

Metaphysics and the Second Analytics

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WE HAVE many reasons for encouragement in the several competent articles which have recently appeared on the subject of metaphysics. The problem of the approach to metaphysics as a science and the problem of the order of that science are complicated ones. If through the current discussion the various aspects of the problem and, even more so, the various steps involved in its solution become clear, we shall have evidence of progress. The problem can be discussed in terms of any one of the several parts which comprise it. A profitable step at this point would be the ordering of these parts of the question.

The correct order of learning is necessary for an intelligent dialectic on any problem. Discussion is normally possible where the good will of the participants is present. Within the Aristotelian-Thomist tradition we certainly have every reason for presuming this, a common interest, a common truth, a basic sharing of principles. What we must seek above all are the conditions for the most profitable discussion of which we are capable. Order would certainly be fundamental in such an approach. If an order of learning is imposed on us by the matter of any science, the *ordo determinandi*, a parallel order should be sought in our approach to a given problem. The logical ordering of the problem would facilitate the discussion, would make clearer the points of agreement and difference in the several opinions. Order must be put into the problem, the proper questions asked, the parts exhausted, if we are ever to arrive at a term, or even if we hope to agree on the points to be

discussed. There must first be agreement on the initial questions before intelligent discussion of a later point can take place. *Sapientis est ordinare*. Even in the approach to wisdom order is of the greatest importance.

The proper order of questions will not always be immediately evident, but it is in the hope of assisting in its discovery that we propose the following series of questions. Will this insistence on order give us a "closed system" of an exclusivist character? This would hardly seem to follow. Rather it should place us in a far better position to judge other philosophical positions, both within and outside the tradition, and to appreciate the truth that they contain.

The present discussion will be limited to the tradition of Aristotle and St. Thomas, our first field of inquiry. Within that orbit we propose to treat the problem principally as a doctrinal matter, without attempting to identify each position with a given person or school, even though an occasional reference may be made to a particularly lucid explanation of a given point. The vagaries which a given position may or may not have undergone in the course of history are another question. All too often the use of historic "tags" serves only to sidetrack the discussion.

THE SPECIFICATION OF THE SCIENCES

Presupposed to any discussion of the subject of metaphysics itself is the question of the principle in terms of which any science will be specified. This is a problem which concerns properly the material logic of the third operation of the mind and would seem to be the first which must be taken up. In particular it would pertain to the logic of the demonstrative syllogism, rather than that of the dialectical or rhetorical syllogism or of poetic argumentation. We find, for example, that the solution of this question for Aristotle involved the greater part of his *Second Analytics*. The actual ordering of the subjects of all

the sciences would be a work of wisdom, proper to the metaphysician, and therefore a later question.

A practical science would appear to be specified by its end, the good to which it is ordered. These sciences would be distinguished in so far as they have specifically distinct ends, irreducible to each other. The good of the individual and the common good of the state are irreducible ends, respectively of ethics and political science. The science of logic is relatively less necessary for the practical sciences than for the speculative sciences, and so understandably discusses them at no great length. One of the few proper treatments of moral matter found in logic is the working out of the dialectical *loci* for moral problems in Book Three of the *Topics*. These would be included because of the distinct and limited character of moral problems—questions of choice and flight rather than of truth and science.¹ The *loci* of rhetorical argumentation are closely related to these.

The speculative sciences, however, will be of much greater interest to logic inasmuch as they arrive more perfectly at truth; logic will be proportionately more necessary for them. Our problem is one of specifying the speculative sciences. Science is reasoned knowledge, certain knowledge through causes. These causes are best manifested in the demonstration of the reasoned fact (*propter quid* demonstration). In such reasoning the cause of our knowledge of the conclusion will at the same time be the cause *in re* of the truth. The term *science* may be extended analogously to less perfect types of scientific knowledge, but a given science must always be specified by the most perfect type of reasoning, *propter quid* demonstration. The causes which are the source of such reasoning are contained in the premises and are found ultimately in the definitions. The definition would represent the proper formal intelligibility of

¹ Cf. St. Albert, *Liber III Topicorum*, Tract. I, cap. 1, ed. Borgnet, II, 331, 332.

the object to the intellect. Sciences would thus be specified by the proportion which obtains between any object and the intellect; diverse intelligibility would diversify the scientific *habitus*. In the definition as source of the reasoning, the object would be proportioned to the mind. Thus the definition as source of light in a science would give rise to a mode of reasoning proper to the science. If several definitions were to manifest their objects in the same manner, they would constitute only one *genus scibile* and specify only one science. However, if each definition were to manifest its object in a way proper to that object alone, i. e., perfectly proportioned to that object, then each definition would manifest a distinct intelligibility, its own *genus scibile*; each definition would be the principle of a distinct science and would give rise to a distinct scientific *habitus* in the mind.

