The Division of Philosophy and the Place of the Trivium from the 9th to the Mid-12th Centuries

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Summary: Into what parts should philosophy be divided? Where should dialectic and the other disciplines of the trivium be placed in the whole system of philosophy? And, in particular, was there any difference between *logica* and *dialectica*? The aim of this paper is to trace various opinions on these questions proposed from the 9th to the mid-12th centuries.[1]

1. Traditions from Late Antiquity

The late-antique tradition on the division of philosophy was bequeathed to the Carolingian Renaissance mainly through three sources, viz. Martianus Capella, Cassiodorus, and Isidore. Martianus Capella discusses all the seven liberal arts, without giving any further division of philosophy. Cassiodorus gives in the beginning of the chapter on *dialectica* a division of philosophy (Schema 1).

Schema 1: *Cassiodorus II.3.4 (= Isidore II.24.10-16)*
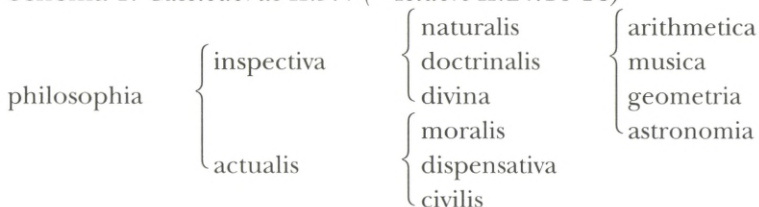
We may call this type of division 'Peripatetic', since in a group of manuscripts of the 9th century and later, this type of division is asserted to be Aristotelian, not Platonic.[2] Isidore in the beginning of

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1 On this subject we have three pioneering studies: Grabmann 1911 (Band II, ch. 2), Bischoff 1958, and Weisheipl 1965. I am indebted to C. Burnett, who corrected my English and gave me suggestions.

2 See *Inst.* II.3.4 (p. 110), the group of manuscripts called D by the editor, Mynors, (see his Introduction pp. xxx-xxxix), adds the phrase: "philosophia dividitur secundum Aristotelem, Platoni vero non conveniunt."

the chapter on *dialectica* (II.24.3-8) gives another division (Schema 2).

Schema 2: *Isidore II.24.3-8*
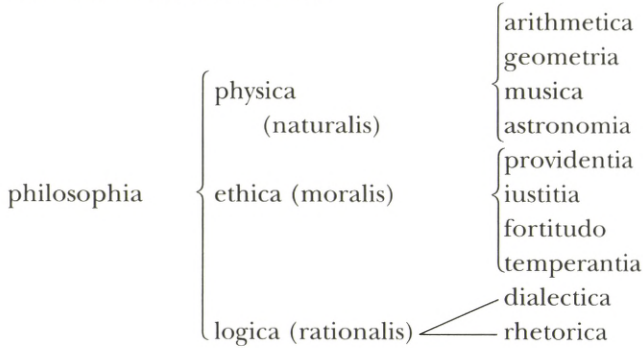
One may call this type of division 'Platonic'.[3] After giving the Platonic division, Isidore tacitly quotes Cassiodorus' Peripatetic division as an alternative division of philosophy (II.24.9-16).

These two types of division recurred in a number of variations in later periods. The two divisions are, however, considerably different from each other. Two points deserve our special attention. (1) The Peripatetic division gives no place to the trivium. (2) In the Platonic division, *logica* is considered the genus of *dialectica* and *rhetorica*, (in other words, *logica* is not equivalent to *dialectica*), and grammar has no place at all. How can one reconcile the two divisions? What place is to be given to the whole trivium, and in particular to grammar? The solution of these problems was a task for later generations.

2. Alcuin and the Platonic Division (The 9th Century)

Alcuin in his *Dialectica* follows Isidore almost without change. However, he uses one trick to make (or rather to pretend to make) a single coherent division of philosophy out of the Peri-

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3 This division of philosophy might well be called Stoic rather than Platonic. However, since Cicero (*Academica* 1.5.19-21) and Augustine (*De civitate dei* viii.4) ascribed the division to Plato, it is often called 'Platonic'. It should be noted, however, that none of the medieval texts I have worked with calls this division Platonic.

patetic and Platonic ones. Isidore first develops the Platonic division of philosophy (II.24.3-7), making a remark that the *divina eloquia* is likewise divided into three parts: *de natura, de moribus,* and *de logica = theologia* (II.24.8); then he introduces the Peripatetic division as another independent one (II.24.9-16). Alcuin follows Isidore faithfully until the remark about the *divina eloquia* (952B-C), but then makes a slight diversion, falsely identifying the Greek word *theologia* with *inspectiva* (952C), one part of the Peripatetic division, at which point he briefly mentions the Peripatetic division as a division of *philosophia vera,* by which Alcuin probably means theological science in a wider sense. Thus, according to Alcuin, at least secular philosophy should be divided in the Platonic way, not the Peripatetic one. Rabanus Maurus, a student of Alcuin, faithfully follows his master in his *De universo* (416B-C). This trick of Alcuin's marks the beginning of a disregard for the Peripatetic division.

A dialogue on philosophy, which is published as a work of Notker Labeo,[4] adopts the Platonic division with no mention of the Peripatetic one. The only difference from Schema 2 above is that in the subdivision of *physica* it adds *mechanica* and *medicina* to the usual subjects of the quadrivium.

The *Ars grammatica* of Clemens Scotus adopts only the Platonic division, as well, adding *astrologia* and *medicina* to the subdivisions of *physica* (IIII-XVI). It is worth noticing that this dialogue is written as an introduction to grammar, which has no place in the division as such. The author does attempt to give a position to grammar, but not very successfully. He repeats a passage neglected in the discussion up to this point in which Isidore says that *grammatica* is somehow connected to *rhetorica.*[5] He proceeds (XVII) – again following Isidore (I.2) – by returning to the traditional division of seven liberal arts, which has but loose connection to the Platonic division of philosophy, and asserting that grammar is the first subject to be learnt. At any rate, to my knowledge this is the first attempt of a grammarian to find a proper position in philosophy for his subject.

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4 Ed. Piper 1882. I have not had the opportunity to study this printed edition. I have worked with my own transcriptions of the manuscripts.

