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ON RELATION (BOOK II, CHAPTER 12 OF Logicae libri quinque)

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> <98> In order to preserve an accurate order of things one should discuss quality and the other absolute categories after quantity and then finally relation. But we will stand in the footsteps of Aristotle, who said in the chapter on quantity that since that the things concerning relata are more easily understood, he wished to change the order of things a little for the sake of perspicuity and so put relation before quantity and the other absolute categories.

Three things should be shown about relations:

- 1. What then this highest genus is and how it is defined.

 2. What its properties are.

 - 3. What its order is.

Relata and relations differ from each other.

As the highest genus is found in this category, it should be noticed with care that relata differ greatly from each other, or, as Aristotle says, those things that are towards something and relations. For relata are the termini of a relation or the subjects in which the relations are. The relata are mutually referred to each other through those relations. But relations are not themselves referred to something else, but are bare forms through which the relata or termini are referred [to each other]. For example, a father is referred to his son through the relation that is called paternity and the son is referred to his father through the relation that is called filiation. But paternity and filiation are not referred to anything; rather, the father is referred through the former and the son through the latter. For this reason relata are referred and relations are the respects themselves or the references by which the relata are referred. Or if you wish to speak more plainly, relata are subjects insofar as they are affected by relations, but relations are bare accidents by which the subjects are affected and according to which they are called relata.

Relatum is not the highest genus.

From this distinction, four things follow that are especially profitable for investigating the highest genus. The first is this: relatum neither is nor can be the highest genus of this category. The reason is obvious. For a relatum is referred to something else, namely, to the correlate. Therefore, if relatum is the highest genus, then by equal reason its correlate would also be a highest genus, and thus either they are two highest genera of one category or this is not one category and so there are more than ten categories. Since, therefore, no reason can even be imagined why relatum but not correlate would be a highest genus, it certainly follows that either neither or both are a highest genus. Since it is impossible for both to be the highest, surely it should be declared that neither of them is the highest. <99> Furthermore, all the highest genera are simples and non-complex, as is proven from the first division of the *Pre-Predicamenta*. But all relata are complex, signifying two completely distinct natures, namely, the subject in which the relation is and the relation itself. Therefore, relatum cannot be a highest genus.

Relation is the highest genus.

The second consequence is this: relation is the highest genus of this category. It follows from the former. For it is certain that either relatum or relation is the highest genus of this series. For no other candidate with any appearance of likelihood can even be imagined. Therefore, since it was already shown that it is not relatum, relation itself remains to truly be the highest genus.

Relata are not entirely genera or species. The third is this: *No relata are either genera, species, differentia, propria, or individuals of this category.* This follows from the preceding claims. For all those are non-complex, but all relata are complex, as we already showed. Furthermore, the highest genus is truly and essentially predicated of every lower genus down to every species and individual. But *relation*, which is (as was proven before) the highest genus of this category, is said of no relatum. For it is not the relatum or the terminus that is referred but the relation itself through which another terminus is referred to something else. From this it is clear that no relata can be called the genera, species, or individuals of this category.

Relata are in a category only reductively.

The fourth consequence is this: no relata are directly placed in any category, but they are reductively gathered in this category of relation. This is also proved from the foregoing. For anything that is placed directly in a category is something non-complex. But no relatum is non-complex. They are, however, reduced to this class, since termini are of a relation, just as a point and an instant are reduced to [the category of] quantity because they are the termini of quantity. It is only in this sense and no other in which that claim that is very frequently made should be held: relata are in this category or this is the category of those things that are towards

something. In fact, since the nature and essence of relations is very subtle, we use relata, since they are more easily cognized and we are led through them as by a hand to the cognition of relations.

Besides, even if relata are placed in this category in the stated way, nevertheless, not all are placed here even in this way. Moreover, since we know what relata are the ones that are not placed back here, this distinction should be carefully observed. <100>

Intentionalia, which are second intentions in which our mind conceives a respect of one to another. Of such a kind are genus and species, cause and effect, subject and attribute, and other similar things as they are taken intentionally but not materially for those things that lie under-

Relata secundum dici and secundum esse. Relata are of two kinds: Realia: the things themselves existing without the activity of our mind and recording a respect. Even these are

neath those intentions.

Secundum dici, the essence of which is certainly absolute, yet they record a kind of respect superadded to their essence, such as knowledge and the knowable, sense and the sensible.

Secundum esse, the whole essence of which is posited in the relation, in such a way as no absolute nature has, such as father and son, and lord and servant.

