

Whether Everything That Is, Is Good

MARGINAL NOTES ON ST. THOMAS'S EXPOSITION OF BOETHIUS'S *DE HEPTOMADIBUS*

INTRODUCTION*

Because many of our contemporaries are guided by a stray, blinded thinking whose expression tends to exalt the contingent and to minimize or deny the eternal, there is danger of their deceiving, in one form or another, even the elect. Lest we whose light is better be misled, we have the greater need to clarify and defend our own fundamental notions, since a mistake in these would be the root of many errors. There is, perhaps, no better way to renew the great basic truths than to bring them to new life and light within our own minds through the doctrine of a master. At present, false conclusions as to the nature of being and of the good are current; we shall do well, then, to meditate upon the teaching given to us by Saint Thomas Aquinas on these important notions.

We are, indirectly, in debt to "John, a deacon of the Roman Church" of the sixth century for the particular work we have in mind to study. He was evidently an earnest student whose sincere desire for more insight into difficult problems had its reward, for Boethius responded to his request for a clearer explanation of how created substances are good, by writing an answer in the *De Heptomadibus* which solves the difficulty in a few pages.¹ Seven centuries later, Saint Thomas added value to this work by an exposition of it, in which he further elucidates the solution so succinctly given by Boethius. It is this exposition with its many implications, that we hope to make as much as possible our own, drawing into its compass related clarifications from other works and seeing it in relation to a few questions of the day. Most especially it will be our concern to expose the important distinctions between *ens per se* and *ens secundum quid* on the one hand, and *bonum per se* and *bonum secundum quid* on the other.

In accomplishing this task we shall be acting upon the advice — usually accredited to the Angelic Doctor himself — written to another John, also an earnest student, in the thirteenth century: to follow the streamlets in his study before going out to the ocean.

*The present notes are the first of a series covering all of both the text of Boethius and the exposition by St. Thomas.

1. We note from SAINT THOMAS'S introduction to the *De Trinitate* that this same John, because of his "desire to know," was the occasion for two other works of Boethius: one, on the distinction of Persons and unity of essence in the Trinity; the other, on the two natures and one Person in Christ.

I. THE PROBLEM AND PRELIMINARY CONSIDERATIONS

The problem that gave John difficulty would find few of us prompt with a solution. Saint Thomas states it more fully than does Boethius:

It is said that created substances in as much as they are, are good; yet, on the other hand, it is said that creatures are not substantial goods, but that to be a substantial good is proper to God alone. Now whatever belongs to any thing in as much as it is, seems to belong to it substantially; and so if created substances, in as much as they are, are good, it seems that they are, in consequence, substantial goods.¹

Or, we might put it this way:

Good is a transcendental attribute of being. Hence, whatever is, is good in so far as it is.

It would seem to follow, then, that substances, being *ens per se*, should also be *bonum per se*.

Yet it is said that this is true of God only.

John does not understand this and, while encouraging Boethius's usual concision, begs for the further light of a little more evidence. The disciple asks his master to reply by a method that will conceal his teaching from the many — a request that might strike one at first as strangely selfish and illogical. Yet, not infrequently men who were advanced in purely natural wisdom, as well as they who were versed in sacred doctrine have agreed that in so doing they were being more faithful to wisdom and more prudent. The author of *Eccelesiasticus* says: "How very unpleasant is wisdom to the unlearned, and the unwise will not continue with her... For the doctrine of wisdom is according to her name, and she is not manifest to many."²

In our time of philosophy-for-the-millions trend, it may be of interest and value for us to note briefly the reasons that sustain the request of the Deacon.

The many whose minds have not been trained for abstract thinking are more apt to be harmed than helped by having proposed to them truths beyond their reach or readiness. They may be led astray by their incomprehension of what is said, or may fall into unwarranted doubts concerning it and other problems. Gregory, in a gloss on *Exodus*,³ suggests a certain "scandal of mind"⁴ that may be caused by setting forth lofty

1. "Dicitur enim, quod substantiae creatae, inquantum sunt, bonae sunt; cum tamen dicatur, quod substantiae creatae non sunt substantialia bona, sed hoc dicitur solius Dei proprium esse. Quod enim convenit alicui inquantum est, videtur ei substantialiter convenire: et ideo si substantiae creatae, inquantum sunt, bonae sunt, consequenter videtur quod sint substantialia bona." — *In librum Boetii de Heptomadibus*, lect. 1.

2. *Ecdl.*, vi, 21, 23. All quotations from the Bible are from the Douay version.

3. *Exod.*, xxi, 33.

