternity is destroyed, and remains, It must be said that this is not true: for upon making such a position, paternity is not simply destroyed, but its respect to this [son] is destroyed, and this is not to be simply destroyed.

And if secondly it be objected that paternity is nothing except a respect, and if it be destroyed as to respect, then it seems to be destroyed simply, It must be said that this is not true: for it still remains in a cause, and therefore it is not simply destroyed: for I say, that it remains in a cause reduced to effect in respect of the other sons.

To the last it must be said that relation is an accident: and so it is necessary that something be added to accident through which it become an accident of this genus: and thus every most general is composed from two intelligibles: on account of which the most generals are called species of being: whence also proper [attributes] are not assigned to them except insofar as they are species of being: because every proper [attribute] is caused from species, as Boethius says; but species has two intellects, just as has often been said in the science of *Universals*.

Chapter I

What quality is, and according to what intention it is one of the ten predicaments.

After now it has been said concerning quantity which together with substance had to be nearby ordered, because substance is subjected to motion and alteration according to which many accidental forms are made in substance, through quantity, because it is not moved, except what is quantified, as Aristotle proves[1]; after also it has been determined concerning 'toward something', which imports

partem accidentis importat, quod est ad aliquid quodammodo se habere : nunc de qualitate restat dicendum, eo quod per qualitates activas et passivas ad agere et pati substantia disponitur, quæ sunt sequentia prædicamenta : per ad aliquid autem quodammodo efficitur susceptibilis ubi et quando, situs et habitus. Et ideo ista quatuor prædicamenta quasi principia disponentia ad illa sex quæ sequuntur præmittuntur. In quantitate enim determinatur de esse quod accidenti convenit ; in ad aliquid autem determinatur ad aliquid se habere, a quo non absolvuntur ubi et quando, situs et habitus : in qualitate disponitur substantia ad agere et pati, quæ duo qualitatem consequuntur. Hæc igitur quatuor præcedunt, ut substantiam ad sequentia disponentia. Et quia ad aliquid se habere accidit ex comparatione suæ substantiæ ad aliquid, qualitas autem ex hoc quod est activa

vel passiva ab alio vel in aliud, ideo ad aliquid ordinatur ante qualitatem.

Assignando igitur qualitatis descriptionem dicimus, quod qualitatem describens, dico secundum quam ut formam accidentalem quales dicimur per denominationem. Non enim, ut diximus in ante habitis [2], denominatio a substantia fieri potest, eo quod forma substantialis abstrahi non potest, eo quod est in ratione subjecti de quo prædicatur, sive sumpta in potentia ut notio totius, sicut signatur in differentia, sive sit notio totius implicite, sicut significatur in specie, sive sit notio totius explicite, sicut significatur in diffinitione : et ideo non secundum illam quales ut quales dicimur, sed potius quod vel quale quid dicimur. Et quia differentia secundum Porphyrium et Antiquos non in quale tantum sed in quale quid prædicatur, quia quamvis prædicetur in quale, tamen quid efficitur in eo de quo prædicatur. Quantitas autem non est secundum quam quales dicimur, sed secundum quam quanti vel aliquanti dicimur. Ad aliquid autem et alia prædicamenta sunt secundum quæ dicimur ad aliquid nos aliquo modo habere, quia comparatione unius ad alterum non absolvuntur [3]. Et ideo soli qualitati convenit quod secundum eam simpliciter et absolute quales dicimur : hoc enim nec substantiæ, neque quantitati, neque ad aliquid simpliciter convenit, quia forma substantialis vel differentia non dicuntur simpliciter quale, sed quale quid, ut diximus. Alia autem prædicamenta et formæ acci-

dentales et prædicamenta accidentalia, aut dicunt id secundum quod formæ accidentales, et prædicamenta accidentalia qualitatem accipiunt per accidens in subjecto, quamvis non insit nisi substantiæ, aut dicunt id quod est ad aliquid se habere.

the other part of accident, which is 'toward something' in some mode to hold itself: now concerning quality it remains to be said, because through active and passive qualities substance is disposed to acting and suffering, which are the following predicaments: but through 'toward something' in some mode it is made susceptible of where and when, position and possession. And therefore these four predicaments as disposing principles to those six which follow are premised. For in quantity it is determined concerning the being which convenes to accident; in 'toward something' however it is determined to hold itself 'toward something', from which are not absolved where and when, position and possession: in quality substance is disposed to acting and suffering, which two follow quality. These four therefore precede, as disposing substance to the following. And because to hold itself 'toward something' happens from comparison of its substance to something, but quality from this that it is active

or passive from another or into another, therefore 'toward something' is ordered before quality.

Assigning therefore the description of quality we say, that describing quality, I say according to which as an accidental form we are called 'such' [qualitative] through denomination. For not, as we said in the formerly had[2], can denomination from substance be made, because the substantial form cannot be abstracted, because it is in the reason of the subject of which it is predicated, whether taken in potency as the notion of the whole, just as signed in difference, whether it be the notion of the whole implicitly, just as signified in species, whether it be the notion of the whole explicitly, just as signified in definition: and therefore not according to that are we called 'such' as 'such', but rather 'what' or 'such-what' we are called. And because difference according to Porphyry and the Ancients is predicated not in 'such' only but in 'such-what', because although it be predicated in 'such', nevertheless 'what' it becomes in that of which it is predicated. But quantity is not according to which we are called 'such', but according to which 'how much' or 'of some quantity' we are called. But 'toward something' and the other predicaments are according to which we are said to hold ourselves 'toward something' in some mode, because by the comparison of one to another they are not absolved[3]. And therefore to quality alone it convenes that according to it simply and absolutely we are called 'such': for this neither to substance, nor to quantity, nor to 'toward something' simply convenes, because the substantial form or difference are not simply called 'such', but 'such-what', as we said. But the other predicaments and accidental forms and acci-

dental predicaments, either say that according to which accidental forms, and accidental predicaments receive quality by accident in a subject, although it be not in except substance, or they say that which is to hold itself 'toward something'.

Tertius autem modus prædicationis remansit, qui est quales dici : secundum quem modum activum et passivum substantia quæ est subjectum efficitur. Et iste modus inter simplices modos prædicandi remansit solus. Simplices autem dico, qui in suis prædicandi modis nihil aliud concipiunt, nisi unum modum simplicem [1]. Omnes enim sex alii modi prædicandi aliquid præter se concipiunt in subjecto de quo prædicantur, sicut actio principium actionis, passio principium passionis, et quando, et ubi, et situs, et habitus concipiunt unius ad alterum comparationem. Isti autem quatuor prædicandi modi simplices sunt, sicut substantia in quid, quantitas subjecti in quantitatem dimensionum, ad aliquid in comparationem, et qualitas in qualitatem secundum quam affecta vel disposita substantia perfecta est ad agere et pati. Et quia antecedentes tres modi sunt substantiæ ut substantia est, ideo prius de ipsis erat agendum. Quia vero qualitas non est substantiæ, ut substantia est in seipsa vel comparata, sed est ipsius ut perficitur ad id quod est agere et pati, propter hoc quarto loco de hoc prædicamento est agendum.

Sic ergo qualitatem describens dico secundum quam simpliciter nos, qui homines sumus, quales dicimur : quia quamvis et alia qualia dicantur secundum aliquam qualitatem, tamen non omnia omnium qualitatum sunt susceptiva : sed solus homo inter ea quæ nota nobis sunt, contrariarum est qualitatum susceptivus: habitus enim et dispositionis secundum omnes species et habitus dispositionis non est susceptivus nisi homo, et non alia existentia nota nobis. Hæc est igitur causa quia sic dicimus, quod qualitas est secundum quam quales dicimur, et non dicitur secundum quam qualia dicuntur.

Et quod posset objici quod differentia est secundum quam quales dicimur, jam solutum est : non enim secundum differentiam simpliciter quales dicimur, sed etiam quid : quia, ut dicit Porphyrius, differentia est quod ad esse substantiale conducit, et quod ejus quod est esse rei pars est : omnis autem alia forma accidentalis quamvis in quale prædicetur omne accidens, non tamen dicit quale simpliciter, sed potius vel quantum, vel aliquo modo se habere addit supra quale quod prædicat præter solam qualitatem accidentalem : et ideo sola qualitas per quale secundum eam dici recta diffinitione diffinitur.

But the third mode of predication has remained, which is to be called 'such': according to which mode the active and passive substance which is the subject is effected. And this mode among the simple modes of predicating has remained alone. But simple I call, which in their modes of predicating conceive nothing other, except one simple mode[1]. For all six other modes of predicating conceive something besides themselves in the subject of which they are predicated, just as action the principle of action, passion the principle of passion, and when, and where, and position, and possession conceive the comparison of one to another. But these four modes of predicating are simple, just as substance in 'what', quantity of the subject in the quantity of dimensions, 'toward something' in comparison, and quality in quality according to which affected or disposed substance is perfected to acting and suffering. And because the antecedent three modes are of substance as substance is, therefore first concerning them it was to be treated. But because quality is not of substance, as substance is in itself or compared, but is of it as it is perfected to that which is to act and to suffer, on account of this in fourth place concerning this predicament it is to be treated.

Thus therefore describing quality I say according to which simply we, who are men, are called 'such': because although also other things be called 'such' according to some quality, nevertheless not all of all qualities are susceptible: but only man among those which are known to us, is susceptible of contrary qualities: for of habit and disposition according to all species and habits of disposition none is susceptible except man, and not other existents known to us. This therefore is the cause because we so say, that quality is according to which we are called 'such', and it is not said according to which things are called 'such'.

And what could be objected that difference is according to which we are called 'such', has already been solved: for not according to difference are we simply called 'such', but also 'what': because, as Porphyry says, difference is that which conduces to substantial being, and that which is a part of the being of a thing: but every other accidental form although every accident is predicated in 'such', nevertheless it does not say 'such' simply, but rather either 'how much', or 'to hold itself in some mode' adds above 'such' what it predicates beyond accidental quality alone: and therefore quality alone through 'such' to be called according to it by correct definition is defined.

Si autem aliquis objiciat quod quale est quod a qualitate quale dicitur, et quale per qualitatem et qualitas per quale diffinitur, et est idem notius et ignotius altero, et e converso, et idem notius et ignotius seipso. Facile est respondere secundum antedicta, quod scilicet quando quale per qualitatem diffinitur, datur diffinitio ex notioribus simpliciter : quando autem e converso qualitas per quale diffinitur, tunc datur per notiora quoad nos, et hoc modo non est inconveniens idem esse notius et ignotius altero nec seipso.

Ab his autem facile est intelligere in qua intentione qualitas vel quale sit prædicamentum : est enim qualitas vel quale prædicamentum secundum quod est prædicans simpliciter quale et nihil aliud : hoc enim est solum quale accidentale omnino absolutum a comparatione et quantitate quæ possint ipsum ad aliud genus prædicamenti determinare, sicut diximus.

Ex hoc autem facile patet quare de prædicamento quantitatis non diximus, quantitas est secundum quam quanti dicimur : quantitas enim in quale prædicatur, eo quod est accidens : sed id quale materiale est in ipsa ad quantitatem per quam ad genus prædicamenti determinatur. Et ab illo communi quanto unius modi non poterat haberi communis denominatio, quia aliter fit denominatio a quantitate discreta et aliter a continua.

Adhuc autem quantitas est propinquissima substantiæ, et ideo subjectum potius constituit secundum esse quo substare potest motui qui est secundum accidentia, quam denominet proprie loquendo. Qualitas autem continet terminos motus secundum quos fit substantiæ denominatio.

Et si quis objiciat quod motus etiam est in quantitate et sic deberet esse denominatio. Jam in ante habitis hoc solutum est, quod motus non est in quantitate secundum quod est quantitas, sed secundum rationem perfecti et imperfecti quæ sunt qualitates in quantitate. Contingit ergo proprie soli qualitati simpliciter secundum quale denominatio, et secundum hoc simplex prædicatum ipsa est prædicamentum ; quia etsi in aliis prædicamentis quale prædicatur, tamen ad aliquod aliud formale determinatur.

CAPUT II.

Qualiter qualitas multipliciter dicitur, et de speciebus ejus.

But if anyone should object that 'such' is what from quality is called 'such', and 'such' is defined through quality and quality through 'such', and the same is more known and less known than the other, and conversely, and the same more known and less known than itself. It is easy to respond according to the aforesaid, that namely when 'such' is defined through quality, a definition is given from things more known simply: but when conversely quality is defined through 'such', then it is given through things more known to us, and in this mode it is not inconvenient that the same be more known and less known than the other nor than itself.

But from these it is easy to understand in what intention quality or 'such' be a predicament: for quality or 'such' is a predicament according as it is predicating simply 'such' and nothing else: for this is solely the accidental 'such' entirely absolved from comparison and quantity which could determine it to another genus of predicament, just as we said.

But from this it easily is clear why concerning the predicament of quantity we did not say, quantity is according to which 'of such quantity' we are called: for quantity is predicated in 'such', because it is an accident: but that 'such' is material in it to the quantity through which it is determined to the genus of predicament. And from that common 'of such quantity' of one mode a common denomination could not be had, because otherwise denomination is made from discrete quantity and otherwise from continuous.

Further yet quantity is most proximate to substance, and therefore constitutes the subject according to the being by which it can be subjected to motion which is according to accidents, rather than denominates properly speaking. But quality contains the terms of motion according to which denomination of substance is made.

And if anyone should object that motion also is in quantity and thus denomination ought to be. Already in the formerly had this was solved, that motion is not in quantity according as it is quantity, but according to the reason of perfect and imperfect which are qualities in quantity. Therefore it happens properly to quality alone that simply according to 'such' denomination [is made], and according to this simple predicate it itself is a predicament; because even if in other predicaments 'such' is predicated, nevertheless it is determined to something other formal.

CHAPTER II.

How quality is spoken of in multiple ways, and concerning its species.

Est autem qualitas secundum quod sic in communi accipitur ut prædicamentum, de numero eorum quæ multipliciter dicuntur. Non autem sic dicitur multipliciter, ut æquivocum, vel analogum quod per prius et posterius dicitur, sed est multipliciter dictum ut genus, quod per diversas differentias in ea dividitur quæ sunt sub ipso æqualiter, ita quod æque exeunt ab ipso, et non unum per aliud. Sic enim sunt quatuor genera vel species qualitatis, quorum nullum per alterum participat qualitatis prædicationem, et ideo species qualitatis ab hoc communi quod est qualitas, exeunt ut multitudo. Propter quod dicimus, quod qualitas de istis dicitur ut de multis, et non de uno per quod de aliis dicatur, sicut substantia, vel aliud genus : quia etiam in quantitate quantitas continua non fit mensura substantiæ nisi quantitas continua fiat numerus. Et in aliquid ad ea quæ sunt ad aliquid secundum modum, oportet quod respiciatur ad ea quæ sunt ad aliquid secundum veritatem, et sic ad unum ordinantur. In qualitate autem statim commune multiplicatur in quatuor, quorum unum non participat commune per alterum, sed sunt coæqualia sub ipso quod commune est.

Et si quæritur, secundum artem dividendi cujus sit divisio, quando dividitur qualitas in quatuor genera vel species qualitatis? Constat quod non potest reduci nisi ad generis in suas species divisionem : sed illæ quatuor species sunt coæquæ sub genere, et nulla alteri subalterna.

Si autem objicitur quod divisio debet esse bimebmris, Dicimus quod hoc verum est quando datur omnino per differentias in genere vel specie constituentes : has enim oportet esse oppositas per affirmationem et negationem, sicut rationale et irrationale : quando autem datur divisio accidentis in modos vel species quibus accidens efficitur in substantia, non oportet : quia illi modi non sunt finiti, nec finitam stantem et ordinantem habent causam. Et ideo oportet dare talem dispositionem per modum multiplicitatis et multitudinis : et sic est de speciebus qualis et qualitatis, nam in qualitate talis convenit divisio. Et hæc est causa quod (sicut dicunt Alexander et Boëtius) ipse Aristoteles hoc prædicamentum intitulavit de quali et qualitate : quia qualitas non cognoscitur nisi ex modis ejus quod est quale, cum de modis substantiæ qualitas hæc vel illa causetur.

Prima autem harum est, quæ communius respicit substantiam, quæ habitus et dispositio dicitur : hæc enim incorporeæ substantiæ convenit et corporeæ rei quæ est ex utrisque composita, ut homo. Et convenit secundum animam et secundum corpus : quia scientia et virtus secundum animam insunt homini, et sanitas et complexio quæ sunt habitus et dispositiones, insunt homini secundum corpora. Habitus igitur et dispositio primæ sunt species qualitatis.

But quality according as it is thus taken in common as predicament, is of the number of those which are spoken of in multiple ways. But it is not spoken of in multiple ways, as equivocal, or analogous which is said through prior and posterior, but it is spoken of in multiple ways as a genus, which through diverse differences is divided into those which are under it equally, so that equally they proceed from it, and not one through another. For thus there are four genera or species of quality, of whose none through the other participates the predication of quality, and therefore the species of quality from this common which is quality, proceed as a multitude. On account of which we say, that quality is called of these as of many, and not of one through which it may be called of others, just as substance, or another genus: because also in quantity continuous quantity does not become the measure of substance unless continuous quantity become number. And in 'toward something' to those which are 'toward something' according to mode, it is necessary that it be looked toward those which are 'toward something' according to truth, and thus they are ordered to one. But in quality immediately the common is multiplied into four, of which one does not participate the common through the other, but they are coequal under that which is common.

And if it be asked, according to the art of dividing, of what sort is the division, when quality is divided into four genera or species of quality? It is established that it cannot be reduced except to the division of a genus into its species: but those four species are coequal under the genus, and none subalternate to another.

But if it be objected that the division ought to be bimembral, We say that this is true when it is given entirely through differences constituting in genus or species: for these it is necessary to be opposed through affirmation and negation, just as rational and irrational: but when the division of an accident is given into modes or species by which an accident is effected in substance, it is not necessary: because those modes are not finite, nor a finite standing and ordering cause do they have. And therefore it is necessary to give such disposition through the mode of multiplicity and multitude: and thus it is concerning the species of 'such' and quality, for in quality such a division convenes. And this is the cause that (just as Alexander and Boethius say) Aristotle himself entitled this predicament concerning 'such' and quality: because quality is not cognized except from the modes of that which is 'such', since from the modes of substance this or that quality is caused.

But the first of these is, which commu-

[commu]-nly regards substance, which is called habit and disposition: for this is suitable to incorporeal substance and to the corporeal thing which is composed from both, such as man. And it is suitable according to the soul and according to the body: because science and virtue are in man according to the soul, and health and complexion, which are habits and dispositions, are in man according to the bodies. Habit and disposition, therefore, are the first species of quality.

Quamvis autem circa idem sunt habitus et dispositio, et ideo dicuntur una species qualitatis, tamen quia oppositum modum vel oppositos modos dicunt circa idem subjectum in quo sunt, et quod secundum ea quale dicitur, unum nomen habere non possunt, quia opposita non significat nomen unum, ut dicit Aristoteles. Et hæc est causa quare unus modus dicitur habitus, et alius modus dicitur dispositio. Habitus autem est nomen perfecti in hac specie, dispositio autem est nomen imperfecti. Et ideo principale nomen est habitus, et secundarium quod adhuc est in fieri, est dispositio. In quocumque autem sunt (ut dictum est) circa idem sunt, non ex æquo, sed secundum quod subjectum per ea quale efficitur : hoc enim movetur ad hoc, et est in fieri : et postquam perfecte ad hoc motum est et in facto esse, et tunc est perfectum : et ideo quamdiu est in fieri, est in dispositione : quando autem est in facto esse, tunc est in habitu. Habitus igitur est actus quidam, dispositio autem est admixta potentiæ.

Ex quo patet quod habitus differt a dispositione, eo quod habitus diuturnior est et permanentior in subjecto in quo est : quod fit vel usu temporis, vel radicatione in subjecto quæ fit per remotionem eorum quæ impediunt subjectum ad expedite agendum id cujus accipit habitum : dicit enim Averroes : habitus est quo quis aliquid agit quando voluerit. Unde habitus est qualitas qualem faciens potentiam ad perfecte agendum effectum illius potentiæ proprium, sive sit potentia animæ, sive corporis. Tales sunt habitus intellectuales, vel rationales, vel opinativi, vel virtutes quæ insunt secundum voluntatem, et secundum alias partes appetitus, sicut est concupiscibilis et irascibilis, et etiam secundum rationem secundum quod ipsa est rationem participans : quia secundum hæc ordinativa est aliorum, et est in ea sicut virtus moralis quæ dicitur justitia. Scientia enim et virtus secundum suum nomen videntur esse de numero eorum quæ sunt permanentia, et sicut perfecta, et stantia et radicata in subjecto : et videntur esse de numero eorum quæ difficile moventur, sive removentur a subjecto. Hujusmodi autem exemplum est, ut si dicamus aliquem mediocriter scientiam sumere : sumens enim eam non fortiter non tenet, quia de facili delebile est, quod ad perfectum non est acceptum : sed postquam sumpta est, difficile mobilis est a subjecto, nisi forte fiat grandis permutatio per aliquam amentiam, aut apoplexiam, vel aliud hujusmodi. Et quia non nisi magnis accidentibus mutatur, propter hoc quidem non omnino immobilis est, sed difficile mobilis esse videtur.

But although habit and disposition are about the same thing, and therefore are called one species of quality, nevertheless because they dictate an opposite mode or opposite modes about the same subject in which they are, and which according to them is called 'such' [qualified], they cannot have one name, because one name does not signify opposites, as Aristotle says. And this is the cause why one mode is called habit, and the other mode is called disposition. Habit, however, is the name of the perfect in this species, while disposition is the name of the imperfect. And therefore the principal name is habit, and the secondary, which is still in the making, is disposition. In whatever they are, however, (as was said) they are about the same thing, not equally, but according as the subject is made 'such' through them: for this is moved toward this, and is in the making [in fieri]: and after it is perfectly moved toward this and in the state of having been made [in facto esse], then it is perfect: and therefore as long as it is in the making, it is in disposition: but when it is in the state of having been made, then it is in habit. Habit, therefore, is a certain act, while disposition is mixed with power.

From which it is clear that habit differs from disposition in that habit is longer-lasting and more permanent in the subject in which it is: which happens either by use of time, or by rooting in the subject which happens through the removal of those things which impede the subject from expeditiously doing that of which it receives the habit: for Averroes says: habit is that by which someone acts when he wishes. Whence habit is a quality making the power 'such' as to perfectly perform the effect proper to that power, whether it be a power of the soul or of the body. Such are intellectual habits, or rational, or opiniative, or virtues which are in [man] according to the will, and according to other parts of the appetite, such as the concupiscible and irascible, and also according to the reason according as it is participant in reason: because according to these it is ordaining of others, and it is in it like the moral virtue which is called justice. For science and virtue according to their name seem to be of the number of those which are permanent, and as if perfect, and standing and rooted in the subject: and they seem to be of the number of those which are moved or removed with difficulty from the subject. But an example of this kind is as if we should say someone takes in science moderately: for taking it in not strongly, he does not hold it, because that which is not received unto perfection is easily deletable: but after it has been taken in, it is moved with difficulty from the subject, unless perhaps a great permutation happens through some madness, or apoplexy, or other such thing. And because it is not changed except by great accidents, for this reason indeed it is not altogether immovable, but seems to be moved with difficulty.

Per ægritudines autem maxime fiunt hujusmodi permutationes, quia quamvis tales habitus insint secundum animam, quia tamen corpus organum est animæ, permutatio corporis impedit animæ operationes et corrumpit habitus tales. Talis etiam habitus (cum perfecte et ad actum expeditum habetur) dicitur. Similiter dicitur et virtus, quæ est fortitudo, et justitia, vel castitas et hujusmodi, quæ sunt de numero talium, quæ scilicet dicunt perfectiones ad proprium et generalem actum, sive sit naturæ, sive sit artis, sicut visus habitus est naturalis, et scientia et virtus habitus sunt acquisiti, et sanitas habitus corporis et ægritudo. Similiter quando talia perficienia potentias animæ -

vel corporis ad actus sibi debitos, radicata sunt et adepta sic ut non facile possint a subjecto removeri nec facile permutari nisi ex magnis permutationibus, tunc dicuntur habitus, eo quod tunc habeantur adeptione perfecta : et quia tunc potentia quæ ante nutabat in actu et fluctuabat, stat in ipsis, sicut in forma perficiente et perfecta ad operationes illius potentiæ.

Affectiones vero dicuntur sive dispositiones, quando subjectum non nisi aliqualiter est affectum vel dispositum per illa, et potentia nondum adepta est perfecte, sed continue disponitur ad aliud. Et ideo tales dispositiones vel affectiones sunt facile et cito etiam parvis occasionibus permutabiles in contrarium, sicut calor quando primum afficit corpus, et non transivit in habitum, sicut in ethico in quo habetur calor ut habitus : et sicut frigiditas quæ primo afficit id quod tangit, et adhuc non transivit in habitum, sicut in eo qui frigida paralysi dissolutus est : et sicut sanitas quæ est habitus et medietates temperatæ ad naturam complexionis, et ægritudo quæ est hujusmodi medietatis distemperantia, et alia hujusmodi : circa enim talia quamdiu dispositiones sunt, afficitur homo quodammodo tactu metaphorico ad non magnam immutationem : cito enim et facili occasione permutatur homo talibus, sicut cum ex calido frigidus fit, et e converso : et sic facile ex sanitate in aliquam ægritudinem transit. Similiter autem est in aliis habitibus per modum habitus dictis. Dispositio enim quodlibet talium dicitur, nisi forte in his quæ dicta sunt sic fiat, quod contingat ea per longitudinem temporis transferri in aliquod simile naturæ cujuscumque, quod secundum ea quale dicitur : tunc enim vincit potentiam, et stat in eo potentia sicut in ultimo perfecto, et tunc est habitus : et tunc aliquis secundum ista efficitur insanabilis, hoc est, non facile sanabilis et permutabilis ad formam habitus : talis enim affectus sive dispositio afficiens quemcumque, non de facili mobilis efficitur, et est talis quem quilibet recte lo- quens habitudinem vel habitum potius quam affectum vel dispositionem nominat.

But through sicknesses such permutations especially happen, because although such habits are present according to the soul, yet because the body is the organ of the soul, the permutation of the body impedes the operations of the soul and corrupts such habits. Such a habit also (when it is possessed perfectly and for an expeditious act) is so called. Similarly is called also virtue, which is fortitude, and justice, or chastity and such, which are of the number of such, which namely dictate perfections toward a proper and general act, whether it be of nature or of art, just as sight is a natural habit, and science and virtue are acquired habits, and health a habit of the body and sickness likewise. Similarly when such things perfecting the powers of the soul -

[soul]- or of the body toward the acts due to them, are rooted and attained so that they cannot easily be removed from the subject nor easily changed except from great changes, then they are called habits, because then they are possessed with perfect attainment: and because then the power which before was wavering in act and fluctuating, stands in them, as in a perfecting and perfected form toward the operations of that power.

But they are called affections or dispositions when the subject is not except in some way affected or disposed through them, and the power is not yet perfectly attained, but is continually disposed toward something else. And therefore such dispositions or affections are easily and quickly changeable into the contrary even by small occasions, just as heat when it first affects the body, and has not passed into a habit, as in the case of a feverish man [ethico] in whom heat is held as a habit: and just as coldness which first affects that which it touches, and has not yet passed into a habit, as in him who is dissolved by a cold paralysis: and just as health which is a habit and temperate medieties according to the nature of the complexion, and sickness which is a distemperance of this kind of mediety, and other such: for concerning such [things], as long as they are dispositions, a man is affected in a certain way by a metaphorical touch toward a not great immutation: for quickly and by an easy occasion a man is changed by such, as when from hot he becomes cold, and vice versa: and thus easily from health he passes into some sickness. But similarly it is in other habits spoken of after the manner of a habit. For 'disposition' is said of any of such, unless perhaps in these which were mentioned it should so happen that it occurs that through length of time they are transferred into something similar to the nature of whatever thing, which is called 'such' according to them: for then it overcomes the power, and the power stands in it as in the ultimate perfect [state], and then it is a habit: and then someone according to these is made incurable, that is, not easily curable and changeable to the form of the habit: for such an affection or disposition affecting anyone is made not easily movable, and is such as anyone speaking rightly - calls a habitude or habit rather than an affection or disposition.

Quod autem ipsa sua substantiali ratione velint habitudines nominari et non dispositiones, manifestum est quando sunt difficile mobilia et tempore diuturniora per quod transeunt in modum naturæ. Et hoc patet inductione : namque in disciplinabilibus qui disciplinas etiam non multum sunt retinentes, sed adhuc ab eis facile mobiles sunt per oblivionem, dicuntur habitum scientiæ disciplinalis non habere, quamvis ad disciplinam sint vel pejus vel melius forte dispositi et affecti. Propter quod patet quod differt habitus a dispositione non formaliter, sed in hoc quod dispositio facile mobile aliquid est, illud autem quod est habitus, diuturnius radicatum est et ideo difficile mobile.

Habent autem ad se invicem habitus et dispositio secundum quod qualem faciunt substantiam, quodammodo sicut inferius et superius : et ideo ad idem et ad eamdem pertinent speciem. Habitus enim sunt aliquo modo dispositiones sed dispositiones non necesse est esse habitus. Dispositio enim est id quod disponit ad aliquod agendum, et cum habitus perficiat et inclinet potentiam ad actum sive operationem, est habitus secundum hoc dispositio. Propter quod dicit Tullius, quod habitus est dispositio perfecti ad optimum. Et hoc modo vult Aristoteles in Ethicis, quod habitus est dispositio ad felicitatem. Sed dispositiones non necesse est esse habitus, cujus probatio est : quia qui retinent habitum, sunt etiam quodammodo dispositi, quia dispositio dicit ordinationem potentiæ ad actum. Unde habitum habentes dispositi sunt pejus vel melius ad ea quæ habent habitum. Qui autem quodammodo dispositi sunt, non sequitur omnino sive universaliter quod retineant habitum. Et hujus causa est, quod dispositio nomine suo non dicit nisi ordinationem potentiæ ad actum : et hoc potest esse vel plene adeptum, et sic est habitus, vel non plene, et sic non addit aliquid super commune nomen dispositionis, et vocatur nomine communi dispositio : et in quantum deficit a perfecto, opponitur habitui, et ideo nomen habitus non meretur.

Caput III

De dubitationibus quæ sunt circa prædicta.

Est autem in his quæ dicta sunt multa dubitatio. Est enim primum dubium, cum una species qualitatis sit una forma simplex, videtur quod unico et simplici nomine habeat nominari. Et videtur quod hæc species unum simplex nomen habere debeat, ut dicatur habitus vel dispositio tantum altero nomine, non autem dicitur habitus et dispositio tanquam utrumque nomen conveniat per copulativam conjunctionem.

Adhuc propter hoc quod est facile mobile vel difficile, videtur quod non deberet nomen geminari vel variari : quia hæc accidunt eidem, et propter accidens nomen substantiale variari non debet, ut videtur.

But that they should wish to be called habitudes and not dispositions by their own substantial reason is manifest when they are difficultly movable and longer-lasting in time through which they pass into the mode of nature. And this is clear by induction: for in disciplinable [subjects] those who are not much retainers even of the disciplines, but are yet easily movable from them through forgetfulness, are said not to have the habit of disciplinable science, although they are perhaps disposed and affected either worse or better toward the discipline. Wherefore it is clear that habit differs from disposition not formally, but in this, that disposition is something easily movable, but that which is a habit is more lastingly rooted and therefore difficultly movable.

But habit and disposition relate to each other according as they make the substance 'such' [qualified], in a certain way like the lower and the higher: and therefore they pertain to the same thing and to the same species. For habits are in some way dispositions, but it is not necessary that dispositions be habits. For a disposition is that which disposes toward doing something, and since a habit perfects and inclines the power toward an act or operation, a habit is according to this a disposition. Wherefore Tully says that a habit is a disposition of the perfect toward the best. And in this way Aristotle wills in the Ethics that a habit is a disposition toward happiness. But it is not necessary that dispositions be habits, the proof of which is: because those who retain a habit are also in a certain way disposed, because disposition dictates an ordering of the power toward the act. Whence those possessing a habit are disposed better or worse toward those [things] of which they have the habit. But as for those who are in a certain way disposed, it does not follow altogether or universally that they retain the habit. And the cause of this is that disposition by its own name does not dictate except an ordering of the power toward the act: and this can be either fully attained, and thus it is a habit, or not fully, and thus it does not add any-

[any]-thing above the common name of disposition, and is called by the common name 'disposition': and insofar as it falls short of the perfect, it is opposed to habit, and therefore does not deserve the name of habit.

Chapter III

Concerning the doubts which are about the aforesaid things.

But in these things which have been said there is much doubt. For the first doubt is, since one species of quality is one simple form, it seems that it ought to be named by a single and simple name. And it seems that this species ought to have one simple name, so that it be called either habit or disposition only by one name, but it is not called habit and disposition as if both names were suitable by a copulative conjunction.

Furthermore, because of this that it is easily movable or difficultly, it seems that the name should not be doubled or varied: because these happen to the same thing, and on account of an accident the substantial name ought not to be varied, as it seems.

Adhuc autem cum ex similibus actibus similes relinquantur dispositiones et habitus, videtur quod tam habitus quam dispositio habeant causam efficientem quæ formaliter agit unum : cum autem formaliter agens non nisi ad formam suam agat in eo in quod agit et formam suam inducit, videtur quod dispositio et habitus sint unius formæ, sed a forma nomina imponuntur. Videtur igitur, quod uno nomine formali debeant nominari. Et hoc quidem concesserunt Antiqui, ut videtur Boëtius innuere, et hoc quod nos dicimus dispositionem et habitum communi nomine applicationem nominaverunt.

Ulterius etiam quæritur, cum ex dispositione fiat habitus, qualiter fiat habitus ex dispositione : quia enim ex actibus relinquuntur dispositiones, oportet quod aliquid formale relinquat primus actus et aliquid secundus, et sic deinceps : aut ergo idem est quod relinquitur ex actibus aut non est idem. Si idem, sequitur quod idem simpliciter secundum formam agatur a multis agentibus tempore divisis, quod non est intelligibile : idem enim et unum non potest habere multas causas æque propinquas secundum unum et idem genus causalitatis. Si autem diversa sunt quæ relinquuntur ex actibus, tunc quæritur quid illa uniat in una habitus substantia : hoc enim non potest facere subjectum, quia unitas subjecti non facit accidentium unitatem : quia in uno et eodem subjecto multa sunt accidentia et genere et specie differentia.

Adhuc quæratur quot actus, vel quid sive quantum tempus exigitur ad hoc quod de dispositione fiat habitus ?

Adhuc secundum Aristotelem, cum aliquis de non sciente fit sciens, est motus quidam : in alteratione autem est motus, in quo est quale post quale, et forma post formam, et continue fluxus de potentia ad actum : et secundum hoc videtur quod operationes habitum inducentes secundum formam scientiæ vel virtutis continue alterent potentiam animæ et animam, donec veniat in actum perfectum scientiæ vel virtutis, et hoc sit ex dispositione fieri habitum, quod dispositio sit sicut motus, et habitus sit sicut finis motus, quando est in motum esse in actu perfecto. Sed si hoc conceditur, tunc videtur, quod operationes quæ disponunt, non sint continuæ sed interruptæ : et qui sic accipit habitum, non movetur motu continuo, sed interrupto : et videtur quod multoties sit in motum esse, et sic multoties in habitu, ut videtur.

Adhuc multi sunt habitus qui non fiunt ex præcedentibus dispositionibus, sicut habitus infusi et concreati : et sic non semper est habitus ex dispositione.

Adhuc ulterius quæritur de hoc quod videtur dicere Aristoteles dispositiones -

Furthermore, since from similar acts similar dispositions and habits are left, it seems that both habit and disposition have an efficient cause which formally acts as one: but since that which acts formally does not act except according to its own form in that in which it acts and induces its own form, it seems that disposition and habit are of one form, but names are imposed from the form. It seems therefore that they ought to be named by one formal name. And this indeed the Ancients conceded, as Boethius seems to intimate, and this which we call disposition and habit, they named by the common name 'application' [applicatio].

Furthermore, it is asked, since habit is made from disposition, how habit is made from disposition: for since dispositions are left from acts, it is necessary that the first act leave something formal and the second something else, and so on: either therefore it is the same which is left from the acts or it is not the same. If it is the same, it follows that the same thing simply according to form is acted upon by many agents divided in time, which is not intelligible: for the same and one cannot have many causes equally proximate according to one and the same genus of causality. But if those things which are left from the acts are different, then it is asked what unites them in one substance of a habit: for the subject cannot do this, because the unity of the subject does not make the unity of accidents: since in one and the same subject there are many accidents differing both in genus and species.

Furthermore, let it be asked how many acts, or what or how much time is required for a habit to be made from a disposition?

Furthermore, according to Aristotle, when someone from not knowing becomes knowing, it is a certain motion: but in alteration there is motion, in which there is quality after quality, and form after form, and a continuous flux from power to act: and according to this it seems that operations inducing a habit according to the form of science or virtue continuously alter the power of the soul and the soul, until it comes into the perfect act of science or virtue, and this would be the making of a habit from a disposition, so that disposition would be like motion, and habit like the end of motion, when it is in the state of having been moved in perfect act. But if this is conceded, then it seems that the operations which dispose are not continuous but interrupted: and he who thus receives a habit is not moved by a continuous motion, but by an interrupted one: and it seems that many times it is in the state of having been moved, and thus many times in habit, as it seems.

Furthermore, there are many habits which are not made from preceding dispositions, such as infused and con-created habits: and thus a habit is not always from a disposition.

Furthermore, it is asked about that which Aristotle seems to say, that dispositions -

esse affectiones : et videtur quod calidum et frigidum, sive calorem et frigus vocet dispositiones et habitus, quæ sunt potius in tertia specie qualitatis, quæ est passio vel passibilis qualitas. Si autem dicatur quod sunt in prima specie et in tertia secundum aliquem modum, contra hunc modum hoc est quod supra in ante habitis determinatum est, quod scilicet diversorum generum non subalternatim positorum diversæ sunt species et differentiæ : dispositio autem et habitus, et passio vel passibilis qualitas, diversa sunt qualitatis genera et non subalternatim posita.

Ad hæc autem et similia dicendum videtur, quod dispositio et habitus sunt una species et prima qualitatis, quæ facit quale secundum accidentalem denominationem. Sunt autem una species ab una forma qua informatur subjectum in specie : quia dispositio ejusdem speciei est cum habitu, sicut si dispositus sit aliquis scibili logico vel geometrico, idem scibile perfecte habet quando scientiam habet in habitu. Unde scibile in dispositione, et scibile in habitu est ejusdem formæ in scientia, et propter hoc etiam una species et non duæ sunt qualitatis habitus et dispositio. Nominatur autem duobus modis : quia ipsa non nominatur tantum quale quod talis qualitas relinquit in subjecto secundum formam : sed nominatur et hoc accidens secundum quod est id quale in subjecto, secundum hoc quod perfecte subjectum habet illud vel imperfecte. Quæ duo quia modum habent oppositum, uno nomine nominari non possunt, sed unum est imperfectum, alterum perfectum ad actum : habens enim habitum sine impedimento agit cum voluerit, dispositus autem agit impedite. Et quia, ut dictum est, ad unam formam pertinent habitus et dispositio, ideo nomina perfecti et imperfecti per copulativam conjunguntur conjunctionem, quia indifferenter per esse perfecti et imperfecti quæ in motu uno ordinantur ad unum finem : ideo dispositio materialis est ad habitum, et dispositio est actus imperfecti, habitus autem est actus perfecti et constituti. Hæc est ergo causa duorum nominum et ordinis dispositionis ad habitum, et copulationis quæ conjungit inter duo nomina.

Ad id autem quod objicitur, quod facile esse mobile vel difficile sunt accidentia qualis, secundum quod est in substantia, Dicendum quod hoc verum est, sed quia nomina ab his accidentibus imponuntur, propterea necesse fuit dari duo nomina. Et quod objicitur, quod duo sunt nomina illius qualis secundum formam, Dicendum quod hoc verum est, sed sunt nomina qualitatis illius, secundum quod quale quod dicit qualitatem illam, radicatum est in subjecto : et a talibus accidentibus sæpe fiunt impositiones nominum, maxime autem in accidentibus quorum propria nominatio et etiam diffinitio est, quod nominentur secundum quod sunt in subjecto a quo et in quo esse et nomen et diffinitionem accipiunt : et hæc est causa quod duo sunt nomina illius speciei, quæ tamen in forma unum sunt et in fine.

are affections: and it seems that he calls hot and cold, or heat and cold, dispositions and habits, which are rather in the third species of quality, which is passion or passible quality. But if it is said that they are in the first species and in the third according to some mode, against this mode is what was determined above in the previous matters: namely that of diverse genera not placed subalternately there are diverse species and differences: but disposition and habit, and passion or passible quality, are diverse genera of quality and not placed subalternately.

To these and similar things, however, it seems it must be said that disposition and habit are one species and the first of quality, which makes a qualified thing according to an accidental denomination. Moreover they are one species from one form by which the subject is informed in species: because a disposition is of the same species with a habit, just as if someone is disposed by a logical or geometrical knowable, he has that same knowable perfectly when he has the knowledge in habit. Hence a knowable in disposition, and a knowable in habit is of the same form in knowledge, and on account of this also habit and disposition are one species of quality and not two. However, it is named in two ways: because it isn't only named as the qualified thing which such a quality leaves in a subject according to form: but also this accident is named according as it is that qualified thing in the subject, according to whether the subject has it perfectly or imperfectly. Which two things, because they have an opposite mode, cannot be named by one name, but one is imperfect, the other perfect towards an act: for one having a habit acts without impediment when he wishes, but one who is disposed acts with impediment. And because, as has been said, habit and disposition pertain to one form, therefore the names of perfect and imperfect are joined through a copulative conjunction, because indifferently through the being of perfect and imperfect which are ordered in one motion to one end: therefore disposition is material towards a habit, and a disposition is the act of the imperfect, but a habit is the act of the perfect and constituted. This is therefore the cause of the two names and of the order of disposition to habit, and of the copulation which joins between the two names.

To that, however, which is objected, that to be easily movable or with difficulty are accidents of a qualified thing, according as it is in a substance, it must be said that this is true, but because names are imposed from these accidents, for that reason it was necessary to give two names. And to what is objected, that there are two names of that qualified thing according to form, it must be said that this is true, but they are names of that quality, according as the qualified thing which speaks of that quality, is rooted in the subject: and from such accidents impositions of names are often made, but especially in accidents whose proper naming and also definition is, that they be named according as they are in the subject from which and in which they receive their being and name and definition: and this is the cause that there are two names of that species, which nevertheless are one in form and in end.

Ad hoc autem quod objicitur quod ex similibus actibus similes relinquuntur dispositiones et habitus, Dicendum quod verum est, et verum est etiam quod sunt unius formæ : sed non semper a forma est nominatio : quandoque enim, sicut dictum est, fit denominatio ab accidente formam consequente, et sic fit hic quando dicitur dispositio et habitus. Ad hoc quod dicitur quod Antiqui hanc speciem uno nomine applicationis nominaverunt, Dicendum quod hoc verum est, et ideo per errorem decepti istas species dixerunt non esse species qualitatis, sed dixerunt eas per modos distingui per quos efficiuntur in substantia, sive per modos per quos insunt subjecto : et quia prima species est per modum acquisitionis per ipsas subjecti operationes, et quod per operationes acquiritur, subjecto paulatim applicatur, ideo primam speciem applicationem communi nomine dispositionis et habitus notaverunt. Et quia secunda species est de potentia consequente esse substantiale,

per quod efficitur aliquid potens ad agendum vel patiendum, ideo illam communi nomine naturalem aptitudinem dixerunt. Quia vero tertia est de his quÃ¦ casu agunt in sensibus passiones, vel aguntur ab illis, ideo illam speciem communi nomine vocaverunt casum. Quia autem per quartam speciem componitur substantia in partibus secundum certitudinem terminationum suÃ¦ quantitatis, ideo illam communi nomine vocaverunt compositionem. Et quamvis hoc illa ratione quÃ¦ dicta est verum sit, tamen patet quod illa nomina communia non dicunt species et formas differentes qualitate et quali quod a qualitate quale dicitur, et sic habent proprie distingui secundum quod etiam species quantitatis, et ejus quod est ad aliquid distinctÃ¦ sunt : hÃ¦c autem in modo distinguendo unum nomen habere non possunt.

Ad hoc autem quod ulterius quÃ¦ritur de relatione dispositionum et habitum ex actibus sive operationibus, Dicendum quod verum est quod ex similibus actibus similes relinquuntur habitus et dispositiones. Actus autem inducunt dispositiones et habitus duobus modis. Uno modo dispositiones et habitus contrarios a subjecto quod est potentia secundum quam fit operatio removendo : et hunc modum dixerunt Socrates et Plato, qui dixerunt scientias et virtutes inesse per naturam, et per studium et exercitium depurari subjectum ut eluceat in anima quod est per naturam, sicut lapis pretiosus politione quidem nihil accipit, sed cum abstergitur ab eo quod impurum est, tunc micat in eo puritas naturalis. Hic est ergo unus modus quo contrariÃ¦ dispositiones removentur.

To this, however, which is objected that from similar acts similar dispositions and habits are left, it must be said that it is true, and it is also true that they are of one form: but nomination is not always from form: for sometimes, as has been said, denomination happens from an accident consequent upon the form, and so it happens here when disposition and habit are spoken of. To what is said that the Ancients named this species with the one name of application, it must be said that this is true, and therefore deceived by error they said those species are not species of quality, but they said that they are distinguished by the modes through which they are effected in a substance, or by the modes through which they are in a subject: and because the first species is through a mode of acquisition through the very operations of a subject, and what is acquired through operations, is gradually applied to the subject, therefore they noted the first species as application by the common name of disposition and habit. And because the second species is concerning a potency consequent upon substantial being,

through which something is made capable of acting or suffering, therefore they called that by the common name of natural aptitude. But because the third is about those things which by chance effect passions in the senses, or are acted upon by them, therefore they called that species by the common name of chance. And because through the fourth species a substance is composed in its parts according to the certainty of the boundaries of its quantity, therefore they called that by the common name of composition. And although this be true for that reason which has been stated, nevertheless it is clear that those common names do not speak of species and forms differing in quality and in the qualified thing which is called qualified from the quality, and thus they have to be properly distinguished just as also the species of quantity, and of that which is relative, are distinct: but these cannot have one name in the mode of distinguishing.

To that, however, which is further asked concerning the relation of dispositions and habits from acts or operations, it must be said that it is true that from similar acts similar habits and dispositions are left. Moreover, acts induce dispositions and habits in two ways. In one way, by removing contrary dispositions and habits from the subject which is the power according to which the operation happens: and this mode was spoken of by Socrates and Plato, who said that sciences and virtues are present by nature, and that through study and exercise the subject is purified so that what is by nature may shine forth in the soul, just as a precious stone indeed receives nothing by polishing, but when what is impure is wiped away from it, then natural purity gleams in it. This is, therefore, one mode by which contrary dispositions are removed.

Secundus autem modus est quo generatur in actu forma in anima, quÃ¦ est operationi formÃ¦ similis, sicut in eo quod movetur forma motoris secundum actum, quÃ¦ antequam moveret motum, non fuit in eo quod movetur nisi secundum potentiam : et sic de potentia ad speciem operationis educitur anima in dispositione et habitu.

