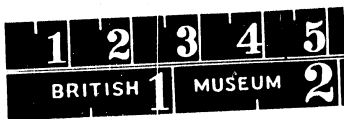


Blundeville (F.)
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THE ART OF F. LOGIKE. C.

Plainely taught in the English tongue,
by M. *Blundeville* of Newton Flotman in Norfolk,
as well according to the doctrine of Aristotle,
as of all other moderne and best ac-
counted Authors thereof.

*A very necessarie Booke for all young stu-
dents in any profession to find out thereby the truth in a-
ny doubtfull speech, but specially for such zealous Mi-
nisters as haue not beene brought vp in any Vniuersity,
and yet are desirous to know how to defend
by sound argumentes the true Christian do-
ctrine, against all subtill Sophisters,
and cauelling Schismatikes, &c
how to confute their false Sil-
logismes, & captious
arguments.* C

F.



LONDON
Imprinted by *John Widdet*, and are to be sold at
Paules Wharfe, at the signe of the
Crosse Keyes. 1599.



The Contents of the Chapters contained in euery one of the sixe Bookes or partes of this Treatise.

The contentes of the first booke, which treating of a question, and of wordes both singular and vniuersall, containeth 23. Chapters.



IN the first Chapter is defined what Logike is, of what partes it consisteth, and whereto such partes do serue.

Item, which be the two chiefe offices of Logike, and wherein Logike is chiefly occupied, that is, in discussing of questions, which is done by Definition, Diuision, & Argumentation.

The second Chapter sheweth what a question is, and that euery question is eyther simple or compoune, also of what partes a compoune question consisteth (that is to say) of two partes, called the subject and the Predicate, and what those tearmes do signifie. Item because all questions doe consist of wordes eyther simple or compoune, in this chapter are set downe three principall diuisions of wordes. First which be simple, and which be compoune. Secondly which be of the first intention, and which be of the second intention. and thirdly which be singular, called in Latine Indiuidua, and which be vniuersall.

The third Chapter sheweth what Indiuiduum is, and all the foure kindes thereof, (that is) Indiuiduum determinatum, Indiuiduum demonstratiuum, Indiuiduum vagū, and Indiuiduum ex hypothesi, (that is to say) by supposition.

The fourth chapter treateth of vniuersall wordes, whereof some are called Predicables, and some Predicaments, and first of the five predicables, (that is) Genus, Species, Differentia, Proprium, and Accidens, & how euery one is diuided, and to what vses they serue, but first of Species, and then of the rest.

The fift Chapter treateth of Predication, and of the diuers kindes thereof.

The sixth Chapter treateth of the ten Predicaments in generall, which be these, Substantia, Quantitas, Qualitas, Relatio, Actio, Passio, Vbi, Quando, Situm est, & Habere.

The seuenth Chapter treateth of the forepredicaments, and sheweth which they be, and to what end they serue.

The Contents of the Booke.

- 8 The eight Chapter treateth of the ten Predicamentes in Speciall, shewing what Substancie is, and how many kindes there bee, and what properties it hath, whereto is added the Table of Substancie.
- 9 The ninth Chapter treateth of quantity, both Whole and broken, called in latine quantitas continua, & discretus, and of the diuerse kindes of both quantities, and what properties quantitie hath, whereto is added a Table of quantitie.
- 10 The tenth Chapter treateth of quality, and of the fower kindes thereof, & in this Chapter are defined the 5. intellectuall habites, that is, Intelligence, Science, Prudence, Art, and Sapience; it sheweth also what properties qualitie hath, and to euery of the fower kindes of quality is added his proper Table.
- 11 The eleuenth Chapter treateth of Relation and of the kindes thereof, together with a Table shewing euery kinde, and finally what properties Relation hath.
- 12 The twelfth Chapter sheweth what action is, and how it is deniued, & what properties doe belong thereunto.
- 13 The thirteenth Chapter sheweth what passion is, and What properties doe belong thereunto.
- 14 The 14. Chapter sheweth what the Predicament Vbi is, and how it is deniued, and what properties do belong to that Predicament.
- 15 The 15. Chapter sheweth what the Predicament Quando is, how it is deniued, and what properties belong thereunto.
- 16 The sixteenth Chapter sheweth what the predicament Situm esse is, what it comprehendeth, also what descriptions are to be fetched from this predicament, and what things are said to alter their situation, and finally what propertie it hath, to which predicament is added a briefe Table.
- 17 The seuenteenth Chapter sheweth the diuers significations of the predicament Habere, also what wordes it comprehendeth, with a Table shewing the same, and finally what properties it hath.
- 18 The eighteenth Chapter briefly sheweth the manifolde vses of the aforesaid ten predicamentes.
- 19 The nineteenth Chapter treateth of the Postpredicaments, which are in number five, that is, Oppositio, ante & post, simul, motus, & habere, and first of Opposition, and how many things are said to agree together, to bee diuers, or to bee contrarie one to another.
- 20 The twentieth Chapter sheweth how many wayes things are said to bee one before or after another, and to what ende that postpredicament serueth.
- 21 The 21. Chapter treateth of the postpredicamento Simul, shewing how many wayes things are said to be together.

The

The Contents of the Booke.

- 22 The 22. Chapter treateth of the Postpredicament Motus shewing how many kindes of mouinges there be.
- 23 The 23. Chapter sheweth how many waies the worde Habere is to be vnderstood.

The Contents of the second booke, which treating of Definition, and of Diuision, and of Methode, containeth five Chapters.

The first Chapter treateth of Definition, and sheweth how many kindes of definitions there be.
 The second Chapter sheweth how many precepts are to be obserued to make a true definition.
 The thirde Chapter treateth of diuision, and of the diuers kindes thereof.
 The fourth Chapter sheweth how many preceptes are to be obserued to make a true Diuision.
 The fift Chapter treateth of Methode, and of the three kindes thereof, that is, Compositiue, resolutive, and diuisiue, and what Methode is to bee obserued in handling eyther of a simple, or of a Compounde question.

The Contents of the third Booke, which treating of a Proposition containeth 11. Chapters.

The first Chapter treateth of a Proposition, shewing of what parts it consisteth, and how many wayes it is diuided, and what questions are to be asked of a Categoricalle or simple proposition, being deniued according to substance, qualitie, and quantitie.
 The second Chapter treateth in general of the three properties belonging to a simple Proposition, that is, Opposition, Equialencie, & conuersion.
 The thirde Chapter treateth of the lawes and conditions belonging to the foure Opposites, and also of the threefold matter of a proposition, that is, naturall, casuall and remote, and then of Opposition, shewing how many wayes simple propositions are said to bee opposite one to another.
 The fourth Chapter treateth of the Equialencie of simple propositions.
 The fift Chapter treateth of the conuersion of simple propositions, shewing how manifold it is.

The Contents of this Booke.

The sixt Chapter treateth of a modall proposition, and of the two kinds thereof, that is to say, Coniunct and Disiunct.

The seuenth Chapter briefly treateth of the Opposition, Equiuallency, and conuersion belonging to Modall propositions.

The eight Chapter treateth of Opposition belonging to Modall Propositions.

The ninth Chapter treateth of Equiuallency and Conuersion of Modall propositions.

The 10. Chapter treateth of an Hypotheticall or compound Proposition, shewing how it is deuided, that is, into a conditionall, copulatiue, and disiunctiue, and of what partes it consisteth, and also what thinges are to be considered in a compound proposition.

The 11. Chapter treateth of the truth and falsehood of all the 3. kinds of compound propositions, first of the conditionall, secondly of Copulatiue, and thirdly of the Disiunctiue.

The contents of the fourth booke, which treating of logicall places containeth 6. Chapters.

The first Chapter sheweth what a place is, and that it is twofold, that is, eyther of persons or of things. Againe the places of things be eyther artificiall or inartificiall, and the artificiall places of thinges are eyther inward, outward or meane: and the inartificiall places of thinges are 6. in number, comprehended vnder the place of authoritie, as the Table of places set downe in the beginning of this Chapter doth plainly shew. Also this Chapter sheweth to what end such manifold diuisions of the places serueth, & how places are diuided according to the schoolmen, that is, into Maxims, and difference of Maxims.

The second Chapter setteth downe examples of all the places belonging to persons.

The third Chapter treateth of the places of things, and first of artificiall places, whereof some be inward, some outward, and some meane: and first of inward places, whereof some belong to the substance of things, and some doe accompany the substance, giuing examples of euery place, together with their proper Maxims or generall rules belonging to the same and how arguments are to be fetched from euery such place eyther affirmatiuely or negatiuely, or both wayes.

The fourth Chapter treateth of outward places, shewing how arguments are to be fetched from euery such place, together with the generall rules or Maxims belonging to the same.

The fift treateth of meane places, giuing examples, and shewing how arguments are to be fetched from such places, together with the rules belonging thereunto.

The

The Contents of the Booke.

The 6. Chapter treateth of the fixe inartificiall places comprehended vnder the place of authority, whereunto is added a table of authoritie. And in this Chapter is not onely declared to what end the knowledge of all the foresaid places do serue, but also it sheweth by one example how to vse them when neede is, eyther to proue or to dilate any theame, which example is taken out of Hunneus, The theame whereof is thus: Man ought to embrace vertue.

The Contentes of the fift booke, which treating of argumentation, and of demonstration, containeth 32. Chapters.

The first Chapter treateth of Argumentation, and of the foure kinds, thereof in generall, and also of the first principles of a Sillogisme, as well materiall as regular.

The second Chapter sheweth what a Sillogisme is, how it is diuided, and of what parts it consisteth (that is) of matter and forme.

The third Chapter sheweth what that matter and forme is, and that the matter consisteth of three tearmes and three propositions, and the forme to consist of figure and Moode. Also by what meanes the meane tearme or poofe is to be found out. And finally it defineth the three propositions, whereof a simple Sillogisme consisteth, shewing how they are named, and how to frame the same to make a true Sillogisme.

The fourth Chapter sheweth what Figure or Moode is, whereof the forme of a Sillogisme consisteth, and how many such figures there bee, and when a Sillogisme is said to conclude directly or indirectly: it sheweth also how many moodes doe belong to euery figure, and how they are named. And finally what the foure vowels A. e. i. o. do signifie in any such moode or vocable of art.

The fift Chapter setteth downe certaine rules as well general as speciall belonging to the three figures.

The sixt Chapter giueth examples of the foure perfect moodes belonging to the first Figure.

The seuenth Chapter giueth examples of the fve vnperfect Moodes, belonging to the first Figure.

The eyght Chapter giueth examples of foure Moodes belonging to the second Figure.

The 9. Chapter giueth examples of the fixe Moodes belonging to the third Figure.

The 10. Chapter treateth of a Sillogisme expository, shewing why it is so called.

The Contents of this Booke.

The 11. Chapter answereth to an obiection concerning the three figures and Moodes belonging to the same.

The 12. Chapter treateth of Reduction, and of the kindes thereof, & also of the signification of certaine Consonants in the wordes of art serving to Reduction.

The 13. Chapter treateth of Reduction by impossibilitie, shewing vnto which of the perfect Moodes euery vnperfect Moode is to bee reduced by impossibility.

The 14. Chapter treateth of a Sillogisme made in oblique cases, and of the 6. habilities, and three defects of a Sillogisme.

The 15. Chapter treateth of a compound Sillogisme, shewing that it is threefold, that is, Conditionall, Copulative, and Disiunctive, and that the truth of a compound Sillogisme is to bee found out by reducing the same into a simple Sillogisme.

The 16. Chapter treateth of a Consequent, shewing what it is, and of how many parts it consisteth, and how it is diuided, also by what meanes, and by what rules the goodnesse of a Consequent is to bee knowne.

The 17. Chapter treateth of a Sillogisme demonstratiue, shewing what it is, and of what manner of propositions it consisteth, which propositions are here defined, it sheweth also the three properties belonging to the predicate and subiect of a demonstratiue proposition, and also sheweth what definitions Aristotle maketh of demonstration, and it describeth what science is, and thereby giueth example of a Sillogisme demonstratiue.

The 18. Chapter treateth of the three things, whereon dependeth the certainty of mans knowledge, that is, vniuersall experience, principles, and mans naturall knowledge in iudging of Consequents, shewing how principles are defined by Aristotle, and how they are deuised by the Schoolemen.

The 19. Chapter sheweth that the schoolemen do deuide Demonstration into two kindes, that is, eyther perfect or vnperfect, wherein is declared what is to be obserued in eyther kind of demonstration.

The 20. Chapter treateth of science, opinion, ignorance, wisdome, and the foure scienciall questions.

The 21. Chapter treateth of a Sillogisme dialecticall, shewing what it is, and of what kindes of propositions it is made, and what things are said to be probable: Again it sheweth how the Schoolemen doe make the matter, whereof a Sillogisme consisteth to be twofold, that is, *Materia remota*, and *materia propinqua*, and what each matter containeth. And finally, it sheweth the difference betwixt a dialecticall proposition, a probleme, and a position.

The

The Contents of this Booke.

The 12. Chapter treateth of a sophisticall Sillogisme, shewing what it is, and that it may be false three manner of wayes. Also in this Chapter is declared another kind of false Sillogisme, called Sillogismus falsigraphus.

The 23. Chapter treateth of Induction, shewing what it is, and what is to be obserued therein, and that it is twofold, that is, perfect and vnperfect.

The 24. Chapter treateth of an Enthimeme, shewing what it is, of what partes it consisteth, and from whence that kinde of argument is to be fetched.

The 25. Chapter treateth of an example, shewing what it is, & wherein it differeth from all the other formes of arguments, and to what ende it serueth, and what is to be obserued in reasoning thereby. And finally from what places such argument is to be fetched.

The 26. Chapter treateth of an argument called Sorites, shewing how it proceedeth, and wherein it differeth from the argument of the Rhetoricians called Gradatio.

The 27. Chapter treateth of diuers other kinds of captious arguments, and first of Dilemma, shewing of what parts it consisteth, and how many kinds of captious arguments it comprehendeth, which are these foure, that is, Ceratins or horned arguments, Crocodelites, Affinitations, and Pseudomenons, euery one of which is here defined, and example given thereof.

The 28. Chapter treateth of an argument called Enumeratio, shewing what it is, and how it is to be confuted.

The 29. Chapter treateth of an argument called Simplex conclusio, shewing what it is.

The 30. Chapter treateth of an argument called Subiectio, shewing what it is, and that it differeth not much from Enumeratio before described.

The 31. Chapter treateth of an argument called Oppositio, made of parts repugnant.

The 32. Chapter treateth of an argument called Violatio, which is more meete to confute then to proue.

The Contents of the 6. Booke, which treating of Confutation containeth sixe Chapters.

The first Chapter sheweth that Confutation is twofolde, whereof the one belongeth to the person, the other to the matter: and that of matter is deuided into two kindes, that is, generall and speciall, and

The Contents of the Booke.

and the generall confutation is done three manner of wayes, that is; eyther by denying the Consequent, by making distinction, or els by instance, any of which three wayes, when it is to be used, is here set downe.

The second Chapter treateth of speciall confutation, shewing how it is done, and what order Aristotle obserueth in treating of special confutation, whose order is briefly here set downe, and first of an blench.

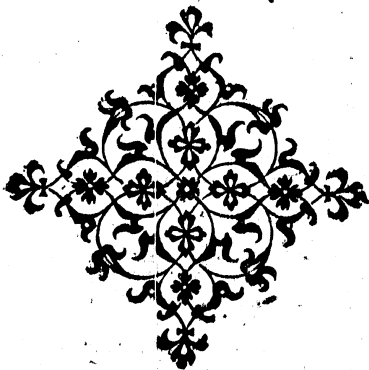
The third Chapter treateth of disputation, and sheweth how manifold it is.

The fourth Chapter sheweth the 5. markes of sophistrie, that is, Reprehensio, Absurdum, Paradoxus, Solecismus, and Nugatio, with their examples.

The fifth Chapter sheweth that there be 13. fallaxes, whereof 6. do consist in wordes, and 7. in things, and first it treateth of the 6. fallaxes consisting in wordes, and sheweth how to confute the same.

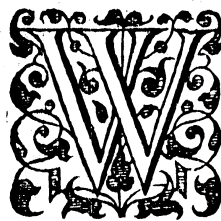
The sixth Chapter treateth of the 7. fallaxes consisting in things, and sheweth by examples how to confute the same.

The



THE
FIRST BOOKE OF
LOGIKE.

¶ Of the Art of Logike, and of the parts and offices thereof. CHAP. I.



What is Logike?

Logike is an Art which teacheth vs to dispute probably on both sides of any matter that is propounded.

Of what & how many parts doth it consist? Of two: that is, Inuention & Iudgement.

Whereto serue these parts?

Inuention findeth out meete matter to proue the thing that yee intend, and Iudgement examineth the matter, whether it be good or not: and then frameth, disposeth, and reduceth the same into due forme of argument.

What is the chiefe end or office of Logike?

The chiefe end or office of Logike is twofold: the one to discusse truth from fallshood in any manner of speech: the other is to teach a compendious way to attayne to any Art or Science: and therefore it is designd of some, to be the Art of artes, and Science of sciences: not for that it teacheth the principles of euery arte or science (for those are to be learned of the Professors of such artes or sciences) but because it sheweth the methode, that is to say, the true order and right way that is to be obserued in seeking to come to the perfect knowledge of any arte or science: of which methodical

2 The First Booke of Logike.

call part in the old friend *Dr. Iacomo Acontio Tridentino* hath written in the Latine tongue a verie proper and profitable treatise: and therefore I minde heere to deale onely with the first office, which is to discusse and to discern truely from falsshood in any speech or question that is propounded.

How is that to be done?

By three speciall instruments, that is, by Definition, Division and Argumentation: whereof wee shall speake hereafter in their proper places: in the meane tyme, because questions are y^e matter wherein Logike is chiefly occupied, we will speak first of a question.

Of a question, and of certain diuisions of words. Chap. 2.



What is a Question?

A Question is a speech whereof some doubt is made and directed to some interrogatorie, as *How, what, or whether*: and such question is either simple or compound.

Which call you Simple, and which Compound?

It is called simple, when the Question consisteth onely of one word, as when I aske what Justice is, or what Fortitude is, and such like: and is to be discusse by defining and diuiding the same. It is called compound, when it consisteth of manie words ioyned together by rules of Grammar, to make some perfect sentence: as when I aske whether it be lawful for christians to make warre vpon the Turkes or not: and such like question, which is to be discusse by arguing and reasoning on both sides: for Definition, Division & Argumentation, as I said before, are the 3. speciall instruments whereby Logike findeth out the truth in any doubtfull matter.

Of what parts doth a compound question consist?

Of two, that is, the subject and the predicate.

What meane you by these words subject and predicate?

The subject is the word or sentence, whereof another word or sentence called the predicate is spoken: as when I say, *Man is a sensible body*: here this word *man* is y^e subject, & sensible body is the predicate: or each of them may containe manie words, as this, *To be learned in the law* requireth a long studie, here to be learned in the law, is the subject, and all the rest is the predicate.

How shall I know in long speeches, and specially being preposited, which is the Subject, and which is the Predicate?

By asking this question *who, or what*: for that which answereth to this question is alwayes the Subject: as in this example, *It were meete to learne my Grammar perfectly before* I entered into my Logike: here if you aske what is meete, you shall finde that to learne my Grammar perfectly, is the Subject, and all the rest

The First booke of Logicke.

3

rest to be y^e predicate. And note that these two words, subject and predicate, are said to be y^e termes, limits, or extreme bounds of a proposition, whereof we shall speake hereafter.

Such euery question doth consist of words, me thinks it were necessary to shew how words are diuided.

Of words the Schoolemen make diuers and manifold diuisions, of which I minde heere to reape but three only, whereof the first is this: Of words some be simple, which they call incomplexa, and some be compounde, which they call complexa. Simple or single words are such as are sole or seuered one from another, not making any sentence, as *man, horse, wolfe*. The compounde are words ioyned or derlie together by rules of Grammar, to make some perfect sentence, as, *Man is a sensible bodie*. And hercof the questions are said to be eyther simple or compounde, as hath bene said before.

What is the second diuision of words.

Of words some be of the first Intention, & some of the second.

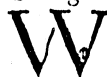
Which are they?

Words of the first Intention are those, whereby any thing is signified or named by the purpose and meaning of the first author: or inustor thereof, in any speech or language whatsoever it be, as y^e beast wheron we commeth ryde is called in english a horse, in latine, Equus, in Italian Cavallo, in French Cheual. Words of the second Intention are termes of Arte, as a *Rowne, Ironrowne, Verbe, or Participle* are termes of Grammar: likewise Genus, Species, Proprium, and such like are termes of Logike.

What is the third diuision of words?

Of words some be called indiuidua, that is to say, particular or rather singular, and some be called vniuersalia, that is to say, vniuersall, common or generall.

Of singular & most particular words called Indiuidua. Cap. 3.



What is Indiuiduum?

Indiuiduum is that which signifyeth but one thing only and can be applied but to one thing only, as this name *John*, or *Robert* signifyeth but one certain man and not manie.

How manie kinde of indiuiduums be there?

Three, that is, indiuiduum determinatum, indiuiduum demonstratum, indiuiduum vagum, and indiuiduum ex hypothesi.

What is indiuiduum determinatum?

Indiuiduum determinatum, that is to say, certain or determined, is the proper name of some one certain thing, whatsoever it be, as *John* or *Thomas* is the proper name of some or one man: again

Bucephalus is the proper name of great Alexander his horse: and London is the proper name of the chiefest citie in England.

What is indiuiduum demonstratiuum?

Indiuiduum demonstratiuum, which is as much to say, as shewing or pointing, is a common word or name toynd with a pronowne demonstratiue, to signifie some one certaine thing onely, as when we say this man, or that horse: and indiuiduums demonstratiue be more ready to signifie particular things, as well in accidents as in substances, then are Indiuidua determinata: for this or that, and such like pronownes, doe point out a thing, as it were with the finger, when proper names often times do faile, yea the pronowne demonstratiue is of such force, as being toynd to the most generall word that is, maketh it Indiuiduum, as well as when it is toynd to the most especiall, for this substance or this bodie is Indiuiduum, as well as this man or that horse.

What is Indiuiduum vagum?

Indiuiduum vagum, that is to say, wandering or vncertaine, is a word betokening some one certaine thing, but not certainly, as when I say, there was a certaine man here to seeke you: by this speeche is meant but one man, & yet vncertaine who it was: and therefore to make the thing more certain, we vse to adde some token or mark, as we read in the Acts of the Apostles, There was a certain man which was halt & lame from his mothers wombe, whome they laide daylie before the gate of the Temple &c. And note that like as we do vse indiuidua, demonstratiua, & determinata, in declaring things either present, or certainly knowne: so in speaking of things absent or vncertainely knowne, wee expresse our myndes oftentimes by indiuidua vaga.

What is indiuiduum ex hypothesi?

Indiuiduum ex hypothesi, that is to say, by supposition is a word which of his owne natural signification being common and vniuersall, is made notwithstanding by supposition a singular word and to signifie but one thing onely: as for example, this word, the Sonne of Marie is a common terme, and yet by supposition is made to signifie none but Christ onely: likewise when we say the Breake poete, we meane none but Homere.

Of words vniuersall or generall.

Chap. 4.

VV

What words are said to be vniuersall or generall?

Those words are said to be vniuersall which are spoken of many things, & is to say, which may be applied

plied to many things, or comprehend many things, as this word animal (which is as much to say as a sensible body) comprehendeth both man, brute beast, fish, fowle, bird, and euery thing els that hath feeling and mouing.

How are such words diuided?

Into predicables and predicaments.

Of the fyue Predicables.

VV

What call you Predicables?

Predicables are certain degrees, or rather petigrees of words that be of one affinitie, shewing which comprehend more, and which comprehend lesse.

How manie such be there?

There be fyue, that is to say, Genus, Species, differentia, Proprium & Accidents: which may be englished thus, generall kinde, speciall kinde, difference, proprietie and accident. But we thinke it best to begin first with species, because it is next to Indiuiduum.

Of the speciall kynde called in Latine, Species.

VV

What is Species?

Species is a speciall kinde, which is spoken of many things, that is to say, it comprehendeth manie things differing onlie in number in asking the question, what the thing is: as when I aske, what is John? it is rightly answered to say, a man: for this word (man) is an vniuersall word comprehending both John, Thomas, Robert, and all other singular men.

How manifold is species?

Twofold: that is, infima & subalterna: infima, that is to say, the lowest or most especiall kynde is that, which comprehendeth many things differing onely in number, and therefore can not be a generall kinde, as man, horse, and such like speciall kindes: species subalterna is that which comprehendeth manie things differing in kinde, and in diuers respects may be both genus and species, as these words, animal or sensible body, bird, fish: for this word bird, in that it comprehendeth diuers kinds of birdes, as a blacke bird, a Maye, a Goldfinche, and many other kinds of birdes, it is a generall kinde: but in respect of these wordes, substance, bodie, or animal, it is but species.

How is species called of the Greekes?

It is called Idea, which is as much to say, as a common shape conceived in the mynde, through some knowledge had before of

one of two individuums hauing that shape: so as after we haue seene one wolfe of two, we heare the shape thereof continually in our myndes, and thereby are able to know a wolfe whensoever we finde him, or if neede be to paint him. But genus extendeth too far, & comprehendeth too many speciall kindes to be so easily painted: and note that such shapes of ideas, are said also to be perpetual.

Why are they said to be perpetual?

Because they continue in the minde, though the things themselves cease to haue any being: as the shape of a horse continueth in our mindes in the cold hart of winter, when there is no horse in deede. And this is the true meaning of Plato touching Ideas, that is, to be perpetuall in the minde, not separate from mans intelligence, as some men sayne: for vniuersalities are alwayes to be comprehended in mans minde, but not individua: which, because they are infinite, there can not be had of them no certaine science or knowledge.

Of the generall kinde called Genus.

VVhat is Genus?

Genus is a generall kind which may be spoken of manye things differing in speciall kinde, in asking the question, what the thing is, as if I aske, what is man or horse? It is rightly answered to say, animal: for this word animal comprehendeth both man, horse, lion, & many other speciall kindes of beastes.

How is it diuided?

Into two, that is, Genus most generall, and genus subalternat.

What is genus most generall?

It is that which in no respect can be species, as these, Substance, Quantity, Quality, and al the rest of the ten predicaments, which be the highest kindes comprehending all other kindes, and are comprehended of none.

What is that which you call subalternat?

It is that which in diuers respects may be both genus & species, as these, animal or sensible body, stone, tree, fish, bird: which being compared to their superiours, as to substance or bodie, be speciall kindes: but if to their inferiours, as this word sensible body being compared to man or horse, or this word stone to a flint or Diamond, or this word tree to an Apple tree or Iuue tree, or this word fish to a Salmon or Pickerell, or this word Bird to a Quays or Goldfinche, and such like, then they be generall kindes. The order of all which kindes, atwell generall as subalternat, as also most especiall, you may see here in the table following, taken out of the predicament of Substance: in the table, Substance is the highest

or most general kind, vnder which are placed the lesse generall or speciall kindes, according as they be in degrees high or lowe, nigh or farre from substance. Wherevpon on each side of the generall kindes are set downe in this table, the differences whereby the said generall kindes are diuided euery one into those inferior kindes which it comprehendeth, and the like table may be made of all the rest of the predicaments.

A Table shewing the order and degrees of generall kindes and especiall kindes, taken out of the predicament of substance.

| Differences. | generall & speciall kindes. | differences. | Examples. |
|--|---|------------------|---|
| with bodie | Substance is eyther | or without body, | an Angell a Spirite. as the soule of a man |
| Compound of the 4. elements, as all naturall bodies and vnaturall. | If with body, it is eyther | or simple, | as the soule of a man separated from the bodie. the 11. heauens. the 4. Elements. |
| Lyuing | Body compound is eyther | or vnliving, | as stones, metalls, liquors. |
| Sensible | Againe the liuing bodie is eyther | or vn sensible | as tree. herbe. |
| Reasonable, as man, | The sensible body called in Latine Animal, is eyther | or vnreasonable | as shrubbe, Fower footed beasts, creeping beasts, fish, fowle, or birde. |
| | The reasonable bodie is man, called in latine homo, which is a most especiall kinde | as | Sociates, Plato, & euery other singular man. |

Of difference called of the Latins *differentia*.

VVhat is difference?

Ans. Difference is that whereby thinges doe differ one from another, or any thing from it selfe.

How many kindes of differences be there?

According to Porphyrius there be three kindes (that is to say) common, proper, and most proper or special, called of the Latins *differentia specifica*.

What call you a common difference?

A common difference is some seperable accident, whereby one thing differeth from another, or from it selfe: as a hott man from a cold, or a man standing from himselfe sitting.

What is proper difference?

A proper difference is some inseperable accident, whereby one thing differeth from another or from it selfe, as the Swanne by whitenes differeth from the Crow, the gray eyed man from another man that hath blacke eyes, or from himselfe, as hauing now an vnumoueable scarre in his face, whereas before hee had none.

What is the most proper difference?

The most proper difference only receiued and allowed of the Logicians, is that which is spoken of many thinges differing in kinde or number, in asking the question what manner of thing any thing is, as this word reasonable or unreasonable: for if I aske the question what manner of thing this man or that man is, as John, Thomas, or Richard, &c. It is rightly answered to say, a reasonable body. Likewise if I aske what manner of thing a houle is, it is truly answered to say an unreasonable body, for these be the most proper and especial differences, whereby men & brute beastes doe differ one from another.

How manifold is the office of a Logickall difference?

Twofold, the one to deuide the generall kinde into his especiall kindes, and the other to constitute or make the selfe same speciall kindes: wherefore such differences are said in diuers respects to be sometimes diuisiue, and sometime constitutiue, yea, & sometime both: as these differences, corporate and incorporate, liuing and vnliving, sensible and insensible, reasonable, & unreasonable, which in that they doe deuide some generall kinde into other kindes, either moze speciall or not so generall, they may be called differences diuisiue: but in that they constitute or make a

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ny speciall kinde, as this difference reasonable being added to a sensible body, maketh the speciall kinde, man: such difference may be well called a difference constitutiue, or rather specificatiue, as the former table of generall kinds and differences, both plainly shew.

What other deuision doe the Schoolemen make of this Logickall difference?

They say that of these differences some do extend further then some, for some may be applyed to many speciall kindes, as liuing, and vnliving, sensible and insensible, and also the differences unreasonable, but the difference reasonable can bee applyed but to one speciall kinde only, which is man.

Of Propertie called in Latine *Proprium*.

VVhat is propertie?

It is a naturall inclination or propertie incident to one especiall kinde, which is to bee vnderstood foure manner of waies.

Shew how.

First it is called *Proprium*, which is proper to one only kind, but not to the whole kind, as to be a Doct or Musitian is proper to man but not to every man: Secondly, it is called proper that belongeth to al the kind, but not to that kind alone: as to be two-footed, belongeth to al mankind, but not to that kind alone: for al flying fouls are also two footed: Thirdly, it is said to be proper when it belongeth to one only kinde and to all that kind, but yet not alwaies: as to be hore headed or bald, is proper to man in old age, but yet not alwaies: Fourthly it is said to bee proper or rather most proper, which is incident to one kinde alone, to all that kinde and alwaies, as to haue a naturall aptnes to laugh or to speake is proper to man only, to euery man, and alwaies, and therefore this kinde of propertie is said to be conuertible, with the kinde whereunto it belongeth, as whatsoeuer hath naturally power to speake or laugh, the same is man, and whatsoeuer is man, the same hath power to speake or laugh.

Of an accident, called in latine *Accidens*.

What is an accident?

An accident is a voice or worde signifying any thing casual, cleauing to substances or bodies.

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which subjects they haue no being at all, and it is thus defined. An accident is that which may be absent or present without corruption of the subject whereto it cleaueth, because it is no substantial part of the subject, and of such accidents some be called separable, and some vnseparable.

What is a separable accident?

A separable accident is that which may bee easily separated from the subject, as outward heate or cold from a mans body, whitenes or blackenes from a wall.

What is an vnseparable accident?

An vnseparable accident is that which cannot bee separated from his subject in deede, but onely in thought or imagination, as heate from the fire, heauines from lead. And such accidents be eyther incident to certaine subjects, or substances in particular, as some men to be gray eyed, or red headed, or els to some whole kinde in generall, as to all Trauens to bee blacke, and all Swannes to be white.

Of the manifold vses of the aforesaid fue predicables.

TO how many vses doe the predicables serue?

To these foure necessary vses; first they shew which words doe comprehend moze or extend furthest, and which comprehend lesse or least, and what affinitie is betwixt word and worde, so as in making any definition, a man may easily perceiue how euerie word ought to be expounded one by another. (that is to say) the lesse common by that which is moze common, as if you would define a Spaniell, you must say that he is a dogge: for this word dogge is a more common word then Spaniell, because it comprehendeth both Spaniell, Grayhound, Hound, Cur, Mastiffe, and euerie other kinde of dogge: Secondly, they shew the nature of propositions which be necessarie, and which bee casuall or accidentall.

Which call you necessarie, and which casuall?

That proposition is said to be necessarie, whereof the predicat is eyther a generall kind, a speciall kinde, a speciall difference or propertie, and is necessarie coupled to his subject, as when I say John is a sensible body, John is a man, John is reasonable, John is apt to speake.

When is a proposition said to be accidentall?

When the predicat is an accident, as when I say John is learned

learned or vnllearned, white or blacke: Thirdly, they yeeld matter meete to make definitions and diuisions: for Logically definitions bee made of the highest generall kindes ioyned together, with their true differences or properties: as in defining a man, wee say that man is a sensible body endued with reason, and in making diuisions we either deuide the generall kindes into their especiall kindes, as a sensible body into man and brute beasts, or the speciall kindes into their Individuums, as man into John, Thomas &c. or els we deuide subjects into their accidents, as of men some be free, and some be bound and such like: Fourthly, they help much towards the inuention of arguments, for arguments be fetched from the common places as from the generall kinde, the speciall kinde, the difference, the propertie, and from other like places of inuention, as shall be taught hereafter in his proper place, and note that of these predicables do spring certaine predicationes, whereof we come now to speake.

Of Predication and of the diuers kindes thereof. Cha. 5.

WHat is predication?

Predication is a certaine kinde or phrase of speech, whereby one word is spoken of another, and aptly applied to another, as when we say, John is a man, for this word man is a generall word, and is spoken of John, Thomas, Richard and euery other singular man.

How many kinde of predicationes be there?

Two, that is essentiall and accidentall.

What is essentiall predication?

It is a naturall & vsuall kinde of speech, whereby one thing is naturally & properly spoken of another, or as the Logicians say, whose words superior are spoke of their inferiours being of one self affinity, as when the generall kind is spoken of any his speciall kindes, or the speciall kinde of any his Individuums, or when the difference or propertie is spoken of their speciall kindes, or of any of the Individuums comprehended under the saide speciall kindes, as when we say, man is a sensible body, or that John is a man, or John is reasonable, or John is apt to speake, or such like: for such speeches are both naturall and of necessitie, because the predicat is aptly applied to his subject. To this kinde of predication some men doe also referre two other kindes of speeches.

Which be they?

What is action, Identicall, and vnuuall.

What is Identicall predication?

It is a kinde of speech whereby one selfe thing is spoken of it selfe, as when we say, John is John, which though it be essentiall, yet because nothing is expounded, thereby it is not allowed of the Logicians.

What is vnuuall predication?

It is a kinde of speech selborne vsed, as when wee read in the holy scriptures, God is man, the word was made flesh, for these be most essentiall and necessarie speeches, though not vsuall in any other science then in diuinitie.

What is predication accidental?

Predication accidental is when an accident is spoken of his subiect, as wine is sweet or wine is lower, Socrates walketh, for this is a casuall kinde of speech, employing no necessity as do the other essentiall or naturall speeches before recyted. To this also may be referred predication by way of similitude, as when wee say, one man is a God or diuine to another. A cyant is a wolfe or fore (that is to say) like a wolfe or fore, which are otherwise called figurative or metaphoricall speeches: But whilst wee talke here of accidental predication, it shall not bee amisse to shew you that the Schoolemen the more distinctly to expresse the nature of accidents doe vse two termes Abstractum & Concretum. Abstractum is the bare shape of any subiect separated by Imagination from the same: as the whiteness or blackness of a wal, or any other thing that is eyther white or blacke, which abstract cannot be properly spoken of his subiect, for it were no proper speech to say that this wall is whiteness, wherfore we must vse the adiectiue called concretum, signifying the shape, together with the subiect, as when we say, this wall is white.

Of Predicaments. Chap. 4

What are Predicaments?

Predicaments are certaine titles or tables containing all thinges that be in the world: for euery thing whatsoeuer it be, is eyther a substance or accident, and if it be a substance it is found in the table of substance hereafter following: if it be an accident it belongeth eyther to quantity, quality, relation, action, passion, time, place, to be sciled or to haue. For these be the tables of accidents, in one of the which euery accident is easie to be found: so that in all there be x. predicaments

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or tables, one of substance and nine of accidents, and these bee called the highest and most generall kindes, albeit there bee others in deede higher then they, called of the Schoolemen Transcendia, (that is to say) surpassing, as these. Res, ens, ynum, aliquid, verum, bonum: which may be Englished thus, a thing, a being, one, somewhat, true, good: but forsomuch as these bee not spoken of the other higher kindes according to one selfe signification, but may be diuersly applied, they are excluded from the order of predicaments.

What other words are excluded from the order of Predicaments?

All compound words, called of the Schoolemen Complexa, as godman, Plato disputeth: and all doubtfull words hauing diuers significations otherwise called Equiuokes, and also tearmes of Art, as a Noun, a Pronoun, a Verbe, which bee tearmes of Grammer, and as genus, species, differentia, which bee tearmes of Logike and such like: which tearmes of Art are called of the Schoolemen, names of the second intention as hath bin said before. Notwithstanding differences constituting especiall kinds doe belong to the predicament of the same speciall kindes, as the parts of any whole thing doe belong to the predicament where in the whole is contayned: and first principles doe belong to the predicament or table of those thinges whereof they be principles, as a point or picke belongeth to the predicament of quantity, all which shall be plainly declared vnto you immediately after that we haue somewhat talked of those thinges, which the schoolemen call antepredicamenta (that is to say) forepredicaments.

Of forepredicaments. Chap. 7.

VVhat meane you by forepredicaments?

Forepredicaments be certaine definitions, diuisions, and rules taught by Aristotle before the predicaments, for the better understanding of the same, and therefore are called antepredicamenta (that is to say) forepredicaments.

What, and how many thinges defineth he?

Three, that is, Equiuokes, Vniuokes, and Denominatiues.

What call you Equiuokes?

