

TRANSCRIPTION AND TRANSLATION OF
GILES OF ROME'S *WHAT IS THE MIDDLE TERM IN A DEMONSTRATION?*

Quaestio quid sit medium in demonstratione¹

What is the Middle Term in a Demonstration?

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Giles of Rome

- 1.00 Quaestio est quid sit medium in demonstratione, et videtur quod definitio subiecti
- 1.01 Nam omnis syllogismus constans ex propositionibus per se et necessariis videtur esse demonstration. Sed in syllogism, ubi definitio subiecti ponitur medium, tales propositiones habent esse quae sunt per se et necessariae. Ergo etc.
- 1.02 Praeterea: Demonstratio est per causam. Sed natura subiecti est causa omnium accidentium quae sunt in subiecto. Cum igitur definitio naturam exprimat, definitione subiecti poterit esse medium ad demonstrandum omnia quae demonstrantur de subiecto.
- 1.03 Praeterea: Syllogismus constitutus ex propositionibus, ubi definitio subiecti ponitur medium, aut erit syllogismus dialecticus aut demonstrativus aut sophisticus. Non sophisticus, quia est ex veris procedens, non peccans in forma. Nec dialecticus, quia non est ex probabilibus, sed ex necessariis. Erit igitur demonstrativus. Ergo etc.

The question is 'what is the middle in a demonstration?', and it seems that <it is> the definition of a subject.

For every syllogism composed of necessary and *per se* propositions seems to be a demonstration. But in the syllogism where the definition of the subject is posited as the middle, such propositions have being which is *per se* and necessary. Therefore, etc.

Furthermore, a demonstration is through a cause. But the nature of the subject is the cause of all the accidents which are in the subject. Therefore, since the definition expresses <that> nature, the definition of the subject will be a middle for demonstrating everything which is demonstrated of a subject.

Furthermore, a syllogism constituted of propositions, where the definition of the subject is posited as the middle, will be either a dialectical syllogism or a demonstrative syllogism or a sophistical syllogism. It is not sophistical, because it proceeds from truths, not erring in form. Nor will it be a dialectical syllogism, because it is not from probable <propositions>, but from necessary

¹ Edited by Jan Pinborg in J. Pinborg, "Diskussionen um die Wissenschaftstheorie an der Artistenfakultät", *Die Auseinandersetzungen an der Pariser Universität im XIII. Jahrhundert*. (Miscellanea medievalia, 10), ed. A. Zimmermann, Berlin-New York 1976, 240–268.

- <propositions>. Therefore it will be a demonstrative syllogism. Therefore, etc.
- 1.04 Praeterea: Principium in demonstratione est medium demonstrativum, quid per medium quasi per causam et principium demonstratio concludit. Sed dicitur in I. De anima: quod-quid-est subiecti principium est omnis demonstrationis. Ergo etc.
- 1.05 Praeterea: Definitio dicens propter quid passionis dicitur medium in demonstratione. Sed definitio subiecti hoc videtur habere, quia comparata ad subiectum est definitio, comparata ad passionem dicit propter quid. Ergo etc.
- 1.06 In contrarium est, quia medium et id per quod concluditur debet esse eiusdem rationis cumeo quod concluditur. Cum ergo accidens concludatur, oportet medium non habere rationem substantiae. Non erit ergo definitio subiecti medium, set aliqua passio.
- 1.07 Praeterea: Dicitur II. Posteriorum quod ratio primi termini est medium in demonstratione. Sed primus terminus est maior extremitas. Cum igitur passio sit maior extremitas, definitio passionis erit medium in demonstratione. Non ergo definitio subiecti.
- Furthermore, the first principle in a demonstration is a demonstrative middle, because through a middle as through a cause and a first principle a demonstration concludes. But in De Anima I, it is said <that> the “what it is” of a subject is the first principle in every demonstration. Therefore, etc.
- Furthermore, the definition expressing the *propter quid* of an attribute is called the middle in demonstration. But the definition of the subject seems to have this, because relative to a subject it is a definition, relative to an attribute it is a *propter quid*. Therefore, etc.
- On the contrary is <this argument>, because a middle, that is, that through which <a demonstration> is concluded, ought to be of the same account as that which is concluded. Therefore since an accident is concluded, it is necessary that the middle not have the account of a substance. Therefore the middle will not be the definition of the subject, but <it will be> some attribute.
- Furthermore, it is said in book 2 of the Posterior Analytics that the account of the first term is the middle in demonstration. But the first term is the extreme of the major. Therefore, since an attribute is the extreme of the major, the definition of an attribute will be the middle in demonstration. Therefore it <will not be> the definition of the subject.

1.08 Ad istam quaestionem est dicendum, quod si volumus bene videre quid sit medium in demonstratione, cum non demonstrentur de subiecto nisi quae subiecto insunt, oportet nos videre qualiter habent ordinem ea quae in subiecto sunt, et ordine inspecto apparebit, quae per demonstrationem concluduntur, et quid est medium in demonstratione, et quae solum virtualiter demonstrationem ingrediuntur, et quae demonstrationi sunt inutilia.

<De Natura>

2.01 Propter quod notandum quod in supposito vel in subiecto aliqua sunt considerata primo, scilicet natura et esse. Est autem in omni subiecto, de quo aliqua demonstrantur, duplex natura, forma scilicet et materia. Nam si reperiantur aliquae substantiae, quae sunt ipsae formae per se existentes, de eis propriae passionis non demonstrantur nec aliquid de eis demonstratur. Nam scientiae particulares quarum proprium est demonstrare non se extendunt usque ad considerationem talium substantiarum, saltem ut substantiae sunt, licet aliqua de eis consideret ut motrices existunt. Metaphysicus autem qui de illis considerat non directe demonstrat, sed modus suus est declarare et investigare naturas et quidditates rerum. Igitur de illis substantiis separatis non est demonstratio. Et si aliquando videatur quod demonstrative probantur esse per effectus inferiores, non proprie esse per tales demonstrationes probatur de eis, sed solum ostenditur, quod propositio illa est vera, in qua dicitur quod substantiae separatae sunt. Nam ipsum primum probatur esse, non tamen esse de eo probari potest, cum esse suum sit idem quod ipse. Igitur

To that question, it must be said that if we want to see well what is the middle in a demonstration, since nothing except that which is in a subject is demonstrated of a subject, we need to see how those which are in a subject have their order, and, through an inspection of that order, it will be clear which <in that order> is concluded through demonstration, and what is the middle in demonstration, and which alone enter into demonstration virtually, and which are useless in demonstration.

<On Nature>

On account of which it must be noted that in a supposit or in a subject some things must be considered first, namely, nature and being. However, there are two natures in every subject about which something is demonstrated, namely, form and matter. For if some substances were sought that are those forms existing *per se*, neither proper attributes nor something <else> would not be demonstrated of them. For the particular sciences of which demonstration is proper do not extend themselves at all to the consideration of such substances, at least insofar as they are substances, though to some extent one could consider them as they exist as motive agents. However, the metaphysician who considers such things does not demonstrate directly, but his own method is to clarify and investigate the natures and quiddities of things. Therefore, there is no demonstration concerning these separate substances. And if sometimes it might seem that they are demonstratively proved to be through inferior effects, the being of these <substances> is not properly proved through such demonstrations, but it is only indicated that that sentence is true, in which it is said that there are separate substances. For that first being is proved, yet being