Intentional relata are not in any category. From this one can already explain what relata are and which are not in this series. I explain the former with three propositions. The first is this: *Intentional relata cannot be placed in this or*

in any other category per se. The reason is obvious, since the categories are classes of things rather than of second intentions. Furthermore, such relata are just as much in every category as in one category. For there are genera and species, cause and effect, in every class. Therefore, they cannot be restricted to some one class. They are, therefore, not in one category per se, but in every category per accidens and on account of those things that are known through those second intentions.

Relata *secundum dici* are not in this third category.

The second is this: *no relata* secundum dici *belong to this cate-gory nor are they reductively placed in it.* The reason is that all such relata are absolute in their essence and nature, and all absolute things belong to classes of absolute things and are collected in some class of absolute things, such as knowledge and sense in quality,

something knowable in substance, some in quantity, some in other categories. Since, therefore, all such relata belong to some absolute category, it is certain that they cannot be placed in this category of *relation* and cannot be reduced to it. For in that case one and the same thing would be in different categories, which is impossible, as we showed earlier in Chapter 8.

All and only relata secundum esse are in this category.

The third is this: All relata secundum esse, and only these, belong to this category and are placed in it reductively. This follows from the preceding claims. For since neither intentionalia nor relata secundum dici are placed here, it remains that only relata secundum esse are collected here. But it is proven that all these belong here since all the relations by which the relata are referred <101> agree in one common nature and univocal genus, namely, in relation. Therefore, since all the relations by which these relata are referred are directly collected in this category, it follows that the relata themselves which are thus referred are reduced to the same category and reductively collected in it.

I imagine it is sufficiently proved by now, first, that relation is the highest genus of this category, and then that relata—although not all relata but *only relata* secundum esse—belong to this category and are located in it through reduction. Now we may resolve what this relation is that is the highest genus. It will be described as follows.

What relation is.

Relation is an accident that is respective by its nature through which the subject in which it is is referred to another. Moreover, since this whole doctrine of relations is both very profitable and very obscure, I will add a little in order to get a fuller understanding of this description and one other matters that pertain to relation. There are three things that should especially be noted in this description.

Relations are real accidents.

The first is that all relations are accidents and therefore are truly real beings, really existing and inhering in their subjects. For we are speaking here only about finite relations and of finite things. For in God there are certain divine relations that are entirely incomprehensible through human reason that are not accidents. For in God there is and can be no accident, as Augustine most wisely and clearly teaches in De fide et simbolo, chapter 9, and Aquinas after him in ST Ia3.6 and SCG I.23. Those relations in God, I say, are not accidents, as Aquinas teaches in ST I.28.2 and in SCG IV.14. But I restrain myself so that I do not send this small boat into such a deep sea, where all the large sea creatures swim and perhaps escape by swimming. I only warn that we are not discussing these relations are all here when we define relations as accidents. For

we are only discussing *finite* relations. We leave the others to the theologians.

The second is that relations are respective by their nature and

In what way relations are of a respective nature.

essence. This claim should not be taken as saying that the relations themselves respect other things or are referred to other things (for this applies to the terminus and to relata but not to relations). But they are respective, since through them subjects or termini are referred to other things. And insofar as they have relations they are nothing other than respective and related by their nature. Thus a father qua father—that is, insofar as he has paternity—is nothing other than a relatum that has no absolute nature but only a respective nature. For paternity is essentially a respect by which a father is referred to his son. Concerning this, see what we recalled above in Chapter 9.

The third is that through a relation one subject or terminus is

A relatum is referred to only one correlate.

The third is that through a relation one subject or terminus is referred to another: I say one to one and not to many. As a matter of fact in the case of every relation there are two things and only two termini, not many termini. For this reason if it comes about (which happens very frequently) that one father is referred to five or to fifty sons (the number that Priam had as Cicero tells in Book I of the Tusculan Disputations) <102> or one lord to five hundred servants or one king to five hundred myriads of subordinates, since there cannot be more than two termini for any one relation, it proves that there are the same number of sons, servants, or subordinates as there are numerically distinct paternities, lordships, and regalities in that father, lord, or king. The same man through one paternity is referred to this son and is called the related terminus to the latter or the father of this son, but through another paternity is referred to another son and is called the related terminus of that son or the father of that son, and so on for however many other sons there are. This is proven as follows: if there were only one paternity in him and he were referred by that to five sons, then certainly if any one of those five sons died he could no longer be or be called a father. For it is certain that that one relation or paternity is destroyed, since one son is destroyed, for with the destruction of a relatum the correlate is destroyed. But the correlate of the son is the father or the man with the paternity. Therefore, if that man only had one paternity, then, since that relation was already removed by the death of one son, it follows that he would no longer be a father. But it is obvious that he is still a father, since the rest of his sons still survive. For this reason it is certain that he still retains the other paternities through which he is still called a father of those sons and is referred