5 *Clementis Ars* XV.6: "coniuncta est grammatica arti rhetoricae. in grammatica enim scientiam recte loquendi discimus, in rhetorica vero percipimus qualiter ea quae didicimus proferamus." This is a reproduction of *Etymologiae* II.1.1.

I have discovered yet another dialogue, entitled *De partibus philosophiae*, in ms. Worcester Q.5.[6] This text must have been written on the basis of Clemens' *Ars grammatica*, since they have many common passages. Although this text is much more abbreviated than Clemens', it shows a slightly more developed stage in respect to the position of grammar. Unfortunately the manuscript has been heavily damaged by damp and one third of each page is completely illegible. However, the readable part (the beginning of f. 73v) retains the phrase "ex hoc apparet grammaticam loice pertinere, quia grammatica et rhetorica ut prediximus coniunctae sunt", a phrase not found in Clemens. It is certain that the anonymous author develops the idea that *logica* contains grammar as well as dialectic and rhetoric. Since this text is among several grammatical works in the manuscript,[7] this must also be an attempt by a grammarian to create a position in philosophy for his subject.

The idea of the anonymous Worcester author seems not to have been widely accepted. For example, a poem on the seven liberal arts,[8] which I would date to around the early 11th century,[9] says that rhetoric and dialectic are common in genus and that dialectic is prior in nature to grammar.[10] Fulbert of Chartres (1976: 266), too, discusses the difference between dialectic and rhetoric, both belonging to *logica*, without mentioning grammar in his *Rithmus de distantia dialecticae et rhetoricae.*

3. Gerbert of Aurillac and the Revival of the Peripatetic Division (The 10th and 11th Centuries)

At the end of the 9th century Gerbert of Aurillac revived the Peripatetic division of philosophy, which had basically been neglected since Alcuin. Richer reports in his *Historia* (III.60) that Gerbert supports the following division of philosophy (Schema 3).

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6 Due to lack of space, I refrain from quoting this and many other texts hither-to unedited. I will publish a collection of sources relevant to the present issue in a future issue of *CIMAGL*.

7 See the detailed description in Floyer's Catalogue (1903).

8 Ed. in *PL* 151, coll. 729-732. See Mews 1992: 31, and Mews 1994: 162-63.

9 Constant Mews (1994: 163) says: "It [i.e. the poem] was probably in circulation by the mid eleventh century".

10 PL 151, col. 731B: "Cuius (= rhetoricae) genere communis hinc est dialectica, / Quae natura prior extat etiam grammatica."

Schema 3: *Richer, Historia III.60*
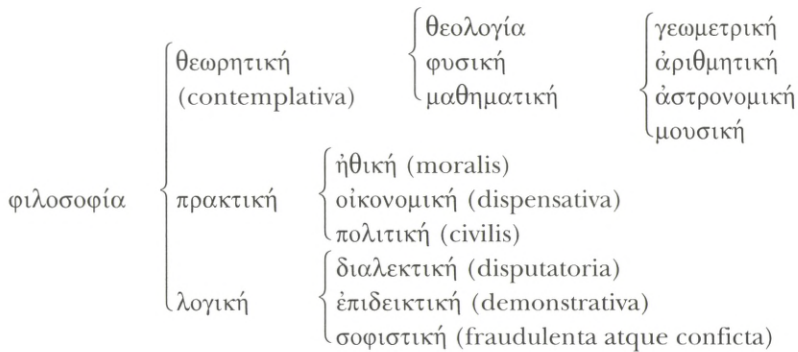
philosophia
- teoretice
  - physica (naturalis)
  - mathematica (intelligibilis)
  - theologia (intellectibilis)
- practice
  - dispensativa
  - distributiva
  - civilis
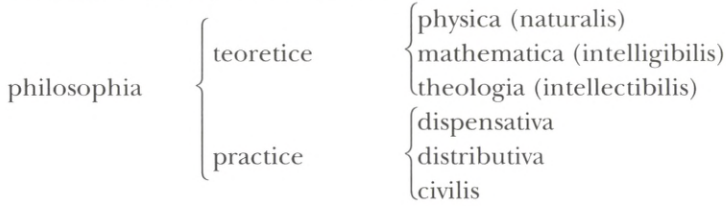
This is substantially the same as the Peripatetic division reported by Cassiodorus and Isidore. Its direct source, however, is Boethius' first commentary on Porphyry (I.3). This is indicated by the Greek words shared by both – 'teoretice' and 'practice' – and above all by the somewhat awkward Latin coined by Boethius, 'intellectibilis'.

  B. Bischoff (1958: 5, n. 2) has edited a short treatise entitled *De divisione philosophiae eiusdem.*[11] It proposes the following division of philosophy (Schema 4).[12]

Schema 4: *De divisione philosophiae eiusdem*

φιλοσοφία
- θεωρητική (contemplativa)
  - θεολογία
  - φυσική
  - μαθηματική
    - γεωμετρική
    - ἀριθμητική
    - ἀστρονομική
    - μουσική
- πρακτική
  - ἠθική (moralis)
  - οἰκονομική (dispensativa)
  - πολιτική (civilis)
- λογική
  - διαλεκτική (disputatoria)
  - ἐπιδεικτική (demonstrativa)
  - σοφιστική (fraudulenta atque conficta)

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11 According to Bischoff, this text is found in mss Bamberg, Hist. nat. 1 (s. IX), ff. 44r-45r; Besançon 184 (s. IX), f. 56v; München clm 14456 (s. IX), f. 68r; Valenciennes 404 (s. IX), f. 57 (I have not yet studied any of these manuscripts); and Bamberg, Phil. 1 (s. X), f. 51r. I have discovered two more manuscripts: Firenze, San Marco 113 (s. XII), f. 20v and San Marco 120 (s. XII), f. 26v. The word 'eiusdem' in

This treatise was in all probability written by a member of Gerbert's school, if not by Gerbert himself. As for the first two parts, this treatise runs parallel to Richer, in particular in their Greek terminology. It is true that Richer in his report ignores logic, which forms the third part of philosophy in this treatise. However, Gerbert's main source, Boethius' first commentary on Porphyry, mentions the ancient controversy over whether logic is a part or an instrument of philosophy (I-4); it is highly likely that Gerbert himself sided with the part theory, being aware that in his second commentary Boethius decides the controversy by claiming that logic is both a part and an instrument of philosophy (I-3). In addition, Richer mentions how important logic was in Gerbert's plan of education (III-46).

