

PA
6233
M34
1912
MAIN

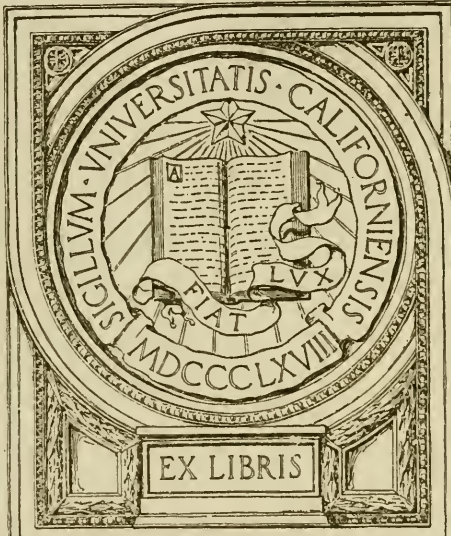
UC-NRLF



8 4 050 915

GIFT OF

A. P. McKinlay



~~75
257
TTL 158~~

PRINTED FROM THE HARVARD STUDIES IN
CLASSICAL PHILOLOGY, VOL. XVIII, 1907

1 1111
CLASSICAL PHILOLOGY

PA6233
M34
1912
MAIN

STYLISTIC TESTS AND THE CHRONOLOGY OF THE
WORKS OF BOETHIUS

BY ARTHUR PATCH MCKINLAY

WHOEVER undertakes to treat of Boethius finds himself in illustrious company. Potentates, churchmen, scholastics, and philosophers have busied themselves with this "last of the Romans." It would appear that but little remains to be said on such a well worn subject. Much less does it seem fitting in a beginner to essay that little. Yet, as the recent researches of Usener and Brandt and the acute suggestions of Rand have marked an epoch in *Boethiana*, one may hope to gain still further insight into the character and mode of thought of the author of the *Consolatio*. With this purpose in view, by the help of the so-called stylistic method, I intend to examine the writings of Boethius, in case it may be possible more accurately to place works the dates of which are not yet certain. To be explicit, I hope to show that the *De Arithmetica* and the *De Musica* should be placed neither first nor together; more definitely to place certain other works; to throw light on the authenticity of the *De Geometria* and the *De Fide Catholica*, and incidentally to test the value of the so-called stylistic method in determining the relative chronology of an author's writings.

For a definition of the meaning of stylistic method, and an illustration of its application, I may refer to the well-known work of Lutoslawski, entitled *The origin and growth of Plato's logic with an account of Plato's style and of the chronology of his writings*, 1897. Lutoslawski applies five hundred tests, comprising more than fifty-eight thousand instances. The tests are of various sorts, such as the relative frequency of hiatus and of synonymous expressions in works of different periods. Lutoslawski prefaces his conclusions with certain principles which he contends must hold good in all such investigations. As these principles practically coincide with my own, evolved independently, — for I purposely did not read the book till my investigation was finished — I cite the most important of them.

1. The method is of little value in works of but few pages in length.
 2. The method is of little value unless corroborated by considerations other than stylistic.

3. Synonyms are the best tests.

4. Of two works, the one which agrees in more criteria with a third work whose date is fixed, more nearly coincides with that work in time.

Relying on these principles and tabulating his criteria, Lutoslawski shows that known early works of Plato, such as the *Crito*, have but few points in common with the last, the *Laws*, whereas the *Sophistes*, *Politicus*, and *Philebus* agree with the *Laws* in more than fifty per cent. of the tests used. Hence he concludes that the dialectical works come late in Plato's career. This much for the method.

Anybody who has read Boethius with care will have observed two marked characteristics of his style. The first of these is the prevalence of various constructions, due, apparently, to the influence of his translations from the Greek. As a large portion of Boethius's works consists of translations of Greek texts and commentaries thereon, one may naturally wonder to what extent Greek usage influences his style. Some light is thrown on the answer from his own words, *Commentarii*¹ in *Porphyrium*, p. 71 A, in which he gives his theory of translation. "Secundus hic arreptae expositionis labor nostrae seriem translationis expediet, in qua quidem vereor ne subierim fidi interpretis culpam, cum verbum verbo expressum comparatumque reddiderim. Cuius incepti ratio est quod in his scriptis in quibus rerum cognitio quaeritur, non luculentae orationis lepos sed incorrupta veritas exprimenda est." That our author carried out this purpose of a literal translation can be seen from even a cursory examination of his works; for traces of Greek usage are found in the commentaries and other works as well as in the translations. A few examples will suffice to illustrate my point.

*Quidem*² . . . *autem* and *quidem* . . . *vero* in the sense of *μὲν* . . .

¹ I cite the works of Boethius as follows: the two editions *περὶ Ἑρμηνείας*, ed. C. Meiser; works on the quadrivium, ed. G. Friedlein; *Consolatio Philosophiae* and *Opuscula Sacra*, ed. Peiper; remaining works, ed. M(igne). In citing the works of Aristotle, I refer to the Tauchnitz edition for the first part of the *Organon*; to Waitz for the *Priora* and *Posteriora Analytica*.

² As shown by E. K. Rand, *Der dem Boethius zugeschriebene Traktat De Fide Catholica*, *Jahrbücher für Klassische Philologie*, XXVI, Supplementband, p. 428 ff.

δέ appear very often in the translations and in all the works that follow the *Dialogi in Porphyrium*. This usage, to a less degree, is found even in classical authors. See Cicero's *Topica*, 51, 65 (?), 95 (?), and especially 60: atque illud *quidem* genus causarum, quod habet vim efficiendi necessariam, errorem adferre non fere solet; hoc *autem* sine quo non efficitur saepe conturbat.

Another marked Graecism in Boethius is the use of *quoniam*¹, *quia*, *quod* clauses to translate clauses with ὅτι and ὡς in indirect discourse. This usage crops out continually in the commentaries also. It is so frequent that *manifestum quoniam* (*Posteriora Analytica*, p. 741 A), or *palam quoniam* (*Priora Analytica*, p. 667 D), are used without a verb as a rendering for δηλον ὅτι.

The influence of translation is seen also in constructions that follow comparisons. Often we find the same case as in the original, that is, the genitive, e. g. Aristotle, *Categoriae*, 4, 11: τῷ τὴν μὲν τῶν ὁμογενῶν μείζονα εἶναι, τὸ δὲ ἔλαττον τῶν ὁμογενῶν. Cf. M(igne), p. 210 B: eo quod hoc *quidem* sui generis maius sit, illud vero minus sui generis. Though this literal transference occurs, yet the ablative with *a* (*ab*)² is the usual construction, whether with verbs implying a comparison or after comparative adjectives and adverbs. Of the former the following is a good example, Περὶ Ἑρμηνείας, 10, 8: ταῦτα γὰρ ἐκείνων διαφέρει τῷ μὴ καθόλου εἶναι. Cf. Meiser, p. 14, 21 f.: haec enim ab illis differunt eo quod non universaliter sunt. For the construction after adject-

See also the columns under *quidem . . . autem* and *quidem . . . vero* in my table on p. 138 below.

¹ There has been much discussion as to the origin of this use of *quoniam*, *quia*, *quod* in indirect discourse. For a review of the subject see Schmalz, in *Berliner Philologische Wochenschrift*, 1905, p. 557. Some argue that the usage comes in from the *sermo plebeius*, others from the Greek. Probably Greek influence merely accelerated the adoption of the construction; for the idea was inherent in the language. To illustrate, there is so little difference between the infinitive after *commemoro* and the construction with *quod*, that it would have been surprising if the Latin writers had not been ready to make a free use of the latter.

² Concerning the origin of this construction, Roensch, *Iula und Vulgata*, p. 452, thinks that it crept in through the Christian writers from the Hebrew idiom. However this may be, the discussion, in the preceding note, of the *quoniam*, *quia*, *quod* construction is applicable here also; for as the Latin ablative of comparison contained the idea of separation, it would have been strange, if, with the increase in the use of prepositions, *a* (*ab*) had not come to be used in constructions after comparisons.

tives see Porphyry, *Isagoge*, 3, 16: Ὁ γὰρ ἄνθρωπος πλέον ἔχει τοῦ ζώου τὸ λογικὸν καὶ τὸ θνητόν. Cf. M., p. 125 C: Homo enim ab animali plus habet rationale et mortale. This use is frequent in the commentaries and other works.

