

Rabelais, I believe, in a famous passage: "Chimaera bombínans in vacuo et comedens secundas intentiones" (the Chimera buzzing about in a vacuum and living on logical entities).

ERNEST KILZER

*St. John's University
Collegeville, Minnesota*

ROUND TABLE DISCUSSIONS

LOGIC AND METHODOLOGY DIVISION: *Panel:* SISTER M. DOMINICA MULLEN,
FRANCIS X. FITZGIBBONS, FRANCIS X. MEEHAN.

Problem (a): The Concept of Being Which is the Proper Object of Logic

To anyone familiar with the different works contained in the *Organon* it is a well known fact, and a puzzling one at that, that Aristotle begins very abruptly, without any preliminary discussion on the nature of logic, its fundamental divisions, and other aspects which might clarify the issue.¹ This procedure has compelled the Commentators to develop considerations concerning the subject-matter of logic, to describe its principal characteristics, namely whether it is an art, or a science, and many other related problems. At first sight, Aristotle's method may seem somewhat childish, but it is a very sound technique, since logic being primarily a method and an instrument to philosophy is primarily given for immediate use.² It is not necessary to know the nature of the instrument used, but it is necessary to know how to use it. The different problems approached in this paper pertain to what may be called the reflexive stage of logic and presuppose a certain knowledge of metaphysics and of the philosophy of man particularly concerning the processus of knowledge. Since this paper is classified as belonging to the "Logic and Methodology Division" I have chosen to consider being as the proper object of logic, and to omit the proper object of metaphysics. It would have been quite impossible to consider both problems in such a limited time.

Among the commentators of the Thomistic School, John of St. Thomas seems to have dealt with those problems more profoundly than his predecessors in his "*Ars Logica*"; while those who have come later on, have either followed in his footsteps, or else have more or less abandoned the thomistic thought. The contents of this paper may be distributed in the following way:

- a—Explanations on "*ens rationis*" in general.
- b—Explanations of "*secunda intentio*" in particular
- c—some difficulties in the more recent works of logic

¹ Cf. Cat. 1. Aristotle begins with the first antepredicament, and without any previous consideration of any kind.

² Cf. Com. St. Th. in De Trin. Boethii qu. 5 art. 1 ad 2.

a—On the nature of "*ens rationis*" in general:

It is a common doctrine among thomists that the subject-matter of logic is "*ens rationis*" as St. Thomas says explicitly in the following text: "Being is twofold: being of reason, and real being. Being of reason is properly said of those intentions, which reason finds (discovers) in things in so far as they are considered, to wit the intention of genus, species, and things similar, which are not to be found in nature, but which follow to some rational consideration. And this being of reason is the proper subject of logic." (Translation ours.)³ The very expression "*ens rationis*" implies that we are concerned with being related to reason in some way or other, and therefore we must examine this relation of being to reason.

i. Being may be said to be "*ens rationis*" in this sense that it is the product of the conception of reason. In this sense it may be rightly said that every "*opus artis*" is an "*ens rationis*." In this case we are in the order of efficient causality.⁴

ii. Again "*ens rationis*" may mean that reason is subject to some modification. In this particular sense it may be said that the "*habitus*" of science is an "*ens rationis*," or again the "*conceptus formalis*," or the process of cognition itself.

It must not be inferred that "*ens rationis*" which is the formal subject of logic is "being" as explained in the two previous instances; on the contrary, the formal subject of logic is "being" precisely as opposed to real being or "*ens naturae*" and which St. Thomas defines in the following way: *Ens habens esse obiective in ratione, cui nullum esse correspondet in re*.⁵ Being according to this definition is the "*ens rationis*" to which he refers in the text quoted from the *Metaphysics*.⁶ If we notice carefully there are two parts in this definition:

a—*Ens habens esse obiective in ratione.*

b—*Cui nullum esse correspondet in re.*

The difficult point to explain is "*ens habens esse obiective in ratione*." Every "*ens*" is "*habens esse*" except God who is *Esse*, but the peculiar point for "*ens rationis*" is that it has "*esse*" in a special way namely "*obiective in ratione*". By this expression "*habens esse obiective in ratione*" is meant that "*ens rationis*" in fact is a "*non-ens naturae*" which is conceived as if it were a real *ens*. The very "being" of an "*ens rationis*" consists in "being known" not as such, but in being known as a being while it is not a being in nature. On this point John of St. Thomas says:

³ *Ens est duplex; ens scilicet, rationis et ens naturae. Ens autem rationis dicitur proprie de illis intentionibus, quas ratio adinvenit in rebus consideratis, sicut intentio generis, speciei et similium, quae quidem non inveniuntur in rerum natura, sed considerationem rationis consequuntur. Et huiusmodi, scilicet ens rationis, est proprie subiectum logicae. (Cf. Com. in Met. lib. 4 lect. 4 no. 574 edit. Cathala.)* There are also many other texts in the different works of St. Thomas where this division is explicitly stated.

⁴ This also applies to nature, which is "*ratio indita rebus*."

⁵ *De Ente et Essentia* c. 1.

⁶ *Com. in Met. lib. 4 lect. 4 no. 574.*

"Sed ille actus, qui respicit non-ens sub ratione et modo entis", and accordingly he speaks of "figere" and "formare"⁷ and again he uses the following expression: . . . in quantum *ad instar entis* reddit tale obiectum cognitum, cum in re non sit ens, et hoc est dare esse rationis seu esse fictum".⁸

Although it does not pertain to the scope of this paper to consider in detail all the different classifications of "entia rationis", nevertheless since second intentions are classified among the "entia rationis" it naturally follows that the main divisions of "entia rationis" must be briefly delineated.⁹ For the moment we are primarily concerned with the division of "entia rationis" in negation and relation. Concerning "negation" there is no difficulty in the fact that it may be conceived "*ad instar entis*", but concerning relation the point is not so obvious, and to solve this problem we must appeal to the notion of relation as explained by thomistic authors.

Relation as such or "*praeise sumpta*" enjoys this peculiar trait or characteristic that it is formally constituted by an "*ad*", while its reality does not proceed precisely from this "*ad*" as such; but from an "*esse in*", "*Sola enim relatio, quia non dicit solum conceptum 'in' sed etiam conceptum 'ad', ratione cuius praeise non dicit existentiam in se, sed extrinsecam termini attingentiam, ideo non repugnat concipi sine realitate, atque adeo ut ens rationis, concipiendo illud non ut in alio vel ut in se, sed ut ad aliud cum negatione existentiae in aliquo.*"¹⁰ Cajetan maintains the same doctrine in the following texts: "*Consequens est quod 'ad' in quantum 'ad', neque reale neque rationis ens necessario est, sed utrumque permissive.*"¹¹ And further on "*Rosa enim secundum rationem non est rosa, neque Homerus in opinione est Homerus, relatio autem in ratione est vera relatio.*"¹² It must therefore be said that this "*vera*" relation is not necessarily a real relation (i.e., either transcendental—*secundum dici*, or predicamental i.e., *secundum esse*). Through these explanations we may more readily see that the "*ad*" that is the specificative or determining principle in the relation, of its very nature is not a real entity but may be real if it is endowed with a real existence,—while it is an "*ens rationis*" if it is conceived "*ad instar entis*" and possessing only an "*esse obiective in ratione*",—but even then it is a "*vera relatio*". It is among the relations of reason that we must classify the proper subject of logic, namely "*second intentions, which are but a peculiar species of relations of reason.*" We must therefore find the determining factor which shall distinguish "*sec-*

⁷ John of St. Th. Cur. Phil. t. 1 2a pars, qu. 2 art. 1 p. 286 col. b.

⁸ Cf. idem.