The question consequent on this would be how the objects of the several sciences achieve their proper intelligibility and their respective proportions to the intellect. What standard can be used to determine this? The intellect is an immaterial power of knowing and the objects must be proportionately immaterial; as objects of science they must likewise be necessary. Would not the objects be diversely intelligible as they can become diversely immaterial? But this would have to be an immateriality proper to reasoning, an immateriality which would enable the mind to perceive the formality of the object in itself and as giving rise to its properties. If the word abstraction—or abstractability—is used to describe this properly scientific intelligibility, must it not be given a meaning proper to the third operation of the mind? The alternative would mean an attempt to specify scientific knowledge in terms of the object of the first or second operation of the mind. Could the abstraction of the first operation, formal or total, serve to specify a science? Total abstraction would appear to be a condition common to all our scientific knowledge and therefore not adequate of itself to specify a given science. The formal abstraction of the first

operation would not seem of itself to give us a scientific intelligibility; would it be any more than potential in regard to such intelligibility? Similar questions might be raised in reference to judgment in the second operation. Judgement may be involved in the process by which we arrive at the object of a science, but is it the ultimate factor in specifying one or all of the sciences? Would the immateriality of the objects of judgment be any more than potential with regard to proper scientific intelligibility?

If the approach of the preceding paragraphs be rejected, then an alternative must be proposed. The approach above derives strictly from material logic. If logic be limited to formal logic, then one cannot look to logic for help in settling the question. Should one appeal then to any one of the other sciences to explain the method to be used, to psychology or perhaps to metaphysics as wisdom? Or must one appeal immediately to the several sciences to discover in each of them its own proper method of reasoning, inductive or deductive? In such event, the discussion would start immediately with the particular science in question, rather than with the common doctrine of logic, the method of all the sciences. Are we justified in forgetting all about formal objects and the abstractability of the object as determining its proportion to our intellect, and thereby "simplifying" the whole question? If so, we must revise entirely the above notion of strict science. There would be room then for a clarification of this novel notion of science. To what exactly would we appeal as the principle of unity in a science? To the things grouped materially in themselves according to convenient similarities—groupings which are subject to revision as the sciences progress? Were such the case, we would have ample reason for not insisting on logic as a prerequisite to the other sciences, or at least for omitting the very culmination of logic, the material logic of the third operation.

THE SUBJECT OF METAPHYSICS

The question of the subject of metaphysics resolves itself into an analysis of the meaning of *being*, being as such, being as being, or being in common. The metaphysician presupposes the existence of his subject; he cannot take it from a higher science. It is very evident to all, that things, e. g., individual sensible substances, do exist. The metaphysician is interested in a scientific knowledge of that subject in its principles and causes. It is his concern to show how and why things exist, rather than to experience simply the fact of existence. Being is the perfection which he studies and it must always be understood in relation to actual existence. Thus, although the existence itself of things is of no concern to the metaphysician, it does not follow that he is not concerned with actual existing things.² Many interpretations have, however, been given to the term *being*. Aristotle found it necessary to divide the meanings of the word with great care so as to limit the subject to the *being* which could be studied scientifically, *ens per se*, and not *ens per accidens* or *ens verum*.³

a) The being of metaphysics is real being and not a being of reason, that is, it is not dependent on the mind for its existence. It is shared proportionately by all things which are. It is an analogous term. But as subject of the science, is it to be understood simply as logically shared by all that which is, as analogous *secundum intentionem*? As a *ratio* which is common to the ten categories of being and in some way also to their causes? Do we have to go beyond the analogy *secundum intentionem nominis* to the analogy also *secundum rem* in order to establish

² "... scientia abstrahit ab esse actuali existentiae in particulari, et non ab existentis in communi, nec a suppositione existentiarum." Cajetan, *In I Anal. Post.*, cap. 1, ad secundum dubium (Lyons, 1579).

³ *Metaph.* E.

the subject of this science, or would this be a matter to be elaborated later in the science itself? ⁴

Perhaps the subject of the science and the problems concerning it should be stated in terms of a real participation in order to bring out better the concrete existential character of the subject. A real participation of being seen as an absolute value, a perfection which participates ultimately in the absolute Being of God, is certainly studied in metaphysics, but it would appear to be more properly the term of the science rather than the subject. ⁵

b) Another question which arises immediately is whether the distinction of *ens nominaliter* and *ens participialiter* can be of use in analyzing the subject of metaphysics. One of the first accounts which we have of the controversy over this distinction is the argument between Cajetan and Sylvester of Ferrara. ⁶ Must we choose absolutely between the two positions in determining the subject of this science, or might the two positions be said to bring out two aspects of the same matter with possible qualifications on one or both sides? Which *being* is the *being* predicated of the ten categories? Which is the being with which the metaphysician must start?