Equiuokes be such thinges as haue one selfe name, and yet be diuers in substance or definition, as a naturall dogge, and a certaine starre in the firmament are both called by one name in Latine Canis, yet they be nothing like in substance, kinde or nature

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& note: the scholemen doe call the word or name it self Equiuocum Equiuocans, and the thing signified by the word Equiuocum, Equiuocatum. They make also two kinds of Equiuokes, that is Equiuokes by chance, and equiuokes of purpose. The first is when one selfe name is giuen to many things by chance, and not for any likeness that is betwixt them, as in English this worde hart signifieth as well the hart of a man or beast, as a certaine beast called a Hart in the Forrest. The second is when one selfe name is giuen to diuers things of purpose, for some likeness that is betwixt them, as a painted man is called man as well as the liuing man, for we will commonly say, here is King Henry the eight, when indeed it is but his picture: but yee must note that all Equiuokes being generally pronounced without addition, ought to be understood according to their chiefe and most principall signification, as this worde man being generally spoken, ought to be taken for a liuing man, and not for a painted man: but no equiuokes ought to be placed in any predicament, neither can it be defined vnllesse it be first brought to one certaine signification, and therefore all Equiuokes are vterly barred from all manner of Discipline.

What call you Vniuokes?

Vniuokes be those things that haue one common name which is spoken of them essentially, or really, as a man, a horse, a Lyon, whose common name is Animal, or sensible body, for in asking what cyther of them is, it is rightly answered to say Animal. And I say, here really, because it is not enough for Vniuokes to haue a common name, vnles the same be also real or essentiall, whereby are excluded all common names or understandings that bee accidentall: for though white or blacke, swift or slow, or such like is a common name, and is commonly applied both to man and beast, yet that is accidentall, and not really or substantially: Forouer the Schoolemen doe call the common word it selfe Vniuocum Vniuocans, and the thing signified by the word Vniuocum Vniuocatum.

What call ye Denominatiues?

Denominatiues are those accidents that be of like name, and differ onely in case or small reuination: as humble, humilitie, proud, proudnesse: for of humilitie a man is said to be humble, & of pride to be proud, and according to the Schoolemen, that word whereof the name doth spring, is called Denominator, & the name it selfe Denominatiue, & the thing or person so called, the Denominated, as if I should say, of valiantnesse Peter is said to be valiant: here valiantnesse is the Denominator, valiant the Denominatiue,

minatiue, and Peter the Denominated: for Peter is the subject whereunto the Denominator doth cleaue. The Grammarians doe call the Denominator Abstractum, that is a substantiue, & the Denominatiue Concretum, that is an Adiectiue.

To what end doth Aristotle chiefly vse these definitions?

To shew the differences of predications or kindes of speeches, which are to be allowed, and, which not: againe to know which be predications essentiall, and which bee accidentall: for according to the three definitions before rehearsed, there be thre predications, that is to say, predication Equiuocal, vniuocall, & denominatiue.

What is predication equiuocall?

Predication equiuocall is when the equiuoke is spoken of any of the things that it signifieth, as to say, his Letter was a Letter of the matter meaning perhaps a hinderer of the matter, but such kinde of speeches ought to be reiected from all good discipline, as hath bin sayd before.

What is predication vniuocall?

It is when the generall kinde is spoken of his especiall kinds, or the especiall kinde of her inferiours, or the speciall difference of that speciall kinde which it maketh, or of the Individuums contained vnder the same speciall kinde, as when wee say, man is a sensible body, man hath reason, or John is a man.

What is predication denominatiue?

It is when some accident is spoken of his subject, as when we say, Peter is proud, humble or valiant.

What and how many diuisions be there?

Two, the first diuision is touching wordes simple and compound, whereof though we haue said somewhat before, yet it shal not grieue vs heere againe to set it downe in such order as the Logicians vse.

Shew how?

Of wordes some be simple, called in latine Incomplexa, and some be compound called Complexa. Simple wordes be distinct and severall words not set together by any rule of Grammar to make any perfect sentence, as good, iust, a man, a horse, to stand, to go: Compound wordes be words significatiue, which are toyed together by rules of Grammar to make some perfect sentence, as Iohn is learned.

What is the second diuision?

The second diuision is foure fold as followeth: First of things that be, some be spoken of a subject, and yet bee in no subject: as man, horse, and such like vniuersall natures or substances: for they be no accidents: Secondly, some be in a subject, and yet be not

not spoken of any subiect as all particular accidentes, as this of that colour, for these be Individuums, and therefore not predicable: Thirdly some be in a subiect, and also be spoken of a subiect, as all vniuersall accidentes, as Science, Grammar, Logike and such like: for of these some be general, & some be speciall kinds and therefore are said to be predicable accidentes: Fourthly, some be neyther in a subiect nor spoken of a subiect, as Iohn, Thomas, this man, or that man, this horse or that horse, for these be first natures of substances, and therefore are subiectes themselves not predicable.

Whereto serueth this diuision?

By this diuision yee may learne the diuersitie of these two speeches, to be spoken of a subiect and to bee in a subiect: for to be spoken of a subiect is to be spoken really or essentially of some thing that is part thereof, as this word animal or sensible body is really spoken of man, horse, & of every other thing that hath life, and feeling, for they be substantiall parts of that generall kinde, for if it be demanded what a man or horse is, it is rightly answered that he is a sensible body: but to be in a subiect is to bee spoken of another thing accidentally, and not essentially, as this word white or blacke is spoken accidentally of man, or of any other subiect and not essentially, for neyther is man any essentiall part of white, nor white any essentiall part of man, and therefore cannot be in man or in any other subiect but accidentally: and for that cause it is spoken of his subiect accidentally, and not reallie.

Now tell how manie, and what those rules be, whereof you spake before.

There be two rules, the first is thus, when one thing is spoken of another essentially as of his subiect: then whatsoever may be spoken of that predicat, must needs bee also really spoken of the same subiect: for as this worde sensible body is spoken of man or horse essentially, as when we say that man is a sensible body: so this word liuing body, being spoken essentially of a sensible body, as when we say that every sensible body is a liuing body, is also as really spoken of the foresaid subiect man, in saying that man is a liuing body, for this worde liuing body is a more generall kinde then sensible body is.

What is the second rule?

The second rule is thus, diuers generall kindes not contained one of another, nor both of a third haue diuers speciall differences which doe make diuers speciall kindes, as a sensible body and science, for the speciall differences of a sensible body are these: reasonable, and unreasonable, making both man & brute

beast: but the differences of science be thesc, contemplatiue & disputatiue and such like, whereby are made speciall kinds of knowledge: for the difference contemplatiue maketh naturall Philosophie, and the difference disputatiue maketh Logike.

To what end serue these rules?

To the end it might be easily knowne what words are of affinity, and which be of one selfe predicament and which not: Thus farre as touching forepredicaments, now to the predicamentes themselves, and first we will speake of substance.

Of Substance. Chapter 8.

VVhat is substance, and how manie kindes of Substances bee there?

Substance is a thing consisting of it selfe, and needeth no help to sustaine the being thereof: and yet it is clad with accidents, for otherwise we could not discern it with our outward senses, whether it were a substance or not, for we cannot see the substance of any thing with our bodily eyes, but onely with the eyes of our minde and vnderstanding, but we may see the shape, the quantity, the colour and such like accidentes cleauing to the substance, without the which those accidentes haue no being at all, and therefore in seeing such accidentes, we may assure our selues that there is a substance sustaining those accidentes which doth alwaies remaine though the accidentes doe faile or change neuer so often. As for example, we see in water that though it be sometime hot, and sometime cold, now of one colour, and now of another, yet the substance of water doth still remaine, so as we may perceiue those accidentes to be one thing, and the substance of water to be another. Now as touching the kindes of substance according to Aristotle there be two, that is, first and second.

Which call ye first substances?

First substances be those substances which the Logicians call Individua, as Iohn, Thomas, this man, or that man, this horse or that horse, & by reason of their accidentes are to bee discerned with outward senses.

Which call you second substances?

Second substances are those which they call speciall kindes, & generall kindes, as man, a sensible body, a liuing body, and such like, which are to be comprehended only by mans reason: And be not subiect to our outward senses as first substances be, & these

second substances are otherwise called of the Schoolemen vnt-
uerfall naturas.

How many properties doe belong to substance?

These three, first substance is contained in no subiect, as an ac-
cident is, for though the parts of a mans body be contained in the
whole, yet every such part is a peculiar body or substance, & hath
his proper being of it self & so well as the whole, whereas acci-
dents without substance haue no being at all: Secondly, sub-
stances are said to be diuerse, but not contrarie one to another, for
neither is fire as touching his substance contrarie to water, nor
the Wolfe contrary to the Lambe, but onely in respect of their
quality, whereunto contrariety both properly belong: Thirdlie,
of substances one cannot bee more or lesse then another, for the
greatest Giant as touching substance is no more a man then the
least dwarfie that is, neither is a man full growne more a man
then a child newly bozne: for more or lesse appertaineth properly
to quantity and not to substance. But if you will vnderstand how
far the predicament of substance doth extend, and what it com-
prehendeth, consider well this table following, whereby you may
learne how to defyne any kind of substance whatsoever it be, for
there you shall finde all the kindes both generall and speciall to-
gether with their differences most plainly set forth.

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The Table of Substance

| | | | |
|--|--|---|---|
| Substance is cyther. | without bo- dy as | { an Angell, as Gabriel, Michael, &c. A spirit or soule (separate from the body, as the spirit or soule of this or that dead man. | |
| | | Celestiall as the cleauen heavens, and all the starres and planets. | |
| | | Simple if it be simple it is ei- ther | { fire, aire, water, earth. |
| | | or elementall as | |
| or with bo- dy, if it be with bodie it is cyther. | | { sensible, if it bee a sensible body cal- led in la- tine ani- mal, it is cyther. | { reaso- nable as ma- as { a bird or foule, as a Larke, &c. a foure footed beast, as a horse, a fish, as a Salmon, a creeping beast, as a worme, a snake, a viper. |
| | or vn- living, if it be vnli- ving it is either | { living if it be living it is ei- ther. | { or vn- reaso- nable |
| | | or vn- sensible as a plant which is cyther, | { a tree as { an oke an apple tree &c. |
| | | | { a shrub as { briars broome, &c. |
| or vn- perfect as | | perfect, if it be per- fect it is either. | { or heard as { Thyme, Ilope, Mar- gerum. |
| | | { metall as { gold and siluer, &c. naturall as a Preci- ous stone, a flint, or artificall as a tile or bricke. | |
| | | { stone which is ei- ther | |
| | | or vnper- fect as | { liquor as wine, hony, &c. fiery im- pressions as { thunder lightning. |
| | | | or watry craine, haile, snow. |

Of Quantitie Chapter 9.

VVhat is quantitie, and how is it diuided?

Quantitie is that which comprehendeth the greatness and number of multitude of things, and is diuided into two kinds, that is whole and broken.

What is whole quantitie?

Whole quantitie called in latine *quantitas continuus*, is that whose parts are ioyned together with some common bound or limitt, which is the ending of one part, and the beginning of another, as the parts of the line here set downe in the margent, marked with the letters a, c, are coupled together with the middle point b, which point is the ending of a, b, and the beginning of b, c.

How many kindes of whole quantitie be there?

Of whole quantitie there be three kindes, that is, *linea*, *superficies*, and *Corpus*.

Shew how they are defined and deuided?

Linea in English a line, is a length without eyther breadth or thickness, which is eyther right or crooked, right as a yarde, an ell or pole, crooked as a hoope or circle.

Superficies (which we may properly interpret to bee the upper face of any thing) is a length and breadth without depth or thickness: & that is eyther plaine or bowing, plaine as a plaine or smooth slope, bowing or compassing as a bank or ouen, where of the outward side is called *concave*, & the inward side *concaue* or hollow.

Corpus, which is as much to say as a body, is that which hath both length, breadth, and depth, and that is eyther rounde or with angles, round as a bowle or ball, with angles or corners, as a square die, or such like things. All which three kinds of quantitie are to be considered only with the mynde mathematically as things abstract and separated from all kinde of matter, (that is to say) as things that haue no being at all, but imaginatiue, & per se necessitie inuented by man, as nothing can be measured without them. To these three kindes of whole quantitie may be also added two other kindes (that is to say) mouing, and time being taken for the measure, space, or distance of place or time wherein any thing is moued.

How many kindes of this mouing bee there, and which be they?

Of

Of this mouing there be three kindes, that is right, circular, and mixt: The right belongeth to the foure elements, and to bodies without life: for their naturall mouing is eyther right upward, or els right downward, as the fire whose proper mouing is alwaies to ascend right vp, and the mouing of a stone, or such like heauy thing is to fall right downeward: according to the rules of Philosophy all light things doe moue upward, and all heauy things downeward: Circular or round mouing belongeth to the heauens and celestiaall bodies, which doe turne round like a Cart wheele: The mixt mouing (that is to say) partly right, and partly round, belongeth to all liuing beastes, that goe sometime forward, sometime backward or sidelong, sometime upward, and sometime downeward.

How is time deuided?

Time is deuided into three kindes, that is, into time past, time present, and time to come, and vnder time are comprehended yeares, monethes, weekes, dayes, howres, and all other wordes signifying distance or difference of time.

What is broken quantitie?

Broken quantitie called of the Latins *quantitas discreta*, is that whose parts are not ioyned with any common bounde or limitt, but be loof and seuerall one from another, which quantitie is deuided into two kinds, that is number and speech.

What is number, and how is it deuided?

Number is a multitude or summe of vnities or ones gathered together, and such number is eyther simple, respectiue, or figuratiue: Simple, as, two, three, foure, fise, &c. Respectiue as halfe, double, treble, quadruple, and such like: Figuratiue as a three square or foure square number, like to these here figured . . :: and such like.

What things are comprehended vnder broken quantitie?

All names of measures whereby we measure any thing either of or liquid, as gallon, quart, pint, bushell, pecke, pounds, dram, scruple graine, &c.

How is speech here taken?

Speech is taken here for the measure of quantitie of syllables, whereof some bee long, and some bee short, and such quantitie is to bee considered eyther in harmonic, in rithme, or verse, of which things the generall and speciall kindes together, with the rest that haue bin said touching quantitie are orderly set forth in the table of quantitie here following.

What and how many properties doe belong to quantitie?

D 3

To

To quantitie belongeth three properties: First to have no contrarietie: for great and small be not of themselves contrarie, but only by way of comparison: Secondly to be greater or lesse, but not more or lesse spoken adverbially, for a little quantitie is a quantitie as well as the greatest quantitie of all: The third and chiefe property of quantitie is to be equall or unequall.



The

- The Table of Quantitie.

| | | | | |
|-------------------------|--|---|---|---|
| Quantitie is cyther, | whole if it bee whole it is cyther, | Permanent if it be per- manent it is cyther, | A line which is ei- ther. a superfi- cies which is either, or a bodie which is ei- ther. | right as a yard, an ell, Or crooked as a hoop, or bow, &c. plaine as a smooth floureth, &c. or bowing as a vault or ouen, &c. round as a bowle or ball, or with corners, as a square die, &c. |
| | or moua- ble, if it be mouable it is cyther, | or moua- ble, if it be mouable it is cyther, | motion which is ei- ther, | right. Circular. or mixt. |
| | | or time & that is cy- ther, | or time & that is cy- ther, | time past, time present, or time to come. |
| | or broken if it be bro- ken quant- ity it is ei- ther, | Number which is ei- ther. | Simple as even or od &c. Respectue as double, treble, & Or figuratiue as three corne- red, foure cornered, &c. | |
| | | or measure of speech which con- sisteth cy- ther, | | In composition of sillables, as Dactylus, Spondeus, &c. In harmony, as a third, a fifth, &c In rithme as charme, harme. or in verse, as hexamiter, pentas- miter, Iambicke. |

Of

Of Qualitie. Chapter 10.

What is qualitie?
Qualitie is an affection, shape, or forme of the mind or body, whereof the thing so affected or formed taketh his name: as of wisdome a man is saide to bee wise, and of iustice he is called iust.

How many kinds of qualitie be there?

Of qualitie there be foure kinds, that is, habit and disposition, naturall power and impotency, passion and passible qualitie, figure and forme.

What is habit, and how is it deuised?

Habit is a constant and absolute perfection in any thing not giuen by nature, but gotten by long vse and exercise, and it is twofold, that is of the minde and of the bodie: Agayne habit of the minde is twofold, wherof the one is called intellectuall belonging to the reason and vnderstanding of man, and the other morall belonging to the will of man. Of intellectuall habits according to Aristotle there be five, that is, Intelligence, Science, Iudgement, Arte and Sapience.

1 Intelligence is the knowledge of speculative principles, as 2. and 2. make 4. the whole is more then his part, take equall from equall and squall remaine and such like.

2 Science is the knowledge of true conclusions, consisting of most certaine and infallible propositions, as man is a sensible body, man is apt to learne, and vnder science are comprehended the sciences rationall, as Grammer, Arithmetike, and Logike: Also the sciences Mathematicall, as Arithmetike, Geometry, Musike, and Astronomie, which are otherwise called quoddyvialls (that is to say) the foure viues or kindes of Mathematicall Discipline, and finally the science phisicall (that is to say) naturall as the naturall Philosophie of Aristotle, or of any other wisler treating of the secrets of nature.

3 Iudgement is an habit working with true iudgement, and according to right reason in all things appertaining to man, bee they good or euill: Iudgement may be deuised into Iudgement monasticall, domesticall, and politicall: Monasticall teacheth to gouerne one sole person: Domesticall to gouerne a household or family, and politicall to gouerne a common wealth,

Arte

4. Arte is an habite of knowledge consisting of assured and certaine rules, tryed and approued by experience, and learned by exercise, teaching to doe or to make something that is profitable to mans behoofe, and Art comprehendeth all arts, both liberall and mechanickall, that is to say, handie crafts. 5. Sapience consisting both of intelligence and of science, is the head and chiefe of those knowledges that be most honorable in Nature, comprehending two notable Sciences, that is, the Christian Diuinitie, and the Philosophers Diuinitie, etherwise called Metaphysicall, that is, supernaturall. And all these intellectuall habites are containd vnder a certaine and most sure knowledge, which is alwayes true, for vncertaine knowledge is sometime true, and sometimes false: whereto belongeth opinion, suspicion, coniecture, and such like. Thus much of habite intellectuall.

What is morall habite, and how is it diuided?

It is a qualitie of the minde gotten by custome and doctrine: teaching and inuiting mans will to worke, eyther well or euill, and is twofold, that is, eyther good or euill: to the good belong all kinde of vertues, as Justice, liberalitie, fortitude, temperance, &c. to the euill all kinde of vices, as pride, couetousnes, cowardlines and such like. And note that of vertues, some be called morall, and some theologicall, that is to say, diuine.

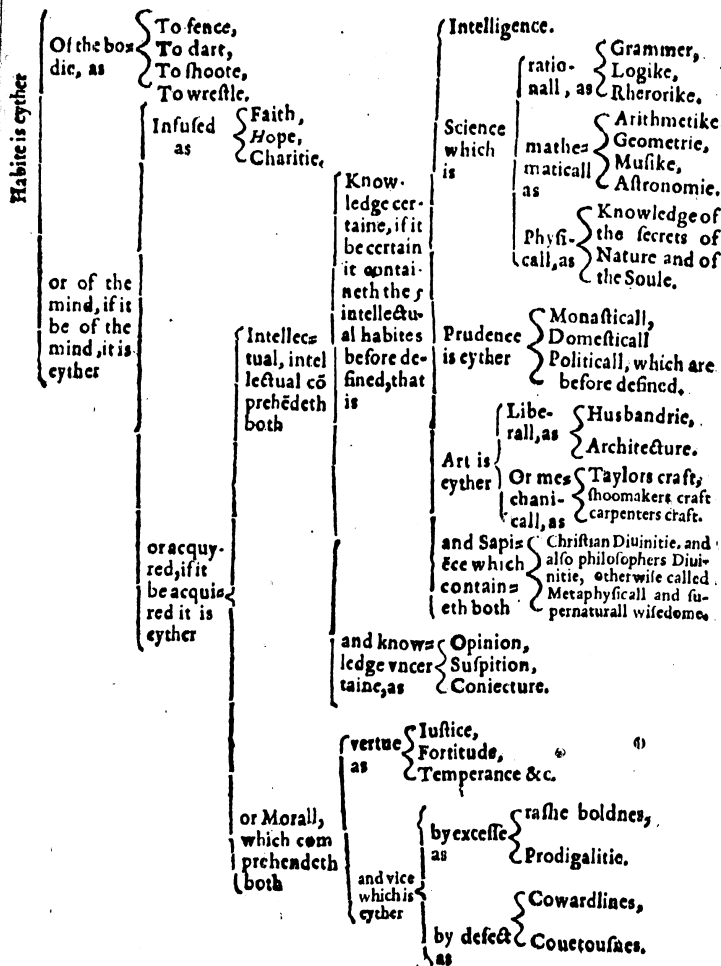
Which call you theologicall or diuine?

Those that be not gotten by custome or mans industry, but are the more gifts of God, as Faith, hope, and perfect charitie, and all other gifts of the holy Ghost, as the gifts of the tongues, of prophesying, of healing, and such like: which some do attribute to habite infused, making a difference betwixt habite infused and habite acquired or gotten, as you may see in the table following.

What is habite of the bodie?

Habite of the bodie is a certaine aptnes and agilitie of doing any thing with the bodie, not giuen by nature, but gotten by custome and exercise, as to ryde well, to run, to leape, to daunce, to worke, to shote, to fence, to darte, to swim, to write, to paynte, and such like.

The First Booke of Logike. The Table of Habite



What is disposition, and how is it diuided?

Disposition is an habite begun, but not perfected, and it is eyther of the body or of the minde: for to disposition may be referred whatsoeuer was before attributed to habite (perfection in the thing only excepted) in which they differ for lacke of continuance, by reason whereof, Disposition is said to be easily removed, but habite not so, because it is thoroughly grounded: as for example, of the disposition that a man hath to learning, he is said to be studious: but of perfect habite gotten by continuall studie in learning, he is said to be learned, which importeth a perfection, which is more then a Disposition.

Of naturall power and impotencie, the
second kinde of Qualitie.

VV Hat is naturall power?

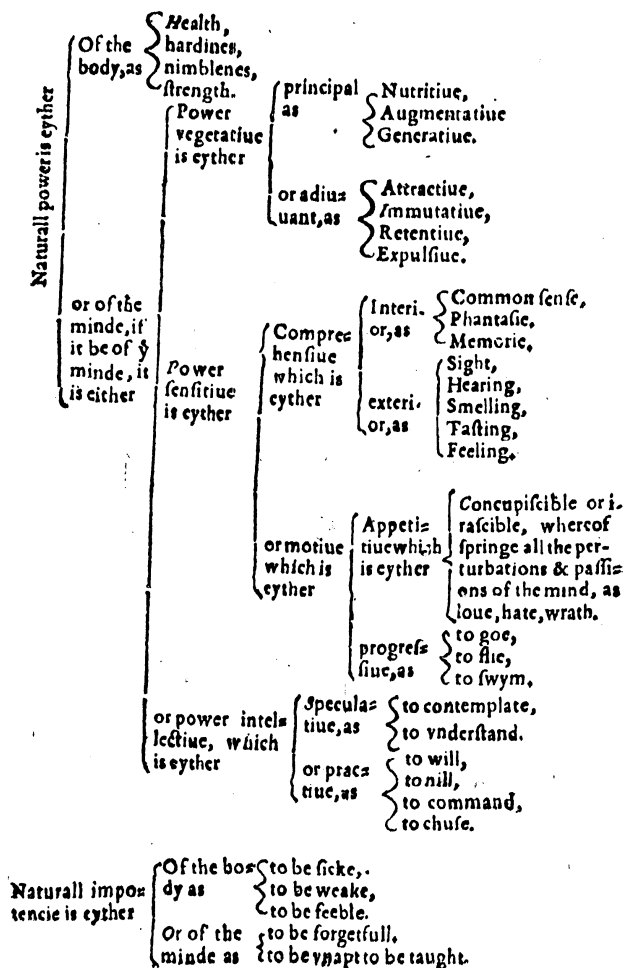
It is a naturall habilitie to doe, to suffer, or to resist, not gotten by exercise, but giuen by nature to the mind or bodie: to the minde, as to haue a good witte or memorie, to be apt to learning, and such like: to the bodie, as to be healthful, nimble, strong, and such like.

What is naturall impotencie?

It is a naturall weaknes either of the mynde or body: of the mind, as to be dull of witte: to be forgetful or vnapt to be taught, and such like: of the bodie, as to be sicklie, to be weak and feeble, and vnapt to suffer any thing that an habile body can do or suffer.

What is comprehended vnder this second kinde of qualitie?

To this kinde may be referred all the naturall powers and impotencies of the soule vegetatiue, sensitiue, and intellectuall: also all naturall powers or vertues of hearbes and stones, and the naturall influences of the heauens, starres, elements, and of all the superiour or vpper bodies. All which thinges you may see playnele set forth in this Table following.



Of

Of Passiō and passiōle qualitie, the third kinde of qualitie.

VVhat doth the third kinde of qualitie comprehend? Passiō and passiōle qualitie.

VVhat is Passiō?

It is a sodaine motion of the minde or bodie that endureth not long, and therefore easie to be remoued: Passiō of the minde is a sodaine feare or ioy conceiued of some euill or good that is offered: and of the bodie, as palenes of colour, blushing or trembling of the flesh.

VVhat is passiōle qualitie?

It is an inueterate affection or motion of the minde or bodie not easie to be remoued: of the minde, as madnes growne of some continuall sorrow or melancholic: of the bodie, as blacknes of the face by continuall boyling heate of the blood, or palenes by continuall sicknes of the bodie: and therefore passiōle qualitie is compared and likened to habite, and sodaine passiō to disposition.

VVhat is comprehended vnder passiōle qualitie?

All the objects of the true outward senses, as colours, light, brightnes, which be the objects of the sight, sounds, voices and noyses, the objects of hearing: sauiours the objects of tasting: odours & smells the objects of smelling: tangible qualities, which be the objects of feeling: of which tangible qualities some are said to be first, and some second: the first be these, heate, coldnes, moistnes, drynes: the second be hardnes, softnes, heauines, lightnes, roughnes, smoothnes, and such like.

Which be the chiefe passions or affections of the minde?

The chiefe affections be these fowre, ioy, lust, sorrow, feare.

How is ioy defined, and what good or euill braches do spring thereof?

Ioy is a sweete and delectable motion of the heart, wherewith it is stirred and delighted whilst it enioyeth some good that is present, or at the least, seemeth good: and hereof springeth delight, boasting, maleuolence, reuysing at others mens euill.

What is lust, and what affections doe spring thereof?

Lust is a motion of the minde stirred up by thinking of some good in deede, or seeming good that is absent, whereof doe springe these affections, hope, desire, loue, anger, wrath and hatred.

VVhat is sorrow, and what affections doe arise thereof?

It is a greuous motion of the heart causing it to shrinke to-

The First Booke of Logike.

gether whilst it seeth some present euill, that is euill in deede or seemeth euill: and hereof springeth these affections, enuy, saundering, mercy, agony, lamenting, calamitie, carefullnes, griefe and desperation.

What is feare, and what affections doe ryse thereof?

Feare is a grieuous motion causing the heart to shrink together whilst it seeth some euill that is to come: and hereof springeth these affections, heauines, shame, terror, cowarding and such like: all which thinges you may see briefly set forth in the Table next following.

The Table of Pasion and passible qualitie.

| | | |
|------------------------------|---|--|
| Pasion is eyther | Of the mynde, as | <div> <div>foy.</div> <div>Lust.</div> <div>Sorrow.</div> <div>Fearc.</div> </div> |
| | or of the bodie, as | <div> <div>Sodaine palenes,</div> <div>Sodaine blushing.</div> <div>or trembling of the flesh.</div> </div> |
| Passible qualitie containeth | All the inueterate passions both of minde and body before set down, | |
| | and also all the objects of the five Senses, as | <div> <div> <div>Colours,</div> <div>Sounds,</div> <div>Odours,</div> <div>Sauours,</div> <div>Tangible qualities.</div> </div> <div>the objects</div> <div> <div>of the sight,</div> <div>of hearing,</div> <div>of smelling,</div> <div>of tasting,</div> <div>of touching or feeling.</div> </div> </div> |

Why are these objects of the senses called passible qualities?

Because they make the senses to suffer as the colour of any thinge by striking into the Eye maketh the sight to suffer, and causeth either pleasure or griefe to the sight: so likewise the sweetness

The First Booke of Logike.

nes of honie in striking the taste delighteth it: and contrariwise the bitterness of gall or such like thinge endued with a bitter sauour offendeth the taste.

Of figure and forme, the fourth kinde of qualitie.

V What difference is betwixt figure and forme? Figure according to some, is that which is enclosed with one bound or limite, or with manie, as a circle enclosed with one round lyne called the circumference, or as a triangle or foure-square figure, whereof the one is enclosed with 3. lynes, and th'other with foure, and such like: but Forme is the drawing or describing of the said figure. Again, according to the opinion of some, figure is compared to an image representing some lively thing: and forme is said to be the due proportion and feature of the same. Some againe doe attribute figure to thinges without life, and forme to things that haue life, briefly set down in this verse following,

Formam viuientis, pictū dic esse figuram: englished thus,

The shapes of painted thinges they figures call,

But liuing thinges they say are formed all.

What doth this fourth kinde of qualitie comprehend?

It comprehendeth the accidentall figures and formes, as well of naturall as artificial thinges: of naturall, as the shape of man, beast, or fowle: or artificiall, as the shape or figure of a house, temple, ship, or such like: also it comprehendeth all Geometrical figures as well perfect as vnperfect.

Which call you perfect?

Those that are enclosed within such bounds as nothing can be added or taken away from them, without marring or altering the same, as a circle, a triangle, a square, and such like: whereof some are plaine enclosed only with lines, as circles, triangles, squares, and such like: and some are solid or whole bodies enclosed with vpper faces eyther one or manie, as round spheres, sharpe pyramids, cubes, as a dye, and round pillars.

Which call you vnperfect?

Those which are not so enclosed with their bounds, but that some one thing may be added or taken away from the same without changing or altering of the figure, as the rightnes, roundnes, concavity or conuexity of vnperfect figures may be lengthened or shortned, and yet the former shape thereof shall still remaine, and not be altered, but onelie in quantity.

A Table of figure and forme.

| | | | |
|----------------------------|-------------------------------|----------------------------|---|
| Figure and forme is cyther | Perfect is cyther | Plaine as | A perfect circle. |
| | | | a trian- gle where of there be 6. kin- des, |
| | Or vnperfect, which is cyther | or solide, which is cyther | a quadrā gle, as |
| | | | or hauing ma- ny angles, as |
| | | | <ul style="list-style-type: none"> Isopeleurus Isoceles Scalenon Ambigonius Oxigonius Orthogonius, A perfect square A long square A square like to a Thorn backe, call- led Rhombus. a figure of 5 6 or 7 angles or more. Sphericall Pyramidicall Cubicke, or pillar like, Right Circular Conuexe or Concaue. |

But the true descriptions of all the figures contained in this table are to be learned of the Geomettricians, and not of the Logicians.

Of the properties of Qualitie.

How manie properties doe belong to Qualities?

Three. First to be contrarie, as vertue is contrarie to vice, heate to cold, white to blacke: yet such contrarietie belongeth not to euery kynde of Quality, for Triangles be not contrarie to Squares, nor round pillars to sharpe pynacles.

What

What is the second proprietie?

To be moze or lesse, for one man may be moze vertuous or lesse vertuous, moze learned or lesse learned, moze healthfull, or lesse healthfull, moze or lesse, hotter or colder, yet this proprietie belongeth not to euery kinde of qualitie, for one triangle is no moze a triangle then another: the like may be said of the rest of the perfect figures, as well plaine as solide.

What is the third proprietie?

To be like or vnlike, and this is the chiefest proprietie belonging to euery kinde of quality, as two Grammaticians be like one to another in their profession, two healthfull or vnhealthfull, two white or two blacke, two triangles or two squares are said to be like or vnlike one to another.

How define you likenes or vnlkenes?

Likenesse according to Boetius, is when diuers thinges haue one selfe qualitie: vnlkenes is when they haue diuers qualities.

Of Relation, Chapter 11.

What is Relation?

It is the referring, comparing or applyng of one thing vnto another for some respect of affinity or likenes wherewith they are knit so together, as the one cannot be well vnderstood without the other: and therefore the thinges so compared are called Relatiues, or rather correlative, for of thinges some are said to be absolute, and some respectiue or relative.

Which call you absolute?

Absolute are those which may bee vnderstood by themselves, without being applied to any other thing, as substance, quantity, qualitie.

Which are said to be relative or respectiue?

Those that cannot be well vnderstood of themselves without hauing relation to some other thing, as the father and the sonne, the Lord and the bondman, the Master and the Scholler, &c. We note that of the scholemen the thing from which the application is made, is called in latine fundamentum, in English the foundation, and the thing wherunto the relation or application is made, is called in latine terminus, in English the bound, end, or teare, as in these Corlatiues, the Father and the Sonne, the Lord

Lord and the bondman, the Schoolemaster and the Scholler: Here the Father, the Lord, and Schoolemaster, are called euerie of them fundamentum, but the sonne, the bondman and scholler, euerie of them is called terminus, that is, the end of rearing, and the application of the one to the other is called relation.

How many kindes of Relatiues bee there?

Two: Relatiues secundum esse, that is in deed, and Relatiues secundum dici, which we may call relatiues in name.

Which call yee Relatiues in deed?

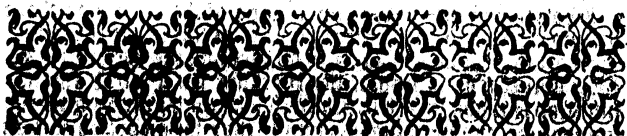
Those which according to their principall signification haue relation to some other thing, without which they cannot bee understood, as a Father is not to be understood without there bee a Sonne, nor a Sonne vntill there be a Father: the like may bee said of a Tutor and pupil, the Master and his Scholler, and such like.

What call yee Relatiues in name?

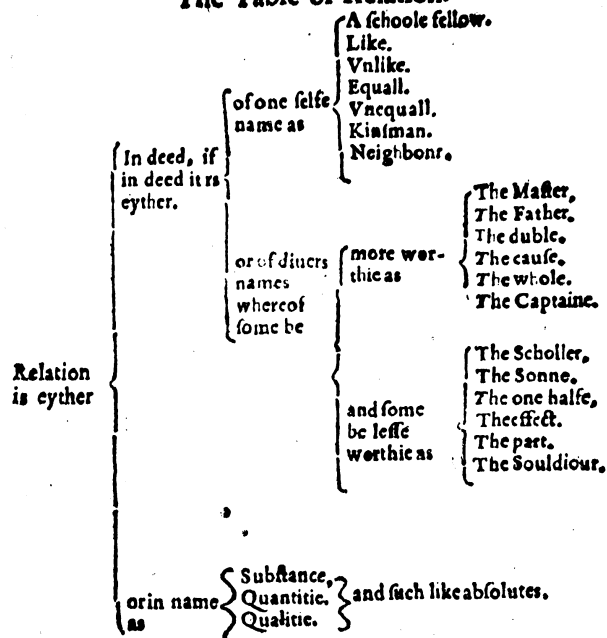
Those that according to their principall signification may be understood, without hauing relation to any other thing. And yet because in some respect they haue relation to some other thing, they are called Relatiues, but not properly, for they differ not from the absolute things before defined: as vertue, vice, habit, disposition, &c.

What other diuision is there of Relatiues?

Of Relatiues some are said to be of one selfe name, and some of diuers, of one selfe name as like, vntill, equall, vnequall, schoolefellow, neighbour, & such like: of diuers names, as the father the Sonne, the Lord and bondman, &c. And of such some be more worthy, and some be lesse worthy, as the father is more worthy, the sonne lesse worthy, the Master more worthy, the Scholler lesse worthy: which diuisions this table doth shew.



The Table of Relation.



Of the properties of Relation.

How manie properties doe belong to Relation?
Five: First to haue contrariety, as vertue and vice, science and ignorance, but this property belongeth not to all: for duoble and the one halfe hath no contrariety, nor the Father and the Sonne.

What is the second property?

The second is to be more or lesse, as to be more like, or lesse like: or more equall or lesse equall: yet this belongeth not to all: for double hath neither more or lesse: nor one father is said to be more or lesse then another.

What is the third property?

The third is, that all Relatiues (which are Relatiues in deed) are

are conuertible: for he is a Father that hath a Sonne, and he is a Sonne that hath a Father, &c.

What is the fourth propertie?

The fourth is that one correlatiue is not before another, but are both together: as the Father is called no father, vntill he hath begotten a child, and a child is called no Sonne before he be begotten of the father: for this is a generall rule of Correlatiues, if the one be, the other must needs be: if the one be taken away, the other must also be taken away.

What is the fifth propertie?

The fifth is that whosoever assuredly knoweth the one Correlatiue, must needs know the other: for whosoever certainly knoweth that I am a Father, must needs also certainly know that I haue a child: the like may be said of all that bee Correlatiues in deed, to whome this property only belongeth, as Aristotle saith.

Of Action. Chapter 12.

VV What is Action?

Action is some accidentall forme or shape where by any thing is said to doe or to worke vpon his subiect.

What meane ye here by this word subiect?

The thing that suffereth, as the water is the subiect whereon the fire induceth the shape of heating, for here the water is said to be passiue, and the fire actiue.

How is action deuided?

Into actions of the soule and of the body: The actions of the soule are those which the soule doth, for according to his power vegetatiue, his actions are to nourish, to increase, and to engender, and according to his power sensitive to see, to heare, to smell, to taste, to feele, & according to his power intellectuall, to vnderstand, to will, to nill, and such like.

The actions of the body are those that doe immediatly belong to some body or corporall accident, as to cut, to strike, to heate, to coole, to moisten, to dry, to make white, to make blacke, and such like.

Is there no other deuision of action?

Yes diuers, but such as doe rather belong to naturall Philosophers and to Diuines then to Logicians, and therefore we leaue

leane to speake any further of them.

What doth this predicament comprehend?

All Nounes and Verbes of the Actiue signification, as these Nounes, Generation, Corruption, Augmentation, Diminution, Alteration, moving from place to place and such like: also all Verbes actiue, as to engender, to corrupt, to increase, to diminish, to alter or change, and to moue from place to place, and such like Verbes of the Actiue signification.

How manie properties doe belong to action?

Two: first to admit contrariety not simply but per accidens, as to kindle and to extinguishe: Secondly to be more or lesse, & yet accidentally, as one fire to burne more, and another lesse, one water to coole more, and another lesse.

Of Passion. Chapter 13

VV What is Passion?

It is the relation or application of the patient to the agent: as for example, whilst the water suffereth to be heated by the fire, this sufferance is called passion.

What doth this Predicament comprehend?

All Verbes of the passiue signification, as to bee engendered, corrupted, increased, diminished, or altered, and such like.

What properties doe belong to Passion?

The same that haue bin said before to belong vnto action.

Of the Predicament where, called in latine *vbi*. Chapter 14.

How define you the Predicament *vbi*?