⁹ A summary division of "entia rationis" is given by John of St. Thomas in Curs. Phil. t. 1 log. 2a pars, qu. 2 art. 1 p. 287 col. b. The classification may be brought about either "*ex parte subiecti*" or again "*ex parte ius, ad cuius instar concipitur ens rationis*" or thirdly "*ex parte rei conceptae*".

¹⁰ Cf. John of St. Th. Cursus Ph. t. 1. 2a pars, qu. 2 art. 1.

¹¹ Cf. Com. Caietani in Sum. 1 pars. qu. 28 art. 1 no. 6.

¹² Cf. Com. Caietani in Sum. 1 pars. qu. 28 art. 1 no. 9.

ond intentions" from all other relations of reason.¹³ Concerning the "second intention" it shall be explained how it is to be distinguished from other "entia rationis" which are not second intentions, then we shall consider certain problems relevant to the teaching of logic and finally the distinction between material and formal logic. A—*The notion of second intention*: To misunderstand the notion of second intention would render all knowledge of logic confusing, and even impossible. The very word "intention" may be somewhat misleading, and it must be remarked that "intention", in our present problem, is not to be understood as an act of the will, but as noted by John of St. Thomas "pro actu seu conceptu intellectus," which tends to the object of our knowledge. And this rightly so since John of St. Thomas remarks that our knowledge considered "secundum esse intentionale" is always inferior to the object itself.¹⁴ That is why we are concerned with "intentions" since through knowledge we must attain the object as it is.

Moreover in the "intentio" itself we must distinguish a twofold viewpoint:

- a—the "intentio formalis" which is nothing else than the "conceptus formalis" implied by this act of cognition—this is not an "ens rationis, but a real being;
- b—the "intentio obiectiva" which is the objective concept "conceptus obiectivus", which is conceived ad "instar entis."

The expression "second" implies that this "intention" presupposes or more exactly is based on a first intention.¹⁵ A misconception on this point has brought about a confusion between logic and psychology as we shall see later on.

It is obvious that each and every "relatio rationis" requires a certain cognition, but it must not be concluded from this, that every "relatio rationis" is a "secunda intentio", but only the ones which "denominant rem solum in statu cogniti". In other words a "relatio rationis" is a second intention if it is based on "status cogniti" as its immediate and proximate

¹³ Cf. John of St. Th. Curs. Ph. t. 1 pars 2 qu. 17 art. 3. At this point an exhaustive classification of the predicamental relation is given. His classification is based on an accidental and an essential division. The accidental division is based on accidental conditions v.g. mutual or non-mutual relations and relations aequiparantiae and disquiparantiae. The accidental division is based on accidental conditions v.g. mutual or non-mutual relations and relations "aequiparantiae" and "disquiparantiae."

¹⁴ . . . Et sic in esse intentionali semper est inferius, licet aliunde in ratione spiritualis entitatis possit aliquando conceptus superare obiectum. Et quando dicimus obiectum esse principalius et perfectius, loquimur de obiecto primario et formali conceptus, . . . cf. J. of St. Th. C. Phil. t. 1. log. 2 pars. qu. 22 art. 1 p. 696.

¹⁵ "Terminus categorematicus alius primae intentionis, alius secundae intentionis. Terminus primae intentionis est, qui significat aliquid secundum id, quod habet in re vel in suo proprio statu. . . . Terminus secundae intentionis est qui significat aliquid secundum id, quod habet per conceptum mentis et in statu intellectus, sicut species, genus et alia similia quae logicus tractat. (Cf. J. of St. Th. C. Ph. t. 1 log. 1 pars. summul. lib. 1 c. 4 p. 12.)