to them. We can argue similarly for the origin of sons, servants, or subordinates. Still, it is not necessary that on account of that multiplicity or diversity of paternities and other relations that are in the same man that he be called multiple or different fathers, lords, or kings. For there to be different fathers or kings requires not only that there be different relations but that the very subjects in which those relations are also be different. For the name 'father' or 'king' marks a subject with paternity or regality. But there is only one subject, not multiple ones. Therefore, there is only one father or one king even if multiple paternities or regalities inhere in him. It is, nevertheless, true that that one man in whom there are so many paternities is the different termini for the five sons, since, although that subject is one, nevertheless he together with one paternity is the terminus for one son, together with another paternity is the terminus for another son, and so one for the remaining sons. For the same subject with a diversity of relations is sufficient for a diversity of termini. And on account of this diversity of termini it happens that father does not pass away with the killing of one son but only the father of that son or the being related to that son. Nor is paternity extinguished in him, strictly speaking, but only that paternity through which he is referred to that son or through which he was the related terminus for that son. As long as even a single paternity remains in him he must equally truly be called a father, although he has only one son and was designated when he had five hundred. But now he is not the father of so many sons nor is he affected by so many paternities.

A doubt.

The solution.

But, you will say, two or more accidents only numerically distinct cannot be in the same subject, for this is commonly said.

I respond that this is indeed said somewhere by Aquinas, but regardless whose proposition it is, it is certainly not true if taken universally. For <103> sensible species of ten thousand objects—think stars or human beings or trees or white bodies—can be in the same part of air, in the same eye, indeed, in the same pupil of an eye, at the very same time. But the species of two white sheets of paper or of two stars or of two human beings differ only numerically, just as the white sheets of paper or the human beings or the stars differ only numerically. In the same way, intelligible species of ten or a thousand human beings can be at the same time in a mind, and yet they differ from each other only numerically. Some people say the same thing about light, namely, that two illuminations only numerically distinct are in the air at the same time. The evidence for this is the fact that if two lamps of the same measure are set up

with an opaque body between them, we see that a shadow comes to be from both. Therefore, the illuminations in the air are distinct, since the privation of one illumination would not bring about two shadows. That common statement can be granted if it is taken as concerning only material qualities (as they are called) or quantities, so that two heat or two quantitative bodies or two figures only numerically distinct cannot be in the same subject. This is the sense taken from Zabarella in Chapter 9 of 'De regionibus aeris' in De rebus naturalibus. But if it is applied to other accidents, either to those that are called spiritual (all visible species are of this sort) or to those that have a feeble entity and are as if spiritual (relations are of this sort), if the claim is applied to these, I say, it is not true. For in the provided examples both of relations and of visible species, it is proven that two, indeed a hundred or a thousand, accidents distinct only numerically can be in the same subject at the same time.

What the foundation of a relation is.

Having explained the definition of relation, its cause needs to be investigated just as in the case of the other accidents. The cause is said to be the foundation of the relation. For that some understand by the name 'foundation' the subject or relatum, as Zabarella does in the introductory chapter about relations, is to stray far both from the target and true sense of that word. For the foundation is that from which the relation immediately arises or that which is the proximate cause for why this terminus or subject is referred to another thing, on which the relation is built (as a building on a foundation).

The foundation of every relation is some absolute being. Moreover, not all relations are similarly founded in one or not. Certain ones are founded in *quantity*, others in *quality*, others in *action*, and others in *other things*, as can be seen from a careful examination. Equality and inequality are founded in quantity, for the proximate cause why something is equal to another thing is that both things have an equal *quantity*. Long and short, wide and narrow, large and small, are founded in magnitude. Long and short with respect to duration are founded in time; equal and odd in number. Similarity and dissimilarity are founded in quality, for from the fact that two termini have the same quality in species similarity arises between them. From the fact that they have different qualities—think of one having whiteness, the other blackness—dissimilarity arises. Likewise where one is more white and the other less white, one more learned and the other less learned, one warmer and the

¹Not sure about the reference.

other <104> less warm, and all the other relations that record a comparison in any quality. All these, I say, arise from quality and are founded in quality. For something in which any quality inheres in multiple grades is referred to another thing in which lower grades inhere through the mark of a relation of more or of less. For example, longer, wider, thicker, and longer in time arise from a greater extension of quantity (namely, of a line, surface, body, or time) that one thing has before another thing. Many relations are founded in action. In the action of generating, that is, of producing another thing, such that as its substance or the same part of it is communicated paternity is founded. Filiation is founded in the action of receiving its substance from another through the mode of generation.² Fraternity is founded in the action of receiving the substance from the same father. That relation according to which someone is called a teacher is founded in the action of teaching the precepts of an art to someone and rightly establishing them in that art. The relation according to which someone is denominated a student is founded in the action of listening and learning some art from someone else. Matrimony, that is, the relation by which a man and a woman are called spouses, is founded in the action of consenting or in the mutual consent by means of the words of present assent that make one a husband and the other a wife. The relations according to which one person is called a lord and another a servant are founded in the mutual consent that latter will faithfully serve the other and the former will be master over and protect the latter in the way owed. The same thing could be shown in the case of all other relations, but it is enough to have proposed these as examples.

A doubt.

The solution.

Perhaps someone will have had doubts about our numbering large, long, wide, and long in time among relations, thinking they should be included with quantities instead.

The solution is easy. *Large, long,* and the others are taken in two ways: *absolutely,* for that which has any magnitude or extension *simpliciter,* and *respectively,* for that which has a greater magnitude or extension than something else. The same should be said about *long, wide, and long in time.* If they are taken in the former way as *they are absolute* and either are the same as that line, surface, body, and time or are properties and affections of those, then we are not talking about them here. If they are taken in the second way, they are truly related in their nature. For thus something is called *large* not from the fact that it is extended but from the fact that it

²This sentence is repeated in the 1622 edition, but not in the 1677 edition.

has a greater extension in length, width, or depth than something else that is called small with respect to the former thing. And from this it follows that anything can be called *absolutely large, long, wide, or thick*, all those things, I say, in which there is magnitude or extension of length, width, or depth. But *small, short, and slender* cannot be or be imagined to be absolute. Obviously nothing is absolutely small, since anything that you suppose to be a body has extension and magnitude. Nothing is absolutely short, since there is some length in it. And so on for the rest of the cases. Therefore, anything that is small is small merely comparatively, namely, with respect to a large thing. <105> For if you accept anything as small, the same thing is large absolutely, since it has extension and magnitude. And therefore it can also be large respectively, if it is compared with a smaller thing, for *a minimal magnitude or extension cannot be given*.

The foundation and relation really differ.

Six things follow from what we have already said about the foundations of relations. The first is this: every relation is a real being, truly really or essentially distinct from its foundation. It is proved from what was said. For the foundation is always an absolute nature, but a relation is always respective. The foundation is always the cause or that from which the relation arises, but the relation is that which arises, is caused, and follows from the foundation. The foundation is always *prior in nature* to the relation; the relation posterior in nature to its foundation. These are certain indications of a real and essential distinction. I know that that man eminent in learning and piety, Girolamo Zanchi, teaches something a little different in De natura Dei II, ch. 2, q. 1, in the paragraph starting with 'They are called'. For he says: relations are also called real beings, not because they are such of themselves, but only from their foundations, since their foundation is real. And further on he says: relations add nothing to their foundations. But why one should not assent to what he says is proven from what has already been said. I add further that if nothing is added to a white body when it is and is called similar to another white body, then certainly every similarity is obliterated. For there is nothing that can be or can be called similar from a white thing without a real accident.

Relation is not the terminus of motion.

The second is this: no relation can be the terminus of motion or of change, such that change tends to the very relation or is terminated in it. Aristotle explicitly teaches this in *Physics* V, ch. 2. The reason is that every motion and change looks to this, that some absolute being—namely, either substance, quantity, quality, or where—is introduced into the subject. But relation is none of these and it is

not something absolute.

Relations arise from three modes.

The third: relations arise from three modes. First, on the arising of the subject in which they inhere, as when a human being comes to be, the power of laughing comes to be with him, and for that reason similarity to other human beings who likewise can laugh also arises, as well as dissimilarity to all brute animals, plants, and all the other things that cannot laugh. Second, on the arising of their foundation. As when fire heats water, similarity to air arises upon the introduction of heat into the water, but dissimilarity to earth and everything cold arises. Third, on the arising of their correlate, even if nothing wholly absolute is added to the subject in which the relation inheres. Thus in the example just given, when the water becomes warm, a new dissimilarity to that water arises in earth, but it arises without the arising of the subject and without the arising of a foundation, but only on the arising of a correlate, namely, of that dissimilarity that arises in the water from that introduction of heat into it. The dissimilarity of the earth, however, is founded in the quality of cold that already existed in the earth and that is dissimilar to every heat. On account of this cold a new relation now comes to be in the earth on the arising of its correlate.