Vbi is to be in some place, as when a bodie is inclosed within a place, and therefore is defined of some to bee the description of the place wherein any thing is saide to bee, or to be done or made, as in the heauens, in the earth, in the temple, in the house, and such like.

How is this Predicament deuided?

Into *vbi* simplex, and *vbi* compositum, that is to say, simple and compound.

When is it said to be simple?

When a thing indivisible is in some indivisible place: as an Angell in Puncto, or when a thing indivisible is in a place divisible, as an Angell in the Temple, for the Temple may be divided into many parts though the Angell cannot.

When is it said to be compound?

When some divisible body is contained in a place divisible, as the being of things corporall in the water, or in the ayre: for corporall things bee so divisibly placed in their places, as every parte of the thing placed is answerable to euery parte of the place wherein they are contained, and so contrarily, as to the parts of a mans body enuironed with the ayre, one part of that ayre is answerable to the heade, another to the secte, and so consequently of all the rest, and therefore the Schoolemen say, that *Vbi compositum* is to be in a place circumscriptiue, but *Vbi simplex* is to be in a place definitiue (that is to say) in some certaine place, though not according to the position or order of placing the parts, but when a thing is said to be in a place circumscriptiue, then such place and thing may be both deuised according to the parts of position or placing, as this part here, and the other part there, whereof springeth these differences, above, beneath, before, behind, on the right side, on the left side, and such like. And finally this predicament comprehendeth whatsoever answereth to this question, where any thing is said to be or to be done.

What properties doo belong to the predicament where?

Three: First to admit no contrariety, for though to be above and beneath seeme to be contrary, yet that is to be vnder stood physically and not dialectically: Secondly it admitteth neither more nor lesse, for to be in the Temple is no more to be in place then to be in the market or in any house: but the third and chiefest property of *Vbi* is to containe.

Of the predicament When, called in Latine

Quando. Chapter 15.

How define you this predicament?

This is said to be a relation or application of a thing measured by time, vnto time it selfe, and containeth the differences of times, whereby any thing is said to bee, to haue beene, or shall be, to doe, or to suffer: and to speake briefly, it comprehendeth

comprehendeth all wordes that answer to this question when, as yester day, to morrow, the next day, and such like.

How is *Quando* deuised?

In two manner of waies, for sometime it is said to bee definite, that is, certaine as in this or that howe, day, or yeare, which is certaine, and sometime indefinite, that is, vncertaine, as to haue beene, without any limitation of time, which is vncertaine: Secondly *Quando* may bee deuised into his partes of succession, as into time past, present, and to come.

What properties doo belong to this predicament?

First to haue no contrariety: Secondly to admit neither more or less: Thirdly to be alwaies flitting or fluxible, and neuer permanent, which property it hath by reason of time which continually passeth away.

Of the predicament to be situated, called in Latine

Situm esse. Chapter 16.

VV

What is *Situm esse*?

Quintilian sayth, that *Situm esse* is as much to say, as to be situated, ordered or placed some manner of way, and it is a generall word comprehending all names that doo expresse the site or ordering of the body & parts thereof, as to stand, to sit, to lye either groueling or right vp, or on the one side: And finally it comprehendeth all those wordes which answer to this question, howe any thing is situated, as when it is required how Norwich standeth from London, either Northward, Southward, westward or Eastward.

How is site deuised of the Schoolemen?

Into site naturall and casuall.

Which call you naturall site?

That whereby euery part of the body hath his naturall place, as in mans body the head to stand above, the belly in the midd and the secte beneath, and so in a tree the roote to be lowest, the top in the midd, and the boughes or branches to be highest.

What call you site casuall?

That whereby the position or ordering of the parts is altered and may be altered, as now to haue Norwich situate to London, now to lie, or to lye downe: this way of that way.

What

What descriptions are to be fetched from this predicament?
The descriptions of places.

What properties doe belong to this predicament?

Two: first to admit no contrariety, for though byward seemeth to be contrarie to downeward, yet that is understood physically and not dialectically: Secondly it hath neither more nor less, for to stand is no more a sight then to sit, nor sitting more the standing.

Which things doe alter their situation, and which not?

All thinges without life and feeling doe keepe their site, if by violence they be not changed: but all thinges hauing life and feeling do alter their site, when and as often as it please them, as a beast to lye vp, or to lye downe, and to foyth.

The Table of site.

| | | |
|--------------------|--------------|--|
| Site is either, | naturall as | { the head to stand above, the bellie to be in the midst, and the feete beneath. } |
| | or casual as | { going, standing, lying groueling, or with the face vpward. } |

Of the predicament to haue, called in latine *habere*. Chapter 17.

VVhat doth this word to haue signifie?

It hath 3. speciall significations: first to be clad with garments, armour or ornament: Secondly to possesse any thing, as to possesse wife, lands, or goods: Thirdly to containe any thing, as a vessell to containe eyther liquid or drye matter that is potuered therof, and therefore this predicament comprehendeth all such modes as are deriued of the names of garments: as to be armed, clothed, or coated: Also of Arment altho offensiu as offensive: And lastly as to be Armed with a Corcelet, Jacke,

Jacke, or shirt of male, and such like. Offensiu, as be armed with a sword, dagger, caluer, halbert or pike: also beasts and fishes are said to be armed with nailes, horns, tallons, beaks, scales, synnes & such like: also it comprehendeth words of ornament, as to be decked with chaines, Jewels and Tablets: also words of possession, as to haue lands or goods: also words of containyng, as to be full of wine, oyle or hony, as you may see in the table following.

The table of the predicament to Haue.

| | | |
|-----------------------------------|----------------|---|
| To Haue is fold, that is | { to be clad | with garments, as to be gowned or cloked. |
| | | with armour, as with a Corcelet or Halbert, or with ornaments, as with tablet or chayne. |
| | { to possesse, | as to possesse lands or goods, to containe, as a vessell to be full of liquor, &c. |

What properties doe belong to this predicament?

Two: first to admit more and lesse: for a man at armes is sayd to be more armed, then a light Horseman: and a pikeman more then a Caluer or Barquebuzier. Again he that is clad with two coates is more clad then he that weareth but one: Secondly, this predicament admitteth in some sort contrariety: for to be armed and unarmed, clad and naked are contraries by situation, but not otherwise.

Of the vse of the Predicaments. Chap. 18.

TO what vse or end doe these Predicaments serue?

To many good vses: first if you will define any thing you shall be sure in some of these predicaments to finde out the generall kynde thereof, together with all the differences for the most part belonging to the same: which if they be not set downe, then they are to be gathered out of the proper accidents incident to the thing which you would define. Secondly, if you would diuide any thing, heere you shall finde both the generall kyndes, speciall kyndes, yea and diuers examples of the Individuums comprehended vnder the same kyndes. Thirdly, out of these predicaments you may gather matter apt to proue any question, eyther generall or particular.

Of post-predicaments. Chap. 19.

WHat meane you by Post-predicaments?
 They be Interpretations of certaine words more plainly expounded after the predicaments, for the better understanding of certain of y^e said predicaments.

Which are they?

These five: Oppositio, prius & posterius, simul, motus & habere, that is to say in English, Opposition, before and after, together, moving, and to haue: euerie one whereof may be taken and interpreted diuers wayes.

What is Opposition?

Opposition is the repugnancy or contrariety of 2. extremes, which are contrarie one to another, in such sort as none of them is in like manner repugnant to any other thing: as for example, white and blacke being two extremes are more contrary one to another then eyther of them is to any other colour, as to redde, yealow, russet or blew.

Some things are said to be agreeable one to another, and some contrarie one to another, and some diuers one from another: it were not amisse first heere to tell how, and when things are said to be agreeable, diuerse or repugnant one to another.

Things are said to be agreeable one to another 3. manner of wayes: First when they agree in generall kynde, as those which are subiect to one next generall kynde, as man and horse doe agree in generall kynde, because this word animal or sensible body is the next generall kynde to them both. Secondly things are said to agree in speciall kynde, as Edward and John are both comprehended vnder this word (man). Thirdly things are said to agree in number, as words hauing one selfe signification, called in Greeke synonyma, as a blade, a rapier, a curtilas or sticke signifying a sword: also things of like substance or definition, as man, and a sensible bodie indued with reason: and by these three wayes things are said also to differ one from another, for they may differ one from another in generall kynd, in speciall kynd, & in number: in generall kynde, as a sensible body, and a tree: in speciall kynde, as a horse and an asse: againe they may differ in number, as the Individuums that be comprehended vnder one speciall kynde, as John and Edward doe differ onely in number.

Is it all one to be diuers and contrarie?

No: for those things are said to be diuers which differ any of the

the wayes abouesayde, or by any other difference, be it common, proper, or most proper: yet few or none of these things are contrarie one to another, for no substance admitteth contrariety, nor yet many accidents, vnllesse it be by reason of quality, whereunto contrarietie both properly belong.

How many waies are things said to be contrary one to another?

Four manner of wayes, that is, relatiue, contrarie, priuatiue and contradictory, that is to say, by relation, by contrariety, by priuation, and by contradiction.

Which things are said to be opposite or contrarie by relation?

Those things are opposite by relation, which according to their owne significations haue mutuall relation one to another, neyther can they be both verified of one selfe thing in one selfe respect, as the father and the son, the lord and the bondman, for one man can not be both a father and a son in one respect, but in diuers respects he may: for euerie man that hath a son is notwithstanding a son to his owne father, and a father to his owne son.

Which things are said to be opposite by contrariety?

Those things are said to be contrary, which being comprehended vnder one selfe kinde doe most differ one from another, & yet both may be one after another in one selfe subiect meete to receaue the same, because the one giueth place to th^e other, vnllesse it be such a thing as is naturally incident to the said subiect: as heat and cold being contrayned vnder quality, are most contrary one to another, and yet may be one after another in mans body, or any other subiect apt to receiue the same, for many times heat driueth out cold, and cold heat: yet in fire it is not so, for heate is alwaies naturally incident to fire, and will neuer giue place to cold, so long as it is fire and not extinct.

How are contraries diuided?

Of contraries some haue a mean called of the schoolmen contraria mediata, and some haue no mean called contraria immediata.

When are they said to haue a meane?

When the two contraries are such, as neither of them is of meere necessity, in any subiect meete to receaue the same, as white and blacke: for that subiect which is apt to receaue them both, may be yealow or russet, and so the subiect is neyther white nor blacke.

When are they said to haue no meane?

When the one of the two contraries may be alwaies truly affirmed of any subiect apt to receaue the same, as sickness & health: for man or beast is truly said to be eyther sicke or whole: also vice and vertue haue no meane, for a man is said to be either good or

euill, yet some make good and euill to haue a meane called a thing indifferent: likewise hote and cold to haue a meane, that is to say, luke warme: and betwixt health and sicknes Galen maketh a meane estate, y^e is to say, neither whole nor sicke, but betwixt both.

Which are opposites by priuation?

Opposites by priuation are two contraries belonging to one self subject apt to receive the same, in the which subject, when the one is wanting at such time as nature doth appoynt, the other must needs be, as sight and blindness in the eye, hearing & deafnes in the eare, light and darknes in the skye, or in any other thing meete to receive both.

(appoint)

Wherefore doe you adde this clause, at such time as nature doth

Because it is not needfull that one of these opposites be in the subject in all times: as for example, the whelpe which is not nyne dayes old, though as yet he seeth not, yet is he not said to be blind, because Nature hath appointed him no sooner to see.

Which be opposite by contradiction?

They be two contraries, hauing no meane, and doe consist in contradiction, that is to say, in denying the one th^e other, and such contradiction consisteth eyther in propositions, or els in simple or single termes.

Giue examples of both.

Propositions thus, John is honest, John is not honest: plato disputeth, plato disputeth not, in which kind of propositions there is no meane of truth or falsshode: for of necessity the one of them must alwaies be eyther true or false in such sort, as both can not be true together, nor both false together: In simple termes thus, a man, no man: to know, not to know: to be, & not to be: and therefore opposites by contradiction be most contrary, and doe differ from all the rest, for in all the other opposites it is easie to finde out some meane subject, whereof neyther of them can be euillie spoken or affirmed.

Of Before and After, called in latine

Prius & Posterius, Chap. 20.

How many waies is a thing said to be before and after? Five manner of waies, that is, by time, nature, order, honor and cause, contained in these 2. latine verses.

Tempore, natura, prius ordine, dic & honore:

Et causa effectus dicitur esse prior.

Giue examples of euery one.

First by time, Cicero is said to be before Quintilian, and Socrates before Aristotle, and such like: Secondlie by nature, that thing is said to be first or before, from which the Consequent cannot returne backward: by which way all generall kyndes are said

to be before their speciall kyndes, and speciall kyndes before their Individuums: for if man be, then sensible body (which is the general kynd) must needs be, but not contrarily: so likewise if John be, man must needs be, but not contrarily, for it followeth not of necessity, Because it is a sensible body, Ergo it is a man, or because it is a man, Ergo it is John. Thirdly by order one thing is said to be before another, as 1. before 2. and 2. before 3: letters before syllables, and syllables before words, and words before speech: To this also appertayneth that which is said to be before by situation, as in going from Norwich to London, Thetford is before Newmarket, and Newmarket before ware, and so forth. Fourthly by honor or dignity: An Emperour is said to be before a King, a King before a Duke, a Duke before an Earle, an Earle before a Baron. &c. Fifthly the cause is said to be before his effect, as the rising of the Sun is said to be before day, so the difference is said to be before his speciall kynd, and the speciall kynd before his property: And these be conuertible, for if it be day, the Sun must needs be up: and if the speciall difference be, the speciall kynde must needs be, and so contrarily.

To what end serueth this manifold way of Before and After?

To th^e effect that we may the better vnderstand what hath bene said before touching opposites by relation, that is to say, that Relations are alwaies together by order of nature, and not one before another, but only by their fourth way, that is to say, by honor or worthines, which way, as Aristotle sayeth, of all the other wayes is most vnproper and least to the purpose.

Of the word Together called in latine Simul. Chap. 21.

How many waies are things said to be Together? Two waies: that is, by order of time, and by order of nature: First by order of time the beate and shining of the Sunne are said to be in the Sunne together, that is, at one time: also the angels were created altogether, and at one time. Secondly those things are said to be together by order of nature, which haue natural relation one to another, & be conuertible, neither is the one cause of the other, as the father & the sonne, single and double, and such like: and many do add hereunto diuers speciall kinds & differences subiect to one self generall kinde, as man and brute beaste, reasonable and unreasonable are subiect to the generall kynd sensible body or animal.

Of Mouing or Motion, called in latine Motus, and of the Kindes thereof. Chap. 22.

Vherefore is mention made heere of Mouing? For the better vnderstanding of the Predicament Action, whereunto Mouing belongeth.

How manie kindes of motion or mouing be there?
 Sir, bryefly touched befoze in the predicament of Action, that
 is to say, Generation, Corruption, Augmentation, Diminution,
 Alteration and Mouing from place to place.

Define these kindes.

1. Generation is a proceeding from the not being of a substance
2. to the being of the same, as from an acorne to an Oke. 2. Corruption contrariwise is a proceeding from a being to a not being, as from an Oke to chippes or ashes. 3. Augmentation is the encreasing of a greater quantity in the whole: as from a child to a man. 4. Diminution is contrariwise a decreasing or diminishing of quantity in the whole, as a body that consumeth or pyneth by disease or otherwise. 5. Alteration is a proceeding or changing from one quality into another, as from hote to cold. 6. Mouing from place to place is, as the mouing of the Sun out of the East into the west.

Of the word Habere, that is, to haue, and how manie
 waies it is to be vnderstoode. Chap. 23.

How manie significacions hath this word to Haue?
 1. Eight: First, to haue a quality, as science, vice or vertue. 2. to haue a quantity, as to be vij. vij. or vijij. score 3. long. 3. to be clad, as to haue a cloke or coate. 4. to haue some part of the body clad or decked with some thing, as the finger with a ring, the necke with a chayne. 5. to haue a part or member, as a hand, a head or foote. 6. to containe, as a hogthead that hath therein beere or wine. 7. to possesse, as to haue lands, tenements or goods. 8. to haue a wife: which according to Aristotle is improperly said, because nothing can be properly said to haue which is bad it selfe of the same, for the wife hath the man as well as the man the wife: and therefore this way of hauing serueth to little purpose.

Here endeth the first Booke of Logike.



THE
 SECOND BOOKE
 OF LOGIKE.

Of Definition. Chap. I.

Hauing hitherto sufficientlie
 spoken of the Predicables and Predicaments,
 and of all things belonging vnto them, with-
 out the knowledge whereof, no true Definiti-
 on nor good Diuision can be well made: me
 thinks it were meete now to treat of Defini-
 tion and Diuision.

What is Definition, and how manifold is it?
 Definition is a speech whereby eyther
 some name or thing is declared: and it is twofold, that is, of a
 name and of a thing.

What is definition of a name, and how manifold is it?

- Definition of a name is a speech whereby the significacion of
 1. some word is declared: and it is ten-folde. 1. Definition ver-
 bal, as when a word lesse knowne is declared by a word more
 knowne, as thus, to imitate, is as much to say as to follow or
 2. to counterfaite: againe, to accomplish is to fulfill. 2. Defini-
 tion by difference, as he is a king which ruleth by law: but he
 3. that ruleth by force is a tyrant. 3. Definition metaphorical or
 by figure, as Adolescency is the flower of mans age: good prea-
 4. chers are the salt of the earth. 4. Definition by contrary, as
 5. vertue is to flee vice. 5. Definition by circumlocution, as the
 6. wynter of the Trojan warre, that is to say, Homer. 6. Defi-
 nition

48 The second Booke of Logike.

- tion by example, as to say, that this word reasonable or unreasonable is a speciall difference. 7. Definition by want or defect, as that is 3. quarters which lacketh a quarter of a yard. 8. or any such like thing. 8. Definition by praise or dispraise: by praise, as Logike is an Art of Artes and Science of Sciences: Justice is the Queene of all vertues: By dispraise, as 9. Idleness is the corruption or destruction of youth. 9. Definition by similitude, as the Sunne is the eye of the world: a Citie without a Magistrate is as a shippe without a Gouvernor. 10. Definition by Etymology, as he is rightly called goodman, because he is a good man in deede and full of good works. When is definition of the name needfull to be vied? when some doubtfull word is cause of the controuersy.

Of the definition of a thing.

WHat is the definition of a thing?

It is a speech which declareth briefly, playnely and aptly the very nature and substance of the thing which is defined.

How is the definition of a thing diuided?

Into these six kyndes, that is to say, into definition essentiall, causall, by the Relatiue, by the effects and offices, by numbering vp of the parts, and by heaping vp of accidents.

What is definition essentiall?

It is that which consisteth of the next generall kynde ioyned with some speciall difference or property belonging to the same kynde: as when I define a man to be a sensible body endued with reason, or apt to speake: and this is the Logickall definition most lute of all others, but not easy to be made of euery thing, for lacke of speciall differences and naturall properties.

When is it said to be a causall definition?

When is it made of the generall kynde and of the proper causes of the thing defined.

How manie chiefe kyndes of causes be there?

Four, that is, matter, forme, cause efficient, and end.

How define you Matter?

Matter is that wherof any thing is made, as cloth is of matter wherof a cloake or coate is made, & wooll is the matter of cloth.

What is Forme?

Forme is the shape wherof any thing taketh both his being and his name: and therefore the Schoolemen doe define forme to be that which giueth a being to any thing, be it naturall or artificiall.

The Second Booke of Logike.

49

ciall, as in the examples before receyued, the coate or cloake hath both his being and name of the shape which it hath, and not of the matter.

What is the Cause efficient?

That which maketh or worketh any thing, and is the author thereof, as the Carpenter is Cause efficient of the house, and the Shipwright of the shippe.

What is the End or finall cause?

It is that for whose sake any thing is done, as the end of warre is to haue peace, the end of studie is to get learning and knowledge.

Giue examples of definitions made of euery one of these causes.

Of Matter let this be your example: Beere is a drinke made of maile, water and hoppes: Of Forme thus, man is a sensible body indued with a soule intellectuall or reasonable, which is the true shape of man: Of the cause efficient thus, that is a decree of the Senate which the senate commandeth and ordaineth, for the Senate is the cause efficient of the decree: Anger or wrath is the boyling of the blood about the heart through the stirring vp of cholere: Of the end thus, A house is a building made to defend our bodies from the iniuries of the ayre and weather.

May not a good definition be made of many of these causes ioyned together?

Yes indeede.

Giue example.

Loe here the example of Demosthenes in defining what law is, Law (saith he) is the inuention and gift of God, and the decree of wise men, the correction of crimes eyther rashlie or aduiseblie committed, and a common covenant or consent of the Citie, according to the which all men ought to liue. In this definition the first and chiefe cause efficient is God, the second cause efficient is the common covenant or consent of the citie, the matter is the decree of the wise, the end is the correction of crimes and the keeping of the Cittizens in good order of life.

When is a definition said to be made by the Relatiue?

When one Relatiue is interpreted by another, as thus, he is a father which hath a sonne, and he is a master which hath a seruant.

When is a definition said to be made by the effects, vertues, or offices of the thing defined?

When the nature of the thing is plainlie declared by shewing the said effects or offices, as thus, an Adamant stone is that which bringeth laide nigh to Iron or Steele, draweth the Steele vnto him:

H

Justice

Justice is a vertue which giueth euery man his right. When is a definition said to be made by numbering vp of the parts? when it containeth eyther the chiefe or all the parts of some whole thing, or els all the speciall kyndes of some generall kynd.

Giue examples of both these wayes.

Of the first whis, a house is a building hauing a foundation, walls and coeuering: of the second way thus, a sensible habite is that which comprehendeth both man and brute beaſt.

When is a definition said to be made by heaping vp of accidents? When a thing is rather described then defined by such commō and proper accidents as doe belong to the same, as fire is an element that is hote and drie, and exceedeth all other Elements in lightnes: and therefore this last kynde of definition ought rather to be called a periphrasis then a definition, which is vniuersall to the poets, Orators and Historiographers, in describing eyther person, fact or thing: also to the Iohyrians, in describing their similes, as rootes, plants, be arbs, and such like.

Of the preceptes to be obserued in Definition. Chap. 2.

How many preceptes are to be obserued in making a true definition?

These three: first that it briefly expresse the whole power and nature of the thing defined: Secondly that there be nothing therein superfluous, nor any thing wanting: Thirdly, that the definition be not common to many things, but proper to that thing onely which is defined, so as y it may make it so differ from all other things.

What order is to be obserued in making a definition?

First you must know in what predicament the thing is contained which you will define, to the intent that in descending from the most generall kinde downe towards the most speciall kinde of the same predicament, yee may find out by the way that which is next generall kynde to the thing that is to be defined: which next generall kynde being found out, yee must then seek out the speciall difference or proprietie, if proper cause, effect, or commō accidents belonging to the same: as for example, if yee would define what vertue is, yee must resort to the predicament of Quality, wherein vertue is contained: then in descending from Quality proceede to Habite, from Habite to habite of the mind, which is twofold, that is to say, intellectuall and morall, and not finding

it under habite intellectuall proceede to habite morall, for that is the next generall kinde to vertue: that done, seeke out the difference or proprietie, true cause or effect: the difference is to be good, wherein it differeth from vice, for vice is also a morall habite as well as vertue: the effect of vertue is to incline mans will to doe alwayes according to right reason or true iudgement, so shall you make a true definition of vertue, in saying that vertue is a good morall habite inclining mans will to doe alwayes according to true iudgement: and after this sort ye may learne to define any other thing.

Of Diuision. Chap. 3.

What is Diuision?
Diuision is the parting or diuiding of a word or thing that is more generall vnto other wordes or things lesse generall: for Diuision is twofold, that is, of a name, and of a thing.

When is it said to be the diuision of a name?

When some Equiuoke or doubtfull word is diuided into his manifold significations, as this word Wolfe into a man hauing that name, into a fowle eyed beast, into an vicious foze, and into a certain fish, each one called by the name of Wolfe: which kind of distinction or diuision is very necessary to auoyd ambiguity of speech, which ambiguity causeth many times great error.

How manifold is the diuision of a thing?

It is threefold, that is, substantiall, partible and accidentall.

When is it properly said to be substantiall?

When any generall kynd is diuided by his speciall differences into his proper speciall kynds, as thus, of sensible bodies one is reasonable, as man, & another is unreasonable, as a brute beast.

When is this kinde of diuision to be vsed?

When the speciall kinds lacke proper names, as most commonly the speciall kynds subalternate doe, which may be diuided againe as generall kyndes into more speciall kinds: as for example, of unreasonable beasts some be terrestriall, some be aquaticall, and some aerie: againe euery one of these may be diuided into their speciall kindes, euen vntill yee come to the lowest of all, and vnto the Individuums comprehended vnder the same: and that not only of things contained in the predicament of substance, but also in any other predicaments of accidents, as of magnitudes one is long, as a line, another is broad, as a superficies, and another

is thicke, as a body: this diuision though it be of accidents contained in the predicament of Quantity, yet it is called a substantiall diuision, because the generall kinde heere is diuided by his speciall difference into his proper speciall kindes.

What call you a partible diuision?

I call that a partible diuision which diuideth some whole thing into his parts, which is called of the Latines *particio*, as if yee would diuide the Romane common wealth into Senators, Knights and Commons: you may also diuide a house into his principall parts, as into the foundation, walls and rooffe thereof: but the better to vnderstand this kinde of diuision, it shall not be amisse to shew you heere what kindes of whole & what kindes of parts there be: for there is whole substantiall & whole integrall: againe of parts, some are called substantiall and some integrall, and of parts integrall some are called similar or like, and some dissimilar or unlike: Againe of the dissimilar some are called principall, and some not principall: of all which thinges I mende heere briefly to speake.

First I pray you tell what you meane by whole substantiall, and whole integrall.

Whole substantiall is that which consisteth of substantiall parts cleauing wholly together, and not feuerally distinct in number, as whole man consistng of soule and body: but whole integrall is that which consisteth of integrall parts, which though they cleaue together, yet they are distinct and seuerall in number, as mans body consistng of head, breast, belly, legges, &c.

How define you substantiall parts?

Substantiall parts are the first and chiefe parts whereof anie thing is compounded, of which parts if any be wanting, the whole must needs perish, and loseth his name, as the matter and forme of any compound thing, be it naturall or artificiall, as the body and soule are the first and chiefe parts of man: the metall and fashion of a silver cuppe are the first and chiefe parts of the cuppe, whereof neyther can be wanting, for the soule without the body is a spiritte and not man, and the body without the soule is but a dead carcasse: againe the cuppe without matter or shape is no cuppe at all.

Which be called integrall parts?

Certaine secondary parts, which being all gathered together doe make the whole perfect, as the head, breast, belly, armes, handes, thighes, legges and feete are the integrall parts of mans body: and of these integrall parts, some are called similar, and some dissimilar (that is to say) like and unlike.

Which are similar and which dissimilar?

Similar

Similar or like are these that be of one kynd and of one selfe name, and being diuided into parts, euery such part, be it neuer so small, beareth also the name of the whole, as flesh, bone, sinew, skin, and such like: for euery little part of the flesh is called flesh, and euery part of Bone is called Bone: and so of all the rest: hitherto also may be referred water, fire, gold, iron, or any other simple metall, wyne, wood, stone, and such like, for euery droppe of water is called water, and so of the rest.

Which call you dissimilar or unlike?

Those parts that differ both in kinde and name, as the head, breast, belly, armes, and legges are the parts dissimilar of a mans body: likewise a house, a shippe, and many other thinges haue also such parts, of any one of which parts the whole cannot bee spoken: for you can not say, because heere is the head of a man, *Ergo* heere is a man. Againe of these dissimilar parts, some are called principall, wherof if any be wanting, the whole must needs perish: as without the head, belly, heart, lyuer or guttes, mans body cannot be. The not principall are those parts without the which the body may be: for though those parts be wanting, yet the body is counted a whole thing, though not perfect in euery point, as without armes, handes, legges, or feete the body may liue: that building also that hath a foundation, walls and rooffe, is counted to be a whole house, though it hath neither doyes nor windowes, yet not perfect in euery respect.

Wherein doth partition and diuision differ?

In diuers points, for in diuision any generall kynd may bee rightly spoken of euery speciall kynde contained vnder the same: as this word (sensible body,) which is spoken both of man and beast, but in partition the whole cannot be spoken of euery part: for you cannot say that the soule or body of man, is whole man, nor y head or foot is his whole body: againe diuision deuideth vniuersal thinges into their particular, & partition diuideth particulars into their parts, and most commonly followeth diuision helping to make subdiuisions: as for example, when diuision hath diuided a sensible body into man and beast, then followeth partition and diuideth man into soule and body, and the body into his integrall parts, as head, breast, belly, legges, and such like.

How manifold is diuision accidental?

Threefold, for by that we eyther diuide some subiect into his accidents, or some accident into his subiect, or some accident into his accidents.

Glue examples of all these three wayes.

Of the first let this be your example: of men some be free, and some be bond, some be vertuous and some be vicious: and after

this sort you may diuide the Medicament of Substance into as many accidents as you will, running throughour all the Medicaments of Accidents. Of the second way thus: of goods some are said to be of the mind, some of the bodie, and some of Fortune. Of the thirde thus: of good thinges some are said to be honest, some profitable, and some pleasant or delectable: which kinde of diuision is much vsed of the Orators: to this also may be referred the common order of diuiding any speech or Oration into his parts, which the Orators call Partition or Distribution, whereby is set downe in what order euerie thing shall be uttered and declared, which first and which last, and so forth.

Of the precepts to be obserued in Diuision. Chap. 4.

How manie precepts are to bee obserued in making a true Diuision?

Thre: First that the generall kynd be diuided into his next speciall kyndes, by such speciall differences as are incereply repugnant one to another, and doe comprehend the whole nature of the thing diuided: as thus, of sensible bodies some be reasonable and some be unreasonable, for it were no good diuision to say, of sensible bodies one is reasonable and another is twofolded.

What is the second precept?

That the parts being ioyned together may be equall to the whole, and may comprehend neither more nor lesse then y^e thing which is diuided, as reasonable soule and carnall body being the chiefe parts of man doe comprehend neyther more nor lesse then whole man.

What is the third precept?

That no part or speciall kynd be vsed as a generall kynd, nor the generall kynd as a part or speciall kynd: as in this diuision which Cicero reproveth, I will shew that through the concupiscence, boldnes, and conetousnes of our aduersaries all mischiefs haue chanced to the common wealch: here conetousnes is mingled with concupiscence, whereof it is a part: for concupiscence is the generall kynd of all lustes or desires: but this precept seemeth rather to appertaine to a Hierozical partition then a Dialecticall diuision.

To what end serueth Diuision?

To diuerse good ends, first (as Cicero sayeth) it helpeth greatly to teach playnely to define, and to make thinges that be compound intricate or confused, to appeare simple, playne and certayne.

certaine: secondly by diuiding thinges orderly into their parts it greatly helpeth memorie: And thirde it helpeth to amplify any kynde of speech, and to make it more copious.

Of Methode. Chap. 5.

Having hitherto sufficiently spoken of words, both singular and vniuersall, and also of Definition and Diuision, which are the 2. chiefe instruments whereby all simple questions are discussed, I minde heere to shew with what order or methode euerie such question is to be handled.

What is Methode?

Methode is a compendious way of learning or teaching any thing: and it is threefold, that is to say, Compositiue, Resolutiue, and Diuinsiue or definitiue.

What is Methode compositiue?

It is that whereby we compound the whole of his parts, beginning at the smallest, and so proceede from greater to greater, until we come to y^e chief end wherto we tend, which kind of order or Methode we obserue heere in writing this Logike: for first we treat of words or termes, then of a proposition, and last of al of a Syllogisme: so likewise he that will reach the highest way from Norwich to London by order compositiue will bidde him first goe to Windham, from Windham to Attleborough, from Attleborough to Thetford, from Thetford to Newmarket, from Newmarket to Barkway, fro Barkway to Ware, fro Ware to London.

What is Methode resolutiue?

It is y^e whereby any whole thing is resolved into his parts: or when we proceede from the end to the next and immediate cause thereof, and from that to the next cause of that, and so from one to another until we come to the first cause of all, and most remote and furthest off, as when we resolve a Syllogisme into his Propositions: & a proposition into his uttermost bounds or termes, which are the subiect and the predicate: and this way is vniike to th^e other before recited, because it goeth backward, as in the former example. If ye will reach the way from Norwich to London by Methode resolutiue, ye must say that there is a towne called Barkway, and so till ye come to that which was first in methode compositiue. To these two methodes Salen addeth the third methode, that is, Methode diuinsiue or definitiue,

What

What is that Methodo?

It is when in defining and deviding wee descende orderly from a most generall kind to all the speciall kinds contayned vnder the same, and so to the lowest of all: as hauing to speake of quality, we define it and deuide it into his foure speciall kinds, and euery such special kind into his parts and members, euen till we come to the lowest of all, as you see in the table of quality before described. Which kind of Methodo is moze fully handled by my friend Accotius in his little Treatise which he wrote in Latine de Methodo, the effect of which booke I thinke it not out of purpose to set downe euen here.

The effect of Accotius his booke *de Methodo*, which he affirmeth to be the second part or Office of Logike.

For the first office of Logike teacheth howe to finde out the truth in any speech, but Methodo teacheth how to attaine to the Art or knowledge of any thing. In which Methodo three things, as he saith, are to be considered. First what Methodo is: Secondly what is the effect or vtermost ende thereof: Thirdly what be the causes of that end or effect.

Methodo is a certaine right way whereby we may search out the knowledge of any thing and hauing attained it how to teach the same commodiously to any other without examining whether it be true or false, for that belongeth to the first part of Logike.

The effect or vtermost ende of Methodo is the knowledge of any thing.

The causes of that ende are these three, forme, matter, and cause efficient.

For the first seemeth to be that which is knowne by all parts of such knowledge being gathered together, as it were into one selfe body, which parts are these: first what the thing is, secondly what be the causes thereof, and also what be the causes of those causes, euen to the last or vtermost cause: Thirdly what be the effects and also what be the effects of those effects as well when the thing is taken generally as for some whole thing, or as when the whole is deuided into all his parts, euen vnto the parts indiuisible.

Matter here is generally taken, and not for the matter of a my determinate or certaine kinde, vnto which matter doo appertain all things that be finite, perpetuall and immutable, that is to say all vniuersals.

The causes efficient are partly those things that are more knowne, as first to know what the thing is by definition consisting of the generall kinde and of the differences thereto belonging: secondly what is the effect or ende of the thing as in those things which doo not depend vpon our will: and thirdly what be the causes of that end or effect, the consideration of which end belongeth to those things which doo depend vpon our will, and partly the cause efficient is the right applying or ordering of the more knowne things: which order containeth two partes, for first we must proceede alwayes from the most generall kinds to the next generall kinds, as hauing to begin with the definition of the thing which you seeke to know when need requirerth, you must proceede from the most generall kinde of all, that is to say, from the highest generall kinde and so descend downewarde vntill you come to the thing that is to be defined, but if you haue to begin from the vtermost end of the thing, then next of all consider that, from whence the end both immediatly spring, and what both follow next to that, and so proceede from one to another till you come to the first cause of all. Finally if you haue to beginne from the first causes, then you must orderly proceede from that which is first vnto the second, and so to the third, & so forth vntill you come to the vtermost effect or last end.

Nowe as touching the seconde part of applying or ordering the more knowne things, you must haue consideration of euery whole thing and of all his parts, wherefore if you haue to define any thing, art, or science: whereof you treat, you must define the whole and then euery part thereof vntill you come to the lowest part thereof, and yet euery one in his proper place, and if you cannot comprehend in one definition all those things that are to bee referred to one head, then vse diuision in deuiding the whole into his parts, and define euery such part in order. But if all the parts which the thing containeth haue not one selfe ende, but diuers, then deuide it by such differences as euery part may haue his proper end.

Moreover if the forme, matter, or cause efficient haue diuers respects and considerations, then according to that diuersely make diuers deuisions, and first declare what is common to all the partes in generall, and what is proper to euery one in particular.

Finally if some one whole thing lieth hidde, the it is to be found out by looking into some of the particuler parts thereof. And these are all the chiefest points contayned in the Latine treatise which my freend Acontius wrote de Methodo: and though that Petrus Ramus maketh but one kynd of Methode, that is to say, to proceede from the first principles or elements: yet I am sure he will not deny but that to goe forwarde and backward be two diuers things, though not contrary, as both well appere by the Compositiue and Resolutiue Methode before defined.

I doe not yet perfectly vnderstande by all this, with what Methode a simple question is to be handled: therefore I pray you shew the true way and order thereof.

The Methode or way in handling a simple question dependeth vpon these 9. Interrogatiues, that is to say. 1. First what significatiōs the name or word hath, whereof the question is made, and how it is to be taken. 2. Secondly whether there be any such thing, or not. 3. Thirdly what it is. 4. Fourthly what be the parts or speciall kyndes thereof. 5. Fifthly what be the causes. 6. Sixtly what be the effects. 7. Seuenthly what things be incident or appurtenant vnto it. 8. Eightly what things are like vnto it. 9. And ninthly what things be contrary to it. All which questions Aristotle reduceth into these foure, that is to say, whether it be? what it is? what manner of thing it is? and why it is?

Giue example of a simple question handled according to the nyne questions before recyted.

As for example, if we haue to treat of vertue, first we must shew the diuers significatiōs of vertue, for vertue signifyeth sometime power and ability, as when we say, vertue attractiue, vertue digestiue or vertue expulsiue: but here vertue is to be taken for a morall habite bying good and commendable actions. Secondly whether vertue be or not it playnly appeareth by the diuers doings of men, whereof some be good, some be bad. Thirdly what vertue is we know by the definition thereof, in saying that vertue is a morall habite enclinyng mans will to do that which is alwayes good and agreeable to true iudgement. Fourthly the kyndes of vertue be diuers, as Prudence, Justice, Temperance, Fortitude, modesty and such like. Fifthly the causes, of vertue be also diuers, for the cause efficient thereof is god, and mans will obedient to true reason and to true iudgement, the matter or subject of vertue is the mind or heart of man, the finall cause is blessednes. Sixtly the effect of vertue is tranquillitie of the mind and many prosperous successes, and also publike brilli-

tie and peace. Seuenthly things incident to vertue are these, the honour, praise, and commendation of good men. Eightly things of affinitie or like to vertue be all good inclinacions, dispositiōs, or good naturall affectiōs, as to be louing, kind, and mercifull. Ninthly, things contrarie to vertue, be all manner of vices, as pride, couetousnes, hypocrisy, dissimulation, &c.

What methode is to be obserued in handling a compound question?

A compound question is to be handled by arguing and reasoning on both sides, whereof we shall treat hereafter: In the meane time we haue to speake of a Proposition, without the which no argument can be made, for all arguments do consist of propositions.

The end of the second booke.



THE THIRD BOOKE OF LOGIKE.

Of a Proposition. Chap. 1.

What is a Proposition?

It is a perfect speech whereby something is manifestly declared to be true or false.

