

## CHAPTER V

### HOW TO TRACE THE ELEMENTS PREDICATED AS CONSTITUTING THE DEFINABLE QUIDDITY (Chapter 12)

After determining the relation of the quod quid est to demonstration, it is Aristotle's intention in the tenth and eleventh chapters to determine likewise the relation of the propter quid to demonstration. He does this in showing how each of the four genera of causes can be known proportionately as propter quid in a demonstration and how this varies in different things. The relation of one of these causes, the formal cause which is most properly called quod quid erat esse, has already been determined at length in the two previous chapters.

We shall pass on immediately to the next problem, which is of more interest to us, the question of how the quod quid est (chapter twelve) and the propter quid (chapters thirteen and fourteen) are to be investigated. A study of the former of these two will be very much to our purpose since it is nothing other than a discussion of the method to be adopted in tracing the elements predicated as constituting the definition, for the definition signifies the quod quid est. Such a discussion follows necessarily at this point. In the eighth chapter, where Aristotle determined

the relation of the quod quid est to demonstration, it was shown that certain quiddities and definitions can strictly speaking be elicited from a demonstration and must also be known in this way. Such a method assures us that we have the definition through a proper cause, but it is not a universal method nor does it develop a methodical process of searching for the defining elements which are predicated essentially of anything.<sup>78</sup> The present chapter considers two such methods of which we shall give only the broad outlines.

### General Conditions

Aristotle first notes several general conditions for the quidditative predicates which will constitute the definition. They must first be predicated always and universally of their subject. Secondly, the predicates which are chosen should be wider in extent than the species to be defined but should not go beyond its genus. Such attributes are to be selected up to the point where they are severally wider than the subject but collectively coextensive with it.

An objection might be raised to the second condition from several texts in the Metaphysics which would indicate that the ultimate differences are equal in number to the species, that an ultimate difference does not exceed the species, and that a definition can be formed of one genus and one difference;

since the difference corresponds to the form it would seem that just as each thing has a form proper to it, so it should also have a proper difference.<sup>79</sup>

The opposition in the texts may be resolved on the following basis. If the difference which would manifest the substantial form were known to us, such a difference would not be wider in extent than the species. But since essential forms are not per se nota to us, we must take accidents as signs of the form. These accidents, moreover, should be more common than the species and not proper accidents, for the latter are to be demonstrated from the definition of the species. We must use these more universal accidents as signs of the substantial form. From them we can determine the substantial predicates of the definition from which we may then demonstrate the proper passions. If the substantial forms are not per se nota to us, it follows that likewise the proper accidents, which are convertible with them and which must be demonstrated from them, cannot be per se nota to us. Thus we cannot know them as such before the definition of the species in order to designate the essence through them.

The principle that substantial forms are in themselves unknown to us and that they must be designated from their accidents is repeated many times in the works of St. Thomas.

The human intellect can have no direct intuition of an essence as such. The intellect of a separate substance, on the other hand, can grasp an essence in itself. In accordance with our way of knowing we must start from the objects of sense knowledge, the exterior accidents, in order that the intellect may come to know its proper object, the quiddity of things. From these accidents we come to know the natures and we name them accordingly as we know them.<sup>80</sup> We likewise use accidental differences as more known to us for essential differences in order to manifest the form. The accidental differences are not the substantial form, but, as is explained in the Metaphysics, there is a proportion between them and the substance which is their cause.<sup>81</sup> They enter a definition only as signs of the substantial form and are in this way called quidditative predicates. A very striking example of this is the fact that the intellectual soul knows itself as well as the intellect only through its acts which are purely accidental predicates.<sup>82</sup>

The principle is very clearly stated in the commentary of St. Thomas on this particular section of the Posterior Analytics.<sup>83</sup> Beyond this text we have an excellent statement of it in his commentary on the De Anima.

Si enim recte definirentur et possent cognosci principia essentialia, definitio non indigeret accidentibus. Sed quia principia essentialia rerum sunt nobis ignota, ideo oportet quod utamur differentiis accidentalibus in

designazione essentialium: bipes enim non est essentialis, sed ponitur in designatione essentialis. Et per eas, scilicet per differentias accidentales, devenimus in cognitionem essentialium. Et ideo difficile est, quia oportet nos prius cognoscere quod quid est animae, ad cognoscendum facilius accidentia animae: . . . E converso etiam accidentia, si praecipiantur, multum conferunt ad cognoscendum quod quid erat esse, ut dictum est.<sup>84</sup>

### The First Method: The 'Via Divisiva'

Aristotle now considers how we are to investigate these parts. He gives us two ways: the first, the way most appropriate to the investigation of the definition, by the division of the genus; the second, another way through the consideration of like things and differences. This investigation pertains to the intellectual operation of simple apprehension according to its object which is the quiddity. In it the intellect proceeds from a confused notion of the thing to be defined or the nominal definition to a distinct concept or real definition. We shall enumerate first of all the steps of the first process as given by St. Thomas and Cajetan in their commentaries.

If anyone wishes to define something, he should first divide the genus subjectum of the science under which it falls into its primary parts which are the infimae species. He should then attempt to define these species; by this is meant a consideration of the descriptive conditions of the species.

From a knowledge of these conditions he can come to know the first or supreme genus under which this species falls. In order to elicit the specific difference he must then consider the proper passions of the quiddity which is to be defined. These must be considered in themselves and in their causes. This is done by returning to the first genus and then through a consideration of the properties of the successive subalternate species determining in which subalternate species the species infima to be defined falls. By dividing the first genus in this way we descend ultimately to the difference which is proper to the essence to be defined.

In such a process the proper passions must be considered since they have the form as their cause and manifest the various specific differences. From the descriptions of the more universal genera by their properties it is easy to determine under which genera the species falls, for these properties <sup>(du genre)</sup> are predicated of the species only inasmuch as it falls under <sup>l'espèce</sup> the genus; these predicates inhere per se only in the genus. The inferior species are composed of the rationes of more universal ones; the latter are principles of the definition of the former. Therefore it is necessary to consider the proper passions in order to determine these more universal genera.<sup>85</sup>

Both Averroes and St. Albert interpreted Aristotle's description of this method in a slightly different way. They concluded first of all that this method was ordered to the search for the essence of a subalternate species alone; St. Thomas, interpreting the text in question more broadly as concerning any universal whole or definable whole, referred it to either subalternate species or species specialissimae.<sup>86</sup> For Averroes, moreover, the process was far more simple, involving fewer steps in view of his notion that genera are composed and that species are simple.

We must note again that this process is useful ad colligendum quod quid est, non ad demonstrandum ipsum.<sup>87</sup> The conclusions concerning the process of division arrived<sup>at</sup> in chapter five of this book must be kept in mind in evaluating the present method. Although the via divisiva does not give us a syllogistic proof of the quiddity, it can assure us that we have included all the elements of the definition of the quiddity. In order that the present method give us this assurance the various conditions described below must be observed. Only through them can we be certain that no essential differences have been omitted in the descent from the first genus.

In order to avoid any defects in the definition we must observe first of all the proper ordering of the parts. If a

definition is composed of genus and difference, it will be important which part is genus and which is difference. Among the terms of a definition the posterior must always be the act and perfection of the prior. A definition demands a certain mode of unity beyond the unity of an enunciation which is not varied by a conversion of terms.<sup>88</sup> It requires a unity of the terms according to the order of nature, which will make them an unum per se. The via divisoiva demands that that which is divided be placed first, the dividing elements in proper order after it, and not the converse.

We must avoid, likewise, omitting anything which is required for the essential nature. All the differences of superior genera pertain to the quiddity of any inferior genus, for the latter is constituted by the differences dividing the superior genus. To be certain of an integral definition, we must omit no essential difference in the process of division.

A difference is passed over if we divide a higher genus by a difference which divides an inferior genus, so that the division does not embrace all that is contained under the superior genus.

In establishing a definition by division three things must be observed:

(1) That only essential predicates be admitted. This will insure that there will be nothing superfluous in the



definition. The rule may be observed through the use of the method proper to arguments about accident, as well as about genus as developed in the second and fourth books of the Topics. From the dialectical loci treated there, we can argue (a) that the predicates inhere in the subject, (de problemate de inesse ut accidens), and (b) that they are predicated in eo quod quid, (de problemate generis).

(2) That the elements be arranged in the right order. This will follow if we always place first the term which is more common and prior to the term which is immediately consequent. If man is two-footed, he is animal, but not vice versa.

(3) That all things which pertain to the essence be included. No difficulty will arise on this point if we always assume the immediate differences which contain universally the thing divided. The ultimate difference will then complete the ratio of the definitum. The second and third points insure that nothing essential is lacking in the definition. They give us the genus and ultimate difference no further divisible by an essential division. If the division is to be made by immediate differences, they must be such in two ways: first of all in the sense of being immediate opposites between which no mean is found; and secondly as following immediately upon the genus which is divided so that no other differentiae intervene. If the differentiae are immediate in both of these

ways, it follows necessarily that the genus is exhausted by the division; thus it will not be necessary to assume or beg this point in such a division.<sup>89</sup>

If a genus has more than two species, such a bimembered division must be judged to be insufficient simply and formally. But it could in some cases be called sufficient if the division is through differences which are truly contrary extremes, since in having the extremes we have also in a certain way the means. The species mediae are constituted from the contraries as is explained in the Metaphysics.<sup>90</sup>

A genus should, moreover, be divided by its per se differences, not by those which are differences only per accidens. The per se differentiae are those to which the genus is in potency in virtue of the intrinsic ratio which constitutes it. For example, if we divide 'animal endowed with feet' the differentiae must be of animal qua endowed with feet--cloved-footed and not-cloven. A division, on the other hand, into white and black would be a division only by an accidental difference.<sup>91</sup> This method of division is used by Aristotle to arrive, for example, at the genus of virtue and at the first definition of the soul.<sup>92</sup> St. Thomas likewise calls it the via convenientissima to arrive at a definition.<sup>93</sup> The difficulties, nonetheless, which accompany the use of such a method under many circumstances were not ignored by Aristotle, as is evident from chapters two and three of the first book On the Parts of Animals.