The word *being* is originally the present participle of the verb *to be*. But the participle has come to be used as a noun, and we would normally be inclined to designate the subject of a science with a substantive term, *being* as a noun. In the course of the controversy about *ens nominaliter* and *ens participialiter* the terms have, however, been given a very restricted meaning with, to all appearances, a certain amount of exaggeration on both sides. *Ens* signifies *id quod habet esse*, and the controversy

⁴ Cf. St. Thomas, *In I Sent.*, d. 19, q. 5, a. 2, ad 1, where the general division of analogy is given.

⁵ Cf. E. Trépanier, "Sur un Traité de Métaphysique," *Laval Théologique et Philosophique*, III (1947) 132.

⁶ Cajetan, *In de Ente et Essentia*, cap. 4, ed. Laurent n. 56, p. 88. Sylvester of Ferrara, *In I Contra Gentiles*, cap. 25.

has centered principally on the relative position of the *esse*, that from which the name is taken—and the *quod*, that upon which the name is imposed—in the signification of the name *ens*.

Thus *ens nominaliter* has been taken to mean essence, pre-scinding from existence, even abstracting entirely from it. In this way it is practically restricted to *ens in potentia*. If *ens* be restricted in this fashion, it is clearly inadequate as the subject of metaphysics. It would in effect relegate *esse* to a secondary position in the signification of *ens*.

Ens participialiter has often been said to mean *esse* primarily and the subject of *esse* only secondarily. Cajetan himself, however, in explaining his interpretation of *ens participialiter*, the meaning which he favored, seemed to view its signification quite simply as a *whole*. *Being* signifies the essences or natures of things, but precisely in so far as they have *esse*. There is no evidence that he intended to distinguish a primary and a secondary signification. The participial derivation of the name, the relation to actual existence, must always be preserved. *Ens ab esse sumitur*. Cajetan appears to have succeeded best in preserving this truth. *Being* will still signify both being in act and being in potency, but it will signify them proportionately. What we must find, in any event, in the signification of *being* is the basis for the demonstrations proper to this science. Would these not follow on the essence or quiddity precisely as it has *esse*, but abstracting from the fact of existence *hic et nunc*?

c) A third question which would seem pertinent is the extent to which the analogy of the parts of speech can be helpful in explaining the object of metaphysics. Attempts have been made to interpret the several approaches to *being* in terms of the grammatical constituents of speech:

1) Would *being* best be understood in the manner of a subject of predication? The *genus subjectum* of a science is the

subject in itself, or in one of its subjective parts, of the scientific conclusions. Properties and causes are predicated of it. But this aspect is common to all sciences. Is it in some way proper to metaphysics, in so far as metaphysics would be concerned especially with being as substance, the ultimate subject? Such a substance would have to be substance in the finite order, for this is the only substance immediately known to us and we are not able to appeal beyond this order for the subject of a formally natural science. Would such an approach bring out the proper character of metaphysics, or would we be guilty of misplacing the emphasis?

2) Would *being* be better understood in the manner of a predicate? We leave aside *being*, the *primum cognitum*, as inadequate. It is the most common predicate of all but as first recognized, it is not seen as analogous but as concretized in a determinate material quiddity. In general, we can always look to the *modus praedicandi* to reveal the *modus essendi*. The universality or analogy of a term is made manifest in the predicability of the term, for predicability is a property of universality. Any analogous notion can thus be said of its analogues. *Being* can be said of the several special modes of being. It is certainly not said in the sense of a quidditative note distinct from the essence and adding something by way of an accident. It is a common predicate said of nature or essence in any way whatever that it is considered. The existence, from which the name *being* is taken, is constituted by the genus, difference, and principles of the thing itself. It actualizes but does not add another entity. Nothing would seem to keep us from understanding *being* as a predicate in the more common sense of something found on the part of the predicate and said of the subject. In this sense *being* can properly be understood by a concept in the mind. But this would still leave the first question unanswered. Does the notion of predicate in any way bring out the special character of the subject of metaphysics? We were able to eliminate

one way in which *being* definitely cannot function as predicate, but what light does this throw on the positive perfection proper to being as the subject of this science? Would not the universality or intentional analogy of the term, no matter how well illumined by being viewed in the manner of a predicate, still be purely material in relation to the specification of a science? The subject of a science will be either universal or analogous, and this will certainly have important bearing on the order of determining the subject matter; but this is not formal in specifying the sciences, rather it is common to all. John of St. Thomas put this very well in describing the product of formal abstraction.

