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(b. Rome [?], ca. 480; d. near Pavia, Italy, 524/525)

logic, mathematics, music, theology, philosophy.

Very little is known of Boethius' life before his downfall, imprisonment, and execution (522–525). He belonged to one of the more eminent families of the Roman aristocracy, the Anicii, to which two emperors and perhaps also Pope Gregory the Great belonged. Manlius Boethius, consul for 487, may have been his father, and a prefect of the *praetorium* for 454 may have been his grandfather. Indirect evidence suggests an approximate date for Boethius' birth: he was younger than the writer Ennodius (b. 475), his distant relative and friend; he considered himself not old in 523; and he achieved public eminence in 510. His appointment to the honorific title of consul in 510, while he was writing a commentary on Aristotle's *Categories*; his presence in Rome in 522, when he delivered a speech in the Senate before King Theodoric, who had just made Boethius' two sons consuls; his imprisonment in or near Pavia in 522/523; and his death there two years later are well documented. All other chronological data are hypothetical, including his appointment to one of the highest offices in the Roman Gothic kingdom, the *magisterium officiorum*, which gave him some measure of control over state affairs.

For a long time it was taken for granted that Boethius studied in Athens because of a statement made in Theodoric's name by Cassiodorus that in fact suggests a contrary conclusion: "You [Boethius] have penetrated *from a distance* the schools of Athens" (italics author's).¹ Many now accept the view that he studied under Ammonius in Alexandria; the hypothesis is based on a vague possibility that a prefect of Alexandria ca. 476 named Boetios was Boethius's father and on the close connection of many passages in the two philosophers' works.² But common doctrines most often derive from common sources, and books travel more easily than men. There is no reason to believe that Boethius ever left Italy.

When still young Boethius lost his father, but acquired the powerful and inspiring protection of Q. Aurelius Memmius Symmachus, a member of an eminent Roman family that combined public authority with great culture. Symmachus may well have provided Boethius with his first knowledge of fourth century Greco-Latin learning and with the encouragement to bring it up to date. Symmachus' daughter, Rusticiana, became Boethius' wife and bore him two sons, Boethius and Symmachus. Theodoric flattered him for his learning, and asked his advice when the king of France wanted a harper and when the king of Burgundy wanted a water clock and a sundial. Whether Theodoric appointed him to high office because of his special abilities or in order to strengthen his hold on the Roman nobility we cannot know; but he certainly did not take into account Boethius' solidarity with other members of the Senate and his attachment to the idea of the [Roman Empire](#) and Roman "freedom," nor did he realize that collaboration does not necessarily mean submission and renunciation. In 522, when Boethius defended Albinus against the charge of betraying the Gothic king for the Roman emperor, Theodoric took his revenge: he ordered Boethius' imprisonment and death.

Boethius left no perceptible mark on politics and statesmanship. His death inspired many to consider him a martyr,³ but hagiography does not lead to proper appreciation of a man's work. On the other hand, centuries after his death Boethius was responsible for what he probably achieved in a very small measure during his lifetime: the spread of encyclopedic learning. He became the broadcaster of much Greek knowledge to many generations who used Latin and through them, to many others. Several factors converged to produce this result: basic among them are the body of works that he translated, elaborated, or adapted from the Greek and his own writings, in which he probably exercised somewhat more independent judgment.

Here again we must be cautious. Much has been made of Boethius' grand plan to leave behind, in Latin, the achievements of the Greek past, but he did not outline any such plan. His interests were varied; he had some acquaintance with the general scheme of the lay encyclopedia of knowledge dominating the Greek schools and cultural life of his time, and with the new developments of Christian doctrine. However, for two areas of knowledge he outlined a vague scheme. The first was the basic doctrines of philosophy: "I shall translate and comment upon as many works by Aristotle and Plato as I can get hold of, and I shall try to show that their philosophies agree."⁴ This echoes a plan first suggested by Plotinus' forerunner Ammonius Saccas and partly carried out by Plotinus' faithful pupil Porphyry. It is particularly important because it can be shown more than once that Boethius is repeating his source almost literally, even where the translation is disguised; and Porphyry was often his source. It must also be noted that Boethius speaks of writings of which he can "get hold," thus hinting that he was not working where works of Aristotle and Plato were easily obtained.