The Second Method: 'Per Similia et Dissimilia'

After treating the mode of investigation through division, the modus maxime congruus, Aristotle teaches us another method, a way quoad nos, as will be explained. It is a method which ascends from inferiors to the superior, the quiddity which is sought. In looking for the definition of any quiddity we should first consider all those things similar to it, and then what is the same in all of them: e.g., esse rationale in all men. Then we should consider that which is the same in other things which are in the same genus as the first group but are of another species: e.g., the ability to neigh in horses, compared to rationality in man. After this we must search for a common ratio of the two groups. If a common ratio is found it will be the definition; if it is not found, then the ratio of each group must be distinct, and that whose definition is sought will not be one in essence but many, as in the example above; it cannot in such a case be represented by one definition.

Aristotle also shows from the terminus of this method and its order of proceeding that it is a proper mode of investigating the definition. Every definition must be of the universal and not the particular; if we consider the terminus

of this mode we see that it fulfills this requirement in arriving at something common or universal. The very order of proceeding in this mode, from defining singulars to universals, has two advantages to recommend it: (a) It is easier to define the singular, i.e., the less common, than the universal which is more common. There is more danger of equivocation as we define the more universal. (b) By first defining singulars we also start from that which is more certain and more known to us. In definition as in demonstration we must presuppose some knowledge as evident and manifest.

Several questions arise in reference to the latter method. The first of these is whether it is in fact easier to define the singular than the universal. If this is the case, then we must proceed from the singular to the more universal, which appears to be contrary to what Aristotle says in the Physics and St. Thomas in his commentary on the Metaphysics.<sup>94</sup> St. Thomas there states that the more universal is more known to us and easier secundum simplicem apprehensionem. Aristotle, moreover, orders the whole of natural philosophy on the principle that we must proceed from the more universal to the less universal as from that which is more known to us.

To answer this objection we must distinguish a twofold order of intellectual knowledge: secundum se and quoad nos.

There corresponds to this a double order of proceeding: (a) according to the order of nature and of doctrine secundum se, starting from the more universal; (b) according to the order of our investigation, starting with the less universal because it is easier to arrive at the unity of that which is less universal. The former proceeds from that which is more difficult, the latter from that which is easier for us. The two modes of investigating essential nature correspond to this twofold manner of proceeding.

Duobus enim modis venandi quod quid est docuit: primus quorum secundum ordinem naturae procedit a superioribus dividens, et nihil usque ad atoma praetermittens. Secundum autem a nobis incipit, et a posterioribus in priora procedit ex minus communibus magis communia quaerens; unde sit ut ille doctrinali processui magis serviat, hic investigativo.<sup>95</sup>

Thus it is true that the more universal is easier for us to know according to the simple apprehension of terms, but not according to a complete quidditative knowledge. The context of the passage from St. Thomas upon which the objection was based supports this very response. Therefore, in first investigating any subject we start with the less universal and attempt to define it as well as to arrive at its properties; in the order of doctrine we proceed, as Aristotle says in the Physics, from that which is more universal to the less universal. This order, however, proceeds from what is more difficult for us, a point which is fully confirmed by the difficulty of the books of the Physics in natural philosophy.

Another difficulty arises in this respect: how can we define the less universal without first having defined the more universal, for the less universal contains the more universal actu et intellectu? Cajetan leads us to the solution by pointing out that we must not understand more universal and less universal so that the latter includes the former; rather take the inferior member formally according to its proper determination as distinct from the more universal. Take the inferior member according to its differential concept by which it is formally distinct from the more universal, the genus. The inferior member can be taken formally in two ways:

Uno modo secundum totum id quod formaliter est, et sic includit superius formaliter, quoniam quod quid est superioris est quod quid est inferioris, licet non convertibiliter, . . . et sic modo non accipitur inferius formaliter. Alio modo secundum id quod formaliter constituitur, et distinguitur etiam a superiori, et sic non includit superius, quoniam sic accipitur secundum differentialem conceptum, quia expers est generis formaliter ut in quarto Topicorum dicitur, et hoc modo loquimur hic de minus communis ut ex textu convincitur.<sup>96</sup>

It is clear that the inferior member must be taken formally in the second sense, according to that which formally constitutes it and distinguishes it from its superior. Cajetan notes that the process of the second method terminates in the proper difference as is evident in the example of 'magnanimity' as developed by Aristotle.<sup>97</sup>

If we refer to St. Thomas's prooemium to the De Anima, we notice that he attributes to Aristotle the view that the via venandi quod quid est is a via compositiva.<sup>98</sup> He remarks also that Plato considered it a via divisiva; Hippocrates, a via demonstrativa. Averroes and St. Albert make the same assertion. But in this chapter where the matter is expressly treated, Aristotle appears to describe the principal method of tracing the elements of the quiddity as a method of division, while making no mention of a 'compositive way.' What, then, is the via compositiva to which the commentators refer?

Averroes singled out the first method as the compositive way; but Averroes had succeeded in noting not two, but four distinct methods in this chapter of Aristotle, each of which concluded in a different terminus, so that one could not very well be singled out as opposed to the others in the manner of a via compositiva. Some commentators proposed the latter method as compositive, since it starts from a multitude which it proceeds to join in an ascending process. But this method is only a method quoad nos, not simpliciter; the question of searching for the essence is one of a processus simpliciter.

