Transmitting school-philosophy: Thomistic commitments regarding sense perception in a
15th-century Cologne student manuscript

by
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Summary
This contribution evaluates the philosophical identity of a student’s manuscript compilation that reflects the teaching in the Thomist faction of the University of Cologne, known as the bursa montana, in the 1490s. The evaluation is based on two problems that served as case studies: 1. defining the organ of sight, and 2. the ontological status of fantasy (also called, formative imagination). The student dealt with these questions with no less than four textual units and two visuals diagrams. This contribution confirms the concern for didactic successes and the interest in pedagogical tools, as mentioned in the scholarly literature. This contribution also shows that the Thomist orientation, is not as orthodox as the literature on the topic wants us to believe. It demonstrates an important shift in doctrinal content during the transmission of the Thomist school content, thus indicating a critical attitude from the masters that not only seek to present Aquinas’ interpretation of Aristotle, but also to complement Aquinas where the Holy Doctor remains unsatisfactory, and adapt his doctrine to reflect their progress in search of truth. Another contribution to the view in the scholarly literature is that the students were required to develop a more dynamic attitude than hitherto assumed. The students might still learn portions by heart, but this student compilation shows that assimilation of the content needs an intellectual investment.

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An extended analysis of the doctrinal tenets of Lambertus de Monte, as presented here in section 4, will be published under the title ‘Lambertus de Monte on the phantasms of unreal things. Reworking Thomas Aquinas’s restrictive clause of the formative imagination, or: why animals cannot imagine golden mountains’, in: Ota Pavlìcek ed., Studying the Arts in Medieval Bohemia, Studia Artistarum (Brepols, forthcoming). I re-use some parts describing the textual sources, and manuscript quotations, in that publication.
Young students had quite a dynamic task to navigate through a variety of literary genres, and to align and differentiate between the different units to convey or build a tradition with specific tenets that identify a school.

1 Introduction

In the late medieval period, the ideas of some philosophers dominated the intellectual climate in specific universities or even internal factions, thus forming schools of thought. Typically, these schools take inspiration in the writings of their favorite philosophical authority and have developed specific study aids to instruct their students in the right philosophy. These schools of thought are in no sense necessarily identical with the authoritative master’s original doctrines, but in many cases we are not well informed about the particular shape and transmission of a school’s identity. This paper aims to contribute toward giving better insight into the transmission of the Thomist identity, i.e. interpretations according to the philosophy of the Dominican Thomas Aquinas, as displayed in a student manuscript compilation of late 15th-century Cologne. Our attention is moved towards the sediments of teaching in a personal book—its owner simultaneously received these teachings as part of a collective.

The origins of these 15th-century schools of thought are related to the so-called Wegestreit that split the philosophical faculties of European universities into different ways of doing philosophy. The polemics of the Wegestreit, phrased between the via moderna (nominalist, Ockham camp) and the via antiqua (realist, with a Thomist and Albertist camp), played an important role in defining school-philosophies. We are mainly informed about Cologne’s late-medieval school-philosophies by the historian of philosophy Maarten Hoenen, and the historian of theology Harm Goris. Hoenen explored the doctrinal tenets responsible for splitting up the via antiqua into a Thomist and an Albertist faction, in Cologne. In a more general way, originality was not the

2 The exact tenets of the different schools of thought are still little known. See: Maarten J. F. M. Hoenen, Nominalism in Cologne: The student notebook of the Dominican Servatius Fanckel. With an edition of a disputatio vacantialis held on July 14, 1480 ‘utrum in deo uno simplicissimo sit trium personarum realis distinctio, in: Crossing boundaries at medieval universities (Education and Society in the Middle Ages and Renaissance), ed. Spencer E. Young, Leiden 2011, pp. 85–144; Maarten J. F. M. Hoenen, Late medieval schools of thought in the mirror of university textbooks: the Promptuarium argumentorum (Cologne 1492), in: Philosophy
greatest concern for the school-philosophy of both the Thomist and Albertist factions, according to Hoenen. Of more importance was the orthodoxy of the doctrine. According to Goris, this is especially true for the Thomists, who were however more exclusively committed to Thomas Aquinas, than Albertists were to Albert the Great. The Albertist Heymeric de Campo (1395–1460) indeed is less convinced about the duty of commitment; he replied to his Thomist rival that he is not interested in what Albert and Thomas themselves actually said, but that he was in search of the truth of the doctrines of the schools.

Next to the philosophical disputes of the Wegestreit, Goris calls the emphasis on teaching a decisive factor in the particular shape Thomism was going to take in Cologne. In 1425 the Cologne realist philosophers were blamed for the fact that the study of the via antiqua was too difficult for the youth to understand; in addition, the new teachings risked heretical consequences. The teachers

4 Reference in Goris (note 3), 16–17.
5 Goris (note 3), 3.
6 At the heart of the complaint, according to Goris (note 3, p. 4), was the fear of riots that a clash between intellectual orientations could cause—something analogous to the events in the university of Prague, where the controversy about universals resulted in the Hussite war and heresies. Götz-Rüdiger Tewes discusses the growing tensions between the Cologne-realists and nominalists and its relation with the events in Prague. In Prague, realism was revived with Wyclif’s philosophy among the Czech members of the university, after a revival of Thomism among the Dominicans, in the late 14th century. For more details, see: Götz-Rüdiger Tewes, Die Bursen der Kölner Artisten-Fakultät bis zur Mitte des 16. Jahrhunderts, Cologne–Weimar–Vienna 1993, esp. 315–17, 332ff.; Thomas A. Fudge, Jerome of Prague and the Foundations of the Hussite Movement, New York 2016.
The antiqui answered the complaint by stressing their right to teach freely, and that an interdiction to use the Thomist doctrine in the Faculty of Arts should also affect the Faculty of Theology, which was obviously not the intention of the complaint. Erich Meuthen, Kölner Universitätsgeschichte, in: Die alte Universität, ed. Albert Zimmermann, Cologne–Vienna 1988,
were therefore summoned to return to the nominalist-terminist doctrine. It is not explicitly mentioned what was considered to be causing the difficulty in understanding, whether it was method or content, or something else. The *antiqui* however agreed that the doctrine that they teach, