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THE FIRST TWO MEANINGS OF "RATIONAL PROCESS"  
ACCORDING TO THE  
EXPOSITIO IN BOETHIUM DE TRINITATE.

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PROPOSITIONES.

1. - Ex ente fit aliquid per accidens.
2. - Materia intelligibilis est de ratione quantitatis.
3. - In natura est infinitum in potentia.
4. - Verba sunt signa per prius.
5. - Universale addit supra ceteri et per se quando  
adaptationem vel adaequationem praedicati ad subjec-  
tum.

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M. B., Québec, le 17 septembre 1954.

## THE FIRST TWO MEANINGS OF "RATIONAL PROCESS"

### ACCORDING TO THE

#### EXPOSITIO IN BOETHIUM DE TRINITATE.

##### Introduction

In St. Thomas's Expositio in Boethium de Trinitate, qu. 6, a. 1, there is a passage wherein is explained three types of rational processes. The first two are denominated rational because they involve a use of logic, which is called the rational science.

An explanation of the first two meanings of rational process and the corresponding two ways in which logic can be used in the demonstrative sciences constitutes the purpose of this study.

The passage is as follows :

... Processus aliquis, quo proceditur in scientiis, dicitur rationalis tripliciter : Uno modo ex parte principiorum, ex quibus proceditur, ut cum aliquis procedit ad aliquid probandum ex operibus rationis, cuiusmodi sunt genus et species et oppositum et huiusmodi intentiones, quas logici considerant. Et sic dicitur aliquis processus esse rationalis, quando aliquis utitur in aliqua scientia propositionibus, quae traduntur in logica, prout scilicet utitur logica, prout est docens in aliis scientiis. Sed hic modus procedendi non potest proprie competere alicui particulari scientiae, in quibus peccatum accidit, nisi ex propriis procedatur. Convenit autem hoc proprie et convenienter fieri in logica et metaphysica eo quod utraque scientia communis est et circa idem subiectum quodammodo.

Alio modo dicitur processus rationalis ex termino, in quo sistitur procedendo. Ultimus enim terminus, ad quem rationis inquisitio perducere debet, est intellectus principiorum, in quo resolvendo iudicamus; quod quidem quando fit, non dicitur processus vel probatio rationalis, sed demonstratio. Quareque autem inquisitio rationis non potest usque ad ultimum terminum perducere, sed sistitur in ipsa inquisitione, quando scilicet inquirenti adhuc manet via ad utrumlibet; et hoc contingit, quando per probabiles ratio-

nes proceditur, quae natae sunt facere opinionem vel fidem, non scientiam, et sic rationabilis processus dividitur contra demonstrativum. Et hoc modo rationabiliter procedi potest in qualibet scientia, ut ex probabilibus paratur via ad necessarias probaticiones. Et hic est alius modus, quo logica utitur in scientiis demonstrativis: non quidem ut est docens, sed ut est utens. Et his duobus modis denominatur processus rationalis a scientia rationali; his enim modis usitur logica, quae rationalis scientia dicitur, in scientiis demonstrativis, ut dicit Commentator in I Physicorum.

PART I

The first process is called rational because it starts from constructions of the reason which are the subject of logic, that is from propositions which have been established in this rational science.

Uno modo [ dicitur processus rationalis ] ex parte principiorum, ex quibus proceditur, ut cum aliquis procedit ad aliquid probandum ex operibus rationis, cuiusmodi sunt genus et species et oppositum et huiusmodi intentiones, quas logici considerant. Et sic dicitur alius processus esse rationabilis, quando aliquis utitur in aliqua scientia propositionibus, quae traduntur in logica, prout scilicet utitur logica, prout est docens in aliis scientiis. Sed hic modus procedendi non potest proprie competere alicui particulari scientiae, in quibus peccatum accidit, nisi ex propriis procedatur. Convenerit autem nec proprie et convenienter fieri in logica et metaphysica eo quod utraque scientia communis est et circa idem subiectum quodammodo.

The purpose of this part of the study is an explanation of the first type of rational process and the particular use of logic that it involves. But first we must prepare the way by a consideration of what logic is and what it deals with. This section, then, will be divided into three chapters: (i) on the definition of logic; (ii) a further development of the nature of its subject, the second intentions which are the works of the reason; (iii) the first type of rational process and one use of logic.

