THE CONCEPT OF VERBUM IN THE WRITINGS OF ST. THOMAS AQUINAS

IV. VERBUM AND ABSTRACTION

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Two general observations on Thomist trinitarian theory have inspired this inquiry into the concept of verbum. The first was that the analogy to the procession of the Divine Word lies in the analysis, not of knowledge in general, but of intellectual reflection, of rational consciousness.2 The second was that the analogy to the procession of the Holy Spirit lies in the act of love, not as within the will for that is processio operationis, but as grounded in a perfect inner word, a judgment of value.3 Now because rational consciousness has received remarkably little attention from commentators and manual writers, not only in their trinitarian thought but also in their psychology and its corresponding metaphysics, a rather lengthy investigation has been forced upon us. The conclusions to which we have been brought may be summarized by stating: (1) that there exists an act of understanding (intelligere); (2) that rational consciousness (dicere) is the act of understanding as ground and origin of inner words of conceptualization and judgment, and (3) that inner words proceed from acts of understanding, not on some obscure analogy of the emergence of terminal states at the end of material processes,4 but as

¹ For earlier articles, see Theological Studies, VII (1946), 349-92; VIII (1947), 35-79, 404-44.

² Loc. cit., VII (1946), 349 f. ³ Loc. cit., VIII (1947), 406 ff.

⁴ When insight into phantasm is overlooked, the *intelligere* has to produce the *verbum* to have an object. It truly produces yet is not predicamental action (material movement as from the mover) except eminently: it has the virtue and actuality of producing without the potentiality, movement, imperfection of action. As looking at its object, it is a quality which is a second act. See John of St. Thomas, *Curs. Theol.*, *In Im.*, q. 27, disp. 32, a. 5, nn. 18, 37; ed. Desclée 1946, vol. IV, fasc. 2, pp. 74, 80. On our analysis an *intelligere* that is producing before being a knowing is merely spontaneous activity and not the ground of an *emanatio intelligibilis*. The *intelligere* exercises efficient causality; predicamental action, as defined, is the effect *in fieri* and so, even *eminenter*, does not include the exercise of efficient causality. Finally, a quality is an essence and a second act is beyond essence; quality is to second act, as habit to operation or as substantial essence to existence.

actus ex actu. Thus, the center of Thomist analysis of intellect is held, not by such products of intelligence in act as concepts, nexus, judgments, syllogisms, but by intelligence in act itself. ing for Aquinas is not simply a matter of concepts and judgments but principally a progress from a less to a more complete act of understanding.7 Again, the speculative habits of intellectus, scientia, sapientia, stand to acts of understanding as first acts to second; and this relation is the same as that of species to intelligere, of form to esse, of principium actionis to actio manens in agente.8 Finally, the objects of Thomist intellect are the objects of understanding: first, there is the moving object of direct understanding, namely, the actuated intelligibility of what is presented by imagination; secondly, there is the terminal object of direct understanding, the essence expressed in a definition; thirdly, there is the moving object of reflective understanding, the aggregate of what is called the evidence on an issue; fourthly, there is the terminal object of reflective understanding, the verum expressed in a judgment; fifthly, there is the transcendent object, reality, known imperfectly in prior acts but perfectly only through the truth of judgment.9

This intellectualist interpretation of Thomist thought runs counter throughout to the currently accepted conceptualist view, but the point of most apparent conflict lies in the issue to which conceptualists attend almost exclusively, the abstraction of concepts. To this issue we may now direct our attention, asking: first, what is the matter from which intellect abstracts; secondly, what is the immateriality by which it knows; thirdly, what is the formative abstraction of the concept; fourthly, what is the prior apprehensive abstraction of insight into phantasm and; fifthly, what is intellectual knowledge of the singular.

THE ANALOGY OF MATTER

The old naturalists had concluded, not only from beds and tables to an underlying subject, wood, but also from wood and bones to an

⁵ C. Gent., IV, 14, §3 (i.e., the third paragraph in the Leonine manual edition).

⁶ I wish to employ the distinction whereby "Thomist" means "of St. Thomas," and "Thomistic" means "of his school."

⁷ Sum Theol., I, q. 79, a. 8 c.

⁸ See Theological Studies, VIII (1947), 418 ff., 429 ff.

⁹ Ibid., 433 ff.

element, earth, and from gold and bronze (they could be melted) to an element, water. Aristotle accepted the principle of such analysis: any change is defined for thought by stating the underlying subject and the variable determination or form; and what holds for defining thought, also holds for the real thing. But while he accepted the principle, he corrected the conclusion. The ultimate subject of change in the older philosophies had always been some sensible body; that was the stuff of the universe; it alone was substantial and permanent; all else was accidental and mutable. Against this materialism Aristotle argued that every assignable object was subject to change; the element, air, could be changed into the element, water; and so he concluded that the ultimate subject of change could not be an assignable object; it could be neither quid nor quantum nor quale nor any other determinate type of reality; it could not, of itself, be knowable; its nature could be stated only by recourse to analogy.

Quod igitur se habet ad ipsas substantias naturales, sicut se habet aes ad statuam, et lignum ad lectum, et quodlibet materiale et informe ad formam, hoc dicimus esse materiam primam.¹⁴

materia prima . . . se habet ad formas substantiales, sicut materiae sensibiles ad formas accidentales. ¹⁵

(materia prima) ita se habet ad omnes formas et privationes, sicut se habet subjectum alterabile ad qualitates contrarias.¹⁶

Such is the defining analogy of matter. In its limit it defines prime matter which is proportionate to substantial form. And as prime matter of itself is not knowable, so substantial form has the complementary distinction of being knowable by intellect alone.¹⁷

The full significance of this analogy is not easy to measure. It eliminates the materialism of the old naturalists for whom the real was the sensible. It corrects the misguided intellectualism of Plato for whom the intelligible was real but not of this world. One might even say that by anticipation it puts in its proper place and perspective, that of prime matter, what Kant thought was the thing-in-itself. It

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    10 In I Phys., lect. 13 §2: Ea in quae resolvitur definitio rei sunt componentia rem illam.
    11 In II Phys., lect. 2 §1.
    12 Met., Z, 3, 1029a 20; VII, lect. 2 §1285.
    13 Ibid., 10, 1036a 8; lect. 10 §1496.
    14 In I Phys., lect. 13 §9.
    15 Ibid., lect. 15 §10.
    16 In VIII Met., lect. 1 §1689.
    17 In II de An., lect. 14 §420; lect. 13 §395 ff.
    18 In VII Met., lect. 2 §1284.
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does all this because it places in the most material of assignable material things an intelligible component known by our intellects and identifiable in our knowledge; that intelligible component, form, species, quiddity, has as much title to being named "cause" and "nature" as has matter itself; and what it is, is fixed by its relation to the ratio rei, the ratio definitiva rei, the ratio quidditativa rei. Conversely, it is only because Aristotle's real thing is not the materialists' real thing that Aristotle was able to satisfy his own epistemological law: unless particulars are identical, at least inadequately, with their quiddities, then the former cannot be objects of scientific knowledge and the latter cannot be realities.²⁰

But the significance of the analogy is not confined to its metaphysical limit of prime matter and substantial form. Besides prime matter, there are sensible and intelligible matter, common and individual matter, appendages of matter, parts of the matter, material and individual conditions. What are all these? The answer is simple if one grasps that natural form stands to natural matter as the object of insight (forma intelligibilis) stands to the object of sense (materia sensibilis). But to convince conceptualists, a more detailed approach is necessary. Just as the correspondence between definitions and things was the ultimate ground of the analysis of change into subject, privation, and form, 22 whence proceeded the notion of prime matter, so the more detailed correspondence between parts of the definition and parts of the thing should bring to light the other elements in the analogy. Accordingly we proceed to sample a lengthy and complex Aristotelian discussion. 23

Segments are parts of circles and letters are parts of syllables. Why is it that the definition of the circle makes no mention of segments, while the definition of the syllable must mention letters? A typical solution is found in the contrast between "curvature" and "snubness": curvature is curvature whether in a nose or not; but snubness is snubness only in a nose. In general one may say that as without proportionate matter there cannot be the corresponding material form (just as without a proportionate phantasm there cannot be the cor-

In II Phys., lect. 2 §3; lect. 5 §3 f.
 De Ver., q. 10, a. 8, ad 1m (1ae ser.).
 Cf. sup. note 10.

²² Met., Z, 10 and 11; cf. In Boet. de Trin., q. 5, a. 3.

responding insight), so for different forms different measures of matter are necessary. There must be letters if there are to be syllables; but the necessary letters are not necessarily in wax or in ink or in stone; hence letters are de ratione speciei or partes speciei; but letters as in wax or as in ink or as in stone are partes materiae. Similarly, one cannot have a particular circle without having potential segments; but the notion of circle is prior to the notion of segment, since the latter cannot be defined without presupposing the notion of the former; and so one can appeal either to the potentiality of the segments or to the priority of the definition of circle to conclude that segments are, with respect to the circle, partes materiae.²⁴

The notion of priority is of wide and nuanced application. right angle is prior to the acute; the circle to the semi-circle; and man to hand or finger. In each of these instances the former is a whole and the latter a part; in each the definition of the former must be presupposed by a definition of the latter; in each, accordingly, the latter does not enter into the definition of the former and so is a pars materiae. But complex cases are not to be solved so simply. Parts of a living body cannot be defined without reference to their function in the whole; again, the whole itself cannot be defined without reference to its formal principle which constitutes it as a whole; accordingly, the soul and its potencies must be prior to the body and its parts. Still it does not follow that parts of the body are mere partes materiae, that "man" can be defined without bothering about corporal parts just as "circle" can be defined without bothering whether it be made of wood or of bronze. The difference arises because the principle of priority must here be complemented by the principle of proportion between form and matter; a circle requires no more than intelligible matter; man requires sensible matter;25 and so while bronze and wood are not de ratione speciei circuli still flesh and bones are de ratione speciei hominis.26

A sufficient sample has been taken from Aristotle's involved discussion to make it plain that matter is not merely prime matter but also the matter that is sensibly perceived and imaginatively represented. If further one wishes to understand why the discussion is so complex, why Aristotle warned against simple rules of solution,²⁷ even

²⁴ Met., Z, 10, 1034b 20 ff.; VII, lect. 9 §1461-63, 1474 ff.

²⁵ Ibid., 1035b 2 ff.; 14 ff.; 1036b 24 ff.; lect. 10 and 11, §1483 ff., 1519.

²⁶ Cf. Sum Theol., I, q. 85, a. 1 ad 2m. 27 Met., Z, 10, 1036a 13 ff.

perhaps a conceptualist might consider the hypothesis that the real principle of solution is neither one rule nor any set of rules but rather the fashioner of all rules, intelligence itself in act, determining what it takes as relevant to itself and so de ratione speciei and what it dismisses as irrelevant to itself and so pertaining to the partes materiae.