Ad hoc autem quod quÃ¦ritur utrum idem sit quod relinquitur ex primo actu cum eo quod relinquitur ex secundo, et sic deinceps, videtur secundum Aristotelem, quod idem est in substantia formÃ¦ sed diversum secundum esse : esse enim relictum ex prima operatione, magis est permixtum potentiÃ¦ quam relictum ex secunda, sicut id motu quod est juxta principium, magis in potentia est quam id quod est juxta finem. Quud autem ulterius infertur, quod unum et idem sic habet multas causas secundum genus causalitatis, Dicendum quod nihil est inconveniens dummodo illud idem sit diversum secundum esse : quia sunt diversa agentia per quÃ¦ efficitur in esse, et esse diverso quousque stet in actu ultimo : et sic in uno alterato possunt esse diversa non specie sed numero alterantia, et in uno augmentato possunt esse diversa non specie sed numero augmentantia : et hoc nihil est inconveniens. Sed quod simul in una et eadem hora sint diversa, et Ã¦que immediata secundum unum et idem genus causalitatis in idem eodem modo agentia, hoc esse non potest.

Ad hoc autem quod quÃ¦ritur quot numero actus vel quantum tempus requiritur ad hoc quod ex dispositione fiat habitus, Dicendum quod non est determinare, quia subjecta non Ã¦que habilia sunt ad habitus susceptionem : et ideo in uno plura, in alio vero pauciora requiruntur.

Ad hoc quod quÃ¦ritur de talis motus continuitate vel interpositione , Dicendum quod nihil prohibet motum hunc ex parte mobilis esse continuum, et ex parte motoris esse interruptum. Hoc dicit Averroes super 2 de Anima et super librum de Generatione et Corruptione, quod si aliquis per annum augeatur per spatium cubiti, non est necesse quod hoc qualibet septimana, et quolibet die et qualibet hora proportionaliter secundum divisionem

But the second mode is that by which a form is generated in act in the soul, which is similar to the form of the operation, just as in that which is moved the form of the mover is according to act, which before it moved the moved thing, was not in that which is moved except according to power: and thus from power the soul is led out into disposition and habit towards the species of the operation.

To that, however, which is asked, whether what is left from the first act is the same as that which is left from the second, and so on, it seems according to Aristotle that it is the same in the substance of the form but diverse according to being: for the being left from the first operation is more mixed with power than that left from the second, just as that in motion which is near the beginning is more in power than that which is near the end. But to what is further inferred, that one and the same thing thus has many causes according to the genus of causality, it must be said that nothing is inconvenient provided that that same thing be diverse according to being: because there are diverse agents through which it is effected in being, and in a diverse being until it stands in the last act: and thus in one altered thing there can be diverse alterants not in species but in number, and in one augmented thing there can be diverse augmentants not in species but in number: and this is nothing inconvenient. But that at one and the same hour there be diverse things, and equally immediate according to one and the same genus of causality acting upon the same thing in the same way, this cannot be.

To that, however, which is asked how many acts in number or how much time is required for a habit to be made from a disposition, it must be said that it cannot be determined, because subjects are not equally apt for the reception of a habit: and therefore in one more are required, but in another fewer.

To that which is asked concerning the continuity or interposition of such motion, it must be said that nothing prohibits this motion from being continuous on the part of the movable thing, and interrupted on the part of the mover. Averroes says this on the 2nd book of *On the Soul* and on the book *On Generation and Corruption*, that if someone be augmented by the space of a cubit through a year, it is not necessary that he be augmented proportionally according to the division of time in any week, or any day, or any hour.

temporis augeatur : aliquando enim minus, aliquando plus augetur, cum semper exeat de imperfecto ad perfectum, vel exeundo a dispositione contraria, vel augmentum accipiendo. Ita etiam dicendum est hic quod motus est continuus ex parte mobilis continue deponendo dispositiones contrarias, vel speciem moventis accipiendo : sed non oportet quod motor semper maneat actu, quia forma quam primo impressit ipsa in se habens virtutem motoris, movet actu, sicut est virtus movens in semine : propter quod non sequitur quod motus sit aliquando ex parte mobilis interruptus. Et ideo dicit Boetius quod scientia principiorum in sensibilibus seminalem sensualem habet virtutem ad scientias.

Ad hoc autem quod dicitur quod multi sunt habitus connaturales et concreati, qui ex dispositionibus non videntur relinqui, Dicendum quod multi habitus connaturales ex dispositionibus relinquuntur naturalibus, ut habitus visus ad quem per principia alterantia disponitur oculus intuentis ex humorum oculi adunatione. Quidan etiam sunt ad quos subjectum per naturam statim dum esse dispositum est, et illi fundantur in dispositionibus suis, quamvis habeant dispositiones se tempore prÃ¦cedentes.

Ad hoc autem quod dispositio dicitur affectio ab Aristotele, Dicendum quod hoc dictum est per quamdam similitudinem, quia sicut affectio est per suam operationem aliquid faciens, hoc est quod actione appropinquat, sed id in quod agit, nondum per actionem suam ad formam suam convertitur : ita dispositio est quÃ¦dam patientis et moti ordinatio ad actum agentis quem nondum perfecte adeptum est : et per hanc similitudinem dispositio dicitur affectio. Et quod dicitur de calido et frigido per affectionem vel per modum habitus suscepto, totum per similitudinem dictum est ad modum accipiendi habitum et dispositionem : et non est ideo dictum quod calor et frigus per se sint habitus et dispositiones, sed ideo quia receptio eorum in subjecto aliquando est per modum dispositionis, aliquando per modum habitus. Et ex his patet solutio quÃ¦sitorum.

Caput IV.

De alio genere qualitatis quod naturalis potentia vel impotentia dicitur.

Aliud vero genus non quidem generalissimum, sed genus subalternum est, quod dicimus naturalem potentiam vel impotentiam. Est enim quÃ¦dam qualitas in substantialibus principiis rei radicata, quÃ¦ totum substantiale esse constitutum et perfectum consequitur, secundum quam quales, hoc est, potentes dicuntur ad facile faciendum vel patiendum, et non facile faciendum ea quÃ¦ sunt secundum naturam vel naturÃ¦ conservationem.

of time: for sometimes it is augmented less, sometimes more, since it always goes out from the imperfect to the perfect, either by going out from a contrary disposition, or by receiving an increase. So also it must be said here that the motion is continuous on the part of the movable thing by continuously laying aside contrary dispositions, or by receiving the species of the mover: but it is not necessary that the mover always remain in act, because the form which it first impressed, having in itself the power of the mover, moves in act, just as there is a moving power in a seed: on account of which it does not follow that the motion is at any time interrupted on the part of the movable thing. And therefore Boethius says that the knowledge of principles has a seminal sensible power towards the sciences.

To that, however, which is said that there are many connatural and con-created habits, which do not seem to be left from dispositions, it must be said that many connatural habits are left from natural dispositions, as the habit of sight for which the eye of the beholder is disposed through altering principles from the union of the humors of the eye. There are also some for which the subject is disposed by nature immediately as it exists, and those are founded in their dispositions, although they have dispositions preceding them in time.

To that, however, that disposition is called an affection by Aristotle, it must be said that this was stated through a certain similitude, because just as an affection is something making through its operation, that is, what approaches through action, but that upon which it acts is not yet converted to its form through its action: so a disposition is a certain ordering of the patient and the moved thing toward the act of the agent which it has not yet perfectly attained: and through this similitude a disposition is called an affection. And what is said concerning hot and cold received through affection or through the mode of habit, all was stated through similitude to the mode of receiving habit and disposition: and it was not stated on that account that heat and cold are in themselves habits and dispositions, but therefore because their reception in a subject is sometimes through the mode of disposition, sometimes through the mode of habit. And from these the solution to the things asked is clear.

Chapter IV.

Concerning another genus of quality which is called natural potency or impotency.

Another genus, indeed not a most general one, but a subaltern genus, is what we call natural potency or impotency. For it is a certain quality rooted in the substantial principles of a thing, which follows upon the whole substantial being constituted and perfected, according to which things are called qualified, that is, powerful to easily do or suffer, and not easily do those things which are according to nature or the conservation of nature.

Et quando quidem talis potentia causatur ex victoria formÃ¦ super materiam quam forma perfecte ad se terminat et tenet terminatam, ita quod contrariis resistit alterationibus, tunc vocatur talis qualitas naturalis potentia : naturalis quidem, quia in naturalibus principiis radicatur ; potentia autem est, quia est vigor et valor formÃ¦ super materiam ad agendum ea quÃ¦ sunt secundum naturam sine impedimento. Per oppositum autem naturalis impotentia causatur ex victoria materiÃ¦ et privationis super formam quam contraria impedit dispositio : quam materia perfecte comprehendere et ad se terminare non potest : et ideo vigor diminuitur ad actiones naturales, et facile patitur, et vincitur a contrariis. Et dicitur naturalis impotentia, non quia natura hujus defectus principium sit, sed quia natura impeditur contrariis dispositionibus ne ad talem vigorem possit pervenire. Hoc igitur genus et non species dicitur, quia convenientia in genere minor

est quam convenientia in specie ; convenientia enim in genere conveniunt in potentia materiæ, convenientia enim in specie conveniunt in actu et forma : et quia naturalis potentia vel impotentia non conveniunt nisi in potentia materiæ, ideo dicuntur genus, quia in solo genere conveniunt. Et quia non uniuntur in uno hæc duo, ideo non per copulativam, sed per disjunctivam disjunguntur conjunctionem.

Naturalis igitur potentia est qualitas secundum quam habentes eam potentes ad naturalia dicuntur ; naturalis impotentia etiam quales facit secundum quam eam habentes impotentes dicuntur ad naturalia. Hæc igitur a principiis habita species, aliud est genus qualitatis secundum quod quales dicimus aliquos pugillatores, qui ex ipsis principiis naturam constituentibus apti sunt fortes ictus dare, ut qui fortiora et exercitata ad motum facilem habent brachia et non impedita : et secundum quod dicimus quosdam ex naturalium principiorum dispositione cursores, qui valde longa et agilia et mobilia habent crura, et non magnum pondus corporis quod lassitudinem inducat. Et secundum quod quosdam dicimus salubres sive salvos, ut quorum caro proportionalis est in membris et densa et vestita undique modico adipe : hæc enim non recipit contraria, et fortiter tenet temperamentum complexionis, et a se repellit nociva. Contrarios autem horum in carnis dispositione dicimus insalubres vel ægrotativos secundum naturalem impotentiam, quia nihil horum quæ dicta sunt perficere possunt per potentiam naturalem , hoc modo dicimus sanativos vel ægrotativos. Et simpliciter sive universaliter dicimus omnia illa , et secundum hanc qualitatem qualiacumque dicuntur potentia vel impotentia secundum qualitatem quæ dicitur naturalis potentia vel impotentia. Hos enim dicimus sic potentes vel impotentes, quod aliquo modo sunt dispositi per aliquid generatum in ipsis.

And when indeed such potency is caused from the victory of form over matter, which the form perfectly terminates to itself and holds terminated, so that it resists contrary alterations, then such quality is called natural potency: natural indeed, because it is rooted in natural principles; but it is a potency, because it is the vigor and value of the form over matter for doing those things which are according to nature without impediment. But by the opposite, natural impotency is caused from the victory of matter and privation over the form which a contrary disposition impedes: which matter cannot perfectly comprehend and terminate to itself: and therefore vigor is diminished towards natural actions, and it easily suffers, and is overcome by contraries. And it is called natural impotency, not because nature is the principle of this defect, but because nature is impeded by contrary dispositions lest it be able to arrive at such vigor. This, therefore, is called a genus and not a species, because the agreement in a genus is less

than the convenience in species; for things agreeing in genus agree in the potency of matter, but things agreeing in species agree in act and form: and because natural potency or impotentia agree only in the potency of matter, therefore they are called a genus, because they agree only in a genus. And because these two are not united in one, therefore they are disjoined not by a copulative, but by a disjunctive conjunction.

Natural potency therefore is a quality according to which those having it are called potent towards natural things; natural impotency also makes things qualified according to which those having it are called impotent towards natural things. This species, therefore, had from principles, is another genus of quality according to which we call some pugilists qualified, who from the very principles constituting their nature are apt to give strong blows, as those who have stronger and exercised arms for easy motion and not impeded: and according to which we call some from the disposition of natural principles runners, who have very long and agile and mobile legs, and not a great weight of body which would induce weariness. And according to which we call some healthy or safe, as those whose flesh is proportional in its members and dense and clothed everywhere with a moderate amount of fat: for this does not receive contraries, and strongly holds the temperament of its complexion, and repels harmful things from itself. But we call the contraries of these in the disposition of the flesh unhealthy or sickly according to a natural impotency, because they can accomplish none of these things which have been said through a natural potency, in this way we call them healing or sickly. And simply or universally we call all those, and according to this quality of whatever sort they are called potent or impotent according to the quality which is called natural potency or impotency. For we call these thus potent or impotent, because they are in some way disposed through something generated in them.

Unde non propter dispositionem advenientem dicimus unumquodque illorum naturaliter potens vel impotens, sicut illi qui per artem vel exercitium efficiuntur pugillatores vel cursores, vel operatione medicinæ fiunt sanativi vel ægrotativi : sed ideo dicuntur tales, quod habeant potentiam naturalem in principiis naturalibus fundatam ad facere quid facile eorum quæ sunt secundum naturam, vel nihil pati eorum quæ sunt contra naturam : sicut pugillatores vel cursores ex naturali potentia dicuntur, non quod sint dispositi arte vel exercitio, sed quia habent naturalem potentiam in principiis naturalibus fundatam hoc facile faciendi sine naturali impedimento : sicut etiam dicuntur sanativi, eo quod habeant potentiam naturalem, ut contra sanitatem aliquibus levibus accidentibus patiantur. Ægrotativi autem dicuntur qui ad hoc ipsum habent impotentiam naturalem, nihil scilicet contra sanitatem patiendi. Similiter autem his dicitur durum et molle, et similiter his sese habent secundum potentiam naturalem. Durum enim dicitur quod a constantia partium habet potentiam naturalem quod non cito secetur vel dividatur , molle autem eo quod cedit cito tangenti, et dicitur ejusdem secationis passivum, in quantum ad resistendum habet impotentiam naturalem, et sic de aliis.

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CAPUT V — *De dubitationibus quæ sunt circa secundum genus qualitatis.*

Oritur autem dubium circa prædicta : quia cum naturalis potentia vel impotentia sint in primis principiis rei constituentibus radicata, habitus autem et dispositio sint acquisita tempore, indigentia et doctrina, et exercitio assuetudinis, videtur quod naturalis potentia vel impotentia propinquiora sunt substantiæ quam habitus et dispositio. Videtur ergo quod naturalis potentia vel impotentia debeat esse prima species qualitatis et non secunda.

Secunda. Ad hoc idem facit quod potentia naturalis præcedit esse, dispositio autem et habitus esse rei consequuntur : videtur ergo quod potentia naturalis vel impotentia prima qualitatis species esse deberet.

Tertia. Adhuc omnis dispositio et habitus supponit ante se potentiam naturalem vel impotentiam. His igitur rationibus prior videtur esse species qualitatis, quæ est naturalis potentia vel impotentia.

Quarta. Ulterius autem quæritur utrum potentia naturalis sit qualitas ? potentia enim naturalis est a forma vincente super materiam, ut dictum est : hoc autem modo potentia naturalis est rationalitas, et intellectus, et ratio, et voluntas, et hujusmodi, ut generaliter dicatur, omnis potestas animæ secundum omnem partem ipsius, ut adhuc generalius dicas, omnis potestas formæ secundum quod actionis principium est forma : hæc autem omnia partes substantiales esse dicuntur et non qualitates.

Hence we do not say each of them is naturally potent or impotent on account of an adventitious disposition, like those who through art or exercise become pugilists or runners, or by the operation of medicine become healing or sickly: but therefore they are called such, because they have a natural potency founded in natural principles to do easily anything of those things which are according to nature, or to suffer nothing of those things which are against nature: just as pugilists or runners are called from a natural potency, not because they are disposed by art or exercise, but because they have a natural potency founded in natural principles to do this easily without natural impediment: just as also they are called healing, in that they have a natural potency, so that they suffer by some light accidents against health. But those who have a natural impotency towards this very thing, namely of suffering nothing against health, are called sickly. But similarly it is called hard and soft by these, and similarly they have themselves by these according to a natural potency. For that is called hard which from the constancy of its parts has a natural potency that it may not quickly be cut or divided, but soft in that it yields quickly to what touches it, and is called passible of the same cutting, insofar as it has a natural impotency to resist, and so concerning others.

<!-- cap:1.2.5 -->

CHAPTER V — *On doubts which surround the second genus of quality.*

Now a doubt arises concerning what has been said: because since natural potency or impotency are rooted in the first constituting principles of a thing, whereas habit and disposition are acquired by time, indigency, and teaching, and the exercise of habituation, it seems that natural potency or impotency are nearer to substance than habit and disposition. It seems therefore that natural potency or impotency ought to be the first species of quality and not the second.

Second. To this same thing it does that natural potency precedes being, but disposition and habit follow the being of a thing: it seems therefore that natural potency or impotency ought to be the first species of quality.

Third. Furthermore every disposition and habit supposes before itself a natural potency or impotency. By these reasons therefore the species of quality which is natural potency or impotency seems to be prior.

Fourth. Further it is also asked whether natural potency is a quality? for natural potency is from the form overcoming the matter, as has been said: but in this way natural potency is rationality, and intellect, and reason, and will, and the like, so that generally speaking, every power of the soul according to every part of it, so that even more generally you may say, every power of the form according as the form is the principle of action: but all these things are said to be substantial parts and not qualities.

Quinta. Adhuc dicit Averroes, super secundo de *Anima*, quod omnis diversitas organorum quæ est in corpore, est propter diversitatem potestatum quæ sunt in anima : sicut ergo se habent partes corporis ad corpus, sic se habent partes animæ ad animam : partes autem corporis substantiæ sunt constituentes et integrantes corpus organicum, partes igitur animæ substantiæ sunt integrantes potestatem animæ, et sic non sunt qualitates animam consequentes : et similiter est de aliis potentiis naturalibus formarum substantialium quarumcumque.

Sexta. Eodem modo objicitur de impotentiis naturalibus formarum : hoc enim nomen fundatur in privatione, et non videtur fundari in aliquo ente vel in aliqua entis specie : videtur ergo quod non sit qualitas aliqua.

Septima. Adhuc autem non videtur rationabiliter dictum quod dictum est, quod scilicet durum est quod potest habere potentiam naturalem ad non secari, et quod molle ejusdem rei habet impotentiam : quia eodem modo potest dici quod molle habet potentiam naturalem ad facile secari, et quod durum ejusdem rei habet impotentiam [1].

Octava. Ulterius etiam quæritur, cum potentia se magis teneat ex parte materiæ quam ex parte formæ, videtur quod potentia naturalis debeat esse ex victoria materiæ super formam potius quam e contra.

Ultima. Ulterius etiam adhuc quæritur quare hæc species vel genus qualitatis uno nomine non nominatur, ut diceretur aptitudo, sicut Socrates et Plato et alii antiqui nominaverunt ?

Responsio ad primam. Ad hæc autem et similia dicendum est, quod habitus est prima species qualitatis, propter hoc quod ipsæ formæ substantiales in materia sunt ut habitus, sicut dicit Aristoteles [2], quod anima secundum quod est endelechia, inest ut habitus, et secundum hoc forma substantialis inest ut qualitas materiæ, et hoc modo differentia est ut qualitas generis. Quia ergo dispositio et habitus modum suum ponunt in primis substantiæ compositæ principiis, quæ sola substat accidentibus, ideo sunt prima species qualitatis. Potentia autem naturalis est consequens esse compositi : est enim consequens ad actum quem forma habet in composito et ad actus consequentes naturam compositi, ideo potentia naturalis est secunda species et non prima. Et quod objicitur de tempore et doctrina, non est verum de omni eo quod habet modum habitus, sed est verum de habitu acquisito tantum.

Ad secundam. Ad hoc autem quod objicitur, quod potentia naturalis præcedit esse, Dicendum quod hæc est potentia materiæ ad for-

mam et ad esse : et hæc non est naturalis potentia, sed hæc potentia est consequens semper esse.

Fifth. Furthermore Averroes says, on the second book of the *Soul*, that all diversity of organs which is in the body, is on account of the diversity of powers which are in the soul: therefore just as the parts of the body have themselves towards the body, so the parts of the soul have themselves towards the soul: but the parts of the body are substances constituting and integrating the organic body, therefore the parts of the soul are substances integrating the power of the soul, and so they are not qualities following the soul: and it is similar concerning other natural potencies of any substantial forms.

Sixth. In the same way it is objected concerning the natural impotencies of forms: for this name is founded in privation, and it does not seem to be founded in any being or in any species of being: it seems therefore that it is not any quality.

Seventh. Moreover it does not seem to be rationally said what has been said, namely that hard is what can have a natural potency towards not being cut, and that soft of the same thing has an impotency: because in the same way it can be said that soft has a natural potency towards being easily cut, and that hard of the same thing has an impotency [1].

Eighth. Further it is also asked, since potency holds itself more on the part of matter than on the part of form, it seems that natural potency ought to be from the victory of matter over form rather than the converse.

Ultimate. Further it is also still asked why this species or genus of quality is not named by one name, so that it be called aptitude, just as Socrates and Plato and other ancients named it?

Response to the first. To these and similar things it must be said, that habit is the first species of quality, on account of this that substantial forms themselves are in matter as a habit, just as Aristotle says [2], that the soul according as it is an entelechy, is present as a habit, and according to this a substantial form is present as a quality of matter, and in this way a difference is as a quality of a genus. Because therefore disposition and habit place their mode in the first principles of a composite substance, which alone substrates accidents, therefore they are the first species of quality. But natural potency follows the being of the composite: for it is consequent to the act which the form has in the composite and to the acts following the nature of the composite, therefore natural potency is the second species and not the first. And what is objected concerning time and doctrine, is not true of everything which has the mode of a habit, but is true of an acquired habit only.

To the second. To this, however, which is objected, that natural potency precedes being, it must be said that this is the potency of matter towards for-

-m and to being: and this is not a natural potency, but this potency is always consequent to being.

Ad hoc autem quod dicitur, quod omnis habitus inest secundum aliquam potentiam, Dicendum quod verum est hoc, sed non oportet quod illa potentia sit esse consequens : quia forma ut habitus inest secundum potentiam esse præcedentem : sed hoc verum est quod aliquis habitus ut acquisitus vel infusus inest secundum potentiam quæ consequitur ad esse, sed ex hoc non sequitur quod generaliter potentia consequens esse sit ante habitum, ut patet per ante dicta.

Ad hoc autem quod ulterius quæritur, si potentia naturalis sit qualitas? Dicendum quod potentia naturalis ad actus esse consequens est qualitas et accidens, secundum quod omne illud est accidens quod sequitur ad esse perfectum, quia non est de substantia : hæc autem qualitas fluit a substantialibus sicut proprium fluit ab essentialibus speciei. Et quod objicitur de partibus animæ, Dicendum quod anima non habet partes essentiales cum sit substantia simplex : sed secundum quod anima est totum potestativum, sic vires ejus intellectus, et voluntas, et sensibilis, et vegetabilis sunt partes ejus potestativæ, et sic dicuntur potentiæ naturales radicatæ in substantia ipsius, et tamen qualitates quia sunt ad actus esse consequentes [1].

Et quod dicitur, sicut se habent partes corporis ad corpus, sic partes animæ ad animam; hoc est verum secundum aliquid, et secundum aliquid non est verum : quoad hoc enim verum est, quod anima comparatur ad corpus, ut principium vitæ et motus : sic enim fluunt potentiæ ab anima, quibus influit vitam et motum corpori, quæ integrant potestatem et virtutem ejus, sicut corpus in quantum mobile ab anima et vitam recipiens, non potest esse simplex, sed oportet quod a na-

-tura ejus fluat diversitas complexionis et compositionis organorum, quibus recipiat diversimode vitam et motum : et hæ sunt partes organici corporis in quantum est organicum et non in quantum est corpus, et hoc modo sic potentiæ sequuntur naturam corporis et substantiam animæ, sicut operatio organorum sequitur naturam corporis : et hoc modo utrumque integratur partibus suis potestativis. Sed quoad modum communem non est verum, quia potentiæ animæ naturam animæ consequuntur, non ut partes naturales, sed ut proprietates naturam animæ constituentes, sed naturam animæ non derelinquentes : organa autem corporis materiales sunt partes corporis, materialiter ipsum constituentes. Et primo modo loquitur Averroes et non secundo. Idem dicendum de omnibus potentiis naturalibus a forma substantiali post esse substantiale ad actus consequentes fluentibus.

To this, however, which is said, that every habit is present according to some potency, it must be said that this is true, but it is not necessary that that potency be consequent to being: because a form as a habit is present according to a potency preceding being: but it is true that some habit as acquired or infused is present according to a potency which follows upon being, but from this it does not follow that generally a potency consequent to being is before a habit, as is clear through what was said before.

To this, however, which is further asked, if natural potency is a quality? it must be said that a natural potency for acts consequent to being is a quality and an accident, according as all that is an accident which follows upon perfect being, because it is not of the substance: moreover this quality flows from substantials just as a property flows from the essentials of a species. And what is objected concerning the parts of the soul, it must be said that the soul does not have essential parts since it is a simple substance: but according as the soul is a potestative whole, thus its powers of intellect, and will, and sensible, and vegetative are its potestative parts, and thus they are called natural potencies rooted in its substance, and nevertheless qualities because they are consequent to the acts of being [1].

And what is said, just as the parts of the body have themselves to the body, so the parts of the soul to the soul; this is true according to something, and according to something it is not true: for according to this it is true, that the soul is compared to the body, as a principle of life and motion: for in this way potencies flow from the soul, by which it flows life and motion to the body, which integrate its power and virtue, just as the body insofar as it is movable by the soul and receiving life, cannot be simple, but it is necessary that from its na-

-ture flows a diversity of complexion and composition of organs, by which it may diversely receive life and motion: and these are the parts of the organic body insofar as it is organic and not insofar as it is a body, and in this way thus potencies follow the nature of the body and the substance of the soul, just as the operation of the organs follows the nature of the body: and in this way each is integrated by its potestative parts. But according to the common mode it is not true, because the potencies of the soul follow the nature of the soul, not as natural parts, but as properties constituting the nature of the soul, but not leaving behind the nature of the soul: moreover the organs of the body are material parts of the body, materially constituting it. And Averroes speaks in the first way and not in the second. The same is to be said concerning all natural potencies flowing from a substantial form after substantial being towards consequent acts.

Ad hoc autem quod objicitur de naturali impotentia, Dicendum quod quamvis quantum ad nomen fundetur in privatione, tamen secundum esse fundatur in contrario quod est contraria qualitas in materia potentiam naturalem impediens.

Ad hoc autem quod dicitur quod potentia se magis tenet ex parte materiæ, Dicendum quod hæc non est potentia ad agendum quæ est esse consequens, sed potius est potentia ad esse, sicut dictum est in capitulo præcedenti : unde per hoc patet solutio.

Ad hoc autem quod quæritur de nomine Antiquorum, qui istam speciem vocabant aptitudinem, Dicendum quod non est nomen usquequaque conveniens : quia aptitudo non est nomen univocum ad potentiam et impotentiam ; quia si aliquid est aptum ad agendum, per hoc ipsum non habet aliquid commune isti et illi, per quod erit aptum ad patiendum.

Caput VI

â€" De tertia specie qualitatis quÃ¦ est passio vel passibilis qualitas.

Tertia vero species qualitatis est quÃ¦ dicitur passio et passibilis qualitas. Hanc enim unam speciem ponimus, ideo quod formÃ¦ qualitatis non differunt, sed sunt ejusdem speciei qualitatis, et aliquando eadem numero qualitas : primo enim est passio, et postea passibilis qualitas. Quia ergo neque in qualitate, neque in quali (quod secundum eas dicitur) specie differunt, ideo dicimus eas esse species et non genus, et unam speciem hÃ¦c duo dicimus esse. Et non conjungemus ea disjunctiva conjunctione sed copulativa, ut notentur ad idem pertinere. Tamen quia passio est afficiens et cito transiens qualitas, passibilis autem qualitas est durans et radicata in subjecto, qui modi sunt oppositi, ad idem nomen non possunt reduci, eo quod hoc nomen ab oppositis rei proprietatibus imponeretur et opposita significaret : ideo duobus modis copulatis hanc speciem designamus. De qualitate enim non possumus loqui nisi sicut de accidente, quod semper in comparatione ad substantiam habet determinari, et ideo oportet quod determinetur per modos quibus est in subjecto. Sic igitur dicunt quod tertia species qualitatis est passibiles qualitates, quÃ¦ jam in subjecto radicatÃ¦ et firmatÃ¦ sunt et passiones.

Hujus autem manifestatio est inductione et exemplo. Sunt enim hujusmodi ut dulcedo, amaritudo, austeritas, sive acuitas in saporibus extremis et mediis omnibus, et qui his qui inducti sunt cognati sunt, ut salsedo, ponticitas, et sapor pinguis. Amplius autem secundum tactum calor et frigiditas, et his similia : secundum visum albedo et nigredo. Odores autem qui inferunt olfactui passionem, juxta sapores determinantur, ut dicit Aristoteles.

To this, however, which is objected concerning natural impotency, it must be said that although as regards the name it is founded in privation, nevertheless according to being it is founded in the contrary which is a contrary quality in matter impeding the natural potency.

To this, however, which is said that potency holds itself more on the part of matter, it must be said that this is not a potency for acting which is consequent to being, but rather it is a potency for being, just as was said in the preceding chapter: hence through this the solution is clear.

To this, however, which is asked concerning the name of the Ancients, who called that species aptitude, it must be said that it is not a name suitable in every respect: because aptitude is not a univocal name to potency and impotency; because if something is apt for acting, through this very thing it does not have anything common to this and to that, through which it will be apt for suffering.

Chapter VI

â€" Concerning the third species of quality, which is passion or passible quality.

The third species of quality is that which is called passion and passible quality. For we posit this as one species, for the reason that the forms of quality do not differ, but are of the same species of quality, and sometimes the same quality in number: for first it is a passion, and afterwards a passible quality. Since therefore they do not differ in species, neither in the quality nor in the qualified thing (which is so called according to them), therefore we say that they are a species and not a genus, and we say these two are one species. And we shall not join them with a disjunctive conjunction but a copulative one, so that they may be noted to pertain to the same thing. Nevertheless, because passion is an affecting and quickly passing quality, but passible quality is enduring and rooted in the subject, which modes are opposite, they cannot be reduced to the same name, because this name would be imposed from opposite properties of the thing and would signify opposites: therefore we designate this species by two coupled modes. For we cannot speak of quality except as of an accident, which always has to be determined in comparison to substance, and therefore it is necessary that it be determined through the modes by which it is in a subject. Thus, therefore, they say that the third species of quality is passible qualities, which are already rooted and fixed in the subject, and passions.

Moreover, the manifestation of this is through induction and example. For they are of this sort as sweetness, bitterness, harshness, or sharpness in all extreme and middle savors, and those which are kindred to these that have been brought forward, as saltiness, astringency, and fatty savor. Furthermore, according to touch, heat and coldness, and things similar to these: according to sight, whiteness and blackness. Moreover, odors which bring passion to the sense of smell are determined according to savors, as Aristotle says.

DifferentiÃ¦ enim sonorum non inducuntur hic : quia quamvis inferant passionem auditui, tamen ex primis qualitatibus (quÃ¦ primo sunt activÃ¦ et passivÃ¦, et virtute earum agit quod agit, et patitur quod patitur) non causantur : et ideo etiam non transmutant substantiam nisi per accidens, sicut aer cum tonitru, ut dicit Aristoteles, scindit lignum.

Quoniam autem hÃ¦c quÃ¦ dicta sunt sensibilia, sunt qualitates, manifestum est per descriptionem quam primo dedimus de qualitate : quÃ¦cumque enim subjecta suscipiunt illa quÃ¦ ita dicta sunt qualitates, et quÃ¦cumque etiam informantur ipsis, secundum ipsa qualia dicuntur. Qualitas autem est secundum quam quales dicimur ; igitur ista sunt qualitates. Hoc autem inductione probatur et exemplo, ut mel : ex hoc enim quod subjectum mellis dulcedinem suscipit, dicitur secundum hoc quale, quia dulce. Eodem modo dicitur corpus album, quia suscipit albedinem se informantem. Similiter autem se habet in cÃ¦teris omnibus quÃ¦ enumerata sunt.

HÃ¦c autem non ideo passibiles qualitates dicuntur, quod subjecta et objecta quÃ¦ ea suscipiunt ut formas aliquid patiantur vel passa sint accidentali passione vel aliqua alia (quamvis naturali passione digestionis habitu passa sint) sed ideo dicuntur passibiles qualitates, quia passiones inferunt sensui : non enim ideo dicitur dulce, quia aliquid ab extrinseco passum sit, et quod hanc sibi impressit dulcedinem. Similiter autem est de omnibus quÃ¦ sunt hujusmodi olfactui vel gustui passionem inferentia. Similiter autem est de calore et frigore in igne vel glacie vel aqua : hÃ¦c enim omnia non ideo passibiles qualitates dicuntur, quod ea subjecta quÃ¦ suscipiunt ea, aliquid passa sint extrinsecus, sed ideo quoniam singula eo-

rum quæ dicta sunt, secundum alicujus sensus qualitatem in ipso sensu passionis alicujus ad sensus immutationem perfectiva sunt, et ideo passibiles qualitates dicuntur. Patet hoc inductione : dulcedo enim passionem quamdam secundum gustum efficit ad gustus immutationem. Sic facit calor qui passionem facit secundum tactum, et similiter aliæ qualitates tangibiles. Albedo autem et nigredo et alii colores medii non similiter passibiles qualitates dicuntur : non enim sic agunt in subjectum secundum esse materiale, quod suis qualitatibus informent visum : visus enim albi non est albus, quemadmodum gustus dulcis est dulcis, et sicut tactus calidi est calidus : et ideo in visu non perficiunt colores passibiles qualitates. Sed ostenduntur colores passibiles qualitates : quia ipsi colores qui sunt qualitates, innascuntur in nobis ex passionibus quibusdam præcedentibus in nobis.

For the differences of sounds are not brought in here: because although they bring passion to the sense of hearing, nevertheless they are not caused from the first qualities (which are primarily active and passive, and by whose virtue that which acts, acts, and that which suffers, suffers): and therefore also they do not transmute the substance except by accident, just as the air with thunder, as Aristotle says, splits wood.

Moreover, since these sensible things which have been mentioned are qualities, it is manifest through the description which we first gave concerning quality: for whatever subjects receive those things so called as qualities, and whatever also are informed by them, are called qualified according to them. But quality is that according to which we are called qualified; therefore these are qualities. This, moreover, is proved by induction and example, as in honey: for from the fact that the subject of honey receives sweetness, it is called qualified according to this, because it is sweet. In the same way a body is called white, because it receives whiteness informing it. Similarly it holds in all other things which have been enumerated.

These, however, are not called passible qualities because the subjects and objects which receive them as forms suffer anything or have suffered by an accidental passion or some other (although they have suffered by the natural passion of the habit of digestion), but they are called passible qualities because they bring passions to the sense: for honey is not called sweet because it has suffered something from without, and which impressed this sweetness upon it. Similarly it is concerning all things of this sort that bring passion to the sense of smell or taste. Similarly it is concerning heat and cold in fire or ice or water: for all these are not called passible qualities because those subjects which receive them have suffered anything from without, but because each individual one of them-

of those things which have been mentioned, they are perfective in the sense itself towards some passion and the mutation of the sense according to the quality of some sense, and therefore they are called passible qualities. This is clear by induction: for sweetness effects a certain passion according to taste for the mutation of the taste. Heat does the same, which makes a passion according to touch, and similarly other tangible qualities. Whiteness, however, and blackness and other middle colors are not called passible qualities in a similar way: for they do not act upon the subject according to material being in such a way that they inform the sight with their qualities: for the sight of a white thing is not white, just as the taste of a sweet thing is sweet, and just as the touch of a hot thing is hot: and therefore in the sight colors do not complete passible qualities. But colors are shown to be passible qualities because the colors themselves which are qualities, are born in us from certain preceding passions in us.

Quod non multæ colorum mutationes sunt in nobis per aliquam passionem præcedentem, est manifestum per inductionem experimenti : erubescens enim aliquis rubeus factus est, cum erubescentia sit timor in turpi perpetrato : timor autem passione et fuga cordis secundum systolem propellens sanguinem in faciem. Et similiter timens aliquis factus est pallidus, sanguine a facie ad cor retracto. Similiter unumquodque talium colorum aliqua innascitur passione : et si tales colores talibus innascuntur passionibus, probatur quod si aliquis est naturaliter aliquid similium passus, quod scilicet sanguinem diffundat in facie, vel ad cor reducat sanguinem, illum naturaliter oportet habere similem colorem illi qui passione verecundiæ vel timoris rufus vel pallidus factus est : quod ex hoc constat quod quæ affectio naturæ facta est ad verecundiam in expulsione sanguinis ad frontem circa corpus, eadem etiam causa fit etiam secundum naturalem affectionem : ita quod color naturalis sit similis ei qui ex passione animæ vel cordis naturalem recipit colorem.

Generaliter autem loquendo quæcumque qualitates sunt de numero talium casuum, hoc est, quæ ex talibus casibus passionum sumpserunt principium ab aliquibus passionibus difficile mobilibus et permanentibus in subjecto, illæ dicuntur passibiles qualitates. Quamvis enim secundum naturalem substantiam sive subsistentiam in primis complexionibus pallor aut nigredo facta est in aliquo, tamen passibiles qualitates dicuntur secundum primam qualitatis rationem : quales enim dicimur secundum tales colores sive qualitates, sive etiam inducta sint talia per accidentas, sicut propter longam ægritudinem quæ facit pallorem. Aut propter æstum qui inducit ruborem qui aliquando in facie comburit sanguinem, ita quod remanet, et stantem et permanentem ruborem inducit, aut aliquid simile his : propter quod nigredo vel pallor contingit, non facile præterit, ita quod immutabile vel difficulter mutabile manet. Ista dicuntur passibiles qualitates : secundum tales enim qualitates dicimur quales simpliciter, sicut secundum eas quæ a passionibus naturalibus inducuntur.

Quæcumque vero sunt de numero talium qualitatum quæ cito transeunt et cito de facili solvuntur, dicuntur passiones : non enim secundum has dicuntur quales, sed potius aliquid passi : nullus enim simpliciter dicitur rubeus propter hoc quia ex verecundia rubeus factus est. Similiter ille cui pallor subitus propter timorem venit, non simpliciter dicitur pallidus sive qualis secundum pallorem, sed magis dicitur convenienter quod aliquid passus sit, non ad denominationem, sed ad subitam mutationem. Ea propter hujusmodi subitæ mutationes dicuntur convenienter passiones : non autem convenienter dicuntur qualitates, quia non simpliciter quales dicimur secundum eas.

Hoc ergo modo se habet de passionibus et passibiles qualitatibus corporis. Ad similitudinem autem horum se habet etiam de passionibus et passibilibus qualitatibus quæ inducuntur secundum

That there are many changes of colors in us through some preceding passion is manifest through the induction of experience: for someone blushing has been made red, since blushing is fear in a shameful deed committed: but fear by passion and flight of the heart according to systole, propelling the blood into the face. And similarly someone fearing has been made pale, with the blood retracted from the face to the heart. Similarly each one of such colors is born from some passion: and if such colors are born from such passions, it is proved that if someone has naturally suffered something similar, namely that he diffuses blood in the face, or leads blood back to the heart, it is necessary that he naturally have a color similar to him who by the passion of shame or fear has been made red or pale: which is clear from this, that the affection of nature which happened toward shame in the expulsion of blood to the forehead around the body, that same cause also happens according to natural affection: so that the natural color be similar to him who from the passion of the soul or heart receives a natural color.

But speaking generally, whatever qualities are of the number of such cases, that is, which from such cases of passions have taken their principle from some passions difficult to move and permanent in the subject, those are called passible qualities. For although according to natural substance or subsistence in the first complexions paleness or blackness has been made in someone, nevertheless they are called passible qualities according to the first account of quality: for we are called qualified according to such colors or qualities, whether such things have been induced by accident, as on account of a long illness which causes paleness. Or on account of heat which induces redness which sometimes burns the blood in the face, so that it remains, and induces a standing and permanent redness, or something similar to these: on account of which blackness or paleness happens, it does not easily pass away, so that it remains immutable or difficult to change. These are called passible qualities: for according to such qualities we are called qualified simply, just as according to those which are induced by natural passions.

But whatever are of the number of such qualities which quickly pass away and are quickly and easily dissolved, are called passions: for according to these we are not called qualified, but rather as having suffered something: for no one is simply called red because he has been made red out of shame. Similarly he to whom a sudden paleness comes on account of fear, is not simply called pale or qualified according to paleness, but rather it is said conveniently that he has suffered something, not towards denomination, but towards sudden mutation. For that reason such sudden mutations are conveniently called passions: but they are not conveniently called qualities, because we are not simply called qualified according to them.

This, therefore, is how it stands concerning the passions and passible qualities of the body. In the likeness of these it also holds concerning the passions and passible qualities which are induced according to

accidentia animæ, hoc est, quarum principium est in anima, quamvis mutatio sit in corpore : quæcumque enim talium mox sive subito in nascendo fiunt, ab aliquibus advenientibus passionibus fiunt subito, ut dementia sive insania, vel ira, et aliæ hujusmodi passiones, si qualitates dicuntur illatæ per sensum et phantasiam vel opinionem : secundum enim talia quales dicimur et denominamur, dicimur enim iracundi et dementes et insani. Similiter autem est si quæcumque alienationes et insaniæ non naturaliter sunt factæ, sed sunt aliquibus casibus inductæ, ut ex visu, vel terrore sonorum vel his similibus, et sunt difficile prætereuntes vel etiam omnino immobiles : omnia hujusmodi sunt dicenda passibiles qualitates, eo quod secundum tales qualitates quales dicimur et denominamur . Quæcumque vero talium passionum sunt ex his quæ citius prætereunt et facile subjectum derelinquunt, passiones dicuntur et non passibiles qualitates.

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CAPUT VII.
De dubitationibus circa tertiam speciem qualitatis.

Est autem circa ea quæ dicta sunt dubitatio. Passio enim per se est genus generalissimum, et ideo non videtur posse esse species qualitatis.

Adhuc autem passibile est potens pati vel habens aptitudinem ad patiendum : qualitas autem nulla pati potest, sed secundum eam est passio : videtur ergo quod nulla sit passibilis qualitas.

Adhuc autem aut passio inducit qualitatem coloris, aut si non inducit, tunc remanet tantum passio, et non habet in qualitate determinari : si autem inducit, constat quod ille color qualitas est, et sic passio est passibilis qualitas, et sic male distinguitur inter passionem et passibilem qualitatem.

Adhuc secundum passionem videtur aliquis dici qualis : est enim passio hæc in aliquo genere, constat quod non nisi in genere qualitatis : sed qualitas est secundum quam quales dicimur : ergo secundum passionem dicimur quales, et sic nulla est distinctio inducta inter passionem et passibilem qualitatem.

Adhuc dubium est de hoc quod albedo et nigredo non dicuntur qualitates, eo quod passiones inferant sensibus : hæc enim sunt objecta visus : visus autem est potentia passiva : objectum igitur quod est proprium agens in visum infert visui passionem, et secundum hoc dicuntur colores passibiles qualitates, sicut alia, et ex simili causa, ut videtur.

accidents of the soul, that is, whose principle is in the soul, although the mutation is in the body: for whatever of such things are made presently or suddenly in being born, are made suddenly from some adventitious passions, such as dementia or insanity, or anger, and other passions of this sort, if they are called qualities inferred through sense and phantasy or opinion: for according to such things we are called and denominated qualified, for we are called irascible and demented and insane. But similarly it is if whatever alienations and insanities have not been naturally made, but are induced by some accidents, as from sight, or the terror of sounds or things similar to these, and are difficultly passing away or even altogether immobile: all such things are to be called passible qualities, in that according to such qualities we are called and denominated qualified. But whatever of such passions are from those which pass away more quickly and easily leave the subject, are called passions and not passible qualities.

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CHAPTER VII.

On doubts concerning the third species of quality.

Now there is a doubt concerning those things which have been said. For passion per se is a most general genus, and therefore it does not seem to be able to be a species of quality.

Furthermore, passible is potent to suffer or having an aptitude to suffer: but no quality can suffer, but according to it there is passion: therefore it seems that there is no passible quality.

Furthermore, either passion induces the quality of color, or if it does not induce it, then the passion alone remains, and it does not have to be determined in quality: but if it induces it, it is certain that that color is a quality, and thus passion is a passible quality, and thus the distinction is badly made between passion and passible quality.

Furthermore, according to a passion someone seems to be called qualified: for this passion is in some genus, it is certain that in no other than the genus of quality: but quality is according to which we are called qualified: therefore according to passion we are called qualified, and thus there is no distinction induced between passion and passible quality.

Furthermore there is a doubt concerning this that whiteness and blackness are not called qualities, in that they infer passions to the senses: for these are the objects of sight: but sight is a passive potency: therefore the object which is the proper agent into sight infers a passion to sight, and according to this colors are called passible qualities, just as others, and from a similar cause, as it seems.

Adhuc autem istæ passiones dicuntur inferentes vel illatæ : colores autem sæpe inferunt passiones, ut concupiscentias, et delectationes, et tristitias, et hujusmodi : et sic iterum patet, quod sunt qualitates sensibiles ex eadem causa qua alia sensibilia dicuntur passibiles qualitates.

Adhuc autem quæritur quare tertia species qualitatis non dicatur forma aut circa aliquid constans figura ? Terminatio substantiæ est secundum qualitatem : passio vero et passibilis qualitas a casu passionis innascuntur, et ita videtur quarta species propinquior esse substantiæ quam passio vel passibilis qualitas : non ergo ista est tertia, sed quarta (ut videtur) species qualitatis.

Adhuc quæritur quare non uno nomine hæc species nominatur, cum omnes Antiqui et etiam Aristoteles illa communi nomine casus appellaverint ?

Ad hæc autem et similia dicendum est, quod passio secundum quod est prædicamentum, est effectus illatioque actio-

nis in id quod patitur : et sic non sumitur passio quÃ¦ est species qualitatis, sed pro forma qualitatis quÃ¦ afficit subjectum ex hoc quod aliquid passum est, quod est causa affectionis illius, vel ex eo quod affectui subjectum ex ipsa affectione inducit passionem quÃ¦ continet subjectum secundum complexionantia vel componentia subjectum, sicut ira inducit ab aliquo circumstante accendit sanguinem circa cor et immiscet vaporem fellis ad vindictÃ¦ appetitum. Et ideo Ã¦quivocatio est in passione, quÃ¦ secundum quod est effectus agentis genus est : secundum autem quod affectio commotione facta vel commotionem inducens est species qualitatis.

Ad aliud dicendum quod non dicitur passibilis qualitas eo quod ipsa qualitas aliquid patiatur, sed (sicut dictum est) quod vel passione inducitur vel passionem inducit, et quia sic passioni conjuncta est, ut causa vel effectus, ideo dicitur passibilis qualitas.

Ad aliud dicendum quod passio inducit id quod est qualitas secundum essentiam : sed non est qualitas secundum quod ab ipso quale dicitur denominative, quia denominationes non sunt nisi ab his quÃ¦ insunt simpliciter : simpliciter autem non inest quod non est in subjecto radicatum et firmatum, quia sic non sequitur, iste est affectus rubore ex verecundia, ergo est rubeus.

Et per hoc patet solutio ad sequens : est enim id quod inducitur ex passione in genere qualitatis, sed non secundum quod quale simpliciter, sed secundum hoc denominative prÃ¦dicatur.

Furthermore, these passions are called inferring or inferred: but colors often infer passions, such as concupiscences, and delectations, and sadnesses, and the like: and thus again it is clear, that sensible qualities are from the same cause by which other sensible things are called passible qualities.

Furthermore it is asked why the third species of quality is not called form or figure constant about something? The termination of substance is according to quality: but passion and passible quality are born from an accident of passion, and thus the fourth species seems to be nearer to substance than passion or passible quality: therefore this is not the third, but the fourth (as it seems) species of quality.

Furthermore it is asked why this species is not named by one name, since all the Ancients and even Aristotle called them by the common name of accident?