demonstrationes secundum quod hic accipimus non se extendunt nisi ad ea quae secundum esse a sensibus non sunt separata. In illis autem, ut dicebatur, est illud quod per se et primo dicitur natura sicut forma, et illud quod dicitur natura quia formam suscipit, ut in V. Metaphysicae est declaratum. Et sicut in huiusmodi substantiis duplicem naturam aspicimus scilicet formam et materiam, ita in eis conspicimus duo genera accidentium, unum genus quod consequitur formam et aliud genus quod consequitur materiam. Accidentia autem quae consequuntur formam sunt accidentia per se, quia consequuntur rem secundum suam formam, quia secundum suam naturam, quae natura directe dicitur de forma. Alia autem accidentia quae sequuntur materiam dicuntur accidentia per accidens, quia per accidens divisum est contra per se. Et sicut ‘aedificator aedificat’. Ista est per se quia est vera ratione formae ut ratione artis aedificativae, sed ‘musicus aedificat’ ista est vera per accidens quia est vera ratione materiae in quantum musica et ars aedificativa in eodem materia habent esse et in eodem subiecto, ita a simili ea quae sunt vera ratione formae dicuntur per se, ea quae ratione materiae dicuntur per accidens. Igitur accidentia quae veritatem et entitatem habent a forma sunt accidentia per se et sunt ea quae demonstrationibus sunt utilia. Ea autem quae sequuntur materiam sunt accidentia per accidens; et quia ex hiis quae sunt per accidens demonstratio non constituitur, demonstrationi talia accidentia inutilia sunt.

is not able to be proved of it since its own being is identical to it. Therefore demonstrations according to the way we here take them do not extend themselves except to those which according to being are not separated from sensible <substances>. Yet in those <substances>, as was said, is that nature which is *per se* and first, just as form, and that nature which is said <to be> from consequence, just as matter, which is called nature to this extent, because it receives form, as was declared in the fifth book of the Metaphysics. And just as in substances of this sort we glimpse a double-sided nature, namely, form and matter, so too in them we see two kinds of accident, one kind which follows form and another kind which follows matter. Moreover, accidents which follow form are accidents *per se*, because they follow a thing according to that thing’s form, because <it follows that thing> according to its own nature, which nature is directly called form. Yet other accidents which follow matter are called accidents *per accidens*, because *per accidens* is a division contrary to *per se*. And just as ‘a builder builds’ is *per se* because it is true by character of a form, as by the account of the art of building, but ‘a musician builds’ is true *per accidens*, because it is true by the character of the matter, in as much as music and the art of building have being in the same matter and in the same subject, so similarly those which are true by the character of the form as called *per se*, those which by the character of the matter are called *per accidens*. Therefore accidents which have truth and being from form are accidents *per se* and are those which are useful for demonstration. Yet those which follow from matter are accidents *per accidens*, and because a demonstration is not constituted from those which are *per accidens*, such accidents are not useful for demonstration.

2.02 Patet ergo quomodo duplex natura existit in re, et quae accidentia naturam sequentia sunt utilia ad demonstrationem et quae non.

<De Esse>

2.03 Verum quia secundum quod restabat considerandum in supposito erat esse, sciendum quod sicut duplex natura existit in supposito, ita existit ibi duplex esse, scilicet esse essentiae et esse actuale. Id autem duplex esse ad demonstrationem comparatum sic se habet quod unum istorum scilicet esse essentiae solum potest aliquantulum medium demonstrationis esse, numquam tamen per demonstrationem concluditur. Aliud autem esse ut actuale solum per demonstrationem aliquantulum concludi potest, numquam tamen erit alicuius demonstrationis medium.

2.04 Primum sic declaratur quia esse essentiae et essentia non differunt nisi sicut rubere et rubor vel sicut aliquid in se acceptum et in supposito consideratum, aut essentia in supposito tria esse. Dicendum est igitur quod cum esse essentiae definitionem ingrediatur, quia id est esse definitivum, et quod per definitionem ostenditur non differt a quidditate rei nisi forte secundum rationem vel secundum quendam modum accipiendi; cum igitur quod-quid-est subiecti formaliter loquendo numquam per demonstrationem concludatur, cum nihil in subiecto sit causa quare ipsum subiecto insit, sed magis ipsa quidditas causalitate praecedat cetera quae in subiecto insunt, nunquam esse essentiae per demonstrationem concluditur per se loquendo, licet forte aliquis

Therefore it is clear how nature exists in a thing in two ways, and which accidents following from nature are useful for demonstration and which are not.

<On Being>

Yet because, as was said, we had to consider being in a supposit, it must be known that just as nature exists in a supposit in two ways, so also being exists there in two ways, namely the being of the essence and actual being. Yet that two-fold being has itself compared to demonstration so that one of them - namely, the being of the essence - can only in some way be the middle of a demonstration, though it is never concluded through demonstration. Yet the other being, as actual, can only in some way be concluded through demonstration, though it will never be the middle of some demonstration.

The first is clear because the being of the essence and <that> essence do not differ except as being red and red or as something taken in itself and considered in its supposit <differ>, or <otherwise> there would be in a supposit three beings. Therefore it must be said that when the being of the essence enters into a definition, because that is definitive being, and that which is shown through a definition does not differ from the quiddity of a thing, unless perhaps according to reason or according to a certain way of taking it; since, therefore, the “what it is” of a subject is never, formally speaking, concluded through demonstration, since nothing in the subject is the cause whereby that [i.e. the “what it is”] is in a subject, but more so that quiddity causally precedes the rest which are in a subject, the being of the essence is

syllogismus possit fieri ad hoc probandum vel concludendum.

2.05 Et licet per demonstrationem esse essentiae non concludatur sive definitio formaliter loquendo non sit demonstrationis conclusio, potest tamen aliquo modo esse demonstrationis medium. Nam cum esse actuale immediate trahat originem a natura rei, cum per causam immediatam possit fieri demonstratio, esse actuale de re, quod non est rei substantia, per quidditatem ipsam poterit ostendi. Unde et Philosophus dicit in II Posteriorum, ‘Necessarium est demonstrare quia est nisi substantia sit’.

2.06 Patet igitur quod per esse essentiae demonstratur esse actuale aliquo modo. Et dico ‘aliquo modo’ quid aliquo modo petitur ibi principium, cum supponatur quod ibi debet probari. Et ideo oportet quod in omni syllogismo probante et inferente conclusio sit alia a qualibet praemissarum. Propter quod oportet medium differre a maiori extremitate et minori. Et si medium est idem quod maior extremitas, tunc conclusio non differret a minori propositione; si autem medium sit idem quod minor extremitas, tunc conclusio non differret a maiori propositione. Et ideo patet falsum dictum eorum qui dicunt quod sufficit quod medium differat a passione sive a maiori extremitate et non oportet quod differat a

never concluded through a demonstration, speaking *per se*, although perhaps some syllogism could come about for proving or concluding this.

And although the being of the essence is not concluded through demonstration, that is, formally speaking, a definition is not the conclusion of a demonstration, yet in some way <that> being can be the middle of demonstration. For since actual being immediately draws an origin out from the nature of a thing, since a demonstration can come about through an immediate cause, the actual being of a thing, which is not the substance of a thing, can be shown through the quiddity <of that thing>. Hence also Aristotle says in the second book of the Posterior Analytics, “it is necessary to demonstrate that it is, unless it is substance.”²

Therefore it is clear that actual being is in some way demonstrated through the being of the essence. And I say “in some way” because in some way one here begs the question, since that which ought to be proved is supposed. And therefore it is necessary that in every convincing and inferential syllogism the conclusion is different from each of the premises. On account of this, it is necessary that the middle differs from the extreme of the major and <from the extreme> of the minor. And if the middle is the same as the major extreme, then the conclusion will not differ from the minor proposition. Yet if the middle is the same as the minor extreme, then the conclusion will not differ from the major proposition. And therefore it is clear that

² Apo II.7 (92b12)

subiecto sive a maiori. Nam si hoc verum esset, non oporteret conclusionem differre a qualibet praemissarum, quod non solum est contra demonstrationem, sed universaliter contra syllogismum.