In any case let us close this section with a summary account of the analogy of matter. In the first instance matter is the matter of common sense, the wood of the table and the bronze in a statue. But unless corrected, that notion easily leads to materialism, whether the crude materialism of the old naturalists or the elaborate materialism of the nineteenth century atomists who equally considered the real to be the sensible. On the other hand, the material world is neither sheer flux, as for Plato, nor unknowable in itself, as for Kant. higher synthesis of these opposites lies in defining matter as what is known by intellect indirectly. Directly intellect knows forms, species, quiddities; but these knowns have antecedent suppositions, simultaneous suppositions, and consequents, all of which, as such, are indirectly known. Antecedent suppositions are matter in the sense that genus is named matter and specific difference is named form, and again in the sense that substance is named matter and accident is named form; such usage is Aristotelian and Thomist but still somewhat improper. Simultaneous suppositions fall into two classes: if they pertain to the intelligible unity of the form, as letters to syllable, they are parts of the form, de ratione speciei, and in Thomist usage common matter; if they do not pertain to the intelligible unity of the form yet are ever included in some fashion in the concrete presentation, they are partes materiae or material conditions or individual matter. Finally, consequents that are contingent and potential, as segments to circles, are again partes materiae. Clearly, it is the second of these three types of indirectly knowns that offers the principal meaning of the term, matter, and it is this meaning that the analogy of matter considers chiefly. The general analogy is the proportion of wood to tables and bronze to statues; but the specifically Aristotelian analogy is that natural form is to natural matter as intelligible form is to sensible matter.28 that is, as the object of insight is to the object of sense.

De Ver., q. 10, a. 8 ad 1m (lae ser.).

THE IMMATERIALITY OF KNOWING

It will be most convenient to begin from the theorem that knowing involves an identity in act of knower and known. This identity is an extension of the theorem in the Physics that affirms the identity of action and passion; one and the same real movement as from the agent is action and as in the patient is passion.29 Now in the De Anima it is seen that this theorem holds no less with regard to operations (actus perfecti) than with regard to movements (actus imperfecti).30 The one operation, sensation, is effected by the sensible object and received in the sensitive potency; as from the object, it is action; as in the subject, it is passion; thus, sounding is the action of the object and hearing the passion of the subject and so, by the theorem of identity, sounding and hearing are not two realities but one and the same.31 From this theorem Aristotle immediately deduced, first, an alternative account of sensitive empirical consciousness, 32 secondly, a solution to the question whether unseen things are colored³³ and, thirdly, an explanation of the fact that excessive stimuli destroy senses.³⁴ Aguinas fails to manifest the slightest difficulty concerning this theorem in his Commentary, yet rarely if ever does he employ it in his independent writings. There one may read repeatedly that "sensibile in actu est sensus in actu, et intelligibile in actu est intellectus in actu." But the meaning is not the original Aristotelian identity in second act⁸⁵ but rather assimilation on the level of species.³⁶ Quite probably the cause of this shift from identity to assimilation was the terminological embroglio of "action" to which we have referred already.37

That knowing is by assimilation is a theorem offering no special difficulty. It was a matter of common consent: "hoc enim animis

 $^{^{29}}$ Phys., III, 3, 202 a22-b29; lect. 4 and 5; cf. Theological Studies, III (1942), 377 ff.

⁸⁰ Theological Studies, VIII (1947), 408 ff.

³¹ De An., III, 2, 425b 26-426a 26; lect. 2 §591-96.

³² *Ibid*., §591.

³⁸ Ibid., §594-96.

³⁴ Ibid., §597 f.

⁸⁵ Ibid., §592: unus et idem est actus sensibilis et sentientis.

³⁶ Sum Theol., I, q. 87, a. 1 ad 3m: Dicendum quod verbum illud Philosophi universaliter verum est in omni intellectu. Sicut enim sensus in actu est sensibile propter similitudinem sensibilis, quae est forma sensus in actu; ita intellectus in actu est intellectum in actu propter similitudinem rei intellectae, quae est forma intellectus in actu.

⁸⁷ Theological Studies, III (1942), 375-81; VIII (1947), 418-33.

omnium communiter inditum fuit, quod simile simili cognoscitur."88 Its grounds in specifically Aristotelian theory are reached easily: as the thing is the thing it is in virtue of its form or species, so too the knowing is the ontological reality it is in virtue of its own form or species; further, unless the form of the thing and the form of the knowing were similar, there would be no ground for affirming that the knowing was knowing the thing.

It is a short step from a theorem of assimilation to a theorem of immaterial assimilation. If knower and known must be similar on the level of form, there is no necessity, indeed no possibility, of assimilation on the level of matter. The contrary view had been advanced by Empedocles and against it Aristotle marshalled no less than ten arguments.39 His own view was in terms of potency and act, action and passion: the sense in potency is unlike the sensible in potency;40 but the sense in act is like the sensible object on the general ground that effects are similar to their causes:41 it followed that the senses were receptive of sensible forms without the matter natural to those forms. much as wax is receptive of the imprint of a seal without being receptive of the gold of which the seal is made.42 In human intellect immaterial assimilation reaches its fulness in immaterial reception: not only is the matter of the agent not transferred to the recipient, as the gold of the seal is not transferred to the wax; not only is the form of the agent not reproduced in matter natural to it, as in sensation; but the form of the agent object is received in a strictly immaterial potency, the possible intellect. Thus, the structures of sense and intellect differ radically. The sensitive potency, such as sight, is form of the sensitive organ, the eye; just as soul is the form of the body.48 Sensation itself is the operation not merely of the organ nor merely of the potency but of the compound of organ and potency.44

³⁸ Sum. Theol., I, q. 84, a. 2 c. ³⁹ De An., I, 5, 409a 19-411a 7.

⁴⁰ In II de An., lect. 12 §382. None the less there must be a proportion and, in that sense, a similitude between object and potency, else eyes would hear and ears see. Cf. ibid., lect. 11 §366; Sum. Theol., I, q. 12, aa. 2 and 5 applies this to the beatific vision.

⁴¹ Ibid., 416a 35 ff; 417a 18; lect. 10 §351 and 357.

⁴² De An., II, 12, 424a 17 ff; lect. 24 §551.

⁴ Ibid., lect. 2 \$239, 241; Sum. Theol., I, q. 85, a. 1 c.

⁴⁴ De Pot., q. 3, a. 9 ad 22 m; Sum. Theol., I, q. 75, a. 2 ad 3m; a. 3; q. 77, a. 5 ad 3m; q. 84, a. 6; q. 89, a. 1 ad 1m; In I de An., lect. 2 §19 f.; lect. 10 §159; II, lect. 2 §241; lect. 12 §377; III, lect. 7 §684-88, cf. 679-82; C. Gent., II, 57, 82; cf. 49 §8, 50, §4.

Directly, the sensible object acts on the sensitive organ; but since matter and form, organ and potency are one, the movement of the organ immediately involves the operation of its form, the sense. On the other hand, the possible intellect is not the form of any organ; it has no other nature but ability to receive; the stands to all intelligible forms as prime matter stands to all sensible forms; and precisely because it is in act none of the things to be known, it offers no subjective resistance to objective knowing. Thus, possible intellect stands to its first act, which is science, as the sensitive organ stands to its first act, which is the sensitive potency; both sensation and understanding are the operations of compounds, but sensation is the operation of a material compound, while understanding is the operation of an immaterial compound; since, then, operari sequitur esse, the substantial form of man must be subsistent but the substantial form of a brute cannot be subsistent.

We have considered immaterial assimilation and immaterial reception; beyond these there is a general theorem that knowledge is by immateriality. If this general theorem is taken out of its historical context and made the premise of merely dialectical deductions, endless difficulties arise. But obviously the general theorem cannot have a different meaning than its particular applications. It does not mean, then, that other patients receive both matter and form from agents, but cognoscitive potencies receive only form: the wax does not receive the matter of the seal.⁵² It does not mean that other recipients are material but cognoscitive potencies are immaterial: both outer and inner senses are forms of corporeal organs; and they know the particular because the species they receive are individuated by the matter and the

⁴⁵ De Unitate Int., cap. I, ed. Keeler, §24: Sensitiva enim pars non recipit in se species sed in organo; pars autem intellectiva non recipit eas in organo sed in se ipsa.....

⁴⁶ Ibid., §23: Sensus enim proportionatur suo organo et trahitur quodammodo ad suam naturam; unde etiam secundum immutationem organi immutatur operatio sensus. Cf. §35, 37, 38, 46. See the account of Cajetan's position in Yves de Simon. Rev. de Phil., IV (1933), 228-58. Also, Theological Studies VIII (1947), 435.

⁴⁷ Sum. Theol., I, q. 75, a. 2 et passim. ⁴⁸ De An., III, 4, 429a 21; cf. 429b 30 ff.

⁴⁹ Sum. Theol., I, q. 87, a. 1 c. ⁵⁰ Ibid., q. 75, a. 2 c.

⁵¹ De An., II, 5, 417b 16 ff.; lect. 12 §373 f.

^{\$2} C. Gent., II, 57, 82; Sum. Theol., I, q. 75, aa. 3 and 6; De Unit. Int., cap. 1, ed. Keeler §35 ff.

⁵³ In II de An., lect. 24 §551 ff.

determinate dimensions of the organs they inform.⁵⁴ It does not mean that objects have to be material to be really distinct from the subjects that know them: angels are immaterial and really distinct from the similitudes by which other angels know them.⁵⁵ But if the object does not have to be material, nor the subject immaterial, and the action of the object on the subject has no particular claim to immateriality, what can be the meaning of the general theorem? In the first place, its meaning is negative; the knower need not be the known; assimilation indeed is necessary but it is on the level of form and not that of matter; complete assimilation, both material and formal, would make the knower be the known but would give no guarantee of knowledge. Out of this negative and anti-Empedoclean meaning there arises a positive meaning. The form of the knowing must be similar to the form of the known, but also it must be different; it must be similar essentially for the known to be known; but it must differ modally for the knower to know and not merely be the known. Modal difference of forms results from difference in recipients: the form of color exists naturally in the wall but intentionally in the eye because wall and eye are different kinds of recipient;56 similarly, angels have a natural existence on their own but an intentional existence in the intellects of other angels.⁵⁷ Thus, the negative concept, immateriality, acquires a positive content of intentional existence; and intentional existence is a modal difference resulting from difference in the recipient. remains a still further step to be taken. Why have forms two different modes of existence, natural or intentional, according to difference in recipients? It is because Thomist system conceives perfection as totality: if finite things which cannot be the totality are somehow to approximate towards perfection which is totality, they must somehow be capable not only of being themselves but also in some manner the others as others; but being themselves is natural existence and being the others as others is intentional existence. Moreover, if potency and especially matter are the principles of limitation, tying things down to being merely the things they are, it follows that the intentional mode

⁵⁴ De Ver., q. 10, a. 5 c; q. 8, a. 11 c.

⁵⁵ Sum. Theol., I, q. 56, a. 2 ad 3m; De Sp. Cr., a. 8 ad 14m.