Another partial plan is suggested by the introductory section of Boethius' *Arithmetic*, dedicated to his father-in-law.⁵ There he says that he intends to produce a handbook for each of the four mathematical disciplines—arithmetic, music, geometry, astronomy—which he calls the *quadrivium* probably the first time this word was used. This led, by analogy, to the term *trivium* for the disciplines dealing with words instead of with numbers or magnitudes. Here again one ought to be cautious and not

interpret the intention as a definite plan: the four disciplines were linked in the Greek tradition from which Boethius drew his material.⁶ Nor should one be drawn by the flattering letter of Theodoric/Cassiodorus (ca. 507–513) into believing that what is written there described works already composed rather than Boethius' knowledge and an ability to discuss matters contained in Greek works.

We know too little about schools and intellectual life when Boethius was young to be able to infer what he learned from whom, or how and where he learned it. We can only try to find out from his works what may have contributed to their composition. The two elements that seem to emerge from such an inquiry are the Roman intellectual life of the latter fourth century and the Greek scholastic tradition as it appeared in the fifth century.

A few books, possibly very few, written in fourth-century Rome had come into Boethius' hands: books of logic or on the line between logic and rhetoric. He may have learned more from his father-in-law, one of whose ancestors had been a member of the learned circles of ca. 360–380. Representing that period in Boethius' works are Marius Victorinus, African and pagan by birth, Roman and Christian by adoption; Vettius Agorius Praetextatus, the leader of the pagan revival; Albinus; and Themistius, the eminent Greek rhetorician, philosopher, and teacher of many Romans, including Agorius, in Constantinople. Cicero should be added, because he was the great Roman of that period, master and inspirer of these revivalists.

Boethius possessed, at least in part, Victorinus' Latin adaptation of Porphyry's *Isagoge* and used it for his shorter commentary, in dialogue form, on this work. Victorinus may even have encouraged him to present as his original work what he was actually adapting from the Greek: Victorinus had done this in the *Isagoge* and Boethius did it in several of his "original" works of logic and, perhaps, of theology. Victorinus may also have been the source for other writings by Boethius, if we accept as authentic one of the two basic versions of Cassiodorus' *Institutiones*: there⁷ Victorinus is credited with a translation of Aristotle's *Categories* and *De interpretatione*, commentaries on the *Categories* and Cicero's *Topica*, and a *De syllogismis hypotheticis*. In any case, Victorinus provided an example of how to spread Greek culture among Latin-speaking people.

Boethius may have known one work by Agorius Praetextatus: his Latin version of Themistius' paraphrase of Aristotle's *Analytics*, but he is rather ambiguous; he may simply have known that such a version existed. Of Albinus, Boethius knew that he had written something on logic. It may be suspected that Albinus was in fact responsible for the Latin version of Themistius' exposition of the *Categories*, which, from ca. 780, was ascribed to [St. Augustine](#); ⁸ but Boethius was not familiar with it. The connection with Themistius appears to be indirect. Apart from Agorius' (and Albinus'?) dependence on Themistius, this idea seems to be confirmed by the place that Themistius' doctrines concerning the "topics," or types of logical and rhetorical arguments, have in Boethius' work; Themistius' classification of topics is discussed by Boethius as a parallel to Cicero's classification and analysis of them.

Greece and the Greek world still had active and organized centers of higher studies and well-stocked libraries. Boethius may never have gone near them, but he could try to obtain some of the books used there, most probably in Athens, by students and teachers. There is no mention in his works⁹ of contemporary Greek scholars or philosophers, nor of those of the two or three previous generations. The most modern man he mentions is Proclus' teacher Syrianus (first half of the fifth century). More than once mention is made of Iamblichus, a Neoplatonist of the first half of the fourth century, whose intellectual legacy passed, after three generations, to Proclus, a Constantinopolitan who headed the Athenian school in the decades immediately preceding Boethius' birth. Recent studies have strengthened the hypothesis that the few books from which Boethius derived his knowledge of Greek philosophy and science came from Athenian circles.