2.07 Cum igitur definitio subiecti non sit simpliciter altera a subiecto, in tali demonstratione, ubi per esse essentiae vel per quiditatem esse actuale concluditur aliquo modo, secundum rei veritatem principium petitur; propter quod a vera demonstratione deficit.

2.08 Et quia visum est, quod esse actuale per esse essentiae concludi habet, declaratum est primum quod proponeretur de esse actuali, scilicet quod per demonstrationem concludi poterit.

2.09 Restat declarare secundum, scilicet quod huiusmodi esse id est actuale non possit esse demonstrationis alicuius medium. Ad cuius evidentiam sciendum, quod illa duo genera accidentium superius nominata, scilicet accidentia per se et accidentia per accidens, non aequae directe respiciunt utrumque esse. Nam accidentia per se directe respiciunt esse essentiae; nam cum ab essentia sumatur ratio speciei et accidentia per se sunt accidentia sequentia speciem, secundum quod dicit Philosophus in libro Topicorum, ‘per se speciei insunt, per speciem individuo’, huiusmodi accidentia per se et directe ipsum

the *dictum* of those who say that it is sufficient that the middle differs from an attribute or from the extreme of the major and that it is not necessary that it differs from the subject or <the extreme> of the minor is false. For if this were true, it would not be necessary that the conclusion differs from each of the premises, which is not only contrary to demonstration, but is contrary to syllogisms generally.

Therefore since the definition of the subject does not differ at all from the subject, in such a demonstration where actual being is concluded in some way through the being of the essence or through the being of the quiddity, one begs the question according to the truth of the thing, on account of which one falls short of a true demonstration.

And because it is clear that actual being has to be concluded through the being of the essence, the first <claim> that was set down about actual being has been shown, namely, that it will be able to be concluded through demonstration.

It remains to make clear the second <claim>, namely, that being of this sort, that is, actual being, cannot be the middle of some demonstration. For evidence of this, it must be known that those two kinds of accidents named earlier, namely, accidents *per se* and accidents *per accidens*, do not directly concern each being equally. For accidents *per se* directly concern the being of the essence; for since the account of a species is taken up from the essence, and accidents *per se* are accidents following a species, on account of which Aristotle says in the book on the Topics, “they are in a species *per se*, in an individual through the

esse essentiae respiciunt. Accidentia autem per accidens modo converso ipsum esse actuale directe respiciunt magis quam esse essentiae. Nam ista accidentia dicuntur accidentia individui et per individua dicuntur inesse speciebus. Et ideo si aliquod respiciunt, respicient illud esse quod suppositum addit supra naturam, quod esse nec est natura nec pars naturae, sed solum a natura progrediens. Quia igitur esse actuale est tale esse, ad esse actuale respiciunt directius accidentia per accidens quam accidentia per se. Et ideo si esse actuale posset esse medium in demonstratione, esset medium ad demonstrandum accidentia per accidens. Et quia accidentia talia omnino demonstratione carent, nullius demonstrationis erit medium esse actuale.

- 2.10 Praetera: Esse actuale non est quoddam completum in genere, quia nec quantitas nec qualitas. Reducitur tamen aliquo modo ad genus substantiae. Quod autem est incomplete in genere non debet esse medium ad ostendum quod habet esse completum in genere.

species,” accidents of this sort concern directly and *per se* the being of the essence. Yet accidents *per accidens* in a converse way directly concern actual being more so that the being of the essence. For those accidents are called accidents of individuals and are said to be in species through individuals. And therefore if they concern something, they will concern that being which is a supposit added on top of nature, which being is neither a nature nor a part of nature, but only <being> proceeding from a nature. Therefore because actual being is such being, accidents *per accidens* more directly concern actual being than accidents *per se*. And therefore if actual being can be a middle in a demonstration, it would be a middle for demonstrating accidents *per accidens*. And because such accidents are separated from demonstration entirely, actual being will be the middle of no demonstration. Therefore since the definition of the subject is not simpliciter different from the subject, in such a demonstration, where through the being of the essence or through the quiddity actual being is concluded in some way, according to the truth of the thing one begs the question, on account of which it falls short of true demonstration.

Furthermore, actual being is not a certain thing complete in genus, because neither quantity nor quality <is a certain thing complete in genus>. Yet in some way it is traced back to the genus of substance. Yet that which is incomplete in genus ought not to be a middle for showing those which have being complete in genus.

About the order of properties from the mode of abstraction

2.11 Viso quomodo natura accipitur in supposito et quomodo esse et quomodo demonstrationi sunt utilia, restat videre ordinem proprietatum adinvicem. Quo viso apparebit quod quaeritur. Et quia accidentia quae sequuntur ad naturam materiae sunt demonstrationi inutilia, ideo talium ordinem conspiciere ad id quod quaeritur esset supervacuum.

<De ordine proprietatum ex modo abstractionis>

2.12 Solum igitur restat videre ordinem proprietatum sequentium formam. Propter quod notandum quod huiusmodi proprietates duplicem habent ordinem; unum enim ordinem habent ex modo abstractionis, alium ex modo causalitatis. Primus ordo sic colligitur; nam in una et eadem re possumus invenire diversos modos abstractionis, quia licet unius rei una sit forma substantialis secundum rem, tamen ille forma considerata secundum esse magis et magis abstractum sortitur diversa vocabula. Propter quod tota linea praedicamentalis sumit originem. Nam sicut idem est vivere et esse et non differt nisi quia consideratus ille actus magis abstractus dicitur esse et minus abstractus dicitur vivere, ita eadem forma est per quam homo est ens, substantia et animal, et non differt nisi secundum esse magis abstractum et minus. Et ita patet quod non obstante quod una forma in re existit et unus actus primus, potest tamen res apprehendi sub esse magis abstracto et minus abstracto. Secundum quod consideratur res secundum tale vel tale esse consequuntur eam aliae et aliae proprietates. Nam

Seeing how nature is taken in supposit and how being <is taken> and how they are useful for demonstration, the order of properties, one after the other, remains to be seen. Having seen this, that which is inquired [i.e. what the middle in a demonstration is] will become clear. And because accidents which follow the nature of matter are not useful in demonstration, therefore it would be needless relative to that which is asked to see the order of such things.

<On the order of attributes from the mode of abstraction>

Therefore we only need to inquire into the order of properties following form. On account of which it must be noted that properties of this sort have two orders. For they have one order from the mode of abstraction, another from the mode of causality. The first order is collected in this way, for in one and the same thing we are able to discover diverse modes of abstraction, because although there is one substantial form of one thing according to <that> thing, yet that form considered according to greater and greater abstract being distributes diverse words, on account of which the entire line of predicaments takes up an origin. For just as it is the same thing to live and to be, and <such an act> does not differ unless because that act considered in a more abstract way is called life and in a less abstract way is called living, so too the form through which a human is being, substance and animal is the same, and it does not differ unless according to being more and less abstract. And so it seems that, while not denying that one form exists in a thing and one first act <exists in a thing>, still a thing can be apprehended under being more and less abstract. Given a thing considered according to being this or that, these