[ A process is called rational ] First, because of the principles from which we proceed, as when someone proceeds to prove something from the works of the reason, such as genus, species, opposite and such like intentions which the logicians consider. And thus a process is said to be rational whenever someone uses in any science propositions which are given in logic, as when we use logic according as it provides knowledge in other sciences. But this mode of proceeding cannot properly belong to any particular science, in which error occurs unless we proceed from its proper principles. This, however, is done properly and fittingly in logic and metaphysics because both sciences are common and, in a certain way, are concerned with the same subject.

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# CHAPTER I.

## WHAT IS LOGIC ?

Although both Aristotle and St. Thomas plainly hold that logic is a science as well as an art, St. Thomas, in his Commentary on Aristotle's *Posteriora Analytica*, defines it simply as an art : the art which directs the act of reason itself and by which man in the very act of reason proceeds with order, ease and without error (1).

We shall probe the reason for this preference later on. Let us first of all try to understand what the definition means. For this purpose it will be of advantage to consider the necessity and the nature first of art in general and then of the type of art that is logic.

Art, as the ability to make certain things, is the kind of stable determination with which nature does not provide us but which we must acquire on our own, such as the shoemaker's craft. Man, we know, is not determined in his actions by instinct as are the other animals, for he can operate in diverse fashions. When, with regard to its operation, a faculty is left undetermined by nature, a special disposition is required to incline it to act rightly. Such determinations we call habits (2).

- (1) - "Are...directiva ipsius actus rationis. per quam scilicet homo in ipso actu rationis ordinato, facilliter et sine errore procedat" (in I Post. Anal., lect. 1 (edit. Leon), n. 1).
- (2) - Cf. Webster's New International Dictionary of the English Language, the word 'habit', n. 8.

St. Thomas says in the *Summa Theologica* :

... If the form is limited to one fixed operation, no further disposition, besides the form itself, is needed for the operation. But if the form be such that it can operate in diverse ways, as the soul, it needs to be disposed to its operations by means of habits (1).

Now, for the various powers of operation there are corresponding dispositions, some of which are good and others wrong. Since art is the kind of disposition which enables one to make things as they should be made, we shall concern ourselves only with the division of good dispositions. In the appetitive faculties, we have the moral virtues, which dispose one to submit to the judgments of right reason. Perfecting the speculative intellect are the determinations of understanding, science and wisdom, which are also called virtues though not quite in the previous sense. Finally, the practical intellect, i. e. the intellect that does and makes, is the

- (1) - "Et si quidem habeat forma determinata unum tantum operationem determinatam, nulla alia dispositio requiritur ad operationem praeter ipsam formam. Si autem sit 'alis forma quae possit diversimode operari, sicut est anima, oportet quod disponatur ad suas operationes per aliquos habitus' (in Iae, q. 19, a. 4, ad 1). - "... Potentia quaedamque se habet ad multa : et ideo oportet quod aliquo alio determinetur. Si vero sit aliqua potentia quae non se habeat ad multa, non indiget habitu determinante, ut dictum est. Et propter hoc vires naturales non agunt operationes suas mediantibus aliquibus habitibus : quia secundum seipsas sunt determinatae ad unum" (in Iae, q. 42, a. 1, ad 2). - For all passages from the *Summa Theologica*, we have used the English Dominican translation newly published by Benziger Brothers, Inc., 1917.



subject of the right dispositions of prudence, which enables the reason to judge rightly concerning how one must act under given circumstances; and of art, which determines the reason with regard to the production of a work, such as a shoe, a boat, or a statue.

Art, then, is the habit which disposes the practical reason to direct the making of things properly and with ease. Consequently its specific object, which distinguishes it from the other habits, is the thing to be made. This can be more readily understood by a comparison with prudence. In the Summa Theologica, St. Thomas distinguishes the two habits as follows :

The reason for this difference is that art is the right reason for things to be made: whereas prudence is the right reason of things to be done. Now making and doing differ, as stated in Metaph. IX, text. 16. In that making is an action passing into outward matter, e. g., to build, to saw, and so forth; whereas doing is an action abiding in the agent, e. g., to see, to will, and the like. Accordingly prudence stands in the same relation to such like human actions, consisting in the use of powers and habits, as art does to outward makings: since each is the perfect reason about the things with which it is concerned (1).