To these and similar things it must be said, that passion according as it is a predicament, is the effect and illation of actio-

towards that which suffers: and thus passion is not taken as the species of quality, but for the form of quality which affects the subject from the fact that it has suffered something, which is the cause of that affection, or from the fact that it induces a passion in the affected subject from the affection itself, which contains the subject according to the things complexing or composing the subject, just as anger induced by something surrounding inflames the blood around the heart and mixes the vapor of bile for the appetite of vengeance. And therefore there is an equivocation in passion, which according to what is the effect of an agent is a genus: but according to what is an affection made by commotion or inducing commotion, it is a species of quality.

To the other thing, it must be said that it is not called a passible quality because the quality itself suffers anything, but (as has been said) because it is either induced by passion or induces passion, and because it is thus joined to passion as cause or effect, therefore it is called passible quality.

To the other thing, it must be said that passion induces that which is a quality according to essence: but it is not a quality according as a qualified thing is called from it denominatively, because denominations are not unless from those things which are present simply: but what is not rooted and fixed in the subject is not present simply, because ainsi it does not follow: "this one is affected by redness from shame, therefore he is red."

And through this the solution to the following is clear: for that which is induced from passion is in the genus of quality, but not according as it is qualified simply, but according to this it is predicated denominatively.

Ad id autem quod ulterius dubitatur de albedine et nigredine, satis in ante habito capitulo responsum est. Et quod dicitur quod passiones inferunt visui, Dicendum quod illÃ¦ sunt passiones secundum quid et non simpliciter : quia sunt talia in visu secundum esse spirituale, et ideo motum et passionem simpliciter non inducunt.

Ad hoc autem quod objicitur, quod inducunt delectationes et concupiscentias, Dicendum quod hoc est per accidens, non enim hoc faciunt in quantum visibilia tantum, sed in quantum sunt signa delectabilium secundum gustum et secundum tactum : secundum quid enim et non simpliciter est delectatio in visu secundum quod visus movetur a visibili tantum.

Ad id autem quod ulterius quÃ¦ritur de ordine istarum specierum qualitatis, Dicendum quod ordo est primÃ¦ speciei ad secundum qui in prÃ¦habitis determinatus est. Quia autem de numero naturalium potentiarum sunt sensibiles vires animÃ¦, et istis inferuntur passiones per passibiles qualitates, ideo statim tertiam speciem qualitatis oportuit esse passionem vel passibilem qualitatem, sicut activum proprium sequitur suum passivum proprium quod infert ei passionem : quia activum suam propriam formam dat passivo, et utrumque refertur ad alterum et cognoscitur per alterum : propter quod tertium statim sequitur post secundum. Adhuc cum objicitur, quod secundum hoc etiam tertia deberet esse quarta, quia actus sunt prius potentiis secundum rationem et objecta actibus, sed ad hoc dicendum quod hoc verum esset, nisi potentia naturalis hic acciperetur secundum quod radicatur in substantialibus principiis substantiÃ¦ : secundum hoc enim determinatur hoc accidens, secundum quod substantiÃ¦ propinquius est, et ideo secundum hunc ordinem potentia naturalis est ante passibilem qualitatem.

Ad hoc autem quod ultimo quÃ¦ritur de nomine, dicendum quod de qualitate hic intendimus secundum quod denominative quale ab ea dicitur : et ideo de qualitate hic non intenditur in comparatione ad causam per quam inducitur, sed potius secundum modum quo inhÃ¦ret subjecto ad denominationem per quale : sed non dicitur casus hic qualitas, nisi in comparatione ad causam per quam inducitur, quia casualis est. HÃ¦c igitur casus non

vocatur. Secundum autem quod est in subjecto, non habet modum unum, sed diversum et compositum secundum quod denominat subjectum simpliciter, et secundum quid, hoc est, ut nunc. Oppositi autem modi eodem nomine non possunt comprehendi. Uno ergo nomine non poterat convenienter nominari, sed duobus, quæ sunt passio et passibilis qualitas.

To that, however, which is further doubted concerning whiteness and blackness, it has been sufficiently answered in the preceding chapter. And as to what is said, that they bring passions to the sight, it must be said that those are passions according to something and not simply: because such things are in the sight according to spiritual being, and therefore they do not simply induce motion and passion.

To that, however, which is objected, that they induce delights and concupiscentias, it must be said that this is by accident, for they do not do this insofar as they are visible things only, but insofar as they are signs of delightful things according to taste and according to touch: for delight is in the sight according to something and not simply according as the sight is moved by the visible thing only.

To that, however, which is further asked concerning the order of these species of quality, it must be said that the order of the first species to the second is that which has been determined in the preceding matters. But because among the number of natural powers are the sensible forces of the soul, and passions are brought to these through passible qualities, therefore it was necessary that the third species of quality immediately be passion or passible quality, just as the proper active follows its own proper passive which brings passion to it: because the active gives its own proper form to the passive, and each is referred to the other and known through the other: on account of which the third follows immediately after the second. Furthermore, when it is objected that according to this also the third ought to be the fourth, because acts are prior to powers according to reason and objects to acts, it must be said to this that this would be true, unless natural power were taken here according as it is rooted in the substantial principles of the substance: for according to this this accident is determined, according as it is closer to the substance, and therefore according to this order natural power is before passible quality.

To that, however, which is last asked concerning the name, it must be said that we intend here concerning quality according as a qualified thing is called from it denominatively: and therefore quality here is not intended in comparison to the cause through which it is induced, but rather according to the mode by which it adheres to the subject for the denomination through "qualified": but "chance" is not called a quality here, except in comparison to the cause through which it is induced, because it is casual. These therefore chance not-

called. But according to that which is in the subject, it does not have one mode, but a diverse and composite one according as it denominates the subject simply, and according to something, that is, as of now. But opposite modes cannot be comprehended by the same name. Therefore it could not be conveniently named by one name, but by two, which are passion and passible quality.

CAPUT VIII.

De quarto genere qualitatis quod est forma, vel circa aliquid constans figura.

Quartum vero genus qualitatis est forma et circa aliquid constans figura. Hoc autem genus qualitatis, sicut in prima philosophia dicit Aristoteles, consequens est speciem substantialem in omni corporea substantia : quia sicut corporeæ substantiæ differunt speciebus, ita differunt figuris : et quorum est una species in communi, horum est in communi figura una, tam in toto quam in membris : sicut hominis figura una, et capræ, asini, et sic de aliis. Forte hoc dicitur genus non species, quia multa valde comprehendit.

Differunt autem hæc, quia modus terminationis linearum in superficie vel corpore referri potest ad intra, ad formam scilicet substantialem, quæ tam in toto quam in partibus, causa est quare dicitur vel sit membrum hoc vel illud, vel etiam totum formetur, et sic dicetur forma. Positem scilicet sic vel sic terminatam in tales vel tales angulos, et sic dicitur figura. Unde patet quod unum et idem secundum id quod qualitas est figura et forma, sed secundum esse differt : quia relatum ad intra quod continet et terminat, est forma : relatum autem ad extra, quo talibus vel talibus angulis terminatum aptum est ad hos motus vel illos secundum hos actus vel alios, sic dicitur figura.

Oportet autem scire quod figura dicitur dupliciter : secundum id quod est quantitas terminata, et sic dicitur id quod est in genere quantitatis : est etiam figura secundum id quo est figura terminatio quantitatis, et hoc modo non dicit nisi id quod est in genere qualitatis, sed hæc qualitas est circa quantitatem posita. Forma autem quamvis idem sit subjecto, differt tamen ratione, nec dicitur forma nisi secundum quod causata est a forma substantiali actu continenti intrinseca, et ideo forma dicit id quod est qualitatis, et non quantitatis.

Hæc autem ideo genus dicuntur, quia in actibus et ratione non conveniunt : continere enim quod est formæ non convenit nisi genere cum sic vel sic angulatum esse acuto angulo vel recto vel hebete : hoc enim non dicitur quia contineat, sed quia sic vel sic pungat vel tangat, propter quod non est convenientia speciei sed generis inter illa sic sumpta. Quia tamen hæc unum sunt in eo quod est forma et figura, propter hoc non disjunctiva conjunctione conjunguntur.

CHAPTER VIII.

On the fourth genus of quality which is form, or figure placed around something constant.

The fourth genus of quality is form and figure placed around something constant. But this genus of quality, as Aristotle says in the First Philosophy, is a consequence of the substantial species in every corporeal substance: because just as corporeal substances differ in species, so they differ in figures: and those whose species is one in common, of these the figure is one in common, as much in the whole as in the members: just as the figure of man is one, and of a goat, of an ass, and so of others. Perhaps this is called a genus and not a species, because it comprehends very many things.

But these differ, because the mode of termination of lines in a surface or body can be referred to within, namely to the substantial form, which both in the whole and in the parts is the cause why it is said either that this or that is a member, or even that the whole is formed, and thus it will be called form. [If it is referred to] the position, namely, thus or thus terminated in such or such angles, it is thus called figure. Whence it is clear that one and the same thing according to that which is quality is figure and form, but it differs according to being: because that which is referred within, which contains and terminates, is form: but that which is referred without, by which, being terminated in such or such angles, it is apt for these movements or those according to these acts or others, is thus called figure.

But it is necessary to know that figure is spoken of in two ways: according to that which is terminated quantity, and thus it is called that which is in the genus of quantity: there is also figure according to that by which figure is the termination of quantity, and in this way it does not speak except of that which is in the genus of quality, but this quality is placed around quantity. But form, although it be the same in subject, yet differs in reason, nor is it called form except according as it is caused by a substantial form in act containing the intrinsic things, and therefore form speaks of that which is of quality, and not of quantity.

But these are therefore called a genus, because they do not agree in acts and reason: for to contain, which belongs to form, does not agree except in genus with being thus or thus angled with an acute or right or obtuse angle: for this is not said because it contains, but because it pricks or touches in this or that way, on account of which there is not an agreement of species but of genus between those things thus taken. Yet because these are one in that which is form and figure, for this reason they are joined not by a disjunctive conjunction.

Duobus autem modis nominatur et non uno : quia continere ad intra, et sic vel sic pungere extra, non sunt reducibilia in unam proprietatem cui nomen unum commune imponatur.

Dicitur autem figura, eo quod ad extra refertur : circa aliquid constans, quia in exterioribus terminationibus linearum concludit et terminat exterius in circuitu, et constant terminationes ejus ad puncta in quibus concurrunt lineæ terminatæ. Hæc ergo est ratio omnium istorum. Hæc autem proprie corporum sunt et superficierum quæ pluribus lineis terminantur.

Amplius autem adhuc in lineis etiam inveniuntur quædam quæ in hoc modo qualitatis sunt ponenda, sicut rectitudo et curvitas : rectum enim est cujus extrema tegunt media, ita quod postea videri non possunt, si rectorum extremitates directe aciebus oculorum opponantur : et hoc dictum est Platonis. Hoc autem magis est forma quam figura, quamvis rationem figuræ habeat secundum quod ad extra

undique terminatur in puncto uno. Curvitas autem ex duabus semper componitur formis : habet enim formam concavam subtus, et habet formam convexam exterius, et ideo omne curvum compositæ est formæ. Figuras autem habet tot, quot habet curvitates, quia tot habet terminationes ad angulos divisos. Tale etiam est quod his simile est, sicut circulare, vel sphæricum, et generaliter loquendo rotundum : omnia enim hæc formam habent concavi ad interius, et figuram convexi ad exterius. Quod hæ autem qualitates sint secundum quod talium sunt formæ et figuræ, probatur ex hoc quod secundum unumquodque talium id dicitur quale quod informatum est ex his, sicut patet inductione et exemplo : triangulum enim vel quadrangulum vel rotundum esse quale aliquid dicitur. Similiter autem et rectum vel curvum esse qualis habet prædicationem. Et similiter est in aliis secundum formam vel figuram hoc modo dictis [1].

Rarum autem et spissum et asperum et lene fortasse putabuntur apud aliquos qualitates principaliter significare : quamvis a linea habent ad hoc quod qualitatem principaliter significent : significant enim primo positionem, et secundario qualitatem partium in loco et in toto positarum, et ideo non pertinent ad divisionem eorum in qua ponuntur ea quæ principaliter sunt in qualitate : hæc enim (ut dictum est) quamdam positionem partium in toto et loco primo principaliter significant quodammodo et non qualitatem : spissum enim sive densum dicitur, eo quod partes materiales ad se invicem sunt propinqua positione : rarum vero per oppositum dicitur, eo quod partes materiales ad se invicem distant in toto : et hæc duo sic secundum positionem partium intrinsecarum sic dicuntur. Lene autem et asperum secundum positionem quamdam partium exteriorum : lene quidem eo quod in rectum vel æque secundum li-

But it is named in two ways and not in one: because to contain within, and thus or thus to prick without, are not reducible into one property to which one common name may be imposed.

But it is called figure, for the reason that it is referred to the outside: placed around something constant, because in the exterior terminations of lines it concludes and terminates exteriorly in a circuit, and its terminations are constant at the points in which the terminated lines meet. This therefore is the account of all these. But these are properly of bodies and of surfaces which are terminated by many lines.

Furthermore yet in lines also certain things are found which are to be placed in this mode of quality, such as straightness and curvature: for the straight is that whose extremes cover the middle, so that afterwards they cannot be seen, if the extremities of the straight things are directly opposed to the sights of the eyes: and this is a saying of Plato. This however is more a form than a figure, although it has the account of a figure according as to the outside

is terminated everywhere in one point. But curvature is always composed out of two forms: for it has a concave form underneath, and it has a convex form exteriorly, and therefore everything curved is of a composite form. But it has as many figures, as it has curvatures, because it has so many terminations to divided angles. Such a thing also is what is similar to these, as circular, or spherical, and generally speaking round: for all these have the form of a concave to the interior, and the figure of a convex to the exterior. But that these are qualities according as they are forms and figures of such things, is proved from this that according to each of such things that is called qualified which is informed from these, just as is clear by induction and example: for to be triangular or quadrangular or round is called a qualified something. Similarly also to be straight or curved has the predication of qualified. And it is similar in others called according to form or figure in this way [1].

But rare and thick and rough and smooth will perhaps be thought among some to signify qualities principally: although from a line they have towards this that they principally signify a quality: for they primarily signify position, and secondarily the quality of the parts posited in place and in the whole, and therefore they do not pertain to the division of those in which are posited those things which are principally in quality: for these (as was said) primarily and principally signify in a certain way a certain position of parts in the whole and in place and not a quality: for it is called thick or dense, in that its material parts are mutually near in position: but rare is called through the opposite, in that its material parts are mutually distant in the whole: and these two are thus so called according to the position of intrinsic parts. But smooth and rough according to a certain position of exterior parts: smooth indeed in that its exterior parts lie for themselves in a straight line or equally according to a li-

-neam vel superficiem sibi partes jacent exteriores et una super alteram non eminet : asperum vero per oppositum hujus dicitur, ideo quod una quidem extremarum partium in linea vel superficie superiore est super aliam eminendo porrecta, alia vero est inferior et simul super alia est depressa. Positiones igitur dicuntur primo, et si qualitates dicuntur, hoc est secundario. Hæ igitur sunt quatuor species qualitatis quæ communiter inveniuntur.

Et fortasse alii quidam modi qualitatum apparebunt : quia quale multipliciter dicitur de substantiali et accidentali qualitate, et ideo multi sunt ejusdem modi : sed quia maxime et principalius dicuntur qualitates et quales hi qui dicti sunt modi, concludatur ergo generaliter quod species vel genera qualitatum sunt quæ prædicta sunt.

<!-- cap:1.9 -->

CAPUT IX.

De dubitationibus quæ sunt circa quartam speciem qualitatis.

Est autem in his dubitatio, cum forma sit principium substantiæ uniuscujusque, qualiter possit esse species qualitatis : potius enim reducenda est ad genus substantiæ, quam qualitatis.

Adhuc autem cum figura sit de mathematicis, nihil autem sit mathematicum nisi quantitas discreta vel continua : videtur figura esse aliquid in genere quantitatis et non qualitatis.

Adhuc autem nihil ens videtur addere forma vel figura super quantitatem, quia quod lineæ sic in acutum vel rectum angulum jungantur, non addit quanto ens sed rationem : et sic videtur quod non sunt species in genere qualitatis.

Adhuc autem quod de aspero et leni dictum est, omnino contradicit ei quod dictum est in sex principiis de situ vel positione, ubi dicitur quod asperum et lene,

et rarum et densum, non positiones dicunt sed qualitates circa positiones dictas.

Ulterius quæritur qualiter numerus specierum qualitatis accipiatur?

Sed ad hæc et similia dicendum est quod forma dicitur secundum id quod forma secundum rationem et substantiam : et sic forma est principium esse et substantiæ in omni eo quod est : et quia substantia vera est, propter hoc forma est principium esse et substantiæ veræ, et secundum aliquid est principium aliorum quo est unumquodque eorum. Dicitur enim forma quasi foris manens secundum nomen, et sic modus continentiæ in terminatione linearum et superficierum dicitur forma, et hæc forma est species qualitatis.

-ne or a surface and one does not project above another: but rough is called through the opposite of this, for the reason that indeed one of the extreme parts in an upper line or surface is stretched out projecting over another, but another is lower and at the same time is depressed under another. Therefore they are called positions firstly, and if they are called qualities, this is secondarily. Therefore these are the four species of quality which are commonly found.

And perhaps certain other modes of qualities will appear: because qualified is said in multiple ways concerning substantial and accidental quality, and therefore many are of the same mode: but because those modes which have been said are maximally and principally called qualities and qualified, therefore let it be concluded generally that the species or genera of qualities are those which have been said before.

<!-- cap:1.9 -->

CHAPTER IX.

On doubts which concern the fourth species of quality.

Now there is a doubt in these things, since form is the principle of the substance of each thing, how it can be a species of quality: for rather it is to be reduced to the genus of substance, than of quality.

Furthermore since figure is of mathematical things, but nothing is mathematical except discrete or continuous quantity: figure seems to be something in the genus of quantity and not of quality.

Furthermore form or figure seems to add no being over quantity, because that lines be thus joined into an acute or right angle, does not add being to the quantum but reason: and thus it seems that they are not species in the genus of quality.

Furthermore what was said concerning rough and smooth, altogether contradicts that which was said in the six principles concerning site or position, where it is said that rough and smooth,

and rare and dense, do not speak of positions but of qualities spoken of around positions.

Furthermore it is asked how the number of species of quality is received?

But to these and similar things it must be said that form is spoken of according to that which is form according to reason and substance: and thus form is the principle of being and of substance in everything which is: and because substance is true, for this reason form is the principle of being and of true substance, and according to something it is the principle of others by which each one of them is. For it is called form as if remaining without (foris manens) according to the name, and thus the mode of containment in the termination of lines and surfaces is called form, and this form is a species of quality.

Ad hoc autem quod de mathematica objicitur, Dicendum, quod figura non ratione figuræ mathematica est, sed ratione quantitatis cujus est qualitas, et ab ipsa absolvi non potest. Vel potest dici, sicut dictum est, quod figura est mathematica secundum quod est quantitas terminata : secundum autem quod est terminatio quanti, sic est qualitas, et hoc modo non consideratur a mathematico.

Ad hoc autem quod dicitur, quod figura nihil addit supra quantitatem, Dicendum quod falsum est : addit enim modum qualitatis qui non est quantitas, qui est acutum, vel rectum, vel hebes in angulis, vel rotundum, vel planum : quæ non sunt rationes tantum, sed sunt res : unde etiam aliter et aliter immutant proprium sensum tactus : omnis autem immutatio sensus proprii est per qualitatem.

Ad hoc autem quod de sex principiis objicitur, Dicendum quod sicut dictum est, asperum et lene, et densum et rarum, positiones dicunt partium materiæ interius et exterius, sed secundario dicunt qualitates : quia sic vel sic agunt in sensum, et hoc consideratur in libro sex principiorum; et ideo dicuntur qualitates, quia lene est quod suaviter immutat, asperum quod immutat cum punctione, et densum est quod visu non penetratur, rarum autem quod ubique est pervium : et ideo in comparatione ad sensum ita dicuntur qualitates, sed tamen quia positio causa est, quod sic vel sic sensus istos immutent, ideo illa principaliter sunt positiones, secundario qualitates.

Ad hoc autem quod quæritur, penes quid ista species qualitatis accipiantur, Dicendum quod numerus et ordo sic simul accipi possunt : aut enim accipitur penes formale principium substantiæ, aut penes materiale, ex quo omne accidens accipi habet penes modum substantiæ a qua causatur. Si autem accipitur penes principium formale, hoc non potest esse nisi duobus modis : aut enim accipitur penes modum quo perficit forma materiam, aut penes modum quo forma principium est agendi in composito quod perfectum est. Si primo modo, forma non habet se ad materiam nisi ut dispositio vel habitus, et penes hunc modum est prima species accepta qualitatis. Si autem secundo modo est, a forma effluunt potentiæ naturales, et sic est secunda species qualitatis accepta. Illæ ergo potentiæ aut accipiuntur in se aut secundum quod propria activa inferunt eis proprias passiones. Et primo modo est iterum secunda species qualitatis : secundo autem modo tertia inducitur species qualitatis.

But to that which is objected concerning mathematics, it must be said, that figure is not mathematical by reason of figure, but by reason of quantity whose quality it is, and it cannot be absolved from it. Or it can be said, as was said, that figure is mathematical according as it is terminated quantity: but according as it is the termination of a quantum, thus it is quality, and in this way it is not considered by the mathematician.

But to that which is said, that figure adds nothing above quantity, it must be said that it is false: for it adds a mode of quality which is not quantity, which is acute, or right, or obtuse in angles, or round, or flat: which are not reasons only, but are things: whence also in different ways they transmute the proper sense of touch: but every transmutation of a proper sense is through quality.

But to that which is objected from the Six Principles, it must be said that as was said, rough and smooth, and dense and rare, speak of positions of the parts of matter interiorly and exteriorly, but secondarily they speak of qualities: because in this or that way they act upon the sense, and this is considered in the book of the Six Principles; and therefore they are called qualities, because the smooth is that which smoothly transmutes, the rough that which transmutes with a pricking, and the dense is that which is not penetrated by sight, but the rare that which is everywhere pervious: and therefore in comparison to the sense they are thus called qualities, but yet because position is the cause that in this or that way they transmute these senses, therefore those are principally positions, secondarily qualities.

But to that which is asked, in respect to what these species of quality are received, it must be said that number and order can be received together thus: for either it is received in respect to the formal principle of substance, or in respect to the material, from which every accident has to be received in respect to the mode of the substance from which it is caused. But if it is received in respect to the formal principle, this cannot be except in two ways: for either it is received in respect to the mode by which the form perfects the matter, or in respect to the mode by which the form is the principle of acting in the composite which is perfected. If in the first way, the form does not have itself to the matter except as a disposition or habit, and in respect to this mode the first species of quality is received. But if it is in the second way, from the form flow the natural powers, and thus the second species of quality is received. Those powers therefore are either received in themselves or according as their own actives induce their own passions in them. And in the first way it is again the second species of quality: but in the second way the third species of quality is induced.

Si vero ex parte materiæ sumatur quæ per se est corporea, et necesse est quod sit secundum relationem ad formam quæ continet et terminat materiam, tunc inducitur quarta species quæ est forma vel circa aliquid constans figura. Et istæ sunt quatuor species qualitatis, secundum quas aliquid ut frequentius quale dicitur, et a quibus proprie accipitur modus iste prædicamenti qui est proprius qualitatis. Si qui autem alii modi qualitatis inveniuntur, facile reducuntur ad istos.

Sciendum quod Antiqui hanc ultimam qualitatis speciem uno communi nomine vocaverunt compositionem : sed quia duos actus includit, unum ad intus qui est formæ, alterum ad extra qui est figu-

ræ, ideo convenientibus duobus modis nominatur. Quare etiam genus melius dicitur quam species, jam in ante habito capitulo dictum est.

Quod autem quidam has species accipiunt penes ea quæ sunt in nobis in anima, quidam per acquisitionem primam speciem, et secundum ea quæ insunt naturæ secundum speciem, et in corpore quidem per motum tertiam speciem, vel per materiæ terminum quartam speciem: potest dicere qui vult, sed rationem perfectam non videtur habere.

Sed de hoc quæri potest, quare secundum solam tertiam speciem qualitatis quæ passio vel passibilis qualitas, sit alteratio præhabita, sicut dicit Aristoteles[1], et non secundum aliam speciem qualitatis? Et hæc quidem quamvis pertineat ad Philosophum determinare et non ad logicum, tamen dici potest quod in habitu et dispositione alteratio esse non potest : quia dispositio et habitus sunt ad perfectionem secundum propriæ naturæ actum, qui est ratio vel rationis actus : et ideo attingens esse perfectum non est proprie alteratus physice, sed in esse connaturali et proprio perfectus. Fere eadem ratione non potest esse alteratio in specie secunda : potentiæ enim naturales radicantur in forma substantiali, secundum quod ipsa in eo quod perfectum est convertitur in principium agendi, et ideo consequuntur esse perfectum sicut id quod est esse substantiale consequens, cum perfectio ipsius sit perfectio in illis : propter quod etiam attingens esse perfectum naturalis potentiæ perfectus est, et diminutus ab illo secundum esse corruptus vel in via corruptionis. In quarta etiam specie motus esse non potest, quia circa quantitatem est qualitas quæ a quantitate non absolvitur: sed quantitati nihil est contrarium, ita quod nec illi speciei contrarium est aliquid.

If however it be taken from the part of the matter which is per se corporeal, and it is necessary that it be according to the relation to the form which contains and terminates the matter, then the fourth species is induced, which is form or figure placed around something constant. And these are the four species of quality, according to which something is most frequently called qualified, and from which this mode of the predicament which is proper to quality is properly received. But if any other modes of quality are found, they are easily reduced to these.

It must be known that the Ancients called this last species of quality by one common name, composition: but because it includes two acts, one towards the inside which is of form, the other towards the outside which is of fi-

-gure, therefore it is named by two convenient modes. Why also it is better called a genus than a species, has already been said in the preceding chapter.

But as for some receiving these species in respect to those things which are in us in the soul, some [receiving] the first species through acquisition, and according to those things which are in nature according to species, and in the body indeed the third species through motion, or the fourth species through the limit of matter: anyone who wishes can say it, but he does not seem to have a perfect reason.

But concerning this it can be asked, why according to only the third species of quality, which is passion or passible quality, is there a preceding alteration, as Aristotle says[1], and not according to another species of quality? And this indeed, although it pertains to the Philosopher to determine and not to the logician, yet it can be said that in habit and disposition there cannot be alteration: because disposition and habit are towards perfection according to the act of their own nature, which is reason or an act of reason: and therefore that which reaches a perfect being is not properly altered physically, but is perfected in its connatural and proper being. Almost for the same reason there cannot be alteration in the second species: for natural powers are rooted in the substantial form, according as it, in that which is perfect, is converted into a principle of acting, and therefore they follow the perfect being just as that which is a consequent substantial being, since its perfection is a perfection in those: on account of which also that which reaches the perfect being of a natural power is perfected, and that which is diminished from it is corrupted according to being or in the way of corruption. In the fourth species also there cannot be motion, because it is a quality around quantity which is not absolved from quantity: but to quantity nothing is contrary, so that to that species also nothing is contrary.

Et si objicitur de recto et curvo, et aspero et leni, et raro et denso, patet quod illæ qualitates nec activæ nec passivæ sunt, neque absolvuntur a positione et situ, et ideo in talibus non potest esse motus alterationis : quia alteratio physica non est nisi inter contraria agentia et patientia ad invicem, et hoc est quod intendit Aristoteles, si quis bene dicta sua inspiciat.

CAPUT X.

De quali quod dicitur secundum qualitatem.

Quia autem, ut dicit Alexander, Aristoteles ipse istum tractatum intitulavit de quali et qualitate, et nos jam determinavimus de speciebus qualitatis secundum quam quales dicimur, restat nunc determinare de quali quod denominative ab his speciebus dicitur qualitatis. Dicimus ergo quod qualia dicuntur quæ secundum qualitates dictas dicuntur denominative : denominative autem , quia simpliciter subjectum ab eis denominatur, vel quomodoliber aliter ab his dicuntur informata. Difficile enim est eam quæ ab accidente denominationem simpliciter fieri : multis enim modis accidens inest, ita quod non denominat , ut si inest secundum partem, ut Æthiops est albus dentes, vel si inest ut nunc et non simpliciter , ut rubeus ex verecundia nunc, non sequitur quod sit rubeus. Licet aliquando etiam hoc sit ex parte accidentis, quod ab ipso fieri denominationem non potest, quamvis simpliciter insit et non secundum quid, ut in sequentibus patebit. Et ideo quale secundum istas qualitatis species (aut dicatur secundum istam denominationem aut quomodoliber aliter dicatur ab his) dicitur qualitas ut informans subjectum per concretionem significans : quale enim et qualitas idem prædicatur, quamvis in modo differant :

quale enim dicit qualitatem subjectum informantem, qualitas autem dicit qualitatem simpliciter.

Et si quis objiciat quod quale dicit duo, subjectum scilicet, et qualitatem, Dicendum quod non dicit principaliter et formaliter nisi qualitatem, sed quia dicit qualitatem in concretione ad subjectum, ideo dicitur ex consequenti de subjecto facere significationem. Propter quod etiam quale cum qualitate ad idem pertinet prædicamentum.

And if it is objected concerning straight and curved, and rough and smooth, and rare and dense, it is clear that those qualities are neither active nor passive, nor are they absolved from position and site, and therefore in such things there cannot be a motion of alteration: because physical alteration is not except between contrary agents and patients towards each other, and this is what Aristotle intends, if anyone should well inspect his sayings.

CHAPTER X.

On the qualified which is spoken of according to quality.

But because, as Alexander says, Aristotle himself entitled this treatise on the qualified and quality, and we have already determined concerning the species of quality according to which we are called qualified, it remains now to determine concerning the qualified which is spoken of denominatively from these species of quality. We say therefore that qualified things are called those which according to the said qualities are spoken of denominatively: denominatively, however, because the subject is simply denominated from them, or in whatever other way they are said to be informed from these. For it is difficult for that denomination which is from an accident to be made simply: for an accident is in many ways, so that it does not denominate, as if it is in according to a part, as an Ethiopian is white in teeth, or if it is in as of now and not simply, as one who is red from shame now, it does not follow that he is red. Although sometimes this is also on the part of the accident, that a denomination cannot be made from it, although it be in simply and not according to something, as will be clear in the following things. And therefore the qualified according to these species of quality (whether it be spoken of according to that denomination or in whatever other way it be spoken of from these) is called quality as informing the subject, signifying through concretion: for qualified and quality are predicated of the same thing, although they differ in mode:

for the qualified speaks of quality informing a subject, but quality speaks of quality simply.

And if anyone should object that the qualified speaks of two things, namely, a subject and a quality, it must be said that it does not speak principally and formally except of quality, but because it speaks of quality in concretion with the subject, therefore it is said to make a signification concerning the subject as a consequence. On account of which also the qualified with quality pertains to the same predicament.

In pluribus tamen qualitatibus, pene etiam in omnibus qualia dicuntur denominative a qualitatibus, ut a candore candidus, et a grammatica grammaticus, et a justitia justus dicitur denominative, et similiter in aliis multis. In aliquibus vero hoc non convenit secundum vocem, quamvis similiter sit secundum esse. Et hujus causa est quod qualitatibus nomina talia posita non sunt quæ solo casu differentia secundum appellationem possint inflecti et informari in nomina denominativa, sicut dicitur cursor, aut sicut dicitur pugillator, non quidem dictus ab actu vel officio currendi vel pugillandi, sed ab ipsa qualitate quæ est naturalis potentia hoc faciendi : hæc enim qualitas nomine proprio non est designata, ita quod nomen secundum valitudinem naturalem ad hæc exercenda significet illam propriam qualitatem : non enim sunt talibus valitudinibus (quæ qualitas sunt) posita nomina secundum quas quales dicuntur et cursor et pugil sive pugillator : sed nomina illa sunt disciplinarum nomina, sicut cursoriæ et pugillatoriæ artis : et hæc non sunt nomina illius vel illarum qualitatum, qua vel quibus dicuntur illi quales, qui affecti sunt illa qualitate, quæ est naturalis potentia ad illa facienda. A nomine autem artis vel disciplinæ denominari potest, qui artis istius vel disciplinæ est ignarus, sicut frequenter contingit, quod habens naturalem potentiam ad aliquid artis, illius ignarus est, quæ docet operationem eamdem ad quam habet quis naturalem potentiam : pugillatoria enim dicitur disciplina pugillandi, sed quales in hac qualitate dicuntur, non qui sunt de arte sive disciplina illa, sed qui afficiuntur per informationem qualitate quæ dicitur potentia naturalis ad pugnandum, sicut dicitur pugil vel cursor qui forte nihil scivit de arte sive disciplina illa, et ideo a disciplina non accipiunt denominationem ut dicantur cursores vel pugilles.

Alii autem etiam posito nomine qualitatis non adhuc quales illa qualitate dicuntur denominative, ita quod nomen qualis secundum figuram appellationis a nomine qualitatis determinetur. Sicut patet in nomine quod est virtus, a quo nomine si denominatio fiat non dicitur virtuosus, sed secundum alios dicitur studiosus, nomine formato a genere virtutis quod est studium, vel quod verius est nomine formato a virtutis causa, quæ est studium. Et secundum posteriores dicitur virtuosus, quamvis non simplicem dicat denominationem, sed cum denominatione, notat plenitudinem. Virtutem enim habens studiosus dicitur, sed non dicitur denominative simplici denominatione a virtute : sed si a virtute dicatur, dicetur virtuosus, quod nomen plenitudinem significat et non facit simplicem denominationem.

In more qualities, however, indeed in almost all, qualified things are spoken of denominatively from qualities, as from whiteness white, and from grammar a grammarian, and from justice a just man is called denominatively, and similarly in many others. In some, however, this does not agree according to the voice, although it be similar according to being. And the cause of this is that such names have not been placed for qualities which, differing only in case according to appellation, could be inflected and informed into denominative names, as it is called a runner (cursor), or as it is called a boxer (pugillator), not indeed called from the act or office of running or boxing, but from the quality itself which is a natural power of doing this: for this quality has not been designated by its own name, so that the name according to natural health for exercising these things might signify that proper quality: for names have not been placed for such healths (which are a quality) according to which they are called qualified both as a runner and a boxer or pugilist: but those names are the names of disciplines, such as of the runner's and the boxer's art: and these are not the names of that quality or those qualities, by which those qualified are called, who are affected by that quality, which is a natural power for doing those things. But from the name of the art or discipline he can be denominated, who is ignorant of that art or discipline, as it frequently happens, that one having the natural power for something of an art, is ignorant of that [art], which teaches the same operation for which one has a natural power: for the boxing [art] is called the discipline of boxing, but those are called qualified in this quality, not who are of that art or discipline, but who are affected through information by the quality which is called natural power for fighting, just as he is called a boxer or a runner who perhaps knew nothing of that art or discipline, and therefore they do not receive a denomination from the discipline so that they be called runners or boxers.

Others, however, even with the name of the quality placed, are not yet called qualified by that quality denominatively, so that the name of the qualified according to the figure of appellation is determined from the name of the quality. Just as is clear in the name which is virtue, from which name if a denomination be made he is not called virtuous (virtuosus), but according to others he is called studious (studiosus), by a name formed from the genus of virtue which is study, or what is truer by a name formed from the cause of virtue, which is study. And according to later ones he is called virtuous, although it does not speak of a simple denomination, but with the denomination, it notes fullness. For one having virtue is called studious, but he is not called denominatively by a simple denomination from virtue: but if he be spoken of from virtue, he will be called virtuous, which name signifies fullness and does not make a simple denomination.

Hujus autem causa est, quia in virtutibus et vitiis politicis nos domini et causa sumus operum quibus efficiuntur virtutes : quia virtutes per studium fiunt in nobis : quod studium, ut dicit Tullius, est vehemens applicatio animi ad aliquid discendum vel faciendum : ideo Antiqui nomina imponentes, virtuosos intellectuali virtute vel morali vel heroica dixerunt studiosos nomine communi. Virtuosi autem dicuntur non ita convenienter, quia virtus nominat ultimum in bono, ut dicit Aristoteles, et hoc non est ita generale ut primum. Consignificata autem plenitudo adjungitur in talibus, propter hoc quod dicit Aristoteles quod nec intellectualis virtus quæ est prudentia, potest esse sine moralibus, nec morales possunt esse sine prudentia : quia moralis contingit finem, prudentia autem eligit ea, et

docet per quæ et qualiter ad finem devenitur : et ideo in quocumque est virtus, quamdam plenitudinem virtutis esse oportet. Propter quod illam denominationem conveniens fuit nomine plenitudinem connotante formari. Et dicitur studiosus et non studialis, et virtuosus et non virtualis. In pluribus autem denominativis non est sic, sed denominativa eorum a nominibus formantur qualitatum quæ insunt ipsis. Concluditur ergo generaliter quod quæcumque dicuntur qualia, aut dicuntur denominative a prædictis quatuor speciebus qualitatis, aut aliquo modo, sicut dictum est, dicuntur aliter ab illis qualitatibus quæ dictæ sunt.

Caput XI

De proprio qualitatis quod est suscipere contrarium.

Postquam autem jam de quali et qualitate secundum diffinitionem et divisionem in species determinatum est, consequenter de quali et qualitate secundum suas consequentes proprietates et passiones est determinandum, et primo de proprio quod nec soli nec omni convenit, quod est esse qualitati contrarietatem. Dicimus igitur quod inest qualitati et quali contrarietas secundum quod est quale, sicut justitia injustitiæ est contraria, et albedo nigredini. Quamvis injustitia privationis habeat nomen, tamen hæc privatio in contrario fundatur habitu cujus nomen proprium non est positum, et sic justitia contraria est injustitiæ. Ita et ipsa quæ secundum qualitates has qualia dicuntur, sunt contraria, sicut injustum contrariatur justo, et album nigro. Patet igitur quod in prima et tertia specie qualitatis est contrarietas. Non est autem hoc proprium in omnibus qualitatibus primæ et tertiæ speciei, secundum quod contrarietas est distantia et oppositio completa eorum quæ sunt in eodem genere : rubeo enim vel pallido aut hujusmodi coloribus mediis nihil est contrarium, cum tamen sint qualitates et in genere qualitatis.

But the cause of this is, because in political virtues and vices we are the masters and cause of the works by which virtues are effected: because virtues are made in us through study: which study, as Tully says, is a vehement application of the mind to something to be learned or done: therefore the Ancients imposing names, called those virtuous in intellectual or moral or heroic virtue, studious by a common name. But they are called virtuous not so conveniently, because virtue names the ultimate in good, as Aristotle says, and this is not so general as the first. But the consignified fullness is joined in such things, on account of this which Aristotle says, that neither can intellectual virtue which is prudence exist without the moral ones, nor can the moral ones exist without prudence: because the moral one reaches the end, but prudence chooses those things, and

teaches through what things and in what way one comes to the end: and therefore in whomsoever there is virtue, there must be a certain fullness of virtue. On account of which it was convenient for that denomination to be formed by a name connoting fullness. And it is called studious (studiosus) and not studialis, and virtuous (virtuosus) and not virtualis. In more denominatives it is not so, but their denominatives are formed from the names of the qualities which are in them. It is concluded therefore generally that whatever things are called qualified, either are called denominatively from the aforesaid four species of quality, or in some way, as was said, they are called otherwise from those qualities which have been mentioned.

Chapter XI

On the property of quality which is to receive a contrary.

But after it has already been determined concerning the qualified and quality according to definition and division into species, consequently it must be determined concerning the qualified and quality according to their consequent properties and passions, and first concerning the property which agrees neither to the only nor to all, which is for there to be contrariety to quality. We say therefore that contrariety is in quality and in the qualified according as it is qualified, just as justice is contrary to injustice, and whiteness to blackness. Although injustice has the name of a privation, yet this privation is founded in a contrary habit whose proper name has not been placed, and thus justice is contrary to injustice. So also those very things which according to these qualities are called qualified, are contrary, as the unjust is contrary to the just, and the white to the black. It is clear therefore that in the first and third species of quality there is contrariety. But this is not a property in all qualities of the first and third species, according as contrariety is the distance and complete opposition of those things which are in the same genus: for to red or pale or colors of this sort, which are in the middle, nothing is contrary, although nevertheless they are qualities and in the genus of quality.

Si autem objicitur quod justitia et injustitia non sunt contraria, quia motus alterationis est inter contraria : in prima autem specie, ut jam ante habitum est, non est alteratio. Dicemus ad hoc, quod alteratio physica non est in prima specie qualitatis : alteratio autem large dicta est in prima specie, secundum quod alteratio est, quando subjecto eodem manente mutatio fit in suis passionibus vel qualitatibus. Sic enim quando de justo fit injustus, alteratio facta est : non enim sufficit ad alterationem physicam, quod sit inter contraria, sed cum hoc exigitur quod contraria sint ad invicem activa et passiva secundum actionem et passionem a substantia abjicientem, et subjectum continue a contrario in contrarium transmutantem.

Ad hoc autem quod diximus de coloribus mediis nihil esse contrarium, cum tamen in quinto Physicorum [1] dicatur quod medium comparatum extremo, contrarium est, et cum in Ethicis dicatur quod medium utrique extremorum contrarium est : non debet aliquis instare, quia hic contrarium accipimus quod secundum maximam distantiam contrarium est. Hoc autem est simplex, nihil de contrario habens admixtum : et secundum hunc modum medium nec opponitur medio nec extremo. In physicis autem contraria accipienda sunt secundum potentiam et actum ubi est motus, et ideo ibi contrarium est id quod aliquid participat contrarii, et est potentia ad alterum, secundum hoc enim movetur ad ipsum ut ad contrarium.

Quod autem in Ethicis dicitur quod medium utrique extremorum contrarium est, ideo dictum est, quod quamvis virtus sit medium quantum ad actum et circumstantias, tamen secundum bonum et rationem boni est extremum : et sic ambobus

extremis opponitur ut extremum, quia sic ambo extrema sunt in genere mali.

Amplius generaliter verum est, quod si ex contrariis unum fuerit quale, et reliquum illi contrarium est quale : cum contraria sint in eodem genere. Hoc autem palam est et manifestum proponenti sive inducenti alia contraria ab his quæ dicta sunt in singulis generibus contraria suspicientibus : semper enim contraria in eodem sunt genere : nam si justitia contraria est injustitiæ, et justitia est quale quoddam sive qualitas, sequitur quod etiam injustitia est quale et qualitas est quædam : nulli enim aliorum prædicamentorum sicut generi aptari potest injustitia ut species vel individuum : justitia enim neque est quantitas, neque ad aliquid, nec ubi, nec omnino sive universaliter aliquid de numero prædicamentorum, nisi quale et qualitas, et illud idem secundum genus prædicamenti est etiam justitia. Et sic est in omnibus aliis contrariis quæ sunt secundum quale vel secundum qualitatem.

But if it is objected that justice and injustice are not contraries, because the motion of alteration is between contraries: but in the first species, as has already been held before, there is no alteration. We shall say to this, that physical alteration is not in the first species of quality: but alteration broadly spoken of is in the first species, according as it is alteration, when, while the same subject remains, a change is made in its passions or qualities. For thus when from just one becomes unjust, an alteration has been made: for it does not suffice for a physical alteration that it be between contraries, but with this it is required that the contraries be mutually active and passive according to action and passion casting away from the substance, and continuously transmuting the subject from contrary to contrary.

But as to that which we said, that to the middle colors nothing is contrary, although nevertheless in the fifth of the Physics [1] it is said that the middle compared to the extreme is a contrary, and although in the Ethics it is said that the middle is contrary to both of the extremes: no one ought to insist, because here we receive the contrary which is contrary according to the greatest distance. This however is simple, having nothing of the contrary mixed in: and according to this mode the middle is opposed neither to the middle nor to the extreme. But in physics contraries are to be received according to power and act where there is motion, and therefore there a contrary is that which participates in something of the contrary, and is in power towards the other, for according to this it is moved towards it as towards a contrary.

But that which is said in the Ethics, that the middle is contrary to both of the extremes, was therefore said because although virtue is a middle as to act and circumstances, yet according to the good and the account of the good it is an extreme: and thus to both

is opposed to the extremes as an extreme, because thus both extremes are in the genus of evil.

Furthermore, it is generally true that if one of the contraries is qualified (quale), the other contrary to it is also qualified: since contraries are in the same genus. But this is open and manifest to one proposing or inducing other contraries from those which have been said in individual genera receiving contraries: for contraries are always in the same genus: for if justice is contrary to injustice, and justice is a certain qualified thing or a quality, it follows that injustice also is a qualified thing and is a certain quality: for injustice can be fitted to none of the other predicaments as a genus, as a species or an individual: for justice is neither quantity, nor relative, nor where, nor at all or universally anything from the number of the predicaments, except qualified thing and quality, and that same thing according to the genus of the predicament is also justice. And thus it is in all other contraries which are according to the qualified or according to quality.

Ex hoc autem forte videbitur alicui, quod prima contraria sint in qualitate : et contra hoc videtur esse, quod prima contraria videntur esse rarum et densum : hæc enim videntur præcedere calidum et frigidum, et inducere ipsa, quia rarum efficitur calidum, et spissum efficitur frigidum : sed ad hoc dicendum, quod in veritate prima contraria vere secundum actionem et passionem sunt contraria in qualitate, et non in positione [1] : quia contrariorum est mutuo se expellere ab eodem susceptibili : expulsio autem hæc fieri non potest, nisi per actionem et passionem, et ideo ea quæ vere sunt contraria, sunt activa et passiva ad invicem : et hæc prima contraria sunt calidum et frigidum, et subjecta eorum passiva sunt humidum et siccum, quorum utrumque respicit utrumque illorum ut subjectum : humidum enim est subjectum calidi et est subjectum frigidi, et siccum est subjectum calidi et est subjectum frigidi in materia elementali : calidum est effectivum rari, et frigidum est effectivum spissi : et sic prima simpliciter contrarietas est in qualitate : prima autem dispositio materiæ est in positione quæ non absolvitur a qualitate quæ est rarum et densum.

Si autem quis dicat quod leve et grave sint prima contraria, eo quod motus localis sursum et deorsum sunt ad formam: leve autem movetur sursum, grave autem deorsum, hoc omnino nihil est et est determinatum in physicis, quod motus sursum non causatur a levitate, nec motus deorsum a gravitate, sed potius a generante vel removente prohibens : et ideo prius aliquo modo habet formam generantis antequam habeat motum quæ est consequens formam generantis [2]. Et ideo leve et grave non sunt prima contraria moventia, sed potius leve causatur in materia per rarum, et grave causatur in materia per densum : et sic adhuc remanet, quod calidum et frigidum quæ sunt in tertia specie qualitatis sunt contraria.

Si quis vero adhuc objiciat, et dicat contra hoc, quod si simpliciter calidum et simpliciter frigidum quorum neutrum de suo contrario habet aliquid admixtum, sunt contraria prima, tunc sequitur quod nata sunt fieri circa subjectum unum et idem : non autem simpliciter calidum, et simpliciter frigidum nata sunt fieri circa idem : nullum enim elementum est quod manens in substantia ejusdem elementi hoc natum sit suscipere : ergo ista non sunt contraria prima, ignis enim habet non admixtam caliditatem, et non potest habere frigiditatem et caliditatem : ad hoc dicendum quod secundum quod caliditas et frigiditas sunt qualitates primæ, sic opponuntur circa materiam primam elementorum, et circa illam nata sunt fieri : secundum autem quod sunt in ge-

neratis primis quæ sunt elementa, sic sunt potentiæ naturales consequentes esse elementorum, et ideo elementis manentibus non deserunt substantias elementorum : et hoc modo circa idem nata sunt fieri, et mutuo se invicem expellentia ab eodem.