Neque in abstractione formali consideratur ratio universalitatis et particularitatis, vel quod sit univoca vel analogica: sed solum quod ratio abstrahens induat condiciones actus et formae, exuat autem condiciones potentiae et materiae.⁷

3) Can *being* here be understood as a copula in a sentence? This would surely not be in the sense of *ens verum*, the truth of a judgment, which is no more than a relation, an accident proper to the act of the mind. However, the verb *to be* functioning as a copula is the sign of the judgment and the judgment is founded on the *esse* of things. The second operation looks to the very existence of things. Where the verb *to be* functions only as a copula, it is employed to signify existence in some respect; the manner of being will be determined by the predicate term. Where the verb *to be* is predicated absolutely, it will signify absolute existence. And it would be true to say that existence is known above all in such a judgment. Existence would seem to be known then not so much in the copula but rather in the absolute predication of being. It would appear to be known in a judgment. This would seem to give the second operation of the mind a privileged place in constituting the subject of metaphysics.

⁷ *Cursus Theologicus*, I, d. 5, a. 1, ed. Solesmnes, I, 501.

At this point we might ask whether the object of metaphysics is conceived as known directly in the judgment or as first known in judgment but then conceived apart from the judgment. If it is taken as the object of a judgment and as known precisely in a judgment, it would not appear as yet to specify a science; it would not determine the proportion of that object to the intellect as a scientifically intelligible object. John of St. Thomas explains that the diverse immateriality of self-evident principles will specify distinct habits of knowledge only when these principles are seen as part of the science, not when taken by themselves.⁸

Another question with regard to the existential judgment is that of the terms in which it is to be stated. Can we form the judgment simply as "x is"? The question immediately arises whether there is not implicit here an attempt to avoid substance, the primary form of being.

A further relation of judgment to the subject of this science will be found in the fact that the subject of metaphysics is the only subject about which the judgment of separation can be made. This judgment denies the identity of material essence and the act of existence, or it asserts the nondependence of the subject of this science on matter for existence. But even this judgment serves only to bring out better the proper relation of

⁸ "Diversae autem materialitatis, et abstractionis sunt principia metaphysicae, ut quodlibet est vel non est, et definitiones physicae, ut motus, vel loci, aut vacui, quae sunt principia in philosophia. Sed respondetur, quod principia ista habent diversam immaterialitatem ad manifestandum conclusiones, non ad manifestandum se, manifestant enim conclusiones mediante connexionem extremorum cum passionibus, quae diversa est, et diverso modo eas illuminat juxta ipsum diversum modum definiendi et intelligendi ipsam essentiam, . . . Unde illa diversa immaterialitas principiorum non praebet diversum modum illuminandi ipsa principia in se, quasi aliter innotescant principia majoris immaterialitatis, aliter minoris, sed omnia explicatis terminis per se ipsa innotescunt. Diversa ergo immaterialitas non facit ibi diversum manifestativum, quod pertinet ad rationem formalem, sed ex parte rei manifestabilis materialiter se tenet." *Cursus Theologicus*, I-II, d. 16, a. 2, ed. Vivès, VI, 458.

the subject of metaphysics to matter. It shows that it is different from the relation of any other science. "*Dicitur tamen tota de his quae sunt separata a materia secundum esse et rationem.*"⁹ It serves to bring out the immateriality proper to the formality which specifies metaphysics. We are justified then in asking whether this judgment is the formal element in specifying the science, or whether it is just one step, however important, which we use in determining the subject. We would do well to bear in mind the remark which Cajetan made in discussing a parallel case.

Nec obstat quod in praedictis locis, demonstrativo discursu definitionem materialem per finalem investiget aut concludat, quoniam hoc est per accidens. Sicut enim primae operationi intellectus per accidens miscetur secunda, dum definitio componendo partes ejus cognoscitur, ita etiam eadem immiscetur tertia, dum definitio applicatur syllogismo discursivo ipsi definito. Et quia in his quae sunt per accidens contingit falli sapientes (ut in Elenchis dicitur), ideo habitus in praedictis locis acquisitus putatur scientificus; sed revera non est, quia per accidens est per demonstrationem acquisitus.¹⁰

If the being known in the judgment is to be conceived separately from the judgment, is it to be understood simply as the principle by which a thing is, *esse*, the principle of existence? This approach has the appearance of a projected study of being in terms of *esse*, the ultimate act and proper principle of existence, in a quasi-separation from its subject. It would appear to resemble somewhat the manner in which the living being is studied in the philosophy of nature. Here we would study first of all the soul in psychology as the proper principle of the being *as living*. The soul is studied first in a quasi-abstraction from the organic body and is then, in a process of concretion, studied in closer relation to the body which it informs. A simi-

⁹ St. Thomas, *In Meta.*, Prooemium.