4. "Si quis aperuerit cisternam, dicit Glossa Gregorii: 'Qui in sacro eloquio iam alta intellegit, sublimis sensus eorum non capientibus per silentium tegat, ne per scandalum interius aut fidelem parvulum, aut infidelem qui credere potuisset, interinat. Haec ergo ab eis quibus nocent, occultanda sunt; sed in colloquutione potest fieri distinctio, ut eadem sapientibus seorsum manifestentur, in publico taceantur.'" — *In Boetii de Trinitate* q. 2, a. 4, c. (Parva ed.), Vol. XVII, p. 365b. Translation by Sister Rose EMMANUELLA BRENNAN, S.H.N., Herder, 1946, p. 64.

and subtle truths to those who are not prepared for them. Saint Thomas, too, says in the *De Trinitate*: "If any subtleties are proposed to uncultivated people, these folk may find in the imperfect comprehension of them matter for error."¹ These are the "little ones in Christ" who need "milk to drink, not meat."²

Nor is Saint Augustine of the opinion that doctrine can be equally imparted to all. He therefore suggests the use of "obscuring words" to shield it when need be. Saint Thomas quotes thus from the *De Doctrina christiana*:

There certain truths are, by reason of their own character, not comprehensible, or scarcely so, even when explained with every effort on the part of the speaker to make them clear, these one rarely dwells upon with a general audience, or never mentions at all: but in writing, the same distinction cannot be adhered to, because a book, once published, can fall into the hands of any one at all, and therefore some truths should be shielded by obscuring words so that they may profit those who will understand them and be hidden from the simple who will not comprehend them.³

The passage concludes by saying that thus no harm will come to any one, because the author will have fulfilled his duty in bringing the truths to the minds of some, and those who can not understand will not read further.

The citations we have given concern the protection of a multitude of good, well-meaning men who simply lack an adequate intellectual formation. But there are others who are dull and slow through their own fault, their own perversity of will. From these Christ concealed the "secrets of the kingdom" by the use of parables, as He told His disciples: "Because to you it is given to know the mysteries of the kingdom of heaven: but to them it is not given... Therefore do I speak to them in parables: because seeing they see not, and hearing they hear not, neither do they understand."⁴ And Our Lord points out that in these men, there is fulfilled one of the prophecies of Isaiah:

By hearing you shall hear, and shall not understand: and seeing you shall see, and shall not perceive. For the heart of this people is grown gross, and with their ears they have been dull of hearing, and their eyes they have shut: lest at any time they should see with their eyes, and hear with their ears, and understand with their heart, and be converted, and I should heal them.⁵

1. "Secundo autem modo si aliqua subtilia rudibus proponantur, ex quibus perfecte non apprehensibilem materiam sumunt errandi." — *Loc. cit.*

2. I Cor., III, 1.

3. "Unde Augustinus, 4 de doct. Christ.: 'Sunt quaedam quae vi sua non intelliguntur, aut vix intelliguntur, quantalibet, et quantalibet dicentis plenissime versetur eloquio: quae in populi audientia vel raro, si aliquid urgeat, vel nunquam omnino mittenda sunt. Sed in scribendo non potest talis distinctio adhiberi: quia liber conscriptus ad manus quorumlibet pervenire potest: et ideo sunt occultanda verborum obscuritibus, ut per hoc prosint sapientibus qui ea intelligunt, et occulta sunt simplicibus qui ea capere non possunt.' — *Loc. cit.* (BENJAMIN TRANSL., p. 65.)

4. *Matth.*, XIII, 11, 13. Cf. also *Luke*, VII, 10 and *In de Trinitate*, loc. cit.

5. *Matth.*, XIII, 14, 15. It is important and interesting to note that the metaphor may serve two purposes. For by means of comparison with material things, divine truth is not only "better hidden from the unworthy" but also, it may be made more accessible to the "simple who are unable to grasp intellectual things." This is because the way of knowledge that is natural to man is through sensible things. Cf. *Id.*, q. 1, a. 9.

The reasons that we have seen for deliberate obscurity are derived from experience with the multitude who, because of their lack either of adequate learning or of a good will, are not prepared to receive instruction in the more recondite and sacred truths.¹

There are other considerations springing from a concern for the truths themselves. There is danger that these may be lost and the doctrine itself deteriorate, or that the teachings be not kept uniform if given out to all indiscriminately and passed from one exotic mind to another. In this way Dionysius expressed concern for holy teachings when he said to shield them "from the unclean multitude so that you may keep them as uniform as possible."² This seems to have been the fear that moved certain students of wisdom among the Greeks: Orpheus, Hesiod and others, to conceal under the cover of divine myths, the truth they possessed. We know to what extent Plato bound up his doctrine with myth and, to some measure, with mathematics. They had excellent reasons for doing this. Apparently, in their zeal to keep their doctrine pure, they exercised an almost jealous guardianship over it, so that only the initiate who knew what the metaphors and fables of the myth stand for, could enter the inner sanctum of the truth it enclosed. As Saint Thomas comments: "For if the truth is covered over with myth, no one can know what truth is hidden under the myth except the one who has pierced through the myth."³