But from this perhaps it will seem to someone that the first contraries are in quality: and against this it seems that the first contraries seem to be rare and dense: for these seem to precede hot and cold, and to induce them, because the rare is made hot, and the thick is made cold: but to this it must be said that in truth the first contraries are truly contraries in quality according to action and passion, and not in position [1]: because it is for contraries to mutually expel each other from the same susceptible: but this expulsion cannot be made except through action and passion, and therefore those things which are truly contraries are mutually active and passive: and these first contraries are hot and cold, and their passive subjects are moist and dry, each of which regards both of those as a subject: for the moist is the subject of the hot and is the subject of the cold, and the dry is the subject of the hot and is the subject of the cold in elemental matter: the hot is effective of the rare, and the cold is effective of the thick: and thus the first contrariety simply is in quality: but the first disposition of matter is in position, which is not resolved from the quality which is the rare and the dense.

But if someone should say that the light and the heavy are the first contraries, because the local motions upward and downward are towards form: for the light is moved upward, but the heavy downward, this is altogether nothing, and it is determined in physics that upward motion is not caused by lightness, nor downward motion by heaviness, but rather by the generator or by the one removing the obstacle: and therefore it first has the form of the generator in some way before it has the motion which is consequent upon the form of the generator [2]. And therefore the light and the heavy are not the first moving contraries, but rather the light is caused in matter through the rare, and the heavy is caused in matter through the dense: and thus it still remains that the hot and the cold, which are in the third species of quality, are contraries.

But if someone should still object, and say against this, that if simply hot and simply cold, neither of which has anything of its contrary mixed in, are the first contraries, then it follows that they are born to happen about one and the same subject: but simply hot and simply cold are not born to happen about the same thing: for there is no element which, remaining in the substance of the same element, is born to receive this: therefore those are not the first contraries, for fire has unmixed heat, and cannot have coldness and heat: to this it must be said that according as heat and coldness are the first qualities, they are thus opposed about the first matter of the elements, and about it they are born to happen: but according as they are in the ge-

generated first things which are elements, they are thus natural powers consequent upon the being of the elements, and therefore while the elements remain they do not desert the substances of the elements: and in this way they are born to happen about the same thing, and mutually expelling each other from the same.

Ex hoc autem quod in qualitate est contrarietas prima, intelligitur quod contrarietas in omnibus aliis generibus in quibus est, non est nisi in ratione qualitatis : primum vero est causa omnium aliorum in quolibet genere in quo est primum. Unde etiam in quantitate ratione motus augmenti et decrementi non est contrarietas nisi secundum qualitatem, sicut in tractatu de *Quantitate* dictum est. Et si contraria sunt in ubi vel in situ, oportet quod sint in eis secundum quod non absolvuntur a qualitate. De his autem disputatio pertinet ad physicum vel metaphysicum, et non ad logicum : logicus enim non considerat contraria, nisi secundum quod sunt in eodem genere maxime distantia, et non considerat ea secundum quod prima et non prima.

Caput XII.

De secundo proprio quod est suscipere magis et minus.

Suscipit autem qualitas magis et minus, et hæc est secunda proprietas ex ea quæ præcessit causata. Quod autem quale magis et minus suscipiat patet inductione : album enim magis et minus alterum altero dicitur secundum albedinis intensionem et remissionem, et similiter justum magis et minus alterum altero dicitur secundum intensionem justitiæ et remissionem. Hoc autem non tantum est in ipsis quæ qualia sunt sicut alba et justa, sed etiam ipsa quæ sunt qualitates (a quibus talia dicuntur qualia) suscipiunt in seipsis, sicut quæ dicuntur crementa et diminutiones in seipsis. Et dicit Boetius quod hæc fuit sententia Platonis. Hoc autem declaratur exemplo, cum, sicut dicunt, candidum quod est candor, sit candidum, contingit, ut dicunt, illum candorem magis intendi per majorem (ut dicit Nicolaus Peripateticus) luminis contrarii admixtionem.

Quamvis autem hoc sit quoddam qualitatis proprium, non tamen convenit omni qualitati, sed plura sunt quæ suscipiunt magis et minus, et non omnia quæ sunt qualitates : justitia enim cum sit qualitas si dicatur (secundum quod in abstracto significatur) suscipere magis et minus, potest quilibet ambigere utrum verum sit an falsum quod dicitur. Similiter autem est etiam in aliis qualitatibus quæ afficiunt per inhærentiam subjecta in quibus sunt, quando per modum abstractionis significantur, ut justitia, albedo, sanitas et hujusmodi. Quidarn namque dubitant de talibus, utrum magis et minus suscipiant : quidarn enim justitiam a justitia et albedinem ab albedine aiunt non multum dici secundum magis et minus, ita quod una justitia sit magis justitia quam alia, vel una albedo magis albedo quam alia : neque dicunt unam sanitatem ab alia sanitate dici secundum magis et minus.

But from this, that the first contrariety is in quality, it is understood that contrariety in all other genera in which it is, is only in the account of quality: for the first is the cause of all others in whatever genus in which it is the first. Whence also in quantity, by reason of the motion of increase and decrease, there is no contrariety except according to quality, as was said in the treatise on *Quantity*. And if there are contraries in where or in position, it must be that they are in them according as they are not resolved from quality. But the disputation concerning these belongs to the physicist or the metaphysician, and not to the logician: for the logician does not consider contraries except according as they are at the greatest distance in the same genus, and he does not consider them according as they are first and not first.

Chapter XII.

On the second property which is to receive more and less.

Quality however receives more and less, and this is the second property caused from that which preceded. But that the qualified receives more and less is clear by induction: for one thing is called more and less white than another according to the intension and remission of whiteness, and similarly one thing is called more and less just than another according to the intension and remission of justice. But this is not only in those very things which are qualified, such as white and just, but even those very things which are qualities (from which such things are called qualified) receive it in themselves, as they are called increases and decreases in themselves. And Boethius says that this was the opinion of Plato. But this is declared by an example, when, as they say, that which is bright (candidum), which is brightness (candor), is bright, it happens, as they say, that that brightness is more intended through a greater (as Nicolaus the Peripatetic says) admixture of the contrary light.

But although this is a certain property of quality, yet it does not agree to every quality, but there are many things which receive more and less, and not all things which are qualities: for since justice is a quality, if it is said (according as it is signified in the abstract) to receive more and less, anyone can doubt whether what is said is true or false. But similarly it is also in other qualities which affect by inherence the subjects in which they are, when they are signified by the mode of abstraction, as justice, whiteness, health and such like. For some doubt about such things, whether they receive more and less: for some say that justice is not much called more and less from justice, and whiteness from whiteness, so that one justice is more justice than another, or one whiteness more whiteness than another: nor do they say one health is called more and less from another health.

Et causa etiam dicti est, quod nomen uniuscujusque abstractorum imponitur in termino, et non potest intendi et remitti : isti autem dicunt, quod intensio et remissio secundum magis et minus accidit qualitatibus secundum quod sunt in subjecto recipiente ipsas qualitates : dicunt enim alterum altero magis et minus sanitatem et justitiam habere, secundum quod unum dicimus altero saniorem et justiorem. Sic etiam dicunt et grammaticam et alias qualitates (quæ subjecta in quibus sunt afficiunt, et ideo affectus generaliter dicuntur) secundum magis et minus inesse. Licet tamen Antiqui diversa circa ista sentiant, tamen hoc indubitanter verum est, quod subjecta (quæ secundum illos affectus qualitatum dicuntur qualia) illa procul dubio secundum quasdam qualitates recipiunt magis et minus, et in prima et in tertia specie qualitatis : hoc enim modo unus alio dici-

tur grammaticior, qui magis habet grammaticam : et sic unus dicitur justior et sanior, et sic est in multis aliis primæ et tertiæ speciei qualitatibus. Sed non est hoc in quarta specie qualitatis : triangulus enim et quadrangulus secundum quod denominative dicta sunt a triangulatione et quadrangulatione, sic dicuntur qualia et non qualitates : et sic dicta non videntur magis et minus suscipere triangulus et quadrangulus, neque aliquod denominatum ab aliis figuris, ut circulus, vel pentagonum, vel exagonum: hæc enim non dicuntur secundum prædicationem, nisi de illis quæ diffinitionem eorum recipiunt: hæc autem omnia sunt in termino : unde omnia de quibus prædicatur circulus nomine et ratione qualitatis, æqualiter et non secundum magis et minus sunt et dicuntur circulus. Ea autem quæ sunt de numero eorum quæ circuli nomen et rationem non recipiunt, illa in quantum non sunt circulus, et non secundum magis et minus, sed æqualiter circulus negatur in ipsis. Hoc autem patet per exempla : quadratum enim et quadrangulum circuli nomen et rationem non recipiunt, sed ab utrisque negatur circulus, et ideo quadratum non magis et minus est circulus quam quadrangulus. Est enim quadratum figura quatuor lineis æqualibus et quatuor rectis angulis conclusa. Et quadrangulus est figura quatuor rectis lineis, quarum duæ oppositæ sunt æquales sibi invicem, aliis non oppositis inæquales, et quatuor rectis angulis contenta. Et neutra istarum suscipit circuli nomen. Quia circulus est figura plana, una linea contenta, in cujus medio punctum est qui vocatur centrum, a quo omnes lineæ rectæ ductæ ad circumferentiam sunt æquales. Et hæc ratio neque quadrato convenit, neque quadrangulo, quod altera parte longius est. Et ideo æqualiter et non secundum magis et minus quadratum et quadrangulum non sunt circulus, nulla enim talium figurarum recipit diffinitivam rationem circuli.

And the cause of this saying is that the name of each of the abstracts is imposed in a limit, and cannot be intended and remitted: but these say that intension and remission according to more and less happens to qualities according as they are in the subject receiving those qualities: for they say that one has more and less health and justice than another, according as we call one healthier and juster than the other. Thus also they say that grammar and other qualities (which affect the subjects in which they are, and therefore are generally called affections) are in them according to more and less. Although however the Ancients feel differently about these things, yet this is indubitably true, that the subjects (which according to those affections of qualities are called qualified) undoubtedly receive more and less according to certain qualities, both in the first and in the third species of quality: for in this way one is said to be more a grammarian, who has more of grammar: and thus one is called more just and healthier, and thus it is in many other qualities of the first and third species. But this is not in the fourth species of quality: for triangle and quadrangle, according as they are called denominatively from triangulation and quadrangulation, are thus called qualified and not qualities: and thus spoken of, triangle and quadrangle do not seem to receive more and less, nor anything denominated from other figures, as a circle, or a pentagon, or a hexagon: for these are not said according to predication except of those things which receive their definition: but all these are in a limit: whence all things of which circle is predicated by name and account of quality, are and are called circle equally and not according to more and less. But those things which are of the number of those which do not receive the name and account of a circle, in as much as they are not a circle, circle is denied in them equally and not according to more and less. But this is clear through examples: for a square and a quadrangle do not receive the name and account of a circle, but a circle is denied by both, and therefore a square is not more and less a circle than a quadrangle. For a square is a figure enclosed by four equal lines and four right angles. And a quadrangle is a figure contained by four right lines, of which two opposite ones are equal to each other, the others not opposite being unequal, and four right angles. And neither of these receives the name of a circle. Because a circle is a plane figure contained by one line, in the middle of which is a point which is called the center, from which all straight lines drawn to the circumference are equal. And this account agrees neither to a square nor to a quadrangle, which is longer on one part. And therefore equally and not according to more and less square and quadrangle are not a circle, for none of such figures receives the definitive account of a circle.

Simpliciter autem loquendo sive universaliter si utraque ista nullo modo recipiunt hujusmodi quod propositum est, hoc est, circuli rationem secundum aliquem modum, tunc sequitur quod alterum istorum non dicitur secundum magis et minus esse circulus : quia quod secundum magis et minus esse vel non esse non dicitur, aliquo modo participat nomen et rationem ejus quod participat secundum magis et minus. Concluditur ergo, quod non omnia qualia suscipiunt magis et minus. Horum itaque prædictorum proprium nihil est proprie proprium qualitatis : neutrum enim illorum convenit omni et soli et semper.

Est autem attendendum, quod sicut dicit Boetius ab Alexandro accipiens in commento libri Prædicamentorum, fuerunt tres sectæ Antiquorum circa hoc. Plato enim qui ponebat formas, dixit intensionem et remissionem fieri in qualitatibus maxime primæ speciei, sicut circa habitus et dispositiones, quæ dona dixit esse deorum, sicut expresse legitur in libro qui Menoni ascribitur, per immissionem boni divini plus et plus, sicut albedo plus et plus est albedo, cui immittitur plus et plus de claritate luminis, et sic dixit intendi omnes virtutes. Alii autem quidam Epicurei dixerunt per incrementa partium subjecti fieri intensionem, ut albedo vel justitia fit plus et minus, quæ plus et minus occupat et informat de partibus subjecti. Media autem Aristotelis et Peripateticorum opinio est, quod intensio fiat circa qualitatem secundum inhærentiam. Qualitas inhæret subjecto dupliciter : ex parte subjecti et ex parte qualitatis. Ex parte subjecti quidem ex hoc quod plus et minus aptatur qualitati recipiendæ. Ex parte autem qualitatis dupliciter : si enim habet contrarium, tunc plus et minus intenditur secundum majorem et minorem contrarii admixtionem: si autem non habet contrarium, tunc plus intenditur secundum majorem vel minorem accessum ad naturæ terminum, cui nomen et a qua nomen imponitur : et hoc est dicere ad veram nominis impo-

sitionem. Positio autem Platonis non habet hic probari nec improbari, sed in prima philosophia. Hic autem dici potest, quod si additione doni divini fieret intensio in qualitate, difficile esset valde dicere qualiter addendum ei sit quod est forma simplex, nisi diceretur illud fieri per additionem alterius formæ ejusdem speciei : et hoc prohibetur a multis Philosophis, quod plures formæ ejusdem speciei non sint in eodem subjecto. Si autem fiat intensio per partium subjecti occupationem, sequeretur quod idem subjectum in eadem parte non esset magis et minus tale, quod est contra sensum. Remanet ergo quod intensio fiat per accessum ad terminum naturæ in subjecto magis et minus ad formam disposito. Hæc ergo de proprietatibus qualitatis dicta sunt.

But speaking simply or universally, if both of these in no way receive this sort of thing which has been proposed, that is, the account of a circle according to some mode, then it follows that one of these is not said to be more and less a circle: because that which is not said to be or not to be according to more and less, in some way participates in the name and account of that which it participates in according to more and less. It is concluded therefore that not all qualified things receive more and less. Therefore of these aforesaid properties, none is properly a property of quality: for neither of them agrees to all and only and always.

But it must be attended to that, as Boethius says, taking it from Alexander in the commentary on the book of the Categories, there were three sects of the Ancients about this. For Plato, who posited forms, said that intension and remission happen in qualities especially of the first species, such as about habits and dispositions, which he said were gifts of the gods, as is expressly read in the book which is ascribed to Meno, through the immission of divine good more and more, just as whiteness is more and more whiteness, into which more and more of the clarity of light is immitted, and thus he said all virtues are intended. But some others, the Epicureans, said that intension happens through the increases of the parts of the subject, so that whiteness or justice becomes more and less, which occupies and informs more and less of the parts of the subject. But the middle opinion of Aristotle and the Peripatetics is that intension happens about quality according to inherence. Quality inheres in a subject in two ways: on the part of the subject and on the part of the quality. On the part of the subject indeed from this, that it is more and less adapted to receiving the quality. But on the part of the quality in two ways: for if it has a contrary, then it is more and less intended according to a greater and lesser admixture of the contrary: but if it does not have a contrary, then it is more intended according to a greater or lesser access to the limit of nature, to which the name is imposed and from which the name is imposed: and this is to say to the true impo-

sition. But the position of Plato does not have to be proved or disproved here, but in First Philosophy. But here it can be said, that if intension in quality were made by the addition of a divine gift, it would be very difficult to say how that which is a simple form is to be added to it, unless it were said to be made by the addition of another form of the same species: and this is prohibited by many philosophers, that multiple forms of the same species are not in the same subject. But if intension were made through the occupation of the parts of the subject, it would follow that the same subject in the same part would not be more and less such, which is against sense. It remains therefore that intension is made through access to the term of nature in a subject more and less disposed to the form. These things, therefore, have been said concerning the properties of quality.

CAPUT XIII. — De tertio proprio qualitatis quod est simile et dissimile.

Proprium autem qualitatis est, quod secundum eam solam simile vel dissimile aliquid dicitur. Simile enim nihil dicitur esse alteri, nisi secundum quod est quale : et secundum hoc solum dicitur dissimile. Similitudo enim est unitas in qualitate, sicut æqualitas est unitas in quantitate, et identitas unitas in substantia.

Quod autem hoc sit proprium qualitatis, patet : quia non secundum aliud aliquid, sicut secundum quantitatem, non dicimus aliquid simile alteri, sed dicimus æquale vel inæquale : secundum autem substantiam, non dicimus aliquid simile, sed idem. Similiter autem est in omnibus aliis prædicamentis.

Sed tunc videtur hoc non esse proprium, quia similitudo est in ad aliquid, et sic non est proprium qualitatis. Ad hoc dicendum quod sicut identitas et æqualitas, ita similitudo fundatur super rem alterius prædicamenti, et secundum illam rem dicitur proprie, sed secundum relationem dicitur relative.

Si autem objiciatur de his quæ in aliis prædicamentis dicuntur similia, sicut duo genera similia, vel duæ species similes : Dicendum quod genus et species non dicuntur similia nisi secundum qualitates essentiales quæ sunt differentiæ. Quod si dicatur quod nec genus nec species prædicatur in quale, sed in quid, Dicendum quod prædicari in quid non habent in quantum sunt formæ, sed in quantum sunt formalia vel formata per differentiam constitutivam quæ est forma. Quod au-

tem similitudines sunt specierum vel individuorum, habent in quantum sunt formæ et qualitates essentiales specierum vel individuorum. Hoc igitur est proprie proprium.

CAPUT XIV. — De exclusione erroris qui posset accidere ex hoc quod dicuntur qualitates in ad aliquid esse.

Sunt autem quidam qui putant prædicamentum ad aliquid et qualitatem non esse distincta : eo quod quædam posita in ad aliquid, sicut scientia et virtus, videntur esse in qualitate. Habitus enim et dispositio ad aliquid dicuntur, et sunt prima species qualitatis. Ad hoc dicendum, quod scientia ut scientia ad aliquid est, sed ut est habitus quidam et affectus, in qualitate est. Et eodem modo est de virtute.

Est autem attendendum quod si idem aliquid utrique prædicamento conveniat, non oportet propter hoc prædicamenta confundi. Scientia enim ut habitus est, qualitas est : ut autem est scibilis scientia, est in ad aliquid. Similiter virtus ut est habitus quidam, qualitas est : ut autem est virtus alicujus vel ad aliquid, est in eo quod est ad aliquid. Et sic est in aliis.

CHAPTER XIII. — On the third property of quality which is similar and dissimilar.

But it is a property of quality that according to it alone something is called similar or dissimilar. For nothing is said to be similar to another, except according as it is qualified (quale): and according to this alone is it called dissimilar. For similarity is unity in quality, as equality is unity in quantity, and identity is unity in substance.

But that this is a property of quality is clear: because not according to anything else, such as according to quantity, do we call something similar to another, but we call it equal or unequal: but according to substance, we do not call something similar, but the same. But similarly it is in all other predicaments.

But then it seems this is not a property, because similarity is in Relation (ad aliquid), and thus it is not a property of quality. To this it must be said that just as identity and equality, so similarity is founded upon a thing of another predicament, and according to that thing it is said properly, but according to relation it is said relatively.

But if it should be objected concerning those things which in other predicaments are called similar, as two similar genera, or two similar species: It must be said that genus and species are not called similar except according to essential qualities which are differences. But if it should be said that neither genus nor species is predicated in the 'of what sort' (in quale), but in the 'what' (in quid), it must be said that they do not have being predicated in the 'what' insofar as they are forms, but insofar as they are formal or formed through a constitutive difference which is a form. That wh-

have similarities of species or individuals, they have [them] insofar as they are forms and essential qualities of species or individuals. This therefore is properly a property.

CHAPTER XIV. — On the exclusion of the error which could happen from this, that qualities are said to be in Relative (ad aliquid).

But there are some who think that the predicament Relation and Quality are not distinct: because certain things placed in Relation, such as knowledge and virtue, seem to be in Quality. For habit and disposition are said [to be] relative to something, and they are the first species of quality. To this it must be said that knowledge as knowledge is relative, but as it is a certain habit and affection, it is in Quality. And it is in the same way concerning virtue.

But it must be attended to that if the same thing agrees to both predicaments, it is not necessary on this account that the predicaments be confused. For knowledge insofar as it is a habit, is a quality: but insofar as it is the knowledge of a knowable thing, it is in Relation. Similarly virtue, insofar as it is a certain habit, is a quality: but insofar as it is the virtue of someone or towards something, it is in that which is Relation. And thus it is in others.

Unde si aliquis dicat, quod virtus vel scientia non sunt in qualitate, eo quod sunt in ad aliquid, decipitur : quia non secundum eamdem rationem sunt in utroque. Secundum enim quod est habitus et dispositio, est in qualitate : ut autem est disciplina, est in eo quod est ad aliquid. Et similiter album per hoc quod subjectum dicit, in substantia est : per hoc autem quod quale dicit subjectum, est in qualitate. Hæc ergo de quali et qualitate dicta sunt.

CAPUT I — De agere et pati.

Habitis quatuor vocibus quatuor genera rerum significantibus, in quibus substantia prædicat id quod simpliciter est ens et per seipsum, Quantitas prædicat ens in alio per quod ipsa subjicitur et substat multis aliis accidentibus, et etiam motui, quia illi non subjicitur substantia simpliciter sed substantia quanta : et omnibus illis quæ dicunt formas quæ in majori quantitate majores, et in minori minores sunt, sicut sunt omnes qualitates activæ et passivæ, per hanc subjicitur motui et mutationi, quia illis subjicitur materia quantitate determinata : propter quod etiam quantum separatam rationem habet a physico, et est secundum rationem ante ipsum, sicut metaphysicum ante physicum. Ad aliquid autem prædicat id quod est comparatum ad aliquid, qui modus immixtus est omnibus sex prædicamentis, et ideo ut principium ad alia præmitti debuit. Habita etiam qualitate et qualibus, quæ etiam generalem modum prædicandi in quale habent, qui quodammodo inest omnibus aliis. Propterea etiam præmitti debuit, ut hic substantia præcederet ut omni subjectum, quantitas ut subjectum ad physicum, ad aliquid autem ut modus aliorum comparatus, quale autem et qualitas ut modum prædicandi dans residuis omnibus.

Restat enim dicere de his quæ non habent res absolutas prædicare nec modum prædicandi habent ab illis absolutum : habent enim modum relationis et qualitatis, et addunt aliquid super utrumque, per quod efficiuntur specialia prædicamenta. Propter quod ipsa sex genera causantur ab aliis quatuor, quæ præhabita sunt, et non causantur ab ipsis sicut inferiora causantur a superioribus, quia si hoc ita esset, continerentur in eis, sicut in suis generibus, sed causantur ex comparationibus supradictorum generum ad aliud : cum tamen secundum causam eamdem vel diversam non dicantur ad convertentiam.

Whence if someone should say that virtue or knowledge are not in Quality because they are in Relation, he is deceived: because they are not in both according to the same account. For according as it is a habit and disposition, it is in Quality: but as it is a discipline (teaching), it is in that which is Relation. And similarly white, through this that it speaks of a subject, is in Substance: but through this that it speaks of the subject as qualified (quale), it is in Quality. These things therefore have been said concerning qualified thing and quality.

CHAPTER I — On acting and suffering.

Having the four voices signifying the four genera of things, in which Substance predicates that which is simply being and through itself, Quantity predicates being in another through which it is subjected and stands under many other accidents, and also motion, because it is not the simple substance that is subjected to it but the quantified substance: and to all those things which speak of forms which are greater in greater quantity and smaller in smaller quantity, as are all active and passive qualities, through this it is subjected to motion and change, because matter determined by quantity is subjected to those: on account of which also quantity has an account separate from the physical, and is according to the account before it, just as the metaphysical is before the physical. Relative (ad aliquid) however predicates that which is compared to something, which mode is mixed in all six predicaments, and therefore it ought to have been placed before the others as a principle. Quality and qualified things have also been had, which also have a general mode of predicating in the 'of what sort' (quale), which in some way is in all others. For that reason also it ought to have been placed before, so that here substance might precede as the subject of all, quantity as the subject for the physical, relative however as a compared mode of the others, but qualified thing and quality as giving the mode of predicating to all the remaining.

For it remains to speak of those things which do not have absolute things to predicate nor have a mode of predicating absolute from those: for they have the mode of relation and of quality, and they add something over both, through which they are made special predicaments. On account of which those six genera are caused by the other four which have been previously had, and they are not caused by them as inferiors are caused by superiors, because if it were so, they would be contained in them as in their genera, but they are caused from comparisons of the aforesaid genera to something else: although nevertheless they are not said to be reciprocal (ad convertentiam) according to the same or diverse cause.

Sicut actio a forma vel qualitate substantiali, vel accidentali comparata ad id quod actioni subjicitur. Passio a materia vel subjecto quod agenti subjicitur, et in qualitate accidentali actio a potentia naturali, passio a naturali impotentia. Quando vero non a tempore, sed a temporis adjacentia. Ubi autem non a loco, sed a loci circumscriptione. Positio autem a partibus secundum ordinem comparatis inter se et toto et in loco. Habitus autem comparatione extrinsecorum ad totum subjectum. De quibus omnibus non magnum hic oportet facere tractatum, eo quod hic specialiter intendimus de quatuor quæ aliorum sex sunt causa, postea autem in alio libro de aliis sex est tractandum. Inter hæc primum est prædicamentum actionis, quod est de facere : et quia actio est in patiens per effectum procedens virtus agentis, ideo cum hoc genere oportet etiam de pati determinare.

Sciendum quod Aristoteles in sexto Ethicorum ponit distinctionem inter agere et facere, et dicit quod actio est proprie in humanis voluntatibus, sicut sunt consi-

liari, et eligere, velle et hujusmodi, de quibus est prudentia virtus : facere autem quia virtus efficientis per effectum procedit in patiens, sicut materiam extrinsecam, sicut est secare, vel dolare, vel aliquid talium de quibus cum certa ratione est ars mechanica. Sed quia nos hic non consideramus nisi prædicationis modum, hic generaliter intendimus de facere vel agere, prout communiter se habent ad utrumque, scilicet agere, et facere : et dicimus omnem illam vocem agere vel facere prædicare, quæ significat activam virtutem in effectum procedere ab agente in id quod agenti secundum illam virtutem subjicitur, sicut est intelligere, secare, et urere secundum totum illum modum quo significare potest secundum totum suum declivium, et secundum omnem modum verbalem suum vel etiam participialem : quia etiam participium significat cum actione et tempore, sicut arans, vel secans, sive quodcumque tale similem illis habens suæ prædicationis significationem : iste enim modus significandi rem prædicabilem non potest reduci ad aliquod aliud prædicamentum : per oppositum autem passionem quæ est ab actore receptio ad simplicem actus agentis receptionem, sive ex hoc immutetur patiens, ut in actione physica passum immutatur in aliud ut in physicis, sive non immutatur. Sed logice loquendo de pati communiter sumitur prout est vox rem prædicamenti significans, quæ est susceptio actus agentis simpliciter prout est suscipiens ipsum tantum : hic enim modus ad nullum aliud reduci potest prædicamentum, et propterea enumerata sunt hæc duo inter prædicamenta :

Just as action [is caused] from substantial or accidental form or quality compared to that which is subjected to the action. Passion [is caused] from the matter or subject which is subjected to the agent, and in accidental quality action is from natural power, passion from natural impotence. But 'When' is not from time, but from the adjacency of time. But 'Where' is not from place, but from the circumscription of place. But 'Position' is from parts compared among themselves and to the whole and in a place according to order. But 'Habit' is by the comparison of extrinsic things to the whole subject. Concerning all of which it is not necessary to make a great treatise here, because here we especially intend [to speak] of the four which are the cause of the other six, but afterwards in another book the other six are to be treated. Among these the first is the predicament of Action, which is about 'doing' (facere): and because action is the power of the agent proceeding into the patient through an effect, therefore with this genus it is also necessary to determine about 'suffering' (pati).

It must be known that Aristotle in the sixth of the Ethics places a distinction between 'agere' and 'facere', and says that action (actio) is properly in human wills, such as are counse-

l, and to choose, to will and such like, of which prudence is the virtue: but 'doing' (facere) because the power of the efficient proceeds through an effect into the patient, as into extrinsic matter, such as is to cut, or to hew, or any of such things about which with certain reason there is mechanical art. But because we here consider only the mode of predication, here we generally intend concerning 'doing' or 'acting', as they commonly relate to both, namely acting and doing: and we say that every voice 'to act' or 'to do' predicates which signifies an active power to proceed into an effect from the agent into that which is subjected to the agent according to that power, such as is to understand, to cut, and to burn according to that whole mode by which it can signify according to its whole inflection, and according to every verbal mode of its own or even participial: because a participle also signifies with action and time, such as plowing, or cutting, or whatever such like having a similar signification of its predication: for this mode of signifying a predicable thing cannot be reduced to any other predicament: conversely however passion, which is reception from the actor towards the simple reception of the agent's act, whether from this the patient is changed, as in a physical action the patient is changed into another as in physics, or it is not changed. But speaking logically, 'to suffer' (pati) is commonly taken insofar as it is a voice signifying a thing of a predicament, which is the reception of the agent's act simply insofar as it is receiving it only: for this mode can be reduced to no other predicament, and for that reason these two have been enumerated among the predicaments:

quia sic dicuntur et prædicantur prima quidem rerum principia : principium enim est illud in quo suæ coordinationis secundum communitatem est reductio, et quod ad nullum ut genus reduci potest. Sic ergo ejus quod est agere accepto, distinctio est in agentibus : eo quod virtus agentis in effectum procedens ab ipso, aliquando per seipsum agit, sicut agit intelligentia et anima. Aliquando autem processus est ab ipsa per qualitatem agentem, sicut est agere a calefaciente vel infrigidante. Et quandoque est processus ab hoc agente per organum et instrumentum, ut secare significat agere, et ad omnia communiter sumitur facere vel agere quando est prædicamentum. Et similiter id quod est pati convenienter significatur per verbum, et non ita convenienter per nomen : melius enim dicitur agere vel facere, quam actio vel factio : et melius dicitur pati, quam passio, quia nominaliter significant ut in quiete et sine tempore, quod non convenit cum agere et pati. His enim sic determinatis, non videtur aliud dici debere hic de agere et pati, nisi quod suscipiunt contrarietates facere et pati, eo quod contrariis virtutibus causantur : et quia recipiunt contrarietatem, necessarium est quod etiam recipiant magis et minus sive intensionem et remissionem : quia actiones et passiones contrariarum virtutum sunt contrariæ, sicut calefacere contrarium est ad infrigidare, eo quod calidum contrarium est frigido. Et humectare ad exsiccare contrarium est, eo quod humidum est contrarium sicco : et sic se habent albificare et nigrificare, et actiones omnium contrariorum sic se habent ad invicem. Et sic est in actionibus animæ : quia sic delectare contrarium est ad contristare, et ideo agere et pati recipiunt contrarietatem : quia sicut calefacere contrarium est ad frigefacere, ita calefieri contrarium est ad frigefieri, et sic delectari contrarium est ad contristari, sicut delectare ad contristare. Quia recipere contrarium est causa ejus quod est recipere magis et minus, sicut sæpe dictum est, ideo ista recipiunt magis et minus, quamvis intensionem non recipiant secundum gradus operationis, tamen ipsum agere et ipsum pati sunt res recipientes magis et minus : et hæc intensio causatur ex intensione virtutis in agendo et intensione virtutis passivæ in patiendo : et sic calefacere est ma-

-gis et minus, et in passione contristari, et calefieri est secundum magis et minus. Recipit ergo magis et minus facere et pati.

De his autem duobus simul determinare oportuit, quia unum est causa alterius, et alterum est effectus ipsius : tamen illud quod prædicat unum istorum, non continetur sub alio sicut sub genere. De his igitur duobus quantum ad præsentem spectat intentionem tantum hæc dicta sunt.

CAPUT II.

De aliis prædicamentis quatuor in communi.

because thus the first principles of things are said and predicated: for a principle is that in which the reduction of its coordination according to community is, and which can be reduced to none as a genus. Thus therefore, having taken that which is 'to act', there is a distinction in agents: because the power of the agent proceeding into an effect from itself, sometimes acts through itself, as the intelligence and the soul act. But sometimes the process is from it through an acting quality, as is to act by a heater or a cooler. And sometimes there is a process from this agent through an organ and instrument, as 'to cut' signifies acting, and 'to do' or 'to act' is commonly taken for all when it is a predicament. And similarly that which is 'to suffer' (pati) is conveniently signified by a verb, and not so conveniently by a noun: for it is better called 'to act' or 'to do' than 'action' or 'faction': and it is better called 'to suffer' than 'passion', because nominally they signify as in rest and without time, which does not agree with 'to act' and 'to suffer'. For these having been thus determined, it does not seem that anything else ought to be said here about acting and suffering, except that 'doing' and 'suffering' receive contrarieties, because they are caused by contrary powers: and because they receive contrariety, it is necessary that they also receive more and less, or intension and remission: because the actions and passions of contrary powers are contrary, just as 'to heat' is contrary to 'to cool', because hot is contrary to cold. And 'to moisten' is contrary to 'to dry', because moist is contrary to dry: and thus are 'to whiten' and 'to blacken', and the actions of all contraries are thus related to each other. And thus it is in the actions of the soul: because thus 'to delight' is contrary to 'to sadden', and therefore acting and suffering receive contrariety: because just as 'to heat' is contrary to 'to cool', so 'to be heated' is contrary to 'to be cooled', and thus 'to be delighted' is contrary to 'to be saddened', just as 'to delight' is to 'to sadden'. Because to receive a contrary is the cause of that which is to receive more and less, as has often been said, therefore these receive more and less; although they do not receive intension according to the degrees of operation, yet the acting itself and the suffering itself are things receiving more and less: and this intension is caused from the intension of power in acting and the intension of the passive power in suffering: and thus to heat is mo-

-more and less, and in passion 'to be saddened' and 'to be heated' is according to more and less. Therefore, 'to do' and 'to suffer' receive more and less.

But it was necessary to determine regarding these two together, because one is the cause of the other, and the other is the effect of it; yet that which predicates one of these is not contained under the other as under a genus. Therefore, regarding these two, only these things have been said as far as the present intention is concerned.

CHAPTER II.

On the other four categories in common.

De situm autem esse (hoc est positum esse secundum ordinem partium ad invicem et in toto et in loco totius et partium) dictum est in his quæ ad aliquid sunt, et quædam sunt quæ sunt relationes, quædam denominative a positionibus dicuntur sicut asperum et lene, rarum et densum, et hujusmodi quæcumque situs partium in toto et in loco significant.

De reliquis autem prædicamentis quæ sunt quando, et ubi, et habere (eo quod manifesta sunt) nihil aliud in hoc loco dici oportet, quam quæ in principio in ante habitis dicta sunt : quia scilicet unumquodque illorum unum per se significat prædicamentum. Quando quidem non tempus significat, sed esse temporis secundum aliquam temporis differentiam, ut heri quidem fuisse, aut cras futurum esse, aut longe a præsenti, aut prope, et a præterito, similiter olim fuisse, aut jam, aut dudum, et aliquid hujusmodi : hoc enim prædicamentum nullum aliorum significat. Et similiter est de ubi, ut hic esse, aut esse in foro, aut in theatro, et quæ hujusmodi habent prædicationem : sic enim significant : ubi enim non est locus, sed in loco aliqualiter esse situm : et quando non est tempus, sed in tempore esse : et ideo speciale oportet esse prædicamentum.

Habere autem comparationem habentis significat ad habitum circumdantem, quamvis habere dicatur multipliciter, sicut in sequentibus istius libri determinabitur : prædicamentum enim ejus quod est habere, non dicit nisi relationem ad habitum exteriorem qui se mutat ad figuram et circumdationem habentis, et hoc est habere, sicut dicimus vel bene vel male habere vestimentum ad necessitatem vel decus habentis. Sic enim generalis vox est ens prædicans quod in nullo aliorum prædicatur : et ideo hic secundum intentionem hujus libri nihil aliud de his esse videtur dicendum, quam quæ in principio in enumeratione prædicamentorum dicta sunt, scilicet quod hoc habere significat et prædicat calceatum esse vel armatum esse. Ubi autem prædicat in loco esse, quando etiam heri vel cras vel hodie esse, et alia quædam quæ de his dicta sunt in istius libri parte prima, ubi prædicamenta enumerata sunt.

De propositis itaque generibus ea quæ dicta sunt sufficiant. Adhuc etiam in libro sex principiorum sigillatim tractabimus de his de quibus hic non est tractatum.

Caput I

Quæ sint et quot tractanda in hoc tractatu.

Regarding 'to be in a position' (situm esse) (that is, to be placed according to the order of parts towards each other both in the whole and in the place of the whole and the parts), it has been spoken of in those things which are relatives, and some are relations, while some are called denominatively from positions, such as rough and smooth, rare and dense, and whatever things of this sort signify the position of parts in the whole and in place.

But regarding the remaining categories, which are 'when' (quando), 'where' (ubi), and 'to have' (habere) (because they are manifest), nothing else ought to be said in this place than what was said at the beginning in the previous sections: namely, because each of them signifies one category in itself. For 'when' does not signify time, but the being of time according to some difference of time, as to have been yesterday, or to be about to be tomorrow, or far from the present, or near, and from the past, similarly to have been once, or already, or a while ago, and something of this sort: for this category signifies none of the others. And it is similar concerning 'where', such as to be here, or to be in the forum, or in the theater, and things of this sort that have predication: for they signify thus: for 'where' is not place, but to be situated in a place in some way; and 'when' is not time, but to be in time; and therefore it must be a special category.

'To have', however, signifies the comparison of the one having to the surrounding habit, although 'to have' is said in many ways, as will be determined in the following parts of this book: for the category of that which is 'to have' says nothing except the relation to an external habit which changes itself to the figure and surrounding of the one having, and this is 'to have', as we say to have a garment either well or poorly for the necessity or grace of the one having. For thus it is a general term predicating being which is predicated in none of the others: and therefore here, according to the intention of this book, nothing else seems to be said about these than what was said at the beginning in the enumeration of the categories, namely that this 'to have' signifies and predicates being shod or being armed. 'Where' however predicates being in a place, 'when' even being yesterday or tomorrow or today, and certain other things which were said about these in the first part of this book, where the categories were enumerated.

Therefore, let those things that have been said about the proposed genera suffice. Furthermore, in the book of the Six Principles, we shall treat individually of those things which have not been treated here.

Chapter I

Which things and how many are to be treated in this treatise.

Omnibus igitur jam determinatis, quæ de prædicamentis dicenda esse videbantur, in quantum prædicamentum est sub uno communi nomine prædicabilium coordinatio. Non enim omnia quocumque modo coordinata reducuntur ad genus unum : ideoque post prædicamenta oportuit sequi tractatum de his quæ quidem coordinanda sunt, sed ad unum genus prædicamenti reduci non possunt. Et hæc sunt opposita, quæ in pluribus generibus inveniuntur, et ea quæ sunt prius et posterius, et ea quæ sunt simul, et motus, et habitus : hæc enim omnia talia sunt cum ipsis nominibus coordinabilitatem habentia, et tamen ad unum aliquod genus prædicamenti reduci non possunt.

De his igitur quinque necesse est tractatum facere specialem secundum quod ad logicum pertinent : quamvis enim opposita sint in rebus et in in entibus quæ considerat metaphysica, tamen oppositio quæ ponitur inter ea intentionis est : et cum intentio rationem dicat cujusdam ordinationis, et illam habet logicus considerare. Et similiter est de his quæ sunt simul in omnibus : ea quidem quæ sunt opposita per prius vel posterius et simul, sunt in natura rerum : forma autem et intentio oppositionis et prioritatis et simul ponitur a ratione. Motus autem secundum omnes sui differentias est in natura. Reductio autem ad universale et ad genus oportet quod si in ratione, et ideo motus cum si prædicabile quidem de multis, oportet quod secundum hoc a logico et secundum formam coordinationis prædicabilium tractetur. Est autem adhuc coordinatio ejus quod inest cum eo cui inest sicut habitum in habente : quod licet ex parte habentis sit secundum genus unum, tamen ex parte habiti est secundum modos multos ad unum et idem genus non reducibiles : et ideo oportuit etiam tractare de habere secundum rationem coordinationis ejus quod habetur ad id quod habet. Et sic completur omnis coordinabilium et prædicabilium coordinatio, quam sequitur actus rationis, qui est prædicabilium rerum de quibus prædicatur compositio.

Accipiuntur autem eorum quinque coordinationes penes quæ sunt in pluribus generibus aliquo modo coordinationis unam rationem habentibus : hæc enim aut penes omnium generum diversitatem sunt accepta, aut penes ea quæ sunt in generibus contenta, aut penes aliorum coordinationem ad substantiam. Si accipiuntur penes omnium generum diversitatem, cum sicut dicit Boetius, oppositio sit prima causa diversitatis, tunc est oppositio : quia omnia diversa per divisionem quæ est per opposita, exeunt ab uno aliquo, et est oppositio causa diversitatis.

Everything, therefore, having now been determined which seemed necessary to say about the categories, insofar as a category is a coordination under one common name of predicables. For not all things coordinated in any way are reduced to one genus: and therefore after the categories it was necessary for a treatise to follow concerning those things which indeed are to be coordinated, but cannot be reduced to one genus of category. And these are opposites, which are found in many genera, and those things which are prior and posterior, and those things which are simultaneous, and motion, and habit: for all these are such as to have coordinability with their names themselves, and yet they cannot be reduced to any one genus of category.

Concerning these five, therefore, it is necessary to make a special treatise according to how they pertain to the logician: for although opposites are in things and in beings which metaphysics considers, yet the opposition which is placed between them is of intention: and since intention expresses the account of a certain ordination, the logician must consider it. And it is similar concerning those things which are simultaneous in all: those things indeed which are opposites by prior or posterior and simultaneous are in the nature of things; but the form and intention of opposition and priority and simultaneity is placed by reason. Motion, however, according to all its differences, is in nature. But the reduction to the universal and to the genus must be in reason, and therefore motion, since it is indeed predicable of many, must according to this be treated by the logician and according to the form of the coordination of predicables. There is, furthermore, still the coordination of that which is in with that in which it is, as the had in the haver: which, although on the part of the haver it is according to one genus, yet on the part of the had it is according to many modes not reducible to one and the same genus: and therefore it was also necessary to treat 'to have' according to the account of the coordination of that which is had to that which has it. And thus is completed every coordination of coordinables and predicables, which is followed by the act of reason, which is the composition of the predicable things about which it is predicated.

Now five coordinations of them are accepted, according to those things which are in many genera having one account in some mode of coordination: for these are either accepted according to the diversity of all genera, or according to those things which are contained in the genera, or according to the coordination of others to substance. If they are accepted according to the diversity of all genera, since as Boethius says, opposition is the first cause of diversity, then there is opposition: because all diverse things through the division which is through opposites go out from some one thing, and opposition is the cause of diversity.

Si autem sumitur ratio coordinationis penes illud quod est in quolibet genere, aut sumitur penes naturam eorum quæ sunt ordinata in genere, aut penes ea in quibus stat coordinatio et per quæ fit divisio coordinatorum. Et si primo sumitur, tunc cum ordinata in genere non sint nisi genus et species, inducitur tractatus de eo

quod est prius et posterius : quia genus se habet in coordinatione sicut prius, et species sicut posterius, et prius et posterius est ratio coordinationis eorum in genere uno. Si autem sumitur penes ea in quibus stat coordinatio tota, et per quæ fit divisio coordinatorum, tunc erit tractatus de simul : quia etiam et individua in quibus stat coordinatio sunt simul natura, et differentiæ per quas fit divisio coordinatorum, ex quo sunt oppositæ simul exeuntes ex eodem genere, sunt simul natura. Hic ergo de necessitate tractandum est eo quod est simul. Quia autem in omni natura cujuslibet generis est potentia et actus, et inter hæc aliquo modo motus (et ideo etiam motus est in omnibus generibus) ideo necesse fuit etiam de illa ratione coordinationis prædicabilium determinare : et ideo oportuit tractare de motu secundum motus communitatem quam in motibus ponit ratio coordinans prædicabilia ad unum commune quod in generibus pluribus invenitur. Si autem est secundum ordinationem illorum generum ad primum quæ est etiam coordinatio quam ratio ponit, sic logico necesse fuit tractare de habere, et in his sufficientia est coordinationis prædicabilium.

Et per ipsam divisionem patet ordo capitulorum istorum : quia prius est id quod sumitur secundum ipsorum generum diversitatem, quam quod sumitur penes ea quæ sunt in genere : et sic oppositio est ante omnia alia. Adhuc prius est quod est in genere secundum substantiam suæ coordinationis, quam id quod est in genere secundum reductionem ad ens generis : et sic prius et simul sunt ante reliqua. Adhuc quod est in genere secundum reductionem ad commune quod est hoc genus, vel id, est ante reductionem ad unum quod est habens ut subjectum : et sic capitulum de motu est ante capitulum de habere. Patet igitur sufficientia post-prædicamentorum et ordo eorum ad invicem : quia etiam prius est ante simul : quia in coordinatione prius sunt ipsa coordinata secundum rationem, quam ea in quibus stat coordinatio : et de his hac de causa quæ dicta tractandum est.

If however the account of coordination is taken according to that which is in any genus, it is either taken according to the nature of those things which are ordained in the genus, or according to those in which the coordination stands and through which the division of coordinated things is made. And if it is taken in the first way, then since the ordained things in a genus are nothing but genus and species, the treatise is introduced concerning that

-which is prior and posterior: because the genus holds itself in the coordination as prior, and the species as posterior, and prior and posterior is the account of their coordination in one genus. If, however, it is taken according to those things in which the whole coordination stands, and through which the division of the coordinated things is made, then there will be a treatise concerning the simultaneous: because both individuals in which the coordination stands are simultaneous by nature, and the differences through which the division of the coordinated things is made, since they are opposites going out simultaneously from the same genus, are simultaneous by nature. Here, therefore, it must necessarily be treated concerning the simultaneous. Because, moreover, in every nature of any genus there is potency and act, and between these in some way motion (and therefore motion also is in all genera), therefore it was also necessary to determine concerning that account of the coordination of predicables: and therefore it was necessary to treat of motion according to the commonality of motion which reason, coordinating predicables, places in motions towards one common thing which is found in many genera. If, however, it is according to the ordination of those genera to the first, which is also a coordination which reason places, thus it was necessary for the logician to treat of 'to have', and in these is the sufficiency of the coordination of predicables.

And through the division itself the order of these chapters is clear: because that which is taken according to the diversity of the genera themselves is prior to that which is taken according to those things which are in a genus: and thus opposition is before all other things. Furthermore, that which is in a genus according to the substance of its coordination is prior to that which is in a genus according to the reduction to the being of the genus: and thus prior and simultaneous are before the rest. Furthermore, that which is in a genus according to the reduction to the common thing which is this genus, or that, is before the reduction to the one which is having as a subject: and thus the chapter on motion is before the chapter on 'to have'. Therefore the sufficiency of the post-predicaments and their order towards each other is clear: because also prior is before simultaneous: because in coordination the coordinated things themselves are prior according to reason than those in which the coordination stands: and concerning these, for this reason, what has been said must be treated.

Caput II

De oppositione in communi et generibus oppositorum.