Cajetan concludes that the via compositiva can only be the first method. Aristotle, he explains, has already considered Hippocrates's opinion in neither wholly approving

nor wholly rejecting the value of the demonstrative procedure in establishing a definition. Plato's view was discussed when Aristotle determined that the method of division was useless for arriving syllogistically at a definition. Aristotle now concludes in this chapter that the proper procedure is one of division, though not in a way which will permit us to have the definition as the conclusion of a syllogism. Cajetan explains how the first method which we called a via divisiva, can be considered compositive;

Concludit tandem in hoc capitulo quod congrua ad veniendum quod quid est, processus est divisivus, non syllogizans, quia hoc reprehendimus, sed colligendo incipiendo a supremo genere cum caeteris conditionibus dictis, additis regulis ex problematibus topicis; et haec est via compositiva. Licet enim divisiva dicatur quoniam a divisione incipit et dividendo incedat, efficaciam tamen ex compositione sortitur, et non ex vi divisionis. . . . divisiones utiles sunt ad colligendum quod quid est, non ad demonstrandum.<sup>99</sup>

This method is compositive, then, as gathering the various quidditative predicates. Thus Aristotle's opinion is not altogether foreign to the others. He uses each of them in a certain way; both division and syllogisms based on the appropriate topics serve the method he describes, but in a manner differing from that conceived by his predecessors.



PART III

THE DEFINITION IN THE METAPHYSICS

## CHAPTER I

### THE IMPORTANCE OF DEFINITION IN THE METAPHYSICS

The notion of definition plays an important part as well in Aristotle's Metaphysics. It enters the sixth book as the principle of the specification of speculative sciences. Speculative sciences differ specifically according as their mode of defining is different.<sup>1</sup> The seventh and eighth books contain a further elaboration of the notion of definition for in them Aristotle uses the definition to study substance. In the study of opposition in the tenth book the intentions of genus, difference, and species are likewise considered. Our principal concern will be with some of the more fundamental points developed in the seventh and eighth books which contain the most extensive treatment of definition. We shall consider some of these points in briefly explaining why and how the definition enters the subject of the two books. It will not be necessary for this purpose to follow the steps of the argument in both books beyond their general outline.

These two books of the Metaphysics are devoted formally to the study of sensible substance. Why, then, is a lengthy consideration of definition involved in such a study? The answer will be found in the method which Aristotle proposes to follow in the study of substance. In the opening chapters of the seventh book Aristotle determines that the

science of metaphysics must treat principally of substance. After establishing the several meanings of substance and the fact that we must start our study of substance with sensible substance as the most known to us, he determines to study sensible substance logice in the seventh book. To argue logice, as Aristotle speaks of it here, is to proceed by dialectical arguments in which a logical intention enters formally so as to specify the argument. Thus it is necessarily an argument ex communibus and not ex propriis, since the second intentions of logic can be used as the basis of disputation in any science. Such arguments do not proceed entirely from terms proper to a given science. The arguments always remain formally logical, dependent on the science of logic.

Such a logical method of inquiry is most properly used in metaphysics because of a certain affinity of the two sciences in the community of their subject matter. Each of the sciences has in a certain way the same subject. Just as all natural things fall under metaphysics in so far as they are being, so all natural beings can be the subject of logical intentions inasmuch as all natural beings can be considered by reason. In this way the subject of logic can be said to be coextensive with that of metaphysics.<sup>2</sup>

In order to study sensible substances, Aristotle will first investigate their quod quid erat esse, since the

quod quid erat esse is substance in the first of the four senses given in the third chapter, i.e., substance as essence, quiddity or nature. It is nothing other than the answer to the question quid est. He will investigate the quiddity ex modo pradicandi, a method which properly pertains to the logician. Since the modes of predication follow the modes of being, from the modes of predication we may discover the modes of being. Applying this to the quiddity we see that the quiddity is limited to those things which can be predicated per se of the subject in the first mode of perseitas. In this mode of predication the subject does not enter into the definition of the predicate. Such predicates are only the definition and its parts; the definition is the ratio which signifies the quiddity of anything.

This relation of definition to quiddity will help Aristotle in determining first of all what things have a quiddity. Thus he can ask whether the things in question have a definition since the definition is nothing but the ratio signifying their quiddity; he will inquire whether they have an essence or anything that can be given in answer to the question quid est.<sup>3</sup> Since a definition is a ratio which has parts, he must determine later what these parts are and how they are related to the parts of the thing defined. Which parts of the thing defined are also parts of the definition and which are not?<sup>4</sup>

He must likewise determine how the parts of the definition combine to signify one thing and not several.<sup>5</sup> The fact that Plato's Ideas cannot be defined will be of help in proving that they are not the quiddity and essence of things.<sup>6</sup>

This dialectical investigation of substance in the seventh book through the study of definition and the parts of definition which are predicated per se of substance yields a common argument for what pertains to substance. But, as St. Thomas explains in the seventeenth lesson of his commentary on that book, it has not yet been manifested exactly what that substance is which is the quiddity.<sup>7</sup> It still remains for Aristotle to determine what secundum rem is the substance which is the quod quid erat esse. As an introductory step in determining this point, he first establishes by another dialectical argument in the last chapter of the seventh book that substance is as a principle and a cause. The argument which he introduces at that point is that substance is as principle and cause since it is that about which we can no further ask the question propter quid. Substance is itself the principle and cause to which other questions are reduced.