The influence of translation is further shown by the extraordinary frequency of *idcirco quoniam, quia, quod; ideo quoniam, quia, quod* and the like. How Boethius treated the Greek equivalents will appear from the following illustrations: διὰ τό with infinitive (*Περὶ Ἑρμηνείας*, 7, 8 = *idcirco quoniam* Meis., 7, 31), or *idcirco quia* (*Com. in Porphyrium*, 3, 20 = M., p. 129 C), or *ideo quod* (*Sophistici Elenchi*, 5, 6 = M., p. 1012 D), or *eo quod* (Aristotle, *Topica*, 8, 12, 8 = M., p. 1007 A), or *propterea quod* (Porphyry, *Isagoge*, 15, 1 = M., p. 155 D); τῷ with infinitive (Aristotle, *Categoriae*, 6, 10 = *idcirco quod* M., p. 246 B), or *eo quod* (Aristotle, *Topica*, 1, 1, 9 = M., p. 911 B), or *hoc quod* (*Categoriae*, 6, 11 = M., p. 247 A); δὶό = *eo quod* (*Topica*, 4, 5, 7 = M., p. 950 C), or *propter quod* (*ibid.* 6, 9, 9 = M., p. 982 C); δίοπερ (*ibid.* 8, 12, 16 = *eo quod* M., p. 1008 B); δίοτι (*ibid.* 1, 1, 10 = *eo quod* M., p. 911 B). These collocations are so frequent that we even find ἐπέ turned by *eo quod* (*Topica*, 8, 10, 8 = M., p. 1005 B), or *idcirco quoniam* (Porphyry, *Isagoge*, 2, 19 = M., p. 100 C). I have collected all such collocations in the works of Boethius and find that, to omit translations, their sum approximates one thousand, a number which sufficiently attests their abundance. Naturally I do not hold that Boethius originated these expressions. I wish to show, however, that their frequency is due to his Greek studies.¹

One of the most interesting of Boethius's Graecisms is his treatment of the definite article. At first he sometimes omitted it, as in Aristotle, *Categoriae*, 8, 19 τὸ γὰρ ὑγιαίνειν Σωκράτην τῷ νοσεῖν Σωκράτην ἐναντίον ἐστίν. Cf. M., p. 278 D: Sanum namque esse Socratem ad languere Socratem contrarium est. Sometimes he used the collocation *id quod dicitur*. Cf. *Com. in Categorias*, p. 208 B: in eo quod ci . . . ce . . . ro dicitur; *Editio prima* περὶ Ἑρμηνείας, p. 49, 11: in eo nomine quod est homo; and again *De Syllogismis Categoricis*, p. 795 B: in Ciceronis nomine. Later for this construction he generally used *id*

¹ This is all that is implied in Rand's discussion of *quidem . . . vero* (*Jahrbücher für Klassische Philologie*, XXVI, Supplementband, pp. 428 ff.), a point that Stangl (*Wochenschrift für Klassische Philologie*, 1903, p. 179) seems not to understand.

quod est. Cf. *Introductio ad Syllogismos Categoricalis*, p. 763 n: in eo quod est Cicero. On this matter Boethius himself remarks (*Editio prima περὶ Ἑρμηνείας*, p. 62, 17 ff.): unde Graeci quoque his per se dictis verbis aliquotiens addunt articularia praepositiva, ut est τὸ τρέχειν, τοῦ τρέχειν, si quis enim dicat: velocius est id quod est currere eo quod est ambulare, in illo nominativum iunxit articulum dicens id quod est currere, in illo vero ablativum dicens eo quod est ambulare. (See also below, p. 147).

These illustrations make it evident that Greek idiom had great influence on the style of Boethius. Consequently it is rather surprising that Friedlein should have been uncertain about the reading of the manuscripts in the *De Arithmetica*, p. 86, l. 4 f.: quam secundum ad [?] (so Friedlein) aliquid speculamur. For we often find *ad aliquid* = πρὸς τι not only in the translations, but also in the commentaries and the other writings. See *Com. in Categorias*, p. 213 B, and especially *Sophistici Elenchi*, 25, 4: Ὀμοίως δὲ καὶ ἐπὶ τῶν πρὸς τι. Cf. M., p. 1034 C: similiter autem et in ad aliquid. Here the preposition *in* accompanies the expression *ad aliquid*.

Among other striking Graecisms in Boethius it will suffice to cite merely the following. The impersonal gerundive governs the accusative case. *Sophistici Elenchi*, 34, 1: πῶς λυτέον τοὺς λόγους καὶ συλλογισμούς. Cf. M., p. 1039 B: quomodo solvendum est orationes et syllogismos. This use appears frequently in the translations.

Again, ἄρα in questions is turned by *putasne* (*Sophistici Elenchi*, 20, 6: ἄρα οἶδας = M., p. 1030 A: putasne vidisti), or by *ut putas* (*ibid.* 10, 10 = M., p. 1019 C).

The participle with ἄν λανθάνοι = the participle with latebit. *Ibid.* 17, 19: μεταφέρων ἄν τις λανθάνοι τὰ ὀνόματα. Cf. M., p. 1028 C: Transferens quispiam nomina latebit.

Οὐδέ = *nequidem* (not *ne . . . quidem*). Cf. Aristotle, *Topica*, 1, 4, 5 = M., p. 913 A.

ὅτι τοσαυτᾶς = *quod totidem modis*. Cf. *Sophistici Elenchi*, 4, 2 = M., p. 1010 A).

Wherefore it is clear that literal translation is a feature of the style of Boethius. Still he was no slavish transcriber. His object, as has been shown above,¹ was accurately to convey the meaning of the original.

¹ See p. 124.

Consequently he was not at all loth to depart from mere verbal transference, if he could thereby better attain his aim of clearness. His use of examples attests this point. Some of the most striking are :

Sophistici Elenchi, 4, 8 : καὶ τὸ περὶ τὸ ἐνύπνιον τοῦ Ἀγαμέμνονος, ὅτι οὐκ αὐτὸς ὁ Ζεὺς εἶπεν,

‘ δίδομεν δὲ οἱ εὖχος ἀρέσθαι.’

Cf. M., p. 1011 B : et id de Niso et Euryalo cum Rutulos vino somnoque sepultos intellexissent,

Cetera per terras omnis animalia somno

Laxabant curas et corda oblita laborum.

Περὶ Ἑρμηνείας, p. 4, 7 : κάλλιππος = *equiferus*. *Ibid.*, l. 20 : Φίλων = *Cato*. *Ibid.*, l. 29 : ὑγεία = *cursus*. *Ibid.*, p. 6, 28 : Καλλίας = *Plato*. *Ibid.*, p. 17, 3 : σκυτεύς = *citharoedus*. *Isagoge*, p. 87 c : Ἑρακλειδῶν = *Romanorum*. *Ibid.*, Ἑρακλέους = *Romuli*. Περὶ Ἑρμηνείας, p. 5, 17 : οὐδὲ γὰρ ἐν τῷ μῦθῳ τὸ ὕς σημαντικόν = *nec in eo quod est sores, rex significat*.

From the above illustrations it is plain that the style of Boethius was much affected by his Greek studies, a result which one might naturally expect and to which Georg Bednarz called attention in his article (*De Boethii Universo Colore*, Pars Prior, 1883, p. 32). This trait, though important, is more or less transient. Graecisms are most abundant in the translations, less frequent in the commentaries and comparatively scarce in the remaining works. This is doubtless the influence of Boethius's studies of Cicero. For example, see the table on page 139 under *quoniam, quia, quod*.

There is one further way in which the influence of translation made itself felt. Out of several modes of expressing a thought there would be a tendency for the translator to adopt one to the exclusion of the others, with the result that out of a number of synonyms one would prevail. The following table illustrates the point.

	Nam	Enim	Namque
Dial. ¹ in Por.	211	229	71
Interpr. Isag.	12	70	1
Com. ¹ in Por.	98	412	6
Interpr. Categ.	22	212	17
Com. in Categ.	212	636	125

¹ For convenience I adhere to the old terminology. See note on p. 155.

We see here that *namque* is frequent in the *Dialogi*; that it almost entirely lapses in the *Interpretatio Isagogae*, a fact which accounts for its rarity in the *Commentarii in Porphyrium*. It appears more frequently in the *Interpretatio Categoriarum*, a fact which accounts for its frequency in the corresponding commentary. The predominance of *enim* over *nam* in the translations explains the similar relation in the commentaries.

It will be observed that this tendency to use one synonym to the exclusion of its competitors makes for the unification of vocabulary. There is another feature of Boethius's style that makes for the opposite, that is, his evident striving after variety. This, next to the effects of translation, is the most marked characteristic of his style. A few of the innumerable examples I have collected will be enough to enforce the point; *a* (*ab*) with the ablative, the ablative alone, and *quam* are used after comparisons. Cf. *Com. in Ciceronis Topica*, p. 1101 A: minus est animal rationale a simpliciter animali. *Ibid.* C: animal maius est homine. *Ibid.*: minus est animal rationale quam proprie animal. Compare also the constructions after *duplus*. *De Arithmetica*, p. 162, 15: duplus a (*ab*). *Ibid.*, p. 141, 11: duplus ad. *Ibid.*, p. 165, 18: duplus with the ablative. *Com. in Categorias*, p. 218 B: duplus(um) with the genitive.

Item, rursus, amplius. *Com. in Ciceronis Topica*, p. 1166 A: Item, causarum aliae sunt non spontaneae. *Ibid.*: Rursus, causarum aliae sunt constantes. *Ibid.*: Amplius, causarum aliae sunt voluntariae.

Tamquam, quasi. *Com. in Porphyrium*, p. 91 C: Fieri autem potest ut res, . . . non *quasi* genus, sed *tamquam* species sub alio collocatur.

Quoniam with finite verb and accusative with infinitive in indirect discourse. *Editio Secunda περὶ Ἐρμηνείας*, p. 362, 18 f.: Siquis dicat Socratem animal esse. Siquis praedicet quoniam Socrates bipes est.

Ac, atque, et, que. *Com. in Porphyrium*, p. 134 C: Itemque species ac differentia et proprium atque accidens.¹

Therefore, to sum up the foregoing points, any stylistic study of Boethius must take into account two marked influences on his style — his methods of translation and his desire for variety. The former influ-

¹ Further illustrations of this tendency may be noted in Engelbrecht's treatise on the style of the *Consolatio*, in *Sitzungsberichte der Wiener Akademie der Wissenschaften*, 1901, pp. 15-36.

ence helps to account for the appearance and disappearance of certain usages; it tends to unification of vocabulary. Though important, it has in many cases only a transient effect. In contrast to this, the second influence—the evident aiming at variety—tends to diversity of diction.