Relations perish from three modes.

The fourth is this: just as relations arise, so also they die, perish, or cease to be from three contrary modes. First, through the destruction of the subject, as by the death of Socrates who is a father all the paternities that <106> are in him die. Second, through the destruction of the correlate, as by the death of Socrates the father all the relations of filiation that are in his sons cease. Third, through the destruction of its foundation, even if the subject is preserved as much as a relatum as a correlate. For example, by the destruction of the heat in the water, the dissimilarity of the water to earth and all other cold things is destroyed.

The number of relations is nearly infinite.

The fifth is this: with relations in the habit of arising in so many ways, there should be no doubt that a vast and entirely incomprehensible number of relations both exist and daily come to be. Take even one grain of wheat, can anyone in their mind how many bodies larger than that grain there are or how many grains of sand smaller than it in the sea? But there are just as many relations in that one grain as the bodies to which it is referred. And when that grain comes to be all those relations simultaneously come to be, as many in the other things that are larger or smaller than it as in the grain of wheat itself. Or can one imagine in the intellect how many numbers there are to which the number two is unequal?

The sixth is this: Since relations arise and perish so easily and

since they have so a light dependency on the subjects in which they exist that almost an infinite number of relations perish and come to be in them without any change coming about in the the subjects (namely, through the addition of anything absolute), one must confess that it is true what is commonly said: relations are of minimal entity. For their entity depends to the same degree on the subject in which they inhere and which is referred as on the terminus to which it is referred and on the foundation from which the relation arises. If any of these pass away, the relation perishes.

The properties of relata.

So far we have talked about what the highest genus is and how it is in this category. Now we move on to its properties. Aristotle enumerates five whose sense we want to uncover.

The first is that something is a contrary to relata. The contrary, I say, is not per se, but on account of its foundation. For those relata are contraries whose foundations are contraries, as contrary of the dissimilarity having arisen from whiteness is per accidens the dissimilarity that is founded in blackness, since whiteness and blackness are contraries. But this does not apply to all relata according to being, for it does not apply to equal or unequal. And those are not the only cases, for qualities are also opposed. For this reason, it should more truly be called a community than a property.

The second is that *relata are susceptible of more and less*, as one similar thing is more similar to another than a second one. And this is also *only a community but not a property of relata according to being*. For it also does not apply to all, since it does not apply to equal and unequal, given that their foundation—namely, quantity—is not susceptible of more and less. Those are not the only cases, for it applies to qualities.³ I add, too, that it does not apply to any relata *per se* but only *per accidens* and on account of the foundation.

A doubt.

But in what way, then, does Aristotle say that equal and unequal are susceptible of more and less? For they are founded in quantity and quantity is not susceptible of more and less. Furthermore, every equality consists in an indivisible so that the equal ceases to be either by adding anything or by taking away anything. Therefore, nothing is more equal (*aequale*) than another, for both are entirely alike (*paria*). <107> Something unequal indeed [can be] more unequal than another, as a thousand is a more unequal number with respect to two than a hundred and a hundred than twenty. So there is difficulty from both sides.

The solution.

One should respond that Aristotle here discusses the matter

³One would have expected a negation in the last clause.

with a thick-headed Minerva⁴ and brings up common examples even though they are not exactly true. As a matter of fact, he also says in this place that *Not truth but illustration is to be sought in the examples.* Therefore, one should say that neither the equal nor the unequal are, *properly speaking*, susceptible of more or less. Furthermore, although one thing is said to be unequaler⁵ or more unequal than another, nevertheless that is not said on account of a greater extension of quantity or a multiplication of unities.

Relata are said conversely.

The third is that all relata are said conversely, that is, they are reciprocal one with another in some oblique case, either in the genitive (as, a father is the father of a son), in the dative (as something similar is similar to a similar thing), in the accusative (as a mountain is said to be large according to something small or with respect to something small), or in the ablative case (as something larger is called larger than something smaller). But the relata are never reciprocated in the right case, for we cannot say that every father is a son.

This applies to *all* relata *secundum esse*, but *not only to them*, for even relata *secundum dici* are reciprocal in this way, as the sensible is sensible to a sense and the knowable is knowable to knowledge. It is, therefore, a *proprium* of relata *secundum esse* in the first mode.

Relata are simultaneous by nature.