⁵⁶ In II de An., lect. 24 §551-54; cf. C. Gent., II, 50 §5.

⁵⁷ Sum. Theol., I, q. 56, a. 2 ad 3m.

of existence results from the negation of potency and specifically from the negation of matter.⁵⁸ It is only in the perspective of such systematic principles that the general theorem, knowledge is by immateriality, can be understood.

FORMATIVE ABSTRACTION

We have been considering the matter from which intellect abstracts, and we turn to abstraction itself. In this section we consider the abstraction that supposes the formation of an inner word and yields knowledge of "rem ut separatam a conditionibus materialibus sine quibus in rerum natura non existit."59 In the next section we shall consider a prior apprehensive abstraction, already described as insight into phantasm; 60 its object differs modally from the object of formative abstraction, for by it man knows not the abstract object of thought, the universal that is common to many, but the universal existing in the particular, 61 the "quidditas sive natura in materia corporali existens."62 On the conceptualist interpretation of Aquinas, formative abstraction is unconscious and non-rational; it precedes apprehensive abstraction. On the intellectualist interpretation, which we find more in accord with the text of Aquinas, the apprehensive abstraction precedes and the consequent formative abstraction is an act of rational consciousness. In dealing with this issue we begin from the more obvious and proceed towards the more fundamental aspects of Thomist thought.

Elementary reflection on abstraction is concerned with common names, the corresponding concepts, and the relation of concepts to reality. Two samples of Thomist treatment of these matters are given. In the *Sentences* it is explained that a ratio is what intellect apprehends of the meaning of a name. No ultimate difference arises whether the meaning be primitive or derived. In either case to attribute a ratio to a reality is to attribute not the active meaning (which is an act of the mind or the intention of an act) but the passive meant; it is to affirm that in the thing there is what corresponds to the concept,

⁵⁸ Ibid., q. 84, a. 2 c; De Ver., q. 2, a. 2 c. ⁵⁹ C. Gent., I, 53 §3.

⁶⁰ THEOLOGICAL STUDIES, VII (1946), 359-79.

⁶¹ Sum. Theol., I, q. 85, a. 3 ad 1m; a. 2 ad 2m.

⁶² Ibid., q. 84, a. 7 c.

as what is signified or meant corresponds to sign or meaning.⁶³ The same issue is treated more expeditiously in the *Summa*. Names are signs of meanings, and meanings are similitudes of things; it follows that names refer to things through concepts in our intellects; and so the measure of the use of names is the knowledge in our intellects. Because we know the essence of man, the name "man" signifies the definition which expresses the essence of man. But we do not know the essence of God, and so since meaning is consequent to knowledge we cannot use names to express the essence of God.⁶⁴

This clear reduction of meaning to knowledge suggests that one had better approach the problem of abstraction on a profounder level, namely, that of knowledge and especially that of science. Now science is of the necessary and universal; but all material things are contingent and particular. A man is composed not of this sort of form and this sort of matter but of this form and this matter.65 What then is the possibility of science? It was, we read, this very problem that forced Plato to posit his separate ideas. Since he accepted the opinion of Cratylus and Heraclitus that everything sensible was in a perpetual flux, he had to choose between denving the objectivity of definitions and of science and, on the other hand, positing universal and necessary objects. He chose the latter, but his choice was not really inevitable. It is true that all sensible things are subject to change, but such change is not absolute; one may distinguish between the composite thing and its ratio or form; the thing changes per se, but the form changes only per accidens. Since, then, intellect can prescind from all that does not per se pertain to a thing, it follows that intellect can define universally and deduce with necessity on the basis of the changeless forms of changing things. 66 But one may ask what is the changeless form or ratio of a changing thing; the answer is to be had by working out the conditions of change. On Aristotelian physics every other change supposes local movement; in turn, local movement supposes a thing to be in a given place at a given time; and a thing is in a given place at a given time inasmuch as it is individuated by matter existing under assigned (as

⁶³ In I Sent., d. 2, q. 1, a. 3 sol. 64 Sum. Theol., I, q. 13, a. 1 c.

⁶⁵ Met., Z, 10, 1035b 27 ff; VII, lect. 10 §1490.

⁶⁶ In Boet. de Trin., q. 5, a. 2 c. See the excellent text and annotations of QQ. 5 and 6 put out by P. Wyser, O.P., Div. Thom. Freiburg, XXV (1947), 437-85; XXVI (1948), 74-98.

opposed to merely specified) dimensions. It follows that one considers the changeless *ratio* of a thing, inasmuch as one considers the thing apart from assigned matter and so apart from the consequents of assigned matter, namely, determinate place, determinate time, and mobility. On the other hand, one is not to prescind from more than assigned matter; to do so would be to prescind from matter relevant to the form which by its proportion determines a measure of matter proper to itself; thus, the definition of man and, as well, scientific knowledge of man prescind from these bones and this flesh but not from bones and flesh.⁶⁷

After the problem of necessary science of contingent things, there comes the problem of universal science of particular things. The abstract rationes are considered and employed in two different manners. They may be considered in themselves and employed as objects of thought, and this is their first and principal use. But also, with the aid of sensitive potencies, they may be considered relatively, used as instrumental means of knowledge, and so applied with the aid of sense to particular things; this use is secondary and involves a measure of reflection.68 In this quite clear passage Aquinas settles a recurrent antinomy of Aristotelian thought: science is of the universal;69 all reality is particular;70 therefore science is not of reality. To this problem Aristotle adverted in his list of basic questions in Metaphysics B, 71 and again in similar terms in books K and M.⁷² The last of these is his fullest treatment: it distinguishes between science in potency and science in act; it affirms that science in potency is indeterminate and so of the indeterminate and universal, but science in act is determinate and of the determinate and particular; it concludes that in one manner science is of the universal and in another manner it is of the particular.78 Aguinas specified what these two manners were: primarily science is concerned with universal objects of thought; secondarily, with the help of sense, intellect uses these universal objects as instru-

⁶⁷ Ibid. 68 Ibid., and ad 4m

^{**} Met., Z, 15, 1039b 27; K, 1, 1059b 26; De An., II. 5, 417b 22; cf. Post. Anal., I, 31, 87b 27 ff.

⁷⁰ Met., Z, 13, 1038b 35.

⁷¹ Ibid., B, 6, 1003a 6-17, esp. 14-17.

⁷² Ibid., K, 2, 1060b 20-23; M, 10, 1087a 10-25.

¹⁸ Ibid. Cf. Ross, Aristotle's Metaphysics, Introd. cviii-cx.

mental means and applies them to particular things. Nor is this solution of the In Boetium de Trinitate out of harmony with, much less contradicted by, later writings. The Contra Gentiles has it that by the use of inner words intellect is able to know "rem ut separatam a conditionibus materialibus sine quibus in rerum natura non existit."74 The Pars Prima affirms "ideam operati esse in mente operantis sicut quod intelligitur; non autem sicut species qua intelligitur."75 The fifth of the Ouodlibeta, of Christmas, 1271, advances that intellect understands in two manners: formally by the species actuating it; instrumentally by the inner word it employs to know the thing.76 Finally, it is plain that without instrumental objects of thought Aquinas could not have accounted as he did for the meaning of common names and false propositions.⁷⁷ However, since an accusation of an implication of idealism has been tossed at me, some explanation may not be out of place. First, the universal ratio or object of thought known by means of the inner word is not subjective but objective; it is not the thinking, meaning, defining, but the thought, meant, defined; but though it is objective, still it is universal and all reality is particular: accordingly its immediate reference is not to the thing except potentially, inasmuch as reflection and the use of sense enable one to apply the universal ratio to particular things. Secondly, before anyone may quote such a passage as Summa theol., I, q. 85, a. 1, ad 1m., against the clear statements of the In Boetium de Trinitate, he must show that both deal with formative abstraction; in fact, as will appear, the above cited passage from the Summa deals not with formative abstraction but with the prior apprehensive abstraction. Thirdly, it may be quite true that if the clear statements of the In Boetium de Trinitate are given the current conceptualist interpretation, then they do imply idealism. If formative abstraction is not preceded by apprehensive abstraction, by insight into phantasm, then the application of universal rationes to particular things must be blind; but that is a point against conceptualist interpretation. The intellectualist interpretation finds no implication of idealism in the In Boetium de Trinitate because for it formative abstraction is not the only abstraction iust as

⁷⁴ C. Gent., I, 53 §3. ⁷⁵ Sum. Theol., I, q. 15, a. 2 c.

⁷⁶ Quodl. V, a. 9 ad 1m.

⁷⁷ In I Peri Herm., lect. 2 and 4; cf. THEOLOGICAL STUDIES, VII (1946), 352.

the universal common to many is not the only universal;⁷⁸ prior to knowledge of essences without existence through definitions, there are insights into phantasm in which are known universals, natures, quiddities existing in corporeal matter; and as such insight governs the formation of meanings and definitions, so also it governs the application of them to particular things.

Two approaches to Thomist thought on formative abstraction have been considered, namely, through the meanings of common names and through the possibility of necessary and universal knowledge of contingent and particular reality. A third approach is through the possibility of abstraction itself.⁷⁹ The two operations of intellect are distinguished: the first is knowledge of quiddity; the second is knowledge of existence. To the latter operation are assigned distinctions that regard separate things, such as man and stone, and, further, abstractions (more accurately separations) on the level of metaphysical or theological thought.80 But to the first operation, knowledge of quiddities, are assigned physical and mathematical abstractions. Their general possibility is accounted for by the nature of intelligibility and the laws of its unity. A thing is intelligible inasmuch as it is in act: accordingly we must understand the natures of things in one or more of three ways; for the thing itself may be act, as is the separate substance; or it may possess a constituent act, as the composite substance; or it may be related to act, as matter to form and a vacuum to what it might contain. Now inasmuch as the nature of a thing is constituted intelligibly by its relation to or dependence on something else, it is impossible to abstract from the something else; on the other hand, inasmuch as the nature of a thing is not dependent intelligibly on something else, in that measure it is possible to abstract from the something else. Thus, one can abstract "animal" from "foot" but not "foot" from "animal"; one can abstract "whiteness" from "man" and "man" from "whiteness"; one can abstract neither "son" from "father" nor "father" from "son," and neither "substantial form" from "matter" nor "matter" from "substantial form." Evidently, intelligibility governs abstraction on the level of the intelligentia indivisi-

⁷⁸ Sum. Theol., I, q. 85, a. 3 ad 1m; a. 2 ad 2m.

⁷⁹ In Boet. de Trin., q. 5, a. 3 c; ed. Wyser, p. 472 line 1 ff.