¹⁰ Cajetan, *op. cit.*, cap. 1, sol. ad dubium primum circa secundam conclusionem.

lar approach is used in the study of the logic of the third operation of the mind. The second intentions dependent on the form of the syllogism are studied before those dependent on the matter. We might well ask whether such an abstraction is possible in establishing the subject of metaphysics.

Or is the act of existence to be conceived together with the subject with which it was associated in the judgment of existence in a kind of complex apprehension of *ens*? Supposedly in such a concept, the *esse* would retain the concrete character of the individual existent with which it was united in the judgment. Such a concept would be difficult to describe. Would it in some way shift the "balance" in the signification of *being* so as to emphasize the *esse*?¹¹

Another aspect of the same problem is the manner in which the identity is established between the *esse* perceived in the judgment and *ens ut ens*, the subject of this science. Can the two be viewed as differing only in mode of signifying, as concrete and abstract, so that *ens* would be the abstract word and *esse* would designate the concrete act of existence? But would it not seem that *existentia* would be more properly the abstract term corresponding to *esse*? If such be the case, how then is the identity of the two to be described or established, especially if we do not wish to make the *esse existentiae* the subject of the science? The latter we would hesitate to do, since presumably the real distinction of *esse* and *essentia* is established only in the science.

d) If the attempt to establish the subject of metaphysics by the analogy of the parts of speech, or even by the judgment as a whole, offers such fundamental difficulties, perhaps it is because the subject of a science must be viewed in a different

¹¹ Cf. J. Owens, C. Ss. R., "A Note on the Approach to Thomistic Metaphysics," *THE NEW SCHOLASTICISM*, XXVIII (1954), 458-465; Q. Quesnell, S. J., "Participated Understanding: The Three Acts of the Mind," *The Modern Schoolman*, XXXI (1954) 287.

light. The following passage from St. Albert suggests strongly that the subject of a science is to be seen as a universal of causation. In commenting on the fact that the demonstration must proceed from principles proper to the subject genus of a science he says,

. . . non est sive contingit ex alio genere descendente in aliud genus demonstrare. Genus autem hic non dicimus praedicabile unum vel primum secundum ordinem praedicati: sed dicimus genus, quod est generationis principium sicut causa: eadem enim est per se causa subjecti, et per consequens passionis principium: quia quod est causa causae, est etiam causa causati: unde generans subjectum, generat per se passiones.¹²

To view the subject as a *universal in causando* rather than as a *universal in praedicando* would correspond perfectly with the basic idea that sciences are distinguished in terms of the *propter quid* demonstration proper to each. In such reasoning the definitions are seen as giving rise to properties according to the proportionate intelligibility of the definition. This is an approach which brings out the proper formality of the science in a very special way. An object seen not just in itself but as giving rise to properties, causing them by reason of its own perfection, has a distinct intelligibility in relation to the intellect. Definitions are then seen not just in themselves but as illumining a conclusion.¹³ Only in this way is the formality common to the

¹² In *I Anal. Post.*, Tract. II, cap. 16, ed. Borgnet, II, 60. See also St. Thomas, In *Meta.*, 2, n. 46; In *Boeth. de Trin.*, V, 4, c., ed. Wyser, p. 47, ll. 9-24, a text which seems to add strength to this interpretation. That the subject of metaphysics is to be viewed as a universal of causation rather than of predication was also the conclusion of a paper delivered by V. Smith entitled: "The Prime Mover: Physical and Metaphysical Considerations," *Proceedings of the American Catholic Philosophical Association*, XXVIII (1954), 78-94.

¹³ John Paul Nazarius, O. P., placed great stress on this point: "Quamvis enim abstractio non sit per se sufficiens, nisi concurrente medio demonstrationis, et lumine ex demonstrative discursu resultante, abstractio tamen est maxime necessaria ad praedictam scientiarum diversitatem." In *Primam Partem Summae Theologiae*, a. 3, contrav. 1, ed. Colon., 1621, I, 35b.

several definitions of a given science seen in its proper intelligibility as distinct from any other form. Would it be too much to suggest that the scientific abstraction of a form would have to be understood in this manner if we are ever to understand how it specifies a science? Thus when we speak of arriving at the specific intelligibility of a *genus subjectum* through abstraction we must understand it in this sense, that we come to know it as cause. Short of that we have not arrived at its proper intelligibility as form. The proper intelligibility of this form as cause offers a distinct difficulty to the intellect, and the intellect is strengthened in turn by the appropriate scientific *habitus*. It is this higher intelligibility, which is proportionate to the relative immateriality of the forms as reflected in the definitions, that requires the distinction of scientific virtues in the mind.