But there is another reason still: wisdom herself must be protected as far as possible from the revilements of any who in their own envy or malice or indecency would despise her. Therefore, a method that unites "obscurity to brevity" will be a useful device whereby doctrine may be communicated to the worthy and at the same time be kept secret from the unworthy. In the *De Trinitate* Saint Thomas explains in strong terms the motive Boethius gives for restraining "my pen with brevity":

"Wherever I have directed my gaze apart from you... I have encountered on the one side, stolid indifference; that is, lack of comprehension; on the other, sly envy; that is, ill will, sly only in condemnation, so that he who treated of these things, would seem to offer insults to divine treatises, that is, by inordinately explaining them to such monsters of men." Men are called monsters who, though in human body, bear within them the heart of a beast, since vice has made them like to beasts in their affections; hence these things "would be trampled under foot by them, rather

1. There is no question here of those fundamental truths, most certainly profound, pertaining to God and salvation that must be made known to every one. Saint Thomas says: "The words of a teacher ought to be so moderated that they result to the things which on being heard harm no one: and such ought not to be hidden but openly professed to all. But there are others which, if openly presented, cause harm in those hearing them." — *In de Trinitate*, loc. cit. (transl. p. 64). Cf. also: replies to the objections.

2. "Et Dionysius, 2 cap. cael. Hierar.: 'Audi sancte dicta, divinus divinum, in doctrina factus, et mentis oculo sancta circumascondens ab immunda multitudo ut quam uniformia custodi.' — *Id.*

3. "Si enim per fabulas veritas obumbratur, non potest sciri quid verum sub fabula lateat, nisi ab eo qui fabulam confert." — *In III Metaph.*, lect. 11 (ed. CATHALA), n. 468.

than be acknowledged,' because they do not so much desire to know, but — because of their envy — to revile whatever is said.¹

And he uses the authority of Christ's words to the multitude gathered on the mount: "Give not that which is holy to dogs, neither cast ye your pearls before swine, lest perhaps they trample them under their feet."²

We might restate to advantage the principal considerations expressed by the foregoing texts. With a view to the multitude, it is well to shield the deeper truths from (a) those who have good will but not sufficient learning; (b) those who have learning, but whose wills are not right. With a view to the doctrine itself, it is well (a) to preserve the truths intact for the development of sound doctrine; (b) to protect wisdom from the revilements of the unworthy.

These reasons evince a concern to keep the light of wisdom strong and clear, and to use it in such a way that its strength may be intensified, for penetrating ever farther into truth. Those who possess it should protect it. In order to do this well, it becomes necessary to speak and write in terms which have a clarity for the wise but are obscure and confusing for the majority; for if wisdom aims to please the majority, she herself will enter into darkness. We have only to consider modern philosophy, beginning with the Renaissance and continuing in our day, to see how wisdom is perverted when — even in discussing problems which, frankly confronted, are not difficult — she seeks the favor of the multitude. Whereas in medieval times philosophy was the business of the schoolmen, and maintained a precision conducive to the acquisition of rich and deep *habitus* of wisdom, today it seeks to trade with men of every rank. A philosophical writer is to be judged by his influence — a condition which can become tragic both for philosophy and for philosophers. The *Proverbs* say: "Do not sell wisdom, and instruction, and understanding."³ If the wise set up their stands in the market place, the house of wisdom will indeed be idle.

Which of the arguments that we have seen prompted John to ask for an answer that would not be open to all? There seem to have been several. In the first place, the problem is a metaphysical one, and hence even if Boethius expanded the answer with illuminating detail, there would be little chance of his being read or understood by the uncultured multitude. But it is the other three reasons that Boethius and Saint Thomas have in mind. The many to whom the Deacon primarily referred are a group who as a matter of fact should be capable of following a reasoned discourse,

1. "Quoniamque igitur a vobis deieci oculos, idest ad quoscumque respect, non ad vos tantum, considerationi meae occurrunt partim, idest in aliquibus, ignava, idest stulta, segnitates, idest pigritia; partim livor, idest invidia, callidus, idest astutus ad nocendum; intantum ut contumeliam videatur irrogare divinis tractatibus, qui haec, scilicet divina, 'proscient', idest inordinate exposuerit, talibus monitis hominum. Monstra dicuntur homines qui in corpore humano cor gerunt bestialiter peccatum similes effecti bestis in affectu. Non agnoscenda potius quam concelandi propter invidiam." — Proem., p. 351b (transl. p. 17).