Whereof is such speech specially compounded?

Of Nōme and Verbe, which Nōme would be of the Nominatiue case, and the Verbe of the Indicatiue moode, as when I say, man is a sensible bodie, for the Logicians do seldom allow any such speeches as are cypher of the Optatiue, Impera-

time, Interrogative, or Vocative mode, as *I would to God I had a good horse*, this speech is not accounted to be so true or certaine, as to say, *I have a good horse*.

Of how many parts doth a Proposition consist?

Of three, that is to say, the Subject, Predicat, and Copulat. What is the Copulat?

It is the Verbe substantive called in Latine, *Sum, es, fui*, that is, to be, which doth couple or ioyne the predicat with his subject, as when we say, *man is a sensible bodie*: here in this proposition the word *man* is the subject, and the word *sensible bodie* is the predicat, and the Verbe *is*, is the copulat: which copulat is not alwaies incident to euery Proposition, and specially when the predicat is some other Verbe, and not the Verbe substantive, as Plato disputeth, *Socrates walketh*, which is as much to say, as Plato is disputing, *Socrates is walking*.

How many wayes is a Proposition diuided?

Three manner of wayes, that is according to substance, qualitie, and quantitie. According to substance thus: of Propositions some are said to be categoricall, that is simple, and some hypothetical that is compound, of which compounde propositions wee mind not to speake before we haue treated of all things belonging to a categoricall and simple Proposition, which is twofold, that is to say, absolute and modall.

What is an absolute categoricall proposition?

It is a speech which affirmeth or denieth something absolutely without any respect: as when we say, *God is true*, or *euery man is a lyer*: and this is otherwise called of the Logicians, *Propositio categorica de inesse*.

How is a simple Proposition deuied according to qualitie?

Into an affirmatiue and negative Proposition.

When is it said to be affirmatiue, and when negative?

It is saide to bee affirmatiue when the predicat is affirmed of the subject: as when I say, that *Iohn is learned*: And that is negative when the predicat is denyed of the subject, as *Iohn is not learned*. And note that in such kind of speech the negative is alwaies ioyned to the Verbe.

How many wayes is a simple proposition diuided according to quantity?

Four manner of wayes, that is to say, into an vniuersall, particular, indefinite, and singular Proposition.

When is it said to be vniuersall?

When some vniuersall signe is added to the subject.

Which words are said to be vniuersall signes?

These:

These: all, euery, whatsoeuer, whosoever, none, no body, not one, none at all, euery where, no where, and such like, as euery man is a lyer, no man is true.

When is it said to be a particular Proposition?

When some particular signe is added to the subject.

Which call you particular signes.

These: some, any, many, few, and such like, as some man is wise, few are wise.

When is it said to be indefinite?

When the subject is a common word hauing neyther vniuersall nor particular signe added vnto it, as when we say, *men in these dayes be giuen to great follies*.

When is it said to be singular?

When the subject is some Individuum, as when we say, that *Cicero is eloquent*.

What and how many questions do rise of these 3. diuisions.

These three: that is, of what kind? of what qualitie? of what quantitie? in latine thus, *quæ? qualis? & quanta?* for if it be asked what kind of Proposition it is, then you must answer that it is either Categoricall or Hypothetical, that is, simple or compound. And if it be demanded of what qualitie it be, then you must answer, that it is eyther Affirmatiue or Negative: if it be asked of what quantitie, then you must answer that it is eyther Vniuersall, Particular, indefinite or Singular.

Of the three properties belonging to a simple Proposition, Chap 2.

VV

What are those?

These: Opposition, Equivalency, and Conuersion.

What is Opposition?

It is the repugnance of two simple Propositions, hauing one selfe subject, and one selfe Predicat.

How many kinds of opposite Propositions be there?

Four: Contrarie, Subcontrarie, Contradictorie, and Subalternat.

Which are said to be Contrarie?

A Vniuersall affirmatiue, and a Vniuersall negative, as euery man is iust: no man is iust.

Which are said to be Subcontrarie?

A particular affirmative & a particular negative, as some man is iust: some man is not iust.

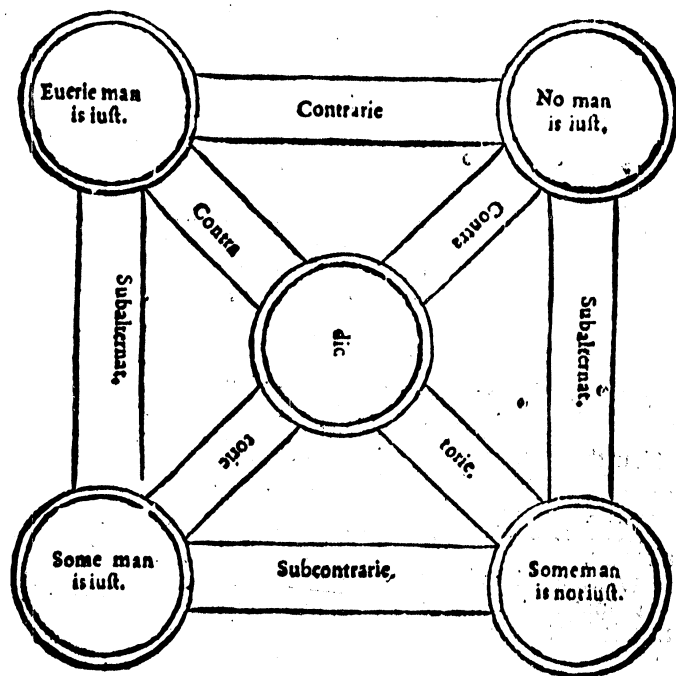
Which are said to be Contradictorie?

Eyther an vniuersal affirmative, and a particular negative, or els a vniuersal negative and a particular affirmative, as euerie man is iust, and some man is not iust: or no man is iust: some man is iust.

Which are said to be Subalternat?

Eyther a vniuersal affirmative and a particular affirmative, or els a vniuersal negative and a particular negative: as euery man is iust, and some man is iust: no man is iust, & some man is not iust.

All which kind of opposites you may the better remember by considering with what order they are placed in this Figure following.



Of the lawes and conditions belonging to these foure kindes of opposites before recited: and of the diuers matter of a Proposition.

Chap. 3.

For the better understanding of the lawes belonging to the opposites, it shall bee necessary to speake somewhat of the matter of a Proposition, whereupon the laide lawes doe partly depend.

How manifold is that matter?

Threefold: (that is to say) naturall, casual, and remote or vnnaturall.

When is a Proposition said to consist of matter naturall?

When the Predicat agreeth with his subject essentially, or at the least necessarily: as when the generall kind is spoken of his speciall kind, and the speciall kinde of his Individuums, or the difference of his speciall kinde, or the propertie of his subject: as euery man is a sensible bodie: Iohn is a man: euery man is reasonable: euery man is apt to speake.

When is a Proposition said to consist of matter Contingent?

When the Predicat agreeth with his subject accidentally, so as it may eyther be, or not be, as Iohn is learned.

When is a Proposition said to consist of matter remote or vnnaturall?

When the Predicat agreeth no manner of way with the Subject, as a man is a boyle: a man is a stone, &c.

What are the lawes of contrary Propositions?

Contrarie propositions can bee true no way both together: as euery man is a sensible body, no man is a sensible body: but they may be both false, and specially consisting of matter contingent: as when I say, euery man is iust: no man is iust: which are both false.

What are the lawes of Subcontrary Propositions.

Subcontrarie Propositions consisting of matter naturall, cannot be both false at once, as some man is a sensible body: some man is not a sensible body: but consisting of matter contingent, both may be sometime true, as some man is iust: some man is not iust.

What be the lawes of contradictorie Propositions?

Those can neyther be true nor false both at once, for if one be

be true, the other must needs be false, whether the matter be naturall or contingent, as euery man is iust, some man is not iust: no man is iust: some man is iust.

What be the lawes of Subalternat Propositions?

If the vniuersall be true, the particular must needs be true: as euery man is iust, ergo some man is iust, but not contrarily: Again, if the particular be false, the vniuersall also must needs be false, as some man is a stone: euery man is a stone.

What good is to be reaped by the knowledge of these opposites?

It teacheth to know what speeches be repugnant one to another, and thereby to discern truth from falsehood.

Of the equiuallencie of simple Propositions. Chap. 4.

What is equiuallency?
It is the reconciling or agreeing of two Propositions, hauing one selfe subject, and one selfe predicat, in such sorte that though they bee diuers in wordes, yet they are made to be all one in signification.

How is such reconciliation made?

By the helpe of signes eyther vniuersall or particular, that are of like value, and equall one to another, and thereby make the speeches equall.

Giue example.

As thus: who knoweth not this to be true: euery man knoweth this to be true: there is none but that knoweth this to be true: all these are of like value, and doe signifie one selfe thing. Again, some men are wise, fewe men are wise, all men are not wise, nor many are wise, are also equiuallent speeches. The schoolmen doe giue diuers rules touching the equiuallencie of speeches: but such as in mine opinion are neyther necessarie nor profitable, for that they cause many times barbarous, vnusall, and intricat speeches. And therefore I thinke good here to passe them ouer with silence, wishing all men to iudge the equiuallencie of speeches, rather by the eare and by custome of speaking, and by vsuall manner of taking the same in euery feuerall tongue or language, then by any rules, which perhaps will serue in one tongue, but not in another.

Of conuerſion of ſimple Propositions. Chap. 5.

What is Conuerſion?
It is the changing or turning of the ſubiect and predicat, the one into the others place.

How manifold is ſuch Conuerſion?

It is threefold, that is, ſimple, by accident, & by contraposition.

What is ſimple Conuerſion?

It is that whereby the termes are only changed the one into the others place, the ſelf ſame quantitie & qualitie being ſtil reſerued.

VVhat Propositions are conuerted by this manner of conuerſion?

An vniuersall negative and particular affirmative.

Giue examples of both.

Of the firſt thus: No vertue is diſcommendable. Ergo no diſcommendable thing is vertue: of the ſecond thus, Some man is a Philoſopher, and ſome Philoſopher is a man. And by this way to inſert ſome vniuersal affirmatiues may be alſo conuerted, as thoſe whoſe termes are conuertible, as the ſpecial kinde and his difference or propertie: as euery man is reaſonable, and euery reaſonable thing is man: or euery man is apt to ſpeak, and euery thing that is apt to ſpeake is man.

What is conuerſion by accident?

It is that whereby the termes are changed, and alſo the quantitie of the Propositions, but not the qualitie.

What Propositions are conuerted this way?

An vniuersal affirmative into a particular affirmative, and a vniuersal negative into a particular negative.

Giue examples.

Euery patience is fortitude. Ergo ſome fortitude is patience. Again, no vertue is vice: Ergo ſome vice is not vertue.

What is conuerſion by contraposition?

It is that whereby neither quantitie nor qualitie is changed, but onely tearmes finite into tearmes infinite, that is to ſay: tearmes limited into tearmes unlimited.

Which call you tearmes infinite?

All ſhownes hauing a negative ſet before them, as not man, not beaſt.

What Propositions are conuerted this manner of way?

An vniuersal affirmative into an vniuersal affirmative, and a particular negative into a particular negative.

Giue examples.

Of the first thus: Every man is a sensible bodie, and euery thing that is not a sensible body is not man. Of the second thus, some vertue is not Iudice: Ergo some thing that is not Iudice is not vertue. These speeches in English haue some sauour, but to be spoken in latine after the school manner, are very barbarous or rather monstrous, as Valerius tearmeth them, as to say, *Quidam non Iusticia non est non virtus.*

Of a Modall Proposition. Chap. 6.

VV

What is a Modall Proposition?

It is that which affirmeth or denyeth some thing not absolutely, but in a certain respect, sort or moode, which moode is commonly the predicate in this kinde of Proposition, and all the rest of the subject called of the Logicians, Dictum.

What is a moode?

Moode is a word determining and limiting the signification of some other word whereunto it is ioyned, as a wise man, a white horse: for here this word wise being added to man, both limit & restraints the generall signification of the word man, which otherwise of it selfe comprehendeth both will and foolish: and the like is to be said of any other generall word, whereunto any such addition is put: but of moodes making modall propositions, there are but these fower, that is, Possible, Contingent, Impossible and necessarie.

How manifold is a Modall Proposition?

Twofold, that is, Coniunct and Disiunct.

When is it said to be Coniunct?

When the moode is placed either in the beginning or ending of a Proposition: as It is impossible that John is sicke: or thus, That John is sicke it is possible.

When is it said to be Disiunct?

When the moode is placed so, as it diuideth the one part of the Subject from the other: as, for John it is possible to be sicke: and the Disiunct is said manie tymes to be true, when the Coniunct is false, being both made of selfe tearmes: as for example, the Logicians affirme this to be true, A white man it is possible to be blacke: but this other, A white man to be blacke it is possible, they affirm

affirmeto be false.

What maketh them so to doe, sith by construction these two speeches in sense doe seeme to be all one?

Because the moode is the disiunct, which by parting and separating the Subject, maketh the Proposition to seeme spoken in diuerse respects, as man to be white in one respect, and blacke in another: and so the speech to be true.

Of the Proposition, Equiuallencie, and conuersion of modall Propositions. Chap. 7.

W

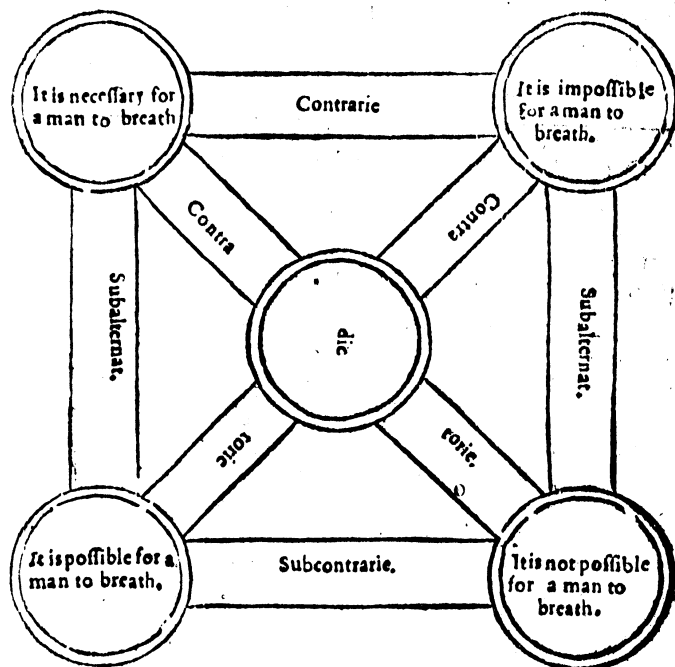
E tolde you be fore that of modall Propositions, some were called Coniunct, and some Disiunct: and as for the modals disiunct, they differ but little from absolute Propositions before declared. And therefore wee haue here chiefly to deale with Opposition, Equiuallency & Conuersion belonging to modall coniuict, the matter whereof being not altogether so necessarie, as some men affirme, I minde to make no long speeche thereof. But for the better vnderstanding of Opposition, Equiuallency & Conuersion thereof, it is needfull first to declare the quantitie and qualitie of a modal proposition: of both which things, though Aristotle maketh no mention, but only a little of qualitie: yet the latter writers doe necessarily suppose modall Propositions to be indued with quantitie and qualitie: for they say that the moode necessarie, is much like to a signe vniuersall affirmatiue: the moode impossible to a signe vniuersall negatiue: the moodes Possible and Contingent, which are both of one value are like to signes particular affirmatiue. Now as touching the qualitie, which is to be either affirmatiue or negatiue, like as the negatiue in absolute propositions is wont to be added to the verbe, euen so in modall propositions it is added to the moode, as by the examples set downe in the figure of Opposition hereafter following ye may easilie perceiue.

Of the opposition of Modals. Chap. 8.

H

ow manie wayes are modall Propositions said to be opposite? They are said to be opposite fowr manner of wayes, euen as absolute propositions are, that is to say, contrarily, subcontrarily, contradictory, & subcontrarily, as you see

in this figure following, wherein the moode is set before in the place of the Subject, the better to shew the quantity and qualitie of every Proposition.



Of the Equivalency and conuersion of Modall Propositions. Chap. 9.

THe Schoolemen doe affirme that Modall Propositions are easilie made equivalent: by reason that they may be vitered fowre manner of waies, that is to say, two manner of wayes affirmatiuely, and two manner of wayes negatiuely: the first way affirmatiuely

is, when no negative is added either to the Subject or to the moode, as for a man to be iust it is possible, contingent, impossible or necessary: the second way affirmatiuely is, whē the negative is added to the verbe of the Subject, the mood remayning stil affirmatiue, as for a mā not to be iust it is possible, contingent, &c. The first way negatiuely is whē the negative is only added to the moode, as a man to be iust it is not possible, contingent, &c. The second way negatiuely is, whē the negative is both added to the verb of the Subject and also to the mood, as a man not to be iust it is not possible, contingent, &c. which is all one and equiuallent to this affirmatiue Proposition saying, that for a man to be iust it is possible, contingent, &c. for two negatives, as well in the Latine tongue as in ours doe alwaies make an affirmatiue. Again as touching the Conuersion of modall Propositions, they say that the disiunct being like to an absolute or simple Proposition, may be conuerted both simple and per accidens, but the Coniunct suffereth no conuersion: and though the Schoolemen doe set down diuers and manifold rules, and haue inuented these fower words of art, that is, PVRPVREA, ILIACE, AMABIMVS, EDENTVLI, attributing as well to the Vowels as to the Consonants thereof certaine significations for the better vnderstanding and bearing in memorie the equivalencies and conuersions of the said modall Propositions: yet because in mine opinion they are more meete to breed preposterous, intricate and barbarous speeches, then to ierue to any other good purpose, I thinke it better to passe them ouer with silence, then to trouble your memorie therewith: wherefore leauing them as things superfluous, I mīd now to treat of an Hypotheticall or compound proposition, & of all the necessary accidents therunto belonging.

Of a Compound or Hypotheticall Proposition. Chap. 10.

VVhat is a compound Proposition?
It is that which consisteth of two or more simple Propositions coupled together with some coniunction.
How manifold is it? (1101.)

Threefold: Conditional, Copulatiue, & Disiunctiue.

When is it said to be conditional?

When the Coniunction (If) is set before any simple Proposition, as thus, If it be a man it is a sensible bodie.

When is it said to be Copulatiue?

When two simple Propositions are ioyned together with a

Coniunction Copulatiue, as *God is true, and man is a lyar.*

When is it saide to be disiunctiue?

When two simple propositions are ioyned together with a coniunction **Disiunctiue** as thus: *eyther it is day or night.*

Of how many parts, doth a compound proposition consist?

Of two, that is of the antecedent, and of the Consequent, which call you the antecedent?

That which followeth next after the Coniunction, as thus: if it be iustice, it is vertue; here this speech, if it be iustice is the antecedent, & the rest of the speech, that is to say, it is a vertue is the consequent, and so it should be though the words were contrarily placed, as thus: it is a vertue, if it be iustice.

What things are to be considered in Hypotheticall propositions?

These: first whether they haue any quantitie, or qualitie, then whether any opposition, euuallence, or conuersion do belong to them or not: Thirdly how to know the truth or falshood of euery such proposition, be it conditional, copulatiue, or disiunctiue, & first as touching quantitie they haue none at all, for quantitie is to be measured by signes vniuersall, or particular, which are onely incident to the subiects of categoricall propositions: but qualitie they haue, in that they affirm or deny some thing, by reason whereof there may be contradiction in hypotheticall propositions, but it cannot be properly said, that they be eyther contrary, subcontrarie, or subalternat, for that they are without quantitie, for want whereof they neither do aptly admit opposition, euuallence, or conuersion, but onely contradiction.

How is that Contradiction to be vnderstood?

By reason of affirmation or negation, which as in simple propositions is to be taken on the behalfe of the verbe copulatiue, and not of the Subiect or predicate, so in compound propositions it is to be taken on the behalfe of the coniunction, hauing a negative set before it, and yet not of euery coniunction, but onely of y coniunction conditionall if, whereof I cannot aptly giue you any example in our native tongue, because it is contrary to our naturall and vsuall speech to put a negative before the coniunction, if, and therefore I leave to speake thereof any further, and to say the truth, it maketh but a strange kind of speech in the latine tongue, and I beleene is seldom vsed in any disputation as to say thus: non si animal est, homo est, or non si lux est, dies est, both which are saide to be negative speeches, according to the rule before giuen: because the negative is set before the coniunction si, and by vertue thereof (as the Schoolmen say) maketh the whole proposition to be negative.

Of

Of the truth and falshood of Hypotheticall propositions, and first of the conditionall. Chap. II.

VVhat is to be considered to know the truth or falshood of Conditionall Propositions?

First whether they be affirmatiue or negatiue, for in the affirmatiues it sufficeth that the one part doth necessarily follow of the other, as thus: If it be a man, it is a sensible body: and it maketh no matter though the parts feuerally taken be both false, so as the Consequent be good: as, If a tree be a man, a tree is a sensible body: for though both these parts bee false, yet the Consequent conditionally is true: for a conditionall Proposition hath no regard to the truth of the parts, but onelie that the Consequent may necessarily follow of the Antecedent.

How is the truth of the negatiue Proposition to be knowne?

By the Consequent: for if the Consequent bee not rightlie inferred of the antecedent, then the negatiue is true, as thus: it followeth not that because a Lyon is a sensible body, that therefore a Lyon is a man.

Of the truth and falshood of propositions copulatiue.

When is a copulatiue Proposition said to be true or false?

It is said to be true, when both the parts be true, as when I say, *God is true, and man is a lyar*: againe it is said to be false, wheyther one part or both parts be false: as whey I say, *man is a sensible body, and God is not a spirit*. Here because the first part is true and the second part false, the whole Proposition is said to be false. It is said also to be false, when both parts are false, as thus, *Man is true, and God is a lyar*. Where both parts be false.

What kind of propositions are wont to be referred to this copulatiue?

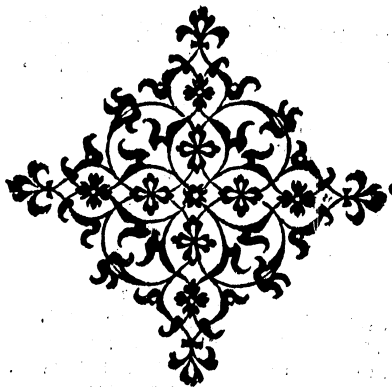
Those which they call **Temporall**, **Local**, by similitude and cause: as of time thus, when a penitent sinner prayeth, then God heareth him. Of place thus, where two or thre are gathered together in the name of the Lord, he is in the midst of them. By similitude thus, As a man dealeth with his neigbbour, so wil God deale with him. Of the cause thus, Because the Sunne shineth, it

is day. And therefore certaine Aduerbes as these, when, where, vntill, so long as, as, so as, for, therefore, because and such like, haue the signification sometime of the Coniunction (And), and sometime of the Coniunction (If).

Of the truth and falshood of disiunctiues.

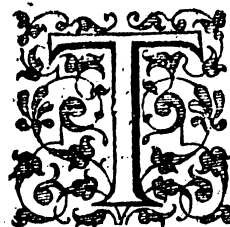
VV Hat belongeth properly to disiunctiue Propositions? To consist of repugnant parts, according to the signification of Coniunctions disiunctiue, such as these bee, vel or, eyther, or else, and such like: as eyther it is day or it is night, whereof the one destroyeth the other: for if the one be, the other can not bee: and therefore they can not be both true, but they may be both false, if there be any mean betwixt the two contraries: as when we say, This woman is eyther white or blacke, both these are false if she be browne, which is a meane colour betwixt white and blacke. But the later writers affirme the disiunctiue to be true, if any one or both of the parts be true, as thus, Eyther a man is a sensible body, or else a tree is a Substance: and to be false when both parts be false, as Eyther a man is true, or God is a lyar.

The end of the third Booke of Logike.



THE FOVRTH BOOKE of Logike.

Of Places. Chap. I.



Hough immediatly after the treatise of a Proposition, the olde men are wont to deale with the order of reasoning called Argumentation, and with the formes thereof: yet sith by order of Nature it is meete to find out matter before we go about to form, frame or order the same, and that the matter of prouing any Question is to be fetched from certaine common Places, I thought it best to treat at first of those Places, and then to shewe the order of reasoning.

What is a Place?

A Place is a marke or token shewing from whence any Argument apt to proue the Question propounded, is to be taken.

What difference is betwixt Argument and Argumentation?

Argument is the bare prooffe or meane teaching which is inuented by him that disputeth to proue the truth of the Question: but Argumentation is the whole reasoning it selfe, of what forme so euer it be, comprehending both the Question, and also the prooffe thereof: whereof we shall speake heereafter in his proper place, and giue you examples of both.

How manifold is Place?

Twofold: the one of persons, the other of thinges: the order & distribution of both which you may plainly see in this Table following.

Hereafter followes the Table of Places.

To what end serueth this manifold diuision?

That the Disputers may the more perfectly know the potuer and proper nature of euery Argument, according to the great or little force of the Place, from whence such Arguments are fetched.

How is Place diuided according to the Schoolemen?

Into 2. kinds, the one called Maxim, and the other difference of Maxim.

What is Maxim?

It is a generall rule approued and receiued of all Logicians, in such sort as no man will deny the same, as of contrarie things there must needs be contrarie consequents. Again, what soeuer agreeth with the thing defined, agreeth also with the Definition of the same; and such like.

What is the difference of Maxims?

It is the proper name of euery Place whereby one Maxim is knowne from another, and to what Place euery Maxim belongeth, as from the Contrary, from the Definition, from the thinge defined; for by these names and such like, we know to what Place euery Maxim belongeth.

To what end serueth this diuision?

The Maxims serue as shoote ankers and as places of refuge when the aduersary shall deny our Conclusion; againe the differences being few in number doe cause the multitude of Maxims to be the more easily kept in memoire.

Of the Places of persons. Chap. 2.

Give examples of all the Places of persons.

Though the Places of persons may be very well applied to the place of common Accidents hereafter following, because they eyther goe before, accompany or follow the subjects whereunto they doe belong: yet because there is a difference betwixt persons and things, and that the Places before mentioned in the Table of persons doe more properly belong to persons then to things, I thought it best to giue you examples of euery Place belonging to the person, before I come to treat of the Places of things, and first of the name, then of the Stocke and family, and so forth.

Of the name.

Of this Place you may reason eyther in praise or dispraise
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more probably then truly, as to say thus: his name is Goodman, Ergo he ought to be a good man. for that name importeth good. I

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dates.

Of Persons, as wonders chancing before death or after death, monuments left of things done or written, and kinde of Funerals shewing how well or euill the person was beloued.

The Definition and the thing defined,
The Description and the thing described,
The Interpretation and the thing Interpreted,
The matter and the thing made,
The Forme and the thing formed,
The generall kinde and his special kinde,
The difference and his propertie,
The whole and his partes Integral,
Principall and not principal.

Generation and the thing ingendred,
Corruption and the thing Corrupted,
Vse, Abuse,
Subiectes,
Adiacentes, and Actions,
Apposition,
Common Accidentes,
Signes and Circumstances, as time place and meane, &c.

Relatiues,
Contraries,
Priuatues,
Contradictories,

From the Comparatiue to the Superlatiue,
From the Positiue to the Comparatiue,
From two Positiues to two Comparatiues,
From two Positiues to two Superlatiues,
and contrariwise.

Of Places,
some be

Inward Places be either

Of the substance it selfe which be these.

Or of things accompanying Substance as these

The Cause Efficient and his Effect,
The End, and the thing ended,
The fower Opposites as

Outwarde Places be these

Things diuers in kinde: called in latine, Disparata,
Comparison, as more or lesse
Like or Vnlike,
Example and Comparison,
Also to Comparison may be added these places,
Proportion,
Changed proportion,
Disproportion,
Changed Disproportion,
Translation or Figuratiue speech.

Artificial Places are eyther

or Inartificial

Or meane places be these three

Coniugates,
Cases,
Diuision,

and some be of things, which be eyther

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All which six places are comprehended vnder the

To what end serueth this manifold diuision?

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Of the name.

Of this place you may reaſon eyther in praife or diſpraife

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more probably then truly, as to ſay thus: his name is Goodman, Ergo he ought to be a good man, for that name importeth good. I did once ſee an euill woman executed at Tyborne, whole name was Sweepſtake, which name was anſwerable to her property, which was to ſweepe al her louers purſes ſo cleane as ſhe could. Cicero did not lette to ſkoſſe in like manner with Verres the Roman extortioner, againſt whome he made ſo many inueyging Orations, ſaying many tymes, that hee had not his name for nought, for Verres was as much to ſay as a ſweeping thief, deriued of the verbe verro, which in Engliſh is to ſweepe.

Of the ſtocke or birth.

Of this place you may reaſon thus: Hee had ſtrong parents, Ergo he is ſtrong. He came of an euill race, Ergo it is no maruaile though he bee euill diſpoſed.

Of the nation.

He is of the Iſland of Crete or Candy, Ergo he is a lyar. Hee is a Fleaming, Ergo a drunkard. He is an Engliſh man, Ergo a glutton. He is an Italian, Ergo a diſſembler.

Of the ſex or kinde.

It is þ promiſe of a womā, Ergo not to be performed or truſted.

Of the age.

He is but an Infant, Ergo not malicious. Hee is young of age, and therefore to be pardoned.

Of education.

He was euill brought vp, and therefore can not bee good.

Of the habite of the body.

He is bigge ſette, Ergo he is ſtrong. He is red headed, Ergo euill conditioned.

Of the affections of the minde.

He is giuen to exceſſe and ryot, Ergo he is not temperate or moderate: to this place may be referred all manner of vertues & vices.

Of the ſtate, calling, or condition of life.

He is a bond man: Ergo hee can neyther ſue nor bee ſued.

Of dyet.

He loucheth to fare delicately, and to ly ſoft: Ergo he is ſalcinious.

Of ſtudy or exerciſe.

He is very ſtudious and applyeth his booke: Ergo no voluptuous man.

Of things done.

Pompey hath had many prosperous and noble victories: Ergo he is moſt meete to be ſent as Generall of the warre againſt Mythrdates.

Of death.

The death of Scipio was much lamented of the Romanes, ergo he was dearly beloued of the Romanes. Such a one suffered death most constantly for Christs sake, ergo hee was a good Christian.

Of things chancing after death.

Honorable monuments were set up by the people of Rome in the honour of Iulius Cæsar after his death, ergo hee was honored and beloned of all the people of Rome in his life time. There were great earthquakes, and dead bodiees did arise immediately after the death of Christ, ergo he was the sonne of God, and was unjustly condemned.

Of the Places of things, and first of
artificiall Places. Chap. 3.

VV What be artificiall Places?

Artificiall Places are those wherein are containned such Arguments as of their owne force and nature are able to proue or disproue; which are divided (as I said befoze) into inward, outward and meane Places.

What are inward Places?

Inward Places are those which yeeld Arguments eyther appertaining to the nature and substance of the matter in question, or els to such things as doe accompany the substance and nature of the thing.

Which be the Places of Substance?

These, Definition and the thing defined, together with the rest rehearsed befoze in the Table.

Of definition and the thing defined.

VV What is Definition?

It is that which briefly, plainly and properly declareth the nature of any thing, by shewing the substantiall parts thereof.

How may a man reason from this Place?

Both affirmatiuely and negatiuely, aswel from the Subject as the predicate of the Question. Affirmatiuely thus, Every reasonable body is apt to learn letters, ergo man is apt to learne letters. Negatiuely thus, No vnreasonable body is apt to learne letters, ergo no brute beast is apt to learne letters.

What be the Maxims or generall rules of this Place?

The Maxims be these, what soeuer agreeeth with the definition, agreeeth with the thing defined: and contrariwise what soeuer agreeeth

agreeeth not with the definition, agreeeth not with the thing defined.

What is the thing defined?

That whose nature and property is declared in the definition.

How may a man reason from this Place?

Both affirmatiuely and negatiuely: affirmatiuely, as Peter is a man, ergo he is a reasonable body. Negatiuely, as an Ape is no man, ergo an Ape is no reasonable body.

What be the Maxims of this Place?

What soeuer agreeeth with the thing defined, agreeeth also with the definition thereof: and what soeuer agreeeth not with the thing defined, agreeeth not with the definition of the same.

Of Description, and the thing described.

VV What is Description?

It is a speech declaring what a thing is, by shewing the properties and accidents whereby it differeth from other things.

How may a man reason from this Place?

Both affirmatiuely and negatiuely: affirmatiuely thus, Every laudable habite adorneth his possessor, ergo vertue adorneth his possessor: negatiuely thus, no laudable habite shameth his owner or possessor, ergo no vertue shameth his owner or possessor.

What is the thing described?

It is that whose properties eyther naturall or accidentall are declared in the description.

How are Arguments to be fetched from this Place?

Both affirmatiuely and negatiuely: affirmatiuely thus, This beast is fower footed, hauing long eares and whole feete, ergo it is an Ass: negatiuely thus, This fower footed beast hath no long eares nor whole feete, ergo it is no Ass.

When are arguments to be confuted, being fetched from these Places?

When the definition or description is not true or proper to the thing defined or described.

Of Interpretation and the thing interpreted.

VV What is Interpretation?

It is the declaring of a name lesse knowne by another that is more knowne, as thus, Iesus is as much to say as a saviour, a philosopher is a lover of wisdom.

What is the thing interpreted?

That which is declared by the Interpretation, as this word Iesus

The Fourth Booke of Logike.

Jesus to be a saviour, of this word philospher to be a lover of wisdomne.

How may a man reason from this Place?

Both affirmatively and Negatively, if the tearmes be conceivable. Affirmatively thus: Hee is a lover of wisdomne, Ergo a Philospher. Negatively thus: He is no lover of wisdomne, Ergo no Philospher.

What be the maxims of these two Places?

The Maxims of these Places are like, for what soever agreeth with the one, agreeth with the other, and contrariwise.

Of the Place of Matter and of the thing made.

VVhat is Matter?

That whereof any thing is made, as Silver is the matter of a silver Cup, & the Cup is the thing made, called of the Logicians *materia*.

How is Matter diuided?

Into Matter permanent and Matter transient.

What is Matter permanent?

It is that which remaineth in the thing made, retaining still both nature & name, as Stone & timber is the matter of an house.

What is Matter transient?

It is that which being changed doth not returne againe into his first nature: as flower and water being made bread will neuer be flower and water againe.

How are arguments to be fetched from Matter permanent?

Both affirmatively and negatively: affirmatively thus, Heere is timber, lyme and stone, ergo here may be an house: negatively thus, Heere is neyther timber, lyme nor stone, Ergo heere is no house.

How are arguments to be fetched from Matter transient?

Affirmatively, but not negatively, as here is water and meale, ergo here may be bread: but you can not say, here is no meale, the effect thereof is also taken away: but this Maxim taketh no place in matter transient, vntlesse the Argument be made by the present Tense of time past, as thus: Heere was no meale, ergo here is no bread.

What be the Maxims of this Place?

The matter being set downe, the effect also may be according to the difference of the matter.

How

The Fourth Booke of Logike.

How may we reason from the thing made to the matter?

In matter permanent you may reason from the present Tense to the present Tense, thus: Heere are yron weapons, ergo here is yron. But in matter transient wee must reason from the present time to the time past, thus: here is bread, ergo here hath bin meale.

What be the Maxims of this Place?

The thing made of matter permanent being set downe, the matter also must needs be: and the thing made of matter transient being set downe, the matter thereof must needs haue beene.

How may you els reason from these two Places?

By adding these two adiectiues (good or euill) as thus: The house is good, Ergo the rymber and stone was good: for the goodness or defect of the matter permanent sheweth the present goodness or defect of the thing made: and any good or euill thing made of Matter transient, proueth the Matter to haue beene good or euill.

Of the Places of Forme and shape.

VVhat is Forme?

Forme is that which giueth shape and being to the thing formed, whereof also the thing taketh his name, as the soule of man is the forme, and man is the thing formed.

How is Forme diuided?

Into { Forme substantiall which is the first being or shape of any thing, and that is eyther
 { Mortall, as the soule of a brute beast,
 { or immortall, as the soule of man.
 And into Forme accidentall, which is a meere accident, called of the Logicians *Abstractum*, as whiteness or blackness.

How are arguments to be fetched from the Forme and the thing formed?

Two wayes, affirmatively from the substantiall forme, thus: Heere is the soule of a beast, Ergo here is a beast: from the accidentall forme thus: Heere is whiteness, Ergo heere is some white thing: from the substantiall thing formed thus: The beast is here, Ergo his soule is here: of the accidentall thing formed thus: Heere is some white thing, Ergo heere is whiteness: Negatively from the substantiall forme thus: Heere is no soule of a beast, Ergo here is

no brast: of the accidental forme thus: There is no whitenes. Ergo here is no white thing: of the substantiall thing formed thus. The beaſt is not here, Ergo his ſoule is not here: of the accidental thing formed thus: here is no white thing, Ergo here is no whitenes.

Rehearse the Maxims wherevpon these arguments are grounded.

The Maxims bee these, where forme is eyther present or wanting, the thinge formed also muſt needes bee eyther present or wanting, and contrariwise. Yet this Maxim ſayeth in the forme of man, for the ſoule intellectuall may be, and yet no man, vntleſſe you reaſon from the inbeing of the forme in the Subject, as in the body is a reaſonable ſoule, Ergo it is a man: for euery Subject hath his name and beeing in his ſhape or forme, as hath bene ſaid befoze.

Of the generall kinde.

WHat is generall kinde?

It is that which comprehendeth manie things differing in ſpeciall kinde, as hath bene ſaid befoze.

Howe are Arguments to bee fetched from the generall kinde to the ſpeciall kinde?

Both affirmatiuely and negatiuely: affirmatiuely thus. Every vertue is to be deſired, Ergo Juſtice is to be deſired. Negatiuely thus. No vice is to bee playſed, Ergo drunkenneſſe is not to bee playſed.

Rehearse the Maxims belonging to the generall kinde?

To what kinde ſoever agreeeth the general kinde being vniuerſally taken (that is to ſay) pronounced with ſome vniuerſal ſigne, as All, euery or none, to the ſame the ſpeciall kinde doth alſo agree: and what ſoever agreeeth not with the generall kinde vniuerſally taken, agreeeth not with the ſpeciall kinde: for if no vniuerſal ſigne bee added to the generall kinde, you cannot reaſon affirmatiuely, but onely negatiuely, thus: It is no ſenſible bodie, Ergo it is no man: but you cannot reaſon ſo affirmatiuely, as to ſay thus, It is a ſenſible bodie, ergo it is a man: becauſe the vniuerſal ſigne All or euery is wanting.

How manie Places doth this Place of generall kinde comprehend?

Four. (that is to ſay) All or euery in quantity, All or euery in reſpect, All or euery in place, All or euery in time.

What is All or euery in quantity?

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It is when an vniuerſall ſigne is added to the generall kynd, as euery plant liueth, therefore euery tree liueth.

When is it all or euery in reſpect?