Richer omits logic in his report probably because the main topic there (III.55-61) is the debate between Gerbert and Otric on the relation between physics and mathematics. This issue deserves closer attention, because it arises from a discrepancy between the Platonic and Peripatetic divisions of philosophy. According to the Platonic tradition, *physica* is the genus of *mathematica*, viz. the quadrivium. According to the Peripatetic one, both *physica* and *mathematica* (or in Cassiodorus/Isidore's terminology, *naturalis* and *doctrinalis*) are species of *theoretice* (or *inspectiva*).

After the division of philosophy in Schema 3, Gerbert adds the phrase: "Rursusque mathematicam sub phisica non praeter rationem collocamus" (III.60). This must have been a concession to the Platonic division of philosophy. Against Otric's claim that there is a subaltern genus between *genus=phisica* and *species=mathe-*

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the title given in ms Bamberg, Phil. 1, certainly means 'Marii Victorini'. This is clear because the Bamberg manuscript is written by one and the same scribe throughout, and just before our text there is a copy of Isidore's *Etymologiae*, II.29-31, which has the incipit "De divisione definitionvm ex Marii Victorini libro adbreviata (f. 46r)" just as in Isidore's text, and the colophon "Explicit de divisione definitionvm ex Marii Victorini viri disertissimi feliciter (f. 51r)". Second, Richer (III.60) reports that Gerbert's division of philosophy was made *secundum Victorini* (*Vitruvii* ms) *atque Boethii*, perhaps confusing the translator and the commentator of Porphyry.

12 I follow the Greek terms used in ms Bamberg, Phil. 1.

matica, Gerbert answers that *physica* and *mathematica* are *coaevae species*, not genus and species (III-61).[13] Richer does not say, nor do I know, how Gerbert could collocate *mathematica* under *physica*, if they are *species coaevae*. Nevertheless, Gerbert felt it necessary to add the concession. This fact proves how prevalent the Platonic division was in those days and how novel the revival of the Peripatetic by Gerbert appeared. This fact also supports my view that Gerbert considered *logica* to be the third part of philosophy as the Platonic division would have it.

A treatise very similar to the *De divisione philosophiae eiusdem* has been published by Grabmann (1911: 43, n. 1). This treatise gives definitions to each species of *mathematica*, all of which are left undefined in the other text. It also introduces a new subdivision of *practica* into *actualis* and *inspectiva*, the former being subdivided into *ethica*, *yconomica*, and *politica*, while the latter into *hystoria* and *spiritualis intelligentia*, which is subdivided into *tropologia*, *allegoria*, and *anagoge*. The author of this treatise was possibly Adalbero of Laon, since in the manuscript (München clm 330) this treatise is preceded by his letter to Fulco of Amiens. If this ascription is correct, it would support my tentative attribution of the previous text to Gerbert because Adalbero was his student.

Both Gerbert and Adalbero (or whoever may have been the authors of these texts) give a unique subdivision of *logica*, that into *dialektike*, *epideiktike*(!), and *sophistike*. I do not know any source for this idea except for Boethius' *In Topica Ciceronis* I (col. 1045B-C), although Greek words are not used there. At any rate, it is likely that for Gerbert the word *logica* is equivalent to *dialectica* (or 'logic' in the modern sense). By contrast, in the Platonic division, and accordingly in the texts discussed in § 2 above, *logica* has a meaning different from *dialectica*, the former being a genus, the latter a

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13   Otric's attack says: "Miror ... quod phisicae mathematicam ... subdidisti, cum inter utramque subalternum genus intelligi possit: phisiologia." But Gerbert answers: "Sed dico phisiologiam phisicae genus non esse quemadmodum proponis." Which is the genus, *phisiologia* or *physica*? I suspect that there is a scribal error here.

species. It is well known that Gerbert's educational curriculum was the first to cover all the extant logical works of Aristotle, of Porphyry, and above all of Boethius, rather than the second-hand works like Martianus Capella, Cassiodorus, and Isidore, which had been so popular before. It is noteworthy that Boethius never uses the term *dialectica*, but *logica* to mean logic in the modern sense.[14] Presumably, Gerbert followed Boethius' terminology.

In some other texts from the *aetas Boethiana*, too, *logica* is used in its Boethian sense. For example *Quaestiones de minori commento Isagogarum*[15] faithfully reproduces what Boethius says about the Peripatetic division of philosophy in his first Porphyry commentary. Another treatise uses the term *logica* almost as an equivalent to *dialectica* (eam nunc dici dialecticam quae olim logica dicta est).[16]

4. The *Glosule* and a New Concept of *Logica* (The Late 11th Century)

As we saw in § 2 above, the Worcester text seems to have tried to give *grammatica* a place in *logica*. In the late 11th century, another attempt was made in a much more influential text: the *Glosule*, a commentary on Priscian Maior.

The *Glosule* divides *logica* into *sermocinalis* and *dissertiva*, the latter being subdivided into *inventio* and *iudicium* (Gibson 1979: 249.50f.). Here the term *sermocinalis* is first introduced into the discussion, a word which was to become popular later on. The term *dissertiva* is obviously based on Boethius' division of *logica* or *ars disserendi* into *pars inveniendi* and *iudicandi* (*De dif. top.* 1173C).

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14 I have checked all occurrences of 'logica' in the Boethian works with the aid of CETEDOC CD-Rom.

15 In mss Bibl. Vatican, Reg. lat. 1281, ff. 88v-91r; Paris BN, lat. 8672, ff. 88v-91r; Vatican, Pal. lat. 2508.

16 This treatise is edited in Piper 1882, pp. 623-645, as a work of the school of Notker Labeo. Although I have not had chance to study this book, I doubt the attribution to the school and tend to date it to the 10th century, on the basis of my own transcription of manuscripts: Sankt Gallen 820 and Bruxelles 10.615-10.729.

The *Glosule* then comments that *inventio* and *iudicium* belong to *dialectici* and *rhetorici*, while *sermocinalis* to *grammatici*, and *logica* is a genus of *grammatica* through *sermocinalis* (Gibson 1979: 250.1f.).

The *Note Dunelmenses*[17] give a slightly different division of *logica* (Schema 5).