2. *Math.*, vii, 6. "Unde *Matth.* 7, 6: 'Nolite sanctum dare canibus, neque mittatis margaritas vestras ante porcos, ne forte conculcent eas'." — *Loc. cit.*

3. *xxiii*, 23.

but who have no real taste for wisdom. They want entertainment.¹ Their reading must be made enjoyable. Their interest in a philosophical argument would be not for intrinsic reasons, for the acquisition of wisdom, but for extrinsic: to be amused, or possibly to appear as quick-witted. Better, then, not to meet their minds in presenting the solution of the problem, but to set it forth in view of the "intelligent and eager who are worthy to be admitted into the secrets of wisdom."²

* * *

Boethius acquiesced to this request by saying that he would use a method that is commonly used in "mathematics and other disciplines." Why does he signalize mathematics when the question is a metaphysical one? We remember that John wanted "evidence"; and evidence produces certitude. Now among the acquired sciences, the mathematical are the ones that most firmly fix the mind by their certainty. Saint Thomas says: To proceed *disciplinabiliter* is attributed to mathematics, not because it alone proceeds in the manner of discipline, but because this belongs to it particularly. For since to learn methodically is nothing else than to receive science from another, we are said to proceed in the manner of discipline when our procedure leads us to certain knowledge; and this indeed occurs in the mathematical sciences. For although mathematics holds the middle way, between natural science and divine science, it is more certain than either of these others.³

This comes, on the one hand, from the fact that the objects of the natural sciences are material things; hence they are involved in the instability and variability of motion and in the obscurity consequent upon matter. Besides, these sciences require a wider experience of singulars in order to engender certitude, and there is often the possibility that some determining fact has been missed. On the other hand, the mind must stretch up to the objects of the metaphysical sciences and seek principles and causes and conclusions in a realm of objects whose intelligibility, because of their complete removal from matter, is difficult for the human intellect to grasp with firmness. The Philosopher's comparison that likens our minds in their regard, to the eyes of a bat in the sun, is apt.

1. Cf. *In de Hebdom.*, lect. 1: "Deinde cum dicit, 'Hebdomadas vero ego ipse mihi commentor,' ostendit hunc modum etiam sibi esse consuetum; et dicit, quod ipse solitus erat sibi commentari, idest componere vel excogitare quasdam hebdomadas, idest editiones, seu conceptiones, quas potius conservabat eas considerans ad sui memoriam, quam participem eorum faceret aliquem illorum qui propter sui lasciviam et perhilaritatem, idest luxuriam, et levitatem, nihil aliud a joco et risu patitur esse conjunctum, id est ordinatum vel constructum. Detestantur enim si quis aliquem sermonem conjunxerit aut ordinaverit non ad ludum sed ad seria pertinentem."

2. "Obscuritas autem cum secretum fideliter custodiat, hoc affert utilitatis quod loquuntur 'solum cum illis qui digni sunt,' idest cum intelligentibus et studiosis, qui digni sunt ad secreta sapientiae admitti." — *Loc. cit.*

3. "... Procedere disciplinabiliter attribuitur mathematicae, non quia ipsa sola disciplinabiliter procedat, sed quia et praecipue competit. Cum igitur discere nihil aliud sit quam ab alto scientiam accipere, hunc dicuntur procedere disciplinabiliter, quando processus noster ad certam cognitionem perducit, quae scientia dicitur: quod quidem contingit in mathematicis scientiis. Cum enim mathematica sit media inter naturalem et divinam, ipsa est utraque certior." — *In de Trinitate*, q. 8, a. 1, ad 2 q. (Parma ed.) p. 391a. The translation here given is adapted from the translation already cited, p. 173.

Those things are most knowable by their nature which are most in act, namely, immaterial and immobile beings; yet, these are least known to us. Hence, it is manifest that the difficulty in acquiring a knowledge of truth comes especially from the weakness of our intellect. From this fact it happens that our intellect is to immaterial things, which have the greatest clarity by their nature, as are the eyes of a bat to the light of day which they can not see, although they can see in the dark.¹

But: "mathematics holds the middle way between natural science and divine science"; hence, its truths are more proportioned to the human mind. A demonstration of them will give us greater evidence and certitude.

Boethius, then, will clarify the problem by the use of a demonstrative procedure of which the mathematical is the prototype.

* * *

Having decided upon his method, Boethius will proceed rigorously by establishing the principles that are to be as cause and security for the conclusions. But before entering upon the proof proper, he gives a definition of "common principle": "A common principle is a proposition which any one accepts upon hearing it."²

In his exposition of this passage and in other texts, Saint Thomas explains at greater length the meaning of the first common principles which are self-evident, and are absolutely necessary for progress in any kind of knowledge but especially in scientific. If demonstration were our only way of arriving at necessary truths, then we could never have certitude of them. In order to see the necessary connection between the predicate and the subject of any conclusion, we would be obliged to reason through an indefinite series of predicates, back to a judgment that did not need to be justified by a previous one. Yet, obviously, we would never come to any such judgment if there were none but demonstrable truths, since it is of the very nature of demonstration to arrive at a conclusion through premises that are previously and better known. As Aristotle and Saint Thomas say: "Demonstration is not the starting point of demonstration."³ And the Saint comments thus on another text of the Philosopher:

He says first, therefore, that not all certain knowledge is demonstrative, that is, acquired through demonstration; for the knowledge of self-evident principles is indemonstrative, that is, not acquired through demonstration.⁴

1. "... Sunt autem maxime cognoscibilia secundum naturam suam, quae sunt maxime in actu, scilicet entia immaterialia et immobilia, quae tamen sunt maxime nobis ignota. Unde manifestum est, quod difficultas accedit in cognitione veritatis, maxime propter defectum intellectus nostri. Ex quo contingit, quod intellectus animae nostrae hoc modo se habet ad entia immaterialia, quae inter omnia sunt maxime manifesta secundum suam naturam, sicut se habent oculi nycticoeorum ad lucem diem, quam videre non possunt, quamvis videant obscura." — Sr. THOMAS, *In I Metaph.*, lect. 1, n. 282.