When it is maintained, with a great wealth of quotations and parallel passages, that Boethius was a pupil of Ammonius,¹⁰ master in Alexandria, nothing more is shown than that what Ammonius had learned from his masters in Athens, especially from Proclus, had also reached Boethius. The detailed analysis of the Porphyrian and Aristotelian commentaries of Boethius made by J. Shiel leaves little doubt that his conclusions are right; Boethius possessed one volume of the Greek *Organon*, in which the logical texts of Porphyry and Aristotle were surrounded by a rich collection of passages extracted from the main commentaries of the third and fourth centuries. All the quotations from and references to Porphyry, Iamblichus, Themistius, and [Alexander of Aphrodisias](#) are secondhand. Wherever it is possible to check, they are also found in the corresponding extant Greek commentaries. Even quotations from other works of Aristotle, not commented upon by Boethius, come from these selections of Greek commentaries.

In general, considering the nature of most of Boethius' writings, one would do well to discount even internal references to "past" works: some of these references may come from the original Greek works¹¹ or—as happens with many writers—may be expressions based on the author's wishful thought that, by the time one work is finished, others will also be completed, so that the reader will be able to take the whole series of works in a definite systematic order linked by cross-references. Consequently, it is reasonable to consider as works surely written by Boethius those which are extant and cannot easily be denied as his. Doubts still remain regarding the actual "Boethian" form of several of these works: double recensions suggest that early editors took more freedom than we should like in reshaping the works of the man they intended to glorify. This might even lead us to suggest that Boethius' name was soon added to works not his own, as was done in later times.

The existing works include a considerable body of logical writings: translations, commentaries, and independent treatises.¹² We still have the translations of (1) Porphyry's *Isagoge* (ca. 507), in two slightly different versions; (2) Aristotle's *Categories* (before 510), in one uniform, quite polished recension and in a mixture of parts of this recension with parts of a rougher rendering (perhaps Boethius' own, incompletely preserved); (3) Aristotle's *De interpretatione* (before 513), in three slightly

different forms; (4) Aristotle's *Prior Analytics* (before 520), like the *Categories*, in one polished recension and in a mixture of parts of this with parts of a more primitive (perhaps Boethius' original) rendering; (5) Aristotle's *Topics* (before 520), in a uniform, unpolished edition and one small section from a more finished text; (6) Aristotle's *Sophistical Refutations* (before 520), in one recension (another existing recension is probably the result of the mixture of the usual recension by Boethius with some elements of a twelfth-century translation or revision by James of Venice). The suggestion that a Latin collection of passages from Greek commentaries on *Prior Analytics* was also translated by Boethius may have to be discarded, and there is only scanty evidence that he translated the *Posterior Analytics*. The translations, especially if one considers only the less finished recensions as undoubtedly authentic, suggest that Boethius' knowledge of Greek was by no means excellent.

The logical works commented upon by Boethius are (1, 2) Porphyry's *Isagoge*: one commentary (ca. 505), in the form of a dialogue, is based on some sections of Victorinus' adaptation, and another (ca. 508), in five books, is based on Boethius' own translation; (3) Aristotle's *Categories* (509–511), on the basis of Boethius' translation, with a second commentary perhaps intended but probably never written;¹³ (4,5) Aristotle's *De interpretatione* (513–516), a shorter commentary in two books and a longer one in six, both based on Boethius' translation; (6) Cicero's *Topics* (ca. 522). Preserved incomplete, in seven books. A commentary on Aristotle's *Topics* is mentioned by Boethius, but it is not known whether it was ever written.

The "independent" logical works are (1) *On Categorical Syllogism* (ca. 505–506), in two books; (2) *On Division* (ca. 507); (3) *On Hypothetical Syllogisms* (ca. 518), in three books; (4) *Prolegomena* (ca. 523), known in the [Middle Ages](#) as *Antepraedicamenta* and, from 1492 on, as *Introductio in Syllogismos categoricos*; and (5) *De differentiis topicis* (ca. 523). (*On Definitions*, a treatise ascribed to Boethius from the twelfth to the nineteenth centuries, is the work of Marius Victorinus. Small rhetorical treatises published as independent works are extracts or adaptations from the *De differentiis topicis*.)¹⁴

Two works by Boethius on disciplines of the *quadrivium* still exist: the *Arithmetic*, in two books, and the *Music*, in five. No agreement has been reached by scholars on the status of the various recensions of a *Geometry* that bear Boethius' name in many manuscripts and editions and were quoted as his for several centuries; it is quite possible that they include at least some sections originally written by him as translations of and adaptations from Euclid. None of the texts on astronomy that have been tentatively connected with Boethius can be ascribed to him unless new evidence comes to light.