Thus after studying the nature of substance dialectically through predication he will proceed to study it properly as a cause and principle in this and that natural existing thing. As metaphysician his interest is to determine

the causes of being of the particular existent thing. Substance, then, is the formal cause of this being's being what it is. The quod quid erat esse is the propter quid why this flesh and these bones fall under this nature, whether that of man or that of animal. For the metaphysician secundum considerationem realem, only matter and form are principles of the quod quid erat esse; for the logician anything which can be predicated in quod quid est can pertain to the quiddity--even the efficient and final causes which are only extrinsic causes, but which can be predicated as illuminating a thing's essence. The metaphysician looks for agent and final cause properly as causes of this thing's being. Therefore he must search ultimately for the first causes which are cause of being in all things.

Aristotle proceeds, then, in the eighth book to manifest the proper principles of sensible substance. This will be done by arguing from what has been determined logice in the seventh book and thus applying those considerations to the res naturales existentes, as St. Thomas explains in the following passage.

Postquam determinavit Philosophus in septimo de substantia modo logico, considerando scilicet definitionem et partes definitionis, et alia hujusmodi quae secundum rationem considerantur; in hoc libro octavo intendit de sensibilibus substantiis determinare per propria principia, applicando ea quae superius inquisita sunt logice, ad substantias illas. . . . cum multa dicta sint in septimo logica consideratione circa substantiam, oportet syllogizare ex his quae dicta sunt, ut applicentur quae secundum considerationem logicam dicta sunt, ad res naturales existentes.<sup>8</sup>

. . . incipit Philosophus tractare de substantiis  
sensibilibus inquirendo principia earum.<sup>9</sup>

He then shows that matter and form are the principles of sensible substance and determines likewise how they are united to constitute a whole. The development of these points involves a further consideration of the definition.

Our consideration of definition in these two books will be limited to only a few of the more important points. The interpretation of several of these will be much facilitated by the explanations found in the De Ente et Essentia of St. Thomas together with the commentary of Cajetan on that work. The first of these will be the question of what can properly have a definition. This will be followed by a discussion of the relation of the parts of the definition to the parts of the thing defined, and this by the question of the unity of the parts of the definition.

## CHAPTER II

### WHETHER ACCIDENTS CAN BE DEFINED

#### The Problem

One of the first applications of the method of predication in the study of substance is found in the fourth and fifth chapters of the seventh book. The definition has been defined by Aristotle as an oratio which signifies what a thing is.<sup>10</sup> It answers the question quid sit and not the questions an sit or quale sit. If, therefore, the definition is that which signifies the quiddity, we can argue that if a thing can have something predicated of it by way of a definition, it has a quiddity or substance. It is clear that there is some kind of definition for sensible substances which are composed of form and of matter as a subject receiving the substantial form. Since each of the other categories also has a subject, the question arises whether the composite of subject and of accidental form in each of them does not likewise have a quiddity which can be signified by a definition. There seems to be a certain definable unity in each case.

#### The First Solution

Aristotle offers us one solution starting from the principle that only that which is a hoc aliquid is properly de-



finable since to be a quid must mean to be something.<sup>11</sup> Only substances, however, are a hoc aliquid. Therefore, they alone are definable; they alone have a quiddity, a quod quid erat esse. An accident by itself predicated of a subject is not a hoc aliquid. The accident "white" of itself is only a quale, not a hoc aliquid. If accidents such as "white" are to be defined, they must be defined in relation to their proper subject. This will give us a quasi ratio of the composite subject-accident, which will be a hoc aliquid in another way. Thus white will have to be defined as white man, in relation to man as its proper subject (if it be true that man is its proper subject).

Aristotle then rules out a mere ratio notificans nomen as insufficient to constitute a definition, even a definition of accidents. The true definition must signify aliquid per se dictum and that in the first mode of per se predication. Such predicates are first in the line of predication. Definition is a special name given to that which is most perfect in the order of convertible terms, namely, the one which signifies the quod quid est.<sup>12</sup> He concludes that according to this first solution only that has a quod quid erat esse which is truly a species since only a species is properly defined through genus and differentiae. The genus must be predicated per essentiam of the species. In the case, however, of a proper

passion or accident signified as such (e.g., album) the proper subject which is used as genus cannot be predicated in such a way; the essence of the subject is not the essence of the accident.

The composite of subject and accident is clearly only an unum per accidens and cannot, therefore, have a quiddity which is definable. The very nature of the composite <sup>EXPLIQUE</sup> accounts for this. It consists of things from several diverse categories, i.e., substance and accident, and hence implies several diverse genera. Diverse genera in turn cannot constitute one quiddity and definition. A definition must be given within one category.<sup>13</sup>

### The Second Solution

Aristotle offers another solution in the same chapter: definition is primarily and simpliciter of substances, per posterius and secundum quid of accidents. The solution flows from the several ways in which we can speak of quod quid est and therefore also of definition since the definition signifies the quod quid est. Quod quid est is said primarily of substance which alone is properly a hoc aliquid. In another way it can also signify each of the other categories since for each of them we can find an answer to the question quid est, the inquiry of the definer. The quid est of the other categories,

however, does not signify a quid absolute, as in the case of substance, but rather a quid qualitatis, etc. Quality, for example, does not have a quid simpliciter but only secundum quid. We find the reason for this in the following passage from the commentary of St. Thomas.