proprietates quae consequuntur hominem in eo quod homo sunt aliae a proprietatibus quae consequuntur ipsum in eo quod animal, licet per eandem formam realiter loquendo homo sit homo et animal. Et secundum id quendam ordinem in huiusmodi proprietatibus conspicimus, ita quod proprietates quae sumuntur a re secundum esse summe abstractum, ut secundum quod in ea reperitur entitas et reperiuntur differentiae entis, sunt aliae a proprietatibus quae reperiuntur in re secundum esse minus abstractum. Et sicut omnia reducuntur ad ens et ad differentias entis, haec autem in alia non ulterius ordinantur, ita proprietates quae sumuntur ex ente et differentiis entis sunt illae ad quas aliae proprietates reducuntur. Et propter hoc propositiones formatae ex subiecto et ex huiusmodi proprietatibus universalibus sunt illae quae regulant propositiones alias. Et quia quae regulant alias dicuntur dignitates et communes animi conceptiones, ideo dignitates et communes animi conceptiones sunt ea quae ab ente et eius differentiis sumpserunt originem. Et ideo ‘de quolibet est verum esse vel non esse’, vel ‘de quolibet affirmatio vel negatio vera’ quod idem est, quia ex ipso ente sumit originem, dignitas appellatur. Et quia totum et aequale et huiusmodi reducuntur ad differentias entis, unde probat Philosophus quod spectat ad metaphysicum determinare propositiones quae ab hiis sumunt originem, etiam dignitates dicuntur. Et ideo ‘omne totum est maius sua parte’, ‘si ab aequalibus aequalia demas, etc.’, ‘quaecumque uni et eidem sunt aequalia, etc.’ etiam dignitates dicuntur.

properties and those properties follow it. For properties which follow a human insofar as she is human are distinct from properties which follow her insofar as she is an animal, although, speaking of a human, she is really a human and an animal through the same form. And on account of this we glimpse a certain order in the properties of this sort, so that the properties which are taken up from a thing according to its most abstract being, as on account of which being³ is discovered in it and the *differentiae* of being are discovered are different from the properties which are discovered in a thing according to being abstracted to a lesser degree. And just as all things are traced back to being and the *differentiae* of being, yet these are not moreover ordered in another, so the properties which are taken up from being and from the *differentiae* of being are those which are traced back to those other properties. And, on account of these properties, formed out of a subject and out of universal properties of this sort are those which regulate other propositions. And because those which regulate others are called axioms and common conceptions of the soul, therefore axioms and common conceptions of the soul are those which take their origin from being and from its *differentiae*. And therefore because ‘about everything it is true that it is or that it is not’ or ‘about everything <there is> a true affirmation or negation’ (which are the same) takes its origin from being itself, it is called an axiom. And because the whole and the equal and similar sorts of things are traced back to the *differentiae* of being, Aristotle proves that it is left to the metaphysician to determine the propositions which take their origin from these, propositions which are also called axioms. And therefore ‘every whole is greater than its part,’ ‘if from

³ *entitas*. Previous uses of being have been the infinitive ‘to be’. The point is, I take it, to discuss being in its most abstract form, that is, being as it transcends the Aristotelian categories.

equals, equals are removed, etc.’, ‘whatever are equal to one and the same, etc.’ are also called axioms.

2.13 Advertendum tamen quod in istis dignitatibus et quidam ordo. Nam sicut omnes differentiae entis reducuntur ad ens et in entitate fundantur, ita dignitates quae sumuntur ex differentiis entis roborantur per dignitatem quae ex ipso ente sumit originem. Et ideo dicit Commentator et Avicenna, quod omnes communes animi conceptiones per illud principium ‘de quolibet affirmatio vel negatio vera’ roborantur. Nam ut dictum est hoc principium ex ipso ente sumitur, alia vero ex differentiis entis.

Yet we must draw attention to the fact that in those axioms there is a certain order. For just as all the *differentiae* of being are traced back to being and are founded in being, so too axioms which are taken up from the *differentiae* of being are strengthened through an axiom which takes its origin from being itself. And therefore Averroes and Avicenna say that all general conceptions of the soul are strengthened through that principle ‘about everything a true affirmation or negation’. For, as was said, this principle is taken up from being itself, yet others <are taken up> from the *differentiae* of being.

2.14 Istae autem omnes dignitates numquam demonstrationem ingredientur, vel haberent rationem conclusi vel rationem concludentis et principii.

Yet all those axioms are never present in a demonstration according to its own substance [i.e. the substance of a demonstration]. For if you concede that they are present, either they have the character of a conclusion or <they have> the character of the principles, that is, those which do the concluding.

2.15 Quod autem istae dignitates numquam per demonstrationem concludantur patet, quia demonstratio est ex primis et veris et causis conclusionis, et ideo oportet praemissas priores esse conclusionibus, cum causa naturaliter sit prior causato. Cum igitur dignitates nullas priores ipsis recognoscant, numquam per alias inferuntur.

Yet it is clear that those axioms are never concluded through demonstration, because demonstration is from <those which are> primary and true and the causes of the conclusion, and therefore it is necessary that the premises are prior to the conclusion, since a cause is naturally prior to that which is caused. Therefore, since no axioms call to mind things prior to them, they are never inferred through others.

- 2.16 Alia ratione ad hoc idem potest esse, quia scientiae particulares, quorum proprie est demonstrare, supra totalitatem conclusorum se extendunt. Sed cum nulla scientia particularis se extendat ad hoc quod ambiat aliquam istarum dignitatum, immo quaelibet earum partem convenientem sibi et proportionalem de istis dignitatibus accipit, ut vult Philosophis IV Metaphysicae et in libro Posteriorum, ideo istae dignitates numquam per demonstrationem concluduntur.
- 2.17 Quod autem non possint ingredi demonstrationem ut medium vel ut concludentes, patet quia quod sic demonstrationi ingreditur oportet esse proportionale conclusioni, ita quod ad unam conclusionem sit tantum unum medium. Sed istae dignitates possunt in conclusiones multas; non ergo intrabunt demonstrationem secundum substantiam, cum talia solum in unam conclusionem possint.
- 2.18 Praeterea: Sicut ars particularis, cuius directe est demonstrare prout de demonstratione hic loquimur, se extendit supra totum conclusum, ita se extendit supra totas praemissas, quae secundum substantiam demonstrationem ingrediuntur. Sed supra totas huiusmodi propositiones nulla ars particularis se extendit, immo ut dictum est de eis partem proportionalem accipit. Ergo etc.
- 2.19 Et quia istae propositiones secundum substantiam demonstrationem non ingrediuntur, quaelibet tamen propositionem demonstrationem ingredientium per has
- There can be another account for the same conclusion, because particular sciences, of which demonstration is proper, extend themselves above the totality of <their> conclusions. But since no particular science extends itself to this extent, that it encircles some axiom of these - indeed it takes from those axioms which part <is> fitting and proportional to it, as Aristotle intends in the fourth book of the Metaphysics and in the book of the Posterior Analytics - therefore those axioms are never concluded through demonstration.
- Yet it is clear that they could not be present in a demonstration as middles or those which do the concluding, because that which is present in a demonstration needs to be proportional to the conclusion, so that to one conclusion there is only one middle. But those axioms are in many conclusions. Therefore they will not enter into a demonstration according to the substance <of that demonstration>, since such things can only be in one conclusion.
- Furthermore, just as a particular art <...> extends itself above every conclusion, so it extends itself above all the premises which come into demonstration according to substance. But above all the propositions of this sort no particular art extends itself - indeed, as was said, it takes a propositional part from them. Therefore, etc.
- And because those propositions are not present according to the substance of demonstration, yet each of the propositions present in a demonstration receives strength, both in itself

robur accipit et in se et in comparatione ad conclusionem. Quia igitur per has demonstratio aliquam virtutem recipit dicuntur virtualiter ingredi demonstrationem.

<De ordine proprietatum ratione causalitatis>

2.20 Viso igitur quomodo proprietates habent ordinem ratione abstractionis, ex quo ordine apparuit quomodo accipiuntur dignitates quae demonstrationem non ingrediuntur secundum substantiam, restat videre quomodo accipitur in proprietatibus ordo ratione causalitas. Quo viso apparebit, qualiter aliquae proprietates in demonstratione concluduntur et aliquae sunt medium concludendi.