Bearing in mind the foregoing facts, we are now ready to take up our chronological study of the writings of Boethius. Any such research must be based on the painstaking and masterly investigation¹ of Samuel Brandt. Utilizing all the references made by Boethius to his own writings, he has fixed beyond all question the chronology of most of the works. He has made out an almost complete framework, leaving now and then a gap of more or less uncertainty which, I hope, may be at least partly supplied by my investigations. Brandt divides the extant writings of Boethius into five classes and arranges them chronologically as follows: 1. Works on the quadrivium; *De Arithmetica*, *De Musica*, *De Geometria*. 2. Works on the principles of logic; *Dialogi in Porphyrium*, *Commentarii in Porphyrium*, *Commentarii in Categorias* (510 A.D.). 3. Further works on the principles of logic; *Editio Prior* περὶ Ἑρμηνείας, *Priora Analytica*, *De Syllogismis Categoricalis*, *Editio Secunda* περὶ Ἑρμηνείας, *Introductio ad Syllogismos Categoricalis*, *De Syllogismis Hypotheticis*, *De Divisione*, *Posteriora Analytica*. 4. Dialectic proof and its application to Rhetoric; *Aristotelis Topica*, *Sophistici Elenchi*, *Commentarii in Ciceronis Topica*, *De Differentiis Topicis*. Also, most probably, the *Opuscula Sacra*. 5. *Consolatio Philosophiae* (523/4).

Brandt's order is practically certain. I shall take issue with him only in regard to the works on the quadrivium and, possibly, the *De Syllogismis Categoricalis*. In fact, I consider it the strongest corroboration of my method, that my conclusions are exactly the same as Professor Brandt's, except in the case of works concerning which there is a reasonable doubt. I hope also to place the *De Divisione* and *Introductio ad Syllogismos Categoricalis* a little more definitely than Brandt has been able to do, and to confirm his reasoning as to the position of the *Posteriora Analytica* and *Sophistici Elenchi*.

It appears, therefore, that, excluding the treatises on the quadrivium, there are four classes of works, according to their chronology and

¹ *Entstehungszeit und zeitliche Folge der Werke von Boethius*, *Philologus*, LXII, pp. 141-154; 234-279. See also his edition of the Commentaries of Boethius on Porphyry's *Isagoge*, 1906, pp. xxvi ff., lxxix ff., and cf. below, p. 155.

subject matter. Taking the works the relative dates of which are positively known, I propose to show first that works of a given period markedly agree and that divergencies can be largely explained; if this is not the case, the whole method rests on a sandy foundation and discourages further inquiry. My results are presented in tables. In preparation of these I have noted innumerable stylistic phenomena, including all the conjunctions and particles in the writings of Boethius. I include here only such tests as have significance. In the case of particles not mentioned in my article, Boethius formed no habits which can serve the investigator.

The first class contains the following works: *Dialogi in Porphyrium*, *Commentarii in Porphyrium*, *Commentarii in Categorias*. The tables below will show how they agree in the use of certain particles. It will be noticed that the *Com. in Porphyrium* agrees now with the *Dialogi* and now with the *Com. in Categorias*. The reasons thereof will be explained in passing.

	2					3			
	pp. ¹	Vero	Sed	Autem	Quodsi	Que	Ac	Atque	Et
Dial. in Por.	57	257	192	147	28	173	11	154	908
Com. in Por.	73½	416	252	131	42	117	77	191	650
Com. in Categ.	113	489	500	277	53	214	29	296	1407

These particles show a fairly consistent use on the part of Boethius. *Ac* appears more frequently in the *Com. in Porphyrium* than we should expect. Still, as compared with *et*, its use is rare, whereas in the late periods it is much more frequent.

	4		
	Quidem-sed	Quidem-vero	Quidem-autem
Dial. in Por.	2	2	1
Com. in Por.	23	117	17
Com. in Categ.	35	80	16

As Rand has shown, the frequency of these correlatives in the two later works is due to the influence of translation, see above, p. 124 f.

	5		
	Itaque	Igitur	Ergo
Dial. in Por.	14	123	58
Com. in Por.	32	157	30
Com. in Categ.	1	129	139

¹ The pages are reckoned according to Migne. Allowance is made for tables, headings, etc.

Ergo is used more frequently in the *Com. in Categorias* than in the corresponding work on Porphyry. The preponderance in either case seems due to the influence of translation, as the following figures show.

	Igitur	Ergo
Interpr. Isag.	14	8
Interpr. Categ.	8	19

	6		
	Nam	Etenim	Enim
Dial. in Por.	211	5	229
Com. in Por.	98	5	412
Com. in Categ.	212	5	636

Enim has a heavy lead over *nam* in the two later works. Translation seems to be the cause. See p. 128.

	7		8	
	Quoniam	Quod	Ideo	Idcirco
Dial. in Por.	120	76	39	17
Com. in Por.	159	158	13	65
Com. in Categ.	276	337	30	136

The influence of translation in the use of all these particles is direct and important. In witness of this, see the notes under the preceding tables and also compare the following :

	9		10	11
	Quoniam	Quod	Quare	Namque
Interpr. Isag.	16	5	5	1
Com. in Por.	159	158	5	6
Interpr. Categ.	4	239	35	17
Com. in Categ.	276	337	113	125

For *ideo* and *idcirco* see p. 126.

As we compare the works of this class we see that the agreements are not so striking as will appear in the remaining classes. This lack of agreement strongly corroborates my results ; for we expect the *Com. in Porphyrium* to show the influence of translation and hence to differ from the *Dialogi* ; we expect the *Com. in Categorias* to show still further influence of translation and to differ still more from the *Dialogi*.

I now take up the second class. The principal works are the *Prior* and *Secunda Editiones* *περὶ Ἑρμηνείας*. The tables explain themselves.

12						
	pp.	Rursus	Iterum	Item	Praeterea	Insuper
Prior . . .	86	125	2	1	1	0
Secunda . .	228	235	5	2	0	0

13			14			
Causal conjunctions			With clauses in indirect discourse			
	Quoniam	Quia	Quod	Quoniam	Quia	Quod
Prior . . .	138	29	112	109	3	6
Secunda . .	369	65	362	287	4	31

15		16			
	Quare	Quocirca	Enim	Nam	Namque
Prior . . .	93	27	473	113	55
Secunda . .	192	97	1249	277	126

17			18				
	Itaque	Igitur	Ergo	At vero	Vero	Sed	Autem
Prior . . .	3	98	121	5	142	286	253
Secunda . .	8	318	308	11	465	883	640

19				20		21		
	Que	Et	Ac	Atque	Quoque	Etiam	Ita	Sic
Prior . . .	121	900	15	90	126	60	91	39
Secunda . .	317	2225	45	286	478	211	384	93

22		23		24		
	Id est	Tamquam si	Ut si	Quidem sed	Quidem vero	Quidem autem
Prior . . .	123	31	33	44	34	21
Secunda . .	290	75	65	94	147	85

These are only a few of the tests that show the resemblance between these two works. Some one might say that the striking agreement in style as shown by these tables is due to the fact that the two works deal with the same subject. This is a factor, to be sure, but not necessarily a controlling one, as will be seen from a reference to the tables on p. 152. There it appears that the two works, the *Priora* and *Posteriora Analytica*, differ very materially, though the subject matter is such as to admit of similarities in usage; there is nothing inherent in the two that would necessitate the exclusive use, for example, of *rursus* in the one and *iterum* in the other. The differences noted on p. 152 are due no doubt to the fact that the works belong to different periods. Hence we see that works similar in nature need not necessarily show general agreement in stylistic peculiarities.

I now come to the third class. These are the *Com. in Ciceronis Topica* and the *De¹ Differentiis Topica*.

	pp.	25			26	
		Quare	Quocirca	Unde	Enim	Nam
Com. in Cic. Top.	118	4	12	14	401	201
De Diff. Top.	40	4	6	5	134	60

	Itaque	27		28	
		Igitur	Ergo	Rursus	Item
Com. in Cic. Top.	37	384	43	42	54
De Diff. Top.	15	98	3	20	18

The reappearance of *item* and *itaque* may be due to the influence of Cicero, as the following figures indicate.

	Rursus	Item	Itaque	Igitur	Ergo
Top. Cic.	2	10	9	26	2

	29			30		
	Causal Quoniam	conjunctions Quia	Quod	In indirect discourse Quoniam Quia Quod		
Com. in Cic. Top.	148	118	152	1	0	2
De Diff. Top.	46	24	51	2	0	0

	31			32	
	Autem	Sed	Vero	Quoque	Etiam
Com. in Cic. Top.	142	392	581	154	202
De Diff. Top.	73	116	219	52	49

	33				34	
	Que	Et	Ac	Atque	Ita	Sic
Com. in Cic. Top.	312	698	131	310	192	24
De Diff. Top.	77	272	70	93	67	9

	35			
	Quod si	Si vero	Si autem	Sed si
Com. in Cic. Top.	37	6	2	7
De Diff. Top.	13	2	0	5

¹ To this treatise Usener (*Anecdota Hilderi*, p. 41) refers as "seinem (Boethius's) verhältnissmässig selbständigsten Werk." But Boethius's method here is really not different from that followed in his other technical treatises. He cites various passages from Cicero and comments on them in the usual fashion. Some of these come from the *De Inventione*. Compare *De Differentiis*, p. 1207 B-D, and *De Inventione*, 7, which deal with the three kinds of rhetoric; also *De Differentiis*, p. 1208 A: B, and *De Inventione*, 10, which treat of the five parts of rhetoric. It is also noteworthy that the introduction of the *De Differentiis*, pp. 1174-1176 D summarizes what has already been said in the two editions of *Περὶ Ἐμπνεύσεως*, in the *De Syllogismis*

A comparison of the preceding tables shows that works of a given period markedly agree in the use of certain particles—the only particles, be it remembered, which reveal any distinct stylistic tendencies in such works. The question now arises whether there is any marked disagreement in works of diverse times. The following tables are a sufficient answer.