Boethius' writings on theology are confined to two short pamphlets, *On the Trinity* and *On the Two Natures*, and *One Person of Christ*, and the briefly argued answers to two questions, *Are "Father," "Son," "Holy Spirit" Predicated Substantially of "God" and How Can Substances Be Good in Virtue of Their Existence, Without Being "Goods" qua Substances (Quomodo Substantiae... often known as De hebdomadibus)*.¹⁵

All these writings are obviously didactic or scholastic. The same character is shared, but veiled in a literary form, by Boethius' one personal, original, and attractive work, the *Consolation of Philosophy* (523–524), written in verse and prose while he was awaiting execution.

Among the books most frequently—and erroneously—ascribed to him are Dominic Gonzalez' (or Gunsissalinus') *De unitate uno* (thirteenth century). Translations from Aristotle (*Metaphysics*, *Ethics*, etc.) made in the twelfth century were occasionally attributed to Boethius from the twelfth to the sixteenth centuries; more persistent was the attribution, from 1510 to the early twentieth century, of the translation by James of Venice of the *Posterior Analytics* (ca. 1140).

Originality is rare in Boethius' works. Even where the sources of the doctrines expounded cannot be traced back exactly to a particular author, it can easily be assumed that he was following a definite model. It is also clear, especially in advanced logic, mathematics, and theology, that his preparation, and possibly his linguistic knowledge, was not sufficient for him to pass on all the best that was available to him. But, considering the enormous influence that his works exerted on the revival of learning from the late eighth to the thirteenth centuries, it is important to delineate the doctrines he expounded. We shall not include, however, those contained in those works of Aristotle that he translated.

Two points from the commentaries on Porphyry—which go back mainly to the commentaries of the Porphyrian school itself as it continued, particularly in Athens—deserve special mention. One concerns the Aristotelian divisions of philosophy, and more especially the general plan of logic.¹⁶ Boethius' texts contributed more than anything else to popularization of those divisions. Philosophy, as the encyclopedia of knowledge, is divided into two parts: the theoretical (speculative) sciences and the practical sciences. The first is tripartite: it contains the sciences of nature that consider things material and changeable (physical sciences in a wide sense); those that consider the Same things abstracted from movement and matter (mathematical, or "intelligible" sciences); and those that consider things immaterial and unchangeable ("theology" or, later, metaphysics). The second part contains the sciences that deal with action, in relation either to the individual (ethics), or to the family ("economics"), or to social life (politics). Logic is the science of persuasive argument, composed of several propositions; it is the science of syllogism in its general form, or in its applications in common discussion, or in its application to demonstration. This main part of logic must be preceded by a study of individual propositions, and this, in its turn, by the study of individual terms or classes of terms.

The other point concerns what came to be known as the problem of universals.¹⁷ Porphyry had only mentioned its difficulties; Boethius treated some of them and suggested solutions. Especially important are his distinction between "things as they are" and "things as they are conceived" and his mention of the theory of *indifferentia*, a half-way solution that simultaneously

allows for and denies the presence of, in things outside the mind, the common element that characterizes universality. This became the doctrine of one of the main schools of thought of the early twelfth century.

In the commentary to the *Categories*, derived largely from the two commentaries by Porphyry, one finds such statements as “A sign of continuity in a body is this: if one part of it is put in motion, the whole body is put in motion, and, if a body which is a whole is moved, at least other parts near those which are set in motion will be moved: as if I push a stick touching one extreme, the other parts of the stick will be moved as that extreme.”¹⁸ The commentaries on *De interpretatione* at one contain interesting analyses of the meanings of necessity¹⁹ and—a source of interminable meditation and discussion—the different aspects of the so-called problem of future contingents:²⁰ Is a future event, which is not foreseeable on the basis of a known law of nature, such that a proposition describing it is bound to be true or false?

The *De divisione*, covering one of the main sections of logic as detailed by Porphyry at the beginning of the *Isagoge* and possibly based on a similar treatise of the Roman or Athenian school of the fourth or fifth century, contains a classification and partial analysis of the kinds of distinctions that must be considered when inquiring into one’s subject matter. It propounds the elements for a methodical approach to scientific inquiry. Four kinds of “division” are listed: (1) division of a genus according to fundamental, substantial, different features and according to species, which are determined by at least some of these differences’ this is indispensable for achieving satisfactory definitions; (2) division of a whole into its constituent parts, so that precision in accounting for the nature and structure of the whole may be attained; (3) “division of words.” i.e., classification of the different meanings or functions of individual words, in order to avoid confusion and sophistry; and (4) “division of accidents.” i.e., classification of some feature that may belong, but not essentially, to many different things or kinds of things (the blue of the sea, the blue of a wall, etc.), which will aid in understanding the relationship between accidental features and the essential nature of things.