⁸⁰ *Ibid.*, p. 472; p. 473 lines 8–16; p. 474 lines 42–44; on the formation of metaphysical concepts, see Theological Studies, VII (1946), 389–91; VIII (1947), 70–73.

bilium; precisely because of intelligible unity, intelligence in act knows what intelligibly is indivisible and abstracts from all that does not pertain to that intelligible indivisibility. By this general principle, in a passage that more than recalls the complications of its parallel in the Metaphysics of Aristotle, 81 both physical and mathematical abstraction are explained. In the order of intelligible priority, a thing is constituted, first, by substance, secondly, by quantity, thirdly, by quality, fourthly, by passions and movements. Now one cannot conceive the intelligibly posterior and prescind from the prior: substance enters into the definition of accident; similarly, sensible qualities presuppose quantity, and changes presuppose sensible qualities; it follows that one cannot abstract accident from substance, sensible quality from quantity, change from sensible quality. On the other hand, one can conceive the intelligibly prior and prescind from the posterior. As we have seen, to abstract from assigned matter eliminates the possibility of change but leaves substance, quantity, and sensible quality; it leaves flesh and bones but not these bones nor this flesh. But one may go a step further to abstract not only from assigned matter but also from sensible quality or, as it is named, sensible matter.82 This leaves substance and quantity and the necessary consequents of quantity such as figure; it is the abstraction of the mathematician; and when it is named the abstraction of form from matter, what is meant is not the impossible abstraction of substantial form from its corresponding matter (the two are correlative) but the abstraction of the form of quantity and its consequent, figure, from sensible qualities such as the hard and soft, hot and cold.88 Finally, to advance beyond mathematical abstraction and prescind from quantity as well as sensible quality and the conditions of change is, Aquinas stated explicitly, not so much abstraction as separation; it pertains to the level of judgment and the fields of metaphysics and theology.84

APPREHENSIVE ABSTRACTION

Repeatedly in the neat treatise on human intellect in the *Pars* Prima⁸⁵ one reads that the proper object of human intellect is the

⁸¹ Met., Z, 10 and 11.

⁸² Met., K, 3, 1061a 28 ff; cf. M, 3, 1077b 17 ff; De An., III, 7, 431b 15 f.

⁸³ In Boet. de Trin., q. 5, a. 3 c; cf. Sum. Theol., I, q. 85, a. 1 ad 2m.

quidditas rei materialis.86 This proper object is also the proportionate object of our intellects, 87 their first object, 88 their primo et per se cognitum, 89 their object according to the state of the present life, 90 and finally an object that can be known only by the conversion of intellect to phantasm.91 Reasons on a cosmic scale are assigned for this position. In the universal hierarchy of cognoscitive potencies human intellect holds an intermediate place. Sense is the first act of a material organ, and so its object is a form existing in matter as it exists in matter. Angelic intellect is the potency of a pure form, and so its object is a pure form. But human intellect is neither the act of an organ, as sense, nor the potency of a pure form, as angelic intellect; it is the potency of a form that actuates matter, and so its object must be a form, existing indeed in matter, but not as it exists in matter. 92 Less striking reasons for the position are to be had in the historical order. In the incessantly quoted third book of Aristotle's De Anima there is recalled the distinction of Metaphysics Z, 6, between water and the quiddity of water, magnitude and the quiddity of magnitude, Socrates and the quiddity of Socrates; then it is advanced that directly by sense we know water, magnitude, flesh, that directly by intellect we know the quiddities of water, magnitude, flesh, and that indirectly by intellect we know what directly we know by sense.98 From this passage Aquinas drew three conclusions and of them the first regarded the proper object of human intellect. That object is the quidditas rei which is not separate from the thing, as the Platonists held, nor apart from sensible things, even though intellect apprehends it without apprehending the individual conditions it possesses in sensible things.94 It is perhaps clear enough that this proper object of human intellect is the same as the proper object defined in the Pars Prima; equally clearly, its source is Aristotle and its ultimate ground is the Aristotelian principle that quiddities and particulars must be identical (at least

⁸⁶ *Ibid.*, q. 84, a. 7; a. 8; q. 85, a. 5 ad 3m; a. 8; q. 86, a. 2; q. 87, a. 2 ad 3m; a. 3; q. 88, a. 3; cf. q. 12, a. 4; q. 85, a. 1.

⁸⁷ Ibid., q. 84, a. 8 c.

⁸⁸ Ibid., q. 87, a. 3; q. 88, a. 3 c.

⁹⁹ *Ibid.*, q. 85, a. 8 c.

⁹⁰ Ibid., and q. 88, a. 3 c.

⁹¹ Ibid., q. 84, a. 7 c.

⁹² Ibid., q. 85, a. 1 c.; cf. q. 12, a. 4 c.

⁹⁸ De An., III, 4, 429b 10-21; lect. 8 §705-16.

⁹⁴ Ibid., §717.

inadequately) if the former are to be realities and the latter are to be objects of science.⁹⁵

It remains that there is an anomaly that must be removed. According to the De Anima intellect "directe apprehendit quidditatem carnis; per reflexionem autem, ipsam carnem."96 According to the Pars Prima intellect must convert to phantasm to know its proper object which still is the quiddity.97 It seems that direct apprehension is by conversion! Again, we read that the first object and the first known of intellect is the quiddity of a material thing.98 How can what is known not only directly but also first, none the less be known only by a conversion to phantasm? To solve this difficulty one must first distinguish conversion to phantasm from reflection on phantasm and, secondly, settle precisely what is meant by conversion. Now conversion and reflection are quite distinct both in themselves and in their consequents. They are distinct in themselves: conversion to phantasm is necessary to know the quiddity, the proper object of human intellect;99 but reflection on phantasm presupposes not only conversion to phantasm but also knowledge of the quiddity; it is needed, not for knowledge of the proper object, but only for knowledge of the indirect object, the singular. 100 This distinction between objects and so between acts results in a further distinction of problems regarding the separate soul: because the separate soul has no body and so no imagination, it might seem that it could not know the proper object of human intellect which requires conversion to phantasm; for this reason Aquinas regularly asks whether the separate soul understands anything at all;101 again, because the separate soul has no imagination and so cannot

⁹⁶ Met., Z, 6, 1031b 3 ff; VII, lect. 5 §1363.

⁹⁶ In III de An., lect. 8 §713.

⁹⁷ Sum. Theol., I, q. 84, a. 7 c. In this context and in general Aquinas' quidditas or quod quid est is objective; it is of the thing as intelligible, just as color is of the thing as visible. In I Sent., d. 19, q. 5, a. 1 ad 7m: "quidditatis esse est quoddam esse rationis" is exceptional; it refers to the act of defining and explains "verum est in mente"; but the context also speaks of the quidditas and esse as components of the thing. When I wrote Theological Studies, VII (1946), 370 lines 17 ff., I had not sufficiently adverted to this, nor to the nature of conversion to phantasm.

⁹⁸ Sum. Theol., I, q. 85, a. 8; q. 87, a. 3; q. 88, a. 3 c.

⁹⁹ Ibid., q. 84, a. 7 c.

¹⁰⁰ Ibid., q. 86, a. 1 c.

¹⁰¹ In IV Sent., d. 50, q. 1, a. 1 sol.; De Ver., q. 19, 1 c; Q. D. de An., a. 15; Sum. Theol., I, q. 89, a. 1 c.

reflect on phantasm, it might seem that even if it knew the proper object still it might not know the singular; and for this reason Aquinas regularly asks in a separate article whether the departed souls can know the singular. 102 At least, then, conversion to phantasm is not the kind of reflection involved in knowing the singular. But is it in any manner a reflection? Certainly, there is an etymological suggestion of reflection in the name, conversion; on the other hand, there is a notable measure of Thomist usage which excludes from conversion what is the essential implication of reflection, namely, the existence of other knowledge or activity prior to or supposed by the reflection. Thus, when Avicenna's possible intellect *converts* to his separate agent intellect for the reception of species, 103 one cannot say that, prior to this conversion and reception, the possible intellect was engaged in any activity. Again, when Aquinas spoke of his own immanent agent intellect converting upon phantasms, 104 there is no need to wonder what it converted from. More specifically, the conversion of possible intellect to phantasm is described by Aquinas neither as an activity nor as a shift in activity but as a natural orientation of human intellect in this life: it results from the perfection of the conjunction of soul to body;105 it consists in human intellect having its gaze (aspectus) turned to phantasms106 and to inferior things;117 and this present state of intellect is contrasted with that of the next life when conversion is not to phantasms nor to bodies but to superior things and pure intelligibles. 108 It may or may not be surprising that the term, conversio, should be used to name what strictly is a natural orientation but the facts already noted remain and, if one finds abstract statements more convincing, there are Aquinas' own words:

... nulla potentia potest aliquid cognoscere non convertendo se ad obiectum suum, ut visus nihil cognoscit nisi convertendo se ad colorem. Unde cum phantasmata se

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102 Ibid., a. 3; a. 2; a. 20; a. 4 respectively.
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¹⁰³ In IV Sent., d. 50, q. 1, a. 2 sol; De Ver., q. 10, a. 2 c; Q. D. de An., a. 14 c; Sum. Theol., I, q. 84, a. 4 c.

¹⁰⁴ Sum. Theol., I, q. 85, a. 1 ad 3m.

¹⁰⁵ In IV Sent., d. 50, q. 1, a. 2 sol.

¹⁰⁶ Q. D. de An., a. 16 c.

¹⁰⁷ Ibid., aa. 17 and 18 c.

¹⁰⁸ Sum. Theol., I, q. 89, a. 1 c and ad 2m. Note that Avicennist conversion is named simply conjunction, C. Gent., II, 74 §3.

habeant hoc modo ad intellectum possibilem sicut sensibilia ad sensum, ut patet per Philosophum in III de Anima, quantumcumque aliquam speciem intelligibilem apud se habeat, numquam tamen actu aliquid considerat secundum illam speciem nisi convertendo se ad phantasmata: et ideo, sicut intellectus noster secundum statum viae indiget phantasmatibus ad actu considerandum antequam accipiat habitum, ita et postquam acceperit.¹⁰⁹

But plainly there is no difficulty in reconciling the necessity of sight converting to color with the fact that color is what sight first and directly knows; similarly, there is no difficulty in reconciling the necessity of possible intellect converting to phantasm to know the quiddity with the statement that possible intellect first and directly knows the quiddity in the phantasm.

This account of conversion throws a new light on such a passage as Summa Theol., I, q. 84, a. 7. The influence of the doubtful De Natura Verbi Intellectus¹¹⁰ forced older interpreters to take it as genuinely Thomist that the verbum was formed prior to any understanding; in consequence they held that intellect first knew the quiddity in the verbum and then converted to phantasm to know it again existing in corporeal matter. But once the opusculum is recognized as doubtful, the whole position falls to the ground. Thomist conversion does not mean reflecting nor turning back but simply a natural orientation; q. 84 of the Pars Prima does not seem to mention the verbum; indeed the whole treatise on human intellect in the Pars Prima mentions the verbum only in incidental fashion. 111 When, then, in Summa Theol., I, q. 84, a. 7, Aguinas affirms the necessity of conversion to phantasm and of acts of imagination and other sensitive potencies both in the initial acquisition of science and in its subsequent use; when he argues both from the experimental fact that the lesion of a sensitive organ interferes with scientific knowledge, and again from the universal experience that whenever we try to understand we construct images in which, as it were, we inspect the solution; when he concludes that the proper object of human intellect in this life is the quiddity or nature existing in corporeal matter; when he maintains that true and complete

¹⁰⁹ De Ver., q. 10, a. 2 ad 7m.