When any generall kinde is vnderſtoode in ſome reſpect, and that the generall ſignification thereof is reſtrayned by ſome worde added vnto it, or by ſome ſecret meaning ſymmitting the ſame, as a white beaſt, a good man: for this worde white reſtrayneth the generall ſignification of beaſt, and this worde good the generall ſignification of man.

Giue examples of this place?

God gaue his holy ſpirit to all faithfull men, ergo to his Apoſtles.

What is all or euery in place?

It is when the generall kynde is an aduerbe of place, ſignifying euery where or no where, as Juſtice is no where truly executed, ergo neither in France nor in England.

What is all or euery in time?

It is when the generall kynde is an aduerbe of time, ſignifying ener or neuer, as God is alwaies with vs, ergo now at this preſent.

What maximes do belong to theſe places?

The ſame that doe belong to the generall kynde vniuerſally taken befoze mentioned, by vertue whereof you may reaſon both affirmatiuely and negatiuely, as I ſaid befoze.

Of the ſpeciall kinde.

HOW are argumentes to be fetched from the ſpeciall kinde to the generall kinde?

Affirmatiuely, but negatiuely thus, it is a man, ergo it is a ſenſible bodie. But now you cannot ſay, it is no man, ergo it is no ſenſible bodie: for it may be a horſe or ſome other ſenſible thing.

What be the maximes belonging to the ſpeciall kind?

Where the ſpeciall kinde is, there the generall kinde muſt alſo needes bee: againe all the ſpeciall kindes being taken away, the generall kinde is alſo taken away.

Of the place of Difference:

THis place is comprehended vnder the place of definition, for difference is a good part of the definition, and yet for order ſake I haue thought

thought good to place it next to the generall kynde and speciall kinde before taught.

How may a man reason from this place?

Both affirmatiuely and negatiuely, as an Oyster hath feeling, ergo it is a sensible body, a hoxle hath no reason, ergo hee is no man.

What be the maxims in this place?

Whatsoever agreeth with the speciall difference agreeth with the thing that hath that difference, and whatsoever disagreeeth with the speciall difference, disagreeeth with the thing that hath that difference, for they be conuertible.

Of the place of Propertie.

How may a man reason from this place?

This place is contayned vnder the place of Description before shewed: And from hence you may reason both affirmatiuely and negatiuely as thus: hee is apt to speake, ergo hee is a man: he is not apt to speake, ergo he is no man.

What be the maxims of this place?

Whatsoever agreeth with the propertie, agreeth also with the thing that hath that propertie. And whatsoever disagreeeth with the propertie, disagreeeth also with the thing wherets such propertie belongeth, for they be conuertible.

Of the place of whole Integrall.

What is whole Integrall?

That which consisteth of partes hauing quantitie.

How may wee reason from the whole to euery particular part?

Affirmatiuely, but not negatiuely, thus: it is a house, ergo it hath foundation, walles and rooffe: but you cannot reason so negatiuely from the whole to euery particular part, as to say thus: There is an house, ergo here is no foundation or walles.

What be the maxims of this place?

If the whole be, euery principall part must needs be: but if the whole be wanting, some principall part must needs be wanting though not all: for the house might be wanting, and yet the walles and foundation may still remaine.

Of

What is an Integrall part and how is it deuided?

It is that which certaine other partes maketh vp the whole, and such Integrall part is eyther principall or not principall.

Define these two partes?

The principall is that without the which the whole cannot be, as the head or belly of a liuing body, or as the foundation, walles or conering of an house. The part not principall is that without the which the whole may stand, as a house without doores or windows: or the body may liue without hands or feete.

How may we reason from the principall part to the whole?

Negatiuely thus: here is no foundation nor walles, ergo here is no house: but you cannot reason so of the part not principall, but onely in hauing respect to the perfection of the whole, as thus, here is neither doores nor windows, ergo the house is not perfect.

What be the maxims of this place?

If any principall part be wanting, the whole cannot be. If any part not principall be wanting, the whole is vnperfect.

Of the places of thinges accompanying Substance.

What is the place of thinges accompanying Substance?

It is that which comprehendeth such argumentes as are not fetched from the substance of the thing it selfe, but from that which accompanieth the substance thereof.

Which be those places?

These: generation, the thing ingendred, Corruption, the thing corrupted, vse, subiect, adiacentes, actions, opposition, common Accidentes, and Circumstances and such like.

Of the place of Generation, and of the thing engendred.

What is Generation?

It is the first being or springing of any thing.

M 2

How

How are argumentes to be fetched from Generation to the thing engendred?

Affirmatiuely thus: it was good that Christ was borne, ergo Christ was good, it was euill for Rome that Cataline was borne, ergo Cataline was euill to Rome.

What be the Maxims of this place?

Those things whose generation is good, must needs be good, and those things whose generation is euill must needs be euill.

How may we reason from the thing engendred to the Generation?

Affirmatiuely thus: Cataline was euill to Rome, ergo the birth of Cataline was euill to Rome.

What be the maxims of this place?

If the thing engendred be eyther good or euill, the generation thereof must needs be also eyther good or euill.

Of Corruption and the thing Corrupted.

VWhat is Corruption?

Corruption is contrary to Generation, and is the destruction of the thing engendred, and the thing destroyed is saide to be corrupted.

How may we reason from Corruption to the thing Corrupted?

Thus, to execute Theeues and Murderers, is profitable to the common welth, ergo Theeues and Murderers are hurtfull to the common welth. The death of Virgil was a great losse to learning, ergo Virgil was a great furtherance to learning.

How may we reason from the thing corrupted to the Corruption?

Affirmatiuely thus: Virgil was a great furtherance to learning, ergo the death of Virgil was a great losse to learning.

What be the maxims of these two places?

Those things whereof the ende and destruction is laudable, must needs of themselves be pernicious and hurtfull: And contrariwise those things whose end and destruction is hurtfull, must needs of themselves be good and profitable: Again of good things the losse is euill, and of euill things the losse is good: but in reasoning from these places you must take heede that atwell the Corruption, as the thing corrupted be absolutely good or euill of it selfe and not by Accident, for it were no good Argument to reason thus, the death of Christ was good, ergo

Christ

Christ was euill, for his death was good by accident, for our saluation, and not for any crime that was in him: moreover you must beware that you vse not one selfe predicate both in your antecedent, and in your consequent, for if good be the predicate in the antecedent, euill must be the predicate in the consequent, and if euill be the predicate in the antecedent, good must be the predicate in the consequent: for this kinde of reasoning consisteth of contraries.

Of Vse.

VWhat is vse?

Vse is the apt applying of euery thing to his proper end, as the vse of wine is to comfort the stomacke, and to reioyce the heart of man.

How may we reason from this place?

Affirmatiuely thus: the vse of wine is good, ergo wine is good: the vse of art Magicke is euill, ergo the art it selfe is euill.

What be the maxims of this place?

What thing is good or euill, whereof the vse is good or euill.

What is to be obserued in this kinde of reasoning?

Two things: first that the thing whereof we speake, haue some good or euill vse of it selfe absolutely, and not by accident: secondly that we take not the abuse in stead of the right vse, as to say, wine will make men drunke, ergo wine is not good.

Whereto serue most chiefly these three places last mentioned (that is to say) the place of Generation, of Corruption, and of Vse?

They chiefly serue to proue the naturall goodnes or euilnes of any thing.

Of the Subiect.

How is this worde Subiect here taken?

For that wherelinto accidents and actions doe belong: and hauing to speake here of common accidentes, I thought it good to speake first of the Subiectes, because all manner of Accidentes must needs cleaue to one Subiect or other.

How may we reason from this place?

Affirmatiuely, and Negatiuely: Affirmatiuely thus, it is fire, ergo it is hot and apt to burne, hee is a man, ergo apt to laugh or to weepe. Negatiuely thus, deade men haue no being at all,

ergo dead men are not miserable, he hath no gall, ergo hee cannot be angry, there be no Dignities, ergo they fight not with Cranes.

Which be the Mixims of this place?

If the Subject be, the naturall accidentes and actions belonging to the Subject must also needes bee: and the Subject being taken away, all the accidentes and actions thereof must also be taken away.

How may such argumentes as are fetched out of this place be confuted?

When the Accidentes doe not of necessitie belong to the Subject, as thus, hee is a man, ergo hee is a good Poet, for this accident belongeth not of necessitie to euery man.

Of Adjacentes and Actions.

FOR so much as Adjacentes, otherwise called perpetuall Accidentes, & also naturall and proper Actions belonging to any Subject bee: either containd vnder the place of Property, of Difference, or els of common Accidentes, and haue like kinde of reasoning, I thought good therefore to refer you to those places, whereof some are taught before, and some do follow hereafter.

Of Apposition.

What is Apposition?

Apposition is when a thing sheweth what his owne quality or operation is by being put or added to another thing, as, white Chalk being put to a wall will make the wall white, and thereby Chalk sheweth it selfe to be white, so likewise Inke being put to paper, or such like thing will make it blacke.

How may a man reason from this place?

Affirmatiuely thus: Chalk being put to a wall will make it white, ergo Chalk is white, fire being put vnder a Cauldron of water, will make the water hotte, ergo fire is hot. By this place also a man may proue conuersation or company with others to be good or euill in this sort. This yong man keeping company with that olde man is made vertuous, ergo the olde man is vertuous, he is become a theefe by keeping Company with such a person, ergo that person is a theefe. And therefore the Scripture sayeth, cum bonis bonus eris, & cum peruersis peruerteris (that is to say)

say) with the good thou shalt be good, and with the froward thou shalt learne frowardnes.

What be the maxims of this place?

If one thing being put to another, endueth the same with any quality, that thing must needes haue the same quality it selfe, I do place this place next to action, because it seemeth to me that it appertayneth to action.

Of common Accidentes.

What call yee common Accidentes?

I call those common Accidentes, such thinges as are either alwayes or for the most part so knit together as the one goeth before or after the other, or els accompany each one the other: whereof some are necessarie, and some probable.

How may we reason from the Necessarie?

Both affirmatiuely and negatiuely, & first affirmatiuely, by the latter part thus, This Appletree hath flowers, ergo it hath budded, it hath fruite, ergo it hath both budded and flowered. This woman is brought to bed of a child, ergo shee hath conceived. Negatiuely by the former part thus. This woman neuer conceived, ergo shee can bring forth no child. This man neuer studied, ergo hee is not learned.

What bee the maxims of this place?

If the latter bee, the former must needes goe before, and if the former were not, the latter cannot bee.

Of Probable Accidentes, Coniectures, Presumptions, Sygnes, and Circumstances.

How may we reason from Probable Accidentes?

From Probable Accidentes you may reason Affirmatiuely thus: The feast of Bacchus is this day celebrated, ergo there will be many drunken this day. The generall Sessions are holden this day, ergo there will be some hanged.

What be the maxims of this place?

If the latter be, it is likely that the former went before, and if the former bee, it is like enough the latter may follow: but you must beware in reasoning from this place, that you fetch not your argument from such Accidentes as chance but seldome, or be indifferent, for such be neither necessarie nor probable, but sophistical and fallible, as to reason thus. Shee is a fayre woman, ergo shee is virtuous.

Whereas toucheth the place of common Accidence admodum. In the Iudiciall kinde it helpeth greatly to proue the fact. In the Demonstratiue kinde to praise or dispraise. In the Deliberatiue kinde to perswade or dissuade, and to gather together all Coniectures meete for the purpose, and therefore this place is much vsed of naturall Philosophers to proue thinges by naturall signes, or by Iudicium: also of Astrologers to proue heathen mortalitie, and such like, by wonders, and monstres, as by blasing starres, and such like impressions. Also it is much vsed of Chiromancers, Southsayers, and such as vse to iudge by Coniectures, and therefore this place extendeth very far, and serueth to many vses. Whereto also are referred the places of circumstances, and chiefly of time and place, from whence good arguments may be fetched.

Of Tyme

How are argumentes fetched from time?

Negatiuely thus: Pythagoras was not bozne in Numa Pompilius time, ergo Numa was not Pythagoras scholler. The cerimoniall lawes of Moses were made but for a certaine time, ergo after that time they do not binde.

What be the maxims of this place?

Nothing can bee without time, for if time bee taken away, the thing also must needs faile.

Of Place.

How are argumentes fetched from place?

Negatiuely thus: Cicero was not at Rome, when Julius Cesar was slaine, ergo Cicero slew him not.

What is the maxime of this place?

No certaine body or thing is without a place, neither is one body at one time in diuers places: and thus much touching inward places:

Of Outward Places and first of Causes.

What be outward Places?

Outward places be those which appertain to the thing, and

and yet do not cleaue thereunto: of which places the first is of Causes, and Effectes.

What is a Cause?

A Cause is that by vertue whereof another thing followeth.

How many chiefe kindes of Causes be there?

Four, (that is to say) the Cause Efficient, the end, matter, and shape, of the two last whereof we haue spoken before, because they be inward places, and do belong to the Substance of the thing, and therefore we haue to deale onely here, with the cause Efficient and end.

Of the Cause Efficient.

What is that cause Efficient, and how is it deuided?

Cause Efficient is that from whence proceedeth the first beginning of any thing that is made or done, and is the maker thereof: As for example the Carpenter is the Cause Efficient of the house which he maketh, and so is every Artificer of his own worke. Causes Efficient are deuided into two kindes (that is to say) Cause Absolute, and Cause Adiuuant. Cause Absolute worketh by his own force and vertue, as the fire that burneth. Cause Adiuuant worketh not by himselfe, but is a helper and such cause is sometime principall, as vertue is a principall Cause of blessed life, and sometime not principall, as the giftes of the body and of fortune be helpers to the happy life: but not principall Causes thereof. Again of Causes, some are of Necessity, without which the thing cannot be made, as the Instrument or matter, and some are saide not to be of Necessity, as when wee say, the speaking of truth causeth hatred, and yet not of Necessity. Also of Causes Efficient, some be Vniuersall, and some Particular, as the Eclipse or euill Coniunction of certaine Planets is the Vniuersall cause of Pestilence: but the corruption of humors in mans body is the particular cause thereof. Again of causes some be called of the Latines Propinquæ (that is to say) nigh vnto the Effect, as the father and mother be the mightiest Causes of Generation of Children. And some be called Remotæ, (that is to say) removed causes, which be further of, as the Grandfathers, and Grandmothers of the saide children. Whosoever of Causes Efficient some worke by a certaine naturall Necessity, as those that lacke choise and iudgement, as fire that burneth, and the Sunne that shineth, and all other naturall thinges that doe worke by their own force and vertue. Some againe do worke by Counsell, reason, and free will, as men, Angels, and most chiefe God himselfe.

How may we reason from the Efficient Cause to the Effect?

From the necessary Efficient Cause you may reason both Affirmatively and Negatively. Affirmatively thus, The Sunne is lately gone downe, ergo it is twilight. Negatively thus, The Sunne was not vp when Troy was destroyed, ergo Troy was not destroyed in y day time: but from the Efficient not necessary you can reason but onely Affirmatively thus: hee is flaine, I ergo hee is dead: but you cannot say, hee is not flaine, ergo hee is not dead.

VVhat be the maxims of this Place?

The Necessary Cause Efficient not letted, the Effect must needs follow: as if he hath drunken poison, he must needs dye. But if such Cause fayleth, the Effect also must needs fayle: as the Sunne is not vp, ergo it is not day: hee neuer studied, ergo he is not learned, to which place may be referred the places of occasion, Instrument, Meane, and Generation.

How may we reason from the Effect, to the Cause Efficient?

From the necessary Effect, both Affirmatively and Negatively thus, it is day, ergo the Sun is vp, it is not day ergo the Sun is not vp. From the Effect not necessary you may onely reason Negatively thus: he is not dead, ergo he is not flaine, but you cannot reason so Affirmatively as to say, he is dead, ergo he is flaine.

VVhat be the maxims of this place?

The Effect being put, the necessary Cause must needs bee, and the Effect being taken away, the necessary Cause is also taken away.

VVhen do Argumentes fetched from this place fayle?

When the Cause is not necessary or proper.

Of the End.

VVhat is End and how is it deuided?

The End is that for whose sake any thing is done, and of endes some be chiefe and last, and some not chiefe but helping: The chiefe is that which is desired for it selfe sake, and such is the best state of euery thing in his kinde, as blessed life to man: courage, and fierceness to a hoyle of seruice: heat & drynes to fire, coldnes and moistnes to water &c. The helping end is that which is desired not for it selfe sake, but for that it helpeth to attain the chiefe end, and of such helping endes one may be better then another as when we desire money to buy a house, and the house to dwell in &c.

How may we reason from this place?

Both

Both Affirmatively and negatively, affirmatively thus, vertue is good because blessed life is good, negatively thus: if adulterie be not good to allure another mans wife, to break wedlocke is not good.

VVhat be the maxims of this place?

That thing whereof the end is good or euill, is also of it selfe good or euill.

Tell the vse of these places of Causes, and whereto they serue?

The vse thereof is diuers and manyfolde, for sith that in the Deliberative kinde two principall questions are to bee discussed, first whether the thing bee profitable, and secondly whether it may be possible and conveniently done or not. Argumentes to proue the first, are to be fetched out of the end and effect. And to proue the second out of the Cause Efficient. Also in the kind Demonstration to praise or dispraise. Argumentes are to be fetched out of the End and Effect. Thirdly in the Iudiciall kinde, wherein doubt riseth of the fact, and will of the doer, Argumentes are to be fetched from the end to proue or disproue the same. Finally these places together with the other two Causes, Matter and Forme before taught, doe serue to make those kindes of Definitions which we call Causall.

Of Opposites.

VVhat be Opposites?

Things contrary one to another.

How many kindes of Opposites be there?

Four (that is to say) Relatiues, Contraries, Inuatiues, and Contradictories.

And first of Relatiues.

VVhen are things saide to be Opposites by Relation?

When according to their owne significations they haue mutuall Relation one to another, as the Father and the Sonne.

How may we reason from this place?

You may reason from the Affirmation of the one to the denyall of the other, thus: Augustus was Octavius his sonne, ergo hee was not his Father.

VVhat be the maxims of this place.

Synth Relatiues be alwayes together by nature if the one be, the other

The Fourth Booke of Logike.

other must needs bee, and if the one bee taken away the other is also taken away.

What is to bee observed in fetching Argumentes from this place?

You must beware that you haue one self respect, and not diuerse, for to reason thus is no good Consequent, This man is a father, ergo hee is not sonne, or thus, This man is his Superior, ergo not his Inferior, for in diuerse respectes he may be both a Father and a Sonne, a Superior and Inferior, a Superior in one respect, & Inferior in another.

Of Contraries.

VWhat be Contraries and how are they deuided?

They bee two Extremes Repugnant one to a nother, whereof some are called Mediate, (that is to say) hauing a mean, and some Immediate hauing no meane at all.

How may we reason from these two kindes?

From the first kind you may conclude negatively thus, he is prodigall, ergo hee is not countous: from the second kind you may reason both Affirmatiuely and Negatiuely thus: This man is whole, ergo he is not sicke, This man is not whole, ergo hee is sicke.

VWhat be the maxims of this place?

The Maxime of the affirmatiue to the negatiue is the general Maxim to all Opposites thus: whatsoeuer agreeth with the one Opposite, must needs disagree with the other Opposite: but the Maxime of the Immediate is thus: if one of the Contraries Immediate be not, the other must needs bee, as the former examples do plainly shew.

Of Priuatiues.

VWhat be Priuatiues.

Priuatiues are two Contraries belonging to one selfe Subject apt to receiue the same, in the which Subject, when the one is wanting (at such time as nature doth appoint) the other must needs bee.

How may we reason from this place?

Two wayes: first from affirmation of the one to the denyall of the other, which is common to all Opposites, as thus, he is blind, ergo hee seeth not. Secondly you may reason from the denyall

all

The Fourth Booke of Logike.

all of the one to the affirmation of the other; thus: hee cannot speake, ergo hee is dumbe. But this kinde of argument is not strong, vntill something required bee, applied to his proper Subject, and in such time as nature hath appointed, for it were no good argument to say thus: a sucking child cannot speake, ergo hee is dumbe, or thus, a whelp of two dayes olde cannot see, ergo hee is blinde: for nature commonly suffereth not the child to speake before it bee two yeares olde, nor the whelp to see before it be nine dayes olde.

VWhat be the maxims of this place?

If the one bee not in the Subject apt to receiue the same at such time as nature hath appointed, the other must needs bee.

Of Contradictories.

VWhat be Contradictories?

They bee Contraries hauing no meane, whereof the one denyeth the other.

How may we reason from this place?

Both Affirmatiuely and negatiuely thus: hee is wise ergo hee is no foole: hee is a foole, ergo hee is not wise.

What is the maxim of this place?

If the one be the other cannot bee: for two Contradictories cannot be together at one selfe time, in one selfe Subject, and in one selfe respect.

Of things differing in kynde called of the Latines Disparata.

VWhat be they?

They are those things that do differ in nature and kind, as a man, a horse, a stone, a tree, whereof euery one differeth from another in kinde and nature.

How may we reason from this place?

From the Affirmation of the one to the denyall of the other, as thus, Peter is a man, ergo hee is no horse.

What be the maxims of this place?

Whatsoeuer agreeth with the one, agreeth not with the other.

What is to be observed in reasoning from all these kinds of Opposites? That the Repugnancie consist in the Predicate, and not in the

Sub-

Subject: for it were no good Consequent to say thus: whatso-
euer seeth is a sensible bodie, ergo that which is blind is no sen-
sible bodie, for here the Contradictorie consisteth in the Subject, &
not in the Predicate.

Of Comparison.

How may we reason from the place of Comparison?
Three manner of wayes, that is, eyther from the More to
the Lesse, or from the Lesse to the More, or from Like to Like.

Of the More.

These two wordes More or Lesse, how are they to be taken?
wee vnderstand here by More, that which hath more proba-
bilitie, and by the Lesse, that which hath lesse probabilitie.

How may we reason from the More to the Lesse?

Onely Negatiuely, and that three manner of wayes: first from
the Subject, as thus: Cicero was not able to defend this cause,
much lesse any other common Orator: secondly from the Predi-
cate thus: if this man bee not able to beare one hundred weight,
much lesse two hundred weight: thirdly from the Subject, and
Predicate both together thus: a strong man is not able to beare
a hundred weight, ergo much lesse a weake childe, is able to
beare two hundred weight.

What is the maxim of this place?

If it preuaileth not in the More, it cannot preuaile in the Lesse.

Of the Lesse.

How may we reason from the Lesse to the More?
Affirmatiuely, three manner of wayes, as before from
the Subject thus: a little childe was able to beare tenne
pound weight, ergo much more a strong man: From the Predi-
cate thus: if Martyres were ready to loose their liues for Christs
sake, much more their temporall goodes: From the Subject, and
the Predicate both together thus: Christ suffered most greuous
tormentes for our sakes: ergo wee ought to suffer a little paine for
his sake.

What is the maxim of this place?

If the Lesse preuaile, the More must needs auaille.

What

What is to be obserued in reasoning from these two places?

You must beware that you take not the More for the Lesse, nor
the Lesse for the More, for many times that which seemeth to be
the More in number or quantitie, is the Lesse in purpose, and
contrary wise, as for example: to beare a hundred weight is more
in quantitie then to beare halfe a hundred weight, and yet in pur-
pose it is lesse, for it is lesse probable, & lesse likely to beare a hun-
dred weight, then to beare halfe a hundred weight.

Of Like and Vnlike.

How may we reason from Like to Like?

When the thing which wee bring to proue is like or equall
to the thing that is to be proued: from which place we may rea-
son both Affirmatiuely and Negatiuely, thus: Peter is mortal,
ergo Paule is mortal. The day Labourer is worthy of his hyer,
ergo the preacher or Teacher: A man ought to be drowned in the
sea for killing his father, ergo hee ought to be executed with the
like death for killing his mother.

What is the maxim of this place?

Of things like, like iudgement is to bee made: but note that
this kinde of reasoning of like is more apt to teach and to print
in the hearers minde a lively representation of the thing, then to
urge him by any necessitie of new prooofe to belceue the same, be-
cause it is impossible, that the two things which are to bee com-
pared can be like in all pointes, and therefore this is the weakest
kinde of argument that is, and yet necessarie to such ende as is
before declared, and specially for Lawyers, to proue one ruled
case, or for iudgement by another like. To this place also is refer-
red the place of Example.

Of Example.

How may wee reason from this place?

Affirmatiuely thus: Peter slew Annanias for lying, ergo with-
out al doubt God wil punish those that vse to lye: the maxime
whereof is all one, with that of Like before set downe.

Of Vnlike.

How may we reason from this place?

Negatiuely thus: God is not as man is, for man is a ly-
er.

The Fourth Booke of Logike.

er, ergo God is true and no lyer.
 What is the maxim of this place?
Of things vnlike, vnlike iudgement is to bee made.

Of the degrees of Comparison.

TO the place of Comparison, me thinkes it were not amisse to re-
 ferre all those places which Aristotle reciteth, and are taken out of
 the three degrees of Comparison, which children learne in their Acci-
 dentes, (that is to say) the Positiue, the Comparatiue, and the Super-
 latiu.

From the Comparatiue to the Positiues.

HOW may we reason from the Comparatiue to the Positiue?
Affirmatiuely thus: Virgill was a more learned Poete then
milke, ergo Virgill was a learned Poete: hony is sweeter then
milke, ergo hony is sweete.

What is the maxime of this place?

If the Comparatiue degree be truly and properly applyed to
any thing, the Positiue must needs bee also rightly applyed to
the same. I say, here properly to auoide Ambiguities, for it were
no good Consequent to say thus: the sea of Calpis is more sweete
then any other sea, ergo it is sweete and not salt: for this worde
sweete hath not in this speech his proper signification, but is ra-
ther taken, for that which is lesse bitter or salt.

From the Positiue to the Comparatiue.

HOW may wee reason from the Positiue to the Comparatiue?
Onely Negatiuely thus: Zoilus was no learned Poete, er-
go hec was not better leached then Homer.

What is the maxim of this place?

If the positiue be denied the Comparatiue also must needs be
denied.

From two Positiues to two Comparatiues and two Superlatiues.

HOW may we reason from two Positiues to two Comparatiues and to

The Fourth Booke of Logike.

to two Superlatiues at once, and contrarily?

In this manner: that which is good deserueth iustly to bee be-
loued, ergo that which is better ought more iustly to be beloued.
and that which is best, ought most iustly to bee beloued. And
much after this manner you may reason from a double Com-
paratiue to a double Positiue thus: that which is more honest:
is more laudable, ergo that which is honest is laudable.

What is to be obserued in reasoning from these degrees of Compa-
 rison.

You must take heede that the predicat bee spoken of the Sub-
iect naturally and necessarily, and not by Accident, for it were no
good Consequent to reason thus: hec that is learned is honest,
therefore he that is more learned is more honest: for a man may
haue much learning, and yet small honesty.

Of Proportion.

VWHen are we saide to reason from the place of Proportion?
 When two like proportions being compared together,
 we conclude in this or such like manner: looke what proportion
 is betwixt 6. and 4. the same proportion is betwixt 12. and 8. but
 betwixt 6. and 4. is proportio Sesquialtera, ergo betwixt 12. and
 8. the like proportion is: for when one number of measure doth
 comprehend another once and one half thereof, that is called pro-
 portio sesquialtera, as 12. and 8. and if it contayne it once and one
 third part thereof, then it is called proportio sesquitertia, as 8. and
 6. for 8. contayneth 6. once and two ouer, which is the thir'd part
 of 6.

What is the Maxim of this place?

Of things hauing like proportion, like iudgement is to be
made.

Whereto serueth this place?

This place is necessarie for Judges and Magistrates that
haue to consider of equitie in causes of iustice, and in rewar-
ding vertue, or in punishing vice, in which the Geometrical
proportion would be alwaies used. Some do giue such exam-
ples of this place as in my opinion do rather belong to the place
of Like then to this place, for the argumentes of this place ought
properlie to be fetcht out of the predicament of quantitie, and
not out of qualitie, or out of any other predicament.

Of Changed Proportion.

VVhat is changed Proportion?

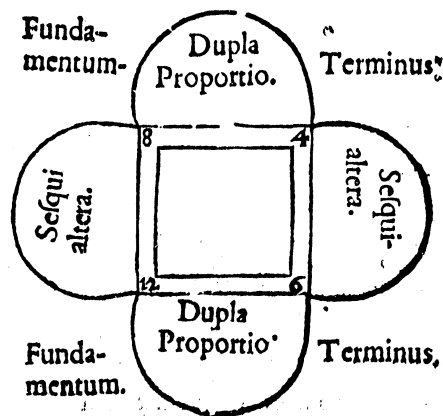
Changed proportion is when the Foundations, and Termes of two like proportions are answerable in proportion as well amongst themselves as one to another.

What meane ye by these two wordes foundations and termes?

The foundation is that from whence the Comparison first proceedeth, as the Father, and the Terme, Bownde or end is that whereunto the same Comparison is applyed, and endeth in the same, as the Son, & therefore the Son is called the term, bownde or ende: whereof wee haue spoken before in the predicament of Relation.

Giue Examples of reasoning from this place?

Looke as 8. is to 4. so is 12. to 6. (that is to say) in double proportion one to another, ergo as 12. is to 8. so is 6. to 4. for each one containeth the other once and a halfe, which is called proportio sesquialtera. The manifest Demonstration whereof you may see in this figure here following.



Why

Why is this Proportion saide to be changed or transposed?

Because the order of numbers that are compared, is altered in the conclusion: for in the Antecedent the first is compared to the second, and the thirde to the fourth: but in the Conclusion the third is compared to the first, and the fourth to the second.

Of Disproportion,

How may we reason from this place?
Negatiuely thus: 12. is not to 6, as 8. to 6, but 12. to 6. is double in proportion, ergo 8. to 6. is not double in proportion.
What is the maxim of this place?
Of things hauing unlike proportion, unlike iudgement is to be made.

From Disproportion changed or transposed.

How may we reason from this place?
Negatiuely thus: 12. is not to 6, as 4. to 3. for betwixt the two first is a double proportion, and betwixt the two last sesquitercia, ergo 12. is not to 4. as 6. to 3. for the one is a tripla, and the other double.

What be the maxims of this place?
If the first be not to the second, as the thirde to the fourth, then the first shall not be to the third, as the second is to the fourth.
To whom are these places most familiar?
To those that are exercised in the Mathematicall sciences.

Of Translation.

VVhat is Translation?
Translation, otherwise called a Metaphor, is a figure of speech, whereby the proper signification of a worde is changed into an other vnpoper, for some likeness that is betwixt the thing signified, and being generally taken it is rather a trope, or figure of rhetoricke, more meet to adorn speech then to proue any thing thereby: notwithstanding being taken here as a place of Logike, you may reason both Affirmatiuely and Negatiuely, in this sort, a roaring Lyon that seeketh to deuoure, is as bee tea-

red, ergo the Deuill is to bee feared: Loue is blind, ergo they that be in loue are not able rightly to iudge.

What be the maxims of this place?

Whatsoever agreeth with the Metaphoricall name, agreeth also with the proper name, and contrariwise.

Of Meane Places.

VVhat be meane Places?

Meane Places are those from whence such Arguments are to be fetched, as do partly agree with the nature of the things to be proued, and do partly differ from the same.

How are Meane places deuided?

Into Coniugates, Cases, and Diuision.

And first of Coniugates and Cases.

VVhat be Coniugates or Cases?

Coniugates or Cases be like words deriued all of one selfe word, differing onely in termination or ende, as wisdom, wise, and wisely: notwithstanding some vse Coniugates and cases as seuerall places.

Why, wherein do they differ?

Their Difference is very smal, sauing that in Arguments fetched from Coniugates, the Abstract is mentioned, but not in those that are fetched from Cases.

How may we reason from these two places?

Both Affirmatiuely & Negatiuely, from the Coniugates thus: A iust man is to be praised, ergo Justice is to be praised: A vicious man is not to be praised, ergo Viciousnes is not to be praised. From cases thus: He doth all things wisely, Ergo he is wise: He doth nothing wisely, ergo hee is not wise: for in these two last examples the abstract which is wisdom, is not once mentioned: what abstract is, looke before in the Chapter of predication lib. 1. cap. 5. but you must beware in reasoning from this place that your phrase of speech be naturall and proper, and not vnproper: for it were no good argument to say thus: white is sweete, ergo whitenesse is sweetnesse.

What is the of maxim these two places?

Whatsoever agreeth with one of the Coniugates or cases, must needs also agree with the other.

Of

Of Diuision.

VVhat is Diuision?

What Diuision is, and how many kindes there bee, and what is to be obserued in euery kinde hath bene declared before, Lib. 2. Chap. 4. when we shewed the order of denying and deuinding.

How may we reason from Diuision?

Two manner of waies: first from the denying of one part or more of the diuision, to affirme another parte thereof, as thus: Euery sensible bodie is whole or sicke, but Peter is a sensible body and not sicke, ergo he is whole: or thus. Of sensible bodies there bee some whole, some sicke, Peter is a sensible bodie and not sicke, ergo he is whole. In these two kindes of examples the diuision consisteth onely of two partes, wherein it sufficeth to deny the one for the affirming of the other. But if the diuision consist of many partes, then you must deny all the partes sauing that which you would affirme, as in this example following: Plato disputeth, is a proposition, but it is neyther vniuersal, particular, nor indefinite, ergo it is a singular proposition: in which kind of reasoning if you leane out or omit any parte that is to be denied, then the conclusion is naught, for it is no good consequent to say thus: this proposition Plato disputeth, is neyther vniuersal nor particular, ergo it is indefinite. Notwithstanding if you ioyn y part omitted in your Antecedent with a coniectio disiunctiue, y argument may bee made good, as to say thus: this proposition Plato disputeth, is neither vniuersal nor particular, ergo it is either indefinite or singular.

What is the maxim of this first way of reasoning?

The Maxim is thus: whatsoever agreeth with the thing diuided, must needs agree with some one of the partes thereof.

What is the second way of reasoning from Diuision?

The second way is to procede from the affirming of one of the partes to the denying of the other, if it consist but of two, or to the denying of all the rest, if it consist of many. Of two partes let this be your example: Of sensible bodies some be whole, some sicke, but this sensible bodie is whole, ergo hee is not sicke. Of many partes thus: of propositions one is vniuersal, another particular, one indefinite, another singular: but this proposition Plato disputeth, is singular, ergo it is neither vniuersal, particular, nor indefinite.

D 3

What

What is the maxim of this way of reasoning?

Whatsoever agreeth with one of the parts, must needs disagree with all the rest, for every good diuision would be made of partes meere repugnant, or at the least diuers in kinde one from another: for it is a principal condition requisite to diuision, whereby the second way of reasoning is grounded euen as the first way is grounded vpon another good condition belonging also to diuision, which is that the thing diuided may not contain more or lesse then his proper partes.

Of inartificiall places.

Having sufficiently spoken of places, inward, outward, and meane, which as I said before are places artificiall, it is meet now that we speake of the places inartificiall, which according to Quintilian be these six, For iudgements, Rumors, Torture, writings of Euidences, Oath, and witnesses: All which are briefly and plainly set forth in the table of authoritie here following, because they are all contained vnder the place of authoritie.

Of Authoritie.

How is Authoritie here to be taken?

Authoritie is here to be taken for any testimonie worthy of credite,

How may we reason from this place?

Afirmatiuely thus: the learned Philosophers say that there be foure elements, whereof all other thinges are mixt and compounded, ergo it is true. Christ saith that whosoever is baptised, and beleueth in him shall be saved, ergo it is true.

VVhat be the Maxims of this place?

Whatsoever is allowed by the most part of the wise and learned, is to be belieued as a thing probable, neyther ought we rashly to dissent from their opinion and iudgement. Again, every man is to be belieued in his owne art, but for so much as Authoritie is two fold (that is to say) diuine and humane, and that all arguments fetched from this place be not of like value, for some be true and infallible, some probable, and some sophistical: this table therefore here following shall plainly set forth euery kinde by it selfe, whereby you shall easily discern the one from the other.

The

The Table of Authority here following.

| | | | |
|-----------------------|-------------------------------|--------------------------|---|
| Authority is twofolde | Diuine which is twofolde. | written. | Of the written which we call holy Scriptures, founde arguments are made so long as the words are truly expounded according to the meaning of the holy Ghost. But they be weake and captious if the authority be corrupted eyther by addition, subtraction, or alteration of any worde, syllable, or letter, or by wresting the sense otherwise then the holy Ghost meant it. |
| | | or vwritten tradition | As for tradition or vwritten verity of what valew it is and what credit it hath, I leaue to the iudgement of the learned diuines amongst whome is no small strife and contention in these dayes for the same. The Paynims were wont to reſerre to diuine authority the Oracles & answeres of their false Gods, Priestes, Prophetes, and Southsayers, which true Christians ought vterly to reiect, and to abhorre: notwithstanding Lactantius letteth not to proue the birth, death and passion of Christ against the Paynims by Sybels prophesies, because he knew the y would giue more credit to them then to the holy scriptures. |
| | or Humaine which is hre folde | wrytings as | Histories, Lawes, Statutes, Decrees, Iudgements, ruled Cases, Maxims, Prouerbes, Generall rules, Patentes, Warrants, Lychenses, Commissions from the Prince, Charters, Deedes, Releases, Court Rolles, Exientes, Accountes, Obligations, Indentures, wils and Testaments, and such like. |
| | | things vntered by mouth, | If it be by mouth, it is eyther free and voluntarie, as voluntarie Confession, or Testimony, Rumor, Opinion, and the speech of the wise. Or else forced by oath or torture. |

And the thirde kinde of humane Authority is that which is allowed by vse and custome of the people.

The Fourth Booke of Logike.

As for such Argumentes as are fetched from humane Authority, the lawes do teach at large, which be sound & which be weak: notwithstanding forsomuch as Quintilia affirmeth, that the iudicial places, are the fit places aboue mentioned, I haue thought good to set downe according to Valerius, the definition of euery place, and briefly to shew how euery such place may bee confirmed or impugned.

And first of Foreiudgements or Ruled Cases.

VVhat call you Foreiudgements or Ruled Cases.
They bee iudgements or sentences heretofore pronounced, whereby Iudges take example to giue like iudgement in like cases.

How may a man confirme or impugne Foreiudgements?

You shall confirme them by aggravating the authority of those that first pronounced them, and by the likenes of the Cases: but you shall impugn or confute them by extenuating or diminishing the authority of the first pronouncers, and by the unlikenes of the Cases.

Of Rumor and Fame.

VVhat Difference is betwixt Rumor and Fame?

Rumor is a particular assertion or affirmation proceeding of some suspicion, without any certaine author. But Fame is a common affirmation hauing some certaine author: eyther of which whosoener will impugne, must call it an vncertaine bruit or clamor, taking his beginning first of malice, and his encrease through credulity and lightnes of belife, and that the same may chance to the most innocent man, that is through the fraude of his enemies, publishing abroad false surmises against him. Contrarily he that will defend Fame or Rumor, must say that it riseth not of nought, nor is spread abroad without some iust cause, & that it is accounted as a publike Testimony according to the olde proverbe, which sayeth, vox populi, vox Dei, the voice of the people is the voice of God.