"fundamentum." In such a case we really have a second intention, a logical entity which enters in the subject-matter of logic. Those relations of reason which do not constitute second intentions imply cognition, but the point of difference is that they are not based on "status cogniti" as a proximate and immediate "fundamentum",—in such cases we have extrinsic denominations as "Creator" which implies a relation to creature, but does not constitute a second intention.¹⁶

Quite a few modern textbooks seem to have quite a foggy idea of a second intention, and although they do not say so explicitly they seem to understand that a second intention belongs exclusively to the first operation of the mind. Such a false conception has led to many errors in logic.¹⁷

We may now enumerate certain conclusions derived from the previous considerations:

B—One of the most confusing methodological errors in contemporary textbooks of logic consists in presenting in elementary works of logic psychological notions which are not necessary at all for beginners, and moreover which do not pertain to logic in the least. This has occurred time and again, v.g. the notion of "concept" which we encounter in most modern textbooks is certainly misplaced, and for different reasons: 1—it does not pertain to the subject-matter of logic, since the concept is not a "secunda intentio" but pertains to the order of reality. It is a psychological notion, and not a logical one. The same may be said of the judgment and the "ratiocinium" which are processes of the mind, and therefore pertain to psychology.

2—Furthermore it must be kept in mind that beginners in logic have no knowledge of psychology, and it is pedagogically unsound to present to the student something which he can not understand at a precise moment in his development. If a student begins logic with vague notions concerning the "concept" or some other real being which is not pertaining to logic, chances are that a serious confusion will always remain in his mind. If a student is pursuing an advanced course in logic, and he has already acquired a notion of the process of logic then it may be granted that notions of psychology could be presented,—in fact they should be,—since the second intention presupposes the first, but even then there should not be any confusion between the two domains.

I am at a loss to explain such confusions in our contemporary textbooks, since they are nowhere to be found in the classical authors of logic, at least not in the thomistic school, and certainly not in Aristotle.

¹⁶ "Sed relatio in Deo ad creaturam non est realis, sed secundum rationem tantum." (Cf. S. Theol. 1 pars. qu. 45 art. 3 ad 1.)

¹⁷ John of St. Thomas brings out very clearly the fact that the second intentions are divided according to the three operations of the mind . . . Unde quia aliter ordinatur et dirigitur prima operatio intellectus, aliter secunda et aliter tertia, ideo penes diversas ordinationes istarum operationum dividetur secunda intentio, et in qualibet operatione secundum diversum ordinem dirigibilitatis erit diversa intentio." (Cf. Curs. Phil. t. 1 2 pars. log. qu. 2 art. 2 p. 293 col. b.)

C—Another false issue brought about through a misconception of the subject matter of logic is the division of logical treatises in “material or major logic” and “formal or minor logic”. It is usually explained more or less in the following way set forth by M. Maritain as a typical exposition of this point: “La logique formelle étudie les conditions formelles de la science, et elle résout ou analyse le raisonnement en les principes dont il dépend au point de vue de la forme ou de sa disposition.”¹⁸ Such a division is nowhere to be found in the classical works of logic, historically it is certainly not thomistic, but we certainly can discuss its intrinsic value. On this point I think it can be said that it presupposes in the mind certain rules or conditions which seem to be independent of the object.

John of St. Thomas does not admit this conception of formal and material logic. He maintains that there is a double process in logic; one of analysis or decomposition—and this pertains to material logic. According to his arrangement the following books of the *Organon* pertain to material logic: *Categories*, *Posterior Analytics*, *Topics*. The other process is one of composition or the constructive process which goes from the simple element to the composite which tends to construct “propositions” and “syllogisms”.¹⁹ So according to John of St. Thomas we may arrange the treatises of the *Organon* in the following way:

a— <i>Categories</i>	material logic.
b— <i>On Interp.</i>	formal logic.
c— <i>Prior Anal.</i>	formal logic.
d— <i>Post. Anal.</i>	material logic.
e— <i>Topics</i>	material logic.

According to this arrangement it must be concluded that formal logic must not be taught before material logic,—since the natural process of the mind is from the simple elements to the composite, and this order corresponds more adequately to the division of the three operations of the mind.