¹¹⁰ Ed. Mandonnet, V, 369-75, esp. 372-74. For instance, John of St. Thomas appealed to this work, In Im, q. 27, disp. 32, a. 5, n. 12, 27, 28 (ed. Desclee, 1946, IV², 72, 77).

¹¹¹ E.g., Sum. Theol., I, q. 85, a. 2 ad 3m.

knowledge of this object can be had only inasmuch as there is presupposed an act of imagination or sense apprehending the material singular and there supervenes an act of intellect apprehending the universal nature existing in that particular; then Aquinas is describing in his manner what from a concatenation of texts we already have described as insight into phantasm.¹¹²

Let us turn to another point. It is remarkable that the description of the object of intellect as "quidditas rei materialis" seems confined to the treatise on human intellect in the Pars Prima. Elsewhere one can read that the object of intellect, the proper object of intellect, the object according to the third book of the De Anima, is the "quid," or the "quod quid est," or the "quidditas rei." Again, elsewhere when need arises, the peculiarity of human intellect in this life is indicated by stating flatly that the object of human intellect is the phantasm. But it is in the Pars Prima that one finds the synthesis of these two complementary streams of thought, for there we find that the proper object is not simply the "quidditas rei" but the quidditas rei materialis" and at the same time we are informed of the necessary condition of conversion to phantasm. The duality in Thomist writings has its source in Aristotle, who not only enlarged upon $\tau \delta \tau l \, \dot{\epsilon} \sigma \tau \iota \nu$ and $\tau \delta \tau l \, \dot{\eta} \nu \, \epsilon \, l \nu \, a \iota$, 115 but also insisted that the soul never understands

¹¹² Ibid., q. 84, a. 7 c; Theological Studies, VII (1946), 359-79.

¹¹⁸ In I Sent., d. 19, q. 5, a. 1 ad 7m; II, d. 13, q. 1, a. 3 sol; III, d. 23, q. 1, a. 2 sol; d. 35, q. 2, a. 2, qc. 1 sol; IV, d. 12, q. 1, a. 1, sol. 2 ad 2m; d. 49, q. 2, a. 3 sol; a. 7 ad 6m; De Ver., q. 1, a. 12 c; q. 8, a. 7 ad 4m (3ae ser.); q. 14, a. 1 c; q. 15, a. 2 ad 3m; a. 3 ad 1m; q. 25, a. 3 c; In Boet. de Trin., q. 5, a. 2 ad 2m; C. Gent., I, 58 §5; III, 41 §3; 56, §5; 108 §4; Sum. Theol., I, q. 17, a. 3 ad 1m; q. 18, a. 2 c; q. 57, a. 1 ad 2m; q. 58, a. 5 c; q. 67, a. 3 c; q. 85, a. 5 c; a. 6 c; I-II, q. 3, a. 8 c; q. 10, a. 1 ad 3m; q. 31, a. 5 c; II-II, q. 8, a. 1 c; III, q. 10, a. 3 ad 2m; q. 76, a. 7 c; In Libr. de Causis, lect. 6 ad fin; In I Peri Herm., lect. 10 §5; In II Post Anal., lect. 5 §9. Twenty of these texts refer to Aristotle's De anima; sixteen speak of the proper object of intellect; four name the object quid; one quod quid; twenty-one quod quid est; eight quidditas; the spread is random except for quid and quod quid which are confined to earliest writings. Sum. Theol., III, q. 75, a. 5 ad 2m states that the proper object of intellect according to the De Anima is substantia.

¹¹⁴ In I Sent., d. 3, q. 4, a. 3 sol; II, d. 8, q. 1, a. 5 sol; d. 20, q. 2, a. 2 ad 3m; d. 23, q. 2, a. 2 ad 3m; III, d. 14, q. 1, a. 3 sol 2; d. 27, q. 3, a. 1 sol; De Ver., q. 18, a. 8 ad 4m; C. Gent., II, 73 §38; 80 §6; 81 §6; 96 §3; Q. D. de An., a. 1 ad 11m; a. 15 c, ad 3m, ad 8m; Sum. Theol., I-II, q. 50, a. 4 ad 1m; De Unitate Intel., c. 1, ed. Keeler §40; In Boet. de Trin., q. 6, a. 2 c et ad 5m. There are a large number of equivalent texts with the Aristotelian parallel of phantasm standing to intellect as sensible to sense.

¹¹⁵ Cf. Theological Studies, VII (1946), 359-72.

without phantasms,¹¹⁶ that phantasms are to the rational soul what sensible objects are to sense,¹¹⁷ that intellect understands species $(\epsilon l \delta \eta)$ in phantasms.¹¹⁸

It is natural enough that this Aristotelian duality should reappear in Aquinas; it is no less natural that there should be in Thomist writings a series of attempts to break it down. In the Sentences one may read that phantasm is intelligible only in potency and so cannot be the proper and proximate object of intellect which is the species intellecta. 119 In the De Veritate one finds a qualification of the Aristotelian parallel that phantasms are to intellect what sensible objects are to sense; for sense directly knows the sensible object, but intellect directly knows not phantasm but the thing that phantasm represents; accordingly, insight into phantasm is like looking in, not looking at, a mirror. 120 In the Contra Gentiles the actual intelligibility of phantasm is clarified: in the dark colors are visible in potency; in daylight they are visible in act but seen in potency; they are seen in act only inasmuch as sight is in act; similarly, prior to the illumination of agent intellect, phantasms are intelligible in potency; by that illumination they become intelligible in act but understood only in potency; they are understood in act only inasmuch as the possible intellect is in act.¹²¹ Moreover, there occurs a description of the intelligibility in act of phantasm: the species intelligibilis is said to shine forth in phantasm as the exemplar does in the example or image.122

As has been already explained, the object of insight into phantasm is pre-conceptual, so that any expression of it is as conceived and not as such, just as any expression of the object of sight is of it as conceived and not as such.¹²³ It is this fact that accounts for the variety of the descriptions one finds. Most commonly it is the intelligibility in act of phantasm. In the *Pars Prima* it is the "quidditas sive natura rei materialis in materia corporali existens." But there it also is the

¹¹⁶ De An., III, 7, 431a 16. 117 Ibid., 14. 118 Ibid., 431b 2.

¹¹⁹ In III Sent., d. 31, q. 2, a. 4 ad 5m; for similar modifications, see "quasi obiecta" In IV Sent., d. 50, q. 1, a. 2 sol ad fin; De Ver., q. 10, a. 11 c; also "species phantasmatum quae sunt obiecta intellectus nostri," In II Sent., d. 24, q. 2, a. 2 ad 1m.

¹²⁰ De Ver., q. 2, a. 6 c; cf. q. 10, a. 9 c.

¹²¹ C. Gent., II, 59 §14.

¹²² Ibid., II, 73 §38; cf. In II Sent., d. 20, q. 2, a. 2 ad 2m.

¹²⁸ THEOLOGICAL STUDIES, VII (1946), 372.

"formam in materia quidem corporali individualiter existentem, non tamen prout est in tali materia."124 In the In Boetium de Trinitate there occurs an identification of 1) "forma intelligibilis", 2) "quidditas rei", and 3) object of intellect. 125 Since "species" translates Aristotle's ellos which regularly means form, 126 it is not surprising that the object of insight should be named not only "forma intelligibilis" but also "species intelligibilis." Thus, the species that shines forth in phantasm¹²⁷ is an object of intellectual knowledge; again the species that intellect understands, knows, apprehends in phantasm, 128 plainly is an object; and in such statements not only the thought but also the expression is Aristotelian. 129 Finally, the object of insight, besides being "quidditas sive natura rei materialis," "forma intelligibilis," and "species intelligibilis," also is the universal which is not posterior but prior, not with, but without the "intentio universalitatis," and concretely though inadequately identical with the particular material thing, 180 just as the Aristotelian quiddity is concretely though inadequately identical with the particular. 181

We have been characterizing the agent object¹³² of apprehensive abstraction (insight) and now we turn to the act itself. This act is defined as a cognoscere or considerare.¹³³ Not only is it itself cognitional, but what it abstracts from is also known, namely, the individual matter represented by the phantasm,¹³⁴ or again the sensible matter of hot or cold, hard or soft,¹³⁵ which may be equally imagined. But though apprehensive abstraction is itself cognitional and abstracts from sensibly known individual or sensible matter, still it may be considered insofar as it enters under metaphysical categories.

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124 Sum. Theol., I, q. 85, a. 1 c.
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¹²⁵ In Boet, de Trin., q. 5, a. 2 ad 2m; ed. Wyser p. 469.

¹²⁶ A subsequent convention has tended to confine "species" to meaning forms in the cognoscitive potencies. Aquinas can write, *In III Sent.*, d. 18, a. 1 c: Causa autem actionis est species, e.g. the form of heat in fire; *De Ver.*, q. 10, a. 8, ad 10m (2ae ser.): species lapidis non est in oculo sed similitudo eius; *C. Gent.*, II, 93 §2: quidditates subsistentes sunt species subsistentes; *In III de An.*, lect. 8 §707: naturalia habent speciem in materia.

¹²⁷ C. Gent., II, 73 §38.

¹²⁸ Sum. Theol., I, q. 85, a. 1, ob. 5a et ad 5m; q. 86, a. 1 c; III, q. 11, a. 2 ad 1m.

¹²⁹ De An., III, 7, 431b 2; lect. 12 §777.

¹⁸⁰ Sum. Theol., I, q. 85, a. 2 ad 2m; a. 3, ad 1m.

¹³¹ Met., Z, 6; VII, lect. 5.

¹⁸² See Theological Studies, VIII (1947), 433-37.

¹⁸⁸ Sum. Theol., I, q. 85, a. 1 c et ad 1m. ¹⁸⁴ Ibid., c. ¹⁸⁵ Ibid., ad 2m.

From that view-point it is an operation, a second act, an actus perfecti. 136 Because it involves psychological necessity and universality, metaphysically the form whence it proceeds must be received universally, immaterially, and immovably; "modus enim actionis est secundum modum formae agentis."137 Such a form is not the essence itself of the soul but an immaterial similitude of the form that is received materially in the known thing. 128 It is not innate. 139 nor derived from separate substances out of this world, 140 nor consisting exclusively of intellectual light:141 but it is received from material things inasmuch as phantasms are made intelligible in act by agent intellect;142 hence neither the acquisition nor the use of science can occur without conversion to phantasm;148 nor can we even judge properly unless sense is functioning freely.144 Now this form also is called a "species intelligibilis"; obviously it is quite different from the species of our preceding paragraph which is an object. If the latter be named "species quae." then this form is "species qua intelligitur"; the "species quae" is one of various attempts to characterize the pre-conceptual object of insight; the "species qua" is not a direct object but a conclusion of metaphysical reflection. 145 When the possible intellect is actuated by the "species qua," it is constituted in the first act of apprehensive abstraction; this first act of apprehensive abstraction stands to the second act, as does form to esse and as principle of action to action. 146 Finally, on the sensitive level passive operations are found in the outer senses, con-

¹³⁶ THEOLOGICAL STUDIES, VIII (1947), 408-13.