Of Torture.

VVhat is Torture?

Torture is a painefull kinde of punishment, intented for the

The Fourth Booke of Logike.

the inquisition of truth, and violently to wrest or wryng the same out of such as would not otherwise confesse it.

How is this place to be confirmed or impugned?

It is to bee confirmed by aggravating the necessitie ble of torture for the finding out of the truth: but who so will impugne it must say, that such torture causeth many times more lies then true tales to be told, for those that bee strong and able to endure paine, and of a resolute mind, will neuer yeeld for any torment to say otherwise then they list themselves. Again, if they be weak and not able to suffer paine, it maketh them to say whatsoener you will haue them, be it neuer so false.

Of Writings and Euidences.

VVhat is meant by Writings?
Deedes, Indentures, Releases, Obligations, and such like other Euidences before rehearsed.

How is this place to be impugned?

You may impugne Euidences or writings, if ye can proue them to be vnperfect any manner of way, as to be forged, to bee made by some collusion or fraude, or to bee extorted by force from some that was put in feare, any such like.

Of Oathes.

VVhat is an Oath?

It is a religious affirming or denying some thing, by calling God to witness, which is the strongest bond that may be to bind mans faith and conscience.

How is this place to be confirmed or impugned?

He that will proue by this place must aggravate the integritie, honestie and holinesse of the parties that are sworn, saying, that the oath of an honest, holy, and religious man is of great importance: And hee that will impugne it must doe cleane contrary: saying, that they are naughtie men that are sworn, and common Swears, which by reason of wicked custome of swearing will easily bee forsworne: or he must say that the partie sweareth for feare, loue, hatred, for hope of gaine, reward, and such like.

Of Witnesses.

VVhat be Witnesses?

Witnesses be proofes of things done or not done, whose office is to speake what they haue heard or knowne: the confirmation or confutation of which prooofe dependeth vpon the goodnesse or euillnesse of the persons.

To what end serueth the knowledge of places?

He that will write or speake of any matter probably, wisely, or copiously: or will vnderstand the effect, tenor, argumentes, and proofes of other mens speeches, and writings, hath as much need to be practised in these places as a Huntsman is in knowing the haunts of his game which he hunteth, for without that he shall wander long time in vaine, and hardly find that which hee seeketh: neyther is it enough to know the places, vntilse you can apply them and vse them when occasion shall serue, in disputations made eether by mouth or pen, which requirerh a continual exercise of such as will be perfect therein. And therefore to the intent you might the better learne how to exercise your self in the foresaid places, I haue thought good here to giue you at the least one example set downe by Hunneus in his Logicke: the theame of which example is thus: Man ought to embrace vertue: which theame he doth not onely handle after the Logically manner with short speech, but also after the Rhetorically manner with copious speech, vsing therein this threefold order: For first hee bringerh in such proofes as are to be gathered in respect of the subiect of the Theame. Secondly those that are to be gathered in respect of the predicat of the same: and thirdly those that are to be had in respect of both.

The Theame or Proposition.

Man ought to embrace vertue.

What arguments are to be gathered on the behalfe of the subiect of this Proposition?

These that follow, and first from the definition thus: Sith of all sensible creatures man is the most noble and most worthy creature, for that he is endued with reason and counsell, and was created like to the image of God: it is most meete therefore that such

From the definition of the subiect.

The Fourth Booke of Logike.

such a creature should be like his creator, in life adorned with such vertue and goodnesse as is answerable to true iudgement, which the Logicians would vzie by expresse in this manner: it becometh every sensible body endued with reason to loue vertue, ergo every man ought to loue vertue.

From the Etimologic.

It becometh euery creature y is made of the stime of y earth to be void of all arrogancie and pride, to be lowlie, humble, and obedient to his creator, and to embrace vertue in obseruing the law of God deuoutly and religiously, wherefore man called in latine homo, of this word humo (that is to say) earth, or rather stime of the earth, taking his originall from so base and vile a thing ought to be humble and void of all pride and arrogancie, and to loue vertue aboue all thinges, being alwayes obedient to God his creator, and readie to do his most holy precepts and commandements.

Logically thus.

Euery sensible creature that is created of the stime of earth ought to be obedient to his Creator and to embrace vertue, therefore man ought to be obedient to his creator, and to embrace vertue.

From the matter.

Man is made of the selfe same matter of which all other vniuersall, dumbe and insensible creatures are made, (that is to say) of the fower elementes whereby he is subiect to alteration and corruption: wherefore man ought not to be proude or arrogant, but modest, humble, lowly and obedient, shewing in all the actions of his life, that he is not vnmindful of his base estate and condition, nor ignorant from whence he came, and what he is, & uen no better then earth and dust.

Logically thus.

Man is made of a base matter as all other things are, therefore man ought not to be proude, but to loue the vertue of humilitie and obedience.

From the forme or shape of man.

It hath bene alwaies most firmly and with one whole cons-
sent agreed and beleueed euen from the beginning of the world,
that the true shape of man is a reasonable soule, immortal and ca-
pable of euerlasting blessednesse, which soule God of his good-
nesse did beareth into man, to the intent that he should continually
serue, honour, and obey him during this mortall life, and after
death enjoy eternall life: what great madnesse were it then to
think that man hauing obtained at Gods hands so noble a shape
ought not to embrace all noble vertues, and to gouerne all his
actions in such godly and vertuous manner as he may at length
attaine to the euerlasting ioy whereunto he was first created and
formed.

Logically thus:

Man consisteth of a soule capable of eternall felicitie, ergo man
ought to loue vertue, whereby he may attaine to that felicitie.

From the generall kind.

Sith it is giuen by nature to euery sensible bodie to seeke his
owne safety, and to be best affected (that is) to haue his full per-
fection according to his kind: the loue of vertue therefore wher-
by man is made not onely perfect in this life, but also attaineth
thereby euerlasting ioy in the life to come must needs bee to him
most naturall.

Logically thus,

Euery sensible bodie willingly desireth that which is agreea-
ble to his nature and kind, therefore man must needs loue ver-
tue, as a thing most fit for his kinde.

From the speciall kind.

Both men and women, rich and poore, young and old, of what
state or calling soeuer they be, if they intend to leade a good and
godly life haue neede of vertue: wherefore all men that will liue
well ought to embrace vertue.

Logically thus,

Both rich and poore, young and old ought to loue vertue, ergo
euery man ought to loue vertue.

From the common Accidents.

Euery man after that hee hath ended this short course of life,
must appeare at the last day before the terrible iudgement seat
of

of God, there to render account of all his doings and words both
good and bad, whereas euery man that hath done well shall re-
ceiue for his good doings a most glorious reward, euen life euer-
lasting: but the wicked for his euill doings shall be condemned
to hell fyre, that neuer shalbe quenched, a iust reward for his de-
serts: wherefore all men ought in this life to flie vice, and to em-
brace vertue, from whence all good actions doe spring.

Logically thus,

Euery man shall render account at the last day, of all his
doings both good and badde, and shall receiue a iust reward ac-
cording to the same: ergo euery man whilest hee liueth in this
world ought to flie vice, and to embrace vertue.

From the cause efficient.

Sith man was created by God the creator of all things, and au-
thor of all goodnesse, excellencie, and vertue, and was formed
according to the very image & likenesse of God: it behooueth man
therefore to imitate his creator, and by leading a godly and ver-
tuous life, to shew that he is somewhat like him, though not able
in all thinges to attaine to the perfection of so perfect a patterne.

Logically thus,

God the cause efficient is good, therefore man being the effect
ought to be good.

From the end.

The Prophetes and Apostles inspired with the Holy Ghost,
author of all truth, by many their writings do testify that the
greatnesse and excellencie of that blessednesse whereunto man is
created, is such as no man is able to expresse with tongue, nor in
his heart or minde to conceiue the same: wherefore sith man is
created to such exceeding great blessednesse, it behooueth him to
embrace vertue, which is the very meane and way to bring him
to that blessednesse.

Logically thus:

Sith most glorious blessednes is the ende of man, man there-
fore ought to embrace vertue that hee may attaine to that end.

What argumentes are to bee gathered on the behalfe of the Predi-
cate, and from what places?

These that follow and such like, and first from the definition
that

From the definition of the Predicate.

Such vertue is a morall habite, whereby mans will and all his actions are alwaies directed to God, and gouerned according to true iudgement, and thereby are made most acceptable both to God and man: Man therefore ought to embrace vertue, from whence such noble fruites do spring.

Logically thus.

Man ought to loue that habite from whence all honest actions doe spring: therefore man ought to loue vertue.

From the Description.

Man ought with all endeuor to follow that thing whereby he may attayne not a vaine and transitorie glozy, but a true and euertlasting glozy, and thereby to be made acceptable both to God and man: wherefore man ought to embrace vertue from whence such glorie springeth.

Logically thus.

That thing is worthy to be beloued of man which getteth him euertlasting glorie: therefore vertue is worthy to be beloued.

From the Etimologie.

Such vertue if you diligently consider and waigh the signification of the word, is none other thing but a noble affection of the mind, of great excellencie, and most meete for man: it is not to be doubted but that those (which leauing so precious a thing do set their whole delight in seeking after worldly riches and bodily pleasure) are much deceyued and do greatly offend.

Logically thus.

Such excellencie as is most meet for man becommeth man best: therefore vertue becommeth him best.

From the generall kind.

Such it is well knowne that man ought with all diligence to seeke after those habites whereby humane nature is best adorned and made most perfect. And that vertue amongst such habites is the chiefe: because that thereby the minde of man is taught to know what truth is, and his will thereby is alwaies inclined to honesty.

honest and laudable actions, man therefore ought with all his power and endeuour to embrace vertue.

Logically thus.

Man ought chiefly to loue those habites whereby his nature is made perfect: therefore man ought to loue vertue.

From the speciall kind.

It is most meete, yea most necessarie for all men to loue fortitude and temperance: for by temperance mans will is bridled and kept from all euill lustes and affections, and by fortitude he is made free from feare of death: and as without temperance mans life cannot be honest, so without fortitude his death cannot be commendable: wherefore it plainly appeareth how necessary a thing it is for a man to embrace vertue, as that which chiefly maketh his life honest and laudable, and his death glorious and honozable.

Logically thus.

A man ought to loue fortitude and temperance, Ergo he ought to loue vertue.

From the corruption of the subject.

The destruction of vertue is the cause of most greivous evils, for the light of vertue being extinct, the minde is immediately wrapped in such darknesse as it cannot see nor discern what is honest, what is profitable, or what is hurtfull: by means whereof man falleth into most filthy vices, which doe so infect and corrupt the life of man, as it becommeth most detestable both to God & man: whereby it playnely appeareth how noble a thing vertue is, and with what loue and diligence it ought to be embraced of all men.

Logically thus.

The destruction of vertue is euill, therefore vertue is good & worthy to be beloued.

From the vse of the Subject.

The vse of vertue maketh mans life commendable, holy, glorious, and acceptable both to God and man: then which nothing can be in this world moze to be desired of man: wherefore it manifestly appeareth, that vertue is so noble a thing as all men ought

The Fourth Booke of Logike.

ought to bestow all their Studie, labour and care in obtaining the same.

Logically thus :

The use of vertue is good, therefore vertue is good.

From common Accidents.

Such men do greatly desire to haue their consciences quieted, and their minds free from all euill lusts, affectes and passions, which with continuall strife do molest the same : and thereby doe cause man to leade a miserable life : man therefore ought to refuse no paine nor labour, so as he may attaine to vertue, which is alwaies accompanied with that tranquillitie of minde & conscience that is so much desired.

Logically thus :

The tranquillitie of the mind and conscience is to bee desired, ergo vertue which is alwaies accompanied with that tranquillity is to bee desired.

From the cause efficient.

Such true vertue is not to be gotten by any mans labour, exercise or industrie, without the great grace of God, who is chiefe author and giuer of all good gifts : it well appeareth that vertue is a most excellent thing and most worthy to be had in admiration, and therefore with seruient loue and diligence to bee embraced of all men.

Logically thus.

God the chiefe author of all good is the cause efficient of vertue, therefore vertue proceeding of so worthy a cause must needs bee an excellent thing, and worthy of all men to bee embraced.

From the effect.

True honor and glorie hath beene alwaies had amongst all men in great admiration : because it seemeth not onely by mans iudgement, but also by the diuine iudgement of God to be alwaies attributed to vertue, wherefore such vertue doeth yeeld such noble fruites and effects, vertue must needs be a noble thing it selfe, and worthy of all men to bee embraced.

Logically :

The Fourth Booke of Logike.

Logically thus.

The effect of vertue, which is true honor and glorie, is good and to be desired, ergo vertue is to bee desired.

From the End.

Such euermlasting blessednesse is of such excellencie, as neyther tongue is able to expresse the ioyes thereof, nor minde to conceive the same, and therefore ought to bee desired aboue all things as the iust rewarde of all goodnes, and finall end of all euill, and that vertue is the onely meane to bring man to that blessed ende : who then will once thinke that vertue is not to bee esteemed aboue all thinges, and worthy of all men to bee embraced.

Logically thus.

The end of vertue which is euermlasting felicity is to bee desired : ergo vertue is to bee desired.

Hetherto you haue shewed how the aforesaide Theme is to be proved with argumentes fetched aswel from the Subject as the Predicate, now shew what arguments are to be fetched fro both ioyned together : These that follow and such like, and first by Comparison, from the Lesse to the More.

From the Lesse to the More.

If men wil not let to bestow any paine, labor or cost to preserve their bodics, from death, sicknesse, or any other hurt, how much more then ought they to enduor themselves to obtain vertue, which will preserve their soules from all corrupt affections and euill vices, and thereby deliuer them from death euermlasting.

Logically thus.

Man ought to bee carefull of his bodily health, ergo much more of his soules health, which is chiefly preserved by vertue.

From Similitude or Likenesse.

As the beautie of the bodie is pleasant to mans eyes : euen so the beautie of the mind or soule is as acceptable to God : and therefore as man wil be diligent and carefull in decking and adorning his body to please the eyes of men : euen so he ought to be most carefull to decke his soule and minde, with such vertues as do make the same in Gods sight most acceptable.

Logically thus.

As the decking of the body is pleasant to mens eyes : so the decking

From Authority.

Dauid the Prophet in the 34. Psalm sayeth thus: Turne from euill, & do that which is good. The Prophet Micheas also agreeth hereunto in saying thus: Deale iustly with all men, loue mercy, and walke diligently in the way of God, by which wordes these two godly Prophetes do teach no other thing, then that man forsaking all kynde of vice, shoulde with all diligence embrace vertue.

Logically thus:

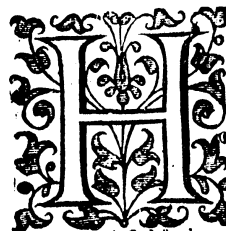
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Here endeth the Fourth Booke of
Logike.

Of

THE FIFT BOOKE OF
Logike.Of Argumentation, and of the Fower kinds there-
of in generall, and also of the first Principles
of a Syllogisme.

Chap. I.



Having hitherto sufficiently spoken of words both simple and compound, whereof al questions do consist, also of definition and diuision, of Method, of Propositions, and of the places: It resteth now that I declare vnto you the formes and kindes of reasoning called Argumentation, which be the meanes whereby in al compound questions the truth may be discerned from falshood, wherein consisteth the chiefeit fruite of Logike: and therefore you shall vnderstand that there bee foure principal kindes or formes of Argumentation (that is) a Syllogisme, an Induction, an Enthymeme, and Example, I say here principal, because there be diuers other formes, which though they be not so necessarie, yet I will briefly treat of them hereafter: But forsomuch as the Syllogisme is the chiefeit, whereunto all others are referred as thinges vnperfect, vnto a thing perfect, I will first speake of a Syllogisme, and of all the partes thereof: but yet before I define or deuide a Syllogisme, I thinke it very necessarie to declare vnto you the first Principles aswell Materiall, as Regular, of a simple Syllogisme consisting of simple Propositions.

V Which call you materiall Principles?

Materiall Principles are three simple Propositions, and three termes, (that is to say) the Subject, the Predicate, and the mean term hereafter defined, whereof the Subject and the Predicate

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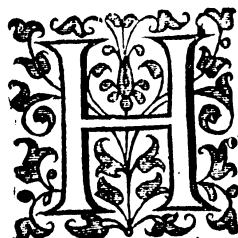
Of



THE FIFT BOOKE OF Logike.

Of Argumentation, and of the Fower kindes thereof in generall, and also of the first Principles of a Syllogisme.

Chap. I.



Having hitherto sufficiently spoken of words both simple and compound, whereof al questions do consist, also of definition and diuision, of Method, of Propositions, and of the places: It resteth now that I declare vnto you the formes and kindes of reasoning called Argumentation, which be the meanes whereby in al compound questions the truth may be discerned from falshood, wherein consisteth the chiefeit fruite of Logike: and therefore you shall vnderstand that there bee foure principal kindes or formes of Argumentation (that is) a Syllogisme, an Induction, an Enthymeme, and Example. I say here principal, because there be diuers other formes, which though they be not so necessarie, yet I will briefly treat of them hereafter: But forsomuch as the Syllogisme is the chiefeit, whereunto all others are referred as thinges vnperfect, vnto a thing perfect, I will first speake of a Syllogisme, and of all the partes thereof: but yet before I define or deuide a syllogisme, I thinke it very necessarie to declare vnto you the first Principles aswell Materiall, as Regular, of a simple Syllogisme consisting of simple Propositions.

Vvhich call you materiall Principles?

Materiall Principles are three simple Propositions, and three termes, (that is to say) the Subject, the Predicate, and the mean term hereafter defined, whereof the Subject and the Predicate

are saide to be the outermost limites or boundes of any simple proposition.

Why are they called tearmes or limites?

Because they limmet a proposition, euen as dole-stones or meares do limmet a peece of ground in the fiede, and bee the uttermost partes or boundes whereunto any proposition is to bee resolued, as for example in this proposition, euery man is a sensible bodie: these two wordes, man and sensible bodie, are the tearmes, limites, or boundes, wherof as the saide proposition is compounded, so into the same it is to be resolued, as into his uttermost parts that haue any signification: for letters & sillables of themselves be without signification, and therefore can limmet no speech, so that y^e termes of propositions must be cyther nommes or verbes, which be onely boies significatiue, as haue been saide before.

VVhich be the principles regulatiue?

The principles regulatiue of a Syllogisme be these, two phrases of speech, to be spoken of all, and to be spoken of none.

VVhat is to be spoken of all?

That is when the predicate being truly spoken of the Subject, must needes be also spoken of all that is comprehended vnder the said Subject: as when I say euery man is a sensible bodie: here this worde sensible bodie, is not onely spoken of man in general, but also of Peter and Iohn, and of euery other man in particular comprehended vnder the foresaide Subject, man.

VVhat is to be spoken of none?

It is when the predicate being denied to be spoken of the Subject, is denied also to be spoken of any thing containd in the Subject, as when I say, no man is a stone, here like as this word stone is denyed to be spoken of man, so it is also denyed to be spoken of Peter, of Iohn, and of euerie other singular man, out of which Definitions are gathered two necessarie rules.

VVhich be they?

The first rule is whatsoever is truly affirmed of his naturall and proper Subject, is also affirmed of all those things which are containd vnder the saide Subject, the second rule is thus, whatsoever is denyed to be spoken of any Subject is also denyed to be spoken of euery thing contained vnder the saide Subject.

VVhereto serue these rules?

The first rule confirmeth all Syllogismes affirmatiue, and the second confirmeth all Syllogismes negatiue.

Of

Of a Syllogisme, what it is, how it is deuided, and of what partes it consisteth.

Chap. 2.

VV

What is a Syllogisme?

A Syllogisme is a kind of argument containyng three propositions, wherof the two first commonly called the premises being disposed according to moode, and figure, and granted, the third proposition otherwise called the conclusion differing from the other two, followeth of necessity, by vertue of the premises: how these three propositions are called, and what moode and figure is, shall be declared hereafter. In the meane time marke wel the two other points touching this Definition: first that the Conclusion must not be at one but differing from the premises, secondly that the saide Conclusion bee necessarily inferred of the premises as in this example: euery sensible bodie is a substance: euery man is a sensible bodie: ergo euery man is a substance: for if the Conclusion were thus, ergo euery sensible bodie is a substance, or euery man is a sensible bodie, the argument should not be good, because the Conclusion should be all one with one of the premises, the reason why the Conclusion must needes be inferred of the premises, and so consequently follow of the same, shall bee declared vnto you hereafter.

How is a Syllogisme deuided according to the Schoolemen?

First they deuide it according to the diuersitie of the propositions, wherof it consisteth into two kindes, v^z. Categorical, and Hypotheticall (that is to say) simple and compound, calling that simple, which is made of simple propositions: & that compound, which is made of compound propositions, what simple & compound propositions are, hath beene before defined. Againe they deuide the simple Syllogisme, three manner of wayes, first according to the diuersitie of the termes into a common and into a singular Syllogisme, for if the termes wherof the Syllogisme consisteth, be common, or generall, and specially the meane tearme, or prooffe, then that Syllogisme is called a common Syllogisme: but if the meane terme or prooffe be Individuum, then that Syllogisme is saide to be a singular Syllogisme, called of them, Syllogismus expositorius, wherof we shall speake hereafter, secondly, they deuide a simple Syllogisme, according to the diuersitie of the figure

23

figure into a perfect, and vnperfect Syllogisme.

When is it saide to be perfect?

When it needeth not to bee altered any manner of way, otherwise then it is, that the Consequent may manifestly appeare.

VVhen is it saide to be vnperfect?

When the Consequent doth not manifestly appeare, vnlesse the Syllogisme be altered eyther by conuersion, or transposing of the premises, whereof we shall speake hereafter: thirdly, they define a simple Syllogisme, according to the matter of the Propositions, whereof it is made into three kinds, that is into a Syllogisme Demonstratiue, Dialecticall, and Sophisticall: of which three kinds we shall speake hereafter, and in their proper places, so as in all the Schoolemen make foure severall diuisions of a Syllogisme, the first according to the diuersity of the propositions, the second according to the diuersitie of the termes, the third according to the diuersitie of the figure, and the fourth according to the diuersitie of the matter of the propositions, whereof we haue spoken before, and shewed how manifolde such matter is: but in the meane time, wee will shew you of what partes a simple common Syllogisme consisteth.

Of how many partes doth a simple Syllogisme consist?

Of two that is Matter, and Forme.

Of the Matter, and Forme of a simple common Syllogisme.

Chap. 3.

VVhat thinges are saide to be the matter of a Syllogisme? The matter whereof a Syllogisme is made, are three termes, and three Propositions, which wee called before materiall Principles, and the forme consisteth of figure, and moode, whereof wee shall speake in the next Chapter.

Define what these three termes be?

The one is called the Maior terme, or maior extremitie, which is the Predicate of the question that is to bee proued, the other is called the Minor terme, or minor extremitie, which is the Subject of the question, and these two termes are knit together in the Conclusion, and made to agree by helpe of a third terme called the

the meane terme, or prooffe.

VVhat is the meane terme?

It is the prooffe of the question, which is twice repeated before the conclusion, and not once mentioned in the same.

How is such prooffe to bee found out?

Four manner of wayes (that is to say) by experience, by quicknes of wit, by erudition, and by searching the common places.

Giue examples of all these four wayes?

1 By experience, as when we affirm that intemperance is to bee fled, because we know by experience, that it consumeth both body and goodes in vaine pleasures. 2 By wit as to prouue that the courtesies of wicked men is infinite: because witte and reason teacheth vs that if courteous men did eyther care for the law of God, or for reason, they woulde not exceede so farre the boundes thereof. 3 by erudition as to prouue that riches are not to bee desired ouer greedily, but to serue necessity: because it appeareth by the doctrine of S. Paule that such as greedily seek to be rich, do fall into temptation, and into the snares of the Deuill. 4 By searching the common places, as when the prooffe of any question is fetched from any of the common places before taught, as from the generall kinde, from the speciall kind, from the difference, or property, and such like whereof you haue had examples before.

Which be the three propositions whereof a Syllogisme doth consist? These three, the Maior, the Minor, and the Conclusion.

VVhich call you the Maior?

That which consisteth of the predicate of the question otherwise called the Maior terme, and of the meane or prooffe, being both ioyned together in one selfe proposition, which proposition is the whole strengthe of the Syllogisme, for it is the cause and prooffe of the Conclusion.

VVhich call you the Minor?

That which consisteth of the Subject of the question called the Minor terme, and of the meane or prooffe ioyned together, which two propositions are called by one general name, premises because they goe before the Conclusion.

What is Conclusion?

It is that which consisteth of the Predicate, and of the Subject, and is the question it selfe concluded.

Giue example.

For example let this bee your question: whether man bee a substance or not, here you haue two extreames or termes, whereof substance being the Predicate is the maior terme, and man being

here the subject is the minor terme: now to prooue that this word substance is properly and naturally spoken of man as of his subject, and that you may truly knit these two extremes, or termes together, you must seeke out some cause or prooffe otherwise called the meane terme, which being once found out, the sillogisme is soon made: let the meane terme therefore be this worde sensible body, for euery sensible bodie is a substance, which prooffe is fetched from the general kind, then forme your Syllogisme thus, euery sensible bodie is a substance: but man is a sensible bodie, ergo man is a substance: here you see that the meane terme or prooffe is twice repeated before the Conclusion: (that is to say) in the maior proposition together with the predicate of the question called the maior terme, and also in the minor proposition together with the subject of the question called the minor terme, and not once mentioned in the conclusion. Thus much touching the matter whereof a sillogisme consisteth, now of the forme thereof.

Of the Forme of a Syllogisme.

Chap. 4

YOU haue before that the Forme of a Syllogisme comprehended Figure, and moode, now therefore tell what figure and mood is, and how many of them there be.

Figure is no other thing, but the diuerse placing, or disposing of the meane terme in the premisses: which figure is threefold, that is first, second, and third, for if the meane terme, be the subject in the maior proposition, and predicate in the minor, as in the example aboue, then it maketh a Syllogisme of the first figure, and if it chance to be predicate in both propositions, then it maketh a Syllogisme of the second figure as thus, no stone is a sensible body: but man is a sensible body, ergo no man is a stone: for here the meane terme, sensible body, is predicate in both propositions: but if the meane be subject in both propositions, then it maketh a Syllogisme of the third figure as thus: euery man is a substance: euery man is a sensible body, ergo some sensible body is a substance, for here the meane terme that is man, is subject in both the first propositions, and to these three figures doe belong certaine moodes.

What is a moode?

A mood, called in latine modus, amongst the Logicians, is none other but the true ordering of the premises as of the conclusion

in a sillogisme according to due quantitie & qualitie: what the quantitie and qualitie of a proposition is, hath bene taught before, lib. 3. Chap. 1.

How many moodes do belong to the first Figure?

To the first figure do belong 9. Moodes, thus named:

Barbara: Celarent: Darii: Ferio: Baralipon:

Celantes: Dabitis: Fapesmo: Frisefomorum.

Whereof the first foure because they conclude directly, are called perfect moodes, making perfect sillogismes: and the other 5. because they conclude indirectly, are called vnperfect Moodes, making vnperfect Sillogismes.

What is to conclude directly or indirectly?

That mood is said to conclude directly when the Maior terme is made the predicate, and the Minor terme the subject in the conclusion: But if in the conclusion the Minor terme be the predicate, and the Maior terme the subject, then that Moode is said to conclude directly: as for example: Euery sensible bodie is a substance: Man is a sensible bodie, Ergo man is a substance. This sillogisme concludeth directly, because the Maior terme substance is the predicate in the conclusion: but if the conclusion were thus, Ergo some substance is a man: then it should conclude indirectly: because this word man which was the subject of the question in this conclusion is made the predicate.

How many Moodes do belong to the second Figure?

There foure, Celare, Camestres, Festino, Baroco.

How many moodes do belong to the third Figure?

These sixe: Darapti, Felapton, Disamis, Datisi, Bocardo, and Ferison: which words being otherwise called tearmes of Art, and euery one consisting of three syllables, were purposely invented by the scholemens, to signifie the quantitie and qualitie of euery proposition contayned in a Syllogisme, and are briefly set downe in these foure verses following.

Barbara, Celarent, Darii, Ferio: Baralipon:

Celantes, Dabitis, Fapesmo, Frisefomorum:

Celare, Camestres, Festino, Baroco, Darapti:

Felapton, Disamis, Datisi, Bocardo, Ferison.

It seemeth to me that these names do not euenly consist each one of three syllables, for in the first verses there be two moodes or names, whereof the one called Baralipon, contayneth foure syllables, & the other called Frisefomorum, contayneth five syllables.

You say true, but these syllables are no part of these two moodes, but serue onely to fill vp the verse: for this syllable con, is no part of the moode Baralipon: nor the two syllables morum, are any part of

the Goodde Friselo.

What is to be considered in these words of Art or Moodes.

Two things, (that is to say) the vowels and the consonants contained in every Goodde, and what they signifie.

Which are those vowels and what do they signifie?

The howelles be these foure, a. e. i. o. Whereof a. signifyeth an vniuersall Affirmatiue, e. an vniuersall Negatiue: i. a particular Affirmatiue, o. a particular Negatiue: of all which you shall haue examples in the sixt chapter of this booke here following.

Which be the Consonants and what do they signifie?

More shall haue cause to speake of them hereafter in a fitter place.

In the meane time then giue examples of the Moodes belonging to all the figures?

Before we giue examples it shall not bee amisse to set downe certaine rules requisite to all the three figures aswell in generall, as in particular.

Of certaine rules as well generall as speciall belonging to the three Figures.

Chap. 5.

How many generall rules be there, which are common to all the three Figures?

Four: two of quantitie, and two of qualitie.

Which is the first of those that belong to quantity?

In every Sillogisme it behooueth eyther one or both of the premisses to be vniuersall.

Why so?

Because that of two meeere particular propositions nothing by order of Logike can consequently follow: As for example, this Sillogisme is not good: Some sensible bodie is a man, but some hoyle is a sensible body, Ergo a hoyle is man. The like reason is also to be vnderstood when the premisses are indefinite propositions, yea or singular propositions, if the meane teatine bee not likewise singular, for then it maketh a Sillogisme expositioe, whereof we shall speake hereafter.

Which is the second rule that belongeth to quantity.

If any of the premisses be particular, then the conclusion also must be particular.

Why so?

Because

Because the conclusion being implied of the premisses ought alwaies to follow the weaker part of the same premisses, but the particular is alwaies accounted weaker then the vniuersall, and the negative weaker then the affirmatiue.

What is the first rule belonging to qualitie?

In every Sillogisme it behooueth either one or both of the premisses to be Affirmatiue.

Why so?

Because that of two pure negative propositions nothing can be orderly concluded, as in this example: No man is a tree, but no beare tree is a man: Ergo no beare tree is a tree: which Sillogisme cannot be good, for the premisses are both true, and the conclusion is false.

Which is the second rule belonging to qualitie?

If any of the premisses be Negatiue, then the conclusion must also be Negatiue.

Why so?

Because (as it hath bene said before) the conclusion must follow the weaker part.

Which be the speciall rules belonging to the three Figures?

In the first lower Moodes of the first figure directly concluding the Minor may not be a Negatiue, nor the Maior particular but vniuersall.

In the second Figure the Maior must not be particular, and one of the premisses must be a Negatiue.

In the third Figure the Minor must not be a negatiue, nor the conclusion vniuersall: but as for the quantitie and qualitie of euery proposition in euery kind of sillogisme, of what figure soener it be, it shall plainly appeare by the vowels, or rather syllables of the Moodes, otherwise called wordes of art, annexed to the examples hereafter following.

First giue examples of Sillogismes of the first figure, and of his foure perfect moodes directly concluding.

Examples of the foure perfect Moodes belonging to the first Figure.

Chap. 6.

The first Goodde of the first Figure is when three termes being giuen, a Sillogisme is made of: vniuersall affirmatiues directly cōcluding a vniuersal affirmatiue, as this sillogisme here following

A 2

following: the tearmes whereof bee these, sensible bodie, substance, and man placed in this sort.

- Bar. Euery sensible bodie is a substance,
 ba. But euery man is a sensible body,
 ra. Ergo euery man is a substance. }

The name of this moode is called Barbara, diuided into three syllables, placed in the margent right against the Sillogisme, to shew the quantitie and qualitie of euery proposition, according to the significations of the vowels contained in euery syllable: and so are all the other names of the Moodes hereafter following. The second Moode is, when three tearmes being giuen, a sillogisme is made of an vniuersall negative Maior, and of an vniuersall affirmative Minor, directly concluding an vniuersall Negative: As for example, let the tearmes bee these: sensible body, a man, a stone, and the sillogisme thus.

- Ce. No sensible body is a stone,
 la. But euery man is a sensible body,
 rent. Ergo no man is a stone. }

The name of this Moode is Celarent.

The third Moode is, when three tearmes being giuen, a sillogisme is made of an vniuersall affirmative Maior, and of a particular Affirmative Minor, directly concluding a particular Affirmative: As for example let these be the tearmes: sensible body, substance, and man, and the sillogisme thus:

- Da. Euery sensible body is a substance,
 ri. But some man is a sensible bodie,
 j. Ergo some man is a substance. }

The name of this Moode is Darii.

The fourth Moode is, when three tearmes being giuen, a sillogisme is made of an vniuersall Negative Maior, and a particular affirmative Minor, directly concluding a particular Negative: As for example, let these be the tearmes, sensible body, man, and Stone: and the Sillogisme thus.

- Fe. No sensible bodie is a stone,
 ri. But some man is a sensible bodie,
 o. Ergo some man is a stone. }

The name of this Moode is Ferio.

Examples

Examples of the five vnperfect Moodes of the first Figure.

Chap. 7.

Give examples of the five Moodes of the first Figure indirectly concluding?

The first imperfect Moode of the first Figure indirectly concluding, is when the Maior and Minor, being both vniuersall affirmatives, do conclude indirectly a particular Affirmative, as thus:

- Ba. Euery sensible body is a substance,
 ra. Euery man is a sensible body,
 lip. Ergo some substance is a man. }

The name of this Moode is Baralipon, whereof the last syllable ton is onely to fill vp the verse, as hath bene said before.

The second imperfect Moode is when a Sillogisme is made of an vniuersall Negative Maior, & an vniuersall Affirmative Minor, indirectly concluding an vniuersal Negative, as thus.

- Ce. No sensible body is a tree,
 lan. Euery man is a sensible bodie,
 tis. Ergo no tree is a man. }

The name of this moode is Celantes.

The third imperfect Moode is when a Sillogisme is made of an vniuersall Affirmative Maior, and of a particular Affirmative Minor, indirectly concluding a particular Affirmative, as thus.

- Da. Euery sensible body is a substance,
 bi. Some man is a sensible bodie,
 tis. Ergo some substance is a man. }

The name of this Moode is Dabitis.

The fourth imperfect Moode is when a Sillogisme is made of an vniuersal Affirmative Maior, and of an vniuersal Negative Minor, indirectly concluding a particular Negative, as thus.

Bar 3

Euery

Fa. Euery sensible body is a substance }
 pel. No tree is a sensible body, }
 mo. Ergo some substance is not a tree. }

The name of this mood is Fapesmo.

The first imperfect mood is when a Sillogisme is made of a particular Affirmative Maior, and of an vniuersall Negatiue Minor, indirectly concluding a particular Negatiue, as thus.

Fri. Some sensible bodie is a substance, }
 fe. But no tree is a sensible bodie, }
 fo. Ergo some substance is not a tree. }

The name of this mood is Frisesomorti, whereof the two last syllables (as hath bene laide before) are only put to make vp the verse.

Of the foure Moods belonging to the
 second Figure.

Chap. 8.

Give examples of the four Moods belonging to the second figure?
 The first mood of the second figure is when a Sillogisme is made of an vniuersall Negatiue Maior, and of a vniuersall Affirmative Minor, directly concluding a vniuersall Negatiue thus:

Ce. No stone is a sensible body }
 fa. Euery man is a sensible bodie, }
 re. Ergo no man is a stone. }

The name of this mood is Cesare.

The seconde mood is when a Sillogisme is made of an vniuersall Affirmative Maior, and of an vniuersall Affirmative Minor, directly concluding a vniuersall Negatiue, as thus.

Ca. Euery man is a sensible bodie, }
 mes. But no stone is a sensible body, }
 tres. Ergo no stone is a man. }

The name of this mood is Camestres.

The third mood is when a Sillogisme is made of an vniuersall

uerfall Negatiue Maior, and of a particular Affirmative Minor, directly concluding a particular Negatiue: as thus.

Fel. No stone is a sensible bodie. }
 ti. But some man is a sensible bodie, }
 no. Ergo some man is not a stone. }

The name of this mood is Festino.

The fourth mood is when a Sillogisme is made of an vniuersall Affirmative Maior, and of a particular Minor, directly concluding a particular negatiue, as thus.

Ba. Euery man is a sensible bodie, }
 ro. But some stone is not a sensible bodie, }
 co. Ergo some stone is not a man. }

The name of this mood is Baroco.

Of the sixe Moods belonging to the 3. Figure.

Chap. 9.

Give examples of the sixe Moods belonging to the third figure?
 The first is when a Sillogisme is made of an vniuersall Affirmative Maior, and of an vniuersall Affirmative Minor, directly concluding a particular Affirmative, as thus.

Da. Euery man is a substance, }
 rap. But euery man is a sensible body, }
 ti. Ergo some sensible bodie is a substance. }

The name of this mood is Darapti.

The second mood is when a Sillogisme is made of an vniuersall Negatiue Maior, & of an vniuersall Affirmative Minor, directly concluding a particular Negatiue as thus:

Fe. No man is a stone, }
 lap. But euery man is a substance, }
 ton. Ergo some substance is not a stone. }

The name of this mood is Felapton.

The third mood is when a Sillogisme is made of a particular Affirmative Maior, and of an vniuersall Affirmative Minor, directly concluding a particular Affirmative, as thus.

- Di. Some man is a substance,
 fa. But euery man is a sensible bodie,
 mis. Ergo some sensible body is a substance. }

The name of this Moode is Disamis.

The fourth Moode is when a Sillogisme is made of an vniuersall Affirmative Maior, and of a particular Affirmative Minor, concluding a particular Affirmative: as thus.

- Da. Euery man is a substance,
 ti. But some man is a sensible bodie,
 fi. Ergo some sensible body is a substance. }

The name of this Moode is Dariti.

The fifth Moode is when a Sillogisme is made of a particular negative Maior, and of an vniuersall Affirmative Minor, directly concluding a particular negative, as thus.

- Bo. Some man is not a stone,
 car. But euery man is a sensible bodie,
 do. Ergo some sensible bodie is not a stone. }

The name of this Moode is Bocardo.

The sixth Moode is when a Sillogisme is made of an vniuersall Negative Maior, and of a particular Affirmative Minor, directly concluding a particular Negative as thus.