		:36	
<i>First Class</i>	pp.	Rursus	Item
Dial. in Por.	57	14	27
Com. in Por.	73	20	40
Com. in Categ.	113	72	4
<i>Second Class</i>			
Περί 'Ερω. Ed. Prior . .	86	125	1
Περί 'Ερω. Ed. Sec. . .	228	235	2
<i>Third Class</i>			
Com. in Cic.	118	42	54
De Differ. Top.	40	20	18
<i>Fourth Class</i>			
Consol. Philos.	46	3	1

In the use of *item* the *Com. in Categorias* shows an affinity with the works of the following class.

		:37		
		With clauses in indirect discourse		
<i>First Class</i>	pp.	Quoniam	Quia	Quod
Dial. in Por.	57	3	0	15
Com. in Por.	73	9	0	10
Com. in Categ.	113	42	0	34
<i>Second Class</i>				
Περί 'Ερω. Ed. Prior . .	86	109	3	6
Περί 'Ερω. Ed. Sec. . .	228	287	4	31
<i>Third Class</i>				
Com. in Cic. Top. . . .	118	1	0	2
De Differ. Top.	40	2	0	0
<i>Fourth Class</i>				
Consol. Philos.		(1) ¹	0	(1) ¹

Categoricis, in the *Introductio ad Syllogismos Categoricos* and in the *De Syllogismis Hypotheticis*.

¹ *Consolatio Philosophiae*, 2, 4, 77, according to the manuscripts has the reading *manifestum est quin*. Migne reads *quod*. Rand would read *quoniam*. This conjecture would carry great weight if the book had been written ten years previously. As it is, however, such a correction is extremely doubtful.

Quia is used only in the second class. In the first class *quoniam* and *quod* are about even. In the second *quoniam* takes the lead. In the later classes the construction itself is practically abandoned.

		38	
	pp.	Quocirca	Quare
<i>First Class</i>			
Dial. in Por.	57	1	12
Com. in Por.	73	7	5
Com. in Categ.	113	122	113
<i>Second Class</i>			
Πεpl 'Ερμ. Ed. Prior . .	36	27	93
Πεpl 'Ερμ. Ed. Sec. . .	228	97	192
<i>Third Class</i>			
Com. in Cic. Top. . . .	118	12	4
De Diff. Top.	40	6	4
<i>Fourth Class</i>			
Consol. Philos.	46	0	26

Again the *Com. in Categoriae* agrees with the following works.

		39		
	pp.	Itaque	Igitur	Ergo
<i>First Class</i>				
Dial. in Por.	57	14	123	58
Com. in Por.	73	32	157	30
Com. in Categ.	113	1	129	139
<i>Second Class</i>				
Πεpl 'Ερμ. Ed. Prior . .	86	3	98	121
Πεpl 'Ερμ. Ed. Sec. . .	228	8	318	308
<i>Third Class</i>				
Com. in Cic. Top. . . .	118	37	384	43
De Diff. Top.	40	15	98	3
<i>Fourth Class</i>				
Consol. Philos.	46	17	152	0 ¹

Itaque and *ergo* connect the *Com. in Categoriae* with the second class.

		40							
	pp.	Que ²	Et	Ac	Atque				
		%	%	%	%	%	%		
<i>First Class</i>									
Dial. in Por.	57	173	.19	908	1.	11	.01	154	.16
Com. in Por.	73	117	.18	650	1.	77	.12	191	.29
Com. in Categ. . . .	113	214	.15	1407	1.	29	.02	296	.21

¹ I have not included the *Carmina*, which contain two instances of *ergo*.

² Following the method of Lutoslawski, I have taken the most important of a series of synonyms, e. g. *et*, as the basis of comparison rather than their sum total, that the relation between the several particles may be most patent to the eye.

	pp.	Que		Et		Ac		Atque	
			%		%		%		%
<i>Second Class</i>									
Περὶ Ἑρμ. Ed. Prior	86	121	.13	900	1.	15	.01	90	.10
Περὶ Ἑρμ. Ed. Sec.	228	317	.14	2225	1.	45	.02	286	.12
<i>Third Class</i>									
Com. in Cic. Top.	118	312	.44	698	1.	131	.18	310	.44
De Diff. Top.	40	77	.28	272	1.	70	.25	93	.34
<i>Fourth Class</i>									
Consol. Philos.	46	286	1.90	150	1.	55	.36	94	.62

Generally speaking, *que*, *ac*, *atque*, as compared with *et*, appear more frequently in the later works.

Without taking space for tables I may also say that *tamquam si* is a marked feature of the second class. It is found therein at least 110 times. In all the other works put together the amount is less than ten. It is also noteworthy that *autem* far outstrips *vero* in the second class, but earlier and later it falls far behind that particle. This variation is due to translation. For after the *Interpretatio Isagogae*, *autem* is far in the ascendancy.

A glance at the preceding tables will show that the various periods have striking divergencies. It will be noticed that the works of the first period agree with each other less strikingly than the others. This was to have been expected. Boethius was a young man at the time and his style was readily susceptible of change. Furthermore, the influence of translation is apparent here. There are few traces of such influence in the first work, presumably because our author has not yet entered deeply into his Greek studies. The second work, the *Com. in Porphyrium*, may be looked upon as transitional in style. The influence of the Greek is making itself strongly felt. The third work shows the influence of translation in full sway. This conclusion has a radical bearing on our whole treatment. Hereafter I shall no longer follow Brandt in classifying the works of Boethius according to subject matter, but shall use the system which my results seem to demand — a classification according to stylistic peculiarities.

The comprehensive tabular view which follows will show that there are four main classes into which the works of Boethius may be grouped. These classes are clearly distinguished, and yet, in certain details, as is natural, adjoining classes shade into each other.

	pp.	Quidem-sed	Quidem-vero	Quidem-autem	Itaque	Igitur	Ergo	Que	Et	Ac	Atque		
<i>First Class</i>								%	%	%	%		
Dial. in Por.	57	2	2	1	14	123	58	173	.19	908	1.	11 .01	154 .16
Com. in Por.	73	23	117	17	32	157	30	117	.18	650	1.	77 .12	191 .29
De Arith.	71	10	24	6	3	105	52	212	.22	924	1.	17 .01	133 .15
<i>Second Class</i>													
Com. in Categ.	113	35	80	16	1	129	139	214	.15	1407	1.	29 .02	296 .21
Περί 'Εμμ. Ed. Prior .	86	44	34	21	3	98	121	121	.13	900	1.	15 .01	90 .10
De Syllog. Categ. ¹ . .	30	3	0	1	2	119	30	25	.06	398	1.	10 .02	18 .04
Περί 'Εμμ. Ed. Sec. .	228	93	147	85	8	318	308	317	.14	2225	1.	45 .02	286 .12
<i>Transition from Second to Third Class</i>													
De Divisione	15	2	12	18	0	22	15	19	.10	177	1.	4 .02	15 .08
Introd. ad Syl. Cat. .	26	13	42	13	3	52	5	52	.39	133	1.	34 .25	71 .53
De Syllog. Hypoth. .	42	8	79	13	12	243	5	39	.14	270	1.	27 .10	62 .22
<i>Third Class</i>													
De Musica	89	14	90	22	11	412	12	320	.51	621	1.	243 .39	220 .35
Com. in Cic. Top. . .	118	17	112	21	37	384	43	312	.44	698	1.	131 .18	310 .44
De Differ. Top. . . .	40	9	63	15	15	98	3	77	.28	272	1.	70 .25	93 .34
De Trinitate	6½	4	5	0	0	16	1	19	.46	41	1.	15 .35	18 .43
Pater et Filius	1½	1	1	0	0	7		3		9		7	0
Quomodo Substant. .	3	0	2	0	1	23		13		17		0	2
Eutyech. et Nest. . .	14½	2	17	0	2	31	3	68	.70	97	1.	18 .18	59 .61
Consol. Philos.	46	26	38	5	17	152	0	286	1.90	150	1.	55 .36	94 .62
(De Fide Cath.) . . .	5				9	1	8	19		39		9	22

¹ I leave this work here for convenience. See discussion on pp. 140-144, 155.

Namque	Namque positive	Nam	Enim	At vero	At vero si	Quemadmodum	Quasi	Quocirca	Quare	Quo	Quo fit	Porro	Porro autem	Quoniam	Quia	Quod	Ita	Sic	Rursus	Item
71	7	211	229	44	6	13	11	1	12	0	0	24	24	3	0	15	78	43	14	27
8	4	98	412	22	1	3	14	7	5	12	12	0	0	9	0	10	150	9	20	40
62	6	85	292	25	9	42	7	0	18	0	0	3	3	0	0	6	57	37	108	8
125	79	212	636	19	5	22	12	122	113	0	0	2	1	42	0	34	150	31	72	4
55	49	113	473	5	1	18	3	27	93	0	0	0	0	109	3	6	91	39	125	1
12	0	91	159	3	0	3	5	0	3	0	0	1	1	12	3	14	30	40	5	34
126	107	277	1249	11	2	63	33	97	192	0	0	2	2	287	4	31	384	93	235	2
15	14	17	75	0	0	1	7	4	6	0	0	0	0	1	0	1	17	13	25	1
17	13	47	101	0	0	0	4	6	4	5	5	0	0	0	0	1	26	3	9	29
26	18	115	181	9	1	0	3	26	4	20	18	0	0	6	19	4	153	19	26	26
17	7	76	223	3	0	4	36	21	2	6	6	0	0	10	1	0	120	10	99	43
56	47	201	401	15	0	1	37	12	4	25	25	2	1	1	0	2	192	24	42	54
9	8	60	134	3	0	0	19	6	4	4	4	0	0	2	0	0	67	9	20	18
2	0	20	41	0	0	2	13	2	4	0	0	0	0	1	0	0	19	1	6	3
0	0	3	3	0	0	0	0	0	0	3	3	0	0	0	0	0	1	0	1	1
0	0	4	15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	19	63	0	0	0	7	4	0	0	0	0	0	0	0	0	23	0	5	4
16	16	81	116	2	0	0	19	0	26	13	13	2	1	(1)	0	0	79	22	3	1
0	0	1	3	0	0	2	1	0	0	0	0	0	0	0	0	0	8	0	3	0

The classes presented in the preceding table are as follows :

First Class.—Works in which the influence of translation is little felt, as the *Dial. in Porphyrium*, or in which such influence is manifesting itself, as the *Com. in Porphyrium*. I call this the transitional period.