The Prolegomena (Introductio ad syllogismos categoricos), which may go back, directly or indirectly, to a similar introduction by Porphyry and is mentioned by Boethius in his first commentary on the *Isagoge*,²¹ restates and expands Aristotelian doctrines on noun and verb, but concentrates mainly on the relationships between propositions that are quantified in the subject and either positive or negative in the subject and/ Or the predicate. This is a later and more extensive treatment of what had appeared as the first book of *De Syllogismis categoricis*, the second book of which is a rather poor synthesis, with the addition of a few mechanically constructed combinations of the first part of Aristotle’s *Prior Analytics*. This work most probably also reflects an elementary textbook of Porphyrian origin.

In *De syllogismis hypotheticis* the basic formulation of the Theophrastian syllogism (“If A then B; if B then C; therefore, if A then C” is played upon through a multiplication of formulas resulting from the insertion of the negative at different places in the premise. The importance of this is limited because A, B, C, must stand for nouns; thus, we fall directly back into the nonhypothetical syllogism. The Stoic hypothetical syllogism had its role in this work as well as in the commentary on the *Topics* of Cicero, but with no original contribution. The one element that may be useful for an analysis of scientific method is the distinction between accidental connection or co-incidence (“Fire being warm, the heavens are spherical”) and natural connection (“There being man, there is animal” and, more compelling, “If the Earth comes in between, there follows an eclipse of the moon”), technically termed by Boethius *consequentia secundum accidens* and *consequentia naturae* (the latter being either *non per positionem terminorum* or *per positionem terminorum*).

The commentary on Cicero’s *Topics* and the *De differentiis topicis* deal with the kinds of arguments used to persuade, either in a purely theoretical context or in a practical one, i.e., in dialectical or rhetorical arguments. The second work includes most that is important, from a methodological point of view, in the first. It is a systematic exposition of the nature of individual propositions (categorical and hypothetical), questions, theses, and rhetorical “hypotheses.” and of connected propositions (such as syllogisms); and then of the headings under which arguments can be classified according to Themistius and Cicero. The importance of such a work lies mainly in its provision of the tools for a critical evaluation of arguments used in discussion and exposition of theories and facts. Thus, distinctions are made between arguments based on definitions, on descriptions, on similarities, on different interpretations of words, on assertions valid for whole classes (and therefore for subclasses), on regular causality, on contradiction, on authority, and on parallelism of situations.

The theological treatises must be considered here because of their role in training several generations from the ninth century to the thirteenth, to apply the concepts developed by philosophy as a basis for clear thinking to fields where acceptance of dogmatic statement would have appeared more apposite. In *On the Trinity* and, within narrower limits, in the question on the predication of the three Persons to the subject “God.” Boethius tries to explain the apparently absurd equation “one=three” by using the distinctions of Porphyry’s (and Aristotle’s) classes of predicates (genus, species, difference, accident, property) and the ten Aristotelian categories (substance, quantity, quality, relation, etc.). He was, of course, not the inventor of rational theology; *On the Trinity*, which reflect I of the revolutionary trends in Greek theology, is perhaps no more than a disguised translation. But his exposition of the problem and the attempt to locate the absurdity, or possibly the validity, of a statement within the intellectual framework of his time give him an eminent position in the progress toward clarity and exercise of critical power.

The short work on goodness of beings (*Quomodo substantiae...*) also claims more than an antiquarian interest. In this writing, Boethius set out to solve an eminently nonmathematical problem with something of a mathematical method, and thereby, through many centuries, trained students to organize their thoughts and apply their powers of deduction: “Just as is the custom in mathematics and other disciplines. I begin with a series of definitions and axioms of postulates, from which all the rest will

be derived.”²² The *Quomodo* is also important for the neat distinction between essence (*esse*) and existence (*quod est*), which may have a distant echo in the distinction between hypothesis and verification.