Schema 5: *Note Dunelmenses*

logica
  (sermoci-
       nalis)
{
    sermocinalis { dialectica
                   rhetorica
   dissertiva
    sermocinalis simplex = grammatica
}

Here the term *sermocinalis* is used to characterize the whole *logica*, not only *grammatica* as is the case in the *Glosule*. Almost the same division of *logica* is found in the *Tractatus glosarum Prisciani*, too (Gibson 1979: 254.74f.). Leaving aside this small difference, the tripartite division of *logica* into *grammatica*, *dialectica*, and *rhetorica* came to be widely adopted in one way or another in later texts, as we shall see in later sections.

All of these three grammatical works assert that all the three species of *logica* deal with the same thing, *sermo* or *vox*, but in different ways (Gibson: 249.27f., 252.14f.). The same view is expressed in William of Champeaux's *Introductiones* (Iwakuma 1993: 1.1). This must have been a widely accepted view of *logica* in the late 11th century. It is incorporated in the revised version of the Platonic division of philosophy contained in the Parisian version of Ps-Rabanus' commentary on Porphyry:[18]

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17 F. 2ra-b: "Logicae supponitur per simplicem sermocinalem. Logica enim, id est sermocinalis scientia, alia sermocinalis dissertiva ut dialectica et rethorica, alia sermocinalis l2rbl simplex, id est non dissertiva, ut grammatica. Non habet enim argumenta propria quibus differat. Quodsi aliquando faciendum est, utitur alienis."

18 Of the three extant manuscripts, only the Paris manuscript, which contains many additions and revisions, mentions the division of philosophy described in Schema 6.

Schema 6: *Ps-Rabanus super Porphyrium* (Parisian version)

philosophia ⎧ physica
⎨ ethica   ⎧ grammatica
⎩ logica   ⎨ dialectica
                   ⎩ rhetorica
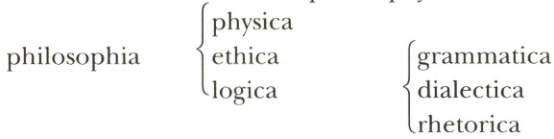
Although it is not mentioned in the other texts discussed in this section, the Platonic division of philosophy must have been presupposed in these discussion of *logica*.

The Migne edition of Ps-Bede's *De mundi caelestis terrestrisque constitutione* contains an accretion which discusses the division of philosophy (col. 908).[19] It asserts with some hesitation that *logica* in the narrower sense is *ratio disserendi* and comprises only *dialectica* and *rhetorica*, while in the broader sense *logica* is *scientia sermocinalis* and embraces the whole trivium. Presumably this text shows the transitional stage in which the new concept of *logica* was gradually accepted. This text is also interesting in that it makes a unique attempt to fuse Peripatetic elements in the main scheme of the Platonic division. For example, it divides *physica* into *intellectibilis*, *intelligibilis*, and *naturalis* (the Peripatetic terms), of which the last is divided into the quadrivium plus *astrologia* and *medicina*.

5. Divisions of *Logica* and/or *Dialectica* in Late 11th-Century Logical Works

By the late eleventh century, several divisions of *logica* and/or *dialectica* had been proposed. (1) Alcuin divides *dialectica* into *Isagoge, Categoriae, syllogismorum formulae, definitiones, Topica*, and *Perihermeniae*, viz. into each of the *logica vetus* texts (953A). (2) *Logica* is divided in the *Glosule* and other works into *grammatica* and *dialectica* plus *rhetorica*. (3) At the same time, the *Glosule* mentions the Boethian division of *logica* (or *ars disserendi* = *dialectica* plus *rhetorica*) into *inventio* and *iudicium*. The question of how to reconcile divisions (1)-(3) first arises around 1100.[20]

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19 This part, not contained in any extant manuscripts, was copied in the 16th century by Johannes Hervagius from an unidentified manuscript. See Charles Burnett's introduction to Pseudo-Bede, *De mundi celestis*: 11 & 6.

20 We have seen that Gerbert proposed yet another division of *logica* into *dialectike, epideiktike*, and *sophistike*, but this division reappears only later (cf. § 7-8).

The most primitive stage of discussion is found in a group of commentaries on *logica vetus* literature. They all pay attention only to the question of how to reconcile divisions (1) and (3). For example, the anonymous author of a commentary on the *De syllogismis hypotheticis*[21] reports that the following four theories were found in his day.

> (i) *Dialectica* can be divided into *scientia inveniendi* and *iudicandi*, of which the latter contains the works on syllogisms. *Scientia inveniendi* is divided into that *cum discretione locorum* and *sine discretione locorum*, of which the former contains the *Topica*, and the latter all the other works like Porphyry, *Categories*, *Perihermeneias* etc. The anonymous author adheres to this theory.
>
> (ii) *Dialectica* should be divided into three parts, viz. *scientia inveniendi* (= *Topica*), *iudicandi* (= works on syllogisms), and *neutra*; and all the other works are under the third part.
>
> (iii) Alcuin's theory, viz. *dialectica* should be divided into *scientia inveniendi* (= *Topica*), *scientia iudicandi* (works on syllogisms), Porphyry, *Categories*, and so on.
>
> (iv) *Dialectica* is divided into *scientia inveniendi* (= *Topica*) and *iudicandi* (= works on syllogisms), and other works are not principally under *dialectica*, but a kind of *appendicia* to *dialectica*.

All the theories agree that the *De differenciis topicis* is identical with *scientia inveniendi* and the *De syllogismis categoricis* and *hypotheticis* with *scientia iudicandi*. The point of dispute is what place is occupied by the other four texts, viz. the *Isagoge, Categoriae, Perihermenias*, and *De divisione*.

A commentary on Porphyry[22] deserves attention, too. The anonymous author first mentions the tripartite division of philosophy. The author asserts that philosophy had in the beginning only two parts, viz. *physica* and *ethica*, and *logica* was only invented later in order to have the skill to dispute correctly in the other two disciplines. *Physica* and *ethica* are characterized both in Peripatetic and Platonic ways, viz. as *speculativa/activa* and *naturalis/moralis* respectively. Thus the author seems to try to reconcile the Platonic

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21 Passages in mss München clm 14458 (f. 59r), Orléans 266 (p. 79a), and München clm 14779 (f. 66v).