Inter illa ergo primo tractandum est de oppositione, quæ forma est et intentio rationis posita supra ea quæ opposita sunt : ideo in quantum stat super ea quæ sunt entia aliquo modo forma est entis : in quantum autem actualis oppositio est comparatio rationis, qua unum oppositorum comparatur alteri, tunc est forma et intentio quæ attingit et non ens, in quantum ens opponitur non enti tam in contradictoriis, quam in privative oppositis, et etiam in contrariis secundum quod contraria ad privationem et habitum reducuntur. Hoc enim non est inconveniens, quod intentio vel forma quæ potentialiter est in rebus et actualiter in ratione, sit et entis et non entis : quia ratio comparans unum alteri, comparationem facere non potest nisi respiciat et stet aliquo modo super utrumque : et sic quidem oppositio simpliciter est forma entis, secundum quid autem etiam est non entis.

Ex his etiam patet quod oppositio aliquo modo forma est unius, et aliquo modo multorum : est enim unius secundum quod unum consideratur oppositum alteri, sed non est forma quæ absolute sit in uno, hoc est, in uno respectu alterius. Est etiam oppositio multorum, quia dicimus quod illa vel illa sunt opposita, et hoc est, quod per rationem utriusque oppositorum comparata est ad alterum et stat sic in oppositis : hoc enim modo forma quæ non est absoluta potest esse multorum.

Ex his etiam patet quod oppositio in quantum oppositio secundum genus est ad aliquid : quamvis species oppositionis non sint ad aliquid, nisi mediante genere, hoc est, reduplicatione ad genus, sic ut dicatur, quod contrarietas in quantum est oppositio, est ad aliquid, secundum quod in antehabitis dictum est, quod grammatica secundum quod est disciplina est ad aliquid, et non secundum quod est grammatica vel hæc scientia.

Et si quis objiciat, quod relatio est forma eorum quorum utrumque est ens actu : oppositio autem potest esse eorum quorum alterum est non ens : et quod ideo oppositio non sit relatio. Adhuc autem quia relatio est secundum genus unum tantum ; oppositio autem est in pluribus generibus, et quod ideo oppositio non est relatio.

Chapter II

On opposition in common and the genera of opposites.

Among those things, therefore, opposition must first be treated, which is a form and intention of reason placed upon those things which are opposite: therefore, insofar as it stands over those things which are beings, it is in some way a form of being: insofar, however, as actual opposition is a comparison of reason, by which one of the opposites is compared to the other, then it is a form and intention which reaches even non-being, insofar as being is opposed to non-being both in contradictories and in privatively opposites, and also in contraries according to which contraries are reduced to privation and habit. For this is not inconvenient, that an intention or form which is potentially in things and actually in reason should be both of being and of non-being: because reason, comparing one to another, cannot make a comparison unless it looks at and stands in some way over both: and thus indeed opposition simply is a form of being, but in a certain respect it is also of non-being.

From these things it is also clear that opposition is in some way the form of one, and in some way of many: for it is of one insofar as one is considered opposite to another, but it is not a form which exists absolutely in one, that is, in one apart from the other. Opposition is also of many, because we say that these or those are opposites, and this is because by the account of both opposites it is compared to the other and stands thus in the opposites: for in this way a form which is not absolute can be of many.

From these things it is also clear that opposition, insofar as it is opposition, is according to genus a relative (ad aliquid): although the species of opposition are not relatives except by means of the genus, that is, by reduplication to the genus, so that it may be said that contrariety, insofar as it is opposition, is a relative, according to what was said in the previous sections, that grammar insofar as it is a discipline is a relative, and not insofar as it is grammar or this science.

And if anyone should object that relation is a form of those things of which each is a being in act; whereas opposition can be of those things of which one is a non-being; and that therefore opposition is not a relation. Furthermore, because relation is according to one genus only, whereas opposition is in many genera, and that therefore opposition is not a relation.

Dicendum quod hæ argumentationes non valent, quia oppositio, sicut ante dictum est, est intentio quæ ponit ratio super res : et ideo relatio quæ ponitur ibi a ratione, intentio est, et talis relatio est relatio entis, quod (ut oppositum est et non ut res) est in ratione : et tale ens sufficit relationi quæ est posita super intentiones. Ad aliud autem dicendum quod quamvis relatio sit unum genus, non tamen propter hoc sequitur quod relativa sint in genere uno omni modo : oppositio autem est distantia relatorum ad invicem, et hoc modo est in diversis prædicamentis. Sic ergo patet quid sit oppositio : est enim, ut dicit Boetius, hoc habens quod opposita non possunt esse simul in uno et eodem : unde oppositio est repugnantia vel essentialis distantia aliquorum se non permittentium esse in eodem simul.

Nunc ergo quærendum est secundum oppositionis divisionem, quoties sive quot modis solet unum opponi alteri. Dicitur autem alterum alteri sive unum alteri opponi quadrupliciter, hoc est, uno quatuor modorum : aut enim opponitur ut ad aliquid, aut ut contraria, aut ut habitus et privatio, aut ut affirmatio et negatio. Oppositio enim (quæ est forma rationis secundum intentiones quæ in ratione sunt, quæ respicit tam ens quam non ens) aut est inter ea quæ actu sunt, aut inter ea quorum unum est et alterum non est. Si enim est inter ea quæ actu sunt, et suis formis repugnantiam habent oppositionis,

tunc aut se sunt expellentia ab eodem susceptibili secundum potentiam et actum, aut expellentia se secundum actum, non secundum potentiam. Si primo modo : tunc est oppositio secundum ad aliquid, sicut patet in patre et filio. Idem enim respectu ejusdem pater nec est nec potest esse et filius. Si autem se expellant ab eodem secundum actum, et non secundum potentiam : tunc est oppositio contrarietatis. Et istæ duæ, quia sunt super ens, aliis duabus oppositionibus præordinandæ sunt : et quia oppositio relationis expellit oppositum secundum actum et potentiam, contrarietas autem secundum actum tantum, ideo oppositio relationis ponitur ante oppositionem contrarietatis. Si autem est inter ens simpliciter, et non ens : tunc aut est inter ens simpliciter et non ens secundum quid, aut inter ens simpliciter et non ens simpliciter. Et primo quidem modo est oppositio inter habitum et privationem, quæ licet privet habitum, relinquit tamen subjectum. Et si est secundo modo : tunc est oppositio inter affirmationem et negationem, in quibus affirmatio dicit ens, negatio autem simpliciter non ens, et habent ordinem secundum quod plus vel minus habent de ente, et hoc modo privatio et habitus sunt ante affirmationem et negationem.

It must be said that these arguments are not valid, because opposition, as was said before, is an intention which reason places over things: and therefore the relation which is placed there by reason is an intention, and such a relation is a relation of being which (as it is opposite and not as a thing) is in reason: and such being suffices for a relation which is placed over intentions. To the other point it must be said that although relation is one genus, it does not therefore follow that relatives are in one genus in every way: for opposition is the distance of relatives from each other, and in this way it is in different categories. Thus, therefore, it is clear what opposition is: for it has this property, as Boethius says, that opposites cannot be simultaneously in one and the same: whence opposition is a repugnance or essential distance of certain things not permitting themselves to be in the same at the same time.

Now, therefore, it must be asked, according to the division of opposition, how often or in how many ways one thing is accustomed to be opposed to another. Now one thing is said to be opposed to another in four ways, that is, in one of four modes: for it is opposed either as a relative (ad aliquid), or as contraries, or as habit and privation, or as affirmation and negation. For opposition (which is a form of reason according to the intentions which are in reason, which looks to both being and non-being) is either between those things which are in act, or between those of which one is and the other is not. If indeed it is between those things which are in act, and which have the repugnance of opposition in their forms,

then they either expel each other from the same subject according to potency and act, or they expel each other according to act, but not according to potency. If in the first way: then it is opposition according to relative (ad aliquid), as is clear in father and son. For the same person, with respect to the same, is neither a father nor can be a son. If however they expel each other from the same according to act, and not according to potency: then it is the opposition of contrariety. And these two, because they are over being, are to be pre-ordered to the other two oppositions: and because the opposition of relation expels the opposite according to act and potency, whereas contrariety expels only according to act, therefore the opposition of relation is placed before the opposition of contrariety. If however it is between being simply and non-being: then it is either between being simply and non-being in a certain respect, or between being simply and non-being simply. And in the first way indeed is the opposition between habit and privation, which although it deprives of the habit, nevertheless leaves the subject. And if it is in the second way: then it is the opposition between affirmation and negation, in which affirmation expresses being, negation however simply non-being, and they have an order according to whether they have more or less of being, and in this way privation and habit are before affirmation and negation.

Vel si placet, dici potest quod oppositio aut est inter complexa, aut inter incomplexa. Si inter complexa : tunc est oppositio conditionis. Et quia in hac parte complexa secundum logicos non intenduntur nisi secundum potentiam : tractatur enim de ordinabilibus ad complexionem, propter hoc oppositio contradictionis ponitur ultimo, ut minus intenta. Si autem est inter incomplexa : aut est inter ea quæ secundum formam opponuntur ratione repugnantiæ formarum, vel ratione perfecti secundum formam et imperfecti. Si secundo modo : tunc est oppositio privationis et habitus. Si primo modo, aut est oppositio secundum formas quæ sunt formam et totum consequentes, aut secundum formas materiam respicientes, in qua fiunt secundum potentiam materiæ ad utrumque per motum et mutationem. Et primo quidem modo est oppositio ad aliquid : secundo autem modo est oppositio quæ est contrarietas. Potest etiam pluribus aliis modis sumi divisio oppositionis : et hoc quia valde facile est cuilibet consideranti naturas oppositorum, ideo pertransimus.

Ut autem sigillatim illa per exempla declarentur, unumquodque istorum oppositorum opponitur, ut relative id quod est dimidium et duplum : ut contraria autem, ut malum et bonum. Quamvis enim malum, ut Aristoteles dicit in tertio Metaphys., sit privatio boni, tamen secundum quod bonum est in habitibus et actibus sunt contraria : quia malus habitus ex malis relinquitur actibus et est qualitas quædam in anima, sicut malus actus est operatio quædam ab anima elicita, et sic contrarie opponitur malum ad bonum, prout est bonum in oppositis habitibus et actibus ad malum. Et hoc est accipere id quod est malum, et id quod est bonum : si enim accipiatur utrumque istorum formaliter, scilicet unde malum, et unde bonum, tunc forma tam in anima quam in habitu et in actu, malum ad bonum privative opponitur et in corpore et in natura tota, sicut probant similiter et Aristoteles et Dionysius : quia etiam in corpore malum privatio est, et in tota natura non est nisi privatio : sed hoc non est præsentis intentionis, sufficit enim quod bonum et malum secundum id quod sunt contraria sunt. Secundum privationem autem et habitum opponuntur, ut cæcitas opponuntur visui , cæcitas enim est privatio visus in eo quod natum est habere visum. Ut affirmatio autem et negatio opponuntur, ut sedet, non sedet : quæcumque affirmatio affirmat, negatio negat, et econtra quæcumque negat negatio, affirmat affirmatio. Hi igitur figuraliter superficialiter dicti sunt modi oppositionum.

Or if you please, it can be said that opposition is either between complexes or between incomplexes. If between complexes: then it is the opposition of condition. And because in this part complexes according to logicians are not intended except according to potency—for it is treated regarding those things orderable to complexity—for this reason the opposition of contradiction is placed last, as less intended. If however it is between incomplexes: it is either between those which are opposed according to form by reason of the repugnance of forms, or by reason of the perfect according to form and the imperfect. If in the second way: then it is the opposition of privation and habit. If in the first way, it is either opposition according to forms which follow the form and the whole, or according to forms looking to matter, in which they occur according to the potency of matter towards both through motion and change. And in the first way indeed is the opposition to relative; in the second way however is the opposition which is contrariety. The division of opposition can also be taken in several other ways: and because this is very easy for anyone considering the natures of opposites, therefore we pass over it.

But so that those things may be declared individually through examples, each of these opposites is opposed, as a relative that which is half and double; as contraries however, as evil and good. For although evil, as Aristotle says in the third book of the Metaphysics, is the privation of good, yet according to that which is good in habits and acts they are contraries: because an evil habit is left from evil acts and is a certain quality in the soul, just as an evil act is a certain operation elicited from the soul, and thus evil is opposed contrarily to good, insofar as good is in opposite habits and acts to evil. And this is to take that which is evil, and that which is good: for if both of these are taken formally, namely whence evil, and whence good, then form both in the soul and in habit and in act, evil is opposed privatively to good both in the body and in the whole of nature, as both Aristotle and Dionysius similarly prove: because even in the body evil is privation, and in the whole of nature there is nothing but privation: but this is not of the present intention, for it suffices that good and evil, according to that which they are, are contraries. According to privation however and habit they are opposed, as blindness is opposed to sight, for blindness is the privation of sight in that which is born to have sight. As affirmation however and negation they are opposed, as he sits, he does not sit: whatever affirmation affirms, negation denies, and conversely whatever negation denies, affirmation affirms. These therefore are the modes of opposition said figuratively and superficially.

Si autem quæratur quæ sit divisio oppositionis in quatuor opposita, Dicendum quod communiter dicitur quod sit divisio sicut generis in species. Sed secundum veritatem per prius et posterius dividitur in suos modos, quia oppositio de esse et non esse sive secundum affirmationem et negationem, est plus habens de oppositione omnibus aliis. Et oppositio secundum habitum et privationem, quæ est oppositio secundum esse et non esse secundum quid, post hoc plus habet de oppositione. Oppositio autem secundum esse et non esse minus habet, et in tali oppositione plus habent ea quæ sunt actu contraria potentia esse in eodem, quam illa quæ sunt relativa quæ nec actu nec potentia possunt esse in eodem : quia quamvis actu et potentia simul esse non possint, tamen formalem contrarietatem non tantam habent quantam contraria quæ se mutuo expellunt : quia relativa se mutuo non expellunt, eo quod se in eodem non contingunt, et ideo formas non habent invicem activas et passivas. Ex his iterum patet quædam sufficientia oppositionum et ordo ipsarum, secundum quod plus vel minus habent de oppositione : quæ enim minus habent prius, et quæ plus habent posterius ordinantur.

CAPUT III.

De relative oppositis.

Dicamus ergo primo de relative oppositis, quod quæcumque ut relative opponuntur, ea ipsa quæ sunt, oppositorum sunt, et dicuntur secundum eumdem, casum vel quolibet aliter ad aliud secundum eumdem casum vel diversum : ut duplum et dimidium hoc ipsum quod est utrumque ipsorum, alterius dicitur duplum, dicitur enim dimidii duplum : et hæc sunt vere ad aliquid secundum hoc ipsum quod sunt : sed etiam secundum dici disciplina quodammodo secundum alium casum dicitur disciplinati disciplina, et disciplinatus disciplina disciplinatus, et disciplina disciplinato est opposita secundum relationem, quia disciplina dicitur hoc ipsum quod est disciplinati, et

disciplinatum hoc ipsum quod est secundum quod disciplinatum est stans sub forma disciplinæ, ad suum oppositum sive correlativum est, quamvis non secundum eumdem casum, quia non dicitur disciplinatum disciplinæ disciplinatum, sed disciplina disciplinatorum : disciplinatum enim dicimus aliquem, non disciplinæ disciplinatum, sed disciplina disciplinatum per ablativum casum convertentiam facientes.

But if it is asked what the division of opposition into four opposites is, it must be said that it is commonly called a division as of a genus into species. But according to truth it is divided into its modes by prior and posterior, because the opposition of being and non-being, or according to affirmation and negation, has more of opposition than all others. And the opposition according to habit and privation, which is opposition according to being and non-being in a certain respect, after this has more of opposition. Opposition however according to being and non-being has less, and in such opposition those things which are in act contraries have more power to be in the same than those which are relatives, which neither in act nor in potency can be in the same: because although they cannot be simultaneously in act and potency, nevertheless they do not have as much formal contrariety as contraries which mutually expel each other: because relatives do not mutually expel each other, for the reason that they do not touch each other in the same, and therefore they do not have mutually active and passive forms. From these things again appears a certain sufficiency of oppositions and their order, according to which they have more or less of opposition: for those which have less are ordered prior, and those which have more posterior.

CHAPTER III.

On relative opposites.

Let us speak therefore first of relative opposites, that whatever things are opposed as relatives, they themselves are of opposites, and are said according to the same case or in any other way towards another according to the same case or a different one: as double and half, this very thing which each of them is, is said to be the double of the other, for it is said the double of the half: and these are truly relative (ad aliquid) according to this very thing that they are: but also according to the saying 'discipline' in a certain way according to another case is said the discipline of the disciplined, and the disciplined is disciplined by discipline, and discipline is opposed to the disciplined according to relation, because discipline is said this very thing which is of the disciplined, and

-the disciplined, this very thing that it is according to which it is disciplined, standing under the form of discipline, is towards its opposite or correlative, although not according to the same case, because it is not said 'the disciplined of discipline', but 'the discipline of the disciplined': for we call someone 'disciplined', not 'disciplined of discipline', but 'disciplined by discipline' (disciplina disciplinatum), making the conversion through the ablative case.

Concludamus igitur generaliter quod quæcumque relative opposita sunt, hoc ipsum quod sunt, aliorum dicuntur secundum genitivum, aut quomodocumque aliter dicantur ad invicem secundum aliquem alium casum. Hæc autem differunt ab omnibus aliis modis oppositionis et præcipue a contrariis : contraria enim non aliorum dicuntur, sed dicuntur contraria esse sibi vel ad se invicem : non enim dicitur bonum mali bonum, sed dicitur bonum malo contrarium, neque album dicitur nigri album, sed dicitur album nigro contrarium : ex quo patet quod hæ duæ ad invicem differunt oppositiones.

Si autem quis objiciat, dicens quod opposita se mutuo perimunt et expellunt, relativa posita se ponunt et interempta se interimunt, et sic relativa non sunt opposita. Solvendum, sicut in ante habitis dictum est, quod relativa in hoc habent virtutem et naturam oppositorum, quod se expellunt actu et potestate ab eodem susceptibili sive subjecto, et quod posita se ponant, non habent ab eo quod sunt opposita, sed habent ab eo quod a se invicem dependent secundum intellectum : quia sic utrumque est finis et terminus alterius, et sic unum non potest poni sine reliquo : quia quod ponitur esse finitum per intellectum alterius, non ponitur esse finitum ante intellectum illius, nec habet esse sine illo : hac etiam necessitate fit quod destructa se perimunt : destructo enim uno, alterum non est in esse finitum ; nihil autem est actu nisi quod finitum est in esse : igitur quod non est finitum in esse, non est : quod finitum est intellectu, finitum est et in esse, quia per idem intelliguntur res per quod sunt in esse, sicut dicitur primo Physicorum [1].

Objicitur tamen contra ea quæ dicta sunt, quod contraria ut contraria ad invicem referuntur, quia contrarietas est forma relationis : et ideo quæcumque sunt contraria in quantum sunt contraria, sunt etiam relativa. Sed ad hoc dicendum sicut prius, quia contraria ut opposita ad invicem referuntur, et sunt relativa secundum genus et non secundum speciem, aut secundum individuum. Et quando dicitur quod contraria ut contraria sunt ad aliquid, locutio est duplex : ex eo quod illud quod dicitur (secundum quod) potest facere reduplicationem contrarietatis ut est oppositio, aut ut hæc oppositio in se designata. Et primo quidem modo vera est hæc, contraria ut contraria sunt relativa, sed tunc non sequitur conclusio, quod oppositio relationis sit oppositio contrarietatis. Si autem facit reduplicationem hujus contrarietatis, tunc est falsa hæc, contraria secundum quod contraria sunt relative opposita, et solvitur per interemptionem propositionis, et ideo patet quod non probat.

Let us conclude therefore generally that whatever things are relative opposites, this very thing that they are, they are said of others according to the genitive, or in whatever other way they may be said towards each other according to some other case. These however differ from all other modes of opposition and especially from contraries: for contraries are not said of others, but are said to be contrary to themselves or towards each other: for 'good' is not said the 'good of evil', but 'good' is said 'contrary to evil', nor is 'white' said the 'white of black', but 'white' is said 'contrary to black': from which it is clear that these two oppositions differ from each other.

But if anyone should object, saying that opposites mutually destroy and expel each other, whereas relatives, being placed, place each other, and being destroyed, destroy each other, and thus relatives are not opposites. It must be resolved, as was said in the previous sections, that relatives have the power and nature of opposites in this, that they expel each other in act and in power from the same susceptible thing or subject; and that being placed they place each other, they do not have from the fact that they are opposites, but they have from the fact that they depend on each other according to the intellect: because thus each is the end and term of the other, and thus one cannot be placed without the other: because what is placed as finite through the intellect of the other is not placed as finite before the intellect of that one, nor has it being without it: by this necessity also it happens that being destroyed they destroy each other: for one being destroyed, the other is not finite in being; but nothing is in act unless it is finite in being: therefore what is not finite in being, is not: what is finite in intellect, is finite also in being, because things are understood through the same thing through which they are in being, as is said in the first book of the Physics.

However, it is objected against those things which have been said, that contraries as contraries are referred to each other, because contrariety is a form of relation: and therefore whatever things are contraries insofar as they are contraries, are also relatives. But to this it must be said as before, because contraries as opposites are referred to each other, and they are relatives according to genus and not according to species, or according to the individual. And when it is said that contraries as contraries are relatives (ad aliquid), the speech is double: because that which is said ('insofar as') can make a reduplication of contrariety as it is opposition, or as this opposition designated in itself. And in the first way indeed this is true, contraries as contraries are relatives, but then the conclusion does not follow, that the opposition of relation is the opposition of contrariety. If however it makes a reduplication of this contrariety, then this is false, contraries according to which they are contraries are relative opposites, and it is resolved through the destruction of the proposition, and therefore it is clear that it does not prove it.

Quamvis enim ex falso sequatur aliquando conclusio, tamen nihil probatur. Hoc igitur est primum genus oppositionis inter quatuor quæ dicta sunt. Et cum omnia opposita nata sint fieri circa idem, hæc quæ dicuntur relative opposita, semper sunt in diversis, et non sunt nata fieri circa idem, nisi in hoc quod ad invicem referuntur et sunt ad invicem hoc ipsum quod sunt. Quod autem mutuo se expellant actu et potentia essendi in eodem, jam in ante habitis expositum est, et qualiter conveniat relativis.

De contrarie vero oppositis tractantes, nos non oportet diffinire contrarietatis oppositionem, quia jam in tractatu de Quantitate ab opinione Antiquorum constat, quod contraria sunt quæ posita sub eodem proximo genere, vere maxime distant a se invicem. Quia etiam quamvis medium comparatum extremo sit contrarium, tamen in quantum distant, distare non habet, nisi in quantum participat aliud contrarium quod maxime distat, et sic medium ab extremo non distat nisi ratione maximæ distantiæ. Et sic omnia quæ distant sub eodem genere proximo, aut sunt extrema maxime distantia, aut si non sunt extrema, distant tamen per ea quæ maxime distant, hoc est, participatione extremorum. Nata autem sunt fieri circa idem susceptibile, sive subjectum, quod est potentia utrumque contrariorum : quia quorum est unum genus proximum, horum est una potentia : quia genus est potentia in quo potestate est utrumque, et a quo per divisionem per oppositas differentias factam exit et educitur utrumque. Sic ergo constat de substantiali diffinitione contrariorum.

Dico autem, quod contrariorum quædam sunt circa suum subjectum sive susceptibile immediata, quædam autem mediata, hoc est, quod quædam sunt quorum alterum necesse semper est inesse suo susceptibili, quædam autem sunt talia quod alterum non est necesse inesse, sed potest inesse medium quod neutrum est extremorum. Horum autem quorum necesse est inesse alterum eorum, nullum est medium : quorum autem alterum non est necesse inesse, horum medium est aliquid.

Ut autem figuraliter per exempla quæ dicta sunt declarentur, contrariorum immediatorum in physicis quidem exemplum est languor et sanitas circa animal complexionatum in corpore : hæc enim circa corpus animalis nata sunt fieri, et necessarium est alterum inesse corpori animalis vel languorem vel sanitatem.

For although from a false premise a conclusion sometimes follows, yet nothing is proved. This therefore is the first genus of opposition among the four which have been mentioned. And since all opposites are born to occur about the same thing, these which are called relative opposites are always in different things, and are not born to occur about the same thing, except in this, that they are referred to each other and are towards each other this very thing that they are. That they however mutually expel each other in act and power of being in the same, has already been explained in the previous sections, and how it belongs to relatives.

Treating however of contrarily opposites, we do not need to define the opposition of contrariety, because it is already established in the treatise on Quantity from the opinion of the Ancients, that contraries are those which, placed under the same proximate genus, truly are most distant from each other. Because also although a medium compared to an extreme is a contrary, yet insofar as they are distant, it does not have distance except insofar as it participates in the other contrary which is most distant, and thus the medium is not distant from the extreme except by reason of the maximal distance. And thus all things which are distant under the same proximate genus, are either extremes most distant, or if they are not extremes, they are distant nevertheless through those things which are most distant, that is, by participation in the extremes. Moreover, they are born to occur about the same susceptible thing, or subject, which is in potency to both contraries: because those of which there is one proximate genus, of these there is one potency: because the genus is the potency in which both are potentially, and from which through division made by opposite differences both go out and are brought forth. Thus therefore it is established regarding the substantial definition of contraries.

I say, however, that of contraries some are immediate regarding their subject or susceptible thing, some however are mediate, that is, that some are those of which it is always necessary for one to be in its susceptible thing, some however are such that it is not necessary for either to be in it, but a medium can be in it which is neither of the extremes. Of those however of which it is necessary for one of them to be in, there is no medium: of those however of which it is not necessary for either to be in, of these the medium is something.

But so that those things which have been said may be declared figuratively through examples, an example of immediate contraries in physics is sickness and health regarding an animal complexioned in body: for these are born to occur about the body of the animal, and it is necessary for one to be in the body of the animal, either sickness or health.

Nec latet vos, quod Galienus inter sanum et ægrum ponit medium quod est neutrum : verbi gratia, quando animal est actu sanum sed dispositum ad ægritudinem : vel e converso, quando est actu ægrum sed dispositum ad sanitatem : vel quando est in toto et secundum partem ægrum, vel e converso, vel aliquo alio tali modo se habens. Omnia enim contraria quæ fundantur super æquale et inæquale, necessario sunt immediata, sicut et æquale et inæquale esse sunt immediata, quia ad affirmationem et negationem reducuntur et sunt contradictoria in genere, quamvis simpliciter non sint contradictoria. Sanum autem et ægrum fundata sunt super æquale et inæquale, quia sanum est, quod est in æqualitate complexionis, ægrum autem, quod ab æqualitate decessit : et hoc modo neutrum non est medium, sed est ægrum non multum distans a sano, vel sanum non multum distans ab ægro : et hoc considerat Philosophus secundum illam partem physicæ quæ medicina est. Intentiones sani et ægri prout contrarietas est inter eas considerat logicus : quia simpliciter sunt fundatæ super æquale et inæquale, logicus dicit esse immediatas.

Est autem objectio contra ea quæ dicta sunt, in physicis : quia motus semper est de contrario in contrarium : motus autem omnis medium habet, quia omne quod movetur de extremo sive contrario in extremum contrarium, prius est in medio quam in extremo, et sic nulla sunt in physicis contraria quæ medium non habeant, ut videtur. Et hoc quidem verum est per hunc modum, quo procedit objectio, scilicet secundum hoc quod contraria comparantur ab subjectum, quod potentia est sub utroque contrariorum successive : et sic contraria prout eorum est motus considerat physicus. Nihilominus tamen intentiones contrariorum causam aliquando accipiunt oppositionis ab æquali et inæquali, aliquando autem a formis essentialiter repugnantibus. Et quando accipiunt causam oppositionis ab æquali et inæquali, non potest inter illas intentiones esse medium propter affirmationem et negationem : quando autem repugnantia et distantia essentialis est in causa, aut illæ essentiæ sive formæ sunt miscibiles sibi ad invicem, aut non sunt miscibiles secundum numerum : et siquidem sunt miscibiles, illa contraria habent medium : si autem non sunt miscibiles, sicut æquale et inæquale, sed sunt immiscibilia, tunc illa contraria secundum intentiones suas formales non habent medium.

Nor is it hidden from you that Galen between the healthy and the sick places a medium which is neither: for example, when the animal is actually healthy but disposed towards sickness: or conversely, when it is actually sick but disposed towards health: or when it is sick in the whole and in part, or conversely, or behaving in some other such way. For all contraries which are founded upon the equal and the unequal are necessarily immediate, just as being equal and unequal are immediate, because they are reduced to affirmation and negation and are contradictories in genus, although they are not contradictories simply. Healthy however and sick are founded upon the equal and the unequal, because healthy is that which is in equality of complexion, whereas sick is that which has departed from equality: and in this way the 'neither' is not a medium, but is the sick not much distant from the healthy, or the healthy not much distant from the sick: and this the Philosopher considers according to that part of physics which is medicine. The intentions of healthy and sick, insofar as there is contrariety between them, the logician considers: because they are simply founded upon the equal and the unequal, the logician says they are immediate.

There is however an objection against those things which have been said, in physics: because motion is always from contrary to contrary: every motion however has a medium, because everything which is moved from an extreme or contrary into an extreme contrary, is first in the medium than in the extreme, and thus there are no contraries in physics which do not have a medium, as it seems. And this indeed is true in this way in which the objection proceeds, namely according to this, that contraries are compared to the subject which is in potency under each of the contraries successively: and thus the physicist considers contraries insofar as there is motion of them. Neverthele-

ness however the intentions of contraries sometimes take the cause of opposition from the equal and the unequal, and sometimes from essentially repugnant forms. And when they take the cause of opposition from the equal and the unequal, there cannot be a medium between those intentions because of affirmation and negation; but when repugnance and essential distance is in the cause, either those essences or forms are miscible with each other, or they are not miscible according to number. And if indeed they are miscible, those contraries have a medium; but if they are not miscible, like the equal and the unequal, but are immiscible, then those contraries according to their formal intentions do not have a medium.

Sicut autem sanum et ægrum sunt immediata circa corpus animalis, sic par et impar circa numerum immediate opponuntur et de numero prædicantur immediate, ita quod omnis numerus est par vel impar, propter eamdem causam, quia numerus par est, qui in duo æqualia dividitur, impar autem qui in duo æqualia non dividitur, sed in duo inæqualia : et sic fundatur par et impar super æquale et inæquale : horum enim alterum necessarium est esse in numero, sicut abundans et perfectum. Dico autem hic abundans, non prout est passio quædam numeri, secundum quam dicitur numerus omnis aut esse perfectus aut esse diminutus. Non sic enim accipimus hic abundans et perfectum, sed secundum quod perfectum est æquale, abundans autem distans ab æqualitate : sic enim par numerus perfectus est quia perfecte stat super æquale, impar autem imperfectus, quia unitate abundans super æquale : impar autem numerus, ut dicit Pythagoras, est qui in duo æqualia non dividitur, impediente ea quæ intercedit unitate. Nihil ergo est in medio istorum inter sanitatem scilicet et languorem, nec inter numerum sic abun-

dantem et perfectum, et imparem et parem.

Contrariorum autem quorum non est necessarium alterum inesse susceptibi illorum, est aliquid medium propter miscibilitatem extremorum, sicut album et nigrum cum sint contraria, in corpore terminato habent fieri sicut in susceptibili : et non est necessarium alterum inesse corpori ; non enim omne corpus terminatum aut album, aut nigrum est, sed aliquando medio colore figuratum.

Similiter autem pravum et studiosum prædicantur ut contraria de homine et de aliis multis : unumquodque enim studiosum est quod est perfectum sua connaturali virtute ad proprium et connaturalem actum, sicut homo ad actum hominis, et leo ad actum leonis, et miles ad actum militis, et philosophus ad actum philosophi, et sic est in omnibus aliis.

Hæc tamen contraria, pravum et studiosum, sunt mediata : quia non est necessarium hominem aut studiosum, aut pravum esse : et similiter est de aliis quæ prava dicuntur vel studiosa. Possunt enim esse media, ita quod neque prava neque studiosa sunt, sicut sunt corpora ad virtutem sui actus disposita, neque etiam contrarium habitum habentia, sicut dicit Averroes[1], quia rusticus qui ad civilitatem et curialitatem et virtutem hominis non est dispositus, nec est bonus nec malus, nec pravus nec studiosus.

Just as the healthy and the sick are immediate regarding the body of an animal, so the even and the odd are immediately opposed regarding number and are predicated immediately of number, so that every number is even or odd, because of the same cause: for an even number is that which is divided into two equals, while an odd number is that which is not divided into two equals, but into two unequals; and thus the even and the odd are founded upon the equal and the unequal. For it is necessary that one of these be in number, like the abundant and the perfect. I say 'abundant' here, not as it is a certain property of number according to which every number is said either to be perfect or to be diminished. For we do not take 'abundant' and 'perfect' here in that way, but according to which the perfect is the equal, while the abundant is distant from equality; for thus the even number is perfect because it perfectly stands upon the equal, while the odd is imperfect because it is abundant by a unit over the equal. For an odd number, as Pythagoras says, is that which is not divided into two equals, because of the intervening unit which hinders it. Therefore, there is nothing in the medium between these, namely between health and sickness, nor between number thus abun-

-dant and perfect, and odd and even.

Of those contraries, however, in which it is not necessary that one of them be in their susceptible subject, there is some medium because of the miscibility of the extremes, just as white and black, since they are contraries, happen to be in a terminated body as in a susceptible subject; and it is not necessary that one of them be in the body; for not every terminated body is either white or black, but is sometimes figured by a middle color.

Similarly, the wicked and the virtuous are predicated as contraries of man and of many other things; for each thing is virtuous which is perfect in its connatural virtue for its proper and connatural act, just as a man for the act of a man, and a lion for the act of a lion, and a soldier for the act of a soldier, and a philosopher for the act of a philosopher, and so it is in all other things.

These contraries, however, the wicked and the virtuous, are mediate: because it is not necessary for a man to be either virtuous or wicked; and similarly it is concerning other things which are called wicked or virtuous. For there can be media, so that they are neither wicked nor virtuous, just as there are bodies disposed to the virtue of their act, yet not having the contrary habit, as Averroes says, because a rustic who is not disposed to the civility and courtliness and virtue of a man, is neither good nor bad, neither wicked nor virtuous.

Hesiodistæ autem philosophiam theologizantium sequentes, dicunt inter bonum et malum, sive inter pravum et studiosum non esse medium : non enim dicunt aliquod bonum bonum bonitate naturæ simplicis, sed bonum dicunt virtute perfectum ad actum omnem : qui autem ab illo deficit cum debeat esse perfectus, dicunt esse malum omissionis malitia ad minus, quia studium virtutis non fecit quod debuit : pravum autem dicunt bonum ad pravi actum in nocentia perfectum, et sic dicunt Theologi nostri temporis.

Physice autem loquendo medium est inter pravum et studiosum sicut dictum est. Est ergo horum contrariorum medium : albi quidem et nigri medium est fuscum, et pallidum, et sunt alii medii colores, sicut viride, et glaucum, et hyacinthinum, et croceum. Pravi vero et studiosi medium est, quod nec pravum nec studiosum est, sicut diximus. Sed in aliquibus contrariis nomina mediorum inter media sunt posita, et sunt quorum formæ sunt miscibiles ad formam medii terminatam, sicut inter album et nigrum nominantur media fuscum, et pallidum, et alia hujusmodi. In contrariis autem, quorum scilicet formæ non sunt miscibiles ad medii determinationem, non est idoneum assignare mediorum nomina, cum tamen sint media secundum rei veritatem. Hoc medium in talibus habet determinari per abnegationem utriusque summorum sive extremorum : summa enim sunt maxime in summo distantia ab invicem, sicut si dicerem intermedium boni et mali esse quod nec bonum nec malum est, sicut rusticus nec bonus dicitur civiliter nec malus : vel sicut diceremus inter justum et injustum esse secundum generalem justitiam, quæ idem est omni virtuti, quia nec justum nec injustum est id quod ad civilem justitiam non est dispositum. Quamvis enim talia contraria sint miscibilia, eo quod in omni motu extrema aliquo modo miscibilia sunt, quia aliter inter ea non essent motus, tamen ad formam medii determinabilia non sunt, quia non est status in mediis ipsorum ad speciem determinati medii secundum medii formam. In omnibus autem sensibilibus contrariis media sunt vel plura vel pauciora secundum doctrinam quæ traditur in libro *de sensu et sensato*. Quia contraria in illis sunt simplices formæ extremorum : in aliis autem quæ fundantur super quasdam habitudines æqualitatis vel inæqualitatis, non potest esse medium.

The Hesiodists, however, following the philosophy of those who theologize, say that between good and evil, or between the wicked and the virtuous, there is no medium: for they do not call some good 'good' by the goodness of a simple nature, but they call 'good' that which is perfect in virtue for every act; and he who falls short of that when he ought to be perfect, they say is evil at least by the malice of omission, because the study of virtue did not do what it ought; but they call the wicked 'good' perfected in harm for a wicked act-

-fected, and so say the Theologians of our time.

Physically speaking, however, there is a medium between the wicked and the virtuous, as has been said. There is, therefore, a medium for these contraries: for white and black the medium is dusky and pale, and there are other middle colors, such as green, and glaucous, and hyacinthine, and saffron. For the wicked and the virtuous, however, the medium is that which is neither wicked nor virtuous, as we have said. But in some contraries the names of the media are placed between the media, and they are those whose forms are miscible into a determinate form of a medium, just as between white and black the media are named dusky, and pale, and others of this sort. In contraries, however, whose forms are not miscible into a determination of a medium, it is not suitable to assign names of media, although there are media according to the truth of the thing. This medium in such cases has to be determined by the negation of both of the highest or extremes: for the highest are distant from each other in the highest degree, as if I were to say that the intermediate between good and evil is that which is neither good nor evil, just as a rustic is called neither civilly good nor evil: or as we would say that between the just and the unjust is that which is according to general justice, which is the same as every virtue, because that which is not disposed to civil justice is neither just nor unjust. For although such contraries are miscible, because in every motion the extremes are in some way miscible, since otherwise there would be no motion between them, nevertheless they are not determinable into a form of a medium, because there is no state in their media determined to a species of medium according to the form of the medium. In all sensible contraries, however, the media are either more or fewer according to the doctrine which is handed down in the book *On Sense and the Sensible*. Because contraries in those things are simple forms of the extremes: in other things, however, which are founded upon certain relations of equality or inequality, there cannot be a medium.

Quamvis dicant ethici virtutem esse medium duarum malitiarum, quæ tamen non miscetur ex duabus malitiis, quia virtus secundum boni rationem non est medium, sed extremum : in actu autem et medio habitus medium est, nisi mixtum ex duabus malitiis secundum medium duarum malitiarum in circumstantiis actus quas medio modo participat duarum malitiarum, quarum una est secundum abundantiam, altera est secundum defectum. Hæ igitur et talis est oppositio contrarietatis.

Privatio vero et habitus secundum quod oppositionis species esse dicuntur, habent fieri circa idem aliquod quod susceptivum proprie est ipsius habitus secundum naturam, sicut visio et cæcitas circa idem sunt habitus per naturam susceptivum, quod est oculus. Oculus enim per naturam susceptibilis est visus : propter quod Philosophus dicit [1], quod si oculus esset animal, visus esset anima ejus : unde sicut mors et vita opponuntur circa idem quod per naturam vitæ susceptibile est, ita visus et cæcitas opponuntur circa oculum, et auditus et surditas circa aurem, et calvum esse et comatum esse circa frontem, quia per humiditatem naturæ cerebri frons nata est esse comata.

Universaliter autem loquendo de omnibus taliter oppositis sciendum, quod in quocumque secundum naturæ principia et naturæ ordinem nascitur habitus vel habet nasci, circa hoc secundum eadem principia et eumdem ordinem habet fieri utrumque istorum oppositorum, habitus scilicet et privatio, habitus scilicet constantibus principiis et constante ordine secundum naturæ determinationem, privatio autem

secundum corruptionem utrorumque, scilicet principiorum et ordinis determinati a natura.

Quod vero ordo requiratur in talibus, patet ex hoc, quia tunc dicimus privari unumquodque suo habitu in illo tempore quo id quod natum est habere aliquem habitum, tunc non habet eum. Et si ante tempus determinatum ad habere habitum non habet, tunc dicimus quod non est privatum : edentulum enim dicimus non eum qui non habet dentes in quocumque tempore, sed eum qui non habet dentes in tempore in quo natus est habere dentes secundum naturam : neque cæcum dicimus, qui in quocumque tempore non habet visum, sed eum qui non habet in tempore in quo secundum naturam convenit eum habere visum vel dentes.

Although the ethicists say that virtue is a medium between two malices, which however is not mixed from two malices, because virtue according to the account of the good is not a medium, but an extreme: in the act however and in the middle of a habit it is a medium, unless it is mixed from two malices according to the medium of two malices in the circumstances of the act, which it participates in the middle way of the two malices, of which one is according to abundance, the other is according to defect. This therefore and of such sort is the opposition of contrariety.

Privation and habit, according to which they are said to be species of opposition, happen concerning some same thing which is properly susceptible of the habit itself according to nature, just as vision and blindness are concerning the same thing that is susceptible to the habit by nature, which is the eye. For the eye is susceptible of sight by nature: on account of which the Philosopher says that if the eye were an animal, sight would be its soul: hence just as death and life are opposed concerning the same thing which by nature is susceptible of life, so sight and blindness are opposed concerning the eye, and hearing and deafness concerning the ear, and being bald and being hairy concerning the forehead, because by the humidity of the nature of the brain the forehead is born to be hairy.

Speaking universally, however, of all such opposites, it is to be known that in whatever thing according to the principles of nature and the order of nature a habit is born or has to be born, concerning this according to the same principles and the same order each of these opposites has to happen, namely habit and privation, habit namely when the principles are constant and the order is constant according to the determination of nature, privation however-

-according to the corruption of both, namely of the principles and of the order determined by nature.

That order is indeed required in such things is clear from this, because we then say each thing is deprived of its habit in that time in which that which is born to have some habit, then does not have it. And if before the time determined for having the habit it does not have it, then we say that it is not deprived: for we call 'toothless' not him who does not have teeth at any time, but him who does not have teeth in the time in which he is born to have teeth according to nature: nor do we call 'blind' him who at any time does not have sight, but him who does not have it in the time in which according to nature it is appropriate for him to have sight or teeth.

Cum enim natura, ut dicit Aristoteles [1], nec abundet in superfluis, nec deficiat in necessariis, et omnia mensurantur periodo, ut dicit idem Aristoteles [2], si in tempore in quo natus est habere, non habet, privatus pro certo est principio naturæ ad operandum : si ante periodum deficit, non est privatus naturali principio, sed materia in qua comparabatur naturæ principium, ad tam breve tempus complere non potuit. Propter quod pueros primæ plantationis dentes projicientes, edentulos non dicimus, quia manet in eis principium dentium generativum. Quædam enim sunt generationes sive quædam generata, quæ mox nata, nec dentes, nec visum habent, sicut est canis natus, lupus, et catus : et homo quamvis habeat visum, non habet adhuc adunatum, sed dentes mox natus non habet ; et tales nati non propter hoc dicuntur edentuli, nec cæci, propter hoc quod non significat corruptionem principii vel membri in quo est privatio et habitus, sed significat brevitatem periodi in qua non poterat compleri organum ad habitus perfectionem.

Sic ergo opponuntur privatio et habitus, quod privatio dicit principiorum habitus corruptionem in eo in quo tunc natus est esse habitus. Et hoc est tripliciter secundum quod dicit Aristoteles in quinto *primæ philosophiæ*, scilicet circa idem numero, ut cæcum circa videns, hoc est, visum habens : vel circa idem genere, sicut talpa dicitur mus cæcus, non quod nata sit videre, sed quod genus ejus (quod est animal) natum est habere visum : tertio circa genus remotum, sicut planta dicitur habere visum, quia vivum natum est habere visum, cum videre sit de operationibus vitæ, quas natum est suscipere vivum secundum quod vivum. His igitur modis privatio opponitur habitui, quando scilicet habitus privatur privatione principiorum ipsius habitus : propter quod etiam videns non opponitur privative ad non videns, quia aliquid est non videns et visu non utens, et hoc non est privatum visu : et est non videns, principia visus nec habens ex genere nec ex specie, sicut lapis est non videns : et sic videns et non videns opposita sunt secundum affirmationem et negationem, et non secundum privationem et habitum. Ad hoc ergo quod privatio et habitus sint opposita, oportet quod sint circa idem habitus per naturam susceptibile, cujus susceptionis præcorruptiva sit privatio. Et hæc est causa quod habitus secundum ordinem naturæ præcedit privationem, et privatio comparatur ad habitum sicut secundum, quia primum est habitus. Non oportet autem habitum præcedere actu, sed in ordine principiorum naturæ : si enim actu semper oporteret præcedere habitum, tunc nullus esset cæcus vel surdus a nativitate, quod falsum est.

For since nature, as Aristotle says, neither abounds in superfluities nor fails in necessities, and all things are measured by a period, as the same Aristotle says, if in the time in which it is born to have, it does not have, it is certainly deprived of the principle of nature for operating: if it fails before the period, it is not deprived of the natural principle, but the matter in which the principle of nature was compared could not complete it in so short a time. On account of which we do not call children 'toothless' when they are shedding their first set of teeth, because the generative principle of teeth remains in them. For there are some generations or some generated things which, as soon as they are born, have neither teeth nor sight, as is the case with the newborn dog, wolf, and cat: and man, although he has sight, does not yet have it coordinated, but as soon as he is born he does not have teeth; and such newborns are not on this account called toothless or blind, because this does not signify the corruption of the principle or of the member in which privation and habit are, but it signifies the shortness of the period in which the organ could not be completed to the perfection of the habit.

Thus, therefore, privation and habit are opposed, so that privation means the corruption of the principles of the habit in that in which it is then born to be a habit. And this is threefold according to what Aristotle says in the fifth book of the *First Philosophy*, namely concerning the same in number, as the blind concerning the seeing, that is, having sight: or concerning the same in genus, just as the mole is called a 'blind mouse,' not that it is born to see, but that its genus (which is animal) is born to have sight: thirdly concerning a remote genus, as a plant is said to have sight, because the living thing is born to have sight, since seeing is among the operations of life, which the living thing is born to receive insofar as it is living. In these ways, therefore, privation is opposed to habit, when namely the habit is deprived by the privation of the principles of the habit itself: on account of which also the 'seeing' is not opposed privatively to the 'not seeing,' because something is 'not seeing' and not using sight, and this is not deprived of sight: and there is the 'not seeing' having neither the principles of sight from genus nor from species, just as a stone is 'not seeing': and thus 'seeing' and 'not seeing' are opposites according to affirmation and negation, and not according to privation and habit. For this purpose, therefore, that privation and habit be opposites, it is necessary that they be concerning the same habit susceptible by nature, of which susceptibility privation is pre-corruptive. And this is the cause that the habit according to the order of nature precedes privation, and privation is compared to the habit as the second, because the first is the habit. It is not necessary, however, for the habit to precede in act, but in the order of the principles of nature: for if it were always necessary for the habit to precede in act, then no one would be blind or deaf from birth, which is false.

Privari autem et habere habitum non est omnino idem, quod privatio et habitus : quamvis inter ea sit idem modus oppositionis. Habitus est visus : visus autem essentialiter non est habere visum. Similiter privatio est cæcitas, quia cæcitas suscipit prædicationem privationis, sicut species suscipit prædicationem generis. Habere igitur visum non est visus. Cæcum vero esse et privari visu, non est cæcitas vel privatio : si enim idem esset cæcitas et cæcum esse essentialiter, tunc utrumque eorum de altero prædicaretur, et de quocumque prædicaretur unum, de eodem prædicaretur reliquum : hoc autem minime vel nequaquam convenit, cæcum enim esse vel privari visu dicitur homo, cæcitas vero nullo modo dicitur homo. Et per hoc patet, quod privatio privat habitum in se, et in principiis habitus relinquit subjectum, circa quod est potentia, et illud nihil est privationis. Hæc tamen scilicet cæcum esse et visum habere opposita sunt tanquam privatio et habitus, modus enim oppositionis in utroque idem est : cæcitas enim opponitur visui, sicut cæcum esse opponitur ad visum habere. Sed in hoc est differentia, quod cæcitas et visus nominant ipsa opposita secundum privationem et habitum : cæcum autem esse et visum habere nominant subjectum secundum quod stat sub privatione et habitu, quasi denominatum ab ipsis, et ideo cum subjectum ex se non habeat oppositionem ad seipsum, nec subjectum possit opponi subjecto, relinquitur quod non est ibi oppositio nisi privationis et habitus, quæ circa subjectum posita esse significatur, et ideo necessarium est, quod idem modus oppositionis sit inter cæcitatem et visum, et inter cæcum esse et visum habere, sive inter privari visu et videre sive habitum habere.