- Fe. No man is a stone,
 ti. But some man is a sensible body.
 fon. Ergo some sensible body is not a stone. }

The name of this Moode is Ferison.

Thus you haue all the three Figures, together with their Moodes plainly set forth with examples.

Of a Sillogisme expositorie.

Chap. 10.

And now because a Sillogisme expositorie is saide to bee a Sillogisme of the third Figure: I thinke it most meet to giue you an example thereof each here: for I haue already defined the same before.

Pea,

Yea I remember yee said it was expositorie when the proofer meaneth it is an Individuum: but if yee giue example, I shal the better vnderstand it?

Let this then bee your example, to prooue some men to be both Orators & Philosophers by a sillogisme expositorie thus: Cicero was an Orator: but Cicero was a Philosopher, ergo some men are both Orators and Philosophers: again to prooue that some rich men are not wise, thus: Crassus was not wise, but Crassus was rich, ergo some rich men are not wise: thus you see that this kind of sillogisme serueth to prooue both affirmatiuely and negatiuely, as it w:re by way of example.

An Obiection concerning the three figures, and moodes belonging to the same.

Chap. 11.

TO what purpose serue so many figures and moodes, with the first figure, and the fewer first moodes belonging to the same are onely perfect, yea and so perfect indeede, as the Mathematicians in seeking out the truth of any probleme will vse none other, because the first figure alone doth suffice to conclude all kinds of problemes whatsoever they be, whereby it shoulde seeme that the two other figures with their moodes be superfluous?

They be not altogether superfluous, for as the first figure serueth chiefly and onely to conclude an vniuersall affirmative: so the second figure serueth to conclude an vniuersall negative, and the third figure to conclude both a particular affirmative, and also a particular negative, as you may perceiue very well by the examples before rehearsed, neither be the 15. vnperfect moodes so vnperfect, but that they may easily be reduced vnto the 4. perfect, by one of these wayes here following, (that is to say) either by conuersion, or by transposing of the premisses: or els by a sillogisme leading to impossibilitie, of which three wayes of reduction we come now to speake: by which thinges it doth plainly appeare what difference there is betwixt a perfect & vnperfect sillogisme, for the perfect sillogisme hath no neede of these helpes to make the Conclusion manifest, as hath bene saide before.

S

O

- Di. Some man is a substance,
 fa. But euery man is a sensible bodie,
 mis. Ergo some sensible body is a substance. }

The name of this Moode is Disamis.

The fourth Moode is when a Sillogisme is made of an vniuersall Affirmative Maior, and of a particular Affirmative Minor, concluding a particular Affirmative: as thus.

- Da. Euery man is a substance,
 ti. But some man is a sensible bodie,
 si. Ergo some sensible body is a substance. }

The name of this Moode is Datisi.

The fifth Moode is when a Sillogisme is made of a particular negative Maior, and of an vniuersall Affirmative Minor, directly concluding a particular negative, as thus.

- Bo. Some man is not a stone,
 car. But euery man is a sensible bodie,
 do. Ergo some sensible bodie is not a stone. }

The name of this Moode is Bocardo.

The sixth Moode is when a Sillogisme is made of an vniuersal Negative Maior, and of a particular Affirmative Minor, directly concluding a particular Negative as thus.

- Fe. No man is a stone,
 ri. But some man is a sensible body.
 fon. Ergo some sensible body is not a stone. }

The name of this Moode is Ferison.

Thus you haue all the three figures, together with their moodes plainly set forth with examples.

Of a Sillogisme expositorye.

Chap. 10.

And now because a Sillogisme expositorye is saide to bee a Sillogisme of the third figure: I thinke it most meet to giue you an example thereof euery here: for I haue already defined the same before.

Pea,

Yea I remember yee said it was expositorye when the proofe or meane is an Individuum: but if yee giue example, I shal the better vnderstand it?

Let this then bee your example, to prooue some men to be both Orators & Philosophers by a sillogisme expositorye thus: Cicero was an Orator: but Cicero was a Philosopher, ergo some men are both Orators and Philosophers: againe to prooue that some rich men are not wise, thus: Crassus was not wise, but Crassus was rich, ergo some rich men are not wise: thus you see that this kind of sillogisme serueth to prooue both affirmatively and negatively, as it were by way of example.

An Obiection concerning the three figures, and moodes belonging to the same.

Chap. 11.

TO what purpose serue so many figures and moodes, with the first figure, and the fewer first moodes belonging to the same are onely perfect, yea and so perfect indeede, as the Mathematicians in seeking out the truth of any probleme will vse none other, because the first figure alone doth suffice to conclude all kinds of problemes whatsoever they be, whereby it shoulde seeme that the two other figures with their moodes be superfluous?

They be not altogether superfluous, for as the first figure serueth chiefly and onely to conclude an vniuersal affirmative: so the second figure serueth to conclude an vniuersal negative, and the third figure to conclude both a particular affirmative, and also a particular negative, as you may perceiue very well by the examples before rehearsed, neither be the 15. vnperfect moodes so vnperfect, but that they may easily be reduced vnto the 4. perfect, by one of these wayes here following, (that is to say) either by conuersion, or by transposing of the premisses: or els by a sillogisme leading to impossibilitie, of which three wayes of Reduction we come now to speake: by which thinges it doth plainly appeare what difference there is betwixt a perfect & vnperfect sillogisme, for the perfect sillogisme hath no neede of these helpes to make the Conclusion manifest, as hath bene saide before.

Or

Of Reduction, and of the kindes thereof, and also
of the signification of certain consonants
in the wordes of Art seruing to
Reduction.

Chap. 12.

VWhat is Reduction?

Reduction here is none other thing but a declarati-
on, proving or shewing the goodnes of an imper-
fect sillogisme, by a sillogisme of a perfect moode.

How manyfold is such Reduction?

Twofolde for it is eyther offensive, or els by impossibilitie.

What is Reduction offensive?

Reduction offensive is when a sillogisme is reduced to his per-
fection, eyther by conversion, or by transposing the premisses, or
els by both at once.

What meane yee by transposing of the premisses, for as touching
conversion you haue spoken thereof before, lib. 3. cap. 6.

The premisses are said to be transposed, when the Maior is put
in the Minor's place, or contrariwise the minor into the Maior's
place?

What is Reduction by impossibilitie?

Reduction by impossibilitie is when the goodnes of the sillo-
gisme is so proved, as the aduersarie denying the same, must
needes be brought to some absurditie, as to confesse two Contra-
dictories to be both true at once, or some proposition, to be false,
which he hath confessed before to be true, or is manifestly true of
it selfe. But first wee will speake of Reduction, i. offensive, and
then of Reduction by impossibilitie, and because that Reduction
offensive is done sometime by conversion, and sometime by tran-
sposition, and sometime by both at once, and againe that some-
time one of the premisses, sometime both, and sometime no more
but the Conclusion onely is converted, and that sometime by
simple conversion, and sometime by conversion per accidens: the
Schoolmen for easement of the memorie, haue made eight of the
Consonantes besides the vowels in the wordes of Art before
mentioned, to be signifiative, and to declare how euery propo-
sition

sition ought to be reduced.

For first these foure consonants, b. c. d. f. (with one of the which
euery imperfect moode both beginne) do shew that such imper-
fect moodes ought to be reduced into those perfect moodes, which
do beginne with the like letter, as,

Baralipon, Baroco, Bocardo, into Barbara,
Celantes, C. sare, Camellres, into Celarent:
Dabitis, Darapti, Disamis, Datisi, into Darii,
Fapesmo, Frisefomorū, Felapton, Ferison, Festino into Daril.

Which be the other foure Consonantes, and what do they signifie?
The other foure Consonantes put betwixt the vowels, be these
f. p. m. c. whereof, f. signifieth simple conversion (that is to say, that
the vowel, which goeth next before this consonant, is to be sim-
ply converted, p. signifieth conversion per accidens, m. betokeneth
transposition of the premisses, c. in the latter ende or midst of the
moode, betokeneth reduction by impossibilitie as in Baroco, and
Bocardo.

Giue examples and shew how such reduction is to be made.

First as touching reduction by conversion, Cesare is reduced in-
to Celarent by simple conversion of the Maior: as this sillogisme
in Cesare.

Ce. No tree is a sensible body
fa. But euery man is a sensible body: } which is reduced into Ce-
re Ergo no man is a tree. } larent thus.

Ce. No sensible body is a tree,
fa. But euery man is a sensible body, }
ren. Ergo no man is a tree.

And Camestres is reduced into Celarent by simple converting the
Conclusion, and also by transposing the premisses, as this sillo-
gisme in Camestres.

Ca. Euery man is a sensible body,
mes, But no tree is a sensible body: } which is reduced into Ce-
tres, Ergo no tree is a man. } larent thus,

Ce. No sensible body is a tree,
fa. But euery man is a sensible body }
ren. Ergo no man is a tree.

Festino is reduced into Ferio, by simply conuerting the Major, as in this Sillogisme in Festino.

Fes. No stone is a sensible body,
 ti. But some man is a sensible body: } which is reduced into
 no. Ergo some man is not a stone. } Ferio thus

Fe. No sensible bodie is a stone,
 ti. But some man is a sensible bodie: }
 o. Ergo some man is not a stone. }

Darapti is reduced from Darri by conuerting the minor per accidens, as this Sillogisme in Darapti.

Da. Euerie man is a substance.
 rap. But euerie man is a sensible body: } which is reduced in-
 ti. Ergo some sensible body is a substance. } to Darri thus.

Da. Euerie man is a substance,
 ri. But some sensible bodie is a man: }
 i. Ergo some sensible body is a substance }

Ferison is reduced into Ferio, by simple conuersion of the Minor, as this Sillogisme in Ferison.

Fe. No man is a stone,
 ri. But some man is a sensible body: } which is reduced into
 son. Ergo some sensible body is not a stone. } Ferio thus.

Fe. No man is a stone.
 ri. But some sensible body is a man: }
 son. Ergo some sensible body is not a stone }

And so forth in all the rest, according as the significant Consonantes do direct you.

Of Reduction by Impossibility.

Chap. 13.

How is Reduction by impossibility made?
 By ioyning the Contradictorie of the conclusion to one of the premisses, and to dispose the same according to some one

one of the perfect moodes of the first figure, in such sort as you may thereby make your conclusion contradictorie to the premiss which you left out, and was granted by your aduersarie, where by your aduersarie is brought into an absurditie to confesse two Contradictories, to be true both at once.

Giue Examples?

As for example, if your aduersarie, would deny this Sillogisme in Baroco, euerie man is a sensible bodie: but some tree is not a sensible bodie, ergo some tree is not a man: then you may reduce it to the first moode of the first figure, which is Barbara, by making the Contradictorie of your Conclusion to bee the minor of your Sillogisme in this sort, euerie man is a sensible bodie: but euerie tree is a man, ergo euerie tree is a sensible bodie, which argument he cannot deny, because he hath granted the minor to be true, for if this proposition, some tree is not a man, bee false, then this proposition, euerie tree is a man, must needs bee true, for two Contradictories cannot be both true at once, & two true premisses must needs inferre a true Conclusion, and note that according to the diuersitie of the figures, the Contradictorie of the conclusion is diuersly disposed (that is to say) made cyther maior or minor accordingly, for in all the moodes of the second figure it must be made the minor, the former Major being still reserved and in the third figure it must be the maior, the former minor being still reserved.

To which of the perfect moodes is euerie vnperfect moode to bee reduced by impossibilitie?

To know this it shalbe needefull to learne, first the vse of certaine wordes compounded of diuersie sillables, and inuented by the Schoolemen for this purpose?

Which be those wordes?

The wordes be these contayned in this verse following, nesciebatis: odiebam: letare Romanis: whereof the first nesciebatis, contayning five sillables representeth the five vnperfect moodes of the first figure: odiebam hauing foure sillables betokeneth the foure vnperfect moodes of the second figure: letare Romanis, contayning six sillables, signifieth the six vnperfect moodes of the third figure: in all which wordes the foure vowels, a e i o do still retainne their olde significacions before taught, serving here chiefly to shew the quantitie and quality of euerie conclusion, for euerie vnperfect moode must be reduced to that perfect moode of the first figure, which hath such conclusion as y vowel of the sillable representing y vnperfect mood doth signifie: as for example in this word nesciebatis, here you see that in the sillable nes representing

the first vnperfect moode called befoze Baralipton the bowell e. signifying an vniuersall negatiue, doth shew that this moode is to be reduced into Celarent, whose Conclusion is an vniuersall negatiue, so as the order of the syllables in the worde nesciebatis together with the signification of the vowels contained in the saide syllables, you may plainly perceiue that Baralipton is to be reduced into Celarent; Celantes into Daril, Dabitis into Celarent, Fapesmo into Barbara, Fiselon into Daril. The like obseruation and consideration is to be had in the other wordes, representing the rest of the imperfect moodes of the second and thirde figure; for odia eham appointeth Celsa e to be reduced into Ferio, Camelstres to Daril, Festino, to Celarent, Baroco to Barbara, againe letare Romanis appointeth Darapti to Celarent, Felapton to Barbara, Disamis to Celarent, Datifi to Ferio, Bocardo to Barbara, and Ferison to Daril, whereof I giue you no examples, because I would haue you to exercise your selfe in examining the former examples of the three figures, and to see how you can reduce each vnperfect moode, to his perfect moode by impossibilitie, according to these short rules here set downe.

The schoolemen after they haue taught the vse of the moodes, and of reduction, do immediately treat of a syllogism, made in oblique cases, and also of the six habilities, and three defectes of a Syllogisme: all which I willingly passe ouer with silence, as things more curious then profitable, for truly I know not where to the syllogisme made in oblique Cases, doo serue more then for varietie sake.

Of Syllogismes made in Oblique Cases, and of the six Habilities, and three defectes of a Syllogisme.

Chap. 14.

VV Hat meane yee by oblique Cases? You learned in your accidents that euery noume hath six cases (y is to say) the nominatiue, the genetiue, the Dative, the accusatiue, the vocatiue, and the Ablatiue, whereof the nominatiue is onely right, and all the rest are called oblique: as this is a Syllogism made in oblique cases

ses, euery drawing beast belongeth to man, or is the beast of man: but an ore is a drawing beast, ergo an ore belongeth to man: or is the beast of man, & as for the six habilities called sex potellares Syllogismi, they are but meanes to proue the goodnes of one syllogisme by another, or to shew which is more vniuersall, or comprehendeth more then another, or to conclude a truth of false premisses, which God wot is a feely kind of Conclusion, the best partes of which habilities are more easily learned by the rules & examples befoze giuen, then by those that they set downe in their treatises touching the same. Likewise the three defectes are none other but Elenches or Fallaces whereof there be thirteene kinds set downe by Aristotle himselfe, whereof we shal speake hereafter, in their place, so as they might say that there are thirteene defectes aswell as three, and therefore leauing to trouble you with these things, I minde here to treat of a compound Syllogisme.

Of a Compound Syllogisme, and of the diuers kindes thereof.

Chap. 15.

VV Hat is a compound Syllogisme, and how many kindes thereof be there?

A compound Syllogisme is that which is made of compound propositions, whereof as there be three sorts, so they make three kindes of compound syllogismes (that is to say) conditional, disiunctiue, and copulatiue.

Of how many partes doth a compound syllogisme consist?

Of three aswell, as a simple syllogisme, that is of the Maior containing two simple propositions, and of the minor repeating the one part of the maior, and of the Conclusion, concluding the other part of the Maior, as in this example: if this woman hath had a childe she hath laine with a man: but shee hath had a childe, ergo shee hath laine with a man.

How is the truth of a compound Syllogisme to be found out?

By reducing the same into a simple Syllogisme thus, euery woman that hath had a childe hath laine with a man: but this woman hath had a childe, ergo shee hath laine with a man.

Are there no other kindes of compound Sillogismes?

Yea, if you consider the order of concluding, there bee but three kindes or waies (that is to say) conditionall, disiunctiue, and copulatiue, but if you consider the varietie in uttering such Sillogismes, you may make seauen sortes or wayes, whereof three appertaine to the conditionall, two to the disiunctiue, and two to the copulatiue.

Which is the first way?

The first way is of the Antecedent, which being granted the consequent must needs follow, both affirmatiuely, and negatiuely: Affirmatiuely thus: if hee be godly, hee is blessed: hee is godlie, therefore blessed: negatiuely thus, if hee bee not godly, hee shall not bee blessed, but hee is not godly, ergo hee is not blessed.

What is the second way?

The second way is of the Consequent, which saying, the antecedent must also needes sayle, as thus, if he be wise, he is free, but he is not free, ergo not wise?

Which is the thirde way?

The thirde way, is when by granting the antecedent the consequent sayleth as thus, if he be not wise he is wretched: but hee is wise, ergo not wretched.

Which is the fourth way?

The fourth way is when the former part of the maior proposition disiunctiue being put, the latter part is cleane taken away, as thus, he is eyther good or euill: but he is good ergo not euill.

Which is the fift way?

The fift way is when the former part of the disiunctiue being taken away, the latter part must needs stande, as thus: hee is eyther good or euill: but hee is not good, ergo hee is euill, for all Sillogismes disiunctiue are made for the most part of partes repugnant, whereof there can bee no more, but one true part.

Which is the sixt way?

The sixt way is by putting a Negatiue before the coniunctioun copulatiue, so as it maketh the antecedent to stande, and taketh away the Consequent, as thus, he is not both wise and wretched: but he is wise ergo not wretched.

Which is the seuenth way?

The seuenth way is when the negatiue is placed in like manner before the coniunction copulatiue, but yet so as the Antecedent

Antecedent being taken away, the Consequent doeth stande as thus: He is not both wise and wretched, but he is not wise, Ergo wretched.

Of a consequent, and by what meanes and rules the goodnesse thereof is to be knowne.

Chap. 16.

But such the goodnesse of an hypothetical sillogisme dependeth vpon the goodnesse of the consequent, it shall not be amisse to treat here of a consequent, and first to define what it is, & to shew how it is diuided.

What is a consequent?

A consequent is a speech consisting of such parts as doe follow one another, and are ioyned together with some rationally, (that is to say) an inferring or employing coniunction, as Ergo, then, therefore, and such like.

How many partes are requisite in a Consequent?

Thre, that is, the Antecedent, the Consequent, and the inferring signe or note, for of these thre parts euery consequent consisteth.

How is it diuided?

Into two, that is, good and euill, againe the good is diuided into two, that is, formall and material.

When is it said to be formall?

When the Antecedent being true, the consequent doth necessarily follow thereof, as when I say, This woman hath had a child, Ergo she hath laine with a man.

When is it said to be Materiall?

When the Consequent doth not of necessity, but casually follow, the Antecedent being true, as Socrates walketh abroad, ergo it is faire weather.

Wherevpon doeth the goodnesse of a Consequent chiefly depend?

It dependeth not so much of the truth of the Antecedent and of the Consequent, as of the necessary connexion, or knitting of the together: and if the same be in forme of a Sillogisme, it requireth also the precepts of *Modus* and *Figure* before taught to be observed.

How els shall a man know whether a Consequent be good or not? By examining the same with the Maxims or generall rules of the places: whereof some doe yeeld proofes or causes necessary, some probable, and some onely coniecturall.

What rules doe the schoolemen set downe to knowe a good Consequent.

They set downe some more, some lesse, but Casarius onely recyeth two, which are these: The first is, if a Consequent doeth necessarily follow of his Antecedent, then the contrary of the Antecedent must needs necessarily follow the contrary of the Consequent: As for example, because this is a good Consequent to say, it is a man, Ergo it is a sensible body: it is a good Consequent to say, it is no sensible body, Ergo it is no man: the reason thereof, is because the contrary of the Consequent & the Antecedent cannot be both true together, but one of them must needs be false. The second rule is, that whatsoeuer followeth vpon a good Consequent must needs also follow vpon the Antecedent thereof: As for example, if it be a good Consequent to say, it is a man Ergo it is a sensible body: ye may aswell say, if it be a sensible body, Ergo it is a substance: & sith y a sensible body is a substance, you may therefore aswell conclude that man is a substance. To these rules you may adde also the third, which is, that of true thinges nothing can follow but truth: but of false thinges, sometime that which is false, and sometime that which is true, as hath beene said before: and yet such truth followeth not by vertue of the false premises, but because the conclusion or Consequent is a true proposition of it selfe: As in this example, Every sensible body is a tree, but euery Beare tree is a sensible body, Ergo euery Beare tree is a tree.

Ofa Sillogisme Demonstratiue.

Chap. 17.

Hitherto we haue treated of a Sillogisme according to the first three of the foure diuisions thereof, before mentioned: for if ye remember wel, we said that according to y first diuision, a Sillogisme is eyther Categorical or Hypothetical, according to the second diuision eyther common or expositorie, according to the third diuision eyther perfect or vnperfect, and according to the fourth diuision, eyther demonstratiue, dialecticall,

or

or sophisticall, whereof we come now to speake, & first of a Sillogisme demonstratiue:

What is a Sillogisme demonstratiue?

A Sillogisme demonstratiue is y which is made of necessary, immediate, true, certaine, and infallible propositions, being first and so knowne, as they neede none other prooffe.

What meane ye by necessary and immediate Propositions?

Necessary propositions be those which cannot be otherwise, as those which do consist of the generall kind, of the speciall kind, of the difference, or of the propertie, as hath beene said before: and therefore Aristotle maketh a difference betwixt a demonstratiue & a dialecticall proposition, for a demonstratiue proposition consisting of matter naturall is necessarily true, and cannot be otherwise, but a dialecticall proposition, consisting of matter contingent, or casual, is onely probable, and may be otherwise.

What be immediate propositions?

Immediate propositions are those which are first, and haue none before them, whereby they can be proued: as euery sensible body endued with reason is apt to learne. Aristotle also setteth downe three properties or conditions belonging to the subject & predicate of a demonstratiue proposition.

Which be those properties?

These, to be spoken of all, by it selfe, and vniuersally.

What is to be spoken of all?

It is when the predicate is knowne to bee altogether and alwaies in the subject, eyther as a part of the substance thereof, as when it is a generall kind, the speciall kind, the difference, or the propertie, as some inseparable accident alwaies incident to the said subject, as when I say: Every man is a sensible body: or euery man is endued with reason: or euery man is apt to speake: or euery Swanne is white: or euery fire is hot.

What is to be spoken by it selfe?

That is when the predicate is either the definitiō of the subject, as a man is a sensible body endued w reason: or els some part of y definitiō, as man is a sensible body, or man is endued w reason.

What is to be spoken vniuersally?

It is when the predicate is in the subject, and in euery such subject by it selfe, and first, as when I say, a man is a sensible body endued with reason: here this predicate sensible body endued with reason is not onely spoken of man, but of euery man in generall by it selfe, and first: for if ye should say, Peter or Socrates is a sensible body endued w reason: here the predicate is not spoke of any of these, as first, but in the second place, because they are compe-

comprehended vnder the word man. For generall kinds are said to be before speciall kinds, and speciall kinds before Individuums as hath bene said before.

How doth Aristotle define Demonstration?

In this sort: Demonstration is a Sillogisme made of such propositions as are true: first immediat, and manifestly knowne, and be the causes of the conclusion: first and immediat here is all one, signifying such propositions as need not to be proued or made more evident by any other former Propositions. Again the premises must be more knowne then the conclusion, for otherwise it should neyther be demonstration nor yet good sillogisme. Finally the premises must render the very cause of the conclusion: and therefore Aristotle in another place saith, that demonstration is a Sillogisme causing knowledge and science.

What is science?

It is a firme and assured knowledge of any thing.

What is to know?

We are said to know a thing, when wee know the true causes thereof, and that it cannot be otherwise: for to make a perfect demonstration we must not onely shew that there is such a thing as we go about to proue, but also we must shew the cause why it is so: for (as Aristotle saith) euery discipline and doctrine intellectuall dependeth vpon a former knowledge which is twofolde, whereof the one is to know that the principles (that is to say) the premises of the demonstration be true, and the other is to know the true signification of the subiect and predicate of the question: for vnlesse a man knowe what the name of the subiect signifieth, whereof the question riseth, and also the proper qualities of the same, how shall he be able to iudge whether the prooffe which is brought in to proue the question withall be to the purpose or not. Again vnlesse he knowe the premises to be true, the demonstration shall breed no certaine knowledge in him.

Giue example of a Sillogisme demonstratiue?

Let this be your example: Euery sensible body endued with reason is apt to learne, but euery man is a sensible body endued with reason: Ergo euery man is apt to learne. Here you see that in this Sillogisme the premises being true and first, doe render the cause of the conclusion: and thereby do imply a most true consequent: for who so would go about to demonstrate any of the premises by some other former, or more knowne Propositions, should loofe his labour, ych there is none before them more certaine nor more knowne to proue this conclusion withall then they: for to vnderstand the truth of these premises, it sufficeth onely

ly to know the signification of the termes, and to haue some experience of the thing called man: and therefore this kinde of demonstration is called of the schoolemen Sillogismus scientificus, because it yetteth the perfect knowledge and science of the thing in question.

Of the certainty of mans knowledge.

Chap. 18.

Whereof dependeth the certainty of mans knowledge? Of three things, that is, of vniuersall experience, of principles, & of naturall knowledge that a man hath in iudging of Consequents: for these be three infallible rules of certitude or truth in all kinds of doctrine.

What is vniuersall experience?

Vniuersall experience is the common iudgement of men in such things as are to be perceived and knowne by the outward senses: as fyre to be hot, the heauens to turne round about, wine and pepper to be hot in operation, women to bring forth children and not men: which things all men (vnlesse they be mad and out of their wittes) must needs confesse to be true.

What be principles?

Principles be certaine generall conceptions & naturall knowledges grafted in mans minde of God, to the intent that by the helpe thereof he might inuent such artes as are necessarie in this life for mans behoofe, for by the naturall knowledge of the mind we vnderstand, number, order, proposition, and all other necessary artes and sciences.

How doth Aristotle define principles?

In this manner: principles be true propositions hauing credite of themselves, and need no other prooffe.

How many diuisions do the schoolemen make principles?

Diuerse.

Rehearse those Diuisions?

The first is, of principles some bee called speculative and some practiue: The speculative be those naturall knowledges or propositions whereof naturall philosophie or the Mathematicall sciences be grounded, as these: The whole is more then his part: Those things which are equal to a third, are equal among themselves,

sciences: of one simple body there is but one naturall moving, and such like. The principles practice, be those naturall knowledges, whereby mens manners are governed: for by this naturall light we know the difference betwixt good and evil: As for example: these be principles practice: God is to be honored and obeyed: Justice is to be embraced: civill societie is to be maintained and the disturbers thereof to be punished: these & such like propositions are naturally received of all men as infallible verities. Again of principles some be called generall and some proper. The generall be those that may be applied to many sciences, as these: the whole is more then any of his parts, if equall bee taken from equall, equall doe remaine and such like. The proper principles be those that are properly belonging to some one certaine science, as a line is to be a length without breadth, is a principle of Geometrie: Again this proposition, every thing is, or is not, is a principle of Logicke, and to be short, every science hath his proper principles. Of which some be called dignities or Maxims, and some positions.

Wherefore are they called dignities or Maxims?

For that they are worthy to be credited for their selfe sake, for so soone as we heare them in such speech as wee understand, wee naturally know them to be true without any further prooffe, as these. Take equal from equal, and equall wil remain: the whole is more then any of his partes, &c.

What be Positions?

Positions be those principles which although they neede no other prooffe, yet they be not so easily understood of all men at the first uttering as maxims be: for in these besides the knowledge of the termes it is needfull to have also some experience, as in these principles. Every thing that is compounded of matter and forme is moueable: whatsoever is heauie tendeth naturally downward, and whatsoever is light tendeth upward. Again of Positions, some are called Definitions, and some Suppositions, and of suppositions some are called Petitions, called in Latine Postulata, and some Suppositions assumed.

Define these kinds?

- 1 Definition sheweth what the thing is.
- 2 Supposition is that which supposeth a thing to be, or not to be, as the Geometricians doe suppose that there is Punctum: (that is to say) a pike or a thing indivisible, having neither length, breadth, nor depth.
- 3 Petition is a Proposition asked and granted to be true: as this is a petition in Geometrie, that a man may drawe a right line

line from one point to another.

4. Supposition assumed is when a manifest supposition is assumed to prove another thing withall, as to prove that Demonstration consisteth of true propositions, the disputer will assume this assertion, which sayth, that of false things there is no certaine knowledge: and that truth is not knowne but of true things.

What is the third thing whereof the certainty of mans knowledge dependeth?

It is the knowledge that man hath in iudging of consequents, which is not altogether artificiall, but partly naturall, for God thought it not sufficient for mans behoofe to know simple propositions as principles or common conceptions gotten by experience, unless hee could also compare them together, and sayne things like: and agreeable together, and sever things unlike, and disagreeing one from another, and by such comparison and composition to finde out things before not knowne, and to the intent we should not erre or wander out of the right way, God hath shewed vs an order, and prescribed certaine boundes and limites of necessitie to be observed in such composition, which boundes are Sillogismes rightly made: for so doe the Consequents plainly appeare: And because that proportions are knowne by nature, it shall not be amisse to giue you an example in numbers: for three knowne numbers being placed in true order of a Sillogisme, a fourth number unknowne of necessitie doeth follow, as in this question: If one pounce of waxe bee worth a groate, what is tenne pounce of waxe worth? Marry ten groates: which is produced by a Sillogisme in this manner: Every pounce of waxe is worth a groate, but here is ten pounce of waxe, Ergo they are worth tenne groates: and like as in these kinds of Sillogismes Arithmetically, the proportion which is to be iudged by mans naturall knowledge doth shew the consequent to be infallible, even so the Consequents in other Sillogismes are shewed to be infallible by

such demonstrations as are not farre fetched or doubtfull, but are manifest, plaine and evident.

Of the two kinds of Demonstration.

Chap. 19.

How do the Schoolemen deuide demonstration.
 Into two, that is perfect & vnperfect: and they call the
 perfect, demonstratio propter quid: and the vnperfect, de-
 monstratio quia est.

It is perfect when it proceedeth from the proper cause to the ef-
 fect, called of the Schoolemen a priore, for in that demonstration
 the Antecedent containeth the proper and true cause of the conse-
 quent, as when we say, the sunne is vp, Ergo it is day.

What is to be obserued in a perfect demonstration?

That the predicate of the conclusion, which is also predicate in
 the Maior be first, properly, alwaies, and that really and accident-
 ally, incident to the subject of the Maior, and to every thing con-
 tained vnder the same, which subject must be some generall kind,
 and the very meane or prooffe of your conclusion: As for example,
 if you would proue a cocke to be a feathered fowle, it were not a
 sufficient demonstration to say, that euery flying beast is a feather-
 ed fowle, for some beastes fly that haue no feathers, as Bakes
 that flie in the night season. But if you say that euery birde is a
 feathered fowle, and euery Cocke is a birde, ergo euery Cocke is a
 feathered fowle: you shall make a perfect demonstration, be-
 cause the subject and predicate of the Maior haue such conditions
 as are before required, for this Maior sheweth the thing to bee,
 and also wherefore it is, which is done so often as the predicate
 is the true definition of the subject, as when I say: Euery man
 is a sensible body endued with reason, or els some chiefe parte of
 the definition, as when I say, Euery man is endued with reason,
 as hath beene said before: for euery good demonstration is either
 made of a true definition, or taken from the generall kind, speci-
 all kind, or els from the speciall difference, or property, yea and
 sometime they may be taken out of the whole and of the partes,
 of the proper causes and effects, of perpetual adiacents, otherwise
 called common accidents, of proper acts, of contrarieties, and of
 diuine authoritie, whereof you haue had examples before in the
 treatise of places and seates of arguments.

V When is it said to be an vnperfect demonstration?

When the premises are true, implying a true consequent, but
 yet

yet are not first, neyther doe they shew the originall cause of the
 conclusion, as in this example: Euery sensible body is nourish-
 able, but euery man is a sensible body, Ergo euery man is nourish-
 able: here though the premises be true propositions, yet they
 be not first, neyther doe they shew the originall cause of the con-
 clusion: for the Maior of this syllogisme may be proued by a for-
 mer and more knowne proposition, for that which is more gene-
 rall is more knowne then that which is lesse generall, as thus:
 Euery living body is nourishable, but euery sensible body is a
 living body, ergo euery sensible body is nourishable. Again it
 is said to bee vnperfect when we proceede from the effect to the
 cause, as when we say, it is day, Ergo the Sunne is vp. But that
 demonstration which proceedeth from the cause to the effect is the
 more worthier, because we vse therein discourse of reason and in-
 derstanding: and in the other we onely iudge by the outward sen-
 ces, whereof springeth two principall kindes of methode, (that is
 to say) compendious and short orders or wayes of teaching in all
 manner of sciences, whereof the one is called composition proceed-
 ing forward from the first to the last, and the other is called re-
 solution, proceeding backward from the last to the first, as hath
 beene said before in the Chapter of Methode. Lib. 2. Chap. 5.

Of science, opinion, ignorance, wit, and of the
 lower scientiall questions.

Chap. 20.

What other things are wont to be treated of by the Schoole-
 men in demonstration?
 Diuerse things, as what difference is betwixt sci-
 ence and opinion: also they treat of the diuerse kindes
 of ignorance, of prompt witte: and of the foure scientiall ques-
 tions.

What difference is betwixt science and opinion?

Science as hath beene said before, is that which consisteth of ne-
 cessary, certaine, and infallible propositions, and of such things
 as cannot be otherwise. Opinion is the knowledge of things
 casual, which may be sometime false and sometime true.

How many kindes of ignorance do the Schoolemen make?

Two

Two

Two: that is to say, absolute, which of the schoolmen is called Ignorantia negationis, & ignorance by false conception, which they call Ignorantia affectionis. The first is, when we utterly deny to haue any knowledge of a thing at all: The other is, when wee thinke to know that which we know not, being deceived by some false persuasion, wherunto we are affected, whereof it is called Ignorantia affectionis.

How doeth Aristotle define prompt witte, called of the Latines Solert a?

He defineth it to bee a promptnesse or readinesse in quickly finding out the proofe or cause of any thing that is in question without any studie.

Which be the foure scienciall questions?

These, whether the thing be, what it is, how it is, and wherefore it is: whereof the first enquireth of the subiect whether it bee: the second of the predicate, as what it is: the third how it is, (that is to say) how the predicate is spoken of the subiect: And the fourth asketh the cause why it is spoken of the subiect. And thus much of a Sillogisme demonstratiue, now of a Sillogisme Dialecticall or probable.

Of a Sillogisme Dialecticall.

Chap. 21.

VVhat is a Dialecticall Sillogisme?

A Dialecticall Sillogisme is that which is made of probable and credible propositions.

What things are said to be probable?

Things probable according to Aristotle, are these that seeme true to all men, or to the most part of men, or to all wise men, or to the most parte of wise men, or els to the most approued wise men: whereby it appeareth that things probable may be said fure manner of waies.

Shew how.

First those thinges are probable, which vnto all men aswell learned as vnlearned being in their right wittes do seeme to bee true, as these: Euery mother loueth her child: we loue them that loue vs: we must do good to them y^e do good to vs. Secondly those thinges y^e seeme true to most men, as these: it is better for a commu-

nality

altie to be ruled by one prince then by many: It is not good to serue many Masters at once. Thirdly, those thinges that seeme true to all wise men, as these: what thing fouer is honest, the same is also profitable: Vertue is better then riches. Fourthly those that seeme true to the most part of the wise and learned, as thus: the soule of man is immortall: the Sunne is greater then the earth. Fifthly those thinges that seeme true to the most approued wise men, as these. The worlde had a beginning: it is better for a prince to bee loued then feared of his subjects. And generally vnder things probable are contained all true propositions that be casuall, and not implying any necessity. I say here true propositions to exclude false propositions, whereof sophisticall Sillogismes are made, and not those which we call probable or logicall Sillogismes, and yet such propositions bee not so true in deede, as those that be required in a Sillogisme demonstratiue, but onely do seeme true engendering a certaine opinion in mans mind, doubting notwithstanding the contrarie: for it breedeth not a perfect knowledge as science doth, whereby the mind is of all doubtres thoroughly resolued. And note here that the schoolmen do make the matter (whereof a Dialecticall Sillogisme doth consist) to be twofold, that is, Materia remota, in English farre of: and Materia propinqua (that is to say) nigh or neere at hand.

What doth Materia remota containe?

These foure Dialecticall Predicates, (that is) Definition, called of the Schoolmen Terminus, property, generall kind, and Accident: All which predicates are before defined, and are called predicates, because they are common wordes spoken of others. But truly I see no cause why these foure Predicates should bee attributed to a dialecticall Sillogisme, more then to a Sillogisme demonstratiue: for sure I am, that as good demonstrations may be made of these as of any other Predicates.

What is contained vnder Materia propinqua?

These: a dialecticall Proposition, Probleme, and Position.

What difference is betwixt these three wordes, dialecticall proposition, Probleme, and Position.

A Dialecticall proposition is a probable question vnterred with a simple Interrogatorie, as whether the mother loueth her child: which is no question in deede, but to him that asketh.

A Probleme is a doubtfull question vnterred with a double Interrogatorie, as whether the least sized squire in the firmament be greater then the Moone or not? or whether that the Sunne bee bigger

U 2

bigger then the earth or not. Position is a wonderfull opinion maintained by some excellent clearkes, as to say, that all things are but one essence or being, as Melissus affirmed, or that all things do continually flowe and change as Heraclitus helde, or that the earth moueth and not the heauens, as Copernicus supposed, one-ly to find out thereby the true motions of the planets, and not for that he thought so in deede.

Of a sophisticall Sillogisme.

Chap. 22.

VVhat is a sophisticall or false Sillogisme?

A false Sillogisme is y^e which is either made of false Propositions, or els of such as seeme probable, and be not in deede, or els of probable premises not rightly concluding, and of such Sillogismes there be three sorts, the one sayling in matter, the other in forme, the third in both.

When is it said to faile in matter?

It faileth in matter when the Sillogisme hauing true forme is made of such Propositions as seeme probable, and bee not probable in deede, as thus: no opposites are both true at once, but subcontraries are opposites, Ergo they are not true. Here though this Maior seemeth probable, because many opposites as contraries, and contradictories be neuer both true at once, yet it is not probable in deede: for those opposites which be called subcontrary and subalternate may be both true at once as hath beene before.

When is it said to faile in forme?


It faileth in forme when it is made of probable premises not rightly concluding: because they be not orderly disposed according to moode and figure, as thus: Some opposites are both true at once, but Contradictories are opposites, Ergo Contradictories are both true at once. Here the premises be probable, but the Sillogisme haltereth in forme, because that of meere particulars no good conclusion can follow.

When is it said to faile both in matter and forme?

