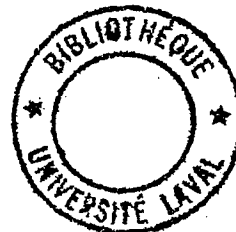


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THE MODAL ENUNCIATION

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## PROPOSITIONS

1. Artes quae actiones et passiones humanas imitantur dependent quantum ad veritatem ipsius artificii a synderesi et scientia morali.
2. Potentiae animae ab actibus et objectis specificantur.
3. Moralis philosophia in tres partes dividitur: monastica, oeconomica, et politica.
4. Possibile absolutum definitur ex non-repugnantia terminorum.
5. Radix contingentiae in rebus naturalibus est natura possibilitatis, per quam se habent ad fieri et non fieri, esse et non esse.

## PREFATORY NOTE

This thesis on the modal enunciation is occasioned by the generally inadequate and incorrect treatment of this subject in manuals of logic--even the Summulae of John of St. Thomas is not an exception. The principal purpose here is to arrive at the nature of the modal enunciation; both the chapters on the division of the modal enunciation and on its properties contribute to that end.

Since St. Thomas did not complete his commentary on Aristotle's Perihermeneias, there is no certainly authentic treatment by St. Thomas of this subject. It is Cajetan, who completed St. Thomas's unfinished commentary on the second book of the Perihermeneias, that best illuminates the text of Aristotle. St. Albert's paraphrase and commentary on the same text also clarifies a great deal, as does his commentary on the Prior Analytics.

This paper in no way attempts to narrate the historical development of various opinions about the modal enunciation, nor does it study the modern "modal judgment." It is an essay, rather, at a doctrinal exposition of the subject, and it contains no deliberate departure from the Aristotelian tradition.

Because the commentary of Cajetan is very formal and explicit, the second and third chapters of this paper are in the form of a commentary on his introductory paragraphs. The fifth chapter on the subjective parts of the modal enunciation expands, mostly from the Metaphysica, what the Perihermeneias indicates only very briefly about the modes of possibility and impossibility. The section on the contingent derives principally from St. Albert's extensive treatment of this mode in the Prior Analytics. Because the Perihermeneias is very explicit on the opposition and consequences of modals, there was no need to repeat what is already done at length and in detail. Cajetan's epilogue, however, on opposition by reason of quantity explains a great deal about the nature of the modal enunciation. The last chapter on the composed and divided senses of the modal enunciation, while not an integral part of a treatise on the modal enunciation, is nevertheless necessary because of some superficial and erroneous opinions found in medieval and modern writers.

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## CHAPTER I

### INTRODUCTION: PLACE OF THIS TREATISE IN LOGIC

Aristotle and St. Thomas commonly divide logic according to the three operations of the human intellect, because logic is the art which directs man in the very act of his reason that he might proceed in good order, with ease, and without error.<sup>1</sup> The first two acts of the mind are properly called acts of intellect rather than of reason, because they are not acts of discourse. The first act is an understanding of indivisible or incomplex things, and is therefore called simple apprehension. The part of logic pertaining to this operation is found in the Predicaments. The second act of the intellect is that of composition or division, in which truth or falsity is found. Aristotle treated what pertains to this act in the Perihermeneias. The third operation of the mind is properly called an act of reason, because it is that in which the mind moves from a knowledge of a known truth to a knowledge of a truth previously unknown. This is the act of discourse, that is, of going from one to another. The remaining books of the Organon are ordered to this act--the Prior Analytics, the Posterior Analytics, the Topics, and the Sophistic Refutations.

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<sup>1</sup>St. Thomas, Expositio in Libros Posteriorum Analyticorum, Lib., I, lect. 1, nn. 1, 4, editio Leonina (Opera Omnia, Rome: Polyglot Press, 1882--), Vol. I, p. 138.

Just as the first of these acts is ordered to the second, and the second to the third, so the Predicaments is ordered to the Perihermeneias and the latter to the Prior Analytics and the books that follow.<sup>1</sup> Here we are concerned with the modal enunciation which is treated by Aristotle in the Perihermeneias, the Latin title of which is De Interpretatione.

#### Place of the Perihermeneias

This section will be devoted to showing the place of the part of logic treated in this book in relation to what precedes and follows it. Since reasoning is the act most proper to the human intellect and since it is the act to which the other acts of the intellect are ordered, we can say, following St. Albert,<sup>2</sup> that logic is the science through which we arrive at a knowledge of the unknown through the known. The unknown can be taken either as something simple, i.e., incomplex, or as complex. The simple can be known only by a definition, the complex only by the use of a syllogism. For the definition it is necessary to treat of how to find definable objects and defining terms, and therefore it is necessary to order the

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<sup>1</sup> S. Thomas, Expositio in Libros Peri Hermeneias, Lib. I, lect. 1, n. 2, ibid., p. 7.

