Species: The Theoretical Context.

In the Prima Pars after treating of the essence of the soul 75, its union with the body q 76, its potencies in general q 77, and its-cognitive in particular its cognitive qq 78 79 and its appetitive potencies qq 80-83, St. Thomas proceeded to treat of intellectual acts [qq 84-89: NB In the introduction to I 84 the Leonine edition/deletes the four references to habits as well as acts that occur in the text of the Piana]. Of the six questions on intellectual acts, the first three treat of our intellectual knowledge of bodies, the fourth of soul's self-knowledge, the fifth of its knowledge of separate substances, and the sixth of its knowledge in the next life when it is separated from the body. ~~The division of the three questions on intellectual acts by which we know bodies.~~

speaks only of acts and/

The division of the first three questions is as follows: "Circa cognitionem vero corporalium, tria consideranda occurrunt: primo quidem, per quid ea (i.e. anima) cognoscit; secundo, quomodo et quo ordine; tertio, quid in eis cognoscit." I 84 Introd. Thus, it appears that the rubricist who devised the titles for the questions and articles of the Summa [See B. Geyer, S. Thomae de Aquino Quaestiones de Trinitate divina, Florilegium Patristicum, fasc. XXXVII, p. 3, Bonn 1934] should have written above q. 84 not "Quomodo anima coniuncta..." but "Per quid anima coniuncta intelligat corporalia quae sunt infra ipsam."

Thus q. 84 treats of the medium (per quid) of the acts by which our intellects in this life know bodies. The first five articles define the Thomist position by its opposition to the positions of Heracleitus, Empedocles, Plato, Avicenna St. Augustine and Avicenna. The sixth affirms the origin of/intellectual knowledge in sensitive knowledge; the seventh treats of the necessity of sensitive knowledge even after intellectual knowledge has been attained; and the eighth deals with the relation of actual sensitive knowledge to intellectual judgment.

our

method employed in the first six articles

The dialectical ~~exposition~~ proceeds from the common ground that knowledge is by assimilation: "Hoc enim animis omnium in communiter inditum fuit, quod 'simile simili cognoscitur.'" I 84 2 c. ~~It develops by bringing in two types of consideration: on the~~ one hand, there are appeals to matters of fact, such as the possibility of natural science (I 84 1 Sed contra and c.), the extravagance of positing bones, flesh and other compounds in the soul or of saying that fire knows fire (I 84 2), the ascending scale of immateriality in sentience, human intelligence, angelic intelligence, divine intelligence (ibid), the fact that we do not forget what we know naturally or that the man born blind does not understand color (I 84 3).

do not always know in act, that we

It develops by bringing in two types of consideration: on the one hand there are appeals to matters of fact; on the other there is the employment of Aristotelian categories of analysis. ~~The result is an interpretation within Aristotelian categories of the facts and, at the same time,~~ of the facts

The ultimate result is an interpretation/through Aristotelian categories and within the wider context of opposing a variety of opposing philosophies.

In the first article

Heracleitus and Plato both stumble against the fact that natural science, and so intellectual knowledge of moving bodies, is possible [I 84 1 Sed con et c]. The possibility of ~~kn~~ such science is the possibility of an assimilation of mind to material things. The possibility of such assimilation ~~kies~~ appears from a twofold application of Aristotelian categories of analysis, ~~first~~, to material things, secondly, to acts of understanding. Apply these categories to things, and the Heracleitean absolute flux ~~dis~~ vanishes: every movement presupposes an unmoved; accidental change does not modify substance; substantial change leaves prime matter intact; and between variable terms there are invariant relations (ad 3m). Apply these same categories to acts of understanding. Such acts are universal in scope and they involve a measure of necessity; since the modal attributes of an act follow from the modal attributes of the form whence the act proceeds, one must grant that the forms by which understanding operates ~~are immaterial, immutable~~ possess some immateriality, universality, immutability. Still the principle of assimilation does not require that the modal attributes of the act of understanding and of the form whence it proceeds, be also the modal attributes of the form of the thing that is understood. For modal attributes vary, not from variations in form, but from variations in the subject in which form is received: "receptum est in recipiente per modum recipientis." Thus, this second application of Aristotelian categories ~~at once~~ both shows where Plato went wrong and explains how assimilation of intellect to bodies is possible. Plato went wrong in extending modal attributes from the knowning to the known; that gave him his abstract and subsistent ideas. On the other hand, the possibility of an assimilation of immaterial, universal, necessary, certain knowledge to material, particular, contingent, changing things arises from the possibility of similar forms being received in different types of subject and so possessing opposed modal attributes.