We have seen, then, that the reason requires certain habits to assist it in directing the other faculties in regard to both immanent and transitive actions. However, it must not be for-

(1) - "Quia differentiae ratio est, quia ars est recta ratio fabricillium, prudentia vero est recta ratio agillium. Differt autem facere et agere quia, ut dicitur in IX Metaph., factio est actus transiens in exteriorum materiam, sicut edificare, suare, et huiusmodi; agere autem est actus permanens in ipso agente, sicut videre, velle, et huiusmodi. Sic igitur hoc modo se habet prudentia ad huiusmodi actus humanos, qui sunt usus potentiarum et habituum, sicut se habet ars ad exteriorum factionum : quia utraque est perfecta ratio respectu illorum ad quae comparatur" (Ia IIae, q. 57, a. 4).

gotten that among the actions that stand in need of direction there are the operations of the mind itself, for the mind, not being determined to any fixed operation, can operate in diverse fashions. But what faculty can direct the mind, other than the mind itself? Since the intellect, being in itself wholly immaterial, is capable of reflexion, the possibility of examining and directing its own act presents no problem. For this particular task, however, a special disposition is required. This is the habit that we call logic. Logic, then, is the habit that directs the operations of the mind.

In our next step, which is to show that logic is a type of art, we are faced with a difficulty. If, on the one hand, art implies the transitive action of making, and if, on the other hand, logic must direct, not the fabrication of some exterior thing, but the immanent operations of the mind, how can logic possibly be an art? Since it is the work of the thing to be made that constitutes the object of an art as art, the only way of establishing that logic is an art would be to show that its object is a thing to be made. And seeing that the difficulty lies in the fact that making has been specified as a transitive action, we can state the problem as follows : Can there be something whose making does not require a transitive action?

The clue to the solution is to be found in the fact that there are different types of things capable of being made, from which it follows that there are different types of art. Indeed, the term art is analogous, and, as such, it signifies many things, not equally — that is, not in such a way that the complete notion is

found equally in each signification, — but in a certain order, that according to which the things signified participate more or less fully in the common definition. The different types of art participate in the definition to the extent to which their respective objects approximate or coincide with the primary type of thing to be made. Our task, then, is to establish the order which exists among the various makeable objects with a view to discovering how logic fits into the schema.

There can be no doubt but that the matter to which we apply the expression makeable object most appropriately is none other than exterior, physical, passive matter, which, because of its passivity, lends itself most readily to a certain making or formation, to the reception of an artificial form, as the wood from which one makes a table. and, because of its exterior and physical conditions, requires from the craftsman, for the accomplishment of this transformation, a transitive operation.

The art having such matter as its object is called servile. for it relates to that part of man which is least free, namely, his body — not that the work of servile art is intended uniquely for the good of the body, for often, as in the case of architecture, it involves a representation intended to please the mind, nevertheless, although it is conceived by man's mind, it is itself a material work and must be executed by means of corporeal activity.

Servile art, differing from prudence by its object — which is, not actions to be performed, but things to be made — is also entirely distinct, again from the point of view of its object, from

the habits of the speculative intellect. Insofar as it considers the makeable as makeable, its field is limited to the strictly practical, for the appetite is the principle of the work and the end proposed by the artist or craftsman is its measure, the work is contingent, since it could be other than it is or not made at all, and its truth, consisting in its conformity with the right appetite, is practical truth.

The association of making with transitive action and of doing with immanent action seems to imply that only material, exterior things can be made and consequently that only these can be objects of art. But such is obviously not the case. Do we not say that, not only a statue or a house, but even a poem, a sonata or a syllogism are works of art? The question brings us face to face with our problem. We must answer that in each of these examples, there is indeed making, and not simply doing, inasmuch as the agent is concerned with the perfection of a work; for, in each instance, there is the formation of a work inasmuch as there is a composition or ordering of objects (1). But since, in this case, the object is

(1) - "Ordo autem quadrupliciter ad rationem comparatur. Est enim quidam ordo quem ratio non facit, sed solum considerat, sicut est ordo rerum naturalium. Alius autem est ordo, quem ratio considerando facit in proprio actu, puta cum ordinat conceptus suos ad invicem, et signa conceptuum, quia sunt voces significativas. Tertius autem est ordo quem ratio considerando facit in operationibus voluntatis. Quartus autem est ordo quem ratio considerando facit in exterioribus rebus, quorum ipsa est causa, sicut in area et domo. — Et quia consideratio rationis per habitum perficitur, secundum hos diversos ordines quos proprius ratio considerat, sunt diversae scientiae. Nam ad philosophiam



quite immaterial — for the exterior work of a poem only signifies the interior one, — the formation does not involve a transitive action, and hence there is no making in the first and most proper sense. Likewise, the art that directs this type of making is art only according to a secondary acceptation. This is liberal art, whose works pertain to the part of man that is most free — his mind.