2. "Communis animi conceptio est enumeratio quam quisque probat audiat." — BERNARDUS, *De Hebdom.*, lect. 1.

3. "Nam principium demonstrationis non est demonstratio, id est de eo demonstratio esse non potest." — Sr. THOMAS, *In IV Metaph.*, lect. 15, n. 710.

4. "Dicit ergo primo quod non omnis scientia est demonstrativa, id est per demonstrationem accepta; sed immediata principiorum est scientia indemonstrabilis, id est non per demonstrationem accepta." — Sr. THOMAS, *In I Post. Anal.*, lect. 7, n. 5.

And again:

Thus it is plain that there are certain principles from which the syllogism proceeds, which are not certified by the syllogism; otherwise there would be infinite regress in the principles of the syllogism; and this is impossible, as is proved in the first book of the *Posteriora*.¹

Hence, in order that man arrive at strictly scientific knowledge, he must first have a way of knowing other than by demonstration — a way that is not a reasoning process and yet gives truth that is more certain, more unshakable, and better known to us than all the conclusions of reasoned demonstration.² Now the only way that is better than a reasoning process is an immediate intellectual insight into the truth of a judgment without any discourse of reason. Such insight is had when "the predicate is of the nature of the subject, so as soon as the subject has been named and what it is has been understood, it is immediately evident that the predicate belongs to it."³

It is this immediate intellectual grasp that explains the self-evident propositions, the common principles at the root of all other knowledge; they are known in and by themselves (*per se nota*), with no need or possibility of being proved by a previous judgment. By reason of them, man has a little taste of the intuition of the angelic intellect.⁴ They are "a natural participation of divine wisdom" which sees — or rather, which is — all truth identified with divine being.

Yet, man even in his slight share of intellectual vision must act through the nature of man. According to this nature he starts life with an intellect

1. "Sic ergo patet quod sunt quaedam principia ex quibus syllogismus procedit, quae non certificantur per syllogismum: alioquin procederet in infinitum in principis syllogismorum, quod est impossibile ut probatur in primo *Posteriorum*." — Sr. THOMAS, *In VI Ethic.*, lect. 3, n. 1148. — It is to be noted that the *processus in infinitum* is not to be excluded, as some believe, because of lack of time to pursue such a course, but rather because an indefinite series has no term. This means that no process *in infinitum* can arrive at a reason for what most certainly is. Since there must be a reason, and since it can not be found in such a process, it must be found elsewhere. In the present case, demonstration requires that there be principles which can not be demonstrated, nor need be; that is, principles which have certainty for us by themselves, for which reason we call them "dignities" — "dignity" being *bonitas propria* *se.* Cf. also Sr. THOMAS, *In I Post. Anal.*, II.32, 33.

2. Sr. THOMAS, *In I Post. Anal.*, lect. 6; *In II*, lect. 20; also, *In IV Metaph.*, lect. 6, nn. 597-599 where he shows that the most certain principles must be such that a) no one can err concerning them; b) they are derived from no previous principles; c) they come naturally.

3. "... Praedicatum est de ratione subiecti, et ideo statim nominato subiecto, et intellecto quid sit, statim manifestum est praedicatum ei inesse." — Sr. THOMAS, *In de Hebdom.*, lect. 1. Cf. also *In I Post. Anal.*, lect. 7, n. 8.

4. Cf. Sr. THOMAS, *Q. D. de Veritate*, q. 15, a. 1, c.: "Unde quamvis cognitio humana animae proprie sit per viam rationis, est tamen in ea aliqua participatio illius simplicis cognitionis quae in substantiis superioribus invenitur, ex quo vim intellectivam habere dicuntur; et hoc secundum illam modum quem Dionysius, vii cap. de divinis Nominibus, assignat dicens, quod divina sapientia semper fines priorum conjungit principis secundorum; hoc est dictum quod inferior natura in suo summo attingit ad aliquid infinitum superioris naturae."