It faileth both in matter and forme, when the premises are neither probable nor yet doe conclude rightly according to the rules of Logike, as thus: No opposites are both true at once, but subcontraries are opposites, Ergo no subcontraries are both true at once

nce. Here first it faileth in matter, because the Maior (as hath beene said before) is not probable in deede. Again it faileth in forme, because that contrarie to the rules of a Sillogisme a vniuersall conclusion is implied, one of the premises being particular which should not be.

Is there no other kinds of false Sillogismes?

Yes, there is another kind of false Sillogisme called of Aristotle Sillogismus falligraphus, which proceedeth of the proper principles of some discipline, misconstrued or not rightly understood, as thus: All lines drawne from one selfe point to another self point, bee equall, a right line, and a crooked line bee drawne from one selfe point to another selfe point, Ergo a right line and a crooked line be equall, as you see in the figure a. b. in the margin: here a  b the Maior being a principle in Geometrie is not rightly understood, for the right meaning of the principle is that the lines should be also drawne in one selfe space, and then they must needs be equall (that is to say) all of one length: but as touching false Sillogismes we shall treat of them hereafter more at large in the Elenches: in the meane time wee mind to speake of the other kinds of arguments before mentioned, and first of Induction.

Of Induction.

Chap. 23.

VVhat is Induction?

Induction is a kind of argument wherein wee proceede from many particulars to a vniuersall conclusion, comprehending all the said particulars: and by the particulars here I meane not onely singularities, called in Latine Individua, but also such things as be lesse common then y^e vniuersall which is concluded, as when wee proceede from many speciall kinds to some generall kinde comprehending the same, or from things lesse common to more common.

What is to be obserued in this kind of reasoning?

That the particulars be all of like nature, for if there bee any one contrary or unlike to the rest, then the induction is not good.

How manifold is Induction?

Twofold: perfect, and imperfect: it is called perfect when all the singularities are rehearsed: and imperfect when but some certaine partes are onely recyted.

Give example of Induction?

Of an Induction, proceeding from meere singularities vnto vniuersall, let this be your example: Malmesie is hot, Gascon wine is hot, Romney wine is hott, Sacke is hot, Renish wine is hot, French wine is hott, & sic de singulis: Ergo euery wine is hott: which may be brought into a Sillogisme thus: Euery thing that is wine be it eyther of Greece, Spaine, Italy, Germany, Fraunce, or of any other country is hot, but euery wine is one of these, Ergo euery wine is hot.

Give example of an Induction proceeding from the speciall kindes to their generall kindes?

Of an Induction proceeding from the speciall kindes to the generall kind, let this be your example: Euery man hath mouing, euery hoise hath mouing, euery Dre hath mouing, & sic de singulis: Ergo euery sensible body hath mouing. In which example you see that to euery speciall kinde is added a vniuersall signe to make your Induction good, which would not bee so, if you should vse a particular signe, in saying, some man, some hoise, some Dre, and so forth.

Which of these two kindes of reasoning, eyther an Induction or a Sillogisme is most familiar and easie to man?

Induction is more familiar to man then a Sillogisme, for a Sillogisme proceedeth from vniuersalities vnto particularities, which vniuersalities be more knowne to nature, (that is to say) to the discourse of reason, and lesse known to our outward senses. But Induction proceedeth from particularities vnto vniuersalities, which particularities are more knowne vnto vs, (that is to say) to our outward senses, and lesse knowne to nature. Againe by Induction wee are able to proue the principles of demonstration, which are not otherwise to be proued, as this principle: Euery whole is more then his part, may be proued by Induction in this sort: This whole is more then his part, and that whole is more then his part, neither is there to be found any whole, but that is more then his part: Ergo euery whole is more then his part. Also this principle, Euery sensible body endued with reason is apt to learne, may be proued thus: this man is apt to learne: and that man is apt to learne, and so of the rest, ergo euery sensible body endued with reason is apt to learne.

Of

Of an Enthimeme. Chap. 24.

What is an Enthimeme?

An Enthimeme is an vnperfect Sillogisme made for haste or speed of two propositions onely, (that is of one of the premises called in this kind of argument the Antecedent, and of the conclusion called here the Consequent, for the other of the premises being supposed to be true and well knowne, is left out of purpose as a thing superfluous and not needefull to be recyted, and sometime the Maior is left out as thus: Voluptuoulnesse is not perpetuall nor proper, it is not therefore the chiefe felicitie: & sometime the Minor is left out, as here, euery good thing maketh his possessor the better, therefore voluptuoulnesse is not good.

How shall a man knowe when the Maior or Minor is left out?

It is easie to know which of the premises is left out by this means, for if the subject of the Antecedent and of the Consequent be all one, then the Maior is left out, but if they be not all one but diuers, then the Minor is left out, as you may see in the two last examples, and the part lacking being reduced together with the rest into a Sillogisme, will quickly shew the truth or falshood of the argument.

From whence are such kinds of arguments gathered?

They are gathered for the most part from signes, which if they be necessary, then the Enthimeme also is necessary, as thus: A be woman giueth milke, ergo she hath had a child, or is with child: if the signes be probable, then the Enthimeme is also probable, as thus: This man is a night gadder, ergo he is a thiefe.

Of an Example.

Chap. 25.

What is an example?

An Example is a kinde of argument, wherein wee proceed from one particular to proue another particular, by reason of some likenesse that is betwixt them, as thus: God did not punish the Nininites because they repented, ergo he will not punish vs if wee repent. God did not let to plague king Dauid for adulterie, ergo he will not let to plague any other king for committing the same offence.

¶ 4

Wherein

Wherein differeth this kind of argument from the rest?

This kind of argument differeth in forme from all the rest before taught, for a Sillogisme proceedeth from the generall kinde to the speciall kind or otherwise. An enthymeme imitating a sillogisme reciteth in his antecedent the cause of the conclusion. Again an Induction out of many particularities gathereth a vniuersallitie, none of which things is to be found in an example proceeding onely from one particular to another like particular. Notwithstanding Aristotle saith, that it may be reduced partly to an Induction, and partly to a Sillogisme: for in taking the first particular you may by an imperfect Induction imply an vniuersall proposition. And so from that vniuersall proposition to proceede by order of Sillogisme vnto the other particular implied in the conclusion of the example, as in this example: Iudas died euill, Ergo Pilate also dyed euill: it may be first reduced into an imperfect Induction thus: Iudas dyed euill because hee was the author of Chyistes death, and did not repent, Ergo every man that was author of Chyistes death and did not repent dyed euill. Into a Sillogisme thus: Every man that was author of Chyistes death and did not repent dyed euill, but Pilate was author of Chyistes death, and did not repent, Ergo Pilate dyed euill.

Whereto serues this kind of reasoning by example?

Examples are very good in all morall matters to perswade or dissuade.

What is to be observed in reasoning by way of example?

You must in any wise bee sure that the similitude or likenesse of the particulars doe make to the purpose which you intende, & that it be the very cause why the predicate of Antecedent properly belongeth vnto the subiect, for otherwise the argument is not good: for if you should reason thus: Iudas dyed euill, ergo Peter dyed euill: because they were both sinners: for their likenesse in this behalfe is not the cause that Iudas dyed euill, but the cause before alledged.

From whence is this kind of argument fetched?

From the places of comparison, as from the like, from the more, and from the lesse, of all which the generall rule or Maxim is this: In thinges like is like iudgement or reason, as hath bene said before in the treatise of places. Thus farre of the foure principall kindes of reasoning, now of the rest and first.

OF

Of the Argument called Sorites.

Chap. 26.

VVhat is Sorites?

Sorites is a kinde of argument proceeding as it were by certaine degrees vnto the Conclusion, which is gathered of many propositions necessarily following one another, and are knit together, so as the predicate of the first proposition, is the subiect of the second, and the predicate of the second the subiect of the thirde, and so forth euen to the last proposition, whose predicate being ioyned to the subiect of the first proposition, both make the Conclusion as thus: The soule of man both moue it selfe: whatsoeuer moueth it selfe is the beginning of mourning: the beginning of mourning hath no end, whatsoeuer hath no end is immortall, ergo the soule of man is immortall.

When is this kinde of argument said to be of force?

When it is made of affirmatiue propositions, wherein wordes of affirmatiue are necessarily ioyned together, as when kindes general, differences, or properties, are ioined with those special kinds of whome they are spoken, or when proper effectes are ioyned with their proper causes, for if the propositions be eyther negative, or do not necessarily hang together, then it is no good argument, as in negatives let this be your example: A man is not a Lyon, a Lyon is a sensible beast, ergo man is not a sensible beast. Now of propositions not hanging necessarily together, because that proper effectes are not ioyned with their proper causes, let this countinge test be your example.

Who so drinketh well, sleepeth well,
Who so sleepeth well sinneth not,
Who so sinneth not shalbe blessed,
Ergo who so drinketh well, shalbe blessed.

Which is no good conclusion, for much drinke is not alwaies the cause of sleepe, nor sleepe the cause of not sinning.

Ed:

The Isotopicians vse another kinde of argument, called Gradatio, which is much like to Sorites, saying that the subject of the first proposition is not rehearsed in the Conclusion, for they vse it rather as an ornament of speech, then as a prowe, as the vertue of Scipio wanne him fame, fame got him enemies, and his enemies procured his death.

Of diuers other kindes of argumentes, and first of a Dilemma, and what kindes it comprehendeth.

Chap. 27.

THere be also other formes of argumentes, whereof some be Fallaxes, and some are good conclusions, and they be these, Dilemma, Enumeratio, simplex, Conclusio, Subiectio, Oppositio, Violatio.

What is Dilemma?

Dilemma is an argument made of two members, repugnant one to another, whereof whichsoeuer thou grantest, thou art by and by taken, as thus, it is not good to marrie a wife, for if she be fayre thee wil be common, if fowle then loathsome: nor withstanding, this is but a slippery kind of argument, vnlesse both the repugnant partes be such, as neyther of them can bee turned again vpon the maker of the argument, for then by conuersion, the Dilemma, is soon confuted, as for example, you may conuert both partes of the argument last recited thus: it is good to marrie a wife, for if she be fayre, she shall not be loathsome, if fowle then not common, much like to this is that captious argument, which Protagoras the lawyer made against his scholler Euathles, who had conuenanted to pay his maister a certayne summe of money at the first suite or action that hee should winne by pleading at the law, whereupon his maister did afterwards commence an action against him, and in reasoning with him of the matter made him this Dilemma: eyther (saith hee) iudgement shall be giuen against thee, or with thee, if against thee, then thou must pay mee by vertue of the iudgement, if iudgement be giuen with thee, then thou must also pay mee by conuenant, which the scholler immedi-

ately

was confuted by conuersion in this sort, eyther sayeth hee iudgement shall be giuen with mee, or against mee, if with mee toge[n] I shall be quit by law, if against mee, then I ought to pay nothing by conuenant.

What other intricate kindes of reasoning are said to bee comprehended vnder Dilemma?

Diuerse, whereof some be called Ceratins, or horned arguments, some Crocodolites, some Assatons, some Pseudomonens.

Define all these kindes, and giue examples?

1 The horned argument is when by some subtle and craftie manner of questioning, wee seeke to haue such an answer as we may take vantage thereof, as the Pharises did when they questioned with Christ touching the payment of tribute to Cesar.

2 The Crocodolite is when being deceived by some crafty manner of questioning, we do admit that which our aduerlarie turneth again vpon vs to our own hindrance, as in the fable of y^e Crocodile, whereof this name Crocodolite proceedeth, for it is said that the Crocodile hauing taken away a childe from his mother, reasoned with her in this sort: I will deliuer thee thy child againe, if thou wilt say a troth, whether therefore shall I deliuer him, or not, the mother answered, thou shalt not deliuer him, and therefore of right thou oughtest to deliuer him, no sayeth he, I will not deliuer him, to the entent it may seeme that thou hast said troth, and though thou haddest saide that I should deliuer him, yet I woulde not deliuer him in deede, for making thee a lyer.

3 Assatton is a kinde of cueling, not consisting of any sure ground, as if a man did say, that hee doth hold his peace, or lyeth, or knoweth nothing, another by and by might caull thereof in this sort, ergo hee that holdeth his peace speaketh, hee that lyeth sayeth truth, hee that knoweth nothing knoweth something.

4 Pseudomonon is a false or lying kinde of cueling as thus: the heauens couereth all thinges, ergo it conereth it selfe, Epimenides, being a Candiot himselfe saide, that the Candioties were lyers, the question is whether he saide true, or not, for though he saide true, and that the Candioties were lyars, yet it is false, because a Candiot saide it: againe if the Candioties bee no lyers, no, Epimenides is a lyer, then he is to be beliered.

How are the Fallaxes of these captious argumentes to bee founde out?

The fallaxes of all these kindes of captious argumentes are soone found out, if we consider wth the rules before taught, touching the repugnances of the propositions, as whether there bee any

ambiguities in the termes, and whether the selfe same termes in the repugnant partes haue respect to one selfe thing, time, or place, or not, it is good also to consider the substances, quantities, and qualitie of the propositions: for in the last example this saying *Candiotos be lyers*, is a proposition indefinite, and therefore is not of such force as to say, all *Candiotos be lyers*, which is an vniuersall proposition, for of particular premisses nothing rightly followeth: In the other examples you shall finde that there is some doubtfulness in the termes hauing respect eyther to diuers things, to diuers times, or diuers places, as to say, he holdeth his peace when hee speaketh: There is doubtfulness in the termes hauing respect to diuers things, that is to say as well to those things, which he meant to keepe in silence, as to those wordes which he uttereth by mouth, so in this word suite in the example of *Protagoras* was doubtfulness, for that *Protagoras* meant some other suite, and not that which he himselve commenced.

Of Enumeration.

Chap. 28.

W Hat is Enumeration?

Enumeration is a kinde of argument, wherein many things being reckned by and denyed, one thing onely of necessitie remaineth to be affirmed, as thus: *Sith thou hast this horse, eyther thou dost buy him, or he came to thee by inheritance, or he was geuen thee, or bred at home with thee, or els thou dost take him from thine enemy in time of war, or if none of these were, then thou must needs steale him: but thou neither boughtest him, nor hee fell not vnto thee by inheritance, nor was geuen thee, nor bred up at home with thee, nor yet taken by thee from the enemy, it followeth theretofore of necessitie that thou hast staine him.*

When is this kinde of Argument to be confuted?
When your aduersarie can proue any necessarie part to be left out.

Of a simple Conclusion Chap. 29.

W Hat is a simple Conclusion?

A simple Conclusion is no other thing, but a necessarie

serie. *Euthymeme*, in the which the Consequent doth necessarily follow the antecedent, as thus, *Shee hath had a childe, ergo shee hath layne with a man.*

Of Subiection.

Chap. 30.

VV Hat is Subiection?

Subiection is a questioning kinde of argument, in the which wee confute each question with a reason immediately following the same, as thus: how is this fellow become so wel monied, had he any great patrimony left him? no: for al his Fathers landes were solde, came there any inheritance to him by descent any otherwise? no, for hee was disinherited of al men, came there any goodes vnto him by Executorshippe &c. if then hee hath not bene enriched by any of these honest wayes, eyther hee hath a golden myne at home, or else he is come to these riches by some unlawful meanes. This argument sayeth when any principall part is left out, and therefore differeth not much from Enumeration befoze recited.

Of Opposition.

Chap. 31.

VV Hat is Opposition?

Opposition is a kind of Argument made of Repugnant partes, wherein we reuert from the opposit of the first proposition, vnto the same proposition againe, as thus: if I were in the citie at such time, as this man was slaine in the countrie, then I slew him not, this proposition is now a simple conclusion, and may be made an Opposition in this manner, if I had been in the countie at such time as you say this man was slaine, then you might well suspect mee to haue slaine him: but sith I was not there at that time, there is no cause therefore why yee should suspect mee.

Of Violation.

Chap. 32.

VVhat is Violation?

Violation is a kinde of Concluding, more meete to confute then to proue, whereby we shew the reason of our aduersary, to make for vs, and not for him, as thus: it is not good to marie a wife, because that of marriage many times commeth the losse of children to our great sorrow, yea rather it is good therefore to marie a wife to get other children for our comfort. In this much touching the diuerse kindes of reasoning, now we will treat of Fallacies, or false Conclusions, and shew how to confute them.

Here endeth the sixt Booke of Logike.

THE SIXT BOOKE OF
Logike.

Of Confutation.

Chap. 1.



Here be some that make two kindes of Confutation, the one belonging to person, the other to matter, confutation of person is done eyther by taunting, rayling, rendering checke for checke, or by scorning, and that eyther by wordes, or else by countenance, gesture and action, which kind of Confutation because it belongeth rather to scoffing then to true order of reasoning, I will leaue to speake thereof, dealing

dealing onely with that confutation that belongeth to matter, which is twofolde, the one generall, the other speciall, it is generall when we affirme that the argument sayleth eyther in forme, in matter, or in both, againe the generall confutation is done three manner of wayes, that is eyther by denying the consequent, by making distinction, or by instance (that is to say) by bringing in a Contrary example.

Shew when these three waies are to be vsed?

If the argument sayle in forme, then wee must denie the Consequent.

Giue examples?

Discipline is necessarie, but the ceremonies of Moses are discipline, therefore the ceremonies of Moses are necessarie: here you must deny the Consequent, because that of meete particulars nothing followeth, and to be short, when any argument is made contrary to the rules of figure and moode before taught, the Consequent is not good, and therefore to be denyed, as here: euery covetous man doth violate the lawes of liberalitie, but euery prodigall man doth violate the lawes of liberalitie, therefore euery prodigall man is a covetous man: this syllogisme being of the second figure is made in Barbara, which moode belongeth not to that figure: but if the argument sayle in matter, that is, when eyther one of the premisses or both are false, then it may be confuted aswell by denying the false part, be it maior or minor, as by making distinction, and to finde out the falsenes of the matter, it is necessarie alwaies to haue respect to the maxims of the places, from whence the prooffe is fetched, for they do shew which propositions are true, and which are not, as for example in this argument: no painted speech becometh philosophers, but eloquence is painted speech, ergo eloquence becometh no philosophers, here the maior is to be denyed because it is a false definition: for the true definition of eloquence is to speake wisely, aply, adornedly, and to the purpose, and not to vse painted wordes vainly: againe who so worshippeth God the creator, worshippeth the true God, the Turkes worshipp God the Creator, ergo the Turkes worshipp the true God, this argument is to be denyed, because the minor is false, for no man can truly worshipp God the Creator, vnlesse he worshipp also Iesus Christ his sonne, which the Turkes doe not, and therefore they worshipp a fained Idoll, and not the true God.

When is distinction to be vsed?

When eyther the wordes or matter is doubtfull.

Giue examples of both?

All verbes actiue do signifie actio, but God vsed this verb actiue.

X 4

Indura-

Andرابو, in saying *I* will harden Pharaos heart, ergo *God* will harden Pharaos heart, here distinction is to bee made, for verbes actiue haue diuers significatiōs according to the diuersities of the tongues wherein they are vttered: for in the Hebrew tongue verbes actiue do signifie permission or sufferance, as well as action, as these wordes *I* will harden Pharaos hearte (is as much to say) as *I* will suffer Pharaos heart to bee hardened, likewise whereas we say in the *Lodges* playe, lead vs not into temptation, is as much to say, as, suffer vs not to bee led into temptation, againe ambiguitie may be in the matter, as thus: no sinnes are heard of *God*: but all men are sinners, therefore no men are heard of *God*, here distinction is to be made betwixt penitent sinners, and impenitent: for *God* will heare the penitent sinner, although hee will not heare the impenitent sinner.

When is confutation by instance vsed?

When the argument though it sayle, neither in forme nor matter, yet perhappes it is neither so strong, nor so probable, but that a stronger and more probable may bee made against it.

Giue example?

Who so killeth any Ambassadors in their iourney, doth violate the lawes of Armes: but the Frenchmen killed our Ambassadors iourneying to Spaine, ergo the Frenchmen in so doing did violate the lawes of Armes: here to the *Maioza* man may answer by instance thus: the Athenians killed the Ambassadors of the Lacedemonians iourneying to the king of Persia, because they went to procure his aide to destroy the citie of Athens, so likewise the Romanes did intercept the Legates of Hanibal going to the king of the Macedonians for the like intenc, and yet neither of these people did thinke to breake the lawes of Armes by doing that which should preserve their state and common weale.

Of speciall confutation.

Chap. 2.

VVhat is speciall Confutation?

Speciall Confutation is when we confute any false argument, by detecting and shewing the fallax thereof, naming the fallax by his proper name.

What order doth Aristotle obserue in treating of speciall Confutation?

Aristotle

Aristotle first treateth in generall of all those thinges that commonly appertaine to the disputations of learned men, as first hee treateth of an Elench, which is as much to say as reprehension, then of Syllogismes, and of disputation, and also of the markes and endes of Sophistry, and whereto they tend.

How defineth he an Elench or Reprehension?

Reprehension or Elench (sayeth hee) is a Syllogisme which gathereth a conclusion contrary to the assertion of the respondent, as if a man would defend Medea: not to loue her childe because she killed it, another might reason against him in this manner: euerie mother loueth her childe: but Medea is a mother, ergo Medea loueth her childe: the Conclusion of this Syllogisme is contrarie to the first assertion: and note here by the way that there bee two sortes of Elenches, the one true and the other false, it is saide to be true when it rightly gathereth a contrarie conclusion to the respondents assertion: And false, when it sayleth in any partie requisite to a true Elench: of which partes we shall speake hereafter when we come to treat of the fallax called Ignorance of the Elench, which is one of the five endes or markes whereunto Sophistrie tendeth, for a true Elench seemeth to belong vnto Diabeticall disputation, rather then to Sophisticall disputation. But now leauing to define a Syllogisme because it hath bene defined before, and therefore not needfull here againe to be rehearsed, *I* will proceede to Disputation.

Of Disputation, and how manifolde it is.

Chap. 3.

Disputation is a contention about some question taken in hand, either for finding out of truth, or els for exercise sake, and there be foure kindes of disputation, whereof the first is called doctrinall, because it appertayneth to science. The second is called Diabeticall, which belongeth to probable opinion.

The third is called Tentative, which serueth to trie another mans knowledge, in any kinde of science.

The fourth is called Sophisticall, which tendeth onely to dectine.

Giue examples of all these foure kindes?

The Doctrinall Disputation, beeth no other but Syllogismes

Primen-

Demonstratiue as this is, whatsoeuer hath reason is capable of learning, but Iohn hath reason, ergo Iohn is capable of learning. Dialecticall Disputation vseth onely probable syllogismes, as the former example of Medea; euery mother loueth her child, but Medea is a mother, ergo Medea loueth her child: against this another probable argument may be made thus, whoesoever killeth her child, loueth not her child, but Medea killed her child, ergo shee loued not her child. Tentatiue Disputation vseth such argumentes as are made of the first common principles of any science, in which principles who so is ignorant, cannot be skilful in that science, as if a man would professe Geometrie, and know not the definitions of a point, or picke of a lyne, or superficies, or of such common maxims, as these are, the whole is more then his parte: take equall from equall, and equall remaine &c. Woulde quicklie be wray his owne ignorance.

Sophisticall disputation, vseth nothing but deceitfull argumentes, or Fallacies, whereof there be thirteene kindes hereafter set downe, but first I wil shew you which be the five markes and endes of Sophistrie.

Of the five Markes and Endes of Sophistrie.

Chap. 1.

ARistotle sayeth, that the fraudulent disputation of the Sophist (seth alwayes to one of these five ends or markes, that is, eyther by force of argument, to bring you into some absurditie which he calleth *Wench*, that is to say, a reprehension or reproofe, or els to make you to confesse that which is manifestly false, or to grant some Paradox, which is as much to say as an opinion contrary to all mens opinions: or to allow of incongrue speech contrarie to the rules of Grammatic called in latine, *Solecismus*, or to admit some vaine repetition called in latine *Nugatio*.

Giue example of all these five markes?

Of the first marke let this bee your example, if in disputing of vertue you haue perhappes granted that the meditation of her-
the doth make a man sad, the Sophist will force you by argumente to deny againe that which you before granted thus: all things

things that be contrarie haue contrarie effectes: but it is proper to vice to make the mind of man sad, ergo vertue maketh his mind glad: this kind of reasoning is more plainly taught before when we talked of Education by impossibility. Of the second marke let this be your example: euery dog hath power to bark: but there is a certaine Harre called the dogge, ergo that Harre hath power to bark: the Fallax of this argument consisteth onely in the word dogge, which is equiuoke, as shall be declared more at large hereafter, when we come to speake of that *Wench* or Fallax.

Of the Paradox which is the thirde marke let this bee your example, the Sophist will make you to grant that a rich and happy king is wretched, by force of argument thus: whoesoever is subject to sinne is wretched: but all rich and happy kinges are subject to sinne, ergo all rich and happy kinges are wretched and miserable, in this is also a Fallax, because that happines is spoken here in two respectes, for there is worldly happines and heauenlie happines.

Of the fourth marke called incongruity of speech, I can hardly giue you any fitt example in our native tongue, because that our english adiectiues do not differ in case, gender, or number; and therefore I pray you content your selfe with this latine example, for it is an easier matter for an englishman to speake false latine then false english, the Sophist will make you to allow of this: false latine, mulier est candidus, by force of argument thus: quoniam homo est candidus, et mulier est homo, ergo mulier est candidus, & english whereof is thus: euery man is white, but woman is man, ergo a woman is white: here this worde white in the latine is of the masculine gender contrarie, to the rules of Grammatic, but this may be very well referred to the Fallax called some of speech hereafter declared.

Of the fift marke called *Nugatio*, let this be your example: the Sophist will make you to allow of this vaine repetition, Plato is learned, a man learned, by force of argument thus, Plato is learned, a man learned, by force of argument thus, ergo Plato is learned. a man learned, but Plato is a man learned, ergo Plato is learned. a man learned, here the premises and the conclusion are all one thing, therefore contrarie to the rules of Logike. But learning these things as superfluous, and in my iudgement seruing to small purpose, if I may so say without offence, I mende therefore to returne to my matter first intended.

How to confute all manner of Elenches, or Fallaxes whatsoeuer they bee.

Chap. 4.

Elenche fallax consisteth eyther in wordes or in thinges: and of those that consist in wordes there are in number six, and of others consisting in thinges, there are seauen, so as in all there be thirtene, as I saide before.

Which be those six that consist in wordes?

Equiuocation, Amphibologie, or doubtfull speech, Coniunction, Diuision, Accent, and figure, or foyme of speech.

Shew what these Fallaxes be, and giue examples?

Equiuoca-
tio. 1.

Equiuocation is, when the deceipt consisteth in the doubtfulness of some one word, hauing diuers significacions, as for example, euery dogge is a sensible bodie, there is a certaine starre called a Dogge, ergo that starre is, a sensible bodie: here the conclusion is to be denyed, because this worde dogge hath diuerse significacions, another example, the prophet sayeth that there is no euill in the Citie, but God doth it, but there bee horrible euils in the Citie, ergo God is the author of euill, the Conclusion is to be denyed, because in the maior this worde euill signifyeth punishment, and in the mino, it signifyeth sinne: another example, who soeuer loueth Christ, obserueth his worde, and is beloued of the Father: but no bodie that byreaketh the law obserueth the word of Christ, therefore no bodie is beloued of the Father, here the maior is doubtfull, because this voyce worde, may be taken eyther for the worde of the law, or els for the worde of the Gospell, which the Apostles did euer keepe, as Christ himselfe sayeth, and therefore they were beloued of the Father, and so consequently euery true christian that doth keepe the pure doctrine of Christ is beloued of the Father: but the worde of the law sayeth that euery one is cursed that abideth not in all.

Amphibologia.
2.

Amphibologia or doubtfull speech is when some whole sentence is doubtfull, and may be interpreted diuerse wayes as the oracle of Apollo in saying that Cressus passing the river of Halis should overthrow a great Empire, by which oracle was meant that hee should

should overthrow his owne empire, and not the Persian empire, which by wrong construing that Oracle he hoped to subdue.

Composition
tio. 3.

Composition or coniunction is the ioyning together of things that are to bee seuered. As for example, two and thre bee euen and odde, but sine makerh two and thre, therefore sine is both euen and odde: which kind of argument is to bee denyed, because those thinges are ioyned together which ought to be seuered.

Diuisio.

Diuision is when things are seuered which should be ioyned together, as, all the wise men of Grece are seuen, Solon and Periander are wise men of Grece, therefore Solon and Periander are seauen, here the Consequent is to be denyed, because Solon and Periander are seuered from the rest whereunto they should be ioyned.

Accentu

The fallax of accent is when wordes are not rightly and simply pronounced, as when we do adde to, or take from a word, any aspiration, letter, or sillable, and thereby alter the true significacion thereof, as this latine word Hara signifying a swines cote, being pronounced without H. doth signifie an altar. In English let this be your example, Euery Hare is swift on foote, but this is a hayter, (that is to say) a cloth to dry Hales, therefore it is swift on foot. Of like sort is this old iest of a maister that said to his servant: Go heat this Capons legges, who immediately did eat it: then his maister being angry said, I badde thee heat it, with an h. no sir (said the seruant) I did eat it with bread. Likewise this fallax may chance by not obseruing the right quantitie of sillables, in any word, as Populus hauing o. long is a Popple tree, but hauing o. short, it signifyeth a people. Or when a word bled interrogatiuely is made to haue an affirmatiue significacion, as for example: Caiphas said to Christ art thou a king? Ergo he confessed Christ to be a king. Or when a worde pronounced ironically is turned to good earnest, in speaking one thing and meaning another, as thus: My maister saide, come hither you honest man, ergo he said that I was an honest man, when in deed he called him knaue.

The fallax of foyme or manner of speech may be diuers wayes, Formas
as first when wordes are fallacy supposed to be like either in signification, in case, or in gender, or to be of one selfe predicament, because they are like in termination, as Poeta in English a poet, and Poema in English a poeic or poeticall worke: these two wordes because they end both in a. ergo they are both of the masculine gender. Also coloured and numbered are like in termination,

tion, ergo they are of one selfe predicament, and yet the first belongeth to the predicament of qualitie, and the other to quantity. Secondly, when a word is used in one selfe argument sometime according to his proper signification, and sometime as a tearme of arte; as for example: God is euery where: euery where is an Aduerbe, therefore God is an Aduerbe. A Mouse eateth cheese, but a Mouse is a sillable, ergo a sillable eateth cheese. Here moule in the Maior hath his proper signification, and in the Minor is used as a tearme of arte: and the like is to be said of the word euery where in the first example. Thirdly when a word hath not his proper signification, or is not used according to the true phrase of speech wherein it is uttered, as thus: whatsoever thou hast not lost, thou hast still, but thou hast lost no hoines: ergo thou hast hoines. Here this word to lose hath not his proper signification, for we are said to lose properly that which we had, and not that which we neuer had. And finally this fallax is called the common refuge and recepracle of all such kind of sophistrie. Hitherto of the fallaxes in words, now of the fallaxes in things.

Of the Fallaxes in things.

Chap. 6.

Of these Fallaxes there be seuen kinds (that is to say) fallacia Accidentis, a dicto secundum quid ad dictum Simpliciter, Ignoratio Elenchi, Petitio principii, Fallacia Consequentis, Causa pro no causa, Plura interrogata pro vno responsu: which may be englished thus: the fallax of the Accident, the fallax of speech respectiue in steade of speech absolute, ignorance of the Elench, petition of principle, a cause that is not the cause in deed, and many questions comprehended in one.

Define what these be, and giue examples?

Fallacia Accidentis may be diuers wayes, as first when any thing belonging onely to substance of some thing, is attributed also to some accident of the said substance, and contrariwise, as thus: whatsoever thou hast bought, thou hast eaten, but thou hast bought rawe flesh, ergo thou hast eaten rawe flesh: here the Consequent is to be denied, because the Maior hath respect to the

the substance, and the Conclusion to the qualitie: Another example, what I am, thou art not, but I am a man, ergo thou art now. Here in this the Maior hath respect to the qualitie, and the conclusion to the substance. Secondly when Accidentes are not rightly ioynd together, as when the qualities of the bodie are ioynd with the qualities of the mind: as Homer is a Poet, and Homer is blind, ergo Homer is a blind Poet: here the conclusion is to be denied, because to be blind and to be a Poet are diuers qualities, whereof the one belongeth to the mind, and the other to the bodie, and therefore are not rightly ioynd together. Thirdly, as (Melancthon saith) when an accidentall cause is made a principall cause, as thus: Elias was an holy prophete, but Elias was cladde with Camelles haire, ergo I being cladde with Camelles haire am an holy prophet. Here the Conclusion is to be denied, because to be cladde with Camelles haire, was not the cause of Elias holinesse. But me thinkes that this and such like examples doe belong rather to the fallax of causa pro non causa (whereof we shall speake hereafter) then to the fallax of the Accident.

The fallax ad dicto secundum quid ad dictum Simpliciter chaunceth when we go about to make a thing to seeme absolute, that is spoken secundum quid in some respect, or to be in all, when it is but in part, as a quid. A Moore hath white teeth, ergo a Moore is white: Againe, it may be in respect, by reason of time, place, person, comparison, and such like. Of time as thus: I saw Iohn yesterday, but I saw him not to day, ergo I did see him and not see him. Of place thus: it is not good to buy and sell in the church, ergo it is not good to buy and sell. Of person thus: A Magistrate may kill a thiefe, ergo euery man may kill a thiefe. Of comparison thus: Riches are not good to him that cannot vse them, ergo riches are not good.

Having now to speake of the fallax, called the ignorance of the Elench, I thinke good to call agayne to your remembrance the definition of an Elench before briefly set downe, which is a Sillogisme rightly gathering a Conclusion contrary to the assercion of the respondent, which contrarietie consisteth of foure principall pointes or respectes, whereof if any be wanting, then the contrarietie is not perfect.

Which be those foure poynts?

First that it bee to one selfe thing: secondly in one selfe respect, Thirdly, in one selfe manner: And fourthly in vñ at one selfe

selfe time: for if you bee deceyued at any time by some false
 leach, in thinking that it rightly gathereth a conclusion meete
 contrarie to your assertion, when it is not so in deede, by rea-
 son that it faileth in some parte requisite and incident to a true
 Elench: then it may be rightly said that you are deceyued by ig-
 norance of the Elench, which fallax as Aristotle saith, compre-
 hendeth almost all others, and therefore hee maketh a long and
 obscure definition of an Elench, rehearsing all the particularities
 thereof nothing apt to be uttered in our English tongue.

Yet I pray you to giue examples of the foure chiefe pointes before
 mentioned?

Of the first let this be your example: foure is double to two
 but not to three, Ergo foure is double and not double: this is not
 to one selfe thing. Of the second thus: this peece of timber is
 double in length to that peece, but it is not double to the same in
 breadth, Ergo it is to one selfe thing both double, and not double
 to one selfe thing, but not in one selfe respect. Of the third thus:
 This prince ruleth mightily, but not mercifully, Ergo hee ruleth
 and not ruleth: this is not in like manner. Of the fourth thus:
 I sawe Iohn yesterday, but not this day, Ergo I saw him and
 saw him not, this is not in one selfe time. And all these foure
 wayes in mine opinion are comprehended in the seconde point:
 which is when any thing is spoken not absolutely but in diuers
 respects: wherefore it differeth not much from the fallax of speech
 respectiue before declared, sauing that this fallax is moze general,
 and comprehenderth moze kinds of fallaxes then that doth.

Definition of the principle is, when the Antecedent doth not proue
 the Consequent, which channeth most commonly three manner
 of wayes: that is, eyther when the prooue is as little knowne as
 the thing that is to be proued. Secondly when the prooue is lesse
 knowne then the thing to be proued. Thirdly, when the prooue
 and the thing to be proued do not differ, but is all one speech, sig-
 nifying one selfe thing, called of the Greekes Tautologia.

Giue example of these three wayes?

Of the first thus: the Sunne moueth not, but standeth still
 in the middelt of heauen, giuing light to all the worlde, Ergo the
 earth is moueable; or thus: The heauens are not made of elemen-
 tall matter subiect to corruption, Ergo the heauens are incorrup-
 tible. Here in both these examples the Antecedent is as doubtful
 as the Consequent; and therefore proueth nothing. Of the se-
 cond way thus: Every sensible body sometime sleepeeth, Ergo man
 sometime sleepeeth. Here it is moze to bee doubted whether all
 sensible

sensible bodies, all beastes, fowles, and fishes do sometime sleepe
 or not, then whether man doth sometime sleepe: for it is an easier
 matter to know the nature and propertie of one speciall kind then
 of all, or many kindes. Of the third way thus: Iohn is learned,
 Ergo Iohn is learned. The soule doth liue euer, Ergo it is im-
 mortall.

The fallax of the Consequent channeth two manner of waies,
 that is eyther when we thinke the Consequent to be conuertible
 with the Antecedent, but it is not so in deede, or els when we
 thinke that vpon the contrarie of the Antecedent, the contrarie
 of the Consequent must needs also follow.

Giue examples of both these waies?

This is a man, Ergo it is a sensible body: now if I would
 hereof by conuersion conclude thus: it is a sensible body, Ergo it
 is a man. This were no good consequent, for every sensible bo-
 dy is not a man. Likewise when it rayneth, the ground is wet,
 Ergo when the ground is wet it rayneth, for these speeches are
 not conuertible. Of the second way thus: it is a man, Ergo it is
 a sensible body. It is no man, ergo it is no sensible body: Here
 you see that this proposition, it is no man, is the contrarie of the
 Antecedent, which saith it is a man. Of which contrary, the
 contrary of the consequent doth not necessarily follow: for though
 it be no man, yet it may be some other sensible body. This fallax
 comprehendeth all such false argumentes as doe not obserue the
 rules of right and true Consequents before giuen.

The fallax of non causa pro causa is, when that thing is made to
 be the cause of the Conclusion, which is not the cause in deede, as
 wine is nought, because it will make a man drunke. Of which
 drunkennes wine is not the cause, but the intemperance of man
 and his immoderate vse thereof, for many thinges that bee good
 of themselves may be abused, yea euen the libertie of the Gospell,
 yet the oocrue of the Gospell is not cause thereof, but the malice
 of man abusing the same.

The seauenth and last Fallax, is when vnuersallie, and with
 out vnyng any distinction, you make an answer to manie
 questions as though they were but one, as for example, the So-
 phister seeing two men standing together whereof one is blind, respon-
 and the other hath his sight, will aske you perhappes whether
 they see or not, whereunto if you answer directly eyther yea or
 no, you are by and by taken, for if you say that they see, then you
 grant that the blinde man also seeth, and if you say that they doe
 not

not see, then you grant that hee which seeth is blinde. but if you
 answer that the one seeth and the other not, you shall by such di-
 stinction easily auoid the Sophisters cauilation: for diuers
 questions budled vp in one, do alwaies require diuers answers.

And thus I ende with the order of confuting all false E-
 lenches, and fallaces, the knowledge whereof is
 very necessarie, for the maintenance of the truth,
 which God loueth, who is the fountaine
 of all truth, yea and very truth it
 selfe, to whome be al honoz,
 glorie, and praise worlde
 without ende
 Amen.

FINIS.

10 JY 57