Were each definition to represent the nature adequately, each nature would constitute its own *genus scibile*. It would be knowable in its own proper way. The manner of defining one nature would not communicate with the manner of defining another. Each nature would found its own science. Because of the limitations of the human intellect, it cannot be perfectly proportioned to each nature; it cannot, consequently, have a science corresponding to each nature. All our scientific knowledge will be according to a more general *lumen*. The standard will be the degrees of abstractability from matter the degrees of greater intelligibility. Thus many natures will be grouped together to share one formality as knowable; they will be knowable—and definable—in one common way relative to our intellect. If the scientific abstraction of the formality of being is something achieved only in the actual *propter quid* demonstration proper to the science, then we can see why Cajetan would speak so emphatically of the difficulty of the formal abstraction of being. “*Secundo modo ens est terminus metaphysicalis: et forte adhuc viris doctissimis non innotuit.*”¹⁴

¹⁴ In *De Ente et Essentia*, Prooemium, ed. cit., p. 6.

How well such an approach to the subject of a science fits in with the fact that quiddity is the proper object of the intellect. Thus in the perfection of the second and third operations of the intellect, the objects are reduced proportionately to the immediacy of the first operation. This will be found first of all in the self-evident propositions of the second operation and then in the *propter quid* demonstrations of the third operation wherein the properties are led back to their causes.¹⁵

THE DEPENDENCE OF METAPHYSICS ON OTHER SCIENCES

After establishing the proper subject of the science, we can logically proceed to ask whether that subject is dependent or not on one of the other sciences. Only when we have established the subject of this science as one term of the relation can we discuss a relation of dependence toward another term.

a) The first question will concern the possibility of an *intrinsic* dependence of metaphysics on another science. Is metaphysics dependent for its truth as a science on another science? As a science in its own right, metaphysics should have principles which are ultimate in its own order. Cajetan insists that the term of a process of formal abstraction is independent of any other formality.¹⁶ The alternative would be to subalternate the science in its principles or its principles and subject to a superior science. For example, metaphysics might conceivably be subalternated by reason of its principles to revealed theology in which the principles would be more evident. But in this case it would no longer be a formally natural-order science. Or one might have the principles of metaphysics derive

¹⁵ "Dicendum quod quia quidditas rei est proprium obiectum intellectus, propter hoc tunc proprie dicimur aliquid intelligere, quando reducentes illud in quod quid est, sic de eo iudicamus; sicut accidit in demonstrationibus, in quibus non est falsitas. St. Thomas, *Summa Theol.*, I, 17, 3, ad 1.

¹⁶ *In De Ente et Essentia*, Prooemium, ed. cit., p. 6.

from an inferior science—which would seem to reduce it to the inferior science. Either alternative would destroy it as a natural-order science in its own right. If the inferior science did no more than suggest the subject, this would not constitute an intrinsic dependence. The metaphysician as scientist would still presuppose the existence of his subject.

b) If metaphysics is intrinsically independent in its proofs, we can still ask whether or not it is dependent *quoad nos* on other sciences. We shall discuss first of all the questions pertaining to the arguments for its independence *quoad nos* from other sciences, then those pertaining to arguments for its dependence.

1) Reasoning to its independence, we might maintain, for example, that it is independent of other sciences because of the Christian faith in the learner. With such a knowledge of God from revelation, the Christian is equipped to start the study of being and its first causes. This would prevent the study of being in common from being purely dialectical. But we could also ask whether this would not put the science in poor perspective in the student's mind, that is, by making it appear that it presupposes the Faith. Would it not be better to teach it in the order of natural dependence *quoad nos* on inferior sciences, which supposedly it would have apart from the Faith? The proper force of the principles would then be more evident to the students and the problems of metaphysics would better be recognized as proper to metaphysics. The "wonder" which is the starting point of any scientific investigation would in this way be assured at the start of metaphysics.¹⁷

As a second possible position we might hold that metaphysics is independent from the other sciences even apart from the fact that the learner has the Faith. One could then ask whether

¹⁷ A somewhat parallel question regarding the necessity of teaching moral philosophy in a Catholic college has been treated very well by D. Dillon and J. Oesterle in "Moral Philosophy in the Catholic College," *The Thomist* XVI (1953), 449-471.

such a study would be in its inception any more than dialectical; being as such would be known only as the material being which is immediately evident to us. Why should the mind propose a distinct science? There would be no wonder to urge the mind on. Would it not appear to be a venture into the dark and quite unnecessary? It would seem to make the pursuit of metaphysics a purely dialectical study. But the human mind does not ordinarily proceed without a reasonably established subject of inquiry. Historically the four causes were discovered in a definite order, because any number less than four was found to be inadequate to account for the facts observed. One would not propose to follow exactly the order of historical discovery in teaching the sciences, but the fact must be kept in mind that the intellect as a potency must be proportioned gradually to the actuality of its object and that this implies a definite order of learning whose broad outlines it would appear wise to follow.