Attendendum autem, quod hæc opposition non est contrariorum oppositio : quamvis enim privatio salvetur in contrario, sicut cum dicitur quod ex non albo fit album, dico quod potest esse album, et hoc est nigrum : tamen nigrum et album prout sunt formæ contrariæ actu, sunt etiam repugnantes sibi invicem, et sic opponuntur ut contraria. Sed in quantum est idem in illis quæ participant utramque illarum formarum ut perfectum et imperfectum et ut formabile ad speciem, sicut est lux : vel logice loquendo genus quod est in utraque specierum ut potentia, et ut formabile ad speciem :

Being deprived, however, and having a habit is not altogether the same as privation and habit: although between them there is the same mode of opposition. The habit is sight: sight, howev-

-er essentially is not 'having sight.' Similarly, privation is blindness, because blindness receives the predication of privation, just as the species receives the predication of the genus. Having sight, therefore, is not sight. 'Being blind' and 'being deprived of sight' is not blindness or privation: for if blindness and 'being blind' were essentially the same, then each of them would be predicated of the other, and of whatever one was predicated, the rest would be predicated of the same: this however is very little or in no way appropriate, for a man is said to be 'being blind' or 'being deprived of sight,' but a man is in no way called 'blindness.' And through this it is clear, that privation deprives the habit in itself, and in the principles of the habit it leaves the subject, concerning which there is potency, and that is nothing of the privation. These however, namely 'being blind' and 'having sight,' are opposed just as privation and habit, for the mode of opposition in each is the same: for blindness is opposed to sight, just as 'being blind' is opposed to 'having sight.' But in this there is a difference, that blindness and sight name the opposites themselves according to privation and habit: 'being blind' and 'having sight' name the subject insofar as it stands under privation and habit, as if denominated by them, and therefore since the subject of itself does not have opposition to itself, nor can a subject be opposed to a subject, it remains that there is no opposition there except of privation and habit, which is signified to be placed concerning the subject, and therefore it is necessary that the same mode of opposition be between blindness and sight, and between 'being blind' and 'having sight,' or between 'being deprived of sight' and 'seeing' or 'having a habit.'

It should be noted, however, that this opposition is not the opposition of contraries: for although privation is saved in the contrary, as when it is said that from 'not white' comes 'white,' I say that it can be 'white,' and this is 'black': nevertheless black and white, insofar as they are contrary forms in act, are also repugnant to each other, and thus they are opposed as contraries. But insofar as there is the same in those which participate in each of those forms as the perfect and the imperfect and as formable to a species, such as is light: or speaking logically the genus which is in each of the species as potency, and as formable to a species:

sic opponuntur ut privatio et habitus : et sic de uno potest fieri reliquum, sicut actus de potentia : sic enim utrumque fit ex altero, sicut non hoc potens, potest tamen esse id, et utrumque inchoationem, et principium sui esse habet in reliquo : et hæc privatio quæ est unum de principiis motus, præcedit habitum secundum naturam : et quia materia nunquam est sine forma, ideo privatio talis est fundata secundum modum quem dicimus in forma contraria vel disparata : et ideo dicit Philosophus, quod quorumcumque est genus unum, illorum est materia una. Patet igitur quod privatio et habitus specialem habent modum oppositionis distinctum a modo oppositionis contrariorum.

Quartum autem genus oppositionis est secundum contradictionem : quod quia complexum est, non adeo proposito convenit huic tractatui. In hac enim parte loquentes logice, non intendimus nisi de prædicabilium ordinatione, secundum quod prædicabilia rerum prædicamentorum significativa sunt, et ad res habent reduci : et quia res oppositæ sunt sub contradictoriis, ideo tractando de oppositis, oportuit tractare de contradictoriis secundum quod sub contradictoriis res substant oppositæ. Et ideo sciendum quod id quod secundum res sub affirmatione est, et id quod secundum rem est sub negatione, non est idem quod affirmatio et negatio : cujus probatio est : quia affirmatio est oratio affirmativa, negatio (quæ est contradictoria) est oratio negativa : horum autem quæ sunt affirmatione et negatione, sunt ut res affirmatæ et negatæ : nullum enim est oratio, sed potius res quæ subjacet orationi, sicut significatum substat signo.

Sciendum enim quod affirmatio tripliciter dicitur, et similiter negatio. Dicitur enim affirmatio affirmationis qualitas et forma in parte per assertionem compositionis : et hoc modo affirmatio qualitas est propositionis, et per oppositum negatio dicitur qualitas vel forma divisionis compositorum, et est qualitas negativæ propositionis. Aliquando dicitur affirmatio enuntiativa oratio dicens unum de altero, et sic affirmatio species est propositionis. Aliquando dicitur affirmatio pars negationis, quando scilicet idem negatur in negativa, quod affirmatur in affirmativa : et sic affirmatio et negatio sunt opposita circa idem : quamvis affirmatio non opponatur negationi ut pars est, tamen oppositio est in hoc quod id quod significatur esse in una, significatur non esse in altera : non inesse autem et inesse sunt opposita per affirmationem et negationem.

thus they are opposed as privation and habit: and thus from one the other can be made, just as act from potency: for thus each is made from the other, just as 'not able to do this' nevertheless can be it, and each has the inchoation and principle of its being in the other: and this privation which is one of the principles of motion, precedes the habit according to nature: and because matter is never without form, therefore such privation is founded according to the mode which we say in a contrary or disparate form: and therefore the Philosopher says, that of whatever things the genus is one, of those the matter is one. It is clear, therefore, that privation and habit have a special mode of opposition distinct from the mode of opposition of contraries.

The fourth genus of opposition is according to contradiction: which, because it is complex, does not so much suit the purpose of this treatise. For in this part, speaking logically, we do not intend anything except concerning the ordination of the predicables, insofar as the predicables of things are significant of the categories, and have to be reduced to things: and because opposite things are under contradictories, therefore in treating of opposites, it was necessary to treat of contradictories insofar as opposite things stand under contradictories. And therefore it is to be known that that which according to the thing is under affirmation, and that which according to the thing is under negation, is not the same as affirmation and negation: the proof of which is: because affirmation is an affirmative speech, negation (which is contradictory) is a negative speech: of those however which are in affirmation and negation, they are as things affirmed and denied: for none is speech, but rather the thing which underlies the speech, just as the signified stands under the sign.

For it is to be known that 'affirmation' is said in three ways, and similarly 'negation.' For affirmation is called the quality and form of affirmation in the part through the assertion of composition: and in this way affirmation is a quality of a proposition, and by the opposite negation is called the quality or form of the division of things composed, and is a quality of a negative proposition. Sometimes affirmation is called an enunciative speech saying one thing of another, and thus affirmation is a species of proposition. Sometimes affirmation is called a part of negation, when namely the same thing is denied in the negative that is affirmed in the affirmative: and thus affirmation and negation are opposites concerning the same thing: although affirmation is not opposed to negation as it is a part, nevertheless the opposition is in this, that that which is signified to be in one, is signified not to be in the other: not being in and being in, however, are opposites through affirmation and negation.

Si quis autem objiciat quod inter affirmationem et negationem est ordo, quod affirmatio est ante negationem, non enim negat negatio nisi quod affirmat affirmatio ; et videtur quod opposita secundum affirmationem et negationem sunt circa idem ordine, et sic sunt opposita ut privatio et habitus, sicut patet per ante dicta, Dicendum quod quando dicitur quod

opposita ut privatio sunt circa idem ordine, intelligitur quod ordo ille sit in rebus a natura determinatis : ordo autem qui est inter affirmationem et negationem, non est talis, sed est ordo rationis : quia scilicet negatio non negat, nisi quod affirmat affirmatio in quocumque tempore : et hoc non est in oppositione privationis et habitus. Hæ igitur genera oppositionis distincta sunt ad invicem : et in argumento est paralogismus æquivocus, et quod aliter et aliter hinc et inde sumitur ordo.

Quamvis autem, sicut dictum est, quod substat affirmationi non sit affirmatio, et quod substat negationi non sit negatio, tamen concedendum quod ea quæ substant affirmationi et negationi, sunt opposita tanquam affirmatio et negatio : et est in eis idem modus oppositionis, qui est etiam in contradictoriis : sicut enim affirmation adversus negationem est opposita, ut quod sedet est oppositum ei quod non sedet, sic et res quæ sub utraque positæ sunt, affirmatione scilicet et negatione, eumdem habent modum oppositionis, ut sedere opponitur ad non sedere respectu ejusdem et circa idem.

Si autem quis quærat dicendo, quod ex quo affirmatio et negatio in sermone sunt complexa, in quibus ex natura contradictionis oppositionis, in rebus autem est modus illius oppositionis, videtur quod hæc oppositio prima sit in sermone, et non in re nisi per consequens et non per veritatem, sed per aliquem modum ipsius tantum : etiam hoc aliqui aliquando concesserunt. Sed contra hoc est, quod dicit auctoritas Platonis : quia non sermoni res, sed rei sermo subjectus est, quia sermo non est nisi propter res significandas : et sicut in ante habitis dictum est, in eo quod res est vel non est, oratio vera vel falsa est : et sic videtur primum esse in re, et consequenter, in sermone : et hoc est concedendum. Et propter hoc dicendum quod contradictio non est in sermone, nisi secundum quod refertur ad rem, et est in re sicut in causa, in sermone autem sicut in signo rei. Adhuc autem attendendum est quod in re est sicut in causa et non in compositione et divisione : res enim est in re vel separata a re, sicut compositione media quæ diversa sit a rebus compositis, sed notam compositionis vel notam divisionis ponit anima, ut dicit Aristoteles [1].

If anyone however should object that between affirmation and negation there is an order, that affirmation is before negation, for negation does not deny except what affirmation affirms; and it seems that opposites according to affirmation and negation are concerning the same thing in order, and thus they are opposites as privation and habit, as is clear through the things said before, It must be said that when it is said that

opposites as privation are concerning the same thing in order, it is understood that that order is in things determined by nature: the order however which is between affirmation and negation is not of such sort, but is an order of reason: because namely negation does not deny except what affirmation affirms in any time: and this is not in the opposition of privation and habit. These genera of opposition are therefore distinct from each other: and in the argument there is an equivocal paralogism, and that the order is taken one way and another on this side and that.

Although however, as has been said, that which underlies affirmation is not affirmation, and that which underlies negation is not negation, nevertheless it must be conceded that those things which underlie affirmation and negation are opposites just as affirmation and negation: and there is in them the same mode of opposition which is also in contradictories: for just as affirmation is opposed against negation, as 'he sits' is opposed to 'he does not sit,' so also the things which are placed under each, namely affirmation and negation, have the same mode of opposition, as 'to sit' is opposed to 'not to sit' with respect to the same thing and concerning the same thing.

If however someone should ask by saying that since affirmation and negation in speech are complex, in which from the nature of contradiction there is opposition, but in things there is the mode of that opposition, it seems that this opposition is primarily in speech, and not in the thing except consequently and not through truth, but through some mode of it only: even this some have sometimes conceded. But against this is what the authority of Plato says: because the thing is not subject to the speech, but the speech to the thing, because speech is not except for the sake of signifying things: and just as has been said in the things held before, in that the thing is or is not, the speech is true or false: and thus it seems to be first in the thing, and consequently in the speech: and this is to be conceded. And on account of this it must be said that contradiction is not in speech except insofar as it refers to the thing, and it is in the thing as in the cause, but in the speech as in the sign of the thing. Further, however, it is to be noted that in the thing it is as in the cause and not in composition and division: for the thing is in the thing or separate from the thing, just as in a middle composition which is different from the composed things, but the soul places the note of composition or the note of division, as Aristotle says.

Et ideo tria sunt in oppositione secundum affirmationem et negationem, scilicet quod ad rem referantur eamdem affirmatio et negatio, et ad eumdem intellectum componentem et dividentem, et quod observetur in sermone identitas significandi in affirmatione et negatione : quia res est causa, intellectus autem componens et dividens, et sermo signum compositionis et divisionis.

Attendendum autem quod diffinientes affirmationem et negationem, utuntur genere remoto dicentes, quod affirmatio est oratio affirmativa, et non dicentes quod est enuntiatio : quia volentes ostendere quod affirmation et negatio opposita sunt, melius ostenditur ex genere quod est oratio, quia hoc commune est utrique, affirmationi scilicet et negationi : enuntiatio autem species est orationis, et proprie loquendo nihil enuntiatur in enuntiatione negativa, sed potius negatur in enuntiatione aliquid de aliquo : et quod enuntiatum est in affirmatione, negatur in negatione.

Adhuc notandum quod cum dicitur, affirmatio est oratio affirmativa, ponitur affirmatio pro specie enuntiationis sive propositionis cujus genus est oratio. Cum autem subjungitur affirmativa, ponitur affirmatio pro qualitate propositionis quæ ad quale informat et denominat orationem.

Et si dicat aliquis, quod aliæ orationum sunt affirmativæ, Dicendum quod non sunt : quia non affirmant verum vel falsum. Unde cum dicitur, utinam non moriar, non est negatum aliquid, sed optatum est de non moriendo. Similiter etiam cum dicitur, non fac hoc, vel non facias aliquid aliud, nihil negatur, sed imperium vel præceptum est de non faciendo. Et idem est in affirmativis, cum dicitur, fac hoc, vel utinam facias : hoc enim nihil est dictum, sed præceptum vel optatum de aliquo fiendo vel faciendo : et in talibus non proprie est affirmatio vel negatio, sicut dictum est, quia si insit per modum affirmationis vel negationis, totum significat affectum mentis, qui per modum verbi importatur quod ponitur in oratione.

CAPUT VII — *De differentia oppositionis secundum privationem et habitum, ab oppositione relationis et contrarietatis.*

And therefore there are three things in opposition according to affirmation and negation, namely that affirmation and negation refer to the same thing, and to the same understanding composing and dividing, and that identity of signifying be observed in speech in affirmation and negation: because the thing is the cause, while the understanding is the composing and dividing, and the speech the sign of composition and division.

It is to be noted however that those defining affirmation and negation use a remote genus saying that affirmation is an affirmative speech, and not saying that it is an enunciation: because wanting to show that affirmation and negation are opposites, it is better shown from the genus which is 'speech,' because this is common to both, namely to affirmation and to negation: enunciation however is a species of speech, and properly speaking nothing is enunciated in a negative enunciation, but rather something is denied of something in the enunciation: and that which was enunciated in the affirmation is denied in the negation.

Further it is to be noted that when it is said, 'affirmation is an affirmative speech,' 'affirmation' is placed for the species of enunciation or proposition whose genus is speech. When however 'affirmative' is added, 'affirmation' is placed for the quality of the proposition which informs and denominates the speech as to what sort.

And if someone says that others of speeches are affirmative, it must be said that they are not: because they do not affirm true or false. Hence when it is said, 'would that I might not die,' nothing is denied, but it is an optative concerning not dying. Similarly also when it is said, 'do not do this,' or 'you should not do something else,' nothing is denied, but it is a command or precept concerning not doing. And the same is in affirmatives, when it is said, 'do this,' or 'would that you might do it': for this is nothing said, but a precept or optative concerning something to be made or done: and in such things there is not properly affirmation or negation, as has been said, because if it be present through the mode of affirmation or negation, the whole signifies an affection of the mind, which is imported through the mode of the verb which is placed in the speech.

CAPUT VII.

On the difference of the opposition according to privation and habit from the opposition of relation and contrariety.

Sic determinatis generibus oppositionum, videndum est in quibus differant a se invicem et inter seipsa. Quod autem privatio et habitus non sic, vel eodem modo opponantur ut ad aliquid, sed hæc duo genera oppositionis sunt diversa, manifestum est, accipiendo primo differentiam sive differentiæ rationem ex ipsis quæ opposita sunt : visus enim qui opponitur cæcitati ut habitus privationi, non dicitur hoc ipsum quod est visus sui oppositi quod est cæcitas secundum aliquem casum sive secundum genitivum, sive secundum alium casum, non dicitur ad ipsum : non enim dicitur visus cæcitatis visus, nec cæcitati visus, nec ad cæcitatem visus, nec cæcitate visus : nullus enim horum habituum ad rem referri potest, et ad id quod est visus secundum quod est visus : aliter autem non potest visus hoc ipsum quod est ad alterum esse. Similiter autem nec cæcitas dicitur hoc ipsum quod est cæcitas visionis, nec secundum aliquem alium casum dicitur alterius hoc ipsum quod est. Sed cæcitas dicitur privatio visionis, et sic secundum genus aliquo modo est alterius, sed non secundum speciem : cæcitas autem visionis cæcitas non dicitur. Hujus autem causa in ante habitis in tractatu de Relatione dicta est, quia aliquando in ratione nominis speciei clauditur vel concipitur id cujus est, et ad ad quod dicitur : et tunc incongrue extrinsecus opponentur. Amplius adhuc ab ipsis oppositis rationem inducendo, sicut patet ex præhabitis, ad aliquid omnia dicuntur reciproce ad convertentiam : propter quod et cæcitas si esset de numero eorum quæ sunt hoc ipsum quod sunt ad aliquid, converteretur utique ad illud ad quod hoc dicitur secundum ipsum hoc quod est: non autem convertitur: non enim dicitur visus cæcitatis visus, sicut paulo ante probatum est; ergo nec cæcitas hoc ipsum quod est, ad aliquid est. Sumitur autem modus oppositionis eorum quæ sunt ad aliquid, ex hoc ipso quod sunt ad aliquid. Cum ergo modus oppositionis privationis et habitus ex hoc non sumitur, patet quod alia est oppositio relationis, et eorum quæ opponuntur ut privatio et habitus.

Quoniam autem ea quæ opponuntur ut privatio et habitus, non opponuntur ut contraria, ex his quæ dicentur manifestum: contraria enim sunt aut mediata, aut immediata: quorum autem contrariorum nihil est medium, sicut contrariorum quæ sunt immediata, necesse est semper alterum contrariorum inesse subjecto susceptibili in quo nata sunt fieri illa immediata contraria, aut sunt in quibus et de quibus prædicari

The genera of oppositions having been thus determined, it is to be seen in what things they differ from each other and among themselves. That privation and habit however are not opposed in this way, or in the same mode as relatives, but that these two genera of opposition are diverse, is manifest, by first taking the difference or the account of the difference from those very things which are opposed: for sight which is opposed to blindness as a habit to a privation, is not called this very thing which is 'sight' of its opposite which is 'blindness' according to any case, whether according to the genitive or according to another case, it is not said to it: for it is not called the sight of blindness, nor sight to blindness, nor sight toward blindness, nor sight by blindness: for none of these habits can be referred to the thing, and to that which is sight insofar as it is sight: otherwise however sight cannot be this very thing which is toward another. Similarly however neither is blindness called this very thing which is the blindness of vision, nor according to any other case is it called this very thing which is of another. But blindness is called the privation of vision, and thus according to genus it is in some way of another, but not according to species: for the blindness of vision is not called 'blindness.' The cause of this however was said in the things held before in the treatise on Relation, because sometimes in the account of the name of the species there is enclosed or conceived that of which it is, and that to which it is said: and then they will be incongruously opposed from without. Inducing the account further from the opposites themselves, as is clear from the things held before, all relatives are said reciprocally to conversion: on account of which also blindness, if it were of the number of those things which are this very thing which they are toward something, would be con-

certainly towards that towards which this is said according to that very thing which it is: but it is not converted: for sight is not said to be the sight of blindness, as was proven a little before; therefore neither is blindness that very thing which it is, towards something. But the mode of opposition of those things which are relatives is taken from this very fact that they are relatives. Therefore, since the mode of opposition of privation and habit is not taken from this, it is clear that the opposition of relation is one thing, and that of those which are opposed as privation and habit is another.

But that those things which are opposed as privation and habit are not opposed as contraries, is manifest from what will be said: for contraries are either mediate or immediate: but of those contraries of which there is no intermediate, such as immediate contraries, it is necessary that one of the contraries always be present in the susceptible subject in which those immediate contraries are naturally suited to occur, or they are those in which and of which they seem to be predicated

per denominationem videntur: alterum enim illorum semper de talibus prædicatur vel ambo sub disjunctione: semper enim secundum omne tempus eorum contrariorum nihil est medium, quorum alterum omni tempore necesse est inesse susceptibili, et quorum alterum semper est necesse de susceptibili prædicari, sicut patet de languore et sanitate circa animal, et abundanti sive impari et perfecto sive pari circa numerum. Contrariorum vero quorum aliquid est medium, nunquam secundum aliquod tempus necesse est alterum inesse: semper enim potest inesse medium, quod neutrum est contrariorum: non enim necesse est omni vel alicui susceptibili aut candidum sive album, vel nigrum inesse, quia potest inesse fuscum vel pallidum. Similiter non est necesse omni vel alicui susceptibili inesse calidum, vel frigidum, quia potest inesse tepidum, quod nec calidum est, nec frigidum: horum enim et similium contrariorum medium nihil prohibet inesse quod neutrum est extremorum. Sed eorum, ut diximus, est aliquid medium, quorum non est necesse alterum semper inesse susceptibili, exceptis his quibus naturaliter inest unum contrariorum, sicut inest igni calidum, et sicut inest per naturam nivi candidam esse. In talibus autem necessarium est alterum inesse, et illius oppositum non convenit inesse, sive impossibile et inesse sine substantiæ corruptione. Non enim possibile est ignem esse frigidum, ita quod maneat ignis substantia, vel nivem esse nigram, ita quod maneat substantia nivis: multa enim etiam alia susceptibilia sunt calidi et candoris, præter ea quibus alterum inest per naturam. Et tunc ex his quæ dicta sunt patet, quod non omni susceptibili verum est alterum inesse contrariorum mediatorum, sed his solum susceptibilibus, quibus alterum inest per naturam: et his determinate inest unum, et non alterum convenit inesse.

In privatione et habitu nihil eorum quæ dicta sunt de contrariis immediatis, verum est. Susceptibili enim privationis et habitus non semper necessarium alterum, hoc est, privationem vel habitum inesse: quia hæc non sunt in eo nisi in tempore determinato: sed animal mox natum nondum habet tempus determinatum ad videndum a natura, neque cæcum neque visum habens dicitur esse. Propter quod sequitur quod privatio et habitus non sunt de numero talium contrariorum quorum nihil est medium, quia illorum omni tempore necesse est alterum inesse suo susceptibili.

by denomination: for one of them is always predicated of such things or both under disjunction: for always according to all time there is no intermediate of those contraries, of which it is necessary that one in all time be present in the susceptible subject, and of which it is always necessary that one be predicated of the susceptible subject, as is clear concerning sickness and health regarding an animal, and the abundant or odd and the perfect or even regarding number. But of contraries of which there is some intermediate, it is never necessary according to any time that one of them be present: for the intermediate, which is neither of the contraries, can always be present: for it is not necessary that either bright or white, or black be present in every or any susceptible subject, because brown or pale can be present. Similarly it is not necessary that hot or cold be present in every or any susceptible subject, because lukewarm can be present, which is neither hot nor cold: for nothing prohibits an intermediate, which is neither of the extremes, from being present among these and similar contraries. But of those, as we said, there is some intermediate, of which it is not necessary that one parameter always be present in the susceptible subject, except for those in which one of the contraries is naturally present, just as hot is present in fire, and just as being bright is present by nature in snow. But in such cases it is necessary for one to be present, and it is not fitting for its opposite to be present, or it is impossible for it to be present without the corruption of the substance. For it is not possible for fire to be cold in such a way that the substance of fire remains, or for snow to be black in such a way that the substance of snow remains: for indeed there are many other subjects susceptible to heat and brightness, besides those in which one is present by nature. And then from what has been said it is clear that it is not true for all susceptible subjects that one of the mediate contraries is present, but only for those susceptible subjects in which one is present by nature: and in these one is determinately present, and it is not fitting for the other to be present.

In privation and habit nothing of those things which were said concerning immediate contraries is true. For to the subject susceptible to privation and habit it is not always necessary for either one to be present, that is, the privation or the habit: because these are not in it except in a determined time: but an animal just born does not yet have a time determined by nature for seeing, and is said to be neither blind nor having sight. Because of which it follows that privation and habit are not of the number of such contraries of which there is no intermediate, because of those it is necessary at all times for one to be present in its susceptible subject.

Sed neque sunt privatio et habitus de numero talium contrariorum, quorum aliquid est medium; omni enim susceptibili privationis et habitus, necessarium est unum inesse vel habitum vel privationem, postquam venerit tempus in quo ipsum susceptibile natum est ad habendum habitum: sic enim aut cæcum, aut habens visionem dicitur: et tunc non convenit necessario determinate inesse alterum, scilicet visum determinate vel cæcum determinate, sed indeterminate alterutrum necessario inerit: est enim vel videns, vel cæcum indeterminate. In contrariis autem in quibus est medium, nunquam secundum aliquod tempus est necessarium alterum inesse, quia semper potest inesse medium : sed quibusdam susceptibilibus alterum contrariorum mediatorum determinate convenit inesse, sicut diximus, cui illud inest per naturam. Propter quod palam est, quod ea quæ privative opposita sunt, secundum neutrum modum habent oppositionem : nec enim semper alterum inest, sicut contrariorum immediatorum : neque unquam necessarium est alterum inesse, sicut in contrariis mediatis se habet oppositio.

Amplius adhuc idem probatur in contrariis sive mediatis sive immediatis, existente et manente secundum substantiam susceptibili, possibile est ex alterutro in alterutrum fieri alterationis mutationem, nisi alterum contrariorum insit naturaliter, sicut igni inest calidum per naturam. Nam in contrariis immediatis, animal quod sanum est modo, possibile est languere, mutatum ex sanitate in languorem : et in contrariis mediatis, possibile est id quod modo candidum est, nigrum fieri et mutari ex candore in nigredinem, et similiter calidum possibile est fieri frigidum, et e converso, et id quod est studiosum possibile est fieri pravum, et e converso ex pravo possibile est fieri studiosum, quod tamen negat Plato in libro qui dicitur *Mennonis*, sed non est negabile si ponamus virtutem ex assuetudine fieri : secundum hoc enim pravus ad meliores exercitationes sive assuefactiones bonorum operum deductus, et in virtutibus intelligibilibus deductus ad meliores doctrinas et consimilia et electiones, quamvis forte primo modicum quid proficiat ut melior sit. Si vero saltem semper sive continuum modicum crementum sumpserit, palam est quia aut perfecte mutabitur et studiosus erit perfecte, aut satis multum accipiet incrementum, ita quod operabitur ut studiosus. Si enim assuetudine fiet bene mobilior ad virtutem, ut ea quæ virtutis sunt facile faciat et gaudeat : vel etiam si homo non est, sed tamen quodcumque incrementum sumat, palam est quod aut perfecte mutabitur, aut satis multum sumet incrementum quod sufficit ad virtutis acceptionem.

But neither are privation and habit of the number of such contraries, of which there is some intermediate; for it is necessary for every susceptible subject of privation and habit to have either the habit or the privation present within it, after the time has come in which that very susceptible subject is naturally suited to have the habit: for thus it is said to be either blind or having vision: and then it is not fitting by necessity for one to be determinately present, namely sight determinately or blindness determinately, but rather it will necessarily be indeterminately one or the other: for it is either seeing or blind indeter-

-minately. But in contraries in which there is an intermediate, it is never necessary according to any time for one to be present, because the intermediate can always be present: but in certain susceptible subjects it determinately belongs to one of the mediate contraries to be present, as we said, to which that is present by nature. Because of this it is evident that those things which are opposed privatively have opposition according to neither mode: for neither is one always present, as with immediate contraries; nor is it never necessary for one to be present, as the opposition stands in mediate contraries.

Moreover, the same is proven in contraries whether mediate or immediate, the susceptible subject existing and remaining according to substance, it is possible for a change of alteration to occur from one to the other, unless one of the contraries is present naturally, just as heat is present in fire by nature. For in immediate contraries, an animal which is now healthy, it is possible to become sick, changed from health into sickness: and in mediate contraries, it is possible for that which is now white to become black and be changed from whiteness into blackness, and similarly it is possible for the hot to become cold, and conversely, and that which is virtuous is possible to become wicked, and conversely from wicked it is possible to become virtuous, which however Plato denies in the book which is called *Meno*, but it cannot be denied if we posit that virtue comes about from habituation: for according to this a wicked man, being led to better exercises or habituations of good works, and in intelligible virtues being led to better teachings and the like and choices, although perhaps at first he may make little progress to become better. But if he takes at least a constant or continuous small increase, it is clear that he will either be perfectly changed and will be perfectly virtuous, or he will receive quite a large increase, such that he will work as a virtuous man. For if by habituation he becomes suitably more mobile towards virtue, so that he does the things of virtue easily and rejoices in them: or even if he is not a man, but nevertheless whatever increase he takes, it is clear that he will either be perfectly changed, or he will take quite a large increase which suffices for the reception of virtue.

Si enim a principio sumat aliquod incrementum, verisimile est apud eum accipere incrementum si perseveraverit in exercitio actuum bonorum, et cum hoc semper fit continue, sic perfecte restituitur in contrarium habitum, nisi forte tempore sive suspensus, sive decurtatus sit : quia non in æquali tempore omnes æqualiter proficiunt, eo quod unus minus habilis est quam alter, quia naturalia moralibus multum cooperantur. Sic se habet in contrariis.

Sed in privatione et habitu hoc quod dictum est, nullo modo convenit : impossibile est enim in privatione et habitu indifferenter mutationem ex alterutro in alterum fieri : ab habitu enim mutatio fit in privationem, a privatione vero in habitum mutationem fieri est impossibile. Cæcus enim qui factus est nunquam rursus videbit, nec cum quis calvus factus est, unquam rursus efficitur in capite comatus, nec edentulus sine dentibus quis factus, rursus dentes ei orti sunt ut fieret dentatus.

CAPUT VIII.

De dubitabilibus quæ sunt circa ea quæ dicta sunt.

Quamvis per ea quæ dicta sunt, nihil intendamus probare nisi quod privative opposita nec sunt opposita ut relativa, nec ut contraria, tamen propter doctrinæ facilitatem bene se habet dubia quæ sunt circa ea quæ dicta sunt determinare. Quæ autem causa sit quod quædam contrariorum sunt mediata et quædam immediata, jam in ante habitis determinatum est.

Quod autem alterum contrariorum inest alicui per naturam, hæc causa est, quia inest ut potentia naturalis ; et hoc

accipitur ex probatione quam fecit Aristoteles in fine tertii *Meteororum*. In substantialibus enim ignis ex hoc quod elementum est motu distensum ut usque ad ultimum rarefactum, radicatur calidum in summo, nec separabile est ab ipso, manente substantia, qua ignis est ignis : quia manente substantia formali manet illud quod ut naturalis potentia in substantia radicatum est.

Et si quis objiciat quod calor, quia est accidens in uno, in nullo potest esse substantia, et sic non est substantia in igne, sed accidens : et sic calor est in igne non sicut quædam pars, et ideo videtur quod ignis possit esse ignis et non calidus, quia accidens est, ut dicit Porphyrius, quod adest et abest præter subjecti corruptionem, Dicendum est quod est accidens naturale et proprietas essentialis ignis consequens et non derelinquens. Quod autem non sit in eo sicut quædam pars, concedendum est, quia non potest esse pars id quod est totum esse perfectum consequens.

For if from the beginning he takes some increase, it is likely that he will receive an increase if he perseveres in the exercise of good acts, and since this always happens continuously, he is thus perfectly restored to the contrary habit, unless perhaps he is either suspended or cut short by time: because not all progress equally in an equal time, because one is less apt than another, because natural things cooperate much with moral things. This is how it stands in contraries.

But in privation and habit what has been said does not in any way apply: for it is impossible in privation and habit for a change to indifferently occur from one to the other: for from habit a change occurs into privation, but from privation into habit it is impossible for a change to occur. For a blind man who has been made such will never see again, nor when someone has become bald is he ever made hairy on his head again, nor if someone has become toothless without teeth do teeth grow again for him to become toothed.

CHAPTER VIII.

On the dubitable things which are concerning those things which have been said.

Although through those things which have been said, we do not intend to prove anything except that things opposed privatively are neither opposed as relatives, nor as contraries, nevertheless for the facility of teaching it is well to determine the doubts which concern the things which have been said. But what the cause is that some contraries are mediate and some are immediate, has already been determined in what preceded.

But that one of the contraries is present to something by nature, the cause is this, that it is present as a natural potency; and this

is taken from the proof which Aristotle made at the end of the third book of *Meteorology*. For in the substantials of fire, from the fact that it is an element distended by motion so as to be rarefied to the utmost, heat is rooted in the highest degree, nor is it separable from it, while the substance remains, by which fire is fire: because while the formal substance remains, that remains which is rooted in the substance as a natural potency.

And if someone should object that heat, because it is an accident in one thing, can be a substance in nothing, and thus is not a substance in fire, but an accident: and thus heat is in fire not as a certain part, and therefore it seems that fire could be fire and not hot, because an accident is, as Porphyry says, that which is present and absent without the corruption of the subject, it must be said that it is a natural accident and a proper essential characteristic of fire, following it and not leaving it. But that it is not in it as a certain part, must be conceded, because that which follows the whole perfect being cannot be a part.

Quod autem dicit Porphyrius, dicit de accidente communi, quod non est proprium, videlicet naturale : et ideo ut accidens non habet inseparabilitatem, sed inseparabilitatem habet ab eo quod est naturale.

Patet autem ex hoc, quod falsa est opinio eorum qui dicunt primas qualitates esse formas substantiales elementorum : formæ enim substantiales corporum nullum habent contrarium : hæc autem ad invicem sibi contraria sunt [1].

Sciendum etiam ea inesse per naturam non ejus quod inest, sed per naturam subjecti cui inest, sicut diximus : et sic insunt omnibus omnes potentiæ naturales.

Si quis autem dicat quod sicut igni per naturam inest calidum, ita aquæ per naturam inest frigidum : sicut ergo aqua frigida per naturam potest calefieri ut sit actu calida sine substantiæ corruptione,

ita ignis deberet posse actu infrigidari per naturam ut esset actu frigidus præter substantiæ corruptionem. Ad hoc autem dicendum quod inter elementa, ut dicit Aristoteles [2], solus ignis est formalis et alia contraria sunt materia, et ideo quod radicatur in ipso, profundius radicatur quam in aliis : et ideo ab aliis manentibus in substantia separantur suæ qualitates secundum actum, et remanent secundum radices in potentia redeunte ad actum, quando alterans cessat ab alteratione. Et ideo aqua calefacta, cessante calefaciente, per seipsam rursus efficitur frigida. Ignis autem quia rarissimus est, et quia alterationem infrigidantis recipiens in profundum sui, propter hoc quod valde formale est, statim infrigidatus inspissatur et corrumpitur ab ignis substantia et forma : quod post ignem facit aer secundum modum proportionalem. Aqua autem et terra, quia spissa sunt, non ita in profundum sui suscipiunt alterationes eorum quibus mutantur : et ideo actu efficiuntur in forma alterante, et cum hoc diu actu tenent qualitates et potentias naturales proprias.

Quod autem diximus ex pravo fieri studiosum si a principio propter exercitationes in bonis actibus incrementum incipiat, propter Socratem et Platonem dictum est, qui dixerunt virtutem secundum quam homo studiosus est, nec discibile, nec assuescibile bonum esse, sed virtutem esse donum deorum immortalium : assuetudine autem et doctrina hominem parari ad virtutem, eo quod dii non juvant inertes et pigros, sed seipsos extendentes et parantes ad virtutem.

Adhuc autem quod dictum est, à privatione in habitum regressum non posse fieri, intelligendum hoc quod est dictum de privatione quæ privat et habitum et subjecti ad habitum aptitudinem, sive quæ privat principia per quæ subjectum habitudinem habet ad habitus susceptio-

But what Porphyry says, he says of a common accident, which is not proper, namely natural: and therefore as an accident it does not have inseparability, but it has inseparability from the fact that it is natural.

It is clear from this, however, that the opinion of those who say that the primary qualities are the substantial forms of the elements is false: for the substantial forms of bodies have no contrary: but these are contrary to each other [1].

It should also be known that these things are present by nature not of that which is present, but by the nature of the subject in which it is present, as we said: and thus all natural potencies are present in all things.

But if someone should say that just as hot is present in fire by nature, so cold is present in water by nature: therefore just as cold water by nature can be heated so that it is actually hot without the corruption of the substance,

so fire ought to be able to be actually cooled by nature so that it would be actually cold without the corruption of the substance. To this it must be said that among the elements, as Aristotle says [2], only fire is formal and the others are formal-material, and therefore what is rooted in it, is rooted more deeply than in the others: and therefore from the others, while remaining in substance, their qualities are separated according to act, and they remain according to their roots in potency returning to act, when that which alters ceases from alteration. And therefore heated water, when the heating agent ceases, becomes cold again by itself. But fire, because it is most rare, and because receiving the alteration of the cooling agent into its depth, on account of the fact that it is highly formal, is immediately cooled, thickened, and corrupted from the substance and form of fire: which after fire air does according to a proportional mode. But water and earth, because they are thick, do not so deeply receive the alterations of those things by which they are changed: and therefore they are actually made into the altering form, and with this they hold their natural proper qualities and potencies in act for a long time.

But what we said, that from wicked one can become virtuous if from the beginning he begins to increase through exercises in good acts, was said on account of Socrates and Plato, who said that the virtue according to which a man is virtuous is neither a learnable nor an habituable good, but that virtue is a gift of the immortal gods: but by habituation and teaching a man is prepared for virtue, because the gods do not help the lazy and sluggish, but those who extend and prepare themselves for virtue.

Furthermore, as to what was said, that a return from privation to habit cannot occur, this must be understood as being said of the privation which deprives both the habit and the aptitude of the subject to the habit, or which deprives the principles through which the subject has an aptitude for the reception of the habit-

nem, sicut cæcitas ad visum se habet : et talis privatio sequitur habitum tempore et natura : hæc enim privatio non relinquit subjectum sine habilitate ad habitum. Est autem alia privatio quæ non privat habitum, sed essentiam secundum esse actu habitum : et hæc est in qua est inchoatio habitus secundum potentiam, et ex qua educitur habitus, et ab hac in omni motu et mutatione fit processus in habitum secundum actum per modum quo movetur subjectum susceptibile actus de potentia ad actum : et hæc privatio semper præcedit habitum tempore et motu, et etiam natura materiæ et potentiæ : et de hac privatione nos hic non loquimur, quia in toto non privat habitum. Nec etiam inter talem privationem et suum habitum est plena oppositio privative oppositorum. Nos autem hic loquimur de differentia modorum oppositionis, et ideo non loquimur de privatione et habitu, nisi secundum quod plenam habent ad invicem hujusmodi oppositionem. Alia vero quæ dicta sunt, per se sunt manifesta.

Quod autem de nive dictum est, quod per naturam inest ei candidam esse : hoc namque est, quia nix materialiter generatur de perspicuo indurato et concusso per minima : perspicuum autem concussum et induratum per indurationem efficitur ubique in superficie clara luminis receptivum : et hæc est natura et naturalis causa albedinis : per hanc ergo naturam inest nivi candidam esse.

CAPUT IX.

De differentia contradictionis ad alias oppositiones, et utrum veritas sit ab æterno.

His habitis, ostendenda est differentia contradictionis ad omnes alias oppositiones. Dicamus ergo quod in affirmatione et negatione semper, sive sit subjectum de quo sit affirmatio et negatio, sive non sit, una quidem pars contradictionis est vera et altera falsa : de quolibet enim sive existente sive non existente dicitur affirmatio vel negatio vera : et de nullo simul ambo vera vel falsa sunt contradictoria, ut in quarto *primæ philosophiæ* probatum est [1] : sive enim sit Socrates sive non sit, de Socrate unum contradictoriorum est verum, aliud autem falsum : palam enim est cum dicitur Socratem (dum ipse est Socrates) languere et Socratem non languere, quod alterum istorum falsum est et alterum verum. Similiter si Socrates ponitur non esse, et dicatur quod Socrates languet vel non languet, alterum est verum, et alterum est falsum, languere enim Socratem quando non est Socrates, falsum est, et non languere Socratem verum est. Propter hoc in his solum quæ sunt opposita contradictorie, proprium est, semper alterum corum verum et alterum falsum esse, et nunquam esse simul vera vel simul falsa.

-tion, just as blindness stands to sight: and such privation follows the habit in time and nature: for this privation does not leave the subject without an aptitude for the habit. But there is another privation which does not deprive the habit, but the essence according to being actually the habit: and this is that in which there is the inchoation of the habit according to potency, and from which the habit is drawn forth, and from this in every motion and change there is a process into the habit according to act by the mode by which the susceptible subject of the act is moved from potency to act: and this privation always precedes the habit in time and motion, and also in the nature of matter and potency: and we are not speaking of this privation here, because it does not totally deprive the habit. Nor even between such a privation and its habit is there the full opposition of things privatively opposed. But here we are speaking of the difference of modes of opposition, and therefore we are not speaking of privation and habit, except according to how they have the full opposition of this kind to each other. But the other things which were said, are manifest in themselves.

But as to what was said of snow, that it is present to it by nature to be white: this is indeed because snow is materially generated from the transparent hardened and broken into minimal parts: but the transparent broken and hardened by hardening is made receptive everywhere on the surface of the clarity of light: and this is the nature and natural cause of whiteness: therefore through this nature it is present to snow to be white.

CHAPTER IX.

On the difference of contradiction to other oppositions, and whether truth is from eternity.

Having obtained these things, the difference of contradiction to all other oppositions must be shown. Let us say, therefore, that in affirmation and negation always, whether the subject exists concerning which there is the affirmation and negation, or does not exist, one part of the contradiction is certainly true and the other false: for of whatever thing, whether existing or not existing, a true affirmation or negation is said: and of nothing are contradictories both true or false simultaneously, as was proven in the fourth book of *First Philosophy* [1]: for whether Socrates exists or does not exist, concerning Socrates one of the contradictories is true, and the other is false: for it is clear when it is said that Socrates (while Socrates himself exists) is sick and Socrates is not sick, that one of these is false and the other true. Similarly if Socrates is posited not to exist, and it is said that Socrates is sick or is not sick, one is true, and the other is false, for it is false that Socrates is sick when Socrates does not exist, and it is true that Socrates is not sick. Because of this, only in those things which are contradictorily opposed is it proper that always one of them is true and the other false, and that they are never simultaneously true or simultaneously false.

Sunt tamen quidam contra hoc fortiter objicientes, et sunt non antiqui sed moderni. Augustinus enim [2] per hoc ipsum quod hic dicitur, probat immortalem esse veritatem dicens, quod aut veritas semper erat aut non semper erat. Si semper erat, habetur propositum quod veritas immortalis fuit ab æterno. Si autem hæc est falsa, veritas semper erat, ejus contradictoria est vera, hæc scilicet, veritas non semper erat. Et si hæc est vera, aliquid erat verum ; verum autem non est nisi in veritate : ergo veritas erat quando non erat veritas, quod falsum est. Inconveniens etiam est idem, ex quo sequitur id quod scilicet non semper erat veritas : veritas igitur semper erat. Eodem modo probatur quod veritas semper erit : aut enim semper erit veritas, aut non semper erit. Si semper erit, habetur propositum. Si autem non semper erit, tunc hæc est falsa, veritas semper erit : ergo ejus contradictoria est vera, hæc scilicet, veritas non semper erit. Et si hæc est vera, aliquid est verum : non autem verum nisi veritate : ergo veritas est quæ non

erit veritas, quod est impossibile. Falsum ergo fuit quod prius dictum est, hoc scilicet quod non semper erit veritas : veritas ergo est æterna et immortalis est. Et hoc sequitur de veritate propositionis et de veritate enuntiabilis, quæ veritates non sunt veritas increata.

Si autem hoc concedatur, tunc objiciunt moderni probantes, quod plura quam unum erunt ab æterno sic. Simus enim ante mundum : tunc si hæc est vera mundum futurum esse, vel hæc propositio, mundus erit, et si est vera, sequitur quod ante mundum fuit aliquid verum. Si autem non est vera : tunc sequitur quod ejus contradictoria est vera, et sic iterum sequitur quod aliquid est verum, et quod veritas illius fuit ante mundum, aut non fuit nisi æternum, et æternitas ab æterno : ergo aliquid fuit verum cujus veritas fuit : sed tam enuntiabile quam propositio sunt creata et creatæ veritatis. Ergo aliquid creatum, fuit ab æterno.

Si autem hæc quidem concedatur, statim sequitur inconveniens quod dicit Plato, quod est creatum, est factum : omne autem factum incepit : ergo creatum incepit : quod autem incepit, non est æternum : ergo creatum non est æternum : enuntiabile sive propositio creatum, ergo non est æternum : et si propositio et enuntiabile non est æternum, tunc veritas sua non fuit ab æterno : et sic videtur sequi, quod veritas propositionis sit ab æterno, et non sit ab æterno.

There are nevertheless some who strongly object against this, and they are not ancients but moderns. For Augustine [2] through this very thing which is said here, proves that truth is immortal, saying that either truth always was or it was not always. If it always was, the proposition is obtained that immortal truth was from eternity. But if this is false, truth always was, its contradictory is true, namely this: truth was not always. And if this is true, something was true; but the true is not except in truth: therefore truth was when truth was not, which is false. Inconvenient also is the same, from which follows that which namely truth was not always: truth therefore always was. In the same way it is proven that truth will always be: for either truth will always be, or it will not always be. If it will always be, the proposition is obtained. But if it will not always be, then this is false, truth will always be: therefore its contradictory is true, namely this, truth will not always be. And if this is true, something is true: but not true except by truth: therefore truth is which not-

-erit veritas, quod est impossibile. Therefore it was false what was said before, namely this, that truth will not always be: therefore truth is eternal and is immortal. And this follows concerning the truth of the proposition and concerning the truth of the enunciable, which truths are not the uncreated truth.

But if this is granted, then the moderns object proving that more than one thing will be from eternity in this way. For let us suppose we are before the world: then if this is true, that the world is to be, or this proposition, the world will be, and if it is true, it follows that before the world something was true. But if it is not true: then it follows that its contradictory is true, and thus again it follows that something is true, and that the truth of that thing was before the world, or was not except eternal, and eternity from eternity: therefore something was true whose truth existed: but both the enunciable and the proposition are created and of created truth. Therefore something created existed from eternity.

But if this is indeed granted, immediately follows the inconvenience which Plato says, that what is created, is made: but everything made began: therefore the created began: what however began, is not eternal: therefore the created is not eternal: the enunciable or proposition is something created, therefore it is not eternal: and if the proposition and the enunciable is not eternal, then its truth was not from eternity: and thus it seems to follow, that the truth of the proposition is from eternity, and is not from eternity.

Ad hoc autem quidam alii dixerunt [1] quod veritas enuntiabilis et propositionis non erat ab æterno : et causam assignant dicentes quod veritas enuntiabilis et propositionis esse non potest nisi existente enuntiabili et propositione. Ante mundum autem ab æterno non fuit enuntiabile, nec propositio, et ideo quando dicit, si hæc non est vera, veritas erit, contradictoria erit vera. Dicunt quod hoc non sequitur : quia contradictoria est propositio vel enuntiabile : ante mundum autem nec fuit vera hæc neque alia, quia propositio nulla fuit. Similiter dicunt de futuro, quod veritas non erit quando non erit mundus si ponatur totus mundus ad nihilum redigi.