It is important to note that the division of art into liberal and servile is based upon the differences that are to be found in the work. We recognize, however, that another classification can be had from the point of view of the end : (i) the arts of what is merely useful, whose purpose is the bonum corporis, and which include only servile arts, such as shoemaking; and (ii) the fine arts, which are intended for the bonum animae, and which comprise both liberal and servile arts, such as poetry and architecture. Nevertheless, it is the former distinction that is the most radical because the work is the object and specifies the art (1).

naturalem pertinet considerare ordinem rerum quem rationi humana considerat sed non facit; ita quod sub naturali philosophia comprehendamus et metaphysicam. Ordo autem quem ratio considerando facit in proprio actu pertinet ad rationalem philosophiam, cuius est considerare ordinem partium orationis adinvicem, et ordinem principiorum adinvicem et ad conclusiones. Ordo autem actionum voluntariorum pertinet ad considerationem moralis philosophiae. Ordo autem quem ratio considerando facit in rebus exterioribus constituitur per rationem humanam, pertinet ad artes mechanicas. Sic ergo moralis philosophiae, circa quam versatur praesens intentio, proprium est considerare operationes humanas, secundum quod sunt ordinatae adinvicem et ad finem" (In I Ethicor., loc. 1 (edit. Pirotta), nn. 1-2).

(1) - It is without apology that we use the word "art" in the Aristotelian and scholastic sense, which applies

Consequently, even though an action is immanent, so long as it is considered as producing a work, it requires the direction of

per primum to the servile arts, such as shoemaking and bricklaying. Nor are we impressed by the silly interpretation, now current, of the distinction between servile and liberal arts as one that was based upon, and passed away with the class-distinction between slaves and freemen. Driving tractors, connecting wires, or even making statues, still requires its share of bodily effort. The following passage from M. Marcel Aymé's *Le confort intellectuel* is very much to the point. "On n'a jamais autant parlé de l'art qu'au siècle dernier et en celui-ci; on ne finit pas d'en discourir et d'en discuter; il nous a valu d'innombrables traités et théories et on va jusqu'à le flanquer parfois d'une majuscule. Ect-il seulement bien sûr que le mot, au sens où on l'entend aujourd'hui le plus ordinairement, corresponde à quelque chose de réel? Autrefois, l'art était tout bonnement une façon de faire. Il y a un peu plus de trois cents ans que le mot a commencé à se draper dans un brouillard majestueux et par la suite, il s'est tellement sublimé qu'il est devenu je ne sais quelle entité cosmique. Quel infini irradiable dont le principe imprènerait certaines créations de l'homme. Tout ça ne paraît fleurir la mysticité et ressemble fort à une invention de castres laïques un mal de religion.

L'Art majuscule, prétexte à combien de doctrines, théories, invocations, prédications, et qui a ses ritos et ses augures, je lui trouve un air de famille avec le bon Dieu. Et quant à l'art sans majuscule, quant à ce participe divin dont les initiés éprouvent si vivement la présence dans un poème ou dans un tableau, ne vous semble-t-il pas qu'il est au chef-d'œuvre ce qu'est l'âme à la chair d'un chrétien? Je vous dis que ce ne sont pas là des façons claires de parler. Quand on parle de l'Art, tout le monde se comprend et personne ne sait au juste de quoi il s'agit. Voilà bien le pire danger. Se comprendre à demi-mot entre initiés tout en ne comprenant rien. C'est, je crois, le véritable mal du siècle — un mal qui n'est peut-être pas particulier à la bourgeoisie, mais dont elle est tout de même seule à craindre. Et, il faut toujours en revenir là, hélas! que de mots servent ainsi à échanger du néant, quoiqu'ils aient l'apparence si simples et si sûrs, brouillent les notions les plus immémorables et nécessaires dans les pauvres cervelles de notre bourgeoisie, qu'elle soit de gauche ou de droite" (Paris, Flammarion, 1919, pp. 152-153).

art, not of prudence. For whereas art is concerned with the perfection of a work, prudence regards the perfection of human action and hence of man himself as an agent. Furthermore, the formation of a work, be it material or spiritual, calls for determinate means of procedure, which are not given by prudence.

Every application of right reason in the work of production belongs to art: but to prudence belongs only the application of right reason in matters of counsel, which are those wherein there is no fixed way of obtaining the end (1).

If the production of a work is sufficient to distinguish art from prudence, why, we may ask, is the transitive action usually given as the principle of their distinction? The answer lies in the fact that, inasmuch as the first, most proper and most complete notion of making involves a transitive action, the most proper, most forceful and most easily understood distinction is to be had from the opposition between immanent and transitive actions.