22 In ms München clm 14458. The relevant passage is on ff. 83vb-84rb.

and Peripatetic divisions of philosophy from a historical view-point.[23] As for the division of *dialectica*, the author adheres to theory (iv), vaguely mentioning those who adhere to other theories. He adds an important comment to theory (iv), viz. that *inventio* and *iudicium* are integral parts of *logica dissertiva*, not divisive parts, viz. species. Thus the author tries to reconcile the twofold division of *logica* (2) and (3), the question of which remained untouched before.

A contemporary commentary on *Categories*[24] develops a completely different theory: that the book of *Categories* is principally subordinate to *logica* in so far as it discusses *voces*, while in so far as it discusses *res*, it is subordinate to *physica*. This surprising theory could be explained as an over-reaction to the vocalist assertion that the *Isagoge*, and therefore also the *Categories*, only discusses *voces*, not *res*.

6. Vocalists on the Division of *Logica* and Philosophy.

The *Historica Francica* (3c) mentions a certain Arnulf of Laon as a codisciple of Roscelin of Compiègne in the school of John, who taught that dialectic was an *ars vocalis*.[25] Arnulf's teaching is preserved in a Pommersfelden manuscript, in which some clearly vocalistic texts use the name 'Arnulfus' in sentence examples (Iwakuma 1992 § 6).[26] One of the texts in which 'Arnulfus' is so

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23 This historical explanation itself derives from Isidore (II.24.4-7), who in his turn followed Augustine (*De civitate dei* viii.2-4). The reconciliation, however, of the Platonic and Peripatetic theories is characteristic of this commentary. It also tries to reconcile the Platonic and Aristotelian theories on universals. See Iwakuma 1996 § 8.

24 In mss Vatican reg. lat. 230, Paris 13368, München clm 14458 ff. 95r-102r, and London, Royal 7.D.XXV.

25 Mews (1992: 13) tentatively identified this John with the author of the *Glosule.*

26 It is an important characteristic of vocalist texts that they tend to use real names of the master himself, of the master's master, or of students, instead of usual straw-names like 'Socrates' or 'Plato'. Examples. (1) In the case of the Pommersfelden manuscript, besides 'Arnulfus' (f. 21v and 34r), many other names are used like 'Balduinellus' (f. 25v), 'Iungomalius' (f. 32v), etc. (2) Gerland of Besançon uses among others his own name and 'Roscilinus' (see the Index to the edition) – this offers further evidence for my assertion (Iwakuma 1992 § 47) that Gerland was younger than, and a student of, Roscelin. (3) Abelard uses in his *Dialectica* his own name and some others (see the Index to the edition). (4) Ms München

used[27] develops the division of *ars litteralis* into *ratio disserendi* and *non ratio disserendi*, which could be understood to be substantially the same as the division in the *Glosule*. (The terms in italics are those in the *Glosule*).

$$
\text{ars litteralis} \left\{
\begin{array}{l}
\text{ratio disserendi} \\
\quad (= \textit{dissertiva}) \\
\text{ratio non disserendi}
\end{array}
\right.
\left\{
\begin{array}{l}
\text{scientia locorum et syllogismorum} \\
\quad (= \textit{dialectica}?) \\
\text{non scientia loc. et syl.} \ (= \textit{rhetorica}?) \\
\end{array}
\right.
$$

ars litteralis (= *logica*); ratio non disserendi (= *sermocinalis*, viz. *grammatica*)

Gerland of Besançon says little about *logica*, but once he says (p. 86.4), "omnis logica, id est sermocinabilis vel disputabilis scientia": the terms *sermocinabilis* and *disputabilis* must reflect the Glosule's *sermocinalis* and *dissertiva*. We have no evidence of what Roscelin thought on this issue. However, seeing that his codisciple, Arnulf, and his student, Gerland, follow the *Glosule*, it is highly plausible that Roscelin himself held the same view.

The *Glosule* gives a twofold division of *dissertiva*, viz. into *inventio* and *iudicium* and into *dialectica* and *rhetorica*, without explaining the relation between them. Arnulf, on the other hand, argues that the former is not a division into parts or individuals, but into integral parts (*continuae*), the same theory that is held in the Porphyry commentary mentioned in § 5 above (cf. n. 22). Roscelin would disagree with this theory, since a source[28] shows that he placed the *Categories* under *scientia iudicandi*, a theory that contradicts all the

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clm 14779 uses among others 'Petrus' three times (f. 53v, 55v, and 88v), and the second sentence is 'Petrus vocor'! (I argue, then, that the glosses in the manuscript, the authenticity of which has long been debated, were written by Peter Abelard). (5) Ms Paris BN lat. 544, ff. 94-114 of which I believe to be vocalistic, contains two unfamiliar names on f. 94r and 98v. This practice is rather popular in grammar (thus 'Priscianus scribo' in the *De inst. gram.* XVII: 151.5), but never found, to my knowledge, in realist logical texts.

27   Com. on *De dif. top*, on ff. 8v-26v + 28r-29v. The relevant passage is on ff. 8v-9r.

28   *Categories* commentary in ms Paris Arsenal 910, at. f. 147va: "Cui parti logicae supponatur liber iste, quaeritur, scilicet inventioni an iudicio. Dicunt quidam ut **Roscelinus** quod liber iste iudicandi scientiae supponitur, quia liber iste tendit ad Perihermenias et Perihermeniae tendunt ad Analytica, qui liber est Resolutorius. **M.p.** dicit quod supponitur scientiae inveniendi. Sed nos dicimus quod neutri illarum magis quam utrique supponitur, sed aeque utrisque. Scire enim quae de quibus habeant praedicari et quae a quibus removeri, valet ad inventionem argumentorum et iudicium."

theories (i)-(iv) studied above (§5). Roscelin's argument for this is that the *Categories* is for the sake of the *Perihermenias*, which is for the sake of the *Analytics*, viz. *scientia iudicandi*.[29] Since a similar idea is developed by Gerland of Besançon (p. 2.5f), Gerland presumably followed his master, although he says nothing explicitly on this issue.