The second question is whether the soul knows bodies by its own essence. The solution again appeals to the principle of assimilation, to transpose the question into the form, Is the soul in its essence similar to bodies?

Heracleitus and Plato both stumble against the fact that natural science is possible. Its possibility is the possibility of an assimilation of mind to material things. But Heracleitus deemed bodies to be in an absolute flux, and so unassimilable by mind with its fixed certitudes; and Plato erred, first of all, by failing to challenge this position and attempting to save natural science by substituting for it knowledge of abstract and subsistent ideas or species. There is not an absolute flux, for all movement presupposed what does not move; ~~subsk~~ accidental change does not modify substance; substantial change ~~does-not~~ leaves prime matter intact; and between variable terms there are invariant relations (3m). Even so, it is true

The second article in part re-affirms the first and in part anticipates the third. By the principle of assimilation the question whether the soul by its own essence knows bodies is transposed into the question whether the soul by its own essence is similar to bodies. Empedocles had taught such a doctrine: because the soul consists of the same elements as the rest of the material universe, it can know that universe. But such a view breaks down in two distinct fashions. It accounts only for knowledge of the elements in the universe; to know the compounds, such as bones and flesh and the like, it would be necessary for the soul to consist not merely of the elements but also of the compounds; and such consistence is at least fantastic. But again it fails to explain why the elements fail to have knowledge; if the soul knows fire because the soul consists of fire, then why should not fire know fire. The error here is the inverse of Plato's: Plato wanted things to be immaterial and abstract, because intellectual knowing is such; Empedocles, on the other hand, wanted knowing to be material, because things are material. But apply the categories of Aristotelian analysis, and you will find that matter is the principle by which forms are individuated and, as it were, confined to being just their ~~individual~~ particular/selves; on the other hand, knowledge transcends its subject; so that materiality and knowledge must be opposites. For this reason the material reception of forms precludes knowledge, as in plants, while immaterial reception of forms yields knowledge, as in animals; further, the more immaterial the reception, the more perfect the knowledge, so that intellectual knowledge, which abstracts from material conditions, surpasses sensitive knowledge, which does not; ~~finally, among intellects the greater their immateriality~~ and sight surpasses the other senses because it is less material. But, if this is so, it follows that a being can know all things by its own essence only inasmuch as its essence ~~is comprehensive of all~~ immaterially possesses or includes all; but that possession is proper to God alone, in whom are all things virtually as effects are in their cause; hence God alone knows all by his own essence; the soul ~~does not~~ cannot do so; and neither can an angel.

Still it is true, as Aristotle said, that the soul somehow is all things; it is them in potency [I 84 2 2m]; and that excludes Platonic reminiscence. For the species by which intellect knows bodies are not innate. A form, or species, is a principle of action; if one is only in potency to the action, it follows that one is only in potency to the form whence the action naturally proceeds. Now men are in potency to knowledge; from that potency they are brought to acts of sensation by the action of sensible objects on the senses; and from potency they are brought to acts of understanding either by being taught or by personal discovery. Hence, since potency to action involves potency to the principle of action, one must say that the soul is initially in potency to the similitudes (species forms) which are the principles of sensation and understanding. Such were the grounds of Aristotle's rejection of innate species and of his affirmation that intellect initially is in potency to all species. It remains, however, that the foregoing argument is not quite complete: a subject can possess a form and yet ~~not actually act~~ be hindered from actual operation

I 84 3 c

by some
obstacle. In this fashion Plato advanced that the soul naturally is replete with all intelligible species but, by its union with the body, is ~~prevented~~ impeded from/operation. Such a position does not stand scrutiny. It is rather extravagant to ~~adva~~ propose that the soul naturally is in possession of all knowledge and yet in complete oblivion with regard to it all; one does not forget the little one knows naturally, such as the principle that the whole is greater than the part. Moreover, one could not maintain that the union of the soul to the body is natural, as it is, yet hold that the body is a wholesale obstacle to the natural operations of the soul. Finally, were species innate, there ~~xxxx~~ would be no accounting for the fact that a man born blind can know nothing about color.