5. Cf. *Ia IIae*, q. 91, a. 3, ad 1: "Dicendum quod ratio humana non potest participare ad plenum dictamen rationis divinae, sed suo modo et imperfecte. Et ideo licet ex parte rationis speculativae per naturalem participationem divinae sapientiae, licet nobis cognitio quorundam communium principiorum, non autem cuiuslibet veritatis propria cognitio, sicut in divina sapientia continentur."

in absolute poverty; it does not possess one concept. Hence, although the intuition of first self-evident principles is called natural in as much as the human endowment of intellectual light allows us to assent at once to the identity of the two terms in question, still, as a prerequisite there is needed an experience of singulars, several acts of induction yielding sense images from which the intellect may abstract the universal expressed by such terms, for example, as "equal" and "to take away." Although this prerequisite involves several acts of the mind whereby it acquires concepts and comes to understand their meaning by a comparison of terms; nevertheless, this activity terminates in the line of the first operation of the mind when it knows the meaning of the concepts. Once in possession of the terms, the intellect immediately sees the necessary relation between them. It is firmly determined and convinced by one act of assent to the judgment uniting or separating these terms, and a *habitus* of first principles is engendered. In the following passage, Saint Thomas epitomizes the movement toward self-evident principles which are known by the natural light of the intellect in a primary judgment, and not by other judgments:

For from the natural light itself of the agent intellect first principles become known; they are not acquired by reasoning processes but only by knowing their terms. This comes about through the fact that a memory is obtained from sense impressions; and from memory, experience; and from experience, a knowledge of the terms; and these being known, the common propositions are known which are the principles of the arts and the sciences.¹

Thus, to the truth of a common proposition, as for instance: "If from two equals you subtract equals, the remainders are equal," anyone will give immediate assent because it is obvious to all that the known terms necessarily belong to one another. As it is said in the exposition of the *De Hebdomadibus*:

If that which is signified by the subject and the predicate falls within the knowledge of all, the consequence is that a proposition of this kind is self-evident to all. For instance, what "equal" means is known to all, and likewise what it means "to take away"; and therefore the aforesaid proposition is self-evident to all.²

Elsewhere, Saint Thomas calls these first principles "dignities" because they are self-evident not only in themselves, but for every person who has the use of reason; they occupy first place in the order of all our knowledge and are not themselves ordered by any previous judgments. The dignities are, like the first simple apprehension of the mind, concerned with what is most general, such as: It is impossible to be and not to be at the same time and in the same respect; and: It is impossible to affirm and to

1. "Ex ipsi enim lumine naturali intellectus agentis prima principia sunt cognita, nec acquiruntur per rationationes, sed solum per hoc quod eorum termini innotescunt. Quod quidem fit per hoc, quod a sensibilibus accipitur memoria, et a memoria experimentum et ab experimento illorum terminorum cognitio, quibus cognitio cognoscitur huiusmodi propositiones communes, quae sunt artium et scientiarum principia." — *In IV Ethic.*, lect. 6 n. 599.

2. "... Si illud idem quod significatur per subiectum et praedicatum cadit in cognitionem omnium; consequens est quod huiusmodi propositio sit per se nota omnibus, sicut quid sit aequale, notum est omnibus, et similiter quid sit subtrahi; et ideo praedicata propositio est omnibus per se nota..." — *In de Hebdom.*, lect. 1.

deny the same thing of the same subject at the same time; and the others.¹ The intellect must, of necessity, adhere to these truths.² But there are other self-evident principles whose truth is not immediately grasped except by those who have a wider experience and more training in abstract thinking. Our text continues:

On the other hand, there is a principle common only to the learned, which is derived from the first principles which are common to all.³ Of such a kind is 'incorporeal beings are not contained in a place.' Principles of this kind are accepted not by the majority of men but only by the wise.³

To the uncultured, their truth is not obvious. The reason is given that "only the intellect of the wise rises to the apprehension of an incorporeal being, for the intellect of the majority of men does not transcend the imagination which is only of corporeal things."⁴

As a summary, Saint Thomas's division of the common principles as given in his commentary on the *Posteriorum Analytica*,⁵ might be set down in this form:

| | | |
|--------------------|---|---|
| Principles | } | in themselves (<i>quoad se</i>) — this expresses the fact |
| <i>per se nota</i> | | that the predicate is of the nature of the subject; |
| | | for us (<i>quoad nos</i>) — this has reference to the one |
| | | who knows that the predicate is of the nature of |
| | | the subject. |

We note too, that, as is well pointed out in the *De Potentia*, a proposition may be *per se nota de se* and yet not be evident to this or that person who does not know the meaning of the terms. For example:

This proposition, *God is*, is *per se nota* in itself, since there is identity between the subject and the predicate, but for us it is not *per se nota*, since we do not know what *God is*. Hence, for us a demonstration is needed, but not for those who see the essence of *God*.⁶

The "dignities" are *per se nota quoad se* and also *quoad nos*, taking *nos* in its widest extension of all who have the use of reason. Aristotle says that any one who asserts that he does not accept these, is telling a lie,⁷ and Saint Thomas says that "no one can mentally admit the opposite of

1. Cf. *In I Post. Anal.*, lect. 20, n. 1; *In IV Metaph.*, lect. 4.

2. Cf. *Id.*, q. 82, a. 1, c.; a. 2, c.; *In IV Metaph.*, lect. 6, n. 600.

3. "Alia vero animi conceptio est communis solum doctis, quae derivatur a primis animi conceptionibus, quae sunt omnibus communes: et huiusmodi est, 'incorporea non esse in loco': quae non approbatur a vulgo, sed solum a sapientibus." — *In de Hebdom.*, loc. cit.