All of these sources show that the tripartite division of *logica* into *grammatica, dialectica*, and *rhetorica* was widely accepted by vocalists as well as by realists around the turn of the 11th century. One of the few to reject the view was Peter Abelard. In his *Logica "Nostrorum"* (506.18-23) he explicitly asserts that *logica* is the same as *dialectica*, while he accepts the Platonic division of philosophy into physics, ethics, and *logica*. He also says in his *Super Topica glossae* that grammatical and rhetorical questions belong to other sciences than *physica* and *ethica*, because we should keep grammar and rhetoric separate from philosophy (p. 290.5-7). Therefore, according to Abelard, grammar and rhetoric do not belong to philosophy, while they may be sciences. After a few lines he also says that grammatical and rhetorical questions do not pertain to the aforementioned sciences (viz. *physica, ethica, logica*), if we do not follow those who think that grammar and rhetoric are under *logica* (p. 290.11-13). It is certain, then, that Abelard knew well the new tripartite division of *logica* he was rejecting. Abelard also comments that the term Boethius uses is not *logica*, but *disserendi rationis scientia*, which can hardly apply to grammar, since grammar does not teach discussion at all (p. 290.13-16).[30]

We have two versions of Abelard's litteral glosses on the *De dif. top.*, which he wrote in his youth.[31] They show that Abelard had earlier made concessions to the new tripartite division of *logica*. According to the glosses, *logos* has a two-fold etymology, *ratio* and *sermo*, and if *logos* is interpreted as *sermo*, then *logica* would contain

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29 His argument is presumably based on Boethius' first commentary on Porphyry (13.16f.).

30 The *ratio* in the edition (p. 290.14) and in the manuscript should be emended to *rationis*.

31 For the authenticity of the glosses found in ms München clm 14779, see n. 26. The relevant passage is on f. 87v. Ms Paris, BN, lat. 7094A, ff. 82-95, contains glosses on the *De syllogismis categoricis*, the *De divisione*, and the *De differentiis topicis* very similar to those in ms Munich clm 14779 or in ms Paris BN lat. 13368. I believe these glosses were written by Peter Abelard too. The relevant passage is on f. 92va.

grammar and rhetoric as well as dialectic, the very idea that is held by the *Note Dunelmenses* and the *Tractatus glosarum Prisciani*. In the end, however, Abelard sticks to the traditional characterization of *dialectica* as *scientia rationalis* and rejects the idea of *dialectica* as *scientia sermocinalis*.

7. Jocelin of Soissons' Division of *Logica*

In § 5 above we saw that the reconciliation of the three divisions of *logica/dialectica* so far proposed was first attempted around 1100. Soon thereafter it was noticed that there is yet another division (4) of *logica/dialectica* in Boethius' *Super Topica Ciceronis* (Schema 7).

Schema 7: Boethius, *In Topica Ciceronis* I (col. 1045B-C)

logica (Aristoteles) = dialectica (Plato) = ratio diligens disserendi (Cicero)	scientia definiendi scientia dividendi scientia colligendi	disciplina vel demonstrativa dialectica (rhetorica)[32] sophistica

This fact was taken seriously for the first time by the school of Jocelin of Soissons. A text ascribed to Jocelin in the *Notulae De divisionibus secundum mag. Gosl.*,[33] develops a unique theory based on the above Boethian division. This theory is described in more detail in two other texts[34] found in the same manuscript (Schema 8).

Schema 8: ms Orléans 266, p. 171b

logica	sermocinalis = grammatica		dialectica
	dissertiva = ratio disserendi	collectiva definitiva divisiva	rhetorica philosophia *seu* physica[35] sophistica

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32 See also *De dif. top.*, PL 64, col. 1181D, where necessary arguments are ascribed to philosophers, probable ones to dialecticians and orators, and sophistical ones to sophists.

33 The relevant passage is ms Orléans, BM, 266, p. 149b.

34 Commentary on the *De syl. cat.* and on the *De dif. top.* The relevant passages are on p. 171b and pp. 230a-231b.

Jocelin follows the theory already proposed by some masters (see §§5-6) that *scientia inveniendi* and *iudicandi* are the integral parts of *logica*. As for the divisive parts (or species) of *logica*, Jocelin replaces the Boethian division (4) with the traditional one into *dialectica* and *rhetorica* only. Thus now, according to Jocelin, *logica* contains *philosophia* or *physica* as one of its species!

8. Peter Abelard on the Division of Philosophy

In his *Logica Ingredientibus* (p. 1.7-11) Peter Abelard gives the tripartite division of philosophy in the Platonic way, but using slightly different terminology: *speculativa*, *moralis*, and *rationalis*. He ascribes this division to Boethius, referring not to Boethius' words in his first Porphyry commentary as B. Geyer suggests, but to a passage of *In Topica Ciceronis* (1044C).

Abelard also makes a short comment that not all *scientiae* are philosophy (p. 1.5-7). This comment is expanded upon in his *Logica Nostrorum petitioni sociorum*, and it has to do with *scientia* as a genus of philosophy (p. 505.1). He divides *scientia* into *scientia agendi* and *discernendi*, and identifies the latter as *philosophia* (p. 506.4-5). In the course of the discussion on *scientia*, he uses the Peripatetic terminology *'practica'* and *'theorica'* to describe the two species of *scientia* (p. 505.21-22). Some later generations follow Abelard in introducing *scientia* in the discussion of philosophy (cf. § 10 & 12).

Finally, Abelard divides *scientia discernendi* or *philosophia* into *physica, ethica*, and *logica* in the traditional way, but as we have seen, for him *logica* is equivalent to *dialectica*, not a genus of *grammatica* and *rhetorica* (§6).

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35 While the commentary on the *De dif. top.* ascribes necessary arguments to philosophy following Boethius (see n. 32 above), the commentary on the *De syl. cat.* mentions *physici* instead. The latter could not be a scribal error, since it adds: "ad physicos, id est ad quatuor reliquarum artium, id est arithmeticae, musicae, astronomiae, geometriae, opifices."

9. Hugh of St. Victor on the Division of Philosophy

In his *Didascalicon* (II-1 and III-1), written in the late 1120's,[36] Hugh of St. Victor proposes a new division of philosophy (Schema 9).