<sup>2</sup> Perihermeneias, Lib. I, Tr. I, cap. 1, ed. Borgnet (Opera Omnia, Paris: Vives, 1890), Vol. I, p. 373 a.



predicables and to show how the definition of something incomplex is arrived at by division. In the same way, we must now treat what is necessary for the syllogism, which is the instrument for arriving at knowledge of something complex. The subject of the Perihermeneias is among the things presupposed to the teaching on the syllogism.

Both the Greek and the Latin forms of the title mean "on interpretation." Since an interpreter explains something as true or false, an interpretation is an enunciative oratio,<sup>1</sup> in which truth or falsity can be found.<sup>2</sup>

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<sup>1</sup>There seems to be no exact English equivalent of oratio. Its Latin definition is, "vox significativa, cuius partium aliquid significativum est separatim, ut dictio, non ut affirmatio vel negatio." (Aristotle, Perihermeneias, 16 b 27.) The Oxford translation uses "sentence" (The Works of Aristotle, ed. W. D. Ross (11 vols; London: Oxford University Press, 1928), I, 16 b 27.) but only a perfect oratio can be called a sentence. "Expression" also seems inadequate, since it can mean a single word, the parts of which do not signify independently. For the sake of accuracy, it will be better to retain the Latin word here.

<sup>2</sup>S. Thomas, In Periherm., Lib. I, lect. 1, n. 3. Thus interpretatio is the equivalent of enunciatio. St. Albert takes interpretatio to have a wider meaning than enunciatio. He takes it to include every way of explaining something, either as a part as in the noun and the verb, or as a whole as in the different kinds of perfect orationes. (St. Albert, Periherm., p. 374 a.) But St. Thomas says the noun and the verb are rather principles of an interpretation than interpretations themselves, and the other orationes, such as the optative and the imperative, are rather expressions of affections than interpretations of what is in the intellect.

The enunciation then is the principal subject of the Perihermeneias, and the noun and verb are treated in it only insofar as they are parts of the enunciation.

It should also be noted that the enunciation is not formally the same as the proposition, for a proposition is an enunciation used in a syllogism.<sup>1</sup> The properties of the syllogism, such as having three terms which are in the positions of subject and predicate, belong to the Prior Analytics. Here only the properties of the enunciation are considered, without reference to any possible syllogisms in which the enunciation might be used. The enunciation can be thus considered apart from the syllogism because each is a whole with its own parts and its own properties. The enunciation can, however, be called the remote matter of the syllogism (the proposition is the proximate matter), because it can be used in the syllogism. The enunciation can also be said to be ordered to the syllogism as to its end, because it is sought for the sake of the syllogism in which we can arrive at knowledge of what was previously unknown.<sup>2</sup>

The enunciation is the sign of the act of the in-

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<sup>1</sup>"Propositio est enuntiatio stans sub forma syllogismi,"  
S. Albertus, ibid., p. 374 b.

<sup>2</sup>Ibid., p. 374 b.

tellekt--composition and division. It is always a declaration of something complex, a composition of intelligible things in which those things are combined which are joined together in reality.<sup>1</sup>

The end of the doctrine in the Perihermeneias is to construct an enunciative oratio about something in words that make a true and perfect enunciation.<sup>2</sup> The further ordering of the enunciation to the syllogism is an extrinsic end.

To complete the brief outline of how we arrive at knowledge of the complex unknown from the known, we can say there must be (1) an interpretation of things by an enunciation, (2) a combination of these things which have been enunciated so that one follows from another, and (3) proof that they are so and cannot be otherwise. The first is treated in the Perihermeneias, the second in the Prior Analytics, and the third in different ways in the Posterior Analytics and the Topics.<sup>3</sup>

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<sup>1</sup>Ibid., p. 375 a, "In hac compositione interpretantur ea quae sibi invicem insunt secundum rem."

<sup>2</sup>Ibid., p. 377 a, "Substantialis principalis hujus scientiae finis est constituere orationem interpretativam de re sub sermone veram interpretationem et perfectam perficiens."

<sup>3</sup>Ibid., p. 377 b.

It was stated above that the book of Predicaments treated of simple or incomplex things, and in another place that the noun and the verb, which are certainly incomplex, fall under the Perihermeneias. There is no contradiction here, because simple expressions can be considered in three different ways: (1) absolutely, as they signify simple apprehensions, and this belongs to the Predicaments; (2) as they are parts of the enunciation, and thus the noun and the verb belong to the Perihermeneias; (3) as terms arranged in a certain order in the syllogism, and this belongs to the Prior Analytics.