4. "Sed ad apprehendendam rem incorpoream solus intellectus sapientium con-surgit: nam vulgatum hominum intellectus non transcendunt imaginationem, quae est solum corporatum rerum..." — *Ibid.*

5. *In I Post. Anal.*, lect. 5.

6. "Haec autem propositio, *Deus est*, quantum est de se, est per se nota, quia idem est in subiecto et praedicato; sed quantum ad nos non est per se nota, quia quid est *Deus* nescimus: unde apud nos demonstratione indiget, non autem apud illos qui *Dei* essentiam vident." — *Q. D. de Potentia*, q. 7, a. 2, ad 11; cf. also, *Id.*, q. 2, a. 1, c.

7. *Post. Anal.*, I, chap. 20; *Metaph.*, III, chap. 3.

what is self-evident."¹ — *Positiones* is a name given to principles *per se nota quoad se* and *quoad nos*, restricting the extension of *nos* to the *sapientes*, the wise. These are derived from the dignities. — And in a wider sense, *suppositiones* are propositions which are accepted as evident by an inferior science. These have been proved in another science from which they are borrowed; or they may be *per se nota* in the higher science to which the inferior science is subordinated, as are, for instance, the principles of our theology, which are evident in the science of the blessed in heaven.

Thus, we have seen what is the nature of the "bounds" and "rules" that Boethius intends to use for his demonstration. As Saint Thomas comments:

'Bounds,' because the resolution of every demonstration comes to a stand in principles of this kind; 'rules,' because through them anyone is directed to the knowledge of conclusions that follow. From principles of this kind he intends to draw conclusions and make evident all the matters which afterwards are to be treated, just as is done in geometry and other demonstrative sciences.²

Boethius next prepares the proof that only the substance of God is *bonum per se*, by setting down several propositions that are evident to the wise.

(*To be continued*)

SISTER VERDA CLARE, C.S.C.

Mathématiques et biologie*

Peut-on mesurer les propriétés des êtres vivants, et trouver des rapports numériques entre ces mesures? Dès lors, les êtres vivants sont-ils susceptibles d'être définis sous forme d'expressions purement mathématiques?

Tel est le problème que se pose la biomathématique et que nous tenterons de déterminer avec quelque précision. Nous aurons ensuite à passer à la critique des résultats scientifiques obtenus, à en dégager la signification et la portée philosophique exacte. Pareil sujet dépasse largement le cadre de notre exposé. Celui-ci n'a aucune prétention à traiter de façon exhaustive le problème des rapports entre la biologie et les mathématiques. Nous ne pouvons envisager que le développement d'un certain nombre d'exemples d'application des lois quantitatives aux principaux domaines de la biologie. Le but sera atteint s'il ressort de ces exemples d'étude mathématique de la forme, de la croissance, de la reproduction et de l'évolution des êtres vivants une idée générale des problèmes posés et de la méthode de la biomathématique. D'autre part, l'évaluation philosophique, du point de vue aristotélicien et thomiste, des résultats obtenus ne constitue nullement une mise au point définitive. Ce ne peut être qu'une ébauche d'explication beaucoup trop sommaire et insuffisamment nuancée. Elle ne peut tendre qu'à mettre en relief l'importance des problèmes soulevés pour la philosophie des sciences, et à montrer comment certains d'entre eux pourraient se résoudre.

En quoi consiste l'application des mathématiques à la biologie? Prise dans son sens étymologique exact, la biologie est la science de la vie. Il est admis en philosophie scolastique que Dieu et les anges vivent¹. Ils ne sont pas pour autant compris dans le champ de la science biologique proprement dite, car celle-ci ne s'occupe que des êtres matériels vivants². Dieu et les natures angéliques sont immatériels. On ne peut évidemment les dénombrer, dans le même sens que l'on dénombre des animaux de telle espèce ou les représentants de telle sorte de végétaux³.

*Série de cinq conférences données à la faculté de Philosophie de l'Université Laval en 1944. Les conceptions essentielles de l'auteur sur la nature des connaissances expérimentales et des sciences exactes ont été exposées antérieurement dans son livre *Science and Common Sense* (1937) et dans un essai *Providence* (*The Thomist*, Maritain Volume, 1943). Le lecteur que la chose intéresse pourra sans difficulté faire les rapprochements nécessaires.

1. S. THOMAS, *Ia*, q. 18, a. 3.

2. JEAN DE SAINT-THOMAS, *Cursus philosophicus*, T. II (éd. Rensser), p. 8b30.
3. S. THOMAS, *Ia*, q. 50, a. 3.

1. "Nullus potest cogitare oppositum eius quod est per se notum, ut patet per Philosophum in IV *Metaph.* et I *Post.*, circa prima demonstrationis principia."
— *Ia*, q. 2, a. 1, c.