2.21 Propter quod notandum quod cum natura sit determinata ad unum, quod ab una natura ut a una forma secundum unum genus abstractionis immediate non procedit nisi una proprietas sive una passio. Nam licet a forma hominis possit procedere diversae proprietates accepta ut dat esse hominem et ut dat esse animal, quia per idem est homo homo et animal, considerata tamen ista forma ut dat esse hominem et non secundum esse magis abstractum consequitur eam una sola proprietas immediate, et mediante illa proprietate fluit alia. Et ideo dicere possumus quod in qualibet abstractione invenitur unum immediatum proprium, ut hominem consequitur una proprietas immediata et animal alia et ita ascendendo. Apparet igitur quod inter huiusmodi proprietates se secundum ordinem causalitatis

and in comparison to the conclusion, through them. Therefore they are said to be virtually present in a demonstration, because a demonstration receives some force through them.

<On the order of attributes by reason of causality>

Therefore having seen how properties have an order by the character of abstraction, from which order it became clear how axioms are taken up <in a demonstration> which are not present in a demonstration according to the substance <of demonstration>, it remains to be seen how order within properties is taken up given the character of causality. Having seen how, it will be clear how some properties are concluded in a demonstration and how some are the middle for concluding.

On account of which it must be noted that since nature is determined to one, that only one property or one attribute proceeds immediate from one nature, i.e., from one form according to one abstract genus. For although from the form of human one can proceed to diverse properties, given that <such a form> yields being human and being animal, yet that form considered as it yields being human and not according to a more abstract being, one property alone immediately follows it, and by the mediation of that property flows others. And therefore we can say that in each abstraction is discovered one proper immediate, as one immediate property follows human and another animal and so on by ascending <the line of the predicaments>. Therefore it seems that between properties of this sort following the order of causality

consequentes aliquae sunt primae, aliquae mediae, aliquae postremae. Primae ita sunt medium demonstrandi quod numquam per demonstrationem concluduntur, et illa sunt immediata de quibus dicit Philosophus quod immediatorum non est demonstratio. Passiones autem mediae sunt medium ad demonstrandum passiones sequentes et concluduntur per proprietates primas, unde concluduntur quod numquam sunt medium concludendi.

2.22 Et ita apparet, quod demonstratio vel est ex primis et veris, quando secundae passiones demonstrantur per primas, vel ex hiis quae ex primis et veris sumpserunt originem, quando postremae demonstrantur per secundas et medias. Semper tamen demonstratio est ex immediatis accipiendo immediatum respectu passionis conclusi. Quare numquam ostenditur passio sequens nisi per passionem immediate praecedentem. Et ita apparet quod prima passio et immediata passio est indemonstrabilis

<Aliae rationes quare prima passio indemonstrabilis sit>

2.23 Et quia forte haec per dicta non est plene clarum, possumus istam veritatem plenius declarare, quod scilicet prima passio non demonstratur. Antequam tamen eam declarem, ne laboremus in aequivoco, dicamus quod primum dicitur dupliciter, vel in comparatione ad suppositum vel in comparatione ad causam. Nam illud dicitur primum quod non est per aliud iuxta illud

according to themselves, some are primary, some are in the middle, some are latter. So the primary <properties> are middles in demonstrating which are never concluded through demonstration, and those are the immediates about which Aristotle says that there is no demonstration of immediates. Yet middle attributes are middles for demonstrating further attributes and they are concluded through the primary properties, so that they conclude and are concluded. Yet the final <properties>, as final, are concluded in such a way that they are never middles for concluding <some other property>.

And so it seems that a demonstration either is from <those things> primary and true when second attributes are demonstrated through first <attributes>, or they take their origin from those which are primary and true when subsequent <properties> are demonstrated through second and middle <properties>. Yet a demonstration is always from immediates, taking what is immediate in respect to the attribute of the conclusion. Whereby a following attribute is never indicated unless through an immediately preceding attribute. And so it seems that the first attribute, that is, the <most> immediate attribute is indemonstrable.

<Other reason why a primary attribute is indemonstrable>

And because this is not fully clear through what has been said, we can show that truth more fully, namely, that a first attribute is not demonstrated. Yet before we show this, lest we labor in an equivocation, we will say that 'first' is spoken of in two ways, either in comparison to its supposit or in comparison to its cause. For that is called first which is not through another, given that <saying> of Aristotle in

Philosophi I Posteriorum, ‘illi primo cui alteri per ipsum et non ipse per alterum’. Ergo primum est non per aliud, vel non per aliud suppositum vel non per aliam causam. Primo modo dicitur ‘habere tres’ inesse triangulo ‘primo’, quid non inest triangulo per aliud suppositum ut per ysoschelem vel per figuram. Non tamen inest ei ‘primo’ secundo modo sic quod non insit ei per causam aliam vel per aliam passionem, cum insit ei habere tres per habere angulum extrinsecum. Ergo diversimode accipiendo ‘primum’ semper prima passio per demonstrationem concluditur. Nam si nos accipimus ‘primo’ inesse quia non per aliud suppositum, semper tale primum est in demonstratione conclusum, loquendo de demonstratione potissima ut hic loquimur. Et ideo cum habere tres insit triangulo non per aliud suppositum, ysocheli autem et figurae insit per aliud suppositum quia per triangulum, non demonstrabitur nec de figura nec de ysochele sed de triangulo. Sed si accipitur prima passio illa passio quae non inest ei subiecto mediante alia passione talis prima passio numquam in demonstratione concluditur, licet possit esse medium ad demonstrandum passiones sequentes.

2.24 Quod autem numquam talis passio concludatur, sic apparet. Quia si talis passio demonstraretur, non demonstraretur per passionem praecedentem, quia ex hypothesi nulla passio praecedit eam. Nec per accidentia per accidens posset demonstrari, quia talia ut habitum est sunt inutilia ad demonstrationem. Si igitur demonstrabitur, aut demonstrabitur per passiones

the first book of the Posterior Analytics, “to that first which to another through it and not itself through another.” Therefore, the first is not through another, neither through another supposit nor through another cause. In the first way ‘having three’ is in a triangle first, because it is not in a triangle through another supposit, either through isosceles or through figure. Yet it is not first in it in the second way, such that it is in it through another cause or through another attribute, since having three is in it through having extrinsic angles. Therefore, by taking ‘first’ in diverse ways a first attribute is always concluded through a demonstration, and a first attribute is never concluded through demonstration. For if we take it to be in first because <it is in it> not through another supposit, such <an attribute> concluded in the demonstration is always first, speaking of a demonstration of the highest sort, as we do here. And therefore since having three is in a triangle not through another supposit, yet it is in isosceles or in figure through another supposit because <it is in them> through triangle, it will not be demonstrated either of figure or of isosceles but of triangle. But if ‘first attribute’ is taken <to be> that attribute which is not in its subject by the mediation of another attribute, such a first attribute is never concluded in a demonstration, though it can be a middle for demonstrating subsequent attributes