#### Order of the Perihermeneias

Having seen the place of the Perihermeneias in the whole of logic, we must now consider the order of the book itself.<sup>1</sup> As was noted above, the enunciation is the

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<sup>1</sup>In view of the rigorous order of the parts of the Organon and the equally rigorous order of the Perihermeneias, it is difficult to see how anyone who has read the Organon in even the most superficial way can make a statement like the following: "Tous ces (i.e., Aristotle's) écrits et particulièrement ceux de l'Organon sont un amas mal ordonné de notices prises, corrigées et augmentées à l'occasion." (I. M. Bochenski, O. P., "Notes Historiques sur les Propositions Modales," Revue des Sciences Philosophiques et Théologiques, XXVI (1937), pp. 673-692.) Certainly, in the Perihermeneias there is nothing that could be in a different order, as the commentaries of St. Albert, St. Thomas, and Cajetan clearly indicate.

principal subject of the Perihermeneias; the treatise is therefore divided according to the consideration of the enunciation and its parts.<sup>1</sup>

After a preliminary chapter on signification and different ways of signifying,<sup>2</sup> Aristotle treats first the principles of the subject, i.e., the principles of the enunciation. These are of two kinds: material and formal. The material (or as St. Thomas refers to them, "quasi-material"<sup>3</sup>) principles or integral parts of the enunciation are the noun and the verb, the former signifying the substance of a thing and the latter signifying an action or a passion proceeding from a thing.<sup>4</sup> The formal principle is the oratio, which is the genus of the enunciation.<sup>5</sup>

Having treated the principles of the subject, Aristotle now takes up the subject, i.e., the enunciation, in the rest of the book. This falls into two sections, the first is on the enunciation absolutely considered,<sup>6</sup> the

<sup>1</sup>"Principaliter tamen modum scientiae considerantis subiectum et partes subiecti, de quibus per principia propria probat passiones." S. Albertus, Periherm., p. 377 a.

<sup>2</sup>Aristotle, chap. 1; S. Thomas, In Periherm., lect. 1-3.

<sup>3</sup>Lect. 4, n. 1.

<sup>4</sup>Ibid.; the noun and the verb are treated in Aristotle, chap. 2 and 3; S. Thomas, lect. 4 and 5.

<sup>5</sup>Aristotle, chap. 4, 16 b 27-35; S. Thomas, lect. 6.

<sup>6</sup>Chap. 4, 17 a 1-chap. 9.

second is on the diversity of enunciations.<sup>1</sup> The absolute consideration of the enunciation comprises three parts: its definition,<sup>2</sup> its division,<sup>3</sup> and its property of opposition.<sup>4</sup>

The enunciation is defined as an oratio in which the true or false is found.<sup>5</sup> The first division is into the enunciation which is simply one because what it signifies is one and the enunciation which is one only by conjunction because it signifies many. The latter, called a composite enunciation, is one only secundum quid, simpliciter it is many.<sup>6</sup> The second division is into the species of the enunciation: the affirmation and the negation. This division is primarily of the simple enunciation, but can also be applied ex consequenti to the composite enunciation.<sup>7</sup>

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<sup>1</sup>Chap. 10-14; in the commentary of St. Thomas, the first is treated in lessons 7 to 15 of what he calls Book One, all the rest in the commentaries of St. Thomas and Cajetan is called Book Two.

<sup>2</sup>Chap. 4, 17 a 1-8.

<sup>3</sup>Chap. 5-6, 17 a 26.

<sup>4</sup>Chap. 6, 17 a 27- chap. 9.

<sup>5</sup>"Enunciatio est oratio, in qua verum vel falsum est," S. Thomas, lect. 7, n. 2.

<sup>6</sup>S. Thomas, lect. 8, n. 13.

<sup>7</sup>S. Thomas, lect. 8, n. 19.

These divisions are followed by a treatment of opposition between the subjective parts of the enunciation, i.e., between affirmation and negation. First, Aristotle shows how enunciations are opposed to each other,<sup>1</sup> and, secondly, he answers a difficulty about whether in future singular enunciations in contingent matter one of the opposed enunciations must be true or false.<sup>2</sup> To show how enunciations are opposed to each other he takes up first of all the opposition of affirmation and negation absolutely considered, i.e., without reference to differences arising from the subject. In this connection, St. Thomas points out that affirmation and negation divide the enunciation on the part of its very form or mode of enunciating, whereas the true and the false divide it in comparison to things.

Philosophus assumit duplicem diversitatem enunciationis: quarum prima est ex ipsa forma vel modo enunciandi, secundum quod dictum est quod enuntiatio vel est affirmativa, per quam scilicet enunciatur aliquid esse, vel est negativa per quam significatur aliquid non esse; secunda diversitas est per comparisonem ad rem, ex qua dependet veritas et falsitas intellectus et enunciationis. Cum enim enunciatur aliquid esse vel non esse secundum congruentiam rei, est oratio vera; alioquin est oratio falsa.<sup>3</sup>

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<sup>1</sup>Chap. 6, 17 a 27- chap. 8; S. Thomas, lect., 9-12.

<sup>2</sup>Aristotle, chap. 9; S. Thomas, lect., 13-15.

<sup>3</sup>S. Thomas, lect. 9, n. 2.