Propter hoc enim quod omnia alia praedicamenta habent rationem entis a substantia, ideo modus entitatis substantiae, scilicet esse quid, participatur secundum quamdam similitudinem proportionis in omnibus aliis praedicamentis; ut dicamus, quod sicut animal est quid hominis, ita color albedinis, et numerus dualitatis; et ita dicimus qualitatem habere quid non simpliciter, sed hujus. Sicut aliqui dicunt logice de non ente loquentes, non ens est, non quia non ens sit simpliciter, sed quia non ens est non ens. Et similiter qualitas non habet quid simpliciter, sed quid qualitatis.<sup>14</sup>

Just as being is found primarily in substance and analogically by participation in the other categories, so likewise the quod quid est and the definition which signifies it. They can only be said analogically of substance and accident, i.e., per prius et posterius and per respectum ad unum, for they are said of accident only in reference to substance. As accident has incomplete being in relation to substance, so its definition is also incomplete.<sup>15</sup>

Since being can in a certain way be said of privations and negations, they also can be said to be in some way definable, but in a most imperfect and incomplete way which explains rather the name than the essence since they have no essence.<sup>16</sup> In the way in which things have being, so they are definable.

He adduces as proof of this second solution the notion that a definition is one, and that by a unity per se, not merely a unity of continuity or of a collection. Just as unity is said analogically of substance and of the composite of subject and accident, so will definition be said analogically of both.<sup>17</sup>

The definition of accidents necessarily includes things of diverse categories since an accident must be defined in relation to its proper subject. Such a definition is not one per se, as explaining one quiddity, but one per additionem since it includes something outside the proper genus of the accident--the subject. In view of the second solution, the conclusion of the first solution--that accidents do not have a definition--must be understood per prius and simpliciter.

#### The Definition 'per Additionem'

The fifth chapter of the seventh book brings us a more complete explanation of the manner of defining accidents by a definition per additionem. When we say that an accident must be defined per additionem, we mean that the definition of the accident must include something outside the very essence of the accident. The subject which must be included is outside the genus of the accidental form but is necessary for the complete definition of the accident. The aptitude to inhere in a subject is of the very essence of every accident--res, cui

debetur esse in alio. This essential dependence on a subject must likewise be expressed in the definition of particular accidents. This dependence of accidents on their subject together with the imperfection of their being is best expressed by defining them through their subject. Each accident has a proper subject of which it is predicated secundum se and through which it should be defined.<sup>18</sup> The subject, if not one by a unity of nature or of being, must be one at least by a unity of capacity to receive the accidental form.<sup>19</sup>

Whether the accident is signified in concreto or in abstracto, its definition will always formally signify the accidental form or quiddity itself. The concrete and the abstract term here signify one and the same thing; only the mode of signification varies. It is the form and essence of the accident which is primarily signified and which is directly defined, since all quidditative predicates of the accident are included only in that form. The subject enters only as that which sustains or supports the definition.

An accident, as was noted, is defined in virtue of its essence, the accidental form. It is placed in the genus of its form; concrete or abstract pertains only to the mode of signifying. The mode of being is the same in both cases--esse in alio. The mode of signifying, however, is determined

by the mode of understanding of which it is nothing but a sign. If the accidental form is understood as accidens, as inhering in another, it is conceived by the mind together with its subject and is signified in concreto--"white." Here the form is still that which is primarily signified, but it is signified as denominating a subject. If, on the other hand, the accidental form is understood by itself, apart from its subject, in the manner of substance which properly exists of itself, then it is signified in abstracto--"whiteness."

Only accidents signified in abstracto are properly placed in the categories and properly have genus and difference. According to its mode of signifying, "whiteness" signifies purely the quality and thus falls under the category of quality. "White," on the other hand, signifies as a composite, namely, the composite of accident and subject which is one and being only per accidens and cannot, therefore, fall under the categories. The mode of signifying is as a necessary condition for placing a thing in a genus or species, a condition which must be considered by the logician.

As the abstract accident is properly in the categories, so it is the abstract accident which is most properly defined. An accident signified in concreto is not defined essentially except by reason of its formal element. As a composite of subject and accident it is an ens per accidens

and can have only a definitio quid nominis.<sup>20</sup> If, however, it is considered as subordinated to one concept which signifies primarily the form and signifies the subject only denominatively, it admits of real definition.