In fact, although liberal art is art in a proper and not merely in a metaphorical sense, the difference that separates it from servile art must not be minimized. Servile art alone realizes perfectly the definition of the common term, whereas the other type is art only by participation. Furthermore, the extension of the term art to include liberal art entails the rejection of a fundamental

(1) - "..... Omnis applicatio rationis rectae ad aliquod factibile pertinet ad artem. Sed ad prudentiam non pertinet nisi applicatio rationis rectae ad ea de quibus est consilium. Et huiusmodi sunt in quibus non sunt viae determinatae perveniendi ad finem" (IIa IIae, q. 47, a. 2, ad 3).

element of the primary notion, and results in a diversity that is rooted in the distinction of the transitive and immanent operations which differ as ultimate genera, the former being a quality and the latter, an action. Considering this distinction of ultimate genera, it is not surprising that there is no common term to include both types of art as species of a same genus.

The initial difficulty concerning the apparent irreducibility of logic and art has been cleared away by the foregoing considerations on liberal art. In logic, as in poetry, although there is no longer question of transitive operation and of making in the strict sense, there still remains something which is in the nature of making (i. e. something which receives some kind of determination), namely, the concepts of the intellect, into which may be introduced an artificial form or order, resulting in the production of a certain work, such as a proposition or a syllogism; and there is, besides, an indetermination of the act itself, a possibility of error, and therefore a need for direction, which can be given by determinate rules of procedure. This is sufficient for the denomination art.

Since, then, the speculative reason makes things such as syllogisms, propositions and the like, wherein the process follows certain and fixed rules, consequently in respect of such things it is possible to have the essentials of art, but not of prudence (1).

(1) - "Quia ergo ratio speculativa quaedam facit, puta syllogismum, propositionem et alia huiusmodi, in quibus proceditur secundum certas et determinatas vias, inde est quod respectu horum potest salvari ratio artis, non autem ratio prudentiae" (IIa IIae, q. 47, a. 2, ad 3).

That logic is a liberal art, there can be no doubt. But to infer that it is in every respect the same type of art as music and poetry would be too hasty a judgment. For there is a radical distinction — once more from the point of view of the work. In the case of such liberal arts as poetry and music, there is a marked distinction from the habits of the speculative intellect. Like the servile arts, they have certain characteristics repugnant to speculative knowledge, namely, the consideration of the end as measure and of the appetite as principle, the contingency of their object as well as its practical truth. With logic, however, it is entirely different. The work of this art is not contingent but necessary. Indeed, the matter, which is the concepts of the mind, does not permit of any order or form arising from the free choice of the logician. As we shall see in the next section of this study, our concepts, according to their very nature, are inter-related in a definite fashion, and it is in accordance with this relationship that they must be arranged if they are to be ordered correctly, that is, in such a way that truth will be attained. The logician, then, puts the right order among the concepts by contemplating the relationship implied in their nature. Consequently, the principle of the work is no longer the appetite, the measure is no longer the end proposed by the artist, the truth is not practical but speculative. The marks that until now have distinguished art from the habits of the speculative intellect have disappeared, and we have a third type of art, one that proceeds not sub lumine artis but sub lumine scientiae (1),

(1) - John of St. Thomas seems to have disregarded this distinction. According to him all liberal arts participate equally in the notion of art.

a habit that is, indivisibly, science and art : science because it seeks the knowledge of the proper order of concepts through its cause, the nature of the concepts, by division, definition and demonstration: art because, by setting the concepts in their proper order, it forms a certain work; indivisibly both because it is precisely by considering the concepts that the mind establishes the logical order.

Logic, then, inasmuch as it is a science that also accomplishes the work of an art, is a speculative, liberal art. And, since it is a science in the strict sense but art only by participation, it differs from the other types of art in that it has for its subject the speculative, and not the practical reason. Hence the words speculative reason of the previous quotation, and again in the following passage :

Even in speculative matters there is something by way of work : e. g., the making of a syllogism or of a fitting speech, or the work of counting or measuring. Hence whatever habits are ordained to such like works of the speculative reason, are, by a kind of comparison, called arts indeed, but liberal arts (1).