Then we see how enunciations are furthermore opposed by reason of their subjects.<sup>1</sup> This involves a new division of enunciations according to the quantity of the subject, i.e., according as something is predicated of many or of one only. Since a subject is either singular or universal, and since a predicate is said of a universal either universally, particularly, or indefinitely, there are four kinds of enunciations: singular, universal, particular, and indefinite.<sup>2</sup> Then, having seen how enunciations are opposed by reason of subject, we next consider how opposed affirmations and negations are related to truth and falsity.<sup>3</sup> Finally, before attacking the difficulty about future singulars in contingent matter, Aristotle shows that to one affirmation there is one negation opposed.<sup>4</sup>

The remainder of the Perihermeneias<sup>5</sup> is devoted to the enunciation as it is diversified by virtue of something's being added to it. First of all, something

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<sup>1</sup>Aristotle, chap. 7, 17 a 37-17 b 22; S. Thomas, lect. 10, 11, nn. 1-5.

<sup>2</sup>S. Thomas, lect. 10, nn. 10, 14, 15, 16.

<sup>3</sup>Aristotle, chap., 7, 17 b 23-37; S. Thomas, lect. 11, nn. 16-11.

<sup>4</sup>Aristotle, chap. 7, 17 b 38-chap. 8; S. Thomas, lect. 12.

<sup>5</sup>Aristotle, chap. 10-14; Book Two of the commentaries.



can be added to a part of the enunciation, i.e., to the subject or to the predicate. Sometimes such an addition does not take away the unity of the enunciation, as when the subject or predicate is rendered infinite by the addition of a negative.<sup>1</sup> Sometimes an addition takes away the unity of the enunciation in making it multiple, although the enunciation may appear to be simple.<sup>2</sup> This section is important for the distinction of the divided and composed senses of the modal enunciation. Secondly, an addition can be made, not merely to a part of the enunciation, but to its very composition. Such an addition is a mode and distinguishes the modal enunciation from the de inesse enunciation.<sup>3</sup> Lastly, Aristotle treats the opposition of enunciations deriving from the additions made to the simple enunciation.<sup>4</sup>

#### Divisions of the Enunciation

From the Perihermeneias we can gather six ways of dividing the enunciation: by reason of unity, quality, quantity, time, matter, and expression or non-expression of the mode of composition.

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<sup>1</sup>Aristotle, chap. 10; S. Thomas and Cajetan, Lib. II, lect. 1-4.

<sup>2</sup>Aristotle, chap. 11; Cajetan, lect. 5-7.

<sup>3</sup>Aristotle, chap. 12, 13; Cajetan, lect. 8-12.

<sup>4</sup>Aristotle, chap. 14; Cajetan, lect. 13-14.

From the first, we have enunciations that are simply one (una simpliciter) and those that are composite (una conjunctione). The former are sometimes called categorical, and the latter hypothetical.<sup>1</sup>

This is an essential division of the enunciation, because it is a division on the part of the copula.<sup>2</sup>

The second is into affirmation and negation, which St. Thomas frequently asserts is the division of the enunciation into its species.

Quae quidem est divisio generis in species, quia sumitur secundum differentiam praedicati ad quod fertur negatio; praedicatum autem est pars formalis enunciationis; et ideo hujusmodi divisio dicitur pertinere ad qualitatem enunciationis, qualitatem, inquam, essentialem, secundum quod differentia significat quale quid.<sup>3</sup>

The third division is by reason of a difference found in the subject of the enunciation, according as it is said of many or only of one. St. Thomas says this division pertains to the quantity of the enunciation, for quantity follows matter, and the subject is as matter in

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<sup>1</sup>Joannis a Sto Thoma, Cursus Philosophicus, ed. Reiser (3 vols.; Rome: Marietti, 1930), I, p. 25.

<sup>2</sup>John of St. Thomas shows at some length that this division of the enunciation is substantially that of a genus into its species, although it takes on the mode of an analogical division, ibid., pp. 157-161.

<sup>3</sup>St. Thomas, In Periherm., Lib. I, lect. 10, n. 10. John of St. Thomas shows that it is not impossible to have more than one essential division, when these divisions are inadequate, i.e., when the essence to be divided is made up of several formalities each of which is divisible into its species. Curs. Phil., I, p. 164 a 41-b 2.

the enunciation.<sup>1</sup> But when the subject is a universal (i.e., it can be said of many) something can be predicated of it in three ways: universally, if the predicate belongs to the entire multitude in which the universal is found, e.g., "every man is an animal"; particularly, if the predicate is said to belong to an indeterminate individual that falls under the universal, e.g., "some man is white"; or indefinitely, when something is predicated of a universal without any sign of universality or particularity. Thus from the point of view of quantity, the enunciation is divided into singular, universal, particular, and indefinite.<sup>2</sup>

The fourth division of the enunciation is according to time, i.e., into past, present, and future. As the third division was on the part of the subject, this is on the part of the verb, because every enunciation must have a verb or a form of a verb and must, therefore, consignify present, past, or future time.<sup>3</sup> Both the third and fourth divisions are accidental, because they are according to a part of the enunciation.

The fifth division of the enunciation is according to matter, i.e., according to the relationship of predicate to subject. If the predicate is in the subject per se, the enunciation is said to be in necessary matter,

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<sup>1</sup>In Periherm., Lib. I, lect. 10, n. 10.