Second Class.—The influence of translation is paramount; *Com. in Categorias*, Περὶ Ἑρμηνείας, *Editio Prior* and *Editio Secunda*. I call this the Greek period.

Third Class.—Works in which the influence of Cicero is felt; *Com. in Cic. Topica*, *De Differentiis Topicis*. I call this the Ciceronian period.

Fourth Class.—*Consolatio Philosophiae*.

Since these classes are clearly defined, it remains only to fit in the somewhat less certain works, most of which Brandt has placed to a greater or less degree of certainty. Of these the *De Syllogismis Categoricis* seems to go between the two *Editiones* περὶ Ἑρμηνείας and after the *Prior Analytica*. The *Introductio ad Syllogismos Categoricos* was written after the *Prior Editio*. Whether it antecedes the *De Syllogismis Categoricis* Brandt cannot determine. The *De Syllogismis Hypotheticis* follows the *Editio Secunda* and precedes the *Commentarii in Ciceronis Topica*. The *De Divisione* was written before the *De Differentiis Topicis* and probably after the works on interpretation.

Practically every test in the preceding table shows that the *De Divisione* is transitional between the works of the second and third periods.

The rarity of *quidem . . . autem, ergo, quoniam, quia, quod, sic*, and the frequency of *que, ac, atque, quo, quo fit* ally the *Introductio ad Syllogismos Categoricos* with the third period. Hence I place it later than the second edition of Περὶ Ἑρμηνείας. The same may be said of the *De Syllogismis Hypotheticis*.

The *De Syllogismis Categoricis* is a peculiar work. The most cursory perusal will show that the book is *sui generis* among the writings of Boethius. It is characterized by a marked paucity of stylistic phenomena and by a brevity strained to the utmost. In fact, at first sight it might appear that this work is the breviarium referred to on p. 251, ll. 9–15, of the second edition of Περὶ Ἑρμηνείας. Brandt (*Entstehungszeit*, p. 257) has exploded this theory. His conclusion is strengthened by the character of the introduction of the *De Syllogismis Categoricis*. This proœmium is elaborate and by no means leads us to anticipate the brevity of the body of the work. After the elaborate

introduction come a few words that furnish a clue to the style to be expected (M., p. 794 c-d): inchoandum nobis est illo prius depulso periculo ne a quoquam *sterilis* culpetur oratio. Non enim eloquentiae compositiones sed planitiem consectamur: qua in re si hoc efficitur quamlibet *incompte* loquentes intentio quoque nostra nobis perfecta est.

Sterilis and *incompte* are terms particularly applicable to the style of the work in question. A good example of the former quality is seen in the way Boethius employs illustrations. To illustrate a declarative sentence, we find, *De Syllogismis Categoricalis*, p. 797 B: Socrates ambulat. With this it is interesting to compare the *Introductio ad Syllogismos Categoricalis*, p. 767 B, where to illustrate the same kind of sentence we find Virgil's words:

Est mihi disparibus septem compacta cicutis
Fistula.

How applicable *incompte* is to the style of our work is shown from the following,—not that the usages are found exclusively in this work, but that they are so frequent as to be particularly noticeable.

The preposition *ad* appears very often in the sense of *secundum*; p. 799 B: ad quantitatem (cf. p. 800 D: secundum quantitatem); p. 799 C: ad eundem ordinem; p. 797 A: ad placitum (cf. p. 795 C: secundum placitum).

The constructions with *participo* are also noteworthy, p. 799 A: participat *ad* utrosque terminos; with *in* and the ablative, p. 798 C; with the ablative alone, p. 798 C; with the dative and the ablative after *in*, p. 798 C: *in* nullo *sibi* participantes. In the *Dialogi in Porphyrium* we find the genitive, e. g., p. 62 A: *sui* participari; the accusative alone in the *Interpretatio Aristotelis Topicorum*, p. 945 B: C; also the preposition *a* (*ab*) with ablative, Περὶ Ἑρμηνείας, *Ed. Sec.*, p. 18, l. 17.

Another unusual construction is *abundo* with the ablative in comparison, p. 804 B: *homine* animal abundat; with this compare *Dialogi in Porphyrium*, p. 35 C: *maius* est animal *ab homine*.

Again within a short compass we have five instances of such an unusual collocation as *aequale est ac si diceret (dicas)*, p. 807 D f.

Another striking fact in the style of the *De Syllogismis Categoricalis* is the rarity of the *quidem . . . sed, vero, autem* correlatives. In fact, on first sight the seeming rarity of the equivalents for the Greek μὲν

. . . δέ might lead us seriously to question the validity of applying the stylistic method to Boethius at all, if indeed the work in question were not so abnormal in many ways. This irregularity manifests itself particularly in conciseness of diction, as has already been shown. Though this trait would account for the rarity of the *quidem* constructions, yet, even as it is, we find several instances. Brandt (*Boethii in Isagogen Porphyrii Commenta*, Leipzig, 1906, p. lxxxii) has enumerated these, as follows, *quidem . . . autem* once and *quidem . . . sed* three times. These are far fewer than one might expect, yet he would be rash indeed who would throw over the entire method when it fails in a work so abnormal as the *De Syllogismis Categoricalis*. The peculiar style of this work has struck the attention of others besides myself. Rocco Murari (*Dante e Boezio*, Bologna, 1905, p. 92), who has made a careful study of our author, is so impressed with the difficulties involved in the attempt to reconcile the character of the *De Syllogismis Categoricalis* with that of Boethius's other works, that he cuts the Gordian knot by declaring the first book of the *De Syllogismis Categoricalis* to be spurious. He thinks the second book of the *De Syllogismis Categoricalis* belongs to the *Introductio ad Syllogismos Categoricalis*, considering the first book a mediaeval abridgment of the *Introductio*. I had already noticed that the second book of the *De Syllogismis Categoricalis* closely resembled the *Introductio*; e. g. *praedico* with *de* and the ablative is very frequent in the second book of the *De Syllogismis Categoricalis*. This is the regular construction in the *Introductio*, whereas in the first book of the *De Syllogismis Categoricalis*, *praedico* appears very often with *in* and the ablative, *ad* and the accusative, only twice with *de* and the ablative. Other resemblances are as follows :

	pp.	Igitur	Ergo	Sicut	Ut si	Quasi
De Syllog. Categ. lib. II . .	16	96	9	8	6	4
Introd. ad Syllog. Categ. . .	26	52	5	4	14	4
	Quare	Unde	Quoqne	Etiam	Quod si	Vero
De Syllog. Categ. lib. II . .	3	3	23	11	2	81
Introd. ad Syllog. Categ. . .	4	2	39	16	6	119
	Sed	Autem	Causal conjunctions			
			Quoniam	Quia	Quod	
De Syllog. Categ. lib. II . .	52	29	31	4	16	
Introd. ad Syllog. Categ. . .	67	58	33	8	31	

The rarity of the *quidem* collocations still calls for comment (the one instance of *quidem . . . autem* occurs in Book II), but perhaps it is due to the fact that fully one half of the book, which contains but 22 columns of Migne in all, is taken up with model syllogisms; these and the preceding and accompanying comment seem hardly to call for the construction at all. It might occur oftener than it does, but the case is not paralleled by the *Dialogi in Porphyrium*, which in 62 columns (57 with allowances for figures, etc.) has only 5 instances of *quidem . . . sed, vero, or autem*.

Further, if we may, for the moment, accept Murari's conjecture, exclude Book I as spurious, and consider Book II as contemporaneous with the *Introductio*, certain tendencies to which my statistics point, appear in clearer light. *Ergo, enim, item* now show a continuous development. Beginning with the *De Arithmetica* and continuing through the second book of the *De Syllogismis Categoricalis, quoque* outnumbers *etiam* two to one; from the *De Syllogismis Hypotheticis* the relation is reversed. In the first and third periods *vero* surpasses *sed* at least two to one; in the second period the relation is reversed.