(1) - "... Etiam in ipsis speculabilibus est aliquid per modum cuiusdam operis, puta constructio syllogismi aut orationis contrariae, aut opus numerandi vel mensurandi. Et ideo quicunque ad huiusmodi opera rationis habitus speculativi ordinantur, dicuntur per quendam similitudinem artes, scilicet liberales; ad differentiam illarum artium quae ordinantur ad opera per corpus exercita, quae sunt quodammodo serviles. In quantum corpus serviliter subditur animae, et homo secundum nullam est liber. Illae vero scientiae quae ad nullum huiusmodi opus ordinantur, simpliciter scientiae dicuntur, non autem artes. Nec oportet, si liberales artes sunt nobiliores, quod magis eis conveniat ratio artis" (ia IIae, q. 57, a. 3, ad 3). — Speaking of the

In view of this conclusion, it may now be asked why logic is usually defined as an art rather than as a science. We may presume that logic, when so defined, is better distinguished from philosophy of nature which also has to do with the operations of the mind. To show that logic accomplishes the work of an art by introducing the correct order among our intellectual acts in view of the obtaining of truth, also makes clear from the beginning that we are dealing with something that is purely intentional and not with the natural act as such.

One further precision : Logic is an art in that it introduces into the natural operations of the intellect a form that is artificial, an order that comes from the reason and not from nature. To be exact, however, we must add that, in this case, the matter has an intrinsic active principle capable of producing the same effect as the art, for reason can attain to truth unaided by logic. Nevertheless, science cannot be had in a perfect state without recourse to the rational art which provides the mind with instruments of reasoning which it is incapable of acquiring on its own. In the case of logic, then, we must specify that it is an art which cooperates with nature.

trivium and quadrivium, St. Thomas says that "haec inter ceteras scientias artes dicuntur, quia non solum habent cognitionem, sed opus aliquod, quod est immediate ipsius rationis, ut constructionem, syllogismum vel orationem formare, numerare, mensurare, melodias formare et cursus siderum computare. Artes vero scientiae vel non habent opus, sed cognitionem tantum, sicut scientia divina et naturalis, unde nomen artis habere non possunt, cum ar dicatur ratio factiva, ut dicitur in VI Metaphysicorum, vel habent opus corporale, sicut medicina, alchimia et artes huiusmodi, unde non possunt dici artes liberales, quia sunt hominis huiusmodi actus ex parte illa, qua non est liber, scilicet ex parte corporis" (In de Trinitate, q. 5, a. 1, ad 3).

We have seen, then, that logic is an art for the sole reason that it involves a certain making. It lacks all the other elements of the definition. Thus, we must distinguish it from the other acceptations of the term art which participate more fully in the definition. If we took logic to be art in the primary sense, we should imply that the operations of the mind were comparable to some sort of exterior physical matter, as stone. If we were to say that logic belongs to the same type of art as poetry, since both are concerned with forming a spiritual work, we should be guilty of disregarding the fact that logic is a science having as object the necessary and not the contingent.

Summing up, we might say that man, not determined by nature in respect to his operations, has need of habits and, in particular, of art which assures him ease and order in those of his actions by which he produces works; that, since even the human intellect is undetermined with regard to its own operations, a special habit is required for their direction; that because this habit has for its object a thing to be made it is an art, but because its object does not involve transitive action and is a work of the speculative intellect, the habit in question rarely participates in the notion of art and is called a speculative liberal art; finally, that this art which directs the act of the reason itself, by which man in the very act of reason proceeds with order and ease and without error, this art we call logic.

## CHAPTER II.

### THE SUBJECT OF LOGIC : THE SECOND INTENTIONS OR THE ORDER OF THE CONCEPTS.

#### 1. - The reason for this order.

We have seen that logic, both as a speculative art and as a science, is concerned with the proper arrangement of the concepts and the acts of the mind. Before examining more closely the subject of logic, let us consider for a moment the nature of the human concepts in an effort to grasp the reason for this order which they seem to require.

The human intelligence, pure potency in the intellectual order, must pass in its quest for truth from potency to act. It does not exhaust the intelligibility of an object by means of one concept alone, but must multiply, compare and compose its mental representations. In other words, it must carry on a discourse. This involves not only juxtaposition of concepts but composition, not merely succession of acts but an order of causality. Two concepts are put together, and in the light of their union we attain to a further act of knowledge. The fact that by considering the concept man we do not immediately grasp the notion able to laugh, means that enlightenment awaits a comparison of the two representations; that, although able to laugh is potentially contained within our concept of man, another operation is required for the connexion to be actually known. The human intellect, then, because of its lack of conceptual intensity must follow a certain order in its operation if it is to attain its end which is the possession of truth.