Fourth,⁷ all relata are simultaneous by nature. But so that something is said to be simultaneous by nature, two things are required. First, that they be simultaneous in time, with neither relatum prior in time or posterior in time. Rather, with the positing of one the other is posited and with the removal of one the other is removed. Second, that neither of them be the cause of the other. Both of these conditions apply to all relata in this category, that is, relata secundum esse. For father is not prior to son and neither is the cause of the other. Moreover, this is a proprium of relata secundum esse in the first mode, for it applies to all of them but not only them. As a matter of fact, relata secundum dici can also be simultaneous by nature, such as knowledge and knowable and sense and sensible. Even intentional relations are, such as genus and species and cause and effect. And beyond these, two propria

⁴That is, with a dull intellect.

⁵The Latin equivalent is less awkward than the English term.

⁶In the Latin text, the examples given make use of genitive, dative, accusative, and ablative cases, respectively.

⁷The marginal note I have placed here is erroneously attached to the previous paragraph in both 1622 and 1677 editions.

of the same species, such as being able to laugh and being able to lament, [are simultaneous in nature], for by positing one the other is posited, and being able to laugh is not the cause of being able to lament nor the other way around.

A doubt.

But two doubts occur here. The first one concerns relata *secundum esse*, for as is often objected, the father is prior in time to his son. Otherwise, he could not generate his son.

The solution.

That common response is true if understood correctly. The father is prior in time if taken *materially* for the generating human being. But if taken formally neither father nor son is prior to the other. Furthermore, one should note with care that the formal taking of them is not to take father and son for abstractions, namely, for paternity and filiation. For in that way neither of them is referred to the other, as has often been said. Rather, they are the relations themselves through which the termini are referred mutually to each other. But father is taken formally when a human being is taken along with this relation of paternity or insofar as there is paternity in him. And in this way the father neither can be nor <108> can be thought to be prior to the son. In no case can anyone be called a father before his son exists. The human being himself in whom paternity now inheres is indeed prior to the son, but the human being together with this relation is not prior. And if he has multiple sons, he is not a father of this son before this son exists.

A doubt.

The second doubt concerns intentional relata such as *genus* and species, cause and effect, essential part and essential whole, and former in nature and posterior in nature. For these are not simultaneous by nature, since every genus is prior by nature to its species, as was said in the chapter 'On Genera'.⁸ And every cause is prior by nature to its effect, as Aristotle teaches in the chapter on the prior. From this it follows both that genus is prior to species and essential part is prior to its essential whole, since genera and essential parts are intrinsic causes of species and essential wholes. To these one can add *prior in time and posterior in time*, which without doubt are relata and yet are not simultaneous by nature, since one of them is prior in time to the other, namely '*prior in time*'. For otherwise the time would not be prior but simultaneous, which implies a contradiction.

The solution.

One response satisfies all these cases: namely, that which we brought up when solving the objection about the father and son concerning the *material and formal* taking of these terms. If genus and species are taken *materially* for those things that are the genera

⁸That is, Book I, chapter 3, of the present work.

and species, then it is entirely certain that genus is prior by nature to the species, as animal is prior to human being, living body to animal, and body to living body. But if they are taken formally for those very things insofar as these intentions of genus and species are accommodated to the those, then neither is prior by nature to the other. For animal insofar as generality is attributed to it or insofar as it is called genus neither is nor can be a genus except there is or there is thought to be something that is a species of it. The same thing should be said about cause and effect. All the things that are causes are prior by nature than those things that are their effects. But no thing can be a cause nor have this intention of cause attributed to it before this intention of effect is attributed to something else. Likewise, the thing itself that is an essential part is prior by nature to its essential whole, as in the case of rational to human. But rational along with this intention of essential part or insofar as you accommodate this second intention (that it is an essential part) to it neither is nor can be imagined prior to you thinking of another thing that is the essential whole with respect to which it is a part. And one should respond in the same way about prior by nature and posterior by nature. Accept them materially for those things that are prior by nature to other things, then they are not simultaneous by nature but one is prior by nature to another (so that it is called prior by nature). But take them formally for some thing along with this relation of priority by nature, and then it neither can be nor can be thought to be prior by nature, except there be something else that is also thought about that is posterior by nature to the former thing. The same thing should be said about the prior in time and posterior in time. A human being of a hundred years is prior in time to one who has only lived two years, for he precedes the younger one by ninety-eight years. But it is never the case that this relation *priority in time* inhere in him before another one is born in whom another relation of posteriority in time inheres. Therefore, there can never be nor be said or thought to be something prior in time before there is another thing that either is said or thought to be that is posterior in time. <109> Just as the man that is a father never is nor is thought to be a father before there is another human being or is thought to be who is his son. And about all these cases that are similar there is an entirely similar judgement.

A doubt.