Even though this arrangement of John of St. Thomas is to be preferred to the arrangement of M. Maritain still it does not seem to be final. The difficulty lies precisely in this fact that although it is a division according to the three operations of the mind, still it is not a division of the second intention itself,—in fact it is but an accidental division. An essential division in this matter would have to be a division of the subject matter of logic itself, i.e., the second intention, and in our particular case since a second intention is a particular species of “*relatio rationis*” it naturally follows that an essential division of the second intention shall be based on the division of the “*fundamentum*” of the relation in question.²⁰ As a *second intention* presupposes a *first intention* and is based on a first inten-

¹⁸ Cf. Maritain “*Petite Logique*” p. 11.

¹⁹ John of St. Th. *Curs. Phil.* pars. 2 qu. 13 prol. p. 473.

²⁰ . . . Unde similiter relatio rationis, quae ad instar relationis rationis formatur, recte dividetur per sua fundamenta. Cum aut fundamentum secundae intentionis sit res ut cognita et ut subest statui apprehensionis, iuxta diversum ordinem cogniti. . . . Cf. J. of St. Th. *Curs. Phil.* t. 1. p. 293 a 30 sqq.

tion, it is through the analysis of the first intention that we may arrive at this essential division. Now it must be kept in mind that a *first intention* comprises two elements:

- a—the thing itself as known,—objective concept.
- b—the formal concept implied in the act of cognition.

We may therefore conclude that the second intentions which are based on the objective concept which is the material element of the first intention pertain to material logic, while those which are based on the formal concept in its mode of signifying pertain to formal logic. In other words we may say that the second intentions which refer primarily to the “*res significata*” pertain to material logic, and those which refer to the “*modus significandi*” pertain to formal logic,—and this runs through the three operations of the mind, and is a strict essential division of logic in formal and material logic.

LUCIEN DUFAULT, O.M.I.

Oblate Fathers' College
Natick, Mass.

*Problem (b): The Three Fundamental Laws of Thought
in Their Metaphysical and Logical Aspects*

Since in a discussion of the Three Fundamental Laws of Thought, as in a discussion of anything at all, there must be an agreed starting-point, and since, on the other hand, it is quite generally recognized that Aristotle was the first philosopher clearly to formulate these laws, let us agree to start our discussion with him. Furthermore, because they are so intimately connected, let us agree to understand that whatever in the following discussion is said of any one of them is equally applicable to the other two.

Book B of the *Metaphysics* is, in general, simply a list of *ἀπορίαι* which the investigator in the field of *Metaphysics* or *First Philosophy* must face. Naturally enough, the *ἀρχαί* come in for much consideration, and concerning these, the second *ἀπορία* asks, “Whether the science of causes should survey only the first principles of substance, or also the principles on which all men base their proofs, e.g., whether it is possible at the same time to assert and deny one and the same thing or not, and all other such questions,¹ or to paraphrase it, “Does *Metaphysics* consider the *ἀρχαί* only in the sense of the four causes of substantial being, or does it also consider the *ἀρχαί* of logical demonstration”?

Aristotle's own answer is hinted at in the second chapter of the same book when he is discussing this *ἀπορία* at greater length. For he says there “The axioms are most universal and are principles of all else. And if it is not the business of the philosopher, to whom else will it belong to

¹ Aristotle, *Metaphysics*, 995^b 6-10: καὶ πότερον τὰς τῆς οὐσίας ἀρχὰς τὰς πρώτας ἐστὶ τῆς ἐπιστήμης ἰδεῖν μόνον ἢ καὶ περὶ τῶν ἀρχῶν ἐξ ὧν δεικνύουσι πάντες, ὅλον πότερον ἐνδέχεται ταὐτὸ καὶ ἐν ἄμα φάναι καὶ ἀποφάναι ἢ οὐ, καὶ περὶ τῶν ἄλλων τῶν τοιούτων.