Moreover, it is clear in this way that such an attribute is never concluded. Because if such an attribute were demonstrated, it would not be demonstrated through a preceding attribute, because, *ex hypothesi*, no attribute precedes it. Nor could it be demonstrated through an accident *per accidens*, because such <attributes>, as was shown earlier, are of no use in demonstration. Therefore,

sequentes eam, aut per ipsam, vel per subiectum, vel per esse actuale subiecti, vel per esse essentiae subiecti vel per quiditatem eius. Per passiones sequentes non, quia per quae demonstratur aliquid debent esse causae eius quod demonstratur, passiones autem sequentes numquam sunt causae passionis primae, sed e converso. Nec per se ipsam nec per subiectum, quia, si per se ipsam demonstraretur non differret medium a maiori extremitate, et tunc idem esset conclusio quam minor propositio. Per subiectum non, quia tunc idem esset medium quam minor extremitas, et tunc non differret conclusio a maiori propositione. Sed quae repugnant syllogismo, repugnant demonstrationi. Cum igitur hoc in demonstratio nisi conclusio differat a qualibet praemissarum. Item non poterit per esse actuale demonstrari. Nam ut probatum fuit superius, esse actuale in nulla demonstratione potest esse medium, quia directe respicit accidentia per accidens quorum non est demonstratio ut ostensum fuit. Si ergo demonstrabitur, vel demonstrabitur per esse essentiae vel per quiditatem subiecti. Quod autem per quiditatem subiecti demonstrari non posset, sic patet, quia secundum Philosophum augentur demonstrationes non per media, immo debet esse proportionalitas tanta inter medium et passionem conclusam, quod nunquam debet esse unum medium ad plures conclusiones, si debet esse demonstratio potissima, nec plura media ad unam conclusionem. Cum igitur per quiditatem subiecti demonstraretur esse actuale eius, non igitur prima passio per quiditatem demonstrari poterit, quia tunc unum esset medium ad conclusiones plures. Quod si diceretur, quod ista plura non sunt eiusdem generis vel coordinationis, hoc non minuit dubitationem sed auget. Nam quanto

if it will be demonstrated, it will be demonstrated either through attributes subsequent to it, or through itself, or through the subject, or through the actual being of the subject, or through the being of the essence of the subject, or through the quiddity of it [i.e. of the subject]. Not through subsequent attributes, because those through which something is demonstrated ought to be the cause of that which is demonstrated. Yet subsequent attributes are never the causes of first attributes, but rather conversely. Neither through itself *per se* nor through the subject, because if it were demonstrated through itself *per se*, the middle would not differ from the extreme of the major premise, and then the conclusion would be the same as the minor proposition. Not through the subject, because then the middle would be the same as the minor extreme, and then the conclusion would not differ from the major proposition. But that which is repugnant to syllogism, is repugnant to demonstration. Therefore, since this is necessary in a syllogism, that the conclusion is different from the premises, there will not be a demonstration unless the conclusion differs from each of the premises. Similarly it will not be demonstrated through actual being. For, as was proved above, actual being cannot be a middle in a demonstration, because it directly concerns accidents *per accidens*, of which there is not demonstration, as was pointed out. Therefore, if it will be demonstrated, it will be demonstrated either through the being of the essence <of the subject> or through the quiddity of the subject. Yet that it cannot be demonstrated through the quiddity of the subject is shown in this way, because, according to Aristotle, demonstrations are not increased through a middle - indeed there ought to be proportionality between the middle and the concluded attribute, to the extent that

magis diversa sunt, tanto unum medium poterit minus esse proportionale eis. Nam ista ratio ex proportionalitate medii ad conclusa processit.

2.25 Potest adhuc adduci secunda ratio. Ad cuius evidentiam sciendum quod medium in demonstratione, ad hoc quod demonstratio potissima sit, dicitur esse directe medium inter passionem concludentem et subiectum. Et ideo in tali medio dupliciter potest attendi immediatio, vel ex parte subiecti, vel ex parte passionis. Et licet immediatio ex parte subiecti non semper in demonstratione existat, quia non semper demonstratio est ex primis et veris, immediatio tamen respectu passionis conclusae semper est ibi, quia demonstratio secundum quod hic de demonstratione loquimur semper est per causas remotas est demonstratio quia. Cum igitur immediate a quidditate fluat esse, nulla proprietas per quidditatem tamquam per causam immediatam demonstrabitur, loquendo de immediatione simpliciter, quia forte aliquis immediationis modus ibi conspicitur.

there never ought to be one middle for many conclusions, if it is a demonstration of the highest sort, nor many middles for one conclusion. Therefore since the actual being of the subject is demonstrated through the quiddity of the subject, therefore the first attribute will not be demonstrated through quiddity, because then there would be middle for many conclusions. If it were said that those many <conclusions> are not of the same genus or of coordinate genera, this does not lessen the doubt but increases it. For however much they are diverse, to that degree one middle will be able to be less proportional to them. For that account proceeds from the proportionality of the middle to the conclusion.

Still a second argument can be given. For the evidence of which it must be known that the middle in a demonstration, speaking here about a demonstration of the highest sort, is said to be a middle directly between the concluding attribute and the subject. And therefore in such a middle immediacy can be achieved in two ways, either on the part of the subject, or on the part of the attribute. And though immediacy on the part of the subject does not always exist in a demonstration, because a demonstration is not always from <those things which are> first and true, yet immediacy in respect to a conclusive attribute always is there, because a demonstration (according to the way we speak of a demonstration here) is always through proximate and immediate causes, because demonstration through remote causes is a factual demonstration [i.e. a demonstration *quia*]. Therefore since being flows immediately from quiddity, no properties will be demonstrated through quiddity as through an immediate

2.26 Adducamus etiam ad hoc tertiam rationem et quartam, si volumus, quia hoc in quaestione maxime videtur facere dubium. Erit igitur ratio tertia, quod medium debet differre a subiecto et passione propter rationes praetactas, quia si hoc non esset, conclusio non differret a qualibet praemissarum. Cum igitur definitio subiecti quodammodo sit idem cum subiecto, in tali demonstratione petitur principium.

2.27 Praeterea: In demonstratione potissima omnia debent recte correspondere. Et ideo cum per primam passionem ostenditur secunda passio de subiecto, dicimus istam passionem recte habere rationem medii, quia recte est medium inter passionem et subiectum. Sed quidditas subiecti non recte est medium inter subiectum et aliquam passionem, cum omnia praecedat.

2.28 Quod si talem syllogismum sic constitutum, in quo passio prima per quidditatem ostenderetur, penitus a demonstratione deficientem, vellet aliquis sic deficientem a demonstratione appellare demonstrationem, quasi positionem defendens, discordia est in verbis et laboramus in aequivoco. Et quia nomina sunt ad placitum, sicut appellant eam demonstrationem, sic possunt eam appellare pedem caprae.

cause (speaking of immediacy *simpliciter*, because perhaps someone noticed the mode of immediacy there).

Also we could draw to this a third reason and a fourth, if we want, because this seems most greatly to produce a doubt in the question. Therefore there will be a third reason, that the middle ought to differ from the subject and from the attribute on account of the reasons previously given. Because, if it were not <to differ>, the conclusion would not differ from the premises. Therefore, since the definition of the subject in a certain manner is the same as the subject, one would beg the question in such a demonstration.

Furthermore, in a demonstration of the highest sort, everything ought to correspond correctly. And therefore since a second attribute is attributed to the subject through a first attribute, we say that attribute to correctly have the character of a middle, because a middle is correctly between an attribute and a subject. But the quiddity of a subject is not a middle between the subject and some attribute, since it precedes everything.

If someone wants to call a syllogism having been constructed, in which a first attribute were attributed through a quiddity, which falls entirely short of demonstration, a demonstration, as if defending his position, there is discord in <his> words and we labor in equivocation. And because names are conventional, just as they call <that syllogism> demonstration, so too they can call a foot a goat.