There is a third doubt about relata *secundum dici* drawn from what Aristotle himself said. For he proves in a prolix discussion that there is something *knowable* but of which there is not *knowledge*. A

squared circle is knowable yet so far there is not knowledge of it. And before human beings were created, there were many knowables—think of the heavens, the elements, plants, and brute animals—and yet there was no knowledge (namely, *human* knowledge) of them since there still was no human being. Likewise before the creation of animals there were many sensibles that could be sensed yet there was no sense by which they could then be sensed. From this it is proved, which Aristotle also concludes, that knowledge and knowable, sense and sensible, which are relata *secundum dici*, are not simultaneous by nature. For one can be without the other.

The solution.

I respond that Aristotle indeed both affirms and proves that, but in that whole discussion he is discussing not asserting, or as is commonly said, he is speaking disputatively and not doctrinally. But he leaves the matter in doubt and he does not attach a solution, either because he is treating the matter here with a thick-headed Minerva or because he wants to exercise the talent of his readers in finding a solution. But the doubt is solved with the following distinction: knowable and knowledge are taken in three different ways. Either [i] as both in act, as that is called knowable which is known in act, and that knowledge by which we know a thing in act. In this way both are simultaneous by nature and neither is prior to the other, for nothing is knowable in act before there is an act of knowledge by which it is known. Or [ii] as both in potency, as that is called knowable which can be known even if it is not known so far, and that knowledge by which a thing can be known even if it is not known in act so far. In this way both are also simultaneous by nature. For nothing can be known unless there can be knowledge by which it is known. Or [iii] as one of them is taken in act and the other in potency, as when you take the knowable for something that can be known but knowledge for something by which we know a thing in act. If we take them in this way, then the knowable is prior to knowledge, and Aristotle was disputing in this sense. But in this case the comparison is not apt and the correlate that is employed is not apt for the knowable. But if you take an apt correlate for the knowable, then they must truly be called simultaneous by nature. A similar response should be employed for the case of sense and sensible.

What it is to cognize something distinctly.

The fifth and last property of relata is that when one of the relata is cognized distinctly, the other relatum is also cognized distinctly. But what is it to cognize something distinctly? It signifies two things. One is to cognize something in particular to be such or such. Examples are to cognize that Socrates in particular is a father or

to cognize that this body in particular has a head. In this way it is opposed to that which is to cognize something confusedly or in general. The other is to cognize to something through its true and essential definition, as when you cognize the father through his essence and definition or the headed body through its essence. In this way it is opposed to that which is to cognize something through accidents or through an accidental description. If it is taken in the former way, then this is a proprium of relata secundum esse in the second mode. 9 <110> For it applies to all of them but not only to them, for it also applies to relata secundum dici and to intentionalia. As a matter of fact, you do not know distinctly that this is a father or a lord unless you know in particular and distinctly that he is the father of this son or the lord of this servant. Likewise, you cannot know distinctly and in particular that this thing is sensible or knowable unless you know distinctly and in particular that this it is sensible by this sense or knowable by this knowledge. Furthermore, you cannot know distinctly that this is a genus or a cause or an essential part unless you know in particular and distinctly that it is the genus for this species, the cause of this effect, or an essential part of this essential whole. But if it is taken in the latter sense, then it is a proprium of relata secundum esse in the fourth mode, for it applies to all of them and always only to them. The reason is because the very essence of relata secundum esse is to respect another thing and to refer to that. For this reason, it is impossible to cognize something in its essence without knowing that to which it is referred according to its essence. But the same does not hold true for relata secundum dici. For they are all absolute things in their nature and essence. Therefore, they have an absolute essence by the cognizing of which they themselves are cognized distinctly and in their essence, just as knowledge and sense are qualities and the sensible is either a quality or a substance. Since, therefore, they do not in their nature respect anything else, they can certainly be cognized in their essence even though those other things to which they are referred by accident (and not through their essence) are not cognized at the same time. This property also does not apply to intentional relata, since they cannot be wholly cognized distinctly and according to essential definitions, but only through descriptions. For they are not extramental things that exist without the activity of the mind, but are second intentions constructed by the mind. For this reason, they are not placed in the categories, which are classes of things, [i.e., extramental entities].

⁹Why not in the first mode as with the third and fourth properties?

But Aristotle took this 'to cognize distinctly' in both senses at the same time. And in that way it is also a *proprium* of relata *secundum esse* in the fourth mode.

A doubt.