I hesitate to accept Murari's view, although it harmonizes so well with my results, until the whole question has been investigated again, and the oldest manuscripts of the *De Syllogismis* have been collated.¹ The theory must confront, first of all, Brandt's very probable demonstration (*op. cit.*, p. 245) that the work contains too many additions to be an excerpt from the *Introductio*. But why could it not be an excerpt from a lost work on the same subject, the existence of which Brandt proves (p. 259) — the *Categorica Institutio*? And, further, why is not this work (referred to variously as *Categorica Institutio, De Praedicativis Syllogismis, De Categoricalis Syllogismis*) the original pro-

¹ The title of the work in one book is given in a number of the earlier manuscripts as *Liber Ante Praedicamenta*: e. g. Valenciennes 406, S. IX/X; Munich 6372, S. X/XI (ANTE PERIERMENIAS); Orléans 267, S. X/XI; Chartres 100, S. XI. The work in two books, on the contrary, often bears the title which appears in the editions for that in one book, i. e. *Liber Introductionis in Categoricalis Syllogismos*. Cf. besides the preceding, Munich 6370, S. X; Chartres 74, S. X. The title *de Categoricalis Syllogismis* (or the like) appears in various later manuscripts (e. g. Orléans 265, S. XIV), none earlier than Tours 676, S. XII/XIII. This array of witnesses, though by no means complete, warrants the suspicion that our printed text derives from a late and inferior source.

duction that appeared between the first and second editions of the commentary on Περὶ Ἑρμηνείας? Such a work, just as Brandt suggests, would treat the subject somewhat more fully than the *Introductio* or the extant *De Categoricalis Syllogismis*, although it did not exceed the limits of *duo libelli* (M., p. 833 B). In that case, the *Introductio* may be after all the *breviarium* of which Boethius speaks (Meis., II, 251, 8), just as Usener surmised (Brandt, p. 258). But, apart from these possibilities, as it seems clear from other grounds than those presented by me that Book I is an abnormal affair, whether written by Boethius or not, I feel justified in excluding it from our present consideration. Granting the abnormality of the work, the evidence offered therein on matters of usage, so far from overthrowing the evidence of stylistic tests, becomes a remarkable attestation of its validity; such exceptions are of the kind that prove the rule.

It may now be well to summarize, the preceding points. Checking my results by Brandt's conclusions and proceeding on the basis that works of a given time agree and works of diverse times disagree, I would place in the following order the works already treated.

Transitional Period: *Dialogi in Porphyrium*; *Com. in Porphyrium*. Greek Period: *Com. in Categorias* (510 A.D.); Περὶ Ἑρμηνείας, *Ed. Prior*; Περὶ Ἑρμηνείας, *Ed. Sec.*; *De Divisione*; *Introductio ad Syllogismos Categoricalis*; *De Syllogismis Categoricalis, lib. II* (*lib. I* possibly spurious); *De Syllogismis Hypotheticis*. Ciceronian Period: *Com. in Ciceronis Topica*; *De Differentiis Topicis*. Last Period: *Consolatio Philosophiae*.

Thus far, leaving out the abnormal *De Syllogismis Categoricalis*, my results corroborate the facts adduced by Professor Brandt. If my method is substantiated in the case of undisputed works, may we not with confidence apply it to the rest? The most important of these are the *De Arithmetica* and the *De Musica*. To make clear the position of these works, it will be necessary, test by test, to show from the tabular view the relationships and differences of the various works and classes. That such tests might be found Professor Rand was the first to observe (*Traktat De Fide Catholica*, p. 436). He noticed that collocations with *quidem* were a marked feature of works later than the *Dialogi in Porphyrium*. This usage seemed to arise from the habit our author had of turning μὲν . . . δέ by *quidem* . . . *sed, vero, autem*. Rand found this usage well established in the works on the quadrivium.

Hence he argued that these works were later than the *Dialogue*. Comparing the use of the conjunctions *itaque*, *igitur*, *ergo*, he was also disposed to deny the authorship of the *De Fide* to Boethius. Professor Brandt (*Entstehungszeit*, pp. 146 f.) thought that the stylistic method, to have value, must be based upon the many references of our author to his own works. As Brandt himself has furnished us this basis for our investigation, I propose now to supplement Professor Rand's work by including many more tests. Referring to the table on pp. 138 f., I will take each test separately and show in detail its place in the general scheme.

The *quidem* collocations are rare in the *Dialogi*. Hence works that show the frequent use of them will be expected to belong to a period later than that work.

Itaque is rare during the second period.

Ergo is frequent in the first period, in the second vies with *igitur*, and later almost disappears.

Que and *ac* are far more frequent in the third than in earlier periods. The same may be said of *atque*.

Namque appears less and less frequently. It is rarely postpositive at first, later usually so.

Nam is as frequent as *enim* only in the *Dialogi*. Why the latter particle outstripped the former is shown above, p. 128.

At vero is frequent only in the early works. The same is true of *at vero si*.

Quemadmodum is very frequent in the first two periods, but later is hardly found at all.

Quasi is frequent from the end of the second period.

Quocirca and *quare* are frequent in the second period, which fact is due to translation. (See above, p. 132). *Quo fit* and *quo* in the sense of therefore, except for an eccentric appearance in the commentary on Porphyry, date from the transition between the second period and the third. *Porro* and *porro autem* are frequent only in the *Dialogi*. The *quoniam*, *quia*, *quod* clauses are frequent only during the Greek period. *Sic* as compared with *ita* is rare in the third period. *Item*, except for the abnormal *De Syllogismis Categoricalis*, is rare in the second period.

Now we are ready to apply these tests to the *De Arithmetica* and the *De Musica*. Professor Brandt considers that they belong together

and must be accounted the first of Boethius's extant writings. He does this, relying upon a seemingly plain statement of our author to that effect in *De Arithmetica*, p. 5, ll. 19-24: Recte ergo, quasi aureos Cereri culmos et maturos Baccho palmities sic ad te *novi operis* rudimenta transmissi. Tu tantum paterna gratia nostrum provehas munus. *Ita et laboris mei primitias* doctissimo iudicio consecrabis et non maiore censebitur auctor merito quam probator. *Primitias* seems to imply that this was the maiden effort of Boethius, *novi operis* referring to the recent accomplishment of the work. Still, as Professor Rand has pointed out, these words need imply only that our author has begun a new task.

As to Brandt's contention that these works come first and go together, a glance at the tabular view, pp. 138 f., will show that they do not belong to the same period. Instead of resembling each other in most stylistic criteria, as the other works of a given period do, they markedly disagree. Professor Brandt in a personal letter has suggested that this disagreement is due to the fact that the sources of the two works are different, for as has been shown, the sources have a marked influence on the style of a work. I had already noticed that with a new subject new words and constructions would come in, e. g. *Dico quia*, *De Musica*, p. 303, 4; *Pone*, *De Arithmetica*, p. 78, 30: 79, 7:14. These criteria, however, are not the kind on which I rely, criteria such that when they have started, appear on almost every page of a work, e. g. *et*, *autem*, etc. Furthermore, if Professor Brandt's suggestion holds, we should find the diction in the two works very uneven, for their sources are manifold. The following tables will show that the use of a given particle in either work is fairly consistent. In each work the first sum under a given word, e. g. *autem*, is the total number of times it appears in the whole work. The figure just under is the number of times that word is found in the first half of the book.

12

	Ac	At	Atque	Autem	Enim	Et	Etiam	Igitur	Ita	Nam
De Arith. . . .	17	36	133	203	292	924	54	105	57	85
	12	17	76	102	146	441	24	51	26	39
De Musica . . .	243	11	220	170	223	621	71	412	120	76
	155	1	105	66	91	277	43	171	61	38

I have chosen these criteria alphabetically. The figures are fairly constant. Hence I conclude that stylistic divergencies in the two works are not due to diverse sources.

I come now to the other of Professor Brandt's contentions, namely, that the works on the quadrivium are the earliest of Boethius' extant writings. I had accepted this as the true view all the while that my material was collecting. When I began to study my results it was borne home to me that the *De Musica* was about as different as could well be from the *Dialogi*, which must have followed it within a few months if Brandt is correct. A glance at the tabular view (pp. 138 f.) will enforce this divergence. Cf. also these tables.

	pp.	At		Nam si		Quemad-		
		§	§	§	§	Etiansi	modum ¹	
Dial. in Por.	57	46	1.	79	1.	10	1	
De Musica	89	11	.15	19	.14	0	12	
		Deinceps	Invicem	Ut puta	Vere	Atsi	Ideo	Verum
Dial. in Por.	0	12	5	11	0	39	0	
De Musica	10	1	0	0	4	11	8	

Besides there are 53 other tests consisting of particles that appear from one to seven times in one of the two works and not at all in the other. Hence it hardly seems likely that the *De Musica* was written only a short time previous to the *Dialogi*.

If the *De Arithmetica* and *De Musica* do not belong to the first period nor together, where do they come in the chronology of Boethius' works? A reference to the tabular view on pp. 138 f. will answer that question.

To begin with the *De Arithmetica*, the *quidem* collocations place it later than the *Dialogi*.

Itaque places it at the beginning of the second class.

Ergo places it before the third class.

Que, et, ac, atque show the same thing.

So also with *namque*.

Namque postpositive allies it with the *Dialogi*.

Enim compared with *nam* shows that it is later than the *Dialogi*.

At vero, at vero si, quemadmodum place it before the second class.

Quasi places it before the third class.

Quocirca, quare, quo, quo fit show that our work was written before the influence of translation became paramount.

Porro places it later than the *Dialogi*.

¹ In questions.

Quoniam, quia, quod in clauses of indirect discourse place it before the full Greek period.

Sic places it before the third period.

Rursus places it later than the *Dialogi*.

Item allies it with the second period.

There is a further criterium which has a strong bearing on the date of our work, i. e. the expression of the definite article, e. g. τὸ τρέχειν = id quod est currere. I have treated this at length above, pp. 126 f. This idiom does not occur in the *Dialogi*, nor in the *Com. in Porphyrium*, nor in the *De Arithmetica*. It begins with the *Interpretatio Isagogae* and the *Com. in Categorias*. After that it is found in all the important works and especially in the *De Musica*. As has been shown above, the appearance of this construction is due to translation.