The treatise *Two Natures and One Person in Christ* provides us with, among other things, an analysis of the meanings that *natura* has in different contexts. The four meanings are set forth in these formulas: “Nature is to be found in things that can somehow be grasped by our mind”; “Nature (of substances) is what can bring about or be the recipient of an effect”; “Nature (of bodily substances) is the principle of movement per se, not accidentally”; and “Nature is the specific difference giving a definite thing its form.” With the definition of *persona*—which became traditional in theology and is at the basis of most of our usages of “person”—Boethius also contributed to the establishment of the technical distinction between *personalis* and *confusa* in the context of the development of the medieval and modern theory of “supposition.” For this second purpose, Boethius’ definition (“Person is the individual substance of a rational nature”) lost the connotation “rational,” preserving above all the element of individuality.

The mathematical works by Boethius reproduced Greek works. Although it is not as clear as it has been thought, partly on the basis of what Boethius himself says, exactly which Greek works were reproduced,²³ it is clear that the neo-Pythagorean theory of number as the very divine essence of the world is the view around which the four sciences of the quadrivium are developed. Number, qua multitude considered in itself, is the subject matter of arithmetic; qua multitude applied to something else (relations between numbers?), the subject matter of music; qua magnitude without movement, of astronomy; The *Arithmetic* develops here and there what was too concise in Nicomachus and abbreviates what was too diffuse. Further, it passes on to the Latin reader many of the basic terms and concepts of arithmetical theory: prime and composite numbers, proportionality, *numeri figurati* (linear, triangular, etc.; pyramidal and other solid numbers), and ten different kinds of *Medietates* (arithmetical, geometrical, harmonic, counterharmonic, etc.). His interest in proportions is perhaps connected with the story according to which, while in prison, he thought out a game based on number relations. Here it is noticeable, however, that his understanding of arithmetic, and possibly of Greek, was limited: the more advanced propositions and proofs in Nicomachus, such as the proposition that cubic numbers can be expressed as the successive sums of odd numbers and the proposition expressing the relation between triangular numbers and the polygonal numbers of polygons with n sides, are missing from the *Arithmetic*. He does not, however, miss such elementary things as the multiplication table up to ten.

The *Music* is a continuation of the *Arithmetic*, which contains several elements and terms more appropriate for the treatment of speculative, purely arithmetical music. But, before he comes to this, the very essence of the second science of the quadrivium, Boethius reminds us of the Platonic view that, unlike the other “mathematical sciences,” which have only a theoretical value, music has a moral value as well. He also distinguishes the three kinds of music in which number relationships express themselves: the music of the universe (each of the heavens has its special chord), the music of human nature (which harmonizes Man’s bodily and psychic activities), and the music of some instruments. The third is the only one that, although deteriorated because of its involvement in matter, can be heard. Most of the book is devoted to a lengthy catalog of somewhat classified number relations, most of them with their technical terms and with some description of the nature of the sounds corresponding to them. But, music being considered as science, most of what the musicologist, the artistic composer, and the practicing player would consider essential to the understanding of what music is, is beyond Boethius’s grasp.

Boethius’ *Geometry*, which is mentioned in Cassiodorus’ *Institutiones*, may well have been very different from any of the texts, varied in extent and, in many cases, with different contents, that appeared under his name during the [Middle Ages](#). There is very little more of a geometrical nature in the most ancient manuscripts ascribed to Boethius than Euclid’s definitions (from Book I) and some propositions (from Books III and IV) without the proofs. But, as part of the *Geometry*, there is the description of the abacus, the elementary computer based on a [decimal system](#) with the individual numbers classified under the headings *numeri incompositi*—the *digiti* (1–9) and the *articuli* (10, 20, ..., 100, etc)— and *compositi* (11–19, 21–29, ..., 101–109, etc.), and there are rules for multiplication and division.

One additional contribution to mathematics that reached the Middle Ages through Boethius is in his commentaries to Porphyry (a sign that his knowledge of such matters is secondhand): the formula for the number of possible combinations of two elements in a class of n elements.²⁴

The *De consolazione philosophiae*, considered from the doctrinal point of view, is on the whole a restatement of the eclectic Neoplatonic cosmology. Three aspects may be usefully emphasized, because this book contributed in large measure to impressing them into the minds of philosophers and scientist, and of the world at large. (1) independently of any revelation, the mind can achieve certainty about the existence of God, his goodness, and his power of ruling over the universe. (2) The universe is ordered according to unbroken chains of causes and effects, where necessity, under supervision and determination by God, would be apparent to an all-knowing mind and where chance is nothing more than the coincidental intersection of distinct lines of causation. (3) The order of the universe includes a descent from the first cause to the lowest effects and a return from the lowest ends to the highest beginning. Causality, in the more restricted modern sense, and technology have perserved a stronger hold on the minds of many generations because of the enormous popularity, until the sixteenth century, of the *Consolatio*. But Boethius’s insistence on the possibility of combining freedom of the will with God’s eternally present knowledge of the order he willed engaged scholars in theological subtleties more than in a scientific approach to research or organization of knowledge.