The distinction, likewise, between the questions *an est* and *quid est* by giving us the starting point of a new science, would not appear to surmount the difficulty in the preceding paragraph. To do so the two questions would have to offer us a distinct knowledge of being or existence as intelligible in their own right. As they stand the questions offer no more than a logical distinction. Could an argument from these questions to a real distinction of essence and existence be any more than dialectical?

If the independence of metaphysics be nonetheless granted, we should ask further whether its initial experience of being will be that of the existing self or that of sensible substances? Certainly the latter would seem to be the more normal starting point of our intellect.

2) If on the other hand we hold that metaphysics is dependent *quoad nos* on other sciences, we must inquire about the reasons for this dependence. One way of establishing this would be by the reasoning already indicated above. Some knowledge

of the immaterial order, i. e., of the prime mover as an immaterial substance and of the intellectual soul as spiritual, would be necessary before the mind could make the judgment of separation. Thus the mind would recognize the need of a new science. It would then proceed to establish a proper subject—being in common—about which it would reason. This would mean that at least the philosophy of nature is presupposed to metaphysics. A practical confirmation of this might be found in the teacher's experience that the problems of metaphysics are appreciated as proper to it only if this order of approach is observed.

Another reason might be that the human intellect, starting as a pure potency, must be perfected gradually in its search for truth so that the lower sciences would be presupposed to the acquiring of the highest of all sciences.

Thirdly, it might be shown that certain parts of natural philosophy, i. e., certain divisions and proofs proper to it, are presupposed by metaphysics. For example, a knowledge of the several kinds of change or of the nature of the intellectual power would first be studied properly in the philosophy of nature and then be used in metaphysics. We can also maintain that other notions, e. g., potency and act, must first be seen as they apply in the world of sense before being extended to the full breadth of their analogy in metaphysics. In this way the full scope of metaphysical principles will better be appreciated. A dependence of this type would not seem to require constant express reference to the other sciences. These analogies, for example, as developed in metaphysics could then have their basis properly in the metaphysical light and be explained as such. But this would not preclude a dependence *quoad nos* on a prior treatment in an inferior science. The extent to which arguments proper to logic are used in metaphysics and the proportionate community of the two sciences would be a good indication that a very good foundation in logic is likewise necessary and presupposed.

A final mode of dependence might come from the sapiential function of metaphysics. Unless the lower disciplines have been acquired, metaphysics could not exercise its role as wisdom, judging the principles of the inferior sciences and ordering them.¹⁸ The foregoing points of dependence *quoad nos* can be taken singly or in conjunction; for example, it can well be argued that the second and third points are very closely allied.

We have accepted the thesis that metaphysics is one science, in other words, that ontology and natural theology are parts of a strictly unified science. This appears quite certain and commonly accepted. But if metaphysics is not one science, then the complication immediately increases. Must ontology and natural theology be taught in immediate succession or can they be separated so that ontology would be taught very early, natural theology much later? Is there a great difference in the way in which these two parts depend on experience?

THE ORDER OF THE SCIENCE OF METAPHYSICS

It is only after a discussion of the previous points and after taking a definite position with regard to them that we should consider the order of metaphysics itself. What will be included in the science and likewise what type of argumentation may be considered as proper to the science, will depend largely on what

¹⁸ “. . . sapientia non iudicat de principiis aliarum scientiarum ostendendo earum veritatem et dando illis evidentiam, cum eam habeant per se et ex terminis, sed earum veritatem defendendo, et explicando secundum convenientiam, et ordinationem ad primas causas et suprema principia. Quae continuatio, et ordo cum illis exigit perfectissimam cognitionem, utpote rerum altissimarum, et ideo non oportet prius tradi sapientiam, quam principia reliquarum scientiarum, sed post reliquas scientias, quia defensio et explicatio talium principiorum cum ordine et continuatione ad suprema principia et primas causas entium non exigitur ad habendam simpliciter evidentiam talium principiorum, sed ad comparandam et conferendam earum veritatem cum veritate aliorum principiorum, quae superiora sunt, ut ex tali collatione magis constet de veritate illorum principiorum quoad nos, et ut magis possint defendi et explicari.” John of St. Thomas, *Cursus Theologicus*, I-II, d. 16, 3, n. 7, ed. Vivès, VI, 462-463.