intellectual/

But if species are not innate, it might be thought that they come to us from the separate substances, either in Platonic fashion as though the separate substances were intelligibles to be known, or in Avicennist fashion as though the separate substances were intelligences communicating to us the species they possess. But neither position accounts for the union of the soul to the body; ~~in itself, the soul is independent of matter~~ the ground of that union has to be either ~~the existence of the soul~~ that the soul cannot exist without the body or else that the soul cannot operate without the body; but it is naturally immortal, and so can exist without the body; it remains that the ground of the union lies in a need of the body for operation; and since the proper operation of the soul is understanding, the soul's need of the body would seem to be understanding's need of the body. But how can we need bodiesto understand, if species come to us from separate substances? On that issue Plato is involved in a vicious circle: understanding needs ~~xxxx~~ bodily senses to be wakened from the stupor caused by union with the body; but why was it united with the body in the first place? Avicenna is no better off. He had it that the soul needs the body and its senses as a stimulus to turn to the separate agent intelligence and from it receive species. But if it is natural to soul to turn to the agent intelligence, why does ~~it xxx do so without benefit~~ nature never assert itself withough benefit of stimulus? and why the correlation between the sensible stimuli and the/species received? why might not an auditory stimulus obtain for the blind an understanding of color?

I 84 4

never

intelligible/

St. Augustine provided a variant on the Platonist position. He denied the subsistence of the ~~xxx~~ separate forms or ideas, but placed them all in the mind of God both as principles by which God forms things and as principles by which the human soul knows. However, one must understand St. Augustine correctly. He did not pretend that one knew the natures of things by taking a look at the divine ideas; he insisted on research "per locorum et temporum historiam"; and he restricted the vision of God to the holy and the pure. ~~To affirm that the divine ideas are principles of our knowing~~ might mean either of two quite different things; they might be principles of knowing as known objects are principles or mirrors are principles; but in that fashion the divine ideas are principles of knowing for the blessed in heaven.

I 84 5

If then one/~~thinks~~ speaks of the divine ideas as principles of knowing and means that these ideas are objects of our knowing or mirrors in which ~~we~~ knows, one is talking about the knowledge of the blessed in heaven. If on the other hand one means that the divine ideas are causes of our knowing as the sun is the cause of our seeing, one is talking about our knowledge in this life; for the light of our human intelligence is but a created participation of the uncreated light which contains the divine ideas. None the less, since the light of intelligence within us is not the total cause of our knowing, our intellects stand in need of the senses to obtain from them the species of material things.

I 84 6 The sixth article/affirms what previous the five

In the sixth article (I 84 6) the dialectical play between opposing positions reaches its climax. Aristotle had established both in the beginning of the Metaphysics and at the end of the Posterior Analytics that the principle of our knowledge was from sense. In this affirmation he held the synthetic mean between the thesis of Demonritus and the antithesis of Plato. For, according to Deocritus, since he made no distinction between sense and intellect, the sole cause of our knowledge is a flow of images from ~~ma~~ bodies to our souls. Plato, on the other hand, would not admit external bodies to do more than excite the sensitive soul to produce sensations, nor sense to do more than excite intellect. But Aristotle maintained that bodies produced sensations, not by a transference of images, but by the causal activity of the sensible object on the compound of sensitive organ and sensitive potency, so that the sensation was a "motus coniuncti." ~~With regard to intellectual knowledge, however, he had to postulate an immanent agent intellect; the corporeal cannot act on the incorporeal, for the agent ranks higher than the patient.~~ ~~With regard to intellectual knowledge, however, he neither~~ Now intellectual knowledge is not such a ~~motion~~ movement of a compound, and so it cannot be produced, as sensation is produced, solely by the imprint of sensible bodies. On the other hand, Aristotl~~e~~ did not follow Plato to advance that intellectual operation was produced by the imprint of higher beings, namely, the separate, intelligible forms. His middle way was to posit an immanent by abstraction/agent intellect that/made the sensible data represented by the imagination intelligible in act, so that what is known by sense is, not the total and complete cause, but the material part of the cause of intellectual knowledge.