<sup>2</sup>Ibid., nn. 13-16.

<sup>3</sup>Ibid., lect. 13, n. 3.

e.g., "man is an animal," or "man is capable of laughter." If it is per se repugnant that the predicate be in the subject, the enunciation is said to be in impossible or remote matter, e.g., "man is a horse." If the predicate is neither per se repugnant to the subject nor per se contained in it, the enunciation is said to be in possible or contingent matter.<sup>1</sup>

The sixth and last division of the enunciation is into the de inesse and the modal enunciation, the former merely stating that the predicate is or is not in the subject, the latter stating the mode in which the predicate does or does not belong to the subject, i.e., necessarily, impossibility, possibly, or contingently.<sup>2</sup> The extremes of this division are the expression or the non-expression of the mode of composition of predicate with subject. In the modal enunciation the verb which is the sign of composition is affected by a mode which is added to it. It is this kind of enunciation that is to be treated in this paper.

#### The Modal Enunciation Pertains to Formal Logic

We have now described how logic is divided according to the three operations of the human intellect and where the modal enunciation is placed in this division. There

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<sup>1</sup>Ibid., n. 3.

<sup>2</sup>Cajetanus, In Periherm., Lib. II, lect. 8, n. 2.

is still another way of dividing the science of logic: into formal and material logic. Divided in this way, the Perihermeneias and the Prior Analytics are principally formal logic; the Categorien, Posterior Analytics, and Topics are material logic; and the Sophistic Refutations contains both formal and material logic. Where does a treatise on the modal enunciation fall in this division? It seems to belong rather to the matter of logic than to the form, because in the fifth division of the enunciation given above the members of the division were necessary, impossible, contingent, and possible matter; and these are also the four modes of the modal enunciation. In order to answer this question it will first be necessary to assign the difference between formal and material logic.

The act of intellectual knowledge terminates in the formation by the possible intellect of the expressed species, which is also called the mental word or concept. This concept can be considered in two ways: formally and objectively. The formal concept is a form by which (quo) we know the object. The objective concept is that which (quod) we know, i.e., the object represented by the formal concept.

In forming the concept, the human intellect has to construct certain relations which then belong to the object only as it is in the state of being known, e.g., to be a

subject or a predicate. These relations are called second intentions because they belong to the object only in its second state, i.e., as known. Formalities which belong to the object in its first state, i.e., in itself, are called first intentions.<sup>1</sup> The second intentions are relations of reason which are founded on first intentions, i.e., on the concept, which is nothing but the object<sup>2</sup> itself, existing now in the intellect in an immaterial, intentional, and purely objective way.

All of logic is concerned with these relations which are constructed by the mind, i.e., with second intentions. The formal object of logic, in fact, is the second intention.<sup>2</sup> But since, like all other relations, these relations differ from one another by reason of their foundations, second intentions will be divided according as the concept on which they are founded is divided.<sup>3</sup> We have already said that the concept can be considered either formally or objectively. Formally, the concept is a sign; it is a sign which is a form; it is that by which the object is known. Objectively, it is

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<sup>1</sup>Joan. a Sto Thoma, Curs. Phil., I, p. 291 a.

<sup>2</sup>The matter of logic (materia denominabilis) is all the things about which the mind forms second intentions. We can also speak of the materia dirigibilis of logic, which is the three acts of the mind that are directed by the art of logic. Cf. Joan. a Sto Thoma, ibid., p. 261 ff.

<sup>3</sup>Cf. Bernard Flynn, "The Notion of Formal Logic," Laval Théologique et Philosophique, II, No. 1 (1946), pp. 181-183.

that which is known or signified by the formal sign. A second intention founded on the concept as a sign is said to belong to formal logic; it makes abstraction from certain determinations of matter; e.g., the noun is indifferent to the perfection of the object which it signifies: God, man, stone, triangle are all equally nouns.<sup>1</sup> On the other hand, a second intention founded on that which is signified is said to belong to material logic, in which the determinations of the matter are taken into account, e.g., substance and accident.

Now the difficulty can be stated more clearly: is the modal enunciation, which is a second intention, founded on the formal sign or on the signified object? Since the four modes are necessity, impossibility, possibility, and contingency, and these express determinations of the matter, it would seem, at first glance, that the modal enunciation is based on the object signified and therefore is treated in material logic. But Aristotle treats modals in the Perihermeneias, which is a treatise of formal logic.