Therefore, taking all these criteria into consideration, I conclude that the *De Arithmetica* was written after the influence of translation began to make itself felt and before it became paramount, that is, just before the *Com. in Categorias*.

Now for the *De Musica*. The *quidem* collocations place it later than the *Dialogi*. The same may be said of *enim* as compared with *nam*. So also of *porro, porro autem. Namque, namque* postpositive, *at vero, at vero si, quocirca* put it later than the first class. So also the definite article (see above, pp. 126 f.). *Ergo, que, et, ac, atque, quemadmodum, quasi, quare, quo fit, quoniam, quia, quod*, and *sic* compared with *ita* place it later than the second class. *Rursus* puts it later than the *Dialogi*. *Item* allies it with the third period. Accordingly, on the basis of these facts, I conclude that the *De Musica* was written after the transitional period and probably along with the works on the *Topica*.

I turn now to the *De Geometria*. As regards the authenticity of this work much has been said pro and con. For my purpose the most suggestive of the writers on this subject is Professor Rand; for taking a hint from his tests, that is, the *quidem* collocations and *itaque, igitur, ergo*, he conjectured that the *Interpretatio* was by Boethius and that the *Ars* was spurious. Georgius Ernst in his interesting article entitled, *De Geometricis illis quae sub Boethii nomine nobis tradita sunt quaestiones*, 1903, agrees with Professor Rand.

My collations confirm the conclusions of these scholars. The following tables show my results.

	44		45		
	Quidem-vero	Quidem-autem	Igitur	Ergo	Itaque
De Geom. Inter.	5	3	21	1	1
Ars	0	0	19	12	6

All illative particles in the *Ars* are found only in the postpositive position, a phenomenon appearing elsewhere only in the *De Fide Catholica*, if indeed that is to be attributed to Boethius.

If the *Ars* is by Boethius, Brandt, to be consistent with his argument in regard to the position of the *De Musica* (see below, pp. 155 f.), would hold that the *Ars* immediately follows the *De Musica*. They are too divergent in style, however, to admit of this possibility. Cf. these tables:

	pp.	Que	46		
			Et	Ac	Atque
De Musica	89	320	621	243	220
Ars	18	33	103	3	2

	Quare	Quapropter	47		
			Quo	Unde	Quocirca
De Musica	2	0	6	15	21
Ars	0	1	0	0	0

With the exception of *quapropter*, particles of this sort are not found in the *Ars*.

	Namque	Nam	48	
			Etenim	Enim
De Musica	17	76	7	223
Ars	1	2	8	11

Etenim in the *Ars* is always postpositive. This is not true in the case of the genuine works.

	Hoc est	49		50	
		Id est	Ut	Quoque	Etiam
De Musica	0	171	105	59	71
Ars	17	61	1	1	11

	51		
	Causal conjunctions		
	Quoniam	Quia	Quod
De Musica	149	10	93
Ars	5	9	0

There are many other words that strike the eye in the *Ars* which are almost entirely wanting in the genuine works, e. g. :

Esto age 5	Esto modo 1	Qua de re 1
Hoc pacto 4	Protinus 2	Videlicet 10
Modo with subj. . 6	Ob id 1	Imprimis 3

Hence, if the *Ars* is to be ascribed to Boethius, it is abnormal in the extreme.

This divergence in style is seen also in a comparison of the ways in which the *Ars* and the undisputed works introduce illustrations, demonstrations, tables, e. g. *Ars*, p. 401, 11 f.: ut subiecta docet formula. There are twenty-eight such illustrations in the *Ars*. Of these only two are introduced in the same way. In the undisputed works the number is ninety; of these more than half are used twice at least. Moreover, these collocations are much more wordy in the *Ars* than in the undisputed works. Also only one¹ used in the *Ars* is found in the undisputed works, whereas more than half of those used in any of the undisputed works are met in the other writings. This fact is not due to any difference in the subject matter; for the words of which the collocations are formed are identical. The difference is due to the fact that they are more involved in the *Ars*. The following will illustrate. Cf. *De Arte Geometrica*, p. 419, 7 f.: ut infra scripta perspicui potest in forma, and *De Musica*, p. 275, 25: id patefaciet subiecta descriptio. In the *Ars*, the introductory word is usually a pronoun, adverb, participle, or verb, e. g. in the preceding, *infra*, an adverb, is the word that refers to the following figure. The adverb furnishes 40% of the instances in the *Ars*, but only 3% in the undisputed works. In the undisputed works the pronoun is the favorite, supplying 50% of the instances. In the *Ars* the percentage is only 16 $\frac{2}{3}$.

As for participles, the same words appear in both the *Ars* and the undisputed works, but in the *Ars* the oblique cases prevail over the nominative, whereas in the genuine writings the reverse is true. Taking all these facts into consideration, I am inclined, therefore, to believe that Boethius did not write the *Ars*.

¹ *Ars*, p. 392, 4: ut subiecta descriptio monet, cf. *De Musica*, p. 246, 27. Even this solitary instance occurs in one of the three demonstrations which probably are excerpts from the *Ars* of Boethius.

Now what about the *Interpretatio*? Though the available tests are necessarily few, yet what few there are go to show that it was excerpted, at least, from Boethius, as Professor Rand has conjectured.

The first test that merits attention is this. Boethius's method of translation, that is, literal transference — see above, p. 124 — is much in evidence. Here are some examples. *De Geometria*, p. 390, 25: quod oportebat facere (ὁπερ ἔδει ποιῆσαι); cf. Heiberg¹: quod oportebat fieri. Again, p. 386, 5: dupla sunt his quadratis (διπλάσιά ἐστι τοῦ . . . τετραγώνου); cf. Heiberg, duplo maiora sunt quadrato.

Again ἀλλήλων is turned by *invicem*, as is the custom with Boethius. διὰ τό is turned by *propter quod hoc*, a phrase very common in Boethius; see above, p. 126. Such constructions are wanting in the *Ars*.

In leaving the *De Geometria*, I conclude, therefore, that the *Interpretatio* is probably genuine and that the *Ars*, with the exception of the demonstrations, pp. 390–92 (see Ernst, p. 24), is almost certainly spurious.

Turning from the *Interpretatio Euclidis* to the other translations, I shall not need to discuss the *Isagoge*, *Categoriae*, and *περὶ Ἐρμηνείας*; for their respective commentaries determine their dates. Of the remainder, the following tables show that the *Aristotelis Topica* and *Sophistici Elenchi* go very closely together, even as Brandt has argued.

		52			53			
		Causal conjunctions			In indirect discourse			
	pp.	Quoniam	Quia	Quod	Quoniam	Quia	Quod	
Aris. Top.	95	50	102	131	159	2	182	
Soph. Elench. . . .	30	16	23	31	24	0	56	
		54		55				
		Rursus and rursum	Amplius	Namque	Nam	Enim		
Aris. Top.	73		120	1	585	525		
Soph. Elench. . . .	14		22	0	175	106		
		56			57			
		Vero	Sed	Autem	Itaque	Igitur	Ergo	
Aris. Top.		127	206	1191	3	144	34	
Soph. Elench. . . .		62	126	401	1	84	11	
		58				59		
		Quo	Unde	Quocirca	Quare	Quidem sed	Quidem vero	Quidem autem
Aris. Top.		0	1	2	171	1	58	305
Soph. Elench. . . .		0	1	0	50	2	20	97

¹ Heiberg et Menge, *Euclidis Opera*, I, p. 13, 17.

Therefore the *Sophistici Elenchi* probably followed close upon the heels of the *Topica*.

The following tables will lead to the opposite conclusion in regard to the two *Analytica*.

	Rursus 60			61			
	pp. and rursum	Iterum	Amplius	Itaque	Igitur	Ergo	
Priora Anal. . . .	70	97	1	31	2	81	271
Post. Anal. . . .	47	0	35	35	21	161	37

	62			63	
	Namque	Nam	Enim	Eo quod	
Priora Anal. . . .	0	247	484	53	
Post. Anal. . . .	18	3	407	5	

	64			65		
	With indirect discourse					
	Quoniam	Quia	Quod	Sed si	Si autem	Si vero
Priora Anal. . . .	319	2	8	9	8	141
Post. Anal. . . .	88	61	140	7	24	18

	66			
	Ut	Sicut	Quemadmodum	Tanquam
Priora Anal. . . .	219	2	37	1
Post. Anal. . . .	181	69	2	16

It is clear that these two works differ materially. Professor Brandt has shown that the former was translated before the *De Syllogismis Categoriis* appeared and probably later than the *Περὶ Ἑρμηνείας*, *Ediitio Prior*. The *Posteriora* preceded the *Com. in Ciceronis Topica*. From the preceding tables it will appear that there was a considerable lapse of time between the two *Analytica*, bringing the *Posteriora* into line perhaps with the *Aristotelis Topica* and *Sophistici Elenchi*. This supposition is confirmed by one striking stylistic peculiarity, namely, the use of *utique*, in several of the translations, to express the particle *ἄν*. This usage appears not at all in the *Isagoge*, once in the *Categoriac*, not at all in the *Περὶ Ἑρμηνείας*, once in the *Priora Analytica*, but seventy-five times in the *Posteriora*, twenty-four in Aristotle's *Topica*, and five in the *Sophistici Elenchi*. I conclude, therefore, that there is an intimate connection between the three latter works.