NOTES

1. Cassiodorus, *Variae* I.45.3
2. P. Courcelle. *Les lettres grecques*, p. 299, n. 1.
3. E.g., Dante, *Divine Comedy*, *Paradiso* X. 124–129
4. *Second Commentary on De interpretatione*. Meister, ed., pp. 79–80.
5. *Arithmetic*, Friedlein, ed., p. 3.
6. See esp. *Iamblichus' commentary on Nicomachus' Arithmetic*, E. Pistelli, ed. (Leipzig, 1894), pp. 5–8.
7. Cassiodorus, *Institutiones* I.iii. 18, R. A. B. Mynors, ed. (Oxford, 1937), p. 128.
8. *Categoriae*, in *Aristoteles Latinus* I I-5 (Bruges, 1961), p. lxxviii.
9. There is no foundation for the view held by Courcelle in *Les lettres grecques* (p. 278) that *audivimus* in Boethius' *Second Commentary*, Meiser, ed., p. 361, line 9, should be read “Ammounius.”
10. Courcelle, pp. 270–277.
11. See J. Shiel, “Boethius' Commentaries on Aristotle,” *Passim*.
12. For the dates of the logical works I follow De Rijk, “On the Chronology,” Some of the views I express here on the question of second recensions are at variance with hypotheses I put forward in the past.
13. But see P. Hadot, in *Archives d'histoire doctrinale et litterarie du moyen âge*.
14. A. Mai “discovered” these texts in MS Vat. lat. 8591: they are part of a collection of Boethian logical texts, made in constantinople ca. 530, of which many copies exist.
15. Views have been expressed by competent scholars both for and against the authenticity of a fifth theological text, the *Defide Catholica*, which seems to have intruded itself, anonymously, at some later stage into the collection of the other four. The arguments in favor seem unsatisfactory.
16. G. Schepss and S. Brandt, eds., pp. 7–10.
17. *Ibid.*, pp. 23–32, 159–167.
18. *Patrologia Latina*, LXIV, cols. 204–205.
19. E.g., in the *second Commentary on the De interpretatione*, Meiser, ed., pp. 241 ff.
20. *Ibid.*, pp. 190–230.
21. Schepss and Brandt, p. 15.
22. H.F. Stewart and E. K. Rand, eds., p. 40.
23. Very close similarities can be noticed between Boethius and Nicomachus' commentator Iamblichus.
24. Schepss and Brandt, pp. 118–120, 319–321.

BIBLIOGRAPHY

I. Original Works. The first ed. meant to contain all the works of Boethius was brought out by Iohannes and Gregorius de Gregoriis, with the scholarly collaboration of Nicolaus Iudecus (Venice, 1491–1492; repr 1498–1499); it did not include the translations of *Prior Analytics*, *Topics*, and *Sophistical Refutations* but did contain the pseudepigrapha *On Definition*, *De*

unitate et uno, and *De disciplina scholarium*. A complete ed. (Basel, 1546, 1570), with the pseudepigrapha and the non-Boethian translation of *Posterior Analytics* includes the translations missnig from the Venice collection reproduced from a text rev. by Jacques Lefèvre d'Étaples (Paris, 1503), which was based on the Greek, under the supervision and with the collaboration of Heinrich Lorit; for the logical works (except the uncommented translations) and for the theological treatises this ed. depends on Giulio Marziano Rota's ed. (Venice, 1537). J. P. Migne, ed., *Patrologia Latina*, LXIII and LXIV, contains all the works of the 1570 ed., some of them from more recently published texts, and some fragments wrongly thought to be new discoveries. Both the Corpus Scriptorum Ecclesiasticorum Latinorum and the Corpus Christianorum include complete editions of Boethius in their plans. In Vol. 48 of the former (Vienna, 1906), G. Schpss and S. Brandt edited the two *Commentaries on Porphyry*, and in Vol. 67 (Vienna, 1934), W. (Guillelmus) Weinberg edited the *Consolatio Philosophiae*; in Vol. 94 of the latter (Turnhout, Belgium, 1957). L. Bieler edited the *Consolatio*.