This need for discourse is peculiar to the human mind. The separated intelligences or pure spirits are capable of grasping actually, and not just potentially, by a single operation. In one concept, not only many objects, but even the order which exists among them. There may be plurality on the part of the objects, but the act is always simple, and, although the consideration of one object may follow that of another, it is never the cause of this other. There can be a succession of acts, but never a passage from potency to act, for in the angel each intelligible species or concept is perfectly in act, sufficient and indivisible.

The order and multiplicity of acts peculiar to the human intellect is due, at bottom, to the nature of the object. The human intellectual species is one which has been abstracted from the sense images and, in the process, has left behind, because of their materiality, certain aspects of the thing which are not included in the definition of the object and which consequently are not essential to an understanding of it. Because the concept is not sufficiently comprehensive, it founds an order with other concepts and with reality. For instance, the concept man founds a relation of universality with respect to Socrates. If the species were prior to the things themselves, infused and not abstracted, it would not be susceptible to such an order, for, like the angelic species, it would represent not only the universal nature but even the individual properties as well.

The order of our concepts, and accordingly of our intellectual acts, therefore, must be founded on certain relations which

are peculiar to objects as they exist in the human mind. Logic, whose task it is to show how to order our concepts, has as formal subject these very relations.

## 2. The nature of the order.

These conceptual relations, founded on the very nature of the human concept, are, of course, the work of the mind itself. Since the concepts as concepts can exist only in the mind, the relations which the mind forms between them can have no existence outside the intellect; they cannot be real, and, consequently, they must belong to the class of beings known as beings of reason.

A being of reason, John of St. Thomas explains in his Cursus Philosophicus (1), is that which depends in a certain way on the reason. Now, something can depend on the reason either as an effect (reason being either an efficient cause, or a material, i. e. a receptive cause), or as an object. In the first case, the effect is a real being, such as a shoe, or its concept considered in the entitative being which it has in the mind; in the second, however, it sometimes happens that an object has no other existence than that which it has in the mind, for something can be conceived by the intellect even though it does not exist in reality. It is such a fictitious object that constitutes the being of reason. This latter, then, can be defined as follows : a being which has no existence in reality but only an objective existence in the reason (2).

(1) - Logica, Pars II, q. 2, a. 1.

(2) - Cf. John of St. Thomas, ibid., (Peiser edit.), p. 285.

Indeed, as we shall explain later on in this paper, the existence of such a being in reality would imply a contradiction.

This being of reason can be either a negation (which includes privation) or a relation. A negation which has, of course, no being in the world of reality, can yet be considered as a being, in which case it has a certain objective existence bestowed upon it by the reason. As for the relation, it sometimes happens that something is known as a relative when in reality it is not so: in such a case, the relation in question, existing only in the mind, is therefore called a being of reason.

Since the ordering of concepts is the concern of logic, even though logic considers negations, it is the relations which constitute the subject of logic. For even when logic considers a negative term or proposition, it considers it only inasmuch as it involves a relation of concepts. Let us examine more closely this relation of reason.

When a concept is relative and the reality which it represents is not so, we say that the relation in question is consequent upon our mode of knowing. We have an example in knowable object (scibile). As the name implies, we conceive it as being relative with respect to knowledge. When, in reality, it is the reverse that is true. If a thing, in itself, were or had a real relation to the knowledge which a person has of it, to be knowable and to be known would be quite identical, i. e. to be in the mind and not in the



mind, or in reality and not in reality, would be the same (1). Again, there is the word Lord, which is a relative term attributed to God, who, although not really related to any other thing, is conceived nevertheless as being relative. An even more striking example of relation of reason is that of identity. We say that "Socrates is Socrates" in order to mark his identity with himself, and in so doing we double our notion of Socrates — the mind posits two terms which it conceives as related, one being said of the other. Now if this relation were real, the terms themselves would have to be distinct realities. Thus, we should imply that in reality the same person is two persons, that to be Socrates is to be Socrates and still another Socrates, i. e. that to be identical with oneself means to be oneself and not oneself. In other words, the very assertion of identity would be the negation of identity. If such a relation were real, it would no longer refer to what it is intended to signify, but rather to the opposite, namely otherness. These are but three of the many examples which could be given to show that the

(1) - "Quaedam vero sunt ad quas quidem alia ordinantur, et non e converso. quia sunt omnino extrinseca ab illo genere actionum vel virtutum quas consequitur talis ordo: sicut patet quod scientia refertur ad scibilia, quia sciens, per actum intelligibilem, ordinem habet ad rem scitam quae est extra animam. Ipsa vero res quae est extra animam, omnino non attingitur a tali actu, quum actus intellectus non sit transiens in exteriora materiam mutandam: unde et ipsa res quae est extra animam, omnino est extra genus intelligibile. Et propter hoc relatio quae consequitur actum intellectus, non potest esse in ea. Et similis ratio est de sensu et sensibili" (Q. D. de Potentia, q. 7, a. 10, c.).

human intellect cannot conceive certain things without introducing amongst them an order of which reason itself is the author.