The *Opuscula Sacra* are too brief definitely to be placed by our method. I think, therefore, that Professor Rand was a little hasty in denying the *De Fide* to Boethius when he based his argument, in part, on dissimilarity in style. It is true, we find more instances of *utique*

than we should expect and, what is even more significant, this particle is always postpositive, a condition not elsewhere exemplified in Boethius save in the spurious *Ars Geometria*. Yet we find some marked Boethian traits, e. g. *De Fide*, l. 42, *ut quia*, cf. *ut quoniam*, *Introductio ad Syllogismos Categoricalis*, p. 774 B, *Περὶ Ἑρμηνείας*, *Ed. Sec.*, p. 90, 29. This collocation arises from the Greek; cf. *Aristotelis Topica*, 955 B, C and often: *οὖν ἐπεὶ* = *ut quia*. It is also worthy of notice that Boethius and the author of the *De Fide* arrange their material in a similar fashion; *hactenus* is a favorite word with which to conclude a paragraph. Therefore, relying merely on stylistic grounds I should hesitate to deny the *De Fide* to Boethius.

In regard to the other *Opuscula* suffice it to say that a comparison of the criteria in the tabular view would seem to place them later than the second period. If so, the date¹ 512, before which the fifth could not well have been written, is corroborated. There is nothing in my results to substantiate the view of Usener² and others that the *Opuscula Sacra* are merely youthful exercises of Boethius.

Having thus traversed the whole series of Boethius's extant writings, I may briefly recapitulate the results of this examination. The so-called stylistic method is a recognized form of investigation, applied notably in the case of Plato. In any stylistic study of Boethius two traits must be taken into account. There is, first, the influence of translation on his style. Translation tends to explain new phenomena in style. It tends to unification of vocabulary. Its influence is more transient than one might anticipate. The second trait is Boethius's marked desire for variety.

Bearing these influences in mind and basing my study on Professor Brandt's researches as a framework, I have shown that works of a given period agree and works of a different period disagree. Then I classified them stylistically, giving up Professor Brandt's classification, based on subject matter. I have shown that my criteria fit in exactly with all the arguments, inductive and deductive, that Professor Brandt has formulated. Barring the dubious *De Syllogismis Categoricalis*, the sole exception is offered by the works on the quadrivium. There is a reasonable doubt concerning the place of these works. If my criteria have stood

¹ Hildebrand, *Boethius und seine Stellung zum Christentume*, 1885, p. 249 ff.

² *Anecdoton Holderi*, p. 54 f. See Rand, *op. cit.*, p. 436.

the test in other respects may we not with confidence rely on them to place the *De Arithmetica* and *De Musica*? Doing so, I have shown that these two works manifestly disagree; that this disagreement is not necessarily due to a difference in subject matter and that it cannot be attributed to a difference in sources. I have also shown that the *De Musica* differs too much from the *Dialogi* immediately to precede it. Following my tests, I have placed the *De Arithmetica* at the close of the transitional period and the *De Musica* in the third period.

As to other works, the peculiar style of the *De Syllogismis Categoricalis* is not such as to endanger the whole fabric of my argument, whether we call Book I spurious and Book II a part of the *Introductio ad Syllogismos Categoricalis*, or see in the work as it stands a sort of rough compendium which our author later reworked into the *Introductio*. The *De Divisione* is to be allied with the works of the second period rather than later. The *Introductio ad Syllogismos Categoricalis*, though belonging to the second period, shows affinities with the third. As to the *De Geometria*, the *Interpretatio* is probably genuine, whereas the *Ars* is spurious. Aristotle's *Topica* and the *Sophistici Elenchi* are intimately connected. The *Posteriora Analytica* is to be placed closely with these and considerably later than the *Priora*. Lastly, stylistic tests are too few to settle the genuineness of the *De Fide Catholica*.

To conclude this summary, I present a complete scheme of the extant works. Transitional period: *Dialogi in Porphyrium*; *Com. in Porphyrium*; *De Arithmetica*. Greek period: *Com. in Categorias* (510 A.D.), Περὶ Ἑρμηνείας, *Editio Prior*; *Priora Analytica*; Περὶ Ἑρμηνείας, *Editio Secunda*; *De Divisione*; *Introductio ad Syllogismos Categoricalis*; *De Syllogismis Categoricalis*, lib. II (*lib. I* possibly spurious); *De Syllogismis Hypotheticis*. Ciceronian period: *Posteriora Analytica*, Aristotle's *Topica*, *Sophistici Elenchi*, *De Musica*, *Interpretatio Euclidis*¹ (*Ars Geometrica* is spurious), *Com. in Ciceronis Topica*, *De Differentiis Topicis*, *Opuscula Sacra* I, II, III, V (IV is uncertain). Last period: *Consolatio Philosophiae* (523/4).

In the beginning of my paper I implied that any such study as I have undertaken, to be of value, must serve to give us a deeper insight

¹ I assume this place for the *Interpretatio Euclidis*, though as far as my data are concerned it may have come later.

into the character of our author. What have the present results contributed to this end? One thing at least. If the *De Arithmetica* and *De Musica* were not written first of Boethius's works nor together, we must place a new estimate on our author's temperament and habits. The current idea is well expressed in the words of Professor Brandt,¹

¹ Since this article went to the printer Brandt has issued his critical edition of the works on Porphyry (*Boethii in Isagogen Porphyrii Commenta*, 1906). Aside from the text there is a valuable introduction. Brandt's comparison of the two editions is especially good. Brandt holds to his former position that the works on the quadrivium must precede those on Porphyry. Noting that Boethius, M., p. 70 D, proposes a comprehensive study of Aristotle's works on logic, he thinks that we should have had a reference to the *De Arithmetica* if Boethius had intended also to treat of the quadrivium. But observe, once more, that Boethius nowhere gave notice of his intention to take up Cicero's *Topica*, to which he later turned. Brandt also believes that a man, so *propositi tenacissimus* as our author, could not have broken into his interpretation of Aristotle by interposing works on the quadrivium. And yet Brandt himself has pointed out a similar circumstance. In the passage referred to above, Boethius proposes to take up Aristotle's logic. Nothing is said about a second commentary on Porphyry.

Brandt also recurs to the scarcity of *quidem* collocations in the first commentary on Porphyry. He thinks that although Boethius may have used them in earlier works, yet he may have laid them aside, for the time being, not meeting with them in Victorinus's translation of Porphyry. As a parallel, Brandt adduces the use of *porro autem*. This occurs 24 times (Brandt's figures) in the first commentary on Porphyry, rarely elsewhere (see table, pp. 138 f.). He supposes that Boethius, noticing the solitary instance in Victorinus's translation, with a few more that may have dropped out of our text, took a notion to *porro autem* and used it freely, later abandoning it. Now this is exactly the sort of evidence to which I have been appealing in this discussion. We are concerned, first, with noting genuine peculiarities, and then, if we can, with explaining them. Brandt's explanations might perhaps suffice here, if other criteria did not clearly place the *Dial. in Porph.* and the *De Arithmetica* in the first period, but the *De Musica* in the third. It is therefore more natural to account for the rarity of *quidem* in the *Dial. in Porph.* on the ground that this work precedes Boethius's translations. A different cause, as explained above, operates in the *De Syllog. Cat.*, of which Book I may be spurious. Instances of sporadic preferences, like *porro autem*, may be noted in all the works of Boethius. These are interesting to observe, but I have cited only such peculiarities as illustrate a constant use or some marked development. Brandt's discussion of *quidem* and *porro autem* shows that he believes such evidence worthy of consideration. In the light of many more phenomena of the same nature, considered in the same way, I venture to draw a different conclusion from his. I cannot agree, therefore, that the peculiar character of the *De Syllog. Cat.* should oblige us to abandon the stylistic method in our efforts to

which I take from a personal letter to me. "Nondum persuadere mihi possum Boethium cum iam diu secundum propositum suum ad libros organi Aristotelici Latine tractandos et ad artem logicam et dialecticam exponendam operam suam contulisset, ad artem musicam explicandam redisse quae pars esset quadrivii." In other words, we are asked to hold of Boethius what Schleiermacher held of Plato, namely, that a man's life work is in embryo in the youth; that we must expect no deviation from the plan outlined by our author in his second edition of the *Περὶ Ἑρμηνείας*, p. 79, 10-80, 1: "haec fixa sententia est, ut . . . ego omne Aristotelis opus . . . transferam atque etiam . . . omnes Platonis dialogos vertendo vel etiam commentando in Latinam redigam formam." Though these words seem to substantiate Professor Brandt's conclusion, yet it were rash to deny that some outside interest might intrude for a time—in fact we know that this was the case with Boethius. For all must concede that before he had carried out his plan of translating and perhaps of commenting on all the works of Aristotle and Plato, he had begun to work on Cicero. In the same way, he may have undertaken the *De Musica* as a parergon.

determine the chronology of the works of Boethius. On the contrary, as I have indicated, this aberrant work may confirm, perhaps decisively, the validity of the method.

UNIVERSITY OF CALIFORNIA LIBRARY,
BERKELEY

THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

Books not returned on time are subject to a fine of
50c per volume after the third day overdue, increasing
to \$1.00 per volume after the sixth day. Books not in
demand may be renewed if application is made before
expiration of loan period.

OCT 12 1931

JUL 29 1931

11 Apr '52 AI

JUN 9 1952 LI

3 Apr '60 PM

IN STACKS

MAR 22 1960

REC'D LD

MAR 27 1960

25 Feb '65 PH

IN STACKS

FEB 11 1965

REC'D LD

JUN 1 '65 - 3 PM

SENT ON ILL

OCT 24 1996

U. C. BERKELEY

Gaylord Bros.
Makers
Syracuse, N. Y.
PAT. JAN. 21, 1908

U. C. BERKELEY LIBRARIES



C044014394

UNIVERSITY OF CALIFORNIA LIBRARY