First of all, it is well to observe how the modal enunciation differs from the de inesse enunciation. "All men are animals" and "All old men have grey hair" differ by reason of their matter: the first is necessary, the

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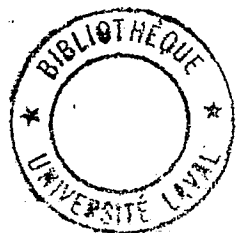
<sup>1</sup>The term formal which is used in formal logic is from the form which is the fourth species of quality, not from the form which is a substantial principle. It is a form in the sense of that which terminates quantity: the parts of a syllogism, for example, are arranged in a certain configuration which is formal in the sense of formal logic.

second is contingent; but they do not differ as enunciations. On the other hand, "All men are animals" and "That all men are animals is necessary" differ precisely as signs, and not at all in their matter. One is as necessary as the other, but the necessity is signified only in the modal enunciation; the modal is therefore a new sign. But such a sign presupposes another sign already formed, i.e., the de inesse enunciation which, then, as the dictum, becomes the subject of the modal. The de inesse enunciation is a sign of a concept which represents a composition found in things. The composition is expressed in the formal concept by a relation of predicate to subject joined to the concept. The enunciation signifies the concept with the relation joined to it. The mind, reflecting on the simple inherence signified by the de inesse, can form a new concept expressing the mode of inherence. This new concept will be accompanied by a new relation of reason, i.e., a new second intention. It is the new concept with its relation that is signified by the modal enunciation.

The formal concept, which is itself a sign, manifests either simple composition or composition with its mode even before the formation of the relation of reason which the mind uses in its act of knowledge. The mode of signification is, therefore, anterior to the formation of the second intention. Since the mode of signification



is already found in the formal concept, logical doctrine based on the mode of signification will belong to formal logic. The modal enunciation is defined by its mode of signification and, consequently, is treated in formal logic. "Man is an animal" is an enunciation in necessary matter, but it is not a modal. "That man is an animal is necessary" is a modal. The two enunciations do not differ in matter, but in their mode of signification. In each case, the predicate belongs to the subject necessarily, but only in the second is the necessity expressed. The proximate foundation for the modal enunciation is the composition signified by the de inesse enunciation. The object signified is only its remote matter.



## CHAPTER II

### THE MODAL ENUNCIATION: AN SIT?

#### The Division of Cajetan's Commentary

##### Perihermeneias. Bk. II

- I. Cajetan's introduction, lect. 8, nn. 1-6.
  - A. There are modal enunciations, n. 2.
  - B. Which modes properly make a modal enunciation, n. 3.
  - C. The subject and predicate of a modal; definition and unity, nn. 4, 5.
  - D. How this treatise is ordered to the preceding; necessity of a special treatment of modals, n. 6.
- II. Opposition of modals, lect. 8, n. 7-lect. 9, n. 5.
  - A. Problem: Is the contradictory of a modal made by negating the verb of the dictum or by negating the mode? n. 7.
  - B. Should the verb of the dictum be negated? nn. 8-14.
    1. Argument for, nn. 8-12.
    2. Argument against, n. 13.
    3. Solution: the verb should not be negated, n. 14.
  - C. The mode should be negated, lect. 9.
- III. Consequences of modals, lect. 10-lect. 12, n. 9.
  - A. What are the correct consequences? lect. 10.
    1. Preliminary notions, nn. 2, 3.
    2. Consequences according to the opinion of the ancients, nn. 3, 4.
    3. Consequences according to Aristotle, nn. 5-18.
      - a) Ancients were right about the consequences of the impossible, n. 5.
      - b) They were not wholly right about the necessary, nn. 6-18.
        - (1) Examination of their view, nn. 6-12.
        - (2) Statement of the truth, nn. 13-18.
  - B. A problem, lect. 11-lect. 12, n. 9.
    1. The question: Does the possible follow on the necessary? nn. 1, 2.
    2. Solution, n. 3-lect. 12, n. 6.
      - a) The correct doctrine absolutely speaking: Some possibles do not have a potency to opposites, n. 3-lect. 12, n. 4.

- b) The correct doctrine applied to the matter in *Summ.* lect. 12, nn. 5-9b.
  - (1) Relation of physical and logical possibles to the necessary; answers to arguments, nn. 5, 6.
  - (2) Order of modals starting from the necessary, nn. 7-9.

- IV. Cajetan's epilogue, lect. 12, nn. 10-13.
  - A. An additional note on quality of modals, n. 10.
  - B. A note on their quantity, nn. 11, 12.
  - C. Figure of opposition of modals, n. 13.

#### The Difference between a Modal and a De Inesse Enunciation

2. Quia ergo possumus dupliciter de rebus loqui; uno modo, componendo rem unam cum alia, alio modo, compositionem factam declarando qualis sit, insurgunt duo enunciationum genera; quaedam scilicet enunciantes aliquid inesse vel non inesse alteri, et hae vocantur de inesse, de quibus superius habitus est sermo; quaedam vero enunciantes modum compositionis praedicati cum subiecto, et hae vocantur modales, a principaliori parte sua, modo scilicet. Cum enim dicitur, Socratem currere est possibile, non enunciaturs cursus de Socrate, sed qualis sit compositio cursus cum Socrate, scilicet possibilis.

In beginning the introduction to his commentary on Aristotle's treatment of the modal enunciation, Cajetan first indicates that there are modal enunciations. To do so he shows that besides the de inesse enunciation, which has been the concern of the Perihermeneias up to this point, there is still another kind of enunciation. The enunciation is a sign of the concept produced in the second operation of the human intellect. Now, this operation, which is that of composition, can be signified in two ways: by simply composing one thing with another, or by declaring

the kind of composition that exists between the two things. We can, for example, say, "Socrates is running," or "That Socrates run is possible." The first is called a de inesse enunciation, the second, a modal.