¹⁸⁷ Sum. Theol., I, q. 84, a. 1 c; q. 76, a. 2 ad 3m; De Unitate Intel., c. 5, ed. Keeler §111.

¹³⁸ Sum. Theol., I, q. 84, a. 2 c. ¹³⁹ Ibid., a. 3 c. ¹⁴¹ Ibid., a. 5 c. ¹⁴² Ibid., a. 6 c.

¹⁸⁹ *Ibid.*, a. 3 c. ¹⁴⁰ *Ibid.*, a. 4 c. ¹⁴² *Ibid.*, a. 6 c. ¹⁴³ *Ibid.*, a. 7 c.

¹⁴⁴ Ibid., a. 8 c. Observe that q. 84 is titled wrongly in the editions. These titles do not pertain to the Thomist text but were picked out by an early editor from the summaries Aquinas placed prior to his questions (See B. Geyer, S. Thomae de Aquino Quaestiones de Trinitate divina, Bonn 1934, Florilegium Patristicum, fasc. XXXVII, p. 3). The printed title (Quomodo anima coniuncta intelligat corporalia quae sunt infra ipsam) refers not to Q. 84 but to QQ. 84-86. The correct title would be: Per quid ea cognoscit. Thus, the topic of Q. 84 is the species: existence, aa. 1, 2; origin, aa. 3-6; conditions of use, aa. 7-8.

¹⁴⁵ Sum. Theol., I, q. 85, a. 2 c; cf. De Ver., q. 10, a. 4 ad 1m; a. 8 ad 2m (2ae ser); ad 9m (1ae ser); a. 9 c, 1m, 3m, 5m, 10m; a. 11 ad 4m; in some of these passages the species is a medium to be known not directly but on reflection and so may be the same as the "species quae" though differently conceived; cf. the earlier formulation, Quodl., VII, a. 1 c; In IV Sent., d. 49, q. 2, a. 1 ad 15m.

¹⁴⁶ THEOLOGICAL STUDIES, VIII (1947), 429-33.

structive operations in the imagination; but on the level of intellect both the passive and constructive operations pertain to the same potency, possible intellect; the reception of the "species qua" is a passion, 147 and the consequent second act is similarly a pati in the general sense of that term; 148 by that second act the preconceptual "quidditas rei materialis" or "forma intelligibilis" or "species quae" or universal in the particular is known; but in virtue of that second act there is formed the definition, the act of defining thought, the act of meaning; 149 and this, at times, is said to be or to contain a third "species intelligibilis" which may be distinguished from the "species quae" and the "species qua" by being called a "species in qua." 150

There remains the question: What is meant by the abstraction of species from phantasm? The principal meaning clearly is that there is produced in the possible intellect a similitude of the thing presented

¹⁴⁷ Sum. Theol., I, q. 85, a. 2 c et ad 3m.

¹⁴⁸ Theological Studies, VIII (1947), 413-17, 429-33.

¹⁴⁹ Sum. Theol., I, q. 85, a. 2 ad 3m.

¹⁵⁰ In all but early writings the inner word is called a form or species only on the secondary ground that it is the form in virtue of which the artisan operates; cf. De Ver., q. 3, a. 2 c; Quodl., V, a. 9 c. As already noted, the early verbum is the later concept plus an ordination towards manifestation (In II Sent., d. 11, q. 2, a. 3 sol; cf. I, d. 27, q. 2, a. 1 sol.); what is conceived, is the species intelligibilis (In I Sent., d. 27, q. 2, a. 1 ob. 4a; a. 2 ob. 4a). Quodl. VIII, a. 4, describes the formation of a classificatory definition of charity and calls it knowledge of the quiddity of charity; apparently the formed definition is to be identified with species intelligibilis; knowledge of the quid of charity is affirmed (In III Sent., d. 23, q. 1, a. 2 ad 1m) but denied on the ground that we do not know its object, God, quidditatively (De Ver., q. 10, a. 10 c). Quodl. VII, a. 2 c et 3m, speaks of knowledge in alleged Augustinian terms as an intentio coniungens. P. Glorieux (Rech. théol. anc. méd., XIII (1946), 282-301) raises the possibility of doubting the authenticity of these Quadlibeta. On the other hand, they perhaps throw some light on In I Sent., d. 35, q. 1, a. 2 sol., which distinguishes the sensible species received in the pupil as a first seen and the external thing as a second seen and, similarly, a similitude received in the intellect as a first understood and the external thing itself as a second understood. Cf. sup. note 145. Finally, there is the species intellecta recurrent in the Sentences (especially II, d. 17, q. 2, a. 1 sol.) but later conspicuous only in discussions of Averroes (C. Gent., II, 75 §3; cf. §7; hence Deunit. int., §110: De rebus enim est scientia naturalis et aliae scientiae et non de speciebus intellectis; Sum. Theol., I, q. 85, a. 2 c: species intellecta secundario est id quod intelligitur). The early species intellecta may be a concept but it may also be the species quae as suggested by In IV Sent., q. 2, a. 6 ad 3m: Facultas enim intellectus nostri determinatur ad formas sensibiles quae per intellectum agentem fiunt intellectae in actu, eo quod phantasmata hoc modo se habent ad intellectum nostrum sicut sensibilia ad sensum, ut dicitur in III de anima. However, too great a precision in early thought would be contradicted by Sum. Theol., I, q. 85, a. 3 c.

by phantasm; this similar to the thing, not in all respects. but with regard only to its specific nature;151 it is to be identified with the "species qua." Still this meaning is not exclusive; Aquinas himself wrote that "hoc est abstrahere universale a particulari, vel speciem intelligibilem a phantasmatibus, considerare scilicet naturam speciei absque consideratione individualium principiorum, quae per phantasmata repraesentantur";153 and here the abstracting is the second act of considering, and what is abstracted from is said, indeed, to be phantasm but means the individual principles that the phantasm represents. Now when the abstracting is considering, the abstracted species would seem to be the considered species; the considered species might be the "species in qua" as conceptualist interpretation might prefer; but it is more plausible perhaps that the considered species is the "species quae" which shines forth in phantasm; certainly, this would seem to be so when Aquinas rewrote Aristotle's "species quidem igitur intellectivum in phantasmatibus intelligit" as "pars animae intellectiva intelligit species a phantasmatibus abstractas."154

SENSE AND UNDERSTANDING

As the sensible is the object of sense, so the intelligible is the object of intellect.¹⁵⁵ The sensible is confined to material reality, but the intelligible is co-extensive with the universe: whatever can be, can be understood.¹⁵⁶ The supreme intelligible is the divine substance which lies beyond the capacity of human intellect, not as sound lies outside the range of sight, but as excessive light blinds it.¹⁵⁷ Further, there are two classes of intelligibles and two modes of understanding: what is in itself intelligible, is the direct object of the intellects of separate, spiritual substances; but what is not in itself actually intelligible but only made intelligible by agent intellect, namely the material and sensible, is understood by intellect directly only inasmuch as it first is apprehended by sense, and represented by imagination, and illuminated by agent intellect.¹⁵⁸ But while the difference between the two classes of intelligible is real and intrinsic, the difference between the two kinds of understanding is only a difference in mode; hence, whether the soul

¹⁶¹ Sum. Theol., I, q. 85, a. 1 ad 3m.

¹⁵³ Sum. Theol., I, q. 85, a. 1 ad 1m.

¹⁵⁵ C. Gent., II, 55 §10.

¹⁵⁷ Ibid., III, 54 §9.

¹⁵² Ibid., a. 2 c; De Sp. Cr., a. 9 ad 6m.

¹⁵⁴ In III de An., lect. 12, §777.

¹⁵⁶ Ibid., II, 98 §9.

¹⁵⁸ Ibid., II, 91 §8; 94 §5; 96 §3-5.

is in or out of the body, it is the same human intellect, specified by the same formal object, but operating under the modal difference that actual intelligibility is presented or is not presented in phantasms.¹⁵⁹ Again, just as understanding the actuated intelligibility of sensible things abstracts from space and time,¹⁶⁰ so the spiritual substances that are in themselves actually intelligible exist outside space and time.¹⁶¹

From this it does not follow that the spiritual substances are not individual but only that they are not material.¹⁶² But it does follow that our direct intellectual knowledge of material things is incomplete: sense knows external accidents, and intellect knows the internal essence or quiddity;¹⁶³ knowing the essence, intellect knows all that the essence involves; but while such knowledge of God would be comprehensive,¹⁶⁴ it cannot include knowledge of contingent existence,¹⁶⁵ nor of contingent acts of will,¹⁶⁶ nor of material individuality. Thus, our science is of the universal and necessary, and to account for a contingent and particular judgment, such as that Socrates lived at Athens, one must appeal to understanding as reflecting on sensitive knowledge.¹⁶⁷

This indirect and reflective intellectual knowledge of the singular and contingent is presented by Aquinas in two manners. Earlier writings assign a series of steps: first, intellect grasps the universal; secondly, it reflects on the act by which it grasps the universal; thirdly, it comes to know the species that is the principle of that act; fourthly, it turns to the phantasm whence the species is derived; and, fifthly, it comes to know the singular thing that is represented by the phantasm. At once one is struck with the parallel between this process of reflection and the reflection by which one arrives at scientific knowledge of the essence of the soul; as the reader will recall, that involved reflection first on the act, then on the potency, and finally on the essence of soul. 169

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169 De Ver., q. 19, a. 1 ob 4a et 4m; ob. 5a et 5m; De An., a. 15 ad 8m, 10m.
160 In Boet. de Trin., q. 5, a. 2 c; De Ver., q. 2, a. 6 ad 1m; Sum. Theol., I, q. 57, a. 2 c; q. 86, a. 4 c.
161 C. Gent., II, 96 §9-10.
162 De Sp. Cr., a. 9 ad 15m.
163 De Ver., q. 8, a. 7 ad 4m (3ae ser.); q. 10, a. 4 ad 1m; In I Post. Anal., lect. 42 §5.
164 De Ver., q. 20, a. 5 c.
165 Ibid., q. 15, a. 2 ad 3m.
166 C. Gent., III, 56 §5.
167 Sum. Theol., I, q. 86, aa. 1 et 3.
168 In IV Sent., d. 50, q. 1, a. 3 sol; De Ver., q. 2, a. 6 c; q. 10, a. 5 c; De An., a. 20 ad 1m (2ae ser).
169 In III Sent., d. 23, q. 1, a. 2 ad 3m; De Ver., q. 10, a. 8 c; Sum. Theol., I, q. 87, aa. 1-4; In II de An., lect. 6 §308; III, lect. 9, §721, 724 ff.
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Accordingly, I cannot agree with the contention of R. P. Wébert that Thomist reflection on phantasm for knowledge of the singular is reflection in a unique sense and without a parallel in other types of reflection; indeed, though one may grant that the sidelong glance (regard dévié) which he postulates would be unique, I think it also must be said that such a glance not only fails to meet theoretical requirements (intellect no more glances than sight smells) but also has no basis in the texts.¹⁷⁰ On the other hand, it is necessary to point out the difference between reflection that arrives merely at a general notion of singularity and reflection that arrives at this singular thing. Tust as one can infer a universal notion of matter from the universal notion of form, 171 so also one can infer an abstract notion of singularity from the notion of quiddity or from any specific quiddity;¹⁷² but the abstract notion of matter does not suffice for knowledge of individual matter, 178 and there is no apparent reason why an abstract notion of singularity should suffice for knowledge of concrete singular things. In any case the reflection that Aquinas describes is not from knowledge of quiddity to knowledge of a proportionate singularity; it is a reflection that proceeds from knowledge of quiddity to knowledge of the act by which the quiddity is known; that act is an immaterial singular; it is known in empirical consciousness as singular; from that singular act is known the singular species that is its principle, and then the singular phantasm that is its source, and so finally the singular thing. The process Aquinas described is truly of the singular, truly reflective, and truly intellectual.