But this could be doubted in either sense. First, relata *secundum esse* seem to be cognized distinctly and essentially without cognition of their correlatives. For each one is cognized essentially when it is cognized through its genus and differentia. Therefore, if someone cognizes the genus and differentia of father, he would certainly cognize the whole essence of father. Furthermore, it is certain that the correlate does not belong to the essence of the relatum and is not any essential part of it, for in that case it would be prior by nature to the relatum, since all essentials are prior to those things of which they are the essence. But all relata are simultaneous by nature. Therefore, since a correlate does not belong to the essence of a relatum, it seems that a relatum can be cognized according to its whole essence without the correlate.

The solution.

I respond that it is very true that a correlate does not belong to the essence of its relatum, as is sufficiently clearly and firmly established in the objection. But, nevertheless, a relatum cannot be essentially cognized nor essentially defined without its correlate. A distinction between absolute and respective must be observed in this. For since the nature of absolutes is absolute, <111> therefore, nothing is required beyond the genus and differentia (which are essential parts) for the cognition of their essence and their essential definition. But the matter is otherwise in the case of *relata*. For since their nature is not absolute but respective and such that their own essence implies respect to something else, relata cannot be known according to their essence unless that which is marked by the respect through that essence is known. Nor is it enough to employ genus and differentia (which alone are essential to it) for a definition of relata. Rather, one must add the correlate. Even if it does not belong to the essence, it is nevertheless the correlative terminus that the relatum respects through its essence.

A doubt.

The other doubt is about the former sense and about relata secundum dici. Aristotle numbers head and headed and hand and handed among relata secundum dici, and says that one can distinctly and in particular know hand and head while at the same time be ignorant of him whose hand or head it is. But this seems impossible, for one cannot know distinctly and in particular that this is a hand or a head unless it is known to be a hand or a head of this body. For a hand and head are parts of a whole, but parts and a whole are relata secundum esse. Therefore, it is not possible

firmly and distinctly to cognize one without the other.

The solution.

I respond that Aristotle also places those among the relata secundum dici and asserts that one can be known distinctly without the other. But that statement which has a place in so many other cases also has a place here: illustration but not truth should be sought in examples. For that the same thing should certainly be said about head and headed and hand and handed cannot be in any doubt when the headed is a whole, the head is a part, and the part and whole are relata according to essence. And as father if taken materially is only a substance but if taken formally for a human being in whom paternity inheres is a relatum secundum esse, plainly in the same way if headed is taken materially for the substance and body itself, it is not a relatum. But if you take it formally for the body to which the head belongs or for the body insofar as it has a head, in that way it is no less a relatum secundum esse than the father or a whole. But Aristotle also says that a hand or head can be distinctly known even if one does not distinctly cognize whose hand it is or whose head it is. I respond that this was said for the sake of illustration and giving examples, not because it is strictly true. For just as you can cognize distinctly, firmly, and in particular that someone is a lord when you see others serve him even though you do not cognize either the name 'lord' or the name 'servant', so plainly you can also cognize firmly and distinctly that this body is headed or that this is the head of this whole even though you do not cognize the name, the appearance, or the face of the person whose head it is. But as no one can know firmly and distinctly that this is a lord unless he knows that that is his servant, so also no one can know firmly and distinctly either [i] that this is headed unless he knows in particular that this is the head of that and that this is continuous with that whole or [ii] that this is a head unless he knows firmly that it is a head of this headed whole and that it is continuous with it as an integral part is with its whole.

These things have been said about the properties of relata. Now their order should be explained. Certainly since the number of relata is infinite to such a degree that they far surpass absolute accidents <112> in number, they can be divided in many ways and can be brought forward into an unending series. We, however, leaving an exact treatment of these matters to others, will present a short and however small table of relata, presenting a model, as it were.

In persons, when two persons are referred to each other, and such a relation is in persons that are either:

Unequal, when one has legitimate authority over the other. Such relata are: King and vassal, lord and servant, father and son, master and disciple, and other similar cases. Here belong also all grades of blood-relationships and marital relationships in a direct line, such as grandfather, great-grandfather, great-grandfather, great-grandfather, etc.

A relation is either:

Equal, when neither has authority over the other. Such relata are:

Husband and wife, brother and brother, ally to ally, friend to friend, co-disciple to co-disciple, and so on. Here belong also all grades of blood-relationships in a collateral line.

In things, when persons are not counted as things, and such relations arise either from: Quantity, such as equal, unequal, larger, smaller, longer, shorter, wider, less wide, longer in time, shorter in time, paired, unpaired, simple, double, triple, quadruple, and so on to infinity.

Quality, such as similar, dissimilar, better, worse, more learned, less learned, braver, more prudent, etc. Also whiter, less white, greener, less green, warmer, less warm, etc.

And these are the statements about the category of relation.