we accept as the logical notion of science and as the subject of this science. The starting point of metaphysics will also reflect the position taken on its dependence on other sciences. The order of determining the subject matter within a science usually follows the principle that we proceed from what is better known to us toward what is less known; this is an order which usually corresponds to a progression from the more universal to the less universal. This order we shall expect to find, likewise, in metaphysics where we proceed from the study of being in common to the several determinate modes of being. This order will be observed except where one part of a science, although more difficult than another, will still be a prerequisite for the other. A science in the traditional sense of the word will study its subject in terms of its principles, its causes, and its properties. Here we can do no more than to suggest in the briefest way some of the orders which have been proposed for the matter of this science.

a) One approach would be to introduce the science as wisdom, the science of first causes and the science of the immaterial causes of all reality. The need of this science would be evident from the fact that philosophy of nature in studying material being does not account for the causes of all being. It might then be shown that the search for the first causes will have to be conducted in terms of the four kinds of causality, whether all kinds will yield the desired first causes or not. The next step would be the establishment of being in common as the formal subject of the science. This will be the proportionately universal effect through which the most universal causes will become known. The defense of the first principles of all knowledge would follow since these principles in the second operation of the mind are stated in terms of being in common. Then, after determining briefly the formal object of the science, which is the degree of immateriality proper to metaphysics and also the source of intelligibility in its demonstrations, we would proceed with the

study of being in common, first of all in its special modes and then in its common modes or properties. Being will first be studied as divided into the ten categories and as realized primarily in substance. It will then be studied as divided into potency and act, and this division will be applied likewise in the analysis of essence and existence. The study of the common modes, i. e., the transcendental properties, would follow immediately and after them the reasoning to the existence and properties of the first immaterial causes of being. This process would culminate in the knowledge of God as first cause in the order of efficient causality and, ultimately, in the order of final causality, the *causa causarum* and the cause most proper to the metaphysician. In the light of the order of final causality one could likewise discuss the proofs for the existence of immaterial substances other than God. This ordering of matter would accept the basic order of the science originally proposed by Aristotle.

b) A variant of this approach would start immediately with the study of being in common. Under this heading are included the analogy of being and the divisions of act and potency, essence and existence, matter and form. Then comes the study of the transcendentals, followed sometimes by a defense of the first principles of knowledge. The study of the categories would concentrate on substance, quality, and relation, concluding with the problem of subsistence. This would terminate the analysis of *static being*. The analysis of *dynamic being* will embrace the study of the four causes and the first cause of all being. This approximates the classic pattern of many of the manuals. The starting point of metaphysics in this ordering might or might not presuppose the inferior sciences, depending on the particular presentation, although the way it is presented most frequently seems to imply an absolute starting point with little or no reference to the other sciences.

c) Another order is that of a suggested reconstruction of a Thomistic metaphysics. It is based on the hypothesis that the

traditional Aristotelian science has undergone a formal change in the hands of St. Thomas. The study of being might perhaps open with a logical preparation explaining the notion of essence. The act of being will then first be recognized as something *adveniens extra* to all being, and this by a comparison with non-being. From here the act of being would be traced to God as its first cause, and being, together with its concomitant modes, would be seen as a participation of this first being, subsistent being. Presumably the emphasis in this ordering would be on reasoning in the order of efficient causality as most proper to the metaphysician.¹⁹

d) In another approach which has been used recently, great stress is laid on a certain intuitive grasp of the concrete existent in the self as the starting point of metaphysics. In this ordering of the matter, the kinds of causality and the transcendentals are not grouped together for consideration but are treated and enriched individually as they come up in the study of being. First would come the clarification of the *value* of being, in its analogy, its unity and truth. Being is conceived as an absolute value in which all particular beings share. The first principles are likewise here enunciated. Secondly, being is studied as *multiple* (the static order) and this multiplicity is explained in terms of essence and existence, matter and form. Being is studied thirdly as *active and changing* in terms of potency and act, substance and accident, and the good as the end. Lastly being is viewed as *relative or dependent*. Here the first efficient cause is investigated in its nature and its relation with universal reality.²⁰ This science is then called general metaphysics. The study of the corporeal world and the human world is seen as special metaphysics and as an extension of general metaphysics.

¹⁹ This is no more than an inadequate summary of an order suggested by J. Owens, C.Ss.R., in "A Note on the Approach to Thomistic Metaphysics," *art. cit.*, 465-468.

²⁰ For a fuller explanation of this order see Jules Pirlot, *L'Enseignement de la Métaphysique* (Louvain, 1950), especially pp. 97-105.

We have arranged some of the thorny questions regarding the approach to metaphysics under four general headings in the belief that the order of these headings is a logical order which will facilitate the discussion. The first question is one of material logic, and it was placed first because of its eminent importance and of the influence it will have on the course of the rest of the discussion. Many questions have been raised, few have been answered. Our first purpose was to suggest an order and to raise the questions. It is with a healthy respect for the difficulty of those questions that we look forward to their clarification so that the truth will become more evident.

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