Et si verum est quod dicunt isti, tunc ista doctrina de contradictoriis non est generaliter vera, et sequitur quod oppositionis contradictionis est medium in quo nec unum, nec alterum contradictoriorum est verum vel falsum : et multa sequuntur inconvenientia contra hoc principium, quod de quolibet affirmatio vel negatio vera, et de nullo simul : et si hoc principium non est firmæ veritatis, nihil est certæ veritatis in demonstrationibus : quia, ut dicit Aristoteles, huic principio sicut primo innititur omnis demonstratio.

Ideo nos dicimus quod doctrina quæ hic traditur, certissimæ est veritatis, et quod argumentationes Augustini procedunt et sunt necessariæ. Sed dicendum quod res de quibus affirmatio et negatio dicuntur, sunt in esse et in ipsa rerum ordinabilitate. Et hoc manifestum est per Avicennam et Algazelem et Alfarabium dicentes (sicut est verum) quod quando prædicatum concipitur in ratione subjecti, talis propositio vera est sive re existente sive non existente : sive enim homo sit et animal, sive non sit homo et animal, hæc semper vera est, homo est animal, et animal est animatum sensibile et vivum et substantia : et ideo sequitur, homo est animal, et animal vivum, et vivum substantia. Sed si ulterius inferatur, et substantia est ens : ergo homo est ens. Dicunt quod non sequitur : quia ens vel entia esse accidit homini et animali, et non per se clauditur in intellectu eorum. Cum vero dicitur, homo est animal, sufficit ad veritatem propositionis substantialis ordinatio prædicati ad subjectum. Cum autem additur, animal est ens, et ens non est de ratione animalis vel hominis : non

est enim ibi ordo substantialis unius ad alterum : et ideo si animal est ens, vel homo est ens, oportet quod sit ens actu : et hoc est contra hypothesim, posuimus enim quod non sit homo vel animal.

But to this some others said [1] that the truth of the enunciable and of the proposition was not from eternity: and they assign the cause saying that the truth of the enunciable and of the proposition cannot be except when the enunciable and proposition exist. But before the world from eternity there was no enunciable, nor proposition, and therefore when it says, if this is not true, truth will be, the contradictory will be true. They say that this does not follow: because the contradictory is a proposition or enunciable: but before the world neither this was true nor the other, because there was no proposition. Similarly they say of the future, that truth will not be when the world will not be if it is posited that the whole world is reduced to nothing.

And if it is true what these people say, then this doctrine of contradictories is not generally true, and it follows that of the opposition of contradiction there is a middle in which neither one nor the other of the contradictories is true or false: and many inconveniences follow against this principle, that of anything the affirmation or negation is true, and of nothing simultaneously: and if this principle is not of firm truth, nothing is of certain truth in demonstrations: because, as Aristotle says, every demonstration relies on this principle as on the first.

Therefore we say that the doctrine which is handed down here is of the most certain truth, and that the arguments of Augustine proceed and are necessary. But it must be said that the things of which affirmation and negation are said, are in being and in the very ordinability of things. And this is manifest through Avicenna and Algazel and Alfarabi saying (as is true) that when the predicate is conceived in the account of the subject, such a proposition is true whether the thing exists or does not exist: for whether man exists and animal, or man and animal do not exist, this is always true, man is animal, and animal is animate sensible and living and substance: and therefore it follows, man is animal, and animal living, and living substance. But if it is further inferred, and substance is a being: therefore man is a being. They say that it does not follow: because to be a being or beings happens to man and animal, and is not enclosed per se in their intellect. But when it is said, man is animal, the substantial ordering of the predicate to the subject suffices for the truth of the proposition. When however it is added, animal is a being, and being is not of the account of animal or man : not

for there is there a substantial order of one thing to another: and therefore if animal is a being, or man is a being, it must be that it is an actual being: and this is against the hypothesis, for we posited that man or animal did not exist.

Hanc igitur doctrinam sequentes dicimus quod ordinabilitas rerum in prædicatum et subjectum, æqualiter est cum rebus existentibus et rebus non existentibus, dum non sint impossibiles ad essendum : et ideo ante mundum hæc propositio, mundus erit, fuit in ipsa rerum ordinabilitate. Et si quæratur, in quo erat illa rerum ordinabilitas quando non erant res? Dicendum quod fuit in ipsis rerum rationibus. Si autem de illis rationibus ulterius quæritur, Dicendum quod fuerunt in sapientia creantis et ordinantis. Si autem ulterius infertur, quod in sapientia primi intellectus fuerunt ut unum, et non ut ordinatum unum ad alterum, Dicendum quod res in sapientia intellectus primæ causæ dupliciter considerantur, scilicet ut res consideratæ in producendo, vel ut intellectus quo intelliguntur. Et primo quidem modo passibiles ad pluralitatem et ordinem non quidem in actu ordinantis, sed qui est in ordinabilibus : et hoc modo possibile est veritatis esse de ipsis, et enuntiabiles sunt ad veritatem, quamvis nunquam fuit enuntiatio, et sic enuntiabile ad rem reductum, et similiter propositio possunt esse ab æterno : et tamen unum solum est actu ab æterno. Et quod quæritur, utrum tale sit creatum, vel non? Dicendum quod creabile, et non creatum secundum rerum ordines : et hoc quamvis sit in creatore, tamen ratione differt a creatore, quia creator non creabilis est, nec creatus. Si autem hæc quæ sunt in intellectu creantis accipiantur ut intellectus, cum creator non intelligat nisi seipsum, tunc verum est quod res in creatore sunt per modum creatoris, et non sunt unum nec multa, nec ordinata nec inordinata, sed sunt idem quod ipse.

Et hæc est Avicennæ doctrina, quæ concordat cum Porphyrio, qui dicit quod nulla specie existente animal potest intelligi substantia animata sensibilis. Et constat quod non loquitur de intellectu intelligentis, quia sic nihil diceret : quia si nulla species est animalis, nihil est intelligens. Sed loquitur de intellectu intelligibilis : quia secundum naturæ ordinem nulla specie existente, adhuc quantum est in se, intellectualiter manet substantia animata sensibilis.

CAPUT X.

De contrariis propter bonum et malum, quæ specialem modum habent contrarietatis.

Following this teaching, therefore, we say that the orderability of things into predicate and subject, is equally with existing things and with non-existing things, provided they are not impossible to be: and therefore before the world this proposition, the world will be, was in the very orderability of things. And if it is asked, in what was that orderability of things when things did not exist? It must be said that it was in the very concepts of things. But if concerning those concepts it is further asked, it must be said that they were in the wisdom of the one creating and ordering. But if it is further inferred, that in the wisdom of the first intellect they were as one, and not as ordered one to another, it must be said that things in the wisdom of the intellect of the first cause are considered in two ways, namely as things considered in producing, or as the intellect by which they are understood. And in the first mode indeed passible to plurality and order not indeed in the act of the one ordering, but which is in things orderable: and in this way it is possible for there to be truth about them, and they are enuntiable to truth, although there never was an enunciation, and thus an enuntiable reduced to a thing, and similarly a proposition can be from eternity: and nevertheless only one thing is in act from eternity. And as to what is asked, whether such a thing is created or not? It must be said that it is creable, and not created according to the orders of things: and this although it is in the creator, nevertheless differs in concept from the creator, because the creator is not creable, nor created. But if these things which are in the intellect of the one creating are taken as the intellect, since the creator does not understand except himself, then it is true that things in the creator are through the mode of the creator, and they are not one nor many, neither ordered nor unordered, but they are the same as he himself.

And this is the teaching of Avicenna, which agrees with Porphyry, who says that with no species existing animal can be understood to be an animate sensible substance. And it is certain that he is not speaking of the intellect of the one understanding, because thus he would be saying nothing: because if there is no species of animal, there is nothing understanding. But he is speaking of the intellect of the intelligible: because according to the order of nature with no species existing, still as much as it is in itself, the animate sensible substance remains intellectually.

CHAPTER X.

On contraries on account of good and evil, which have a special mode of contrariety.

In moribus autem contrarium est quidem bono malum, ut accipiatur bonum in habitu virtutis et actu, et malum in habitu et actu vitii oppositi ad virtutem. Hoc autem palam est, quod scilicet bono malum contrarium est per inductionem singulorum : in corpore enim quamvis non sunt virtutes et vitia, tamen sunt ea quæ virtutibus et vitiis proportionantur, ut sensibilitati sensuum prudentia, robori corporis fortitudo, rectitudini corporis et membrorum ordinationi justitia, sanitati temperantia, eo quod sanitas consistit in temperantia complexionis : et sic sanitati ut bono opponitur languor ut malum, et in anima justitiæ ut bono opponitur injustitia ut malum, et fortitudini in utroque, corpore scilicet et anima, ut bono opponitur debilitas ut malum, debilitas enim cordis timor est vel timiditas. Similiter autem invenitur in omnibus aliis : semper enim opponitur bono malum.

Nequaquam autem bono opponitur bonum : cujus causa est, quia bonum est, ut dicit Aristoteles secundo Ethicorum, ex una sola et tota causa, ex causa actus et actu, et circumstantiis agentis et actus in fine congregata : et hoc est in omnibus quorum est aliqua virtus in actu, sive sint corporalia, sive animantia, hoc est, ad animam pertinentia, sive etiam sint intellectualia sive divina, ut dicit Dionysius : et ideo bonum est uniforme : uniforme

autem uniformi non opponitur nec opponi potest, quia uniforme uniformi convenit et non potest esse oppositum : et ideo dicit Aristoteles quod omnia consonantia vera et bona sunt. Falsum autem statim dissonat vero, et malum statim dissonat bono. Intelliguntur autem hæc omnia de bono et malo dictis simpliciter, et non de bono et malo dictis per accidens ut hic et nunc : quia sic nihil prohibet esse idem malum et bonum, sicut secari et uri quæ mala sunt, sunt tamen bona et nunc et hic. De talibus autem disputari habet in ethicis : sed hoc sufficit scire tantum, quia malum bono opponitur, bono autem bonum nunquam opponitur.

Malo autem aliquando opponitur bonum, et aliquando malum est contrario oppositum malo : egestas enim cum sit malum in civibus, quia impedit civiles actus, superabundantiæ quæ impedit actus felicitatis contemplativæ, et ideo etiam est malum, est contrarie opposita. Sed in paucis hoc tale est, quibus advertens de facili inspicere potest. In pluribus vero semper bonum malo contrarium est. Non enim invenitur nisi in ethicis et civilibus et œconomicis malum malo contrarium, et in illis quæ ad civilia, vel ethica habent analogiam sive proportionem : in aliis autem omnibus malum bono est contrarium.

But in morals, evil is indeed contrary to good, so that good is taken in the habit of virtue and act, and evil in the habit and act of vice opposed to virtue. For this is plain, namely that evil is contrary to good through the induction of singular things: for in the body although there are not virtues and vices, nevertheless there are those things which are proportioned to virtues and vices, as for the sensibility of the senses prudence, for the strength of the body fortitude, for the rectitude of the body and the ordering of the members justice, for health temperance, because health consists in the temperance of the complexion: and thus sickness as an evil is opposed to health as a good, and in the soul injustice as an evil is opposed to justice as a good, and to fortitude in both, namely body and soul, as a good is opposed weakness as an evil, for weakness of the heart is fear or timidity. Similarly moreover it is found in all others: for evil is always opposed to good.

But by no means is good opposed to good: the cause of which is, because good is, as Aristotle says in the second book of the Ethics, from one single and total cause, from the cause of the act and in act, and the circumstances of the agent and the act being gathered together in the end: and this is in all things of which there is some virtue in act, whether they be bodily, or animating, that is, pertaining to the soul, or even if they be intellectual or divine, as Dionysius says: and therefore good is uniform: uniform

-form: but the uniform is not opposed to the uniform nor can it be opposed, because the uniform agrees with the uniform and cannot be opposite: and therefore Aristotle says that all consonant things are true and good. But the false immediately dissonates with the true, and the evil immediately dissonates with the good. But all these things are understood concerning good and evil spoken of simply, and not concerning good and evil spoken of accidentally as here and now: because thus nothing prohibits the same thing from being evil and good, just as to be cut and to be burned which are evils, are nevertheless good both now and here. But concerning such things one has to dispute in ethics: but it suffices to know only this much, that evil is opposed to good, but good is never opposed to good.

But sometimes good is opposed to evil, and sometimes evil is opposed as contrary to evil: for want, since it is an evil in citizens, because it impedes civil acts, is contrarily opposed to superabundance which impedes the acts of contemplative happiness, and therefore is also an evil. But in few cases is it such, which one paying attention can easily see. But in more cases good is always contrary to evil. For it is not found except in ethical and civil and economic matters that evil is contrary to evil, and in those which have an analogy or proportion to civil or ethical matters: but in all other things evil is contrary to good.

Nunquam autem invenitur bono bonum contrarium, sed concors est : in eo enim quod bonum est uno modo et ex tota et sola causa, bonum est indivisibile et æqualitati proportionale : æquali autem non opponitur æquale sed inæquale. Propter quod in stichia bonorum Pythagoras posuit æquale, inæquale autem posuit in stichia malorum [1].

Amplius autem in contrariis considerando non est necessarium, quod si alterum contrariorum sit, quod reliquum sit ex necessitate. Si enim ponamus omnia animalia esse sana, tunc per talem hypothesim sanitas est, sed languor non est. Similiter si ponamus omne corpus terminatum esse album, tunc albedo quidem est, nigredo autem non est : quia si esset, oporteret quod esset in aliquo corpore terminato : et talia posuimus omnia esse alba. Hæc autem in complexis videre possumus. Si enim Socratem esse sanum contrarium est ad id quod est Socratem languere, eo quod idem modus oppositionis in contrariis incomplexis, et in contrariis complexis quando prædicantur de eodem : tunc sicut per complexionem dicimus Socratem sanum esse et Socratem languere, cum non sit possibile quod hæc simul insint eidem in eodem tempore, non est possibile quod cum alterum sit, quod simul cum hoc sit et reliquum. Cum enim sit et verum sit sanum esse Socratem, tunc pro eodem tempore est impossibile languere Socratem, aliter enim simul secundum actum inessent contraria.

Quamvis autem simul non insunt secundum actum, palam est autem, quod omnia contraria habent fieri circa idem aut specie, aut genere : circa enim idem numero nata sunt fieri contraria, ut circa subjectum : sed circa idem specie habent fieri contraria quædam sicut circa id quod est essentialiter constituens formas contrarias, sicut albedo et nigredo circa lucem, et sicut acutum et grave in sonis circa absonum quod est in utrisque, et sicut amarum et dulce circa humidum digestum quod est in saporibus et sic in multis aliis. Habent etiam fieri circa idem genere, quia contraria sunt in eodem genere proximo vel remoto : languor namque et sanitas circa corpus animalis natura habent fieri, et sic sunt circa idem genere, scilicet animalis. Albedo autem et nigredo habent fieri in corpore terminato quod non est idem specie, sed remoto genere : non enim omnia terminata corpora sunt eadem specie propinqua. Justitia vero et injustitia habent fieri in anima, quæ est eadem specie specialissima : quia non fiunt nisi circa hominis animam, quæ eadem est specie specialis-

sima. Et sic contraria fiunt circa idem numero, et circa idem specie, et circa idem genere.

But never is good found contrary to good, but it is concordant: for in the fact that good is in one way and from a total and single cause, good is indivisible and proportional to equality: but to the equal is not opposed the equal but the unequal. On account of which in the column of goods Pythagoras posited the equal, but the unequal he posited in the column of evils [1].

Moreover, in considering contraries it is not necessary, that if one of the contraries is, that the rest is of necessity. For if we posit all animals to be healthy, then through such an hypothesis health is, but sickness is not. Similarly if we posit every bounded body to be white, then whiteness indeed is, but blackness is not: because if it were, it would be necessary that it be in some bounded body: and we have posited all such things to be white. But we can see these things in complex terms. For if Socrates being healthy is contrary to what is Socrates being sick, because there is the same mode of opposition in incomplex contraries, and in complex contraries when they are predicated of the same thing: then just as by complexion we say Socrates is healthy and Socrates is sick, since it is not possible that these simultaneously are present in the same thing at the same time, it is not possible that when one is, that simultaneously with this the rest also is. For since it is and it is true that Socrates is healthy, then for the same time it is impossible for Socrates to be sick, for otherwise contraries would simultaneously be present in act.

But although they are not present simultaneously in act, it is however plain, that all contraries have to occur around the same thing either in species, or in genus: for they are naturally suited to occur around the same thing in number, as around a subject: but some contraries have to occur around the same thing in species just as around that which is essentially constituting contrary forms, just as whiteness and blackness around light, and just as sharp and flat in sounds around the dissonant which is in both, and just as bitter and sweet around the digested humor which is in flavors and thus in many others. They also have to occur around the same thing in genus, because contraries are in the same proximate or remote genus: for sickness and health have to occur around the body of an animal by nature, and thus are around the same thing in genus, namely animal. But whiteness and blackness have to occur in a bounded body which is not the same in species, but in a remote genus: for not all bounded bodies are the same in proximate species. But justice and injustice have to occur in the soul, which is the same in most specific species: because they only occur around the soul of a man, which is the same in most specific spe-

-cific species. And thus contraries occur around the same thing in number, and around the same thing in species, and around the same thing in genus.

Adhuc autem consideratio in his quæ propria sunt contrariis, necessarium est omnia contraria in proximo esse, vel in contrariis generibus proximis : vel oportet quod ipsa contraria secundum se sint contraria genera. Album enim et nigrum in eodem sunt genere proximo, color enim est genus horum contrariorum. Justitia autem et injustitia quæ sunt contraria, sunt in contrariis generibus proximis, quia justitia est in genere virtutis, injustitia autem in genere vitii : virtus autem et vitium sunt contraria genera, justitiæ enim genus est virtus, injustitiæ autem genus est nequitia sive vitium. Bonum vero et malum simpliciter et secundum se accepta sive universaliter non sunt in aliquo sicut in genere, sed ipsa secundum seipsa sunt contraria genera, et sic sunt genera aliorum existentia, ad quæ alia multa vel omnia sicut ad genera reducuntur.

CAPUT XI.

De dubitabilibus quæ sunt circa ea quæ dicta sunt de bono et malo.

Est autem apud multos antiquissima quæstio, quo genere oppositionis opponuntur bonum et malum. Et si considerentur verba Aristotelis in decimo tertio primæ philosophiæ, et verba Dionysii Areopagitæ in libro de *Divinis nominibus*, cap. 4, et verba Augustini in secundo libro de *Libero arbitrio*, et verba Petri Apostoli in capitulo de elementis contra Simonem magum, similiter autem verba Pythagoræ in stichia bonorum et malorum, planum est, quod omnes hi concorditer dicunt, ad quod etiam Aristoteles Socratem et Platonem inducit, quod malum privative et non contrarie opponitur bono, et quod malum est nihil secundum se, nec accidens, nec substantia, sed privatio. Privatio autem secundum se nihil est penitus. Cum enim sit in aliquo non est in eo sicut ens accidens, vel ens substantia, sed est in eo sicut habitus privatio : et hoc est idem sicut formitas et deformitas inesse dicitur in eo qui mutilatus sive denasatus est, quia Græce muti, Latine sonat nasus : constat autem quod denasatio non dicit inesse ens ut accidens, nec est ens ut substantia, quæ est forma vel materia vel compositum, sed solum ex defectu habitus debiti relinquit deformitatem et turpitudinem.

Omnes autem supra memorati auctores deducunt hanc quæstionem ad hoc, quod in nullo nihil est malum, et non est aliquid ens magis in eo cujus est privatio, quam in eo cujus non est privatio, sicut cæcitas non est magis aliquid ens in oculo quam in lapide : quamvis in oculo relinquat turpitudinem sive deformitatem, in lapide autem non relinquit turpitudinem aliquam.

Moreover the consideration in those things which are proper to contraries, it is necessary that all contraries be in the proximate genus, or in contrary proximate genera: or it is necessary that the contraries themselves according to themselves be contrary genera. For white and black are in the same proximate genus, for color is the genus of these contraries. But justice and injustice which are contraries, are in contrary proximate genera, because justice is in the genus of virtue, but injustice in the genus of vice: but virtue and vice are contrary genera, for the genus of justice is virtue, but the genus of injustice is wickedness or vice. But good and evil accepted simply and according to themselves or universally are not in anything as in a genus, but they themselves according to themselves are contrary genera, and thus are the existing genera of others, to which many or all other things are reduced as to genera.

CHAPTER XI.

On the dubitable things which are concerning those things which have been said concerning good and evil.

But there is among many a most ancient question, in what genus of opposition do good and evil oppose each other. And if the words of Aristotle in the thirteenth book of *First Philosophy* are considered, and the words of Dionysius the Areopagite in the book *On the Divine Names*, chapter 4, and the words of Augustine in the second book *On Free Will*, and the words of Peter the Apostle in the chapter on the elements against Simon Magus, and similarly the words of Pythagoras in the column of goods and evils, it is plain, that all these say concordantly, to which also Aristotle induces Socrates and Plato, that evil is opposed to good privatively and not contrarily, and that evil is nothing according to itself, neither accident, nor substance, but a privation. But a privation according to itself is completely nothing. For when it is in something it is not in it as a being accident, or a being substance, but it is in it as the privation of a habit: and this is the same as formlessness and deformity is said to be present in one who is mutilated or un-nosed, because what is *muti* in Greek sounds as nose in Latin: but it is certain that being un-nosed does not denote a being present as an accident, nor is it a being as a substance, which is form or matter or composite, but only from the defect of the due habit it leaves a deformity and ugliness.

But all the above mentioned authors deduce this question to this: that evil is nothing in anything, and it is not a being any more in that of which it is the privation, than in that of which it is not the privation, just as blindness is not any more a being in the eye than in a stone: although in the eye it leaves an ugliness or deformity, but in a stone it does not leave any ugliness.

Dionysius [1] igitur præ cæteris subtilius de malo agens, ostendit hoc in natura corporis et in natura Angeli, quam quidam vocant intelligentiam, quamvis Angelus secundum quod lex Moysi et Christi de Angelis loquitur, non sunt intelligentiæ [2], secundum quod Philosophi locuti sunt de intelligentiis. Hæc autem in libro *Causarum* habent determinari. Est autem via disputationis Dionysii in hoc quod sumamus bonum naturæ in corpore, et bonum animæ, et bonum Angeli, et videbimus quod malum non dicit vel ponit aliquam formam vel aliquod ens, quod sit substantia vel accidens contrarium bono, sive illi formæ quam dicit bonum, sed in omnibus malum nihil ponit penitus nisi boni ademptionem, sive corruptionem, et detractionem sive diminutionem, sive aliquo quocumque modo potest nominari privatio.

Ut hæc perfectius intelligantur, dica-

mus quod entium quædam sunt essentiæ sive existentiæ, et quædam sunt entia quæ in illis essentiis existunt. Essentiæ quidem sunt formæ simplices, ut genera, et species, et differentiæ. intelligentiæ, et anima, et hujusmodi, quibus secundum se non accidit corruptio, sed si corrumpuntur, tunc corrumpuntur per accidens secundum quod sunt in esse eorum quæ sunt per harmoniam et compositionem cum his in quibus sunt, quibus datur esse secundum hoc quod sunt. His autem quæ sunt composita in quibus essentiæ sunt, accidit corruptio per dissolutionem harmoniæ et compositionis, quæ sunt in his quæ sunt. Et ideo dicit Dionysius ubi de malo loquitur, quod non corrumpitur quid existentium, sed corruptio est ablatio vel dissolutio modi et harmoniæ quæ sunt circa ea quæ ab essentiis esse non habent.

Est ergo bonum formale corporis quo corpus dicitur bonum, habitudo perfecta ad esse et ad opus corporis modis et harmoniis quæ sunt ad hoc quod corpus perfectum sit in esse et ad corpus. Corruptio autem istius non est nisi harmoniæ et commensurationis disjunctio vel corruptio : et hoc non dicit nisi privationem et corruptionem puram, et non essentiam aliquam ad quam fiat harmonia alicujus, sicut ad essentiam dantem esse alicui. Malum igitur corporis non est essentia aliqua, sed corruptio modi, et commensurationis, et harmoniæ.

Similiter est in anima bonum, et perfectum animæ est per essentiam, quæ est ratio, vel rationabilitas, et competentius dicitur ratio. Bonum igitur animæ in animam in omnibus viribus suis secundum esse et agere commensuratam esse rationi ut ordinantis omnia ratione. Malum igitur animæ non est nisi istius modi, et commensurationis, et harmoniæ corruptio, et non contraria aliqua forma ad quam anima commensurata et proportionata mala sit et faciat malum. Malum igitur animæ sicut corporis non est nisi privatio, et non est aliquid quod sit substantia vel accidens.

Therefore Dionysius [1] treating of evil more subtly than the others, shows this in the nature of a body and in the nature of an Angel, which some call an intelligence, although an Angel according to how the law of Moses and of Christ speaks of Angels, are not intelligences [2], according to how the Philosophers spoke of intelligences. But these things have to be determined in the book of *Causes*. But the way of disputation of Dionysius is in this that we take the good of nature in a body, and the good of a soul, and the good of an Angel, and we shall see that evil does not denote or posit any form or any being, which is a substance or accident contrary to the good, or to that form which is called good, but in all things evil posits completely nothing except the taking away of good, or corruption, and withdrawal or diminution, or by whatever other way privation can be named.

That these things may be more perfectly understood, let us say-

-say that of beings some are essences or existences, and some are beings which exist in those essences. Essences indeed are simple forms, as genera, and species, and differences, intelligences, and soul, and things of this kind, to which according to themselves corruption does not happen, but if they are corrupted, then they are corrupted accidentally according to what they are in the being of those things which are through harmony and composition with these in which they are, to which being is given according to what they are. But to these which are composite in which the essences are, corruption happens through the dissolution of the harmony and composition, which are in these things which are. And therefore Dionysius says where he speaks of evil, that no existing thing is corrupted, but corruption is the taking away or dissolution of the mode and harmony which are around those things which from essences do not have being.

Therefore the formal good of the body by which the body is called good, is the perfect habitude to being and to the work of the body in the modes and harmonies which are to this that the body is perfect in being and for the body. But the corruption of this is nothing other than the disjunction or corruption of the harmony and commensuration: and this denotes nothing other than pure privation and corruption, and not some essence to which the harmony of something might be made, just as to an essence giving being to something. Therefore the evil of the body is not some essence, but the corruption of mode, and commensuration, and harmony.

Similarly there is a good in the soul, and the perfect of the soul is through the essence, which is reason, or rationality, and more aptly it is called reason. Therefore the good of the soul in the soul in all its powers according to being and acting is to be commensurated to reason as ordering all things by reason. Therefore the evil of the soul is nothing but the corruption of this mode, and commensuration, and harmony, and not some contrary form to which the soul commensurated and proportioned might be evil and do evil. Therefore the evil of the soul just as of the body is nothing but privation, and is not something which is a substance or accident.

Eodem modo accipitur bonum Angeli. Bonum Angeli est commensuratum esse sub essentia quæ est intellectus agens purus et mundus : et bonum Angeli est, quod sit in esse et viribus et actu et opere commensurationes habens ad talem intelligentiam vel intellectum. Malum autem Angeli non est aliqua forma illi commensurationi contraria, ad quam et sub qua constituatur Angelus malus, ut malus sit in esse et opere, sed malum Angeli est violatio hujusmodi commensurationis et harmoniæ, quod non est nisi corruptio et privatio.

Malum igitur in omnibus opponitur bono sicut privatio, et non sicut contrarium. Et in hoc omnes Auctores condemnant Manichæum, qui dixit essentiam esse mali sicut essentia est boni, et dixit mala per naturam quamdam essentialem esse mala, ad quam naturam et formam harmoniantur et constituuntur ut non possint esse non mala. Hic igitur est error, et veritas est quod malum in omnibus non est nisi privatio modi et commensurationis ad bonum. Idcirco autem quia corruptis modis et harmoniis et commensurationibus in his quæ sunt ad aliquid commensurata et harmoniata, adhuc remanent ipsa quæ mensurata erant possibilia ad commensurationem : et hoc est quoddam ad bonum ordinatum. Ad bonum autem esse ordinabile secundum naturam est, quod bonum (sicut Aristoteles dicit) est quod est ad bonum.

Ideo dixit Dionysius quod malum est bonum diminutum et declinatum et particulatum et imperfectum. Aristoteles dicit Pythagoram inducens, quod bonum est locus mali, et malum locus boni, sicut oculus est locus cæcitatis et visus. Et sicut dicit Dionysius, hoc modo malum corporis est contra naturam esse. Malum autem animæ est contra rationem esse, et malum Angeli est contra intellectum esse, sicut malum claudæ tibiæ contra gressum et esse tibiæ esse. Similiter au-

tem est in febribus et aliis malis corporis quæ secundum quod mala sunt, nihil sunt nisi corruptio commensurationis complexionis in humoribus, vel compositionis in partibus et membris. Febris enim ex hoc quod est secundum naturam putridus humor vaporans per corpus, non est malum corporis, quia in bono et sano accidit humori quod vaporaliter per corpus diffundatur : sed ex hoc quod vaporatio corrumpit et impedit modos et harmoniam et commensurationem veræ secundum naturam sanitatis corporis, ex hoc habet mali rationem.

In the same way the good of an Angel is taken. The good of an Angel is to be commensurated under the essence which is a pure and clean active intellect: and the good of an Angel is, that it be in being and powers and act and work having commensurations to such an intelligence or intellect. But the evil of an Angel is not some form contrary to that commensuration, to which and under which the evil Angel is constituted, so that it might be evil in being and in work, but the evil of an Angel is the violation of a commensuration and harmony of this kind, which is nothing but corruption and privation.

Therefore evil in all things is opposed to good as a privation, and not as a contrary. And in this all Authors condemn the Manichaean, who said that there is an essence of evil just as there is an essence of good, and he said that evils through a certain essential nature are evils, to which nature and form they are harmonized and constituted so that they cannot not be evils. Therefore this is an error, and the truth is that evil in all things is nothing but the privation of mode and commensuration to the good. Therefore, however, because with the modes and harmonies and commensurations corrupted in these things which are commensurated and harmonized to something, there still remain those very things which were measured as possible for commensuration: and this is a certain thing ordered to the good. But to be orderable to good is according to nature, because good (as Aristotle says) is that which is for the good.

Therefore Dionysius said that evil is a diminished and declined and particulated and imperfect good. Aristotle says introducing Pythagoras, that good is the place of evil, and evil the place of good, just as the eye is the place of blindness and sight. And just as Dionysius says, in this way the evil of the body is to be against nature. But the evil of the soul is to be against reason, and the evil of an Angel is to be against intellect, just as the evil of a lame leg is against stepping and the being-a-leg of the leg. Similarly however-

-tem est in febribus et aliis malis corporis quæ secundum quod mala sunt, nihil sunt nisi corruptio commensurationis complexionis in humoribus, vel compositionis in partibus et membris. For fever from this that it is according to nature a putrid humor evaporating through the body, is not an evil of the body, because in the good and healthy it happens to the humor that it is diffused vaporously through the body: but from this that the evaporation corrupts and impedes the modes and harmony and commensuration of true health of the body according to nature, from this it has the account of evil.

Patet igitur quod verum est quod dicit Dionysius, quod malum nunquam est et quod non habet causam formalem vel efficientem, sed incausale, et præter intentionem, et præter voluntatem, et infœcundum, et pigrum, et quod non est nisi privatio incidens ex defectu boni. Hæc igitur dicta de malo extracta sunt a nobis ex verbis Antiquorum. Et patet quod innegabiliter verum est quod dicunt. Qualiter autem bonum convertatur cum ente, hic non potest determinari secundum hujus scientiæ principia, nec nos hic loquimur de tali bono, sed potius de bono quod est uniuscujusque rei bonum serviens ad harmoniam commensurationis, quam habet secundum propriam essentiam perficientem ipsum in esse et actu qui est secundum essentiæ suæ rationem.

Quod etiam quidam dicunt quod bonitas dicat formam additam super id quod est, et ideo ista sit vera prædicatio, bonitas est bona, falsum est, et non intelligitur quod dicunt. Bonum enim super ens sive id quod est, non addit nisi relationem ad finem et perfectum ad actum, sicut dictum est : sed hoc in libro de *Causis* habet determinari.

Qualiter vero in hac doctrina prædicamentorum bonum et malum dicantur esse contraria, non autem opposita secundum privationem et habitum, nunc dicendum est. Præmittendum est autem quod malum ut malum ad aliquid est : malum enim ut malum, sicut dictum est, non est nisi privatio, sicut probatum est per Auctores. Id autem quod est malum, est actus corruptus circa modos et harmonias et commensurationes ad formam boni : et in illo in quo est actus, relinquit consimiles habitus, et illi sunt mali habitus : et hoc modo est contrarietas inter bonum et malum, sicut inter contraria, non quod contrarius actus et habitus habeant aliquam formam ex qua mali sunt, sed quia in quantum actus vel habitus sunt, relinquunt aliquid ejus in corpore vel in anima, hoc est, qualitatem aliquam quæ quia boni forma privata est, et cum qualitas sit, dicitur esse contraria : sicut claudicatio gressus est contrarius incessui recto, quia gressus est quod est ens actu et caret perfectione rectitudinis quod est privatio. Sic autem omnia contraria reduci habent ad privationem et habitum, ut dicit Aristoteles [1] : quia albedo habitus est et forma est cum diffusione lucis in superficie, nigredo autem privatio est, quia est privatio diffusionis lucis in superficie umbrosa. Hoc ergo modo dictum est, quod album et nigrum sunt contraria, et similiter bonum et malum in actibus et habitibus. Et hoc modo doctrina de malo hic posita intelligitur.

Quod autem dictum est, quod bonum et malum sunt genera contraria, constat quod non intelligitur de generalissimis, quia sic essent plura genera quam decem : sed intelligitur, quod sunt genera aliorum quæ sunt bona et in moribus, eo quod omnia quæ sunt in moribus, ad hæc tanquam ad genera reducuntur.

It is clear therefore that it is true what Dionysius says, that evil never is and that it does not have a formal or efficient cause, but is incausal, and beyond intention, and beyond will, and unfruitful, and sluggish, and that it is nothing but a privation incident from the defect of good. These things therefore said concerning evil have been extracted by us from the words of the Ancients. And it is clear that what they say is undeniably true. However, how the good is converted with being cannot be determined here according to the principles of this science, nor do we speak here of such a good, but rather of the good which is the good of each thing serving the harmony of commensuration, which it has according to its own essence perfecting it in being and in act which is according to the account of its essence.

What also some say, that goodness denotes a form added upon that which is, and therefore this is a true predication, 'goodness is good', is false, and what they say is not understood. For good upon being or that which is, does not add except a relation to the end and the perfect towards act, as has been said: but this has to be determined in the book *On Causes*.

How truly in this doctrine of the predicaments good and evil are said to be contraries, but not opposed according to privation and habit, must now be said. It must be premised however that evil as evil is toward something: for evil as evil, as has been said, is nothing but privation, as has been proven by the Authors. But that which is evil, is a corrupted act concerning the modes and harmonies and commensurations toward the form of good: and in that in which the act is, it leaves similar habits, and those are evil habits: and in this way there is contrariety between good and evil, as between contraries, not that the contrary act and habit have some form from which they are evil, but because insofar as they are acts or habits, they leave something of it in the body or in the soul, that is, some quality which because it is deprived of the form of good, and since it is a quality, is said to be contrary: just as the lameness of a step is contrary to a straight gait, because the step is that which is a being in act and lacks the perfection of rectitude which is privation. In this way however all contraries have to be reduced to privation and habit, as Aristotle says [1]: because whiteness is a habit and a form with the diffusion of light on the surface, but blackness is a privation, because it is the privation of the diffusion of light on a shadowy surface. In this way therefore it has been said, that white and black are contraries, and similarly good and evil in acts and habits. And in this way the doctrine concerning evil placed here is understood.

As to what was said, that good and evil are contrary genera, it is clear that it is not understood of the most general, because thus there would be more genera than ten: but it is understood that they are genera of others which are good and in morals, because all things which are in morals are reduced to these as to genera.

Et quod bonum in moribus contrarium est duobus malis, non est ex hoc quod medium est, sed est ex hoc quod extremum est in ratione boni perfecti, ut dicit Aristoteles, sic utrique opponitur extremitati ut extremum et maxime distans ab utraque. Hoc autem quantum spectat ad istam intentionem interponendum erat :

de bono et malo : reliqua enim in prima philosophia sunt determinanda.

CAPUT XII — *De multiplicitate ejus quod est prius.*

Postquam determinatum est de oppositis quæ sunt diversorum generum, dicendum de multiplicitate ejus quod est prius. Quia penes ejus rationem fit ordo eorum quæ sunt in uno genere secundum coordinationem prædicabilium secundum quod species est sub genere et individuum sub specie. Ex hoc enim priori et posteriori proprium accipiunt modum prædicandi, qui maxime in hoc libro est attendendus. Determinatis modis prioris sunt per oppositum etiam modi posterioris determinati : quia non dicitur prius nisi respectu sui posterioris.

Dicimus igitur quod prius dicitur unum altero quadrupliciter : et in hoc quod dicitur quadrupliciter, non divisionem intelligimus in species, sed est divisio multipliciter dicta : et prius tempore magis habet de ratione prioris, et secundo et tertio et quarto habent plus secundum ordinem quo enumerabitur a nobis. Prius enim de modis prioris non dicitur æqualiter secundum unam rationem, sicut innuit Aristoteles in quinto primæ philosophiæ [1], ubi distinguit prius inter multipliciter dicta.

Primus autem modus qui et principalis et primus est, qui secundum tempus, secundum quem prius alterum altero dicitur quod est antiquius et senius eo secundum tempus. In ordine enim partium temporis prius est præteritum quod ad præsens continuatur, futuro quod adhuc expectatur ut fiat : et ideo secundum ordinem temporis prius est quod in præterito longius distat a nunc, sicut dicit Aristoteles, quod bella Mediæ fuerunt ante bella Troiæ, et bella Troiæ fuerunt ante bella Romana et priora eis : et quia hic prius est sumptum secundum rationem numerantis quod extrinsecus adjacet ut mensurans, et quidquid prius est secundum numerum mensurantis est simpliciter prius, ideo iste modus est principalis, ad cujus comparationem et proportionem sive analogiam omnes alii modi priores dicuntur. Hoc ergo modo prius dicitur, cujus tempus est in præteritum. Amplius et prius quod est senius, et hoc modo æternitas est ante tempus duratione, et ea quæ sunt æterna, sunt ante temporalia.

And that good in morals is contrary to two evils, is not from this that it is a middle, but is from this that it is an extreme in the account of perfect good, as Aristotle says, thus it is opposed to each extremity as an extreme and maximally distant from both. This however, as much as it pertains to this intention, had to be interposed :

concerning good and evil: for the remaining things are to be determined in first philosophy.

CHAPTER XII — *On the multiplicity of that which is prior.*

After it has been determined concerning the opposites which are of diverse genera, we must speak concerning the multiplicity of that which is prior. Because by its account there is the order of those things which are in one genus according to the coordination of predicables according to which the species is under the genus and the individual under the species. For from this prior and posterior they receive their proper mode of predicating, which is most to be attended to in this book. The modes of the prior having been determined, the modes of the posterior are also determined through the opposite: because the prior is not said except with respect to its posterior.

We say therefore that one thing is said to be prior to another in four ways: and in this which is said in four ways, we do not understand a division into species, but it is a division said in many ways: and the prior in time has more of the account of the prior, and the second and third and fourth have more according to the order in which they will be enumerated by us. For the prior is not said equally of the modes of the prior according to one account, as Aristotle hints in the fifth book of *First Philosophy* [1], where he distinguishes the prior among things said in many ways.

But the first mode, which is both principal and first, is that which is according to time, according to which one thing is said to be prior to another which is more ancient and older than it according to time. For in the order of the parts of time, the prior is the past which is continued to the present, with respect to the future which is still expected to happen: and therefore according to the order of time, the prior is that which in the past is further distant from the now, as Aristotle says, that the wars of Media were before the wars of Troy, and the wars of Troy were before the Roman wars and prior to them: and because here the prior is taken according to the account of the numbering thing which is extrinsically adjacent as a measure, and whatever is prior according to the number of the measuring thing is simply prior, therefore this mode is principal, to whose comparison and proportion or analogy all other prior modes are said. In this way therefore it is said to be prior, whose time is in the past. Further and prior is that which is older, and in this way eternity is before time by duration, and those things which are eternal, are before temporal things.

Sunt autem secundum sui naturam æternæ rerum essentiæ, ut genera quæ sunt prima rerum principia : istis enim non potest assignari tempus ut numerus mensurans : quia in tempore esse, ut dicit Philosophus in quarto Physicorum [2], est esse in quadam parte temporis mensurandi. Sic igitur antiquiora sunt genera omnibus.

Secundo autem dicitur prius quod non convertitur secundum subsistendi consequentiam . Subsistendi autem consequentiam dico, ut si unum ponatur actu subsistere secundum esse, quod alterum propter hoc necesse sit ponere subsistere secundum esse, sicut dicimus quod unum est prius duobus : duobus enim existentibus mox unum consequens est esse et subsistere : uno vero existente non est necessarium duo esse vel subsistere. Et hic modus est inter inferius et superius in coordinatione prædicabilium : quia inferius est, sicut duo, quorum alterum est id quod directe est super ipsum, et alterum differentia constitutiva : unde posito inferiori in esse ponitur suum superius : sed non convertitur, quod posito superiori in esse ponatur inferius esse necessario : quia superius concipitur in inferiori, sicut unum in duobus : sed inferius non concipitur in superiori nisi ut potentia, sicut duo in uno sunt potentia, et ideo non convertitur consequentia ab uno existente, ut necessario propter hoc sit reliquum : et inter illa prius esse videtur non id a quo convertitur consequentia, et :

hoc est unum : ab illo enim ad duo consequentia non convertitur.

Tertio autem modo dicitur prius secundum quemdam ordinem . Dico autem quemdam ordinem : quia in omni priori est ordo, et ideo ordo simpliciter non facit specialem modum prioris, sed ordo quidam, non in quantum est ordo, sed in quantum est quidam ordo. Sic ergo tertio modo dicitur prius quod est quoad nos prius, ut in disciplinis demonstrantibus et orationibus rhetoricis : in demonstrantibus enim disciplinis est prius et posterius per quemdam doctrinæ ordinem : elementa enim in geometria priora sunt his quæ per ordinem describuntur : elementa enim sunt ut punctum, linea, circulus, angulus, et hujusmodi, quæ præcedunt ordine elementali descriptiones et compositiones figurarum angularium , figuræ enim per ordinem describuntur, secundum quod ex una probatur altera, sicut triangulus, aut quadratum, vel quadrangulum, vel quadratum, aut circulus ; quia centrum dicti circuli per triangulum invenitur. Sic igitur in grammatica elementa litterarum priora sunt syllabis, et syllabæ dictionibus, et dictiones orationibus : et in oratione rhetorica hoc modo proœmium prius est narratione, et narratio prior est partitione.

But according to their own nature the essences of things are eternal, as genera which are the first principles of things: for to these a time cannot be assigned as a measuring number: because to be in time, as the Philosopher says in the fourth book of the *Physics* [2], is to be in a certain part of measuring time. Thus therefore the genera are more ancient than all things.

In the second place however that is said to be prior which is not converted according to the consequence of subsisting. And I call the consequence of subsisting, as if one is posited to subsist in act according to being, that because of this it is necessary to posit that the other subsists according to being, as we say that one is prior to two: for if two exist, immediately it follows that one is and subsists: but if one exists, it is not necessary that two exist or subsist. And this mode is between the lower and the higher in the coordination of predicables: because the lower is as two, of which one is that which is directly above it, and the other is the constitutive difference: whence if the lower is posited in being, its higher is posited: but it is not converted, that if the higher is posited in being, the lower is necessarily posited to be: because the higher is conceived in the lower, as one in two: but the lower is not conceived in the higher except as potency, as two are in one in potency, and therefore the consequence is not converted from one existing, so that necessarily because of this the remaining thing exists: and among those things the prior seems to be not that from which the consequence is converted, and:

this is one: for from that the consequence to two is not converted.

In the third mode however that is said to be prior which is according to a certain order. But I say a certain order: because in every prior there is an order, and therefore order simply does not make a special mode of the prior, but a certain order, not in as much as it is an order, but in as much as it is a certain order. Thus therefore in the third mode that is said to be prior which is prior with respect to us, as in demonstrative disciplines and rhetorical speeches: for in demonstrative disciplines there is prior and posterior through a certain order of doctrine: for elements in geometry are prior to those which are described in order: for elements are such as a point, a line, a circle, an angle, and such things, which precede in elemental order the descriptions and compositions of angular figures, for figures are described in order, according as from one another is proven, as a triangle, or a square, or a quadrangle, or a square, or a circle; because the center of the said circle is found through a triangle. Thus therefore in grammar the elements of letters are prior to syllables, and syllables to words, and words to sentences: and in a rhetorical speech in this mode the proemium is prior to the narration, and the narration prior to the partition.

Hic autem modus prioritatis est inter principia generum, et ipsa rerum genera quæ ex illis principiis constituuntur. Principia autem sunt potentia et actus : ens enim est quodlibet genus potentiæ, et efficitur actu illud per actum rem generis illius complentem et constituentem.

Amplius supra ea quæ dicta sunt in quibus dicitur prius secundum ipsam naturam rei, et esse videtur prius et dici secundum aliquid additum sibi quod est ad bene esse, sic quod honorabilius et melius naturaliter secundum illam additam ad esse naturam prius esse videtur : consueverunt enim plurimi, quorum judicium non potest esse in toto falsum, et ideo pro auctoritate sumendum, consueverunt, inquam, nobiliores et ex se magis ex causa dilectos priores dicere et vocare. Et attende si non ex causa diliguntur plus, non propter hoc dicerentur priores : et ideo causa facit priores et non dilectio, quia dilectio secundum se non discernit inter priores et posteriores.

Utrum autem duo æqualiter diligi possunt aut non, fatuum est quærere : quia ubi dilectio una et una ratio diligendi et æqualis sit in duobus, pro certo æqualiter diliguntur. Si autem dilectio est simpliciter, non discernunt unum a pluribus, nec plura ab uno. Hic autem modus est in prædicamentis secundum ordinem substantiæ ante aliqua, quia honorabilior et melior est omnibus. Isti ergo sunt quatuor modi prioris, qui ab Antiquis dicti sunt, et sunt magis famosi et vulgati.

Dicit autem Boetius, quod his modis quintum addidit Aristoteles qui ante tempus suum non fuit. Dicit igitur Aristoteles quod videtur præter eos quatuor modos prioris qui dicti sunt alter quintus esse modus prioris : inter illa enim quæ convertuntur secundum essentiæ consequentiam id quod alteri causa est quomodolibet secundum quodcumque genus causæ, idem digne prius dicitur illo. Causa enim actu causans et effectus convertuntur secundum essentiæ consequentiam : et in talibus posita causa ponitur effectus, vel posito effectu ponitur causa. In talibus igitur dignum est ut causa natura sive naturali ordine prior sit quam effectus. Quod autem quædam hujusmodi sint, palam est : hominem namque esse convertitur secundum essentiæ consequentiam, ad hoc quod est veram orationem esse de hoc quod est hominem esse : nam si homo est secundum rem, vera est oratio qua dicitur, quod homo est. Oratio autem nequaquam est causa ut homo sit secundum rem, sed potius res sic se habens causa est ut oratio sit : dum enim res est aut non est, vera vel falsa dicitur oratio quæ rem significat, sicut in ante habitis dictum est, et sic prius dicitur causa prius. Necesse est igitur ut nisi secundum quinque modos spe-

But this mode of priority is between the principles of genera, and the very genera of things which are constituted from those principles. But the principles are potency and act: for being is any genus of potency, and that is made in act through the act completing and constituting the thing of that genus.