2. "Terminus quidem, quia in huiusmodi principijs stat omnium demonstrationum resolutio; regulas autem, quia per eas diriguntur aliquis in cognitionem sequentium conclusionum. Ex huiusmodi autem principijs intendit concludere et facere nota omnia quae consequenter tractanda sunt, sicut fit in geometria, et in alijs demonstrativis scientiis..." — *In de Hebdom.*, loc. cit.

what is self-evident."¹ — *Positiones* is a name given to principles *per se nota quoad se* and *quoad nos*, restricting the extension of *nos* to the *sapientes*, the wise. These are derived from the dignities. — And in a wider sense, *suppositiones* are propositions which are accepted as evident by an inferior science. These have been proved in another science from which they are borrowed; or they may be *per se nota* in the higher science to which the inferior science is subordinated, as are, for instance, the principles of our theology, which are evident in the science of the blessed in heaven.

Thus, we have seen what is the nature of the "bounds" and "rules" that Boethius intends to use for his demonstration. As Saint Thomas comments:

'Bounds' because the resolution of every demonstration comes to a stand in principles of this kind; 'rules' because through them anyone is directed to the knowledge of conclusions that follow. From principles of this kind he intends to draw conclusions and make evident all the matters which afterwards are to be treated, just as is done in geometry and other demonstrative sciences.²

Boethius next prepares the proof that only the substance of God is *bonum per se*, by setting down several propositions that are evident to the wise.

(To be continued)

SISTER VERDA CLARE, C.S.C.

1. "Nullus potest cogitare oppositum eius quod est per se notum, ut patet per Philosophum in IV *Metaph.* et I *Post.*, circa prima demonstrationis principia. — *Ia*, q.2, a.1, c.

2. "Terminos' quidem, quia in huiusmodi principiis stat omnium demonstrationum resolutio; 'regulas' autem, quia per eas diriguntur aliqui in cognitionem sequentium conclusionum. Ex huiusmodi autem principijs intendit concludere et facere nota omnia quae consequenter tractanda sunt, sicut fit in geometria, et in alijs demonstrativis scientiis.... — *In de Hebdom.*, loc. cit.

Mathématiques et biologie*

Peut-on mesurer les propriétés des êtres vivants, et trouver des rapports numériques entre ces mesures? Dès lors, les êtres vivants sont-ils susceptibles d'être définis sous forme d'expressions purement mathématiques?

Tel est le problème que se pose la biomathématique et que nous tenterons de déterminer avec quelque précision. Nous aurons ensuite à passer à la critique des résultats scientifiques obtenus, à en dégager la signification et la portée philosophique exacte. Pareil sujet dépasse largement le cadre de notre exposé. Celui-ci n'a aucune prétention à traiter de façon exhaustive le problème des rapports entre la biologie et les mathématiques. Nous ne pouvons envisager que le développement d'un certain nombre d'exemples d'application des lois quantitatives aux principaux domaines de la biologie. Le but sera atteint s'il ressort de ces exemples d'étude mathématique de la forme, de la croissance, de la reproduction et de l'évolution des êtres vivants une idée générale des problèmes posés et de la méthode de la biomathématique. D'autre part, l'évaluation philosophique, du point de vue aristotélicien et thomiste, des résultats obtenus ne constitue nullement une mise au point définitive. Ce ne peut être qu'une ébauche d'explication beaucoup trop sommaire et insuffisamment nuancée. Elle ne peut tendre qu'à mettre en relief l'importance des problèmes soulevés pour la philosophie des sciences, et à montrer comment certains d'entre eux pourraient se résoudre.

En quoi consiste l'application des mathématiques à la biologie? Prise dans son sens étymologique exact, la biologie est la science de la vie. Il est admis en philosophie scolastique que Dieu et les anges vivent. Ils ne sont pas pour autant compris dans le champ de la science biologique proprement dite, car celle-ci ne s'occupe que des êtres matériels vivants². Dieu et les natures angéliques sont immatériels. On ne peut évidemment les dénombrer, dans le même sens que l'on dénombre des animaux de telle espèce ou les représentants de telle sorte de végétaux³.

*Série de cinq conférences données à la faculté de Philosophie de l'Université Laval en 1944. Les conceptions essentielles de l'auteur sur la nature des connaissances expérimentales et des sciences exactes ont été exposées antérieurement dans son livre *Science and Common Sense* (1937) et dans un essai *Providence* (*The Thomist*, Marian Volume, 1943). Le lecteur que la chose intéresse pourra sans difficulté faire les rapprochements nécessaires.

1. S. THOMAS, *Ia*, q.18, a.3.

2. JEAN DE SAINT-THOMAS, *Cursus philosophicus*, T. II (éd. REISER), p. 8630.

3. S. THOMAS, *Ia*, q.50, a.3.