Schema 9: Hugo de Sancto Victore, *Didascalicon* II-1 & III-1

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                                        ⎧ theologia (intellectibilis)                    ⎧ arithmetica
                theoretica (speculativa) ⎨ physica (naturalis)                           ⎪ musica
                                        ⎩ mathematica (intelligibilis, doctrinalis) ⎨ geometria
                                                                                        ⎩ astronomia
                                        ⎧ solitaria
philosophia ⎨ practica (activa, ethica, moralis) ⎨ privata
                                        ⎩ publica
                                        ⎧ lanificium
                                        ⎪ armatura
                                        ⎪ navigatio
                mechanica (adulterina)  ⎨ agricultura
                                        ⎪ venatio
                                        ⎪ medicina
                                        ⎩ theatrica
                                        ⎧ grammatica
                                        ⎪                    ⎧ demonstratio      ⎧ dialectica
                logica (sermocinalis)   ⎨ dissertiva ⎨ probabilis ⎨ rhetorica
                                                            ⎩ sophistica
```

Hugh revives the Peripatetic division which had long been neglected. His schema is substantially the same as that possibly proposed by Gerbert of Aurillac (see Schema 4 in §3 above). What he adds to the latter are various charactarizations of each species of philosophy that had appeared in the meantime (for example he characterizes *logica* as *sermocinalis*); a new species, *mechanica*; and the division of *probabilis* into *dialectica* and *rhetorica*.

Just like Jocelin of Soissons, Hugh asserts that *inventio* and *iudicium* are integral parts of *ars disserendi* (II-30). Unlike Jocelin, however, Hugh neglects the division of *dissertiva* into *collectiva, definitiva,* and *divisiva.*

36   On the dating, see Taylor 1961: 3.

10. William of Conches' Introduction
of the Ciceronian Schema

William of Conches introduces a completely new idea into the discussion on the division of the seven liberal arts. In his glosses on Priscian (Jeauneau 1960, p. 245.3-9) and in his *De philosophia mundi* (IV.41), he takes up *eloquentia* as the genus of the the trivium. We may call this type of division Ciceronian, for his idea is based on what Cicero says in the beginning of his *De inventione* (I.1): that *sapientia* without *eloquentia* and *eloquentia* without *sapientia* are useless (see the *De philosophia mundi* praef.). For William, the trivium or *eloquentia* is an indispensable weapon for philosophy, but is itself not *philosophia*, which name applies only to the quadrivium (*De philosophia mundi* IV.41).

The introduction of *eloquentia* was clearly very novel. For in his glosses on Priscian (p. 245.21-22) William felt it necessary, in order to avoid critique (*ut contentio tollatur*), to mention *logica*, too, which since the *Glosule* had traditionally been the genus of the trivium. Further, William develops his own theory of the meaning of *logica*. According to him (p. 245.22-26), *logica* can equivocally mean *sermocinalis* and *rationativa*, since the Greek word *logos* can mean *sermo* and *ratio*; and *logica sermocinalis* contains the trivium, while *logica rationativa* contains *dialecticam, rhetoricam,* and *sophisticam,* but not *grammaticam.*

The Ciceronian schema seems to have had some vogue in the mid-12th century. The commentary "Totius eloquentiae" on Priscian (p. 236 'Quod genus') asserts the following division of sciences (Schema 10).

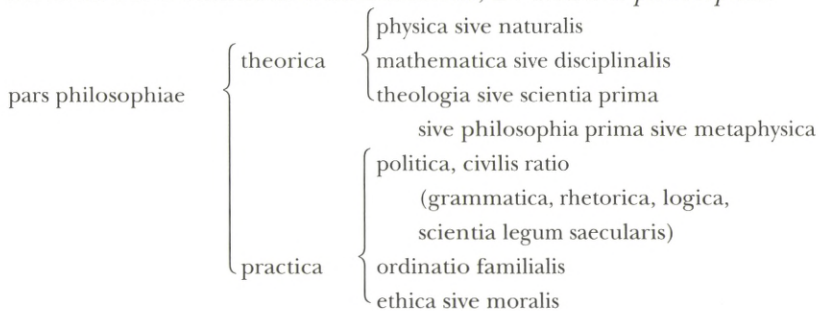Schema 10: *The Commentary "Totius eloquentiae" on Priscian*
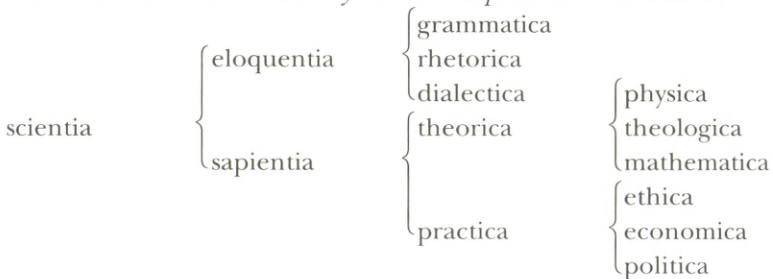
A similar division of sciences is found in the anonymous *Divisio sci-entiarum* (pp. 77-79). The difference is only that *dialectica* is replaced by *logica*, that *sapientia* is not identified with *philosophia*, and that *mathematica* is divided into the four arts of the quadrivium. Almost the same division of philosophy is also found in a text published by Grabmann (1911, pp. 36-40). The main difference is that it contains *mechanica* as a species of *sapientia*, just as in Hugh of St. Victor.[37] And here *sapientia* and *eloquentia* are overtly identi-fied with *philosophia* and *logica*, respectively.

In schema 10 the subdivision of *sapientia* is the same as the orig-inal Peripatetic division of philosophy. Thus, the problem that the Peripatetic division lacks a spot for the trivium is solved here by in-troducing the Ciceronian framework. But, as a result, the trivium (viz. *eloquentia* or *logica*) has come to be excluded from *philosophia*, although it is a species of *scientia*.

11. Dominicus Gundissalinus on the Division of Philosophy

The same problem was solved in another way by Dominicus Gundissalinus. In his *De divisione philosophiae* he first says (p. 5.9-23) that some parts of the *scientia humana*, viz. the liberal arts, be-long to *eloquentia*, some to *sapientia*; but they all are *philosophia*. And as for *philosophia*, he proposes (p. 12.10-19.2) the following division (Schema 11).

Schema 11: Dominicus Gundissalinus, *De divisione philosophiae*

```
                                    ┌ physica sive naturalis
                          ┌ theorica┤ mathematica sive disciplinalis
                          │         └ theologia sive scientia prima
pars philosophiae ┤                        sive philosophia prima sive metaphysica
                          │         ┌ politica, civilis ratio
                          │         │     (grammatica, rhetorica, logica,
                          │         │      scientia legum saecularis)
                          └ practica┤ ordinatio familialis
                                    └ ethica sive moralis
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37 As for the relation between this text and Hugh's teaching, see the discussion by Grabmann 1911: 31-36.