The composition, which is the second act of the mind, is not, however, a mere juxtaposition of two concepts, but is rather an act of comparing one with the other in order to know whether this predicate belongs to this subject. It is this very comparison which is the reason that a human intellect can see the connection between the two extremes. John of St. Thomas has explained the act of composition in the following way:

Unde formaliter loquendo compositio non consistit in eo quod pluribus speciebus intellectus utatur ad aliquid integrale, et perfecte cognoscendum, sed quod indiget comparatione, et conferentia unius cum altero ad alicuiusmodi iudicium, et cognitionem de convenientia vel inconvenientia talis praedicati ad tale subjectum.<sup>1</sup>

The reason for this act is that the light of the human intellect is a very feeble one that cannot penetrate the connection existing between different notions by an act of simple intuition. It must, rather, resort to the more roundabout method of comparison in order to manifest these connections.

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<sup>1</sup>Cursus Theologicus, "De Angelis", disp. 22, a. 4, n. 27 (Paris: Vives, 1884), Vol. IV, p. 863.

. . . . requiritur enim ad compositionem, ut diximus, quod utatur multis speciebus non manifestantibus convenientiam, vel disconvenientiam, extremorum unico intuitu, et lumine simplici penetrante, et comprehendente illam convenientiam, licet ex concursu plurium specierum id procedat, sed manifestantibus illam convenientiam ex vi comparationis, et conferentiae unius extremi cum alio, ita quod non solum composita extrema cognoscat, sed quod ipsa compositio, et comparatio det manifestationem enuntiationis; hoc est formaliter componere et dividere.<sup>1</sup>

Every enunciation signifies the concept formed by the mind in making the comparison of the extremes. The de inesse enunciation signifies a concept which composes one extreme with another, but when a new concept is formed manifesting how the extremes are composed, it is signified by the modal enunciation. They differ precisely in their modes of signification. It is very important for the teaching on the modal enunciation to insist that it is essentially a sign and that it is as a sign that it differs from the de inesse. The problem, therefore, is not one of "modality of judgment." The acts of composition and of judgment are distinct, and so, consequently, are the signs of these two acts. Judgment is the assent given by the intellect to something capable of that assent. It is, however, only a complex truth as signified by an enunciation which is capable of such assent. The act of judgment must, therefore, be distinguished from the formation of an enunciation. We know from experience that

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<sup>1</sup>Ibid., n. 29, p. 864.

we can construct enunciations without passing any judgment upon them. Only subsequent to the composition of an enunciation does the intellect assent. Although enunciation and judgment or assertion are distinct, they may be expressed by materially the same group of words and they may sometimes even be formed as if by one act. For example, in "Man is an animal" the "is" may be taken merely as a copula joining the extremes or as expressing an assertion.<sup>1</sup> Only in the first case is it formally an enunciation.

In another passage, Cajetan points out that in a de inesse enunciation it is the verb, which signifies being or non-being, that is predicated of the subject, whereas in a modal enunciation that which signifies being or non-being is the subject.

Et dicitur quod quemadmodum in illis enunciationibus de inesse appositiones, idest praedicationes, sunt esse et non esse, idest verba significativa esse vel non esse (verbum enim semper est nota eorum quae de altero praedicantur), subjective vero appositionibus res sunt, quibus esse vel non esse apponitur, ut album, cum dicitur album est, vel homo, cum dicitur, homo est; eodem modo hoc in loco in modalibus accidit: esse quidem subjectum fit, idest dictum significans esse vel non esse subjecti locum tenet; contingere vero et posse appositiones, idest modi, praedicationes sunt.<sup>2</sup>

The appositio in the modal enunciation is the entire predicate, e.g., "is possible".<sup>3</sup>

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<sup>1</sup>Joan. a Sto Thoma, Curs. Phil., I, p. 145.

<sup>2</sup>In Periherm., Lib. II, lect. 9, n. 2.

<sup>3</sup>Ibid., n. 3.

The Mode Determines Composition, Not Things

(2. cont.) Signanter autem dixi modum compositionis, quoniam modus in enunciatione positus duplex est. Quidam enim determinat verbum, vel ratione significati ipsius verbi, ut Socrates currit velociter, vel ratione temporis consignificati, ut Socrates currit hodie; quidam autem determinat compositionem ipsam praedicati cum subjecto, sicut cum dicitur, Socratem currere est possibile. In illis namque determinatur qualis cursus insit Socrati, vel quando; in hac autem, qualis sit coniunctio cursus cum Socrate. Modi ergo non illi qui rem verbi, sed qui compositionem determinant, modales enunciationes reddunt, eo quod compositio veluti forma totius totam enunciationem continet.

In this section, Cajetan first says what kind of mode it is that makes a modal enunciation, and secondly, gives the reason, eo quod compositio. . . . .