Further above those things which have been said in which the prior is said according to the very nature of the thing, it seems both to be prior and to be said according to something added to it which is for well-being, so that what is more honorable and better naturally according to that nature added to being seems to be prior: for many, whose judgment cannot be entirely false and therefore must be taken for authority, have been accustomed, I say, to call and name prior those who are more noble and from themselves more loved from a cause. And note if they are not loved more from a cause, they would not because of this be called prior: and therefore the cause makes them prior and not love, because love according to itself does not discern between prior and posterior.

But whether two things can be loved equally or not, it is foolish to ask: because where there is one love and one account of loving and it is equal in two, for certain they are loved equally. But if the love is simple, they do not discern one from many, nor many from one. But this mode is in the predicaments according to the order of substance before some things, because it is more honorable and better than all. These therefore are the four modes of the prior, which were said by the Ancients, and are more famous and common.

But Boethius says, that to these modes Aristotle added a fifth which did not exist before his time. Therefore Aristotle says that besides those four modes of the prior which have been said, another fifth seems to be a mode of the prior: for among those things which are converted according to the consequence of essence, that which is a cause for another in any way according to any genus of cause, the same is worthily said to be prior to that. For the cause actually causing and the effect are converted according to the consequence of essence: and in such things if the cause is posited the effect is posited, or if the effect is posited the cause is posited. In such things therefore it is worthy that the cause by nature or by natural order be prior than the effect. But that some things are of this kind, is clear: for that a man is, is converted according to the consequence of essence, to this that there is a true speech concerning this which is that a man is: for if a man is according to the thing, true is the speech by which it is said, that a man is. But the speech is by no means the cause that the man is according to the thing, but rather the thing thus having itself is the cause that the speech is: for while the thing is or is not, true or false is said the speech which signifies the thing, as was said in the things held before, and thus the cause is said prior. It is necessary therefore that unless according to five modes spe-

ciales prius alterum altero dicatur. Hic autem modus prioris est inter substantiam et accidens : quia accidens est a substantia causatum. Sunt autem et alii modi priorum sicut prius in motu, prius in spatio, vel prius in loco, et in prima philosophia distinguitur unumquodque quoties dicitur, et non hic habent determinari, quia ad prædicamentorum genera non referuntur.

Hi autem omnes referuntur, sicut dictum est : essentiæ enim entium quæ constituunt genera, referuntur ad prædicamenta : et sic aut referuntur ad suas essentias, aut ad ea quæ sunt inter genera ad invicem unum genus ad alterum. Et primo quidem est modus primus. Secundo autem modo secundus est modus. Et tertius, quia ad intrinseca potest referri genus duplex, scilicet ad intrinseca secundum esse, et sic modus tertius, vel ad intrinseca secundum ambitum continentiæ, et sic secundus est etiam ante tertium : qui in coordinatione prædicabilium est magis intentus. Secundum ordinem autem substantiæ ad alia genera duplex est ordo, scilicet secundum quod substantia comparatur aliis secundum dignitatem quam habet ad alia, et sic est quartus modus. Et secundum quod est causa aliorum, et sic est quintus modus. Nec sunt plures modi, quia non possunt esse plures modi comparationis generum secundum quod genera sunt principia prima, sub quibus fiunt prædicabilium coordinationes. Alii autem aliter dicunt, sed non est curandum.

CAPUT XIII.

De modis ejus quod dicitur simul secundum quod spectat ad doctrinam prædicamentorum.

Eodem autem modo determinandum est de hoc quod aliqua dicantur simul secundum quod pertinent ad doctrinam prædicamentorum. Dicamus igitur, quod simul esse non est oppositum ad prius, sed disparatum est ad ipsum : prius enim opponitur ad id quod est posterius, et e converso. Et neutrum illorum est simul in prædicabilium coordinatione, aut non est simul secundum locum, nec simul secundum sensuum voluntatem, nec secundum dignitatem, ideo de talibus prætereundum est : sed est simul secundum coævitatem, et non secundum naturam, et ideo hæc duo sola tractanda sunt.

-cial modes one is said prior to another. But this mode of the prior is between substance and accident: because the accident is caused by the substance. There are however also other modes of the priors as prior in motion, prior in space, or prior in place, and in first philosophy each one is distinguished as often as it is said, and they do not have to be determined here, because they are not referred to the genera of the predicaments.

But all these are referred, as has been said: for the essences of beings which constitute the genera, are referred to the predicaments: and thus they are either referred to their own essences, or to those things which are between the genera to each other, one genus to another. And first indeed is the first mode. In the second place however is the second mode. And the third, because a double genus can be referred to intrinsics, namely to intrinsics according to being, and thus the third mode, or to intrinsics according to the ambit of containment, and thus the second is even before the third: which is more intended in the coordination of predicables. According to the order of substance however toward other genera there is a double order, namely according as substance is compared to others according to the dignity which it has toward others, and thus is the fourth mode. And according as it is the cause of others, and thus is the fifth mode. Nor are there more modes, because there cannot be more modes of comparison of genera according as genera are first principles, under which the coordinations of predicables are made. Others however say otherwise, but it is not to be cared for.

CHAPTER XIII.

On the modes of that which is said simultaneous according as it pertains to the doctrine of the predicaments.

In the same way however it must be determined concerning this, that some things are said to be simultaneous according as they pertain to the doctrine of the predicaments. Let us say therefore, that to be simultaneous is not opposed to the prior, but is disparate from it: for the prior is opposed to that which is posterior, and vice versa. And neither of them is simultaneous in the coordination of predicables, or it is not simultaneous according to place, nor simultaneous according to the will of the senses, nor according to dignity, therefore we must pass over such things: but it is simultaneous according to coevity, and not according to nature, and therefore only these two are to be treated.

Dicimus igitur quod simul dicuntur simpliciter et proprie, quæ sunt coæva, sive quorum generatio sive generatum esse est in eodem tempore in quo simul sint genita et manentia, sicut dicimus coæquæva eodem tempore vel periodo mensurata esse simul. Si enim uno tempore generata essent, et statim alterum periret, non dicerentur simul esse tempore, quia generatio est ad esse perfectum ordinata. Nec dicuntur illorum generationes simul, quorum esse perfectum non simul durat in tempore. Hac igitur coæquævitate simul sunt omnia quæ ab uno communi exeunt per unam et essentialem divisionem, sunt inter se coæquæva ; sicut species specialissimæ inter se sunt coæquæva, neutrum enim nec prius nec posterius est altero : quæ etiam ætanica vocantur ab antiquis, quasi unius ætatis. Hæc igitur dicuntur simul secundum tempus. Naturaliter autem sunt simul dupliciter : sunt enim simul quæcumque secundum id quod sunt, ad consequentiam dicuntur sive convertentiam, et secundum hunc modum alterum non est causa alterius, sed se invicem ponunt, et se invicem perimunt. Si enim in hac consequentia alterum esset causa alterius, utrumque esset causa alterius : et tamen in esse substantiali alterum potest esse causa alterius. Taliter autem simul sunt duplum et dimidium et alia relativa quæ secundum naturam relationis posita se ponunt, et perempta se perimunt : duplum enim convertitur ad dimidium, et e converso : nam cum est duplum sic est dimidium, et e converso cum est dimidium, est duplum, et secundum hanc re:

lationis consequentiam neutrum est alterius causa ut sic : sed natura relationis simul facit esse utrumque, et hæc simul sunt secundum quamdam naturam quæ fundatur super substantiam utriusque relativorum ad invicem.

Dicuntur autem alio modo simul natura simpliciter secundum id quod substantialiter natura ipsorum est, illa quæ in una et eadem divisione ex eodem genere ex diverso sive ex opposito dividuntur ad se invicem, et illa sunt quæ immediata divisione idem genus dividunt : ex diverso enim sive ex opposito dicuntur dividi, quæcumque sunt sumpta secundum eamdem divisionem ex uno genere, sicut sub animali tanquam genere secundum unam divisionem gressibile, volatile, aquatile sive natatile : horum nullum ad alterum erit per alterum, sed animal participatur immediate, et sunt coæquæva in illo : et ideo e diverso dividi dicuntur, quia sunt ex eodem genere æqua immediate : animal enim æqualiter dividitur in gressibile, et volatile, et aquatile sive natatile : et nihil horum prius et posterius est altero in animali, sed simul per naturam animalitatis hæc esse videntur.

We say therefore that those things are said to be simultaneous simply and properly which are coeval, or whose generation or state of having been generated is in the same time in which they are simultaneously generated and remaining, just as we say coeval things measured by the same time or period are simultaneous. For if they had been generated in one time, and immediately one perished, they would not be said to be simultaneous in time, because generation is ordered to perfect being. Nor are their generations said to be simultaneous, whose perfect being does not endure simultaneously in time. By this coevity therefore all things are simultaneous which from one common thing go forth through one and essential division, they are coeval among themselves; just as the most specific species are coeval among themselves, for neither is prior nor posterior to the other: which are also called 'aetanica' by the ancients, as if of one age. These therefore are said to be simultaneous according to time. Naturally however they are simultaneous in two ways: for those things are simultaneous whatever according to that which they are, are said for consequence or conversion, and according to this mode one is not the cause of the other so that it may be, but they posit each other, and destroy each other. For if in this consequence one were the cause of the other, each would be the cause of the other: and yet in substantial being one can be the cause of the other. In such a way however are simultaneous double and half and other relatives which having been posited according to the nature of relation posit themselves, and having been destroyed destroy themselves: for double is converted to half, and vice versa: for since there is double so there is half, and vice versa since there is half, there is double, and according to this re-:

-lation, neither is the cause of the other as such: but the nature of relation makes both to be simultaneously, and these are simultaneous according to a certain nature which is founded upon the substance of each of the relatives to each other.

In another way however they are said to be simultaneous by nature simply according to that which is substantially their nature, those things which in one and the same division from the same genus are divided against each other from the diverse or from the opposite, and those are the things which by immediate division divide the same genus: for they are said to be divided from the diverse or from the opposite, whichever are taken according to the same division from one genus, as under animal as a genus according to one division the walking, the flying, the aquatic or swimming: none of these will be for the other through the other, but animal is participated immediately, and they are coeval in it: and therefore they are said to be divided from the diverse, because they are from the same genus equally immediately: for animal is equally divided into the walking, and flying, and aquatic or swimming: and none of these is prior and posterior to the other in animal, but these seem to be simultaneously through the nature of animality.

Singulum autem istorum rursus ulteriori divisione dividitur in species, gressibile simul et volatile et aquatile sic : gressibile in hominem et equum, volatile in aquilam et vespertilionem, quorum unum est habens alas membranales, alterum autem pennatas : aquatile autem in pisces natantes pennis, et in ea quæ natant motu pedum sicut ranæ. Erunt ergo et illa dividentia simul naturaliter in illo quod dividunt. Simul ergo natura sunt, quæcumque sub genere vel specie secundum eamdem divisionem sumpta sunt. Genera vero divisa semper priora sunt dividentibus ipsa : non enim convertuntur secundum quod est esse consequentiam ipsorum quæ simul sunt natura. Quod manifestum est inductione et exemplo : cum enim sit aquatile, sequitur quod sit animal : cum autem sit animal, non necesse est esse aquatile, quia non convertitur affirmatio a superiori ad inferius.

Generaliter ergo concludendo simul secundum naturam dicuntur quæcumque convertuntur ad invicem secundum quod est esse consequentiam relationis, sed nequaquam causa est alterum alteri ut sit, sed relatio est causa utriusque. Et secundo dicuntur simul natura, quia eodem genere e diverso dividuntur ab invicem. Et simpliciter simul sunt, quorum generatio in eodem est tempore. Patet autem cuilibet qualiter prædicamenta conveniunt : simul enim tempore est individuis simul, quam etiam ad invicem relatis in quolibet genere. Simul autem natura divisio generis in speciebus coæquævis, nec in coordinatione prædicabilium potest esse simul pluribus modis.

CAPUT XIV.

De post-prædicamento quod est motus.

Postquam jam tractatum est de illis consequentibus prædicamenta quæ accidunt sive conveniunt omnibus prædicamentis per id quod comparantur ad invicem genera vel ea quæ in generibus sunt, nunc determinandum est de eo quod est consequens prædicamenta per esse quod prædicatur in illis, ex quo prædicamenta sunt principia omnium eorum quorum sunt principia, sequitur quod omne esse rerum prædicatur in illis, et significatur nominibus prædicamentorum.

Each of these however again by a further division is divided into species, the walking as well as the flying and the aquatic thus: the walking into man and horse, the flying into eagle and bat, of which one has membraneous wings, the other however feathered ones: the aquatic however into fishes swimming with fins, and into those which swim by the movement of feet like frogs. Those dividing things will therefore also be simultaneous naturally in that which they divide. Therefore simultaneous by nature are whatever have been taken under a genus or species according to the same division. Divided genera however are always prior to the things dividing them: for they are not converted according to what it is to be the consequence of those things which are simultaneous by nature. Which is manifest by induction and example: for when it is aquatic, it follows that it is an animal: when however it is an animal, it is not necessary that it be aquatic, because the affirmation is not converted from the higher to the lower.

Generally therefore concluding, those things are said to be simultaneous according to nature which are converted to each other according to what it is to be the consequence of relation, but by no means is one the cause for the other that it may be, but relation is the cause of both. And secondly they are said to be simultaneous by nature, because in the same genus they are divided against each other from the diverse. And they are simply simultaneous, whose generation is in the same time. It is clear however to anyone how the predicaments agree: for it is simultaneous in time for simultaneous individuals, as well as for those related to each other in any genus. Simultaneous by nature however is the division of a genus into coeval species, nor in the coordination of predicables can it be simultaneous in more ways.

CHAPTER XIV.

On the post-predicament which is motion.

After we have already treated those things consequent to the predicaments which happen or agree with all predicaments by this that genera or those things which are in genera are compared to each other, now it must be determined concerning that which is consequent to the predicaments through the being which is predicated in them, from which, since the predicaments are principles of all those things of which they are principles, it follows that all being of things is predicated in them, and is signified by the names of the predicaments.

Est autem duplex, scilicet esse fluens, et esse simpliciter et stans : et prædicamentum quidem genere, specie et individuo prædicat esse stans : et hoc sufficienter in prædicamentis determinatum est. Est autem, ut dicit Avicenna, esse fluens quod non est simpliciter actus, sed permixtus potentiæ : qui modus significandi esse et prædicandi ordinatione generum et specierum et individuorum determinari non potuit, eo quod omnia illa significant et prædicant quod similiter suo modo actu est : propter quod oportuit ut hoc esse sit designatum et prædicatum in aliquo post prædicamenta consequente consignificaretur : et hoc est in tot prædicamentis, quot sunt quæ possunt habere res suas, et esse quod prædicatur permixtum potentia. De hoc ergo tractantes tractabimus de motu quantum pertinet ad præsentem speculationem : subtiliter enim de motu ad Physicum tractare pertinet : cum enim in quolibet sit ut potentia primo distans ab actu, nec devenire possit potentia ad actum nisi per motum, oportet ponere quod motus sit. Adhuc autem omne passivum, actum agentis aut nullo modo recipit, aut it per motum ad actum agentis. Constat autem quod passivum suscipit actum agentis, ergo suscipit per motum : ergo oportet ponere quod sit motus. Adhuc tempus esse ponitur : tempus autem non est continuum nisi per motum : quare oportet ponere quod motus sit. Si autem est motus, et in prædicamentis determinandum de omni voce quæ esse prædicat rei alicujus, oportet in prædicamentis determinare de modis motus, et cujusmodi esse prædicatur in modis illis, et ad quæ prædicamenta reducatur. Dicentes autem de motu secundum hunc modum non oportet nos diffinire motum, quia una et eadem ratione de sex modis motuum sive speciebus non prædicatur : motum enim hic extenso nomine sumimus pro omni eo quod dicit quodcumque esse fluens de potentia ad actum, sive id esse sit substantiale, sive accidentale : tale enim esse in quantum est fluens, in communi unum modum habet quo significetur, et quo per nomen significans ipsum secundum quod fluens est prædicetur, et hoc modo in hac scientia habet determinari. Dicamus ergo sic multiplicitatem motus determinantes, quod motus extenso nomine motus sunt sex species, scilicet generatio, corruptio, augmentatio, diminutio, alteratio, secundum locum mutatio.

It is however twofold, namely flowing being, and being simply and standing: and the predicament indeed in genus, species and individual predicates standing being: and this has been sufficiently determined in the predicaments. There is however, as Avicenna says, flowing being which is not simply act, but mixed with potency: which mode of signifying being and of predicating by the ordering of genera and species and individuals could not be determined, for the fact that all those things signify and predicate what si-

-milarly in its own way it is in act: for which reason it was appropriate that this being should be designated and signified as predicated in something consequent after the predicaments: and this is in as many predicaments as there are those which can have their own things, and the being which is predicated as mixed with potency. Treating therefore of this we shall treat of motion as much as pertains to the present speculation: for to treat of motion subtly pertains to the Physicist: for since in anything there is being as potency first distant from act, nor can potency come to act except through motion, it is necessary to posit that motion is. Further however every passive thing either receives the act of the agent in no way, or it goes through motion to the act of the agent. It is clear however that the passive thing receives the act of the agent, therefore it receives it through motion: therefore it is necessary to posit that there is motion. Further time is posited to be: but time is not continuous except through motion: wherefore it is necessary to posit that motion is. If however there is motion, and in the predicaments it must be determined concerning every word which predicates the being of some thing, it is necessary in the predicaments to determine concerning the modes of motion, and what kind of being is predicated in those modes, and to which predicaments it is reduced. Speaking however of motion according to this mode it is not necessary for us to define motion, because it is not predicated by one and the same account of the six modes of motions or species: for we take motion here by an extended name for all that which denotes any flowing being from potency to act, whether that being be substantial or accidental: for such a being insofar as it is flowing, has in common one mode by which it is signified, and by which it is predicated through the name signifying it according as it is flowing, and in this mode it has to be determined in this science. Let us say therefore thus determining the multiplicity of motion, that motion by the extended name of motion has six species, namely generation, corruption, augmentation, diminution, alteration, change according to place.

Generatio quidem et corruptio in substantia sunt et uno modo sunt, et dicuntur mutationes non motus. Alio autem modo motus extenso nomine motus possunt appellari. Si enim sunt in substantia solum, tunc non possunt esse nisi aut de non substantia ad substantiam secundum esse substantiæ, vel e converso de substantia ad non substantiam : et quia hi termini dicuntur opponi secundum affirmationem et negationem, inter quas nullum medium est, hæc mutatio non habet medium, sed est de termino a quo ad terminum ad quem sine medio. Adhuc autem sequitur quod non sit in tempore, sed in nunc, quia omne tempus habet medium : et velox in tempore dividit tempus et motum : nunc autem est finis temporis ad quem continuatur tempus : sequitur ergo quod talis mutatio sit finis motus : sicut enim nunc se habet ad tempus, ita mutatio se habet ad motum, et hæc est probatio Averrois super physicam in commento. Si autem generatio accipiatur ut immixta alterationi qua alteratur materia ejus quod generatur per qualitates generantis, tunc motus dici potest, et sic hic nos loquimur de generatione, quia sicut esse fluens. Juxta hunc modum plane intelligitur qualiter corruptio sit mutatio et non motus, et qualiter possit dici motus, et qualiter dicit esse substantiale fluens secundum quod dicit Aristoteles, quod in tali fluxu non est vivum et animal simul in motu, et non est animal et homo simul in motu generationis. Et opposito modo est in corruptione : quia corruptio in uno modo est mutatio de substantia ad non substantiam, et sic est finis motus. Et alio modo est immixta motui alterationis corrumpentis id quod est secundum qualitates suas alterantes in virtute corrumpentis : et sic est alteratio paulatim abjiciens a substantia, et in fine quando est substantia in abjectum esse, tunc facta est corruptio secundum substantiam. Sic igitur patet qualiter generatio et corruptio sunt motus et qualiter mutationes.

Alii autem omnes motus sunt salvato subjecto in esse substantiali subjecto ad aliquod esse secundum quantitatis perfectionem, aut secundum qualitates, aut secundum ubi. Et illi sunt proprie motus : quia mobile secundum quod mobile est ens perfectum in esse substantiali, et potentia existens in esse quanti vel qualis vel ubi : et motus est actus ejus secundum quod hujusmodi : et ideo in quantitate secundum rationem perfecti et imperfecti est augmentum et diminutio : et augmentum est motus naturalis, diminutio autem a perfecto est esse motus innaturalis.

Generation indeed and corruption are in substance and in one way they are, and they are called mutations not motions. In another way however they can be called motions by the extended name of motion. For if they are in substance only, then they cannot be except either from non-substance to substance according to the being of substance, or vice versa from substance to non-substance: and because these terms are said to be opposed according to affirmation and negation, between which there is no middle, this mutation has no middle, but is from the term 'from which' to the term 'to which' without a middle. Further however it follows that it is not in time, but in the now, because all time has a middle: and the swift in time divides time and motion: the now however is the end of time to which time is continued: it follows therefore that such a mutation is the end of motion: for as the now relates to time, so mutation relates to motion, and this is the proof of Averroes on physics in the commentary. If however generation is taken as mixed with the alteration by which the matter of that which is generated is altered through the qualities of the generating thing, then it can be called motion, and thus we speak here of generation, because it is as a flowing being. According to this mode it is clearly understood how corruption is a mutation and not a motion, and how it can be called motion, and how it denotes a substantial flowing being according to what Aristotle says, that in such a flux the living and the animal are not simultaneously in motion, and the animal and the man are not simultaneously in the motion of generation. And in the opposite way it is in corruption: because corruption in one way is a mutation from substance to non-substance, and thus is the end of motion. And in another way it is mixed with the motion of alteration of the thing corrupting that which is according to its own altering qualities in the power of the corrupter: and thus it is an alteration gradually casting off from substance, and in the end when the substance is in a cast-off state of being, then corruption according to substance has been made. Thus therefore it is clear how generation and corruption are motions and how mutations.

All other motions however are while the subject is preserved in its substantial being, a subject to some being according to the perfection of quantity, or according to qualities, or according to where. And those are properly motions: because the mobile thing according as it is mobile is a perfect being in substantial being, and existing in potency in the being of how much or of what kind or of where: and motion is its act according as it is such: and therefore in quantity according to the account of perfect and imperfect there is augmentation and diminution: and augmentation is a natural motion, but diminution from the perfect is to be an unnatural motion.

Alteratio autem non nominatur nominibus oppositis, sed uno nomine communi, quod est secundum qualitatem cujus terminus secundum naturam vel ultra quem non debet esse, est calidum, vel frigidum, vel humidum, vel siccum, et sic de aliis qualitatibus quæ causantur ab istis : tamen non est ratione determinata. Quia tamen tempore complexionatum variatur et simpliciter in simplicibus, et ideo dicit Aristoteles[1], quod non est eadem sanitas in mane et vespere : quia sanitas est habitus fundatus super calidi et frigidi, humidi et sicci complexione : et ideo in genere determinatur et non in specie, et dicitur alteratio : qualitas enim in genere non habet contrarium, sed in specie[2]. Et quamvis quantitas non habeat contrarium, nec in genere, nec in specie, tamen in ratione termini naturalis et defectus ab isto suspicitur circa quantitatem qualitatis contrarietatis. Ideo ergo in communi dicitur alteratio.

Et hæ quidem mutatione sunt secundum ea quæ insunt substantiæ aut substantialiter, aut accidentaliter ; et si accidentaliter aut secundum quantitatem, aut secundum qualitatem : relatio enim non prædicat aliquod quod absolute insit secundum quod est, sed ipsum esse ad aliquid, et patet quod ad ea quæ insunt substantiæ pluribus modis non potest esse motus. Si autem est secundum ea quæ extrinsecus adjacent substantiæ, tunc non potest esse secundum quando : quia quando causatur a tempore, et tempus est mensura motus, et non potest esse secundum quando, nisi esset secundum motum, et sic motus esset ad motum, et hoc procederet in infinitum, quod esse non potest. Nec potest esse secundum actionem : quia actio est operatio agentis et moventis, et motus non est in agente sicut in subjecto. Non potest esse secundum passionem : quia passio est causa motus. Nec potest secundum positionem : quia positio partium in toto et in loco non mutatur nisi per generationem et corruptionem, ut patet. Nec secundum habitum : quia habitus mutatur ad subjectum et non mutat ipsum. Relinquitur ergo, quod sit secundum ubi in quo totum mobile salvatum transfertur de loco ad locum : et ideo per se non possunt esse nisi sex species vel modi motus, secundum quod motus dicit esse vel ubi etiam fluens.

Palam autem est, quod motus alii et alii sunt diversi ab invicem, et unus non incidit in alterius intentionem : non enim potest esse quod generatio sit corruptio, quia generatio est via in esse, et corruptio est via ab esse in non esse. Nec augmentum potest esse diminutio : quia augmentum est via ad debitam secundum naturam quantitatem, diminutio autem est ab illa. Nec alteratio est secundum locum mutatio : quia alteratum manens in loco eodem in passionibus motum vel mutatum est, in loci autem mutatione totum secundum se translatum est ad alium locum.

Alteration however is not named by opposite names, but by one common name, which is according to the quality whose term according to nature or beyond which it ought not to be, is hot, or cold, or moist, or dry, and so of other qualities which are caused by these: yet it is not by a determined account. Because however in time the complexioned thing is varied and simply in simple things, and therefore Aristotle says [1], that it is not the same health in the morning and in the evening: because health is a habit founded upon the complexion of hot and cold, moist and dry: and therefore it is determined in genus and not in species, and is called alteration: for quality in genus does not have a contrary, but in species[2]. And although quantity does not have a contrary, neither in genus nor in species, yet in the account of the natural term and the defect from it, a quality of contrariety is suspected around quantity. Therefore therefore in common it is called alteration.

And these mutations indeed are according to those things which are in the substance either substantially or accidentally; and if accidentally either according to quantity, or according to quality: for relation does not predicate something which is absolutely in according to what it is, but being itself toward something, and it is clear that toward those things which are in substance there cannot be motion in more ways. If however it is according to those things which extrinsically lie adjacent to the substance, then it cannot be according to 'when': because 'when' is caused by time, and time is the measure of motion, and it cannot be according to 'when', unless it were according to motion, and thus motion would be toward motion, and this would proceed to infinity, which cannot be. Nor can it be according to action: because action is the operation of the agent and of the mover, and motion is not in the agent as in a subject. It cannot be according to passion: because passion is the cause of motion. Nor can it be according to position: because the position of parts in the whole and in place is not changed except through generation and corruption, as is clear. Nor according to habit: because the habit is changed toward the subject and does not change it. It remains therefore, that it be according to where in which the whole preserved mobile thing is transferred from place to place: and therefore per se there cannot be except six species or modes of motion, according as motion denotes being or 'where' also flowing.

It is clear however, that various motions are diverse from each other, and one does not fall into the intention of another: for it cannot be that generation is corruption, because generation is the way into being, and corruption is the way from being into non-being. Neither can augmentation be diminution: because augmentation is the way to the due quantity according to nature, diminution however is from it. Neither is alteration a change according to place: because the altered thing remaining in the same place is moved or changed in passions, but in change of place the whole according to itself is transferred to another place.

Quamvis autem dicatur quod tot sunt species motus quot sunt species entis [3], eo quod in quolibet prædicamento est devenire de potentia ad actum, tamen illi sunt motus per accidens et non per se, et sunt infiniti : et ideo per artem

fieri non possunt, sed aliis motibus sunt adjuncti.

In alteratione vero habet quamdam secundum quosdam quæstionem. Dubitant enim quidam, ne forte necessarium sit id quod alteratur per aliquam reliquarum mutationum alterari, et non secundum ipsam alterationem. Hoc autem quamvis dicant quidam, tamen non est verum, et hoc experiri possumus in nobis ipsis : accidit enim nobis pene secundum qualitates omnes passionum animæ et corporis alterari absque eo quod aliqua aliarum mutationum mutemur : non enim augeri necessarium est quod secundum passiones qualitatum movetur : nec necessarium est minui secundum id quod movetur secundum passibiles qualitates. Similiter autem est et in aliis motibus, quia non est necesse alteratum secundum locum moveri, vel generari, vel corrumpi. Propter quod patet quod alteratio alia est mutatio quæ est præter omnes alios motus et separata ab omnibus aliis. Nam si alteratio esset eadem cum aliqua aliarum mutationum, oporteret id quod alteratur, augeri vel minui : vel oporteret quod cum alteratur, fieret quædam aliarum consequentium ad alterationem mutationum. Sed hoc non est necessarium, quia potest alterari nulla aliarum mutationum facta in ipso.

Similiter autem sciendum, quod id quod augetur, non aliqua aliarum mutationum movetur, sicut quod minuitur, vel generatur, vel corrumpitur, vel quod movetur secundum locum physicæ secundum quod motus secundum locum est a generante, procul dubio prius oportet alterari in omnibus physicis : quia non fit generatio, vel corruptio, vel augmentum, vel diminutio, vel loci mutatio quæ est a natura, nisi alteratione præcedente quæ disponit generabile vel corruptibile vel augens et auctum et diminuens et diminutum et secundum locum motum ad hoc quod mutetur.

Et quamvis sit hoc necessarium in physicis, tamen in mathematicis sunt quædam crescentia in plus et additamentum suæ quantitatis, quæ non alterantur de qualitate in qualitatem aliam, sicut patet in secundo Euclidis, quod quadrangulum circumposito gnomone crevit quidem, sed in nullo est factum alteratum : quia de figura in figuram non est mutatum.

Although however it may be said that there are as many species of motion as there are species of being [3], for the fact that in every predicament there is a coming from potency to act, yet those are motions by accident and not per se, and are infinite: and therefore through art

they cannot be made, but are adjoined to other motions.

But in alteration it has a certain question according to some. For some doubt, lest perhaps it be necessary that that which is altered be altered through some of the remaining mutations, and not according to the alteration itself. But although some say this, yet it is not true, and this we can experience in ourselves: for it happens to us to be altered almost according to all qualities of the passions of the soul and body without us being mutated by any of the other mutations: for it is not necessary to be augmented that which is moved according to the passions of qualities: nor is it necessary to be diminished according to that which is moved according to passible qualities. But similarly it is also in other motions, because it is not necessary that the altered be moved according to place, or be generated, or be corrupted. On account of which it is plain that alteration is another mutation which is besides all other motions and separated from all others. For if alteration were the same with some of the other mutations, it would behoove that that which is altered, be augmented or diminished: or it would behoove that when it is altered, some of the mutations consequent to alteration should be made. But this is not necessary, because it can be altered with no other mutations made in it.

But similarly it is to be known, that that which is augmented, is not moved by some of the other mutations, just as that which is diminished, or is generated, or is corrupted, or which is moved according to physical place according as motion according to place is from the generating thing, without doubt first it behooves to be altered in all physical things: because there is not made generation, or corruption, or augmentation, or diminution, or mutation of place which is from nature, unless alteration preceding which disposes the generable or corruptible or augmenting and augmented and diminishing and diminished and the moved according to place to this that it be mutated.

And although this is necessary in physical things, yet in mathematical things there are some growing into more and an addition of their quantity, which are not altered from quality into another quality, as is plain in the second of Euclid, that a quadrangle with a gnomon placed around has indeed grown, but in nothing is made altered: because it is not mutated from figure into figure.

Est enim *gnomon* secundum Euclidem supplementum quadranguli quod est altera parte longius ad inveniendum quantitatem quadranguli : et si hoc circumponitur quidem ad quadrangulum, est quidem quadrangulum majus factum, sed tamen a figura sua secundum speciem quadranguli non est mutatum : et ideo non est alteratum, quia secundum aliam speciem qualitatis alterari non posset nisi secundum figuram.

[Diagram showing a square (quadrato) with a L-shaped addition (gnomon) forming a larger square.]

<!-- cap:1.1.15 -->

CAPUT XV — *De his quæ motibus opposita sunt.*

Motus autem consideratio duplex est : consideratur simpliciter sive universaliter prout abstrahit ab hoc motu et illo. Consideratur etiam secundum speciem prout est hic vel ille motus. Dicamus igitur quod motui simpliciter considerato contrarium est quies. Dico autem contrarium large sumendo prout privatio dicitur in physicis contrarium : quod enim est quies, est privatio motus : ideo quia movens ad formam contraria quiete eniente quam inducere intendit, cessat a movendo : et sic cessat et privatur motus in eo quod motus est : et quia status est in forma vel in loco ad quem fit motus, sicut in contrario ei cujus motus incipit, ideo contrarium dicitur esse quies ad motum : cum tamen quies secundum se non sit contrarium, sed potius est privatio motus [1].

Contra quod tamen quidam objiciunt dicentes quod cessatio motus est negatio motus ab eo quod possibile est moveri, et non movetur et terminat motum ad nunc in quo est in motum esse, sed in eo quod movetur eadem aptitudo est, quia etiam illud aptum est moveri : idem ergo est subjectum in eo quod possibile est moveri et in eo quod movetur, utrumque enim est aptum natum moveri, et quies non est nisi negatio motus ab utroque : quies ergo videtur contradictorie opponi motui, et non privative vel contrarie. Hæc autem eadem argumentatio fieri potest in

omnibus privative oppositis. Sed ad hoc dicendum quod quies vel privative vel contrarie opponitur motui, sicut dictum est. Et cum dicitur quod eadem aptitudo vel potentia ad motum est in eo quod aptum natum est moveri et non movetur, et in eo quod actu movetur, dicendum quod hoc falsum est : non enim eadem potentia est ante actum et cum actu existens : et sic affirmatio et negatio non sunt omnino de eodem : et sic non potest esse contradictio. Opponitur igitur quies motui privative vel contrarie prout simpliciter consideratur.

For a *gnomon* according to Euclid is a supplement of a quadrangle which is longer on the other part to find the quantity of the quadrangle: and if this is placed around indeed to the quadrangle, indeed a larger quadrangle is made, but yet from its figure according to the species of a quadrangle it is not mutated: and therefore it is not altered, because it could not be altered according to another species of quality except according to figure.

![Diagram of Gnomon and Quadrato]

[Diagram showing a square (quadrato) with a L-shaped addition (gnomon) forming a larger square.]

<!-- cap:1.1.15 -->

CHAPTER XV — *On those things which are opposed to motions.*

But the consideration of motion is twofold: it is considered simply or universally according as it abstracts from this motion and that. It is also considered according to species according as it is this or that motion. Let us say therefore that to motion considered simply contrary is rest. But I say contrary taking it largely according as privation is called a contrary in physics: for what is rest, is the privation of motion: therefore because the mover to a form incoming contrary to the rest which it intends to induce, ceases from moving: and thus ceases and motion is deprived in that which motion is: and because the standing is in a form or in a place to which the motion is made, just as in the contrary to that of which the motion begins, therefore rest is said to be contrary to motion: although yet rest according to itself is not a contrary, but rather is the privation of motion [1].

Against which however some object saying that the cessation of motion is the negation of motion from that which is possible to be moved, and is not moved and terminates motion to the now in which it is to be moved, but in that which is moved is the same aptitude, because also that is apt to be moved: therefore it is the same subject in that which is possible to be moved and in that which is moved, for each is apt by nature to be moved, and rest is not except the negation of motion from each: rest therefore seems to be opposed contradictorily to motion, and not privatively or contrarily. But this same argumentation can be made in

all privative opposites. But to this it must be said that rest either privatively or contrarily is opposed to motion, as has been said. And when it is said that the same aptitude or potency to motion is in that which is apt by nature to be moved and is not moved, and in that which is moved in act, it must be said that this is false: for it is not the same potency existing before act and with act: and thus affirmation and negation are not altogether of the same: and thus there cannot be a contradiction. Therefore rest is opposed to motion privatively or contrarily according as it is simply considered.

Ex quo manifestum est quod generatio et corruptio motus non sunt sed fines motuum, quia non opponitur generationi quies, sed corruptio. Motibus autem (si per singulas species motus considerantur) opponitur non quies, sed in contrarium motus, ut generationi opponitur corruptio, quia generatio est via in substantiam, corruptio autem est motus in contrarium, a substantia scilicet in non substantiam : et similiter opponitur augmentatio diminutioni, quia augmentum est existentis magnitudinis additamentum: diminutio autem est in contrarium, scilicet ab existente secundum naturam magnitudine decrementum.

Mutationi autem quæ est per locum, maxime videtur quies esse opposita. Et hæc causa est : quia hic est simplex motus vel mutatio, in quo totum mobile secundum substantiam et quantitatem et qualitatem (quæ in ipso) transfertur : et ideo etiam quies illi simpliciter opponitur : quia sicut talis motus simpliciter est motus et causa motuum aliorum, ita talis quies simpliciter est quies. Motus autem alii sunt motus quidam et in quodam, et quietes sunt quietes in quodam.

Quamvis autem loci mutationi simpliciter quies est opposita, tamen cuidam loci mutationi quæ recta est, sicut sursum vel deorsum, fortassis etiam opponitur in contrarium secundum locum mutatio, ut loci mutatio quæ est inferius, opponitur loci mutationi quæ est superius, et quæ est superius, opponitur ei quæ est inferius. Hoc autem certum non est utrum sit propter contrarietatem loci ut locus, vel propter contrarias qualitates loco accidentes, sicut superius in tractatu de Quantitate dictum est. Vel forte ideo dubium est : quia con-

habere dicantur . Dicamus igitur quod habere dicitur multis modis : nec est univoca prædicatio ejus de illis, sed æquivoca vel magis analoga secundum prius et posterius. Primus autem modus est secundum qualitatem, sive habeatur ut habitus, sive ut passio, vel aliqua alia species qualitatis, sicut dicimur habere scientiam vel virtutem. Secundo autem modo dicitur secundum quantitatem, sicut dicimus aliquid habere magnitudinem trium cubitorum vel quatuor. Tertio autem modo dicitur habere quod extrinsecus adjacet circa corpus, sicut dicimur habere vestimentum, vel chlamydem, aut tunicam, vel habere armaturam : et hic est proprius modus prædicamenti habitus. Quarto autem modo dicitur habere quod est in parte, sicut habere annulum in digito. Quinto autem modo dicitur habere ut pars in toto, sicut dicitur corpus habere manum vel pedem. Sexto autem modo dicitur habere ut continens contentum, sicut dicitur vas habere vinum, vel modius habere triticum : vas enim habere dicitur vinum, et modius triticum.

From which it is manifest that generation and corruption are not motions but the ends of motions, because rest is not opposed to generation, but corruption. But to motions (if through singular species motions are considered) is opposed not rest, but motion to a contrary, as corruption is opposed to generation, because generation is a way into substance, but corruption is motion to a contrary, namely from substance into non-substance: and similarly augmentation is opposed to diminution, because augmentation is the addition of an existing magnitude: but diminution is into a contrary, namely a decrement from a magnitude existing according to nature.

But to the mutation which is through place, most of all rest seems to be opposed. And this is the cause: because here is a simple motion or mutation, in which the whole mobile according to substance and quantity and quality (which is in it) is transferred: and therefore also rest simply is opposed to it: because just as such motion simply is motion and the cause of other motions, so such rest simply is rest. But other motions are certain motions and in a certain thing, and rests are rests in a certain thing.

But although to the mutation of place simply rest is opposed, yet to a certain mutation of place which is straight, just as upwards or downwards, perhaps also the mutation according to place is opposed into a contrary, as the mutation of place which is downwards, is opposed to the mutation of place which is upwards, and which is upwards, is opposed to that which is downwards. But this is not certain whether it be on account of the contrariety of place as place, or on account of contrary qualities happening to place, as above in the tractate on Quantity it has been said. Or perhaps therefore it is doubtful: because con-

they may be said to have. Let us say therefore that to have is said in many ways: nor is its predication univocal concerning them, but equivocal or rather analogical according to prior and posterior. But the first mode is according to quality, whether it be had as a habit, or as a passion, or some other species of quality, as we are said to have science or virtue. In the second way however it is said according to quantity, as we say that something has a magnitude of three cubits or four. In the third way however it is said to have that which extrinsically lies adjacent around the body, as we are said to have a garment, or a cloak, or a tunic, or to have armor: and this is the proper mode of the predicament of habit. In the fourth way however it is said to have what is in a part, as having a ring on the finger. In the fifth way however it is said to have as a part in a whole, as a body is said to have a hand or a foot. In the sixth way however it is said to have as the container the thing contained, as a vessel is said to have wine, or a bushel to have wheat: for the vessel is said to have wine, and the bushel wheat.

Septimo autem modo dicitur habere ut possessio, sicut dicimur habere agrum vel domum. Octavo autem modo dicitur habere aliquem uxorem, et uxorem habere virum : sed iste modus videtur esse remotissimus ab habere, quia nihil aliud dicere videtur nisi uxorem cohabitare. Palam autem est quod forte et alii modi possunt inveniri ab aliis, sicut dicere aliquid habere se ad aliquid, sed illi ad istos octo reducuntur. Hi ergo sunt octo modi ejus quod est habere fere omnes quos enumerat Aristoteles. Et hi ad prædicamenta et ad ea quæ post prædicamenta consequuntur, reducuntur. Qualitas enim habitus est in prædicamento qualitatis : quantitas autem in prædicamento quantitatis. Ea autem quæ sunt circa corpus, sunt in prædicamento habitus. Quod autem est in parte, vel ut pars in toto, vel ut contentum in continente, reducitur ad prædicamentum ubi, vel ad prædicamentum positionis. Possessio autem vel habere uxorem, reducitur ad prædicamentum habitus secundum extrinsecam denominationem vel ad relationem. Sic igitur de omnibus quæ ad prædicamentorum logicam pertinent, determinatum est.

vel tunica : quæ omnia mutantur ad habentem, et non mutant eum, ut dicit Augustinus, et juxta hunc modum est id quod habetur in decorem, ut quod circumdat membrum, sicut habetur annulus in digito. Adhuc autem alio modo dicitur sicut totum habet partes præcipue organicas quæ sunt ad actum, ut manum, aut pedem, quando habentur ad usum manus et pedes. Dicitur etiam habere secundum quod in vase mensurante quantitatem et continente, sicut dicitur quis habere granum tritici in modio, aut sicut vinum dicitur quis habere in lagena : vinum enim in lagena habere dicimur, et in modio grana tritici, quia lagena continet et mensurat vinum, et modius triticum.

Hæc igitur omnia diversimode habere dicuntur diversi, et diversis secundum omnia. Hic est unus modus prædicandi. Dicitur etiam alio modo habere per modum quo habetur possessio, sicut domum et agrum habere dicimur : et hic est specialis modus habendi et valde proprius. Adhuc autem dicitur habere sicut vir uxorem dicitur habere, aut uxor virum, mutuo contractu inter virum et uxorem. Sed modus iste qui dictus est, videtur alienissimus inter omnes modos habendi qui dicti sunt : nihil enim aliud dicimus virum habere uxorem, nisi quia cohabitant simul ad civiles et œconomicos actus : et hoc modo habens habetur eodem modo quo habet : et per eumdem contractum qui habet efficitur habitus, et hoc non est in aliquo aliorum modorum. Forte tamen adhuc apparebunt et alii modi ejus quod est habere : sed qui magis consueverunt dici et usitati sunt apud sapientes sunt isti, qui pene omnes enumerati sunt : et si qui alii sunt, reducuntur ad istos.

In the seventh way however it is said to have as a possession, as we are said to have a field or a house. In the eighth way however it is said that someone has a wife, and a wife has a husband: but this mode seems to be most remote from having, because it seems to say nothing else than that the wife cohabits. It is clear however that perhaps also other modes can be found by others, such as saying that something has itself toward something, but those are reduced to these eight. These therefore are the eight modes of that which is to have, almost all which Aristotle enumerates. And these are reduced to the predicaments and to those things which follow after the predicaments. For the quality of habit is in the predicament of quality: quantity however in the predicament of quantity. Those things however which are around the body, are in the predicament of habit. That however which is in a part, or as a part in a whole, or as the thing contained in the container, is reduced to the predicament of 'where', or to the predicament of position. Possession however or having a wife, is reduced to the predicament of habit according to extrinsic denomination or to relation. Thus therefore concerning all things which pertain to the logic of the predicaments, it has been determined.

or a tunic: which all are mutated to the one having it, and do not mutate him, as Augustine says, and next to this mode is that which is had for decor, as that which surrounds a member, just as a ring is had on a finger. Moreover in another mode it is said as a whole has parts especially organic which are to an act, as a hand, or a foot, when hands and feet are had for use. It is also said to have according as in a vessel measuring quantity and containing, as someone is said to have a grain of wheat in a modius, or as someone is said to have wine in a flagon: for wine we are said to have in a flagon, and grains of wheat in a modius, because the flagon contains and measures the wine, and the modius the wheat.

These therefore all are said in a diverse mode for diverse ones to have, and by diverse ones according to all things. This is one mode of predicating. It is also said in another mode to have through the mode by which possession is had, as a house and a field we are said to have: and this is a special mode of having and very proper. Moreover it is said to have as a man is said to have a wife, or a wife a man, by mutual contract between man and wife. But this mode which has been said, seems most alien among all the modes of having which have been said: for we say nothing else that a man has a wife, except because they cohabit simultaneously to civil and economic acts: and in this mode the having is had in the same mode by which it has: and through the same contract the one who has is made had, and this is not in any other of the modes. Perhaps however still will appear other modes of that which is to have: but those which most are accustomed to be said and are used among the wise are these, which almost all are enumerated: and if there are any others, they are reduced to these.

Modi autem habendi qui dicti sunt, sic accipiuntur. In omnibus enim habens aliquo modo est principium habiti, et habitum est ad naturam habentis, quando proprie habetur : aut igitur secundum naturam est principium, aut secundum voluntatem, aut simul secundum naturam et voluntatem. Si enim principium est secundum naturam, aut est secundum qualitatem cujus natura est principium, et sic est modus primus, aut secundum quantitatem, et sic est modus secundus. Nec plures sunt secundum naturam : quia cum habens differat ab habito, oportet quod substantia sit habens et qualitas vel quantitas sint habita. Alia vero prædicamenta non prædicant aliquid absolutum. Si autem natura cum voluntate est principium, tunc est modus quintus, in quo membrum habetur a natura : visus autem refertur ad voluntatem. Si autem sola voluntas est principium, tunc est respectu principii extrinseci quod extrinsecus se habet ad habentem : aut igitur habitum habens est ex ipso quod habet, aut non : si sic, est tunc modus octavus : si non, et est de extrinsecis : aut ergo habitum mutatur ad formam habentis, aut non. Si sic : aut est ad necessitatem, aut decorem. Si est ad necessitatem : tunc est tertius modus. Si est ad decorem : tunc est modus quartus. Si vero mutatur habitum ad habentem : aut habitum habetur per modum contenti, sicut in vase mensurante : aut per modum habitus tantum. Si per modum contenti : tunc est modus nonus. Si secundo modo : tunc est modus septimus.

Multis autem aliis modis potest accipi numerus modorum habendi : sed quia parva vis est in talibus, ideo illa sufficiant.

But the modes of having which have been said, are thus taken. For in all the having in some mode is the principle of the had, and the had is to the nature of the having, when it is properly had: therefore either according to nature it is the principle, or according to will, or simultaneously according to nature and will. For if the principle is according to nature, either it is according to a quality of which nature is the principle, and thus is the first mode, or according to quantity, and thus is the second mode. Nor are there more according to nature: because since the having differs from the had, it behooves that substance be the having and quality or quantity be had. But other predicaments do not predicate anything absolute. But if nature with will is the principle, then is the fifth mode, in which a member is had by nature: but sight is referred to the will. But if will alone is the principle, then it is in respect of an extrinsic principle which extrinsically has itself to the having: either therefore the had having is from itself which it has, or not: if thus, it is then the eighth mode: if not, and it is of extrinsic things: or therefore the had is mutated to the form of the having, or not. If thus: either it is to necessity, or to decor. If it is to necessity: then is the third mode. If it is to decor: then is the fourth mode. But if the had is mutated to the having: either the had is had through the mode of the contained, as in a measuring vessel: or through the mode of habit only. If through the mode of the contained: then is the ninth mode. If in the second mode: then is the seventh mode.

But in many other modes the number of the modes of having can be accepted: but because there is small force in such, therefore let these suffice.