However, there is reason to believe that Aquinas later modified the above view. The reflection, involved in at least three of the four passages cited above, ¹⁷⁴ is metaphysical in character; it introduces the

¹⁷⁰ Except, of course, in so far as "regard dévié" is a devious manner of speaking of reflection on insight. See R. P. Wébert's article, "Reflexio," *Mélanges Mandonnet*, I, 307–10, Bibl. Thomiste XIII.

¹⁷¹ See De Ver., q. 10, a. 4 c.

¹⁷² See Cajetan, În I, q. 86, a. 1 §VI-VIII; J. de Tonquédec, La critiqué de la connaissance, Paris 1929, pp. 146 ff.

¹⁷⁸ De Ver., q. 10, a. 5 ad 1m.

¹⁷⁴ Note 168. All but *De Ver.*, q. 2, a. 6 c, speak of the species which is principle of the act; knowledge of this species supposes metaphysical analysis and reflection; but notes 145 and 150 above, together with the complicated peculiarity of the agent object as object (see note 191 below), will supply the reader with materials for grasping why Aquinas should not have adverted to the obvious difficulty mentioned in the text above.

"species qua" that is the principle of the act of understanding; it explains how a Thomist metaphysician might account for intellectual knowledge of the singular; but it does not explain how the mass of mankind is capable of affirming that Socrates lived in Athens. Whether Aquinas adverted to this difficulty or whether he was influenced by the *Paraphrases* of Themistius which do not suppose metaphysical knowledge, 175 can hardly be determined. But what is plain is that the *Pars Prima* presents a significant variation. It mentions not merely the item of metaphysical knowledge, the "species qua," but also the item of anyone's knowledge, the "species quae" that intellect understands in phantasm. The Evidently this change accounts for the substitution of "quasi quamdam reflexionem" for the elaborate process of reflection of earlier passages.

Revert to the problem: man by his imagination knows a singular and by his intellect understands a universal nature; the question raised is how can he know that the universal nature he understands is the nature of the singular that he is imagining; the very terms of the question involve reflection on one's acts of understanding and imagining; and the very nature of understanding, which initially is insight into phantasm, supplies the answer.

Intellectual knowledge of the contingent raises no further problem.¹⁷⁷ But there does remain a prior issue, namely, how can the act existing in a material organ, such as the phantasm, be the agent object of immaterial intellect. Now Aquinas himself was concerned with this possibility. He pointed out that, since the objects of Platonist science were immaterial ideas, Platonist doctrine had no use for an agent intellect; on the other hand, since the objects of Aristotelian science were material things and only potentially intelligible, there had to be a power of the soul to illuminate phantasms, make them intelligible in act, make them objects in act, ¹⁷⁸ produce the immaterial in act, ¹⁷⁹ produce the universal, ¹⁸⁰ by way of abstracting species from individual

¹⁷⁶ Themistii Paraphrases, In III de Anima, 4, ed. L. Spengel, Teubner Lipsiae 1866, pp. 176, 18—178, 30. The date of the medieval Latin translation has been discovered recently in a Toledo MS. The translation was completed at Viterbo, Nov. 22, 1267. See G. Verbeke, Rev. Phil. de Louvain, XLV (1947), 317.

¹⁷⁶ Sum. Theol., I, q. 86, a. 1 c. Cf. ibid., q. 85, a. 1 ad 5m; III, q. 11, a. 2 ad 1m; etc.

¹⁷⁷ Ibid., I, q. 86, a. 3 c. See Theological Studies, VIII (1947), 50 ff.

¹⁷⁸ Ibid., q. 79, a. 4 ad 3m; a. 7 c.

¹⁷⁹ Ibid., a. 4 ad 4m, 180 Ibid., a. 5 ad 2m; De Sp. Cr., a. 10 ad 13m,

matter or from material conditions.¹⁸¹ Such statements raise three questions: what precisely is illuminated, immaterialized, universalized; in what does the illumination, immaterialization, universalization consist; and how can that provide an object in act for the possible intellect?

As to the first question, it is plain that phantasms are illuminated, immaterialized, universalized, made intelligible in act. Aquinas said so repeatedly. More precisely, it is phantasm, not in the sense of act of the imagination, but in the sense of what is imagined, that is illuminated; for what is illuminated is what will be known; and, certainly, insights into phantasm are not insights into the nature of acts of imagination but insights into the nature of what imagination presents; as Aquinas put it, insight into phantasm is like looking in, not looking at, a mirror.¹⁸²

As to the second question, there is an interesting Thomist objection against a possible Averroist alternative that would account for our knowing by a separate possible intellect on the ground that species in the separate intellect irradiate our phantasms. The objection runs:

Secundo, quod talis irradiatio phantasmatum non poterit facere quod phantasmata sint intelligibilia actu: non enim fiunt phantasmata intelligibilia actu nisi per abstractionem; hoc autem magis erit receptio quam abstractio. Et iterum cum omnis receptio sit secundum naturam recepti, irradiatio specierum intelligibilium quae sunt in intellectu possibili, non erit in phantasmatibus quae sunt in nobis, intelligibiliter sed sensibiliter et materialiter....¹⁸³

From this passage it would seem that Aquinas did not consider his own theory to involve the reception in phantasm of some virtue or quality; what he affirmed was an abstraction that is opposed to reception.

The foregoing is negative. On the positive side there is a list of four requirements: the presence of agent intellect; the presence of phantasms; proper dispositions of the sensitive faculties; and, inasmuch as understanding one thing depends on understanding another,

¹⁸¹ Ibid., aa. 3 et 4; In III de An., lect. 10; De Sp. Cr., aa. 9 et 10; C. Gent., II, 76-78. ¹⁸² De Ver., q. 2, a. 6 c. Cf. q. 10, a. 9 c.

¹⁸³ De Unitate Int., c. IV, ed. Keeler §98. The "irradiatio phantasmatum" is an objective genitive; the "irradiatio specierum" seems to be a genitive of origin.

practice.¹⁸⁴ The first two requirements recur in a description of illumination of phantasm as a particular case of the general increase of sensitive power resulting from the conjunction of sense with intellect.¹⁸⁵ The third requirement is connected with the work of the *cogitativa* which operates under the influence of intellect.¹⁸⁶ and prepares suitable phantasms;¹⁸⁷ the significance of this preparation appears from the statement that different intelligible species result from different arrangements of phantasms just as different meanings result from different arrangements of letters.¹⁸⁸ The fourth requirement is a matter of common experience: the expert can understand where the layman can be only puzzled; the expert sees problems where the layman can barely suspect them.

The third question is whether the foregoing really suffices. It suffices if it enables one to distinguish between intelligible in potency, intelligible in act but understood in potency, and understood in act, just as clearly and precisely as we distinguish between colors in the dark, colors in daylight but not actually seen, and colors actually seen. Moreover, since the work of the *cogitativa* and the influence of past experience regard particular instances of understanding, the main burden of accounting for the threefold distinction must rest upon the prior requirements, namely, the presence of agent intellect and the presence of phantasms.

Now I think that any reader who will recall what has been gathered from Aquinas' statements on intellectual light¹⁸⁹ will also see that Aquinas in affirming an abstractive illumination of phantasm has left us not a puzzle but a solution. The imagined object as merely imagined and as present to a merely sensitive consciousness (subject) is not, properly speaking, intelligible in potency; ^{189a} but the same object present to a subject that is intelligent as well as sensitive may fairly be described as intelligible in potency. Thus, pure reverie, in which image succeeds image in the inner human cinema with never a care for the why or wherefore, illustrates the intelligible in potency.

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184 Sum. Theol., I, q. 79, a. 4 ad 3m.
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¹⁸⁵ *Ibid.*, q. 85, a. 1 ad 4m.

¹⁸⁸ *Ibid.*, q. 78, a. 4, ob. 5a et ad 5m.

¹⁸⁷ C. Gent., II, 73 §14-16 and 26-28.

¹⁸⁸ Sum. Theol., II-II, q. 173, a. 2 c.

¹⁸⁹ Theol. Stud., VIII (1947), 65-70.

¹⁸⁹a De Pot., q. 7, a. 10 c: ipsa res quae est extra animam, omnino est extra genus intelligible. The meaning is that material entities of themselves are not related to intellectual knowledge; the context deals with the non-reciprocal real relation of scientia ad scibile.

But let active intelligence intervene: 190 there is a care for the why and wherefore; there is wonder and inquiry; there is the alertness of the scientist or technician, the mathematician or philosopher, for whom the imagined object no longer is merely given but also a somethingto-be-understood. It is the imagined object as present to intelligent consciousness as something-to-be-understood that constitutes the intelligible in act. Further, this illumination of the imagined object, this reception of it within the field of intellectual light, has the characteristic of being abstractive; for it is not the imagined object in all respects that is regarded as a something-to-be-understood; no one spontaneously endeavors to understand why "here" is "here" and why "now" is not "then"; effort is confined to grasping natures, just as explanation is always in terms of the character of persons, the natures of things, the circumstances of events, but never in terms of their being then and there. Finally, inquiry and wonder give place to actual understanding; the imagined object no longer is something-to-beunderstood but something actually understood; this involves no difference in the phantasm but only in the possible intellect, just as the difference between colors in daylight and colors actually seen involves no difference in the colors but only in eyes and sight; accordingly, the intelligible "species quae," which is understood in phantasm, is like the actually seen color, which is seen in the colored thing. 191

It remains that a note be added on the *per se* infallibility of intellect. In Aristotle as well as Aquinas it is described by pointing out that definitions are neither true nor false.¹⁹² But infallibility seems to mean more than such a negation and, in fact, there is another element to be observed in the original Aristotelian statement and in

¹⁹⁰ This intervention would be what is meant by Sum. Theol., I, q. 85, a. 1 ad 3m: "...ex conversione intellectus agentis supra phantasmata..."