He returns to the genuine Aristotelian bipartite division reported by Cassiodorus and Boethius in his first commentary on Porphyry, and incorporates the trivium under a species of *philosophia practica*, viz. *politica* or *civilis ratio*.

This type of schema did not originate with Gundissalinus. The same idea, at least concerning rhetoric, can be traced back to Thierry of Chartres. Thierry writes in his commentary on Cicero's *De inventione* (p. 50.27-39) that the genus of rhetorical art is *scientia civilis*, and this very passage, as well as many others, is repeated verbatim by Gundissalinus (p. 64.11-25).[38]

12. Alberic of Paris on *Scientia* or *Philosophia*

Alberic of Paris wavers as to the division of philosophy. In one text he simply follows the division of philosophy into physics, ethics, and logic, the last of which contains grammar, dialectic, and rhetoric.[39] In another text Alberic combines all the divisions so far proposed, without attempting to reconcile them (Schema 12).[40]

Of the divisions mentioned here, the only one that we have not yet encountered is the idea that grammar, dialectic, and physics occur in both theoretical and practical variants. A similar idea is implied in the *Microcosmographia*.[41] I do not know who proposed this idea first.
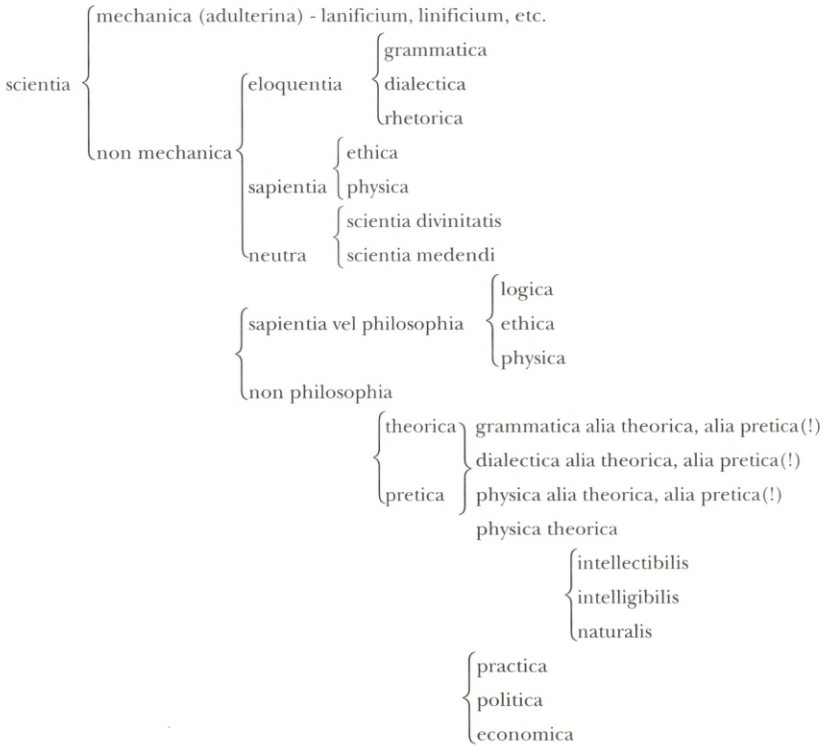
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38 The priority of Thierry to Gundissalinus has been disputed, but the matter has now been resolved. See Fredborg's discussion in Thierry of Chartres, *The Latin Rhetorical Commentaries*: 15-20.

39 A Porphyry commentary in ms Berlin lat. fol. 624. The relevant passage is on ff. 73vb-74ra.

40 A *Perihermeneias* commentary in ms Berlin lat. fol. 624. The relevant passage is on f. 88ra-va.

41 "Unde sicut aliquis in arte aliqua bonus theoricus est et pravus practicus, ut bonus rethor et pravus orator, bonus logicus, pravus dialecticus, bonus astrologus, astronomicus non bonus, ita ...", quoted in Williams 1934/35: 109, n. 12. I owe this information to Ch. Burnett.

Schema 12: Ms Berlin, lat. fol. 624, f. 88ra-va

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          ┌ mechanica (adulterina) - lanificium, linificium, etc.
          │                          ┌ grammatica
          │            ┌ eloquentia  ┤ dialectica
scientia ─┤            │             └ rhetorica
          │            │             ┌ ethica
          └ non mechanica ┤ sapientia ┤ physica
                       │             ┌ scientia divinitatis
                       └ neutra      ┤ scientia medendi

                                     ┌ logica
          ┌ sapientia vel philosophia ┤ ethica
          ┤                          └ physica
          └ non philosophia

                         ┌ theorica ┐ grammatica alia theorica, alia pretica(!)
                         ┤          ├ dialectica alia theorica, alia pretica(!)
                         └ pretica  ┘ physica alia theorica, alia pretica(!)

                              physica theorica
                                              ┌ intellectibilis
                                              ┤ intelligibilis
                                              └ naturalis
                         ┌ practica
                         ┤ politica
                         └ economica
```

13. Conclusions

Recapitulating our results one may summarize as follows.

The medievals inherited from Antiquity two main schemes of the division of philosophy, viz. the Platonic and the Peripatetic one. Each of these divisions had its supporters, who often modified the division to a certain extent. Some tried to reconcile the two traditions. But nobody succeeded in proposing a coherent theory that was widely accepted.

It was always the grammarians who proposed new divisions, since their subject had no place in either of these traditions. First, Clemens Scot, who sought – in vain – a proper place for grammar in the whole system of philosophy; secondly the author of the *Glosule*, who made grammar a species of *logica*; and lastly William of Conches, who introduced the Ciceronian scheme, a completely

new division. Each idea found some adherents, but none of them was to survive for long.

From the 9th to the mid-12th century, *logica* was almost always considered as the genus of *dialectica*. One of the few who denied this was Peter Abelard, for whom *logica* and *dialectica* were equivalent. As time went by, however, *dialectica* was gradually replaced by *logica* when referring to logic.[42]

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42 For a general survey of the meanings of *logica* and *dialectica* through the Midde Ages, see Michaud-Quantin 1969.

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