A mode is commonly defined as an "adjoining determination of a thing,"<sup>1</sup> An adjective, for example, is said to modify a noun, and an adverb to modify a verb. But logic is not concerned with parts of speech, the treatment of which belongs, rather, to grammar. A logical mode is indifferent to the part of speech which is used to signify it: an adverb, an adjective, or even another verb can be used. Socrates currit contingenter, Socratem currere est contingens, and Contingit Socratem currere are grammatically different; yet their meaning remains exactly the same, and from the point of view of logic they are identical enunciations.

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<sup>1</sup>Adjacens rei determinatio, S. Thomas, Summa Totius Logicae, Tr. VII, cap. xi, ed. Mandonnet (Opuscula Omnia, 5 vols., Paris: Lethielleux, 1927), V, "Opuscula Spuria," p. 92.

Since a modal enunciation expresses the kind of composition that exists between subject and predicate, and since the verb is the sign of composition, it is the verb that is affected or determined by the mode. The verb can, however, be affected in two ways: it can be modified by reason of what it signifies or consignifies, e.g., "Socrates runs swiftly," or "Socrates is running today"; or it can be modified insofar as it is the sign of composition, e.g., "That Socrates run is possible." If it is affected in the first way, the mode determines the res verbi and is called, in St. Albert's phrase, the modus rei praedicatae.<sup>1</sup> If the verb is affected in the second way, the mode determines the composition. Only this latter mode which affects the composition is a mode that makes a modal enunciation, for the logician is not interested in when or how well Socrates runs, but only in the kind of connection between Socrates and his running.

At eo quod compositio, etc., Cajetan gives the reason that a modal enunciation must have a mode which determines the composition. The reason is that the composition is as a form which contains the whole enunciation. Thus, in "Socrates is running" the enunciation is constituted by the fact that "Socrates" is composed with "running." These two words are the parts of the composite. Taken se-

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<sup>1</sup>Periherm., Lib. II, Tr. II, cap. i, I, p. 440 a.



parately, neither signifies an affirmation or negation; but taken as joined together in a composite, they are parts and they are related as subject and predicate. Now, it is precisely the whole which makes the parts to be parts. The whole is, therefore, as a form which includes or contains the parts. St. Albert corroborates Cajetan:

Et quia tales modi (scil. possibile, contingens, necessarium, et impossibile) sunt modi compositionis, et compositio formaliter ambit composita, et est principium intelligendi ea secundum quod stant sub compositione, et sic modus compositionis est modus totius enunciationis: et ideo isti modi totam modificant enunciationem et totam faciunt modalem.<sup>1</sup>

That there is a composition at all is due to the fact that the subject and predicate are united by the verb "is."

In omni enunciatione oportet esse verbum, quod importat compositionem, quam non est intelligere sine compositis,

as St. Thomas says in the first book of the Perihermeneias.<sup>2</sup>  
Or again, in the same paragraph,

Verbum est nota eorum quae de altero praedicantur.<sup>3</sup>

Since the verb is the very sign of composition in the oratio, a modification of the verb (i.e., the verb as composing, and not the res verbi) is

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<sup>1</sup>Ibid., p. 440 b.

<sup>2</sup>Lect. 8, n. 9.

<sup>3</sup>Cf. lect. 5, n. 8.

a modification of the composition.<sup>1</sup> There is, therefore, no difference between a modification of the copula and a modification of the whole enunciation. "That Socrates run is possible" contains a modification of the entire enunciation, "Socrates is running." The composition of "Socrates" with "running," which is expressed by "is," is said to be possible. To state the same enunciation thus, "Socrates can run," changes nothing; the subject and predicate are still said to be composed in the mode of possibility.<sup>2</sup>

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<sup>1</sup>The verb est primarily signifies actuality, and ex consequenti it signifies composition. "Ideo autem dicitur quod hoc verbum est consignificat compositionem, quia non eam principaliter significat sed ex consequenti; significat enim primo illud quod cadit in intellectu per modum actualitatis absolute: nam est, simpliciter dictum, significat in actu esse; et ideo significat per modum verbi. Quia vero actualitas, quam principaliter significat hoc verbum est, est communiter actualitas omnis formae, vel actus substantialis vel accidentalis, inde est quod cum volumus significare quaecunque formam vel actum actualiter inesse alicui subiecto, significamus illud per hoc verbum est, vel simpliciter vel secundum quid: simpliciter quidem secundum praesens tempus; secundum quid autem secundum alia tempora. Et ideo ex consequenti hoc verbum est significat compositionem." Ibid., n. 22.

<sup>2</sup>Fr. Bochenski, however, asserts, "Cependant Aristote confond constamment le modus comme qualification de la copule et comme qualification de la proposition entière." "Notes historiques sur les propositions modales," Revue des Sciences Philosophiques et Théologiques, XXVI (1937), pp. 673-692, n. 29. What is the difference? For an examination of the texts which he alleges support his contention, see Appendix.