It should be observed that in each of these examples, the relation, though not real, is, nevertheless, founded in reality. When we say that a thing is knowable, we mean that knowledge is related to it as to its object. The mind, indeed, cannot conceive of one thing being related to another without representing the opposite relation (1). Likewise, the relative term Lord is attributed to God to signify his dominion over His creatures, which in reality involves a relation of creature to God rather than the reverse. Again, the relation of identity in "Socrates is Socrates" serves to express something very real though not at all relative, namely Socrates' identity with himself, his unity in substance, which, however, cannot be expressly conceived otherwise than by a relation.

Because such relations express something real (though not a relation), they can be attributed to the thing itself as it exists in the mind. We rightly say that God is the Lord. In saying this we do not mean that the Deity is relative, but we attribute to God an absolute reality which we conceive as being relative.

(1) - "Intellectus enim noster intelligit creaturam cum aliqua relatione et dependentia ad Creatorem: et ex hoc ipso quia non potest intelligere aliquid reatum alteri, nisi e contrario reatificat relationem ex opposito, ideo intelligit in Deo quamdam relationem principii, quae consequitur modum intelligendi, et sic refertur ad rem mediate" (Q. D. de Potentia, q. 1, a. 1, ad 10).

... Just as someone is identical with himself in reality, and not merely according to reason — although the relation is only according to reason — inasmuch as the cause of the relation is real, namely the unity of the substance, which the intellect understands as the subject of a relation; likewise, the power of coercing underlings is in God really, which power the intellect understands in relation to the underlings because of their order to Him; and because of this, He is called Lord really, although the relation is something of reason only. And, in the same way, one sees that he would be Lord even if there were no intellect at all (1).

Although these relations are wholly dependent on the reason, nevertheless, they serve to express something that is real. There is, however, another kind which is further removed from the world outside the mind. These are the relations that are found to exist between the different objects when they are considered not as they exist in reality but as they exist in the mind. Unlike the first type, they cannot be predicated of the real thing, but only of the object qua known, for, in this case, the intellect is responsible not only for the formation of the relation but even for the attitude of the object to become subject of the relation. The nature man, for instance, as it is found individualized in reality, such as in Socrates, cannot be the subject of a relation of universality which makes it attributable to many. For this, it must be abstracted from whatever is proper to this individual qua this individual, for instance, Socrates, a task which is accomplished by the intellect.

(1) - "... Sicut aliquis est idem sibi realiter, et non solum secundum rationem, licet relatio sit secundum rationem tantum, propter hoc quod relationis causa est realis, scilicet unitas substantiae quam intellectus sub relatione intelligit: ita potestas coercendi subditos est in Deo realiter, quam intellectus intelligit in ordine ad subditos propter ordinem subditorum ad ipsum: et propter hoc dicitur Dominus realiter, licet relatio sit rationis tantum. Et eodem modo apparet quod Dominus esset, nullo existente intellectu" (Q. D. de Potentia, q. 7, a. 11, ad 3).

This type of relation of reason is therefore even more purely rational than the former.

In view of this fact, it is not surprising to find that this second kind of relation of reason, also, could not exist in reality without involving a contradiction. That Socrates is a man does not mean that he is a species, although man is a species. If the universal species man could be identified with a this thing, Socrates would be identical with Plato, who is also a man; hence Socrates would be both Socrates and not Socrates, and Plato would be both Plato and not Plato (1).

Because these relations of reason, unlike the former type (a. g. Socrates is Socrates), do not express something real, they have no proximate foundation in reality. However, we can say that they are remotely founded in reality, inasmuch as we can indicate in reality a reason for such relations, something which remotely corresponds to them. The universal man, for example, can be explained by the fact that, in the order of reality, human nature is alike in all men.

The differences that separate the two types of relations of reason are very clearly set forth in the following passage from

St. Thomas :

Just as the real relation consists in an order of one thing to another, so the relation of reason consists in an order of things known; which can come about in two ways. First, according as that order is found by the intellect and attributed to that which is said relatively; and such are the relations which are attributed by

(1) - Cf. De Ente et Essentia (edit. Mandonnet), c. 3.