### Genus and Difference in Accidents

Since an accident is not by its essence composed of matter and form we cannot say that in defining it the genus is taken from an intrinsic matter and the difference from the form as in the case of a composed substance. But the genus must always be taken from that according to which a thing is determinable. Thus the first genus of an accident (in abstracto) will be taken from that according to which it is primarily determinable, namely, its proper mode of being as a category, which is determined by the diverse relations of accident to substance--as measure, disposition, etc. The differentiae are taken from the diversity of the proper principles from which the accidents are caused. Thus in defining accidents signified in abstracto the proper subject is used as the specific difference. The subject is placed in their definition in obliquo, as that from which they draw their specific difference, e.g., similitudo est curvitas nasi. Proper passions differ according as the principles of the subject from which

they are caused differ. Quantity, for example, differs according as the ratio mensurae is found diversely in successive and in permanent things. Moreover, accidents take their specific difference from their proper principle not only when they are caused immediately by a substance but also when one accident has another accident as its proper principle. In the latter case the differentiae derive from the diversity of accidental causes. The immediate principles of the first proper passion would differ from the second in this way.

It is important to note that the subject is not itself the difference but is put in place of the difference. An accident has its own proper difference as well as its own genus, but they cannot be completely explained without the subject. Because the proper principles of accidents are frequently hidden to us, we sometimes take the differentiae from their effects as more known to us. The example of this given by St. Thomas is the use of congregativum and disgregativum visus as the differentiae of color. These are effects caused by the abundance or lack of light, the proper principles.

The accident signified in concreto is defined, as was noted above, only with respect to the accidental form, not with respect to the composite as such. But in this case the subject is placed in recto in the definition and takes the place



of genus, not because of any difference in the nature of the accident but solely because of a difference in the mode of signifying. The concrete accident is signified in the manner of a composite--here the composite of subject and accident. Therefore, it must be defined in the manner of a composed thing in which the genus is taken from the matter and the difference from the form. The subject here is as matter or potency and thus takes the place of genus, e.g., simum est nasus curvus. John of St. Thomas explains that the subject does not enter the definition secundum se et absolute.

. . . tale concretum, si per se definitur, erit ratione solius formae, et tunc subiectum secundum se et absolute non intrat definitionem, sed ut formatum ipsa forma accidentis secundum gradum genericum talis formae ad ipsammet secundum gradum specificum. Et sic cum dicitur: "Album est corpus disagregativum", non intelligitur corpus absolute, sed ut coloratum, et sic explicat rationem generis; ponitur autem ly corpus ut sustentans, non ut intrans quidditatem albi.<sup>21</sup>

The subject taken as determined by the accidental form under a more common ratio of the same accidental form is as matter to the subject determined by the particular form in question.

The subject is not here taken as a logical genus, which would make of it and the accidental form a unity per se, a unity which would be definable as such. It is taken rather in the manner of a physical genus. The nature of this genus subjectum of accidents is discussed at greater length by St. Thomas in his commentary on the fifth book of the Metaphysics where

he opposes it to logical or predicable genus.<sup>22</sup> The exact relation of physical genus to this genus subjectum is in itself a difficult problem and one which goes beyond the scope of the present work.

If we attempt to define the substantial form by itself (where this form is the form of a given matter) we must define it per additamentum in a way similar to that of defining an accident. Just as an accident has perfect being only in its subject, so the substantial form of a composed substance has its being only in its proper matter. Accidental and substantial form resemble each other in that neither has a complete essence by itself; each is ordered to something else as receptive of it. In the same way neither substantial nor accidental form is capable of complete definition in its own proper terms but only per additamentum. In the case of the substantial form, its proper matter must be added. This is clearly outside the genus of the form since the genus of form is act, whereas the genus of matter is potency. It is important to note that when the substantial composite as such is defined the matter which enters the definition is not ex additione as something outside the essence of the composite.

The mode of defining per additamentum, however, remains proper to the definition of accidents. Because of the imperfection of their essence, accidents require the addition

of something outside their essence in order to be defined. This reason obviously does not hold for the substantial form. A substantial form is defined in this way only in so far as it participates in the nature of accident--esse in alio. Another argument for the same conclusion is found in the fact that what is properly defined is whatever is found directly in the line of one of the categories and also as complete in its own species. In order to define an accident as it is found complete in its species and in the direct line of its category, we must define it by the addition of something outside its essence. In the case of the composed substance it is the complete species which is most properly defined; in such a definition, as we remarked above, the matter is part of the essence. Hence the mode of defining per additamentum is most proper to accidents.<sup>23</sup>

### CHAPTER III

## THE RELATION OF THE PARTS OF THE DEFINITION TO THE PARTS OF THE THING DEFINED

### The Signification of Genus, Species, and Difference as Names of the First Intention

In the tenth and eleventh chapters of the seventh book Aristotle discusses the relation of the parts of the definition to the parts of the thing defined. The question arises whether the parts of the definition are also parts of the thing defined. In order to arrive at a clearer idea of the difficulty, we should begin by noting that every definition is a ratio and as such must have several words or parts, since a ratio is a certain oratio composita<sup>e</sup> and not a simple name. One name may be clearer than another, but only a ratio which has parts can manifest the principles constituting the essence of a thing as a definition must do. But do the parts of the ratio correspond to the parts of the thing in the same way as the ratio as a whole represents the thing? On the one hand one could argue that as the definition is the same as the thing, so its parts should be the same as the parts of the thing. But on the other hand, each part of the definition can be predicated of that which is defined--rational can be predicated of man--whereas no integral part can be predicated in this way of the whole.