^{191 &}quot;Actually seen" is predicated of color by extrinsic denomination; similarly the actu intellectum is not a reality received in the phantasm. Hence the accuracy of the expression (C. Gent., II, 59 §14) that has phantasms actu intellecta inasmuch as they are one with the actuated possible intellect. This factor is to be born in mind in connection with the problems raised by notes 35, 36, 145, 150, 174. Though I have spoken throughout in terms of what the species qua ultimately proves to be, namely, a principium formale quo (De Sp. Cr., a 9 ad 6m), accurate interpretation must include awareness of a gradual process of clarification and, no less, of the economic survival in later works of less accurate modes of speech which do not affect the immediate issue.

¹⁹² In III de An., lect. 11 §762,

the Thomist Commentary. It is that infallibility is with respect to the first object of intellect, the quod quid est, the $\tau \delta \tau l \tilde{\eta} \nu \epsilon l \nu a l$; further, infallibility in direct understanding is like the infallibility of sight. Plainly, this seems to suggest that one examine insight for its infallibility; moreover, what one finds, seems to me to provide a desired positive complement to the negation that definitions are neither true or false. No one misunderstands things as he imagines them: for insight into phantasm to be erroneous either one must fancy what is not or else fail to imagine what is; of itself, per se, apart from errors in imagining, insight is infallible; and, were that not so, one would not expect to correct misunderstandings by pointing out what has been overlooked or by correcting what mistakenly has been fancied.

CONCLUDING SUMMARY

Abstraction is from matter, and matter is an analogous term. One makes an initial approximation to the analogy by considering the proportion of wood to tables and bronze to statues; this broad analogy makes matter the subject of change or of difference, and so substance and genus are instances of matter. But an observation made by Averroes and repeated by Aquinas¹⁹³ fixes the proximately relevant analogy: natural form stands to natural matter, as the object of insight (forma intelligibilis) stands to the object of imagination (materia sensibilis); the former part of this analogy supplies the basis for an account of the metaphysical conditions of abstraction; the latter part supplies the basis for its psychological description.

On the metaphysical side, because the material thing has an intelligible component, form, it follows that what is known by understanding is real and not merely ideal as materialists, idealists, and pseudo-realists are prone to assume. Again, because the thing is form and matter, there is a possible knowledge of the thing by abstraction of form from matter. Further, because matter is a principle of limitation, so that form of itself is universal, 194 this abstract knowledge will be universal. But the act of knowing is as much an ontological reality as the known: as the thing is constituted determinately by its form, so the knowing is constituted determinately by its form, which will

¹⁹⁸ De Ver., q. 10, a. 8 ad 1m (1ae ser).

¹⁹⁴ Ibid., q. 10, a. 5 c.

be similar to the form of the known; on the other hand, there cannot be material as well as formal assimilation of knowing to known, else the knowing would be, but not know, the known; further, where the knowing has the characteristics of necessity and universality, its form must be received immaterially; finally, a general theorem that knowledge is by immateriality may be constructed within the assumptions of the Thomist system.

On the psychological side, because the object of insight is the object of pre-conceptual knowing, there is a certain vacillation in its description. Primarily insight adds to our knowledge a grasp of intelligible unity in sensible multiplicity; as the grasp of this unity, it is intelligentia indivisibilium. 195 Still, it is not any unity or unity in general that is grasped, but the unity specific and proportionate to the sensible multiplicity presented; further, this intelligible unity divides the sensible multiplicity into a part necessary for the unity to be the unity it is and, on the other hand, a residue that also happens to be given; the former part is described as partes speciei, de ratione speciei, materia communis; the latter residual part is described as partes materiae. The dividing line does not always fall in the same place: physical abstraction is from individual or assigned matter with its consequents of determinate place and time and the possibility of change; mathematical abstraction is from sensible matter (hot and cold, wet and dry, bright and dark, etc.) as well. The so-called third degree of abstraction is more properly named a separation; it is different in kind from the preceding; because it is a separation, disputes about real distinctions are disputes about the validity of metaphysical concepts. Forma intelligibilis would seem to be, at least normally, the specific intelligible unity. Ouidditas rei materialis is the intelligible unity plus common matter; primarily, it is the quiddity of substance; 196 but it is sound Aristotelian doctrine to speak of the quiddities of accidents. 197 Species has both the meaning of form and the meaning of quiddity.198

There are three stages to physical and mathematical abstraction: the objective, the apprehensive, the formative. Objective abstrac-

¹⁹⁵ Aristotle's study of unity is a study of the άδιαιρετόν; Met., I, 1, 1052a 36; b 15. Hence, De An., III, 6, 430a 26; 430b 5; lect. 11.

¹⁹⁶ Sum. Theol., I, q. 85, a. 5 c. ¹⁹⁷ In VII Met., lect. 4. ¹⁹⁸ Ibid., lect. 9 §1473.

tion is the illumination of phantasm, the imagined object; it consists in treating the imagined object as something to be understood as far as its specific nature goes; like action and passion, it is one reality with two aspects; as effected by agent intellect, it may be named efficient; as affecting the imagined object, it may be named instrumental. Next, with regard to apprehensive abstraction, one has to distinguish between first act and second act: first act is the possible intellect informed and actuated by a species qua; second act proceeds from first as esse from form and action from principle of action; accordingly, the procession is processio operationis; the second act consists in grasping, knowing, considering an intelligible species quae in the imagined object. Per se this second act is infallible; consequent to it by a sort of reflection, there is indirect, intellectual knowledge of the singular, i.e. a reflective grasping that the universal nature understood is the nature of the particular imagined. Thirdly, there is the act of formative abstraction; this consists in an act of meaning or defining; but whenever there is an act of meaning or defining, by that very fact there is something meant or defined; accordingly, formative abstraction may also be described as positing a universal ratio or an intentio intellecta.

The principal efficient cause of apprehensive abstraction is agent intellect; the instrumental efficient cause is the illuminated phantasm; hence not only is the impression of the species qua a passio but also the consequent second act, intelligere, is a pati; again, the procession of species qua and intelligere from agent intellect and phantasm is a processio operati; but, as already noted, the procession of intelligere from species qua is processio operationis. Now formative abstraction proceeds from apprehensive abstraction just as the apprehensive abstraction proceeds from agent intellect and phantasm; hence its procession is processio operati; and, as ground of this procession, intelligere is named dicere. However, the procession of the formative abstraction has a special property; it is an emanatio intelligibilis, an activity of rational consciousness, the production of a product because and inasmuch as the sufficiency of the sufficient grounds for the product are known. Just as we affirm existence because and inasmuch as we know the sufficiency of sufficient grounds for affirming it, so also we mean and define essences because and inasmuch as we understand them. In similar fashion by processio operati and emanatio intelligibilis a rational act of love proceeds from a judgment of value.

Let us now compare objects. Objective abstraction, the illumination of phantasm, constitutes the imagined object as something to be understood with regard to its specific nature. Apprehensive abstraction, insight into phantasm, actually understands what objective abstraction presented to be understood. But what was presented to be understood was the imagined object, the phantasm; hence it was perfectly natural and no less reasonable for Aquinas so repeatedly to affirm that the object of human intellect in this life was the phantasm; if one cannot see that, then it would seem that one has very little idea of what Aquinas was talking about. But if what is understood is the phantasm, the imagined object, still what is added to knowledge, what is known, precisely by understanding is the forma intelligibilis, the quiddity, the species intelligibilis quae. This is known in phantasm just as actually seen colors are seen in colored things. merely that there is the act of understanding and simultaneously the act of imagination, each with its respective object. But the two objects are intrinsically related: the imagined object is presented as something to be understood; and the insight or apprehensive abstraction grasps the intelligibility of the imagined object in the imagined object; thus, insight grasps imagined equal radii in a plane surface as the necessary and sufficient condition of an imagined uniform curve; imagination presents terms which insight intelligibly relates or unifies. 199

Thus, while apprehensive abstraction is not of material conditions still it is not of something apart from material conditions. It is formative abstraction that sets up the object that is apart from material conditions; it does so by meaning it or by defining it; one can mean "circle" without meaning any particular instance of circle; but one cannot grasp, intuit, know by inspection the necessary and sufficient condition of circularity except in a diagram. In terms of the universal,

199 This is the critical point in philosophy. For a materialist the terms are real, the intelligible unification subjective; for an idealist the terms cannot be reality and the intelligible unification is not objective; for the Platonist the terms are not reality but the intelligible unifications are objective in another world; for the Aristotelian both are objective in this world; Thomism adds a third category, existence, to Aristotelian matter and form.

apprehensive abstraction knows the universal in a particular instance; formative abstraction knows the universal that is common to many: and reflection on formative abstraction knows the universal as universal, the universal precisely as common to many. Again, the objects of apprehensive and of formative abstraction are essentially the same but modally different; they are essentially the same, for it is the same essence that is known: they are modally different, for what apprehensive abstraction knows only in the imagined instance, formative abstraction knows apart from any instances. On the other hand, though apprehensive abstraction must be with respect to an instance it must always be of a universal for always the individual is pars materiae; but while formative abstraction can posit the universal apart from any instance, still the act of meaning can mean the individual just as easily as it can mean the universal; but it means the universal in virtue of apprehensive abstraction and it means the particular in virtue of consequent indirect knowledge of the particular; and so while the particular can be meant, it cannot be defined explanatorily, quidditatively. Finally, there is the contrast between quidditas and res: apprehensive abstraction knows the quidditas such as humanitas; formative abstraction posits the res such as homo; again, apprehensive abstraction knows the forma intelligibilis, but formative abstraction posits the thing in which metaphysical analysis will uncover a forma naturalis.

Our plan of operations has been to investigate, first, the psychology relevant to an account of the Thomist concept of verbum; secondly, the relevant metaphysics; thirdly, issues in which the relevant psychology and metaphysics are inextricably joined together; and, fourthly, the application of this psychology and metaphysics to divine knowledge. The present article concludes the first three sections of the investigation. All that has been said so far and all that remains to be said can be reduced to a single proposition that, when Aquinas used the term, intelligibile, his primary meaning was not whatever can be conceived, such as matter, nothing, and sin, but whatever can be known by understanding. The proof of such a contention can only be inductive, i.e. it increases cumulatively as the correspondence between the contention with its implications and, on the other hand, the statements of

Aquinas is found to exist exactly, extensively, and illuminatively. But, may it be noted, the proof of any opposed view cannot but have the same inductive character; insofar as such proofs of opposed views exist, perhaps some readers will agree with me in not finding their correspondence with the statements of Aquinas to offer a comparable measure of exactitude, extent, and light.

To be continued