The seventh article extends the affirmation of the sixth to every act of understanding. Without an imaginative representation the soul understands nothing. Not only in learning a science but also in all subsequent use of the form so acquired there must be an act of the imagination and accordingly of the other sensitive potencies. This necessity appears in two manners. One has to account for the fact that a corporal lesion of sensitive organs prevents acts of understanding even in a man who earlier had learnt a science [I 75 2 3m]. Further, one has to account for the fact that, whenever ~~one~~ man is trying to understand something, he forms images by way of examples in which he grasp/s, as it were, ~~xxhexinspects~~ by inspection, what he is endeavoring to understand.

In like manner, whenever one desires to make someone else understand something, one gives him instances and examples from which he can form images and so come to understand. Now the ultimate ground of such facts is to be sought in the parallel, the proportion, between cognitive faculties potencies and knowable things. An angel has no body and so the proper object of its intellect is immaterial intelligible substance separate from any body; and only through knowing such intelligible objects does the angel know material objects. On the other hand, human intellect is linked with a body, and so its proper object is quiddity or nature existent in corporeal matter; and through knowing the natures of visible things, human intellect ascends to some knowledge of invisible things. Now the nature of a material thing cannot exist apart from corporeal matter; therefore, by the law of parallel and proportion, it cannot be known completely and truly unless it it is known in as existing in some particular instance. But the particular is apprehended by sense and imagination; hence-necessarily hence for intellect to know its proper object, namely the quiddity or nature existing in corporeal matter, it must turn to imaginative representations and so behold, not an abstract universal nature, but an universal nature existing in a particular instance. This would not be true, of course, were the proper object of human intellect not what it is but either the separate form, which is the proper object of angelic intellect, or the Platonic ideas which are the forms of sensible things not subsisting in sensible things.

As the seventh-and sixth and seventh articles deal with the relation between sense and the act of understanding, so the eighth articles deals with the relation between sense and the act of judgment. Now it is a commonplace of morals that a man is not responsible for acts performed during sleep; but that would not be true if sleep did not impeded free use of reasn and intellect; and so judgment must depend on sense. Why does it? Because one cannot judge-a pass judgment on things without knowing all that is relevant; least of all can one do so when ignorant of the very end and term of judgment. But just as the end of applied science is some product, so the end of natural science is what is apprehended mainly by sense; for the natural scientist would not bother about the nature of stones and horses, were he not intent on knowing the reasons for what he apprehends by his senses. Hence just as the artisan cannot pass judgment on a cutting tool without knowing what it is to cut, so the natural scientist cannot utter the judgments of his science while ignorant of sensible things. Moreover, to extend this theorem, since all else the human intellect knows is in its present state is known by sensible analogy, not merely the judgments of artisans and natural scientists but all judgment our judgments postulate an unimpeded use of our senses.

The argument of these eight articles is composed of several stands: in a context of opposing philosophic positions by applying the categories of Aristotelian analysis to matters of fact, step by step, Aquinas defined his own position. The Aristotelian categories are potency and act, matter or recipient and form, form and operation. Equally these categories are applied to the knowing and the known. There are things composed of matter and form, existing, and operating. There are knowers composed of body and soul, possessing sensitive potencies which are forms or first acts of sensitive organs, possessing agent intellects which are created participations of uncreated light and possible intellects which are not acts or forms of organs but pure recipients of forms whence proceed ~~the operations of~~ acts of understanding. ~~The question deals with these forms in their modal attributes (a 1), their immateriality (a. 2), in our need of acquiring them (a 3), in the irrelevance of separate ideas or substances to produce them (a 4), in the significance insufficiency of our light of intelligence to supply them (a 5), in the causation of sensible data~~

in/

The question deals with these forms in so far as they are the principles of our understanding material things. Hence the fundamental affirmation of fact: natural science is possible.

Species intelligibilis

a forma — 1 to which our intellects are in potency

2 a principle of the operation, understanding

to subject 3 ~~a principle~~ received in an immaterial recipient

4 possessing opposed modal attributes to the similar forms of the understood

5 produced in us [not by Platonic ideas / not by species of separate intelligences / not by seeing a work of God]

[α by sensible knowledge as matter of its cause / β by intellectual light]

6 capable of going to act only when a phantasm represents its object.