- 2.29 Patet igitur quod prima passio indemonstrabilis existit. Therefore it is clear that the existence of the first attribute is indemonstrable.
- <Quod definitio subiecti non possit esse medium in demonstratione> <That the definition of the subject cannot be the middle in a demonstration>
- 3.00 Quod autem definitio subiecti non possit esse medium in demonstratione hoc viso sic ostenditur That the definition of a subject cannot be a middle in demonstration can be shown in this way.
- 3.01 Nam si definitio subiecti demonstraret aliquam passionem, vel esset medium ad demonstrandum passionem primam vel alias. Non primam, quia ut ostensum est illa est indemonstrabilis. Quod autem non possit esse medium ad demonstrandum alias passiones quadrupliciter ostenditur. Nam si hoc esset, demonstratio non esset ex primis et immediatis et tolleretur proportionalitas inter medium et conclusionem et non roboraretur per dignitatem quaelibet praemissarum. Et sic periret ordo, qui in demonstratione conspicitur. For if the definition of a subject were to demonstrate some attribute, either it will be a middle for demonstrating the first attribute or others. Not the first, because, as we have shown, that is indemonstrable. Moreover, that it cannot be a middle for demonstrating other attributes is shown in four ways. For if it were, demonstration would not be from <things which are> first and immediate, and it would destroy proportionality between the middle and the conclusion, and each of the premises would not be strengthened through an axiom. And so the order which is glimpsed in demonstration would come to nothing.
- 3.02 Primum sic patet. Nam quidditas subiecti virtualiter continet omnes passiones. Nam sicut in arte virtualiter quasi in quadam communi potentia continentur omnia quae ex arte sunt possible ad procedendum, ita in quidditate subiecti quasi in quadam communi causa continentur virtualiter singulae passiones. Et ideo ex definitione subiecti probare passiones de subiecto non est demonstrare ex propriis. The first is clear in this way. For the quiddity of a subject virtually contains every attribute <of that subject>. For just as in art all things which could proceed from art are virtually contained <in it> as in a certain common power, so too in the quiddity of a subject every single attribute is virtually contained as in a certain common cause. And therefore from the definition of a subject there is no demonstration from things proper to a subject to prove an attribute of <that> subject.
- 3.03 Item, non esset demonstratio ex immediatis, quia secundae passiones huiusmodi proportionalitatem Also, there would be no demonstration from immediates, because second attributes do not flow immediately from

dicebatur, quod augebantur demonstrationes non per media, quia non erat unum medium conclusionem plurium nec plura unius, sed si definitio subiecti demonstraret passiones sequentes, esset unum medium ad conclusiones plures.

3.04 Item, non esset medium proportionale conclusioni, quia propter huiusmodi proportionalitatem dicebatur, quod augebantur demonstrationes non per media, quia non erat unum medium conclusionem plurium nec plura unius, sed si definitio subiecti demonstraret passiones sequentes, esset unum medium ad conclusiones plures.

3.05 Item quarto, tolleretur ordo demonstrationis qui habet esse ex eo quod quaelibet praemissarum in se et in comparatione ad conclusionem roboratur per aliquam dignitatem. Nam si dignitates ipsae roborantur per illud principium ‘de quolibet affirmatio vel negatio’, ut est tactum, quia propositiones quae secundum substantiam ingrediuntur demonstrationem sunt inferiores dignitatibus, quaelibet earum per dictum principium sive per aliam dignitatem roborari debet. Sed si definitio subiecti esset in demonstratione medium, ad roborationem minoris non se extenderet aliqua dignitas. Quod si diceretur immo, quia quando definitio subiecti de ipso subiecto praedicatur, roboratur per illud principium ‘de quolibet affirmatio vel negatio’, dicendum quod huiusmodi roboratio est praeter veritatem. Nam huiusmodi roboratio est solum secundum illationem et non secundum causalitatem. Nam principium praetactum, licet inferat naturas proprias inesse rebus

the quiddity, that is, the nature of a subject, since first attributes do not flow immediately from quiddity, though they flow immediately from the supposit, in which the first attribute surpasses other attributes, which do not flow immediately from a subject.

Also, the middle would not be proportional to the conclusion, because on account of the proportionality of the sort mentioned, that they did not increase demonstrations through the middle, because there was not one middle for many conclusions nor many middles for one conclusion. But if the definition of a subject demonstrated subsequent attributes, there would be one middle for many conclusions.

Also, fourth, the order of demonstration, which has to be due to the fact that each of the premises in itself and in comparison to the conclusion are increased through some axiom, would be destroyed. For if those axioms are strengthened through this principle - ‘concerning each thing <a true> affirmation or negation’ - as was treated <earlier>, because propositions which according to substance are present in demonstration are inferior to axioms, each of these ought to be strengthened through a principle *dictum* or through some axiom. But if the definition of a subject were a middle in a demonstration, some axiom would not extend itself to strengthen a lesser <proposition, which can be the premise in a demonstration>. If it were said <that it was strengthened> indeed, because when the definition of a subject is predicated of that subject, it is strengthened through that principle ‘concerning each thing <a true> affirmation or negation,’ it must be said that strength of this sort is

singulis, non tamen naturarum in rebus est causa, immo magis e converso: a natura rerum id principium fundamentum habet, ut patet per Philosophum IV Metaphysicae: licet sit ostendere illud principium, non sit ipsum per demonstrationem concludere nec ratione probare ipsum. Et ista ratio universalis videtur.

- 3.06 Possumus etiam adhuc adducere rationes praetactas, scilicet quod definitio subiecti non habet recte rationem medii, quia ibi principium peteretur.

<Cum definitio dicatur medium in demonstratione>

- 3.07 Cum ergo definitio medium in demonstratione dicatur a Philosopho, cum non sit definitio subiecti medium in demonstratione, erit definitio passionis. Sed passionis est duplex definitio, quaedam scilicet dicens quid et quaedam dicens propter quid. Non erit in demonstratione medium definitio passionis dicens quid, quia illa per demonstrationem concluditur. Erit igitur definitio dicens propter quid passionis medium in demonstratione.

- 3.08 Ad quod bene intelligendum notandum, quod passio praecedens immediate aliam passionem est medium ad demonstrandum passionem illam. Ista passio praecedens

beyond truth. For strength of this sort is only according to logical relation and not according to causality. For the principle treated earlier, though it infers that proper natures are in singular things, yet it is not the cause of natures in things, indeed more so conversely. From the natures of things the principle has its foundation, as Aristotle makes clear in the fourth book of the Metaphysics: though that principle is shown, it is not concluded through demonstration nor proved by reason. And that account is universally clear.

We are even able to provide reasons treated earlier, namely, that the definition of a subject does not have the correct account of a middle, because there a question would be begged.

<How a middle in a demonstration is called a definition>

Therefore, since the middle in a demonstration is called a definition by Aristotle, given that the middle in a demonstration is not the definition of a subject, it will be a definition of an attribute. But the definition of an attribute is of two sorts, namely, a certain one expressing a *quid* and a certain one expressing a *propter quid*. The definition of an attribute expressing a *quid* will not be a middle in a demonstration, because that is concluded through demonstration. Therefore the middle in a demonstration will be the definition of an attribute expressing a *propter quid*.

To understand that well, it must be noted that an attribute immediately preceding another attribute is the middle for demonstrating that attribute. That preceding attribute is

est propter quid passionis sequentis, quia est causa quare sequens passio subiecto insit.

3.09 Item, ista passio potest dici definitio, quod dupliciter potest intelligi. Uno modo sic quod dicatur passio praecedens definitio passionis sequentis. Nam aliter habent accidentia quidditatem et aliter substantiae. Nam substantiae habent accidentia quidditatem non per additamenta, et ideo quidquid non est de essentia substantiae non est definitionis substantiae. Sed cum passiones habent quidditatem per additamenta, ideo quod non est de essentia passionis potest dici quod-quid-est passionis, et ideo causa passionis potest dici definitio eius dicens propter quid ipsius, secundum quod dicimus, quod interpositio terrae est definitio dicens propter quid eclipsis. Et per istum modum dicere possumus quod habere angulum extrinsecum est definitio dicens propter quid eius quod est habere tres. Et ut sic ad unum dicere: semper passio praecedens, quae est causa passionis sequentis, potest dici definitio propter quid ipsius.

