

Scriptum super libros Posteriorum

by Walter Burleigh

translated by John Longeway, from

the edition of Pamphilius de Montebononiensis, Venice 1514

Chapter 14

[I.19] "Now syllogism is etc." (*Est autem syllogismus etc.*) In this chapter Aristotle intends to explain the cause of ignorance <in one proceeding with regard to> opinion or appearance alone, and not with regard to what exists, and to destroy it. And this cause belongs to the middles of the figures, and <occurs when> it is possible in opinion, but impossible in reality <that there be a middle>. ☒ And Aristotle introduces three doubts.

The first doubt is this, whether the subject <of the conclusion> posited in the syllogism, when it does not have under it another subject, can proceed indefinitely in ascending <to higher genera>. The second doubt is whether the predicate <of the conclusion> posited in a syllogism, when no other higher predicate is said <of it>, can order <other less general predicates> under itself, descending in this way indefinitely. The third doubt is whether the highest predicate and the lowest subject being assumed, an infinite number of middles can be assumed. And in these questions the Philosopher reduces the question concerning the middles to questions concerning the extreme terms, by showing that if the extremes are finite <in number in the cases mentioned> the middles are not infinite <in number in the third case>, so that if there is not an infinite process in ascending and descending there will be a finite number of middles.

[I.20] And this is made clear in this way: For if the middles are infinite then by descending from a highest genus, receiving a middle under a middle, there is an infinite process in descending. In the same way, if the middles were infinite, then by receiving from the lowest subject a predicate above a predicate there is an infinite process in ascending and descending. But if the middles are finite in number there is no such process. And thus it is clear that if there are finite extremes there cannot be an infinite number of middles. In the same way if the middles are infinite, since an infinite number cannot be gone through, one cannot get from one extreme to the other.

Or let it be argued thus: If the number of middles is infinite everything higher is in more <subjects> than what is lower, it is necessary that before one arrives at the highest of the middles for something to be in more than the highest. This is impossible, therefore etc. ☒

[I.21] Then Aristotle proves that if one does not proceed indefinitely in affirmative demonstrations, then neither does one proceed indefinitely in negative demonstrations. For if one proceeds indefinitely in negatives, this is because the negative premise is immediate, and has some prior negative proposition. And then it is necessary for one extreme of this knowledge to be contained under one extreme of this prior negative <proposition>, so that one is above the other. Then I ask: Either this prior negative <proposition> is immediate or has a middle. If it is immediate then things stand there, and it does not proceed indefinitely. But if it has a middle, then <it has> some negative <proposition> of which one extreme is prior to one extreme of the other negative <proposition already introduced>. And I argue concerning this negative <proposition> as before. And if we proceed thus indefinitely in negative <propositions> it is necessary that there be a procession in affirmative propositions, since it is necessary that the extremes of one negative be under the extreme of another negative, and this under another, and so on indefinitely.

[I.22 82b37-83b31] And then he explains that there is no infinite process in affirmative <propositions>. For a subject being assumed for the other negative <proposition>, it comes to a stand above, since that is not difficult in any definition in which are placed all the superior substantial <terms> which are indicated in it. But in a definition those can be gone through. Therefore there is not an infinite number of predicates above, and consequently, there is not an infinite number below either. Hence, briefly, if there is an infinite process in ascending or descending, nothing can be defined, which is absurd. Proof that it does not follow: For it cannot descend (43ra) except to a last, and it ascends to a first. But an infinite cannot be gone through, therefore if there is an infinite process in ascending or descending, nothing can be defined. ☒

[I.22 84a7-b3] Moreover that there is an end to ascending and descending in predicates is also proven through analytic arguments, thus, ☒ if propositions are not received in demonstrations unless they are per se true. Now since there are two ways of saying per se there is an infinite process, for in the first way the subject falls in the definition of the predicate. If then under any subject there is assumed to be something of which its predicate is predicated per se, and under another another, and so on indefinitely, it follows that an infinite number of items fall in the definition of one thing, which is absurd. In the same way, in the second way of saying per se the proper passion is predicated of the subject, and so in that way the predicate and subject are convertible. But in convertibles there is no infinite process, nor is there an infinite process in the first way since the subject can be defined, as was proved, therefore in no way is there an infinite process in ascending and descending.

Chapter 15

[I.23 84a3-84b19] “Now that these things have been shown.” (*Monstrat autem his ostensis etc.*) In this chapter Aristotle shows something that follows immediately from this, and it is that not everything that is predicated of two <things> is predicated of them

because of some <other predicate> common to them. He proves it thus: let B be in E and in D because of something common, for instance, because of A. Therefore B is in C, and in D, so it is in these because of some common name. And thus there is an indefinite process, so that between B and C, and similarly between B and D, <etc., so that> there will be an infinite number of middles, which is disproved above. So it is not necessary <if> any predicate be in two <things>, of which neither is placed below another, that it is for this reason in them because of something common.

And in this way is destroyed the error of those who think that there is no universal and primary predication except in equal terms. For those who suppose this believe that if anything is said of two <things> not posited as subalternates, it is necessarily said of these because of one common nature found in them. For instance, having three angles equal to two right angles is said because isosceles and scalene (*isopleuro*) occur, which are not posited as subalternates, because of some common nature found in them, the nature of a triangle.

But it must be recognized that according to Grosseteste there are some predicates that, if they are said of many not posited as subalternates, are said of these because of some common nature. This is clear in the example already given concerning this, that having three angles is etc. And perhaps every per se accident is such that it comes forth from the nature of the subject, but from different natures of <different> subject<s> some one accident comes forth, namely some one predicate that must be predicated of different <subjects> that are not subalternate, <and> is not <predicated> because of something common, as a genus is predicated of its species.

Chapter 16

[I.23 84b20-32] “Now it is clear etc.” (*Manifestum est autem etc.*) It was shown above that the middle <terms> are not infinite <in number>, and having shown this, he proves that there are as many elements or principles to one conclusion as there are middle <terms> to that conclusion. This conclusion, when it was made appropriate in the way of this science to the subject of this science, it was also made appropriate in this way to every demonstrable conclusion, <and so> there are as many ordered elements as there are demonstrative middles to the conclusion. ☒

And this is the nineteenth conclusion of this book. And it is proven thus that it is not so: ☒ if any demonstrative conclusion, for instance this, that every B is an A, is demonstrated from mediated premisses, it is necessary to prove both premisses through two immediate premisses. Therefore there will be three terms and four principles, and three middle <terms>, and so the principles are more than the middle <terms> or elements. ☒ In the same way, in these syllogisms there are five terms and four principles; ☒ and so, comparing all the terms, the terms are one more than the principles, although there are as many elements as there are middle terms.

To make this evident, it must be noted that according to Grosseteste the whole

power of a syllogism stands (*consistit*) in the major, ☒ therefore both the major and the minor that are immediate propositions to the major <of the original syllogism> must be called elements. Therefore in the aforesaid two syllogisms <proving the premisses to the original conclusion> there are two immediate premisses proving the mediated major, so that in the three syllogisms there will be three elements. ☒ And it is certain that there are not three middle <terms>, ☒ therefore there are not as many elements as middle terms.