In answering this question we shall limit the discussion to the perfect kind of definition, that of substance, and to a definition given through the genus and per se differentiae. Such a definition always signifies one essence or quiddity. This essence includes all the essential principles of the thing. In it and through it a thing has being. It is that by which a substance is known. By it a thing is constituted in its proper genus and species. The definition signifies what a thing is as constituted in its genus and species; it signifies quid est res. The quiddity is nothing but the essence as answering the question, quid est res? The quod quid erat esse likewise designates that by which something is a quid--hoc per quod aliquod habet esse quid. The essence can be called form in the sense of signifying the perfection of each thing, or called nature in so far as it designates all that is intelligible in the thing. In the latter sense nature should be understood as common to substantial and accidental essences both generic and specific.<sup>24</sup>

Briefly, the word essence signifies the form alone in simple substances and the composite of matter and form in the composed substances. Matter is a part of the essence of each individual of the species and thus matter universaliter accepta must be a part of the essence of the species. If the individual composite were to be defined, it would have to be

defined with individual matter, materia signata, since this is part of the individual essence. The specific essence or the generic essence of composed things will contain only materia non signata, common matter, which alone enters the specific essence. From the specific essence are excluded both particular matter--this flesh and these bones--and those parts which are accidental to the understanding of the species.

If the generic, specific, and individual essences are considered absolutely in themselves, apart from any relation to first and second intentions, they do not differ except according to greater or lesser determination, i.e., as the non-signate and the signate, although there is a different mode of designation in each case. The designation of the individual with respect to the species is through matter determined by dimensions; but the designation of the species with respect to the genus is through the difference which constitutes the species--a difference which is derived from the form of the thing. From this it follows that, considered in themselves, man, for example, and humanity are the same since the nature signified by each is the same. They differ only as terms of the first intention.<sup>25</sup> This brief statement of these points suffices for our purpose.

If we consider now the generic and specific names of the first intention, e.g., animal and rational, names which

constitute the definition, and man, which designates the species defined, we arrive at the proper terms of our problem. The species, man, is properly composed of the genus, animal, and the difference, rational, which constitute the definition representing the species. How are these parts related to each other and to the parts of the thing--matter and form?

If we compare first of all generic and specific names we see that the generic name includes in its signification all that is in the species. Whatever is in the species is in the genus but as undetermined. The generic nature must contain the whole being of the species since it can be predicated in recto of the species, whereas no part signified as part can be predicated in recto of the whole. The way in which the generic name must signify will be evident from the example of "body" which can signify--as it is in the category of substance--either a generic whole, or a material and integral part of animal. St. Thomas notes this very precisely in the following passage:

Cum enim ratio corporis in hoc consistat quod sit talis naturae, ut in eo possint designari tres dimensiones; si nomine corporis significetur res hujusmodi, ut in ea scilicet possint signari tres dimensiones sub hac conditione, ut superveniat alia perfectio quae compleat ipsam in ratione nobiliori, sicut est anima; sic est corpus pars animalis, et sic non praedicatur de animali. Si vero nomine corporis significetur res habens talem naturam ex quacunque forma ipsam perficiente, ut possint in ea designari tres dimensiones; tunc corpus est genus, et significat totum: quia quaecunque forma sumatur specialis, non erit extra hoc per quod ratio corporis conditionabatur; sed tamen indistincte, eo quod non determinetur, utrum ex tali vel tali forma dictam rationem habeat.<sup>26</sup>

If, then, we compare genus, species, difference, and definition to see again how they agree and differ as names of the first intention, it will be evident that they all agree in this that each of them signifies the whole of that which is found in the species. Just as each of them can be predicated of the species, so each must include in some way the whole of that found in the species. They differ, however, according to that which they formally signify.<sup>27</sup> That which is formally signified by the genus is a material perfection; the difference formally signifies a formal perfection; the species formally signifies both of the preceding perfections but without distinguishing them; whereas the definition, while signifying the same aggregate of perfections, distinguishes the parts. "Animal," for example, formally signifies sensitive nature which is material with respect to the intellectual perfection formally signified by "rational." Hence the latter perfection is formal. "Man" and "rational animal" both signify the aggregate of sensitive nature and intellectual nature; the latter expresses both parts separately, the former does not. The species and definition both signify formally the same thing; the distinction is only in the manner of signifying--the definition signifies the whole in the distinction of its parts, the species does not.

If, therefore, we consider these terms according to what they signify both formally as well as materially, they



can all be said to agree in their signification; if we consider only that which is formally signified, they clearly differ and do not signify the same thing. Taking the parts of the definition we see that the generic name, e.g., animal formally and determinately expresses the material perfection of man--sensitive perfection. The genus is, therefore, said to be taken from the matter. The name of the difference, rational, formally and determinately expresses the formal perfection of man and is thus said to be taken from the form.

Just as the perfection formally signified by the difference is not included in the formal signification of the genus but is included only indeterminately, so the generic perfection is not included in the differential perfection. The generic perfection enters only indeterminately into the name of the difference, even though it is necessary for the understanding of the difference. The name of the difference, e.g., rational, does not determinately explain the genus. All that rational explains is "that which has rationality," whether it be horse or man. Nor can the genus be predicated of the difference properly according to any of the four modes of per se predication, unless perhaps as the subject is predicated of the passion. The difference likewise does not fall in the definition of the genus.<sup>28</sup>