Critical editions of the translations are being done by L. Minio-Paluello, partly with the collaboration of B. G. Dod, as part of the *Aristoteles Latinus*, a section of the Corpus Philosophorum Medit Aevi (Bruges-Brussel-Paris): I, pts. 1–2, *Categoriae* (1961); III, pts. 1–2, *Analytica priora* (1962); II, pt. 1, *De interpretatione* (1965); I, pt. 6, Porphyry's *Isagoge* (1966); V, pts. 1–2, *Topica* (1969); and VI, pt. 1, *Elenchi sophistici* (in preparation).

Among the earliest eds. are *Consolatio Philosophiae* (Savigliano, ca 1471)—at least sixty-two Latin eds. of the work were printed before 1501; *Analytica priora* (Louvain, 1475); *Second Commentary on Porphyry*, *Commentary on Categories*, text of *De interpretatione* (Naples, ca. 1476); all the translations (Augsburg, 1479); *De differentiis topicis and In Ciceronis Topica Commentarium* (Rome, 1484); *De institutione arithmetica* (Augsburg, 1479); *De differentiis topicis and In Ciceronis Topica commentarium* (Rome, 1484); *De institutione arithmetica* (Augsburg, 1488); *De Trinitate, Utrum Pater Quomodo substantiae* (Venice, 1489); and the doubtful *De fide Catholica* (Leiden, 1656).

Among the recent eds. not mentioned above, the following are important: *In Ciceronis topica commentarium*, I. G. Baiter, ed., in Cicero's *Opera*, I. C. Orelli and I. G. Baiter, eds., I (Zurich, 1833)—this ed. also contains the short section discovered and published by C.B. Hase in *Johannis Laurentii Lydi, De ostentis* (Paris, 1823), pp. 341–356; *De institutione arithmetica, De institutione musica, Geometria*, G. Friedlein, ed. (Leipzig, 1867); *Opera theologica*, R. Peiper, ed. (Leipzig, 1871); *Commentaries on the De interpretatione*, C. Meiser, ed. (Leipzig, 1877–1880); *Dedivisione*, in an appendix to L. Davidson, *The Logic of Definition* (London, 1885); *The Theological Tractates*, with English translation by H. F. Stewart and E. K. Rand, and *The Consolation of Philosophy*, with English translation by I. T. [John Thorpe?], rev. by H. F. Stewart (London-Cambridge, Mass., 1936). A fragment, believed by the ed. to come from Boethius' *Second Commentary to the Categories*, was published by P. Hadot in *Archives d'histoire doctrinale et littéraire du moyen âge* 34 (1960), 10–27.

II. Secondary Literature. Extensive bibliographies on Boethius can be found in L. Bieler's ed. of the *Consolatio* (see above), pp. xvi–xxvi; P. Courcelle, *Les lettres grecques en occident de Macrobe à Cassiodore*, 2nd ed. (Paris, 1948), pp. 401–415, and *La Consolation de philosophie dans la tradition littéraire* (Paris, 1967), pp. 383–402 and, for the commentaries on the *Consolatio*, pp. 403–438; M. Cappuyns, “Boèce,” in *Dictionnaire d'histoire et de géographie ecclésiastique*, IX (1937), cols. 349–380; B. Geyer, *Die patristische und scholastische Philosophie*, Vol. II of Friedrich Ueberweg's *Grundriss der Geschichte der Philosophie*, 11th ed. (Berlin, 1928), pp. 133, 669–670; C. Leonardi, L. Minio-Paluello, U. Pizzani, and P. Courcelle, “Beozio,” in *Dizionario biografico degli italiani* XII (inpress); and A. Momigliano, “Cassiodorus and Italian, Culture of His Time,” in *Proceedings of the British Academy*, 41 (1955), 227–245.

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Also see the prefaces to Minio-Paluello's eds. of Boethius' works listed above; however, some of the views expressed in this article are new, and will be discussed in future writings. The previous literature on the authorship of the translations is discussed in full in these prefaces.

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