3.10 Advertendum tamen quod quia definitio est sermo habens partes, talis passio quae ponitur ut medium alterius passionis non debet uno nomine proferri tale medium, sed nominibus pluribus et per circumlocutionem ipsa passio quae habet rationem medii pronuntiari debet. Quod si bene advertamus habemus intellectum ad secundam expositionem, ut scilicet loco primae passionis accipiamus definitionem ipsius. Et tunc ista definitio dicit solum propter quid passionis

the *propter quid* of the subsequent attribute, because it is the cause whereby the subsequent attribute is in a subject.

Also, that attribute can be called a definition, because it can be understood in two ways. In one way so that a preceding attribute is called the definition of the subsequent attribute. For accidents have a quiddity in one way and substances in another. For substances have quiddity not through some addition, and therefore whatever is not of the essence of a substance is not of the definition of <that> substance. But since attributes have quiddity through some addition, therefore that which is not of the essence of an attribute can be called the “what it is” of an attribute. And therefore the cause of an attribute can be called the definition of it, speaking in terms of the *propter quid* of it, according to which we say that the interposition of the earth is the definition expressing the *propter quid* of an eclipse. And through this mode we can say that having extrinsic angles is the definition expressing the *propter quid* of that which has three. And as it was said in the first <response>, the preceding attribute, which is the cause of the subsequent attribute, can always be called the definition *propter quid* of it.

Yet that must be considered again, because a definition is a verbal expression having parts, such an attribute which is posited as a middle of another attribute ought not to appear as such a middle in one name, but that attribute which has the account of a middle ought to be pronounced in many names and through circumlocution. If we well consider that again, we have a thought to a second exposition, as, namely, we would take the definition of it in the place of the first. And then that definition expresses

sequentis et non dicet quid ipsius nisi forte definitione causali, licet dicat quid primae.

3.11 Dicendum igitur quod medium in demonstratione est definitio dicens propter quid passionis conclusae sive passionis sequentis, dicit tamen quid primae passionis sive passionis per quam fit conclusio.

3.12 Non igitur directe et per se loquendo est definitio subiecti medium immediatum sive immediata causa alicuius passionis, quae per demonstrationem concludatur.

<Utrum definitio subiecti concurrat ad medium>

3.13 Quod si tamen quaeratur, utrum ad tale medium aliquo modo concurrat definitio subiecti, non quasi causa immediata et directe medium, sed propter aliquas conditiones superadditas, dicendum quod sic. Una conditio propter quam concurrat ibi definitio subiecti vel saltem aliqua notificatio ipsius est, quia definitio dicens quid primae passionis et propter quid secundae, quae est medium in demonstratione, cum sit definitio proprietatis, erit definitio per additamenta, et ita subiectum vel aliquid loco subiecti ponitur in definitione illa. Subiectum ibi poni non potest, quia tunc in praemissis poneretur subiectum, quod non pertinet ad modum syllogisticum. Et ideo aliqua definitio subiecti vel aliqua notificatio ibi concurrat.

only the *propter quid* of the subsequent attribute, and it does not express the *quid* of it [i.e. the preceding attribute] unless perhaps by a causal definition, it might express the *quid* of the first.

Therefore, it must be said that a middle in demonstration is a definition expressing the *propter quid* of a concluded attribute, that is, the subsequent attribute. Yet it expresses the *quid* of the first attribute, that is, <the *quid*> of the attribute through which the conclusion comes about.

Therefore, speaking *per se* and directly, the definition of a subject is not an immediate middle or an immediate cause of some attribute which is concluded through some demonstration.

<Whether the definition of a subject concurs with a middle>

Yet if it is asked whether the definition of a subject concurs in some way to such a middle, not as an immediate cause or a middle directly, but on account of some conditions added on top of it, it must be said that this is so. One condition on account of which the definition of a subject (or at least some notion of it) concurs, is because the definition expressing the *quid* of a first attribute and the *propter quid* of a second, which is the middle in a demonstration since it is a definition of properties, will be a definition through something added in addition. And so the subject or something in the place of the subject will be posited in that definition. The subject cannot be posited there, because then the subject would be placed in the premises, which does not pertain to the mode of a

- 3.14 Secunda causa huius concursus esse potest habilior combinatio praemissarum. Plures autem causas assignare huius concursus prudentis iudicio relinquatur.
- 3.15 Patet igitur quid sit in demonstratione medium, quoniam non est definitio subiecti, licet aliquibus causis concurrentibus definitio subiecti vel aliqua eius notificatio requiratur.
- <Ad rationes>
- 4.00 Ad primum argumentum in oppositum, dicendum quod quaelibet propositiones per se et necessariae faciunt demonstrationem. Unde cum dicitur ‘omne animal est corpus, omnis homo est animal, ergo omnis homo est corpus’, iste syllogismus non est demonstratio, licet sit ex propositionibus per se et necessariis.
- 4.01 Ad secundam dicendum quod non omnis causa est medium in demonstratione. Ideo syllogismus per quamlibet causam non est demonstratio.
- 4.02 Ad tertiam dicendum quod ille syllogismus non esset sophisticus, reduceretur tamen ad dialecticum in quantum deficeret a demonstratione, sicut syllogismus prius factus ad syllogismum dialecticum reducitur, quia non est demonstratio.
- syllogism. And therefore some definition of the subject or some notion <of it> will concur there.
- The combination of the premises can be had more so by the second cause of this concurrence.⁴ Yet the judgment of prudence relinquishes to provide many causes of this concurrence.
- Therefore it is clear what the middle is in a demonstration, since it is not the definition of a subject, though the definition of a subject or some notion of it is required for some concurrent causes.
- <To the reasons to the contrary>
- To the first argument, in opposition it must be said that not all necessary and *per se* propositions produces a demonstration. Hence when it is said ‘every animal is a body, every human is an animal, therefore every human is a body’, that syllogism is not a demonstration, though it is from *per se* and necessary propositions.
- To the second, it must be said that not every cause is a middle in a demonstration. Therefore a syllogism through each cause is not a demonstration
- To the third it must be said that that syllogism is not sophistic, yet it would be traced back to a dialectical <syllogism> insofar as it falls short of demonstration, just as the syllogism made in the first <response> is traced

⁴ i.e. the suggestion that a notion of the subject is a constituent of the definition of the first attribute, rather than the definition of the subject.

- 4.03 Ad quartum dicendum quod licet definitio subiecti sit in demonstratione principium, quia in ipsa tamquam in universali causa et communi principio passionis singulae continentur, non tamen dicitur demonstrationis medium propter causas iam dictas.
- 4.04 Ad quintam dicendum quod definitio dicens propter quid passionis est medium in demonstratione, illa tamen definitio quae dicit propter quid passionis sequentis dicit quid passionis praecedentis, non tamen quid subiecti, licet quid subiecti ibi concurrat propter causas praetactas.

back to a dialectical syllogism, because it is not a demonstration.

To the fourth, it must be said that though the definition of a subject is in a demonstration of [as?] an origin, because all of the attributes are contained in it as in a universal cause and a common principle, yet it is not called a middle of a demonstration, on account of causes mentioned now.

To the fifth, it must be said that a definition expressing the *propter quid* of an attribute is a middle in a demonstration, yet that definition which expresses the *propter quid* of the subsequent attribute expresses the *quid* of the preceding attribute, yet not the *quid* of the subject, though the *quid* of the subject concurs here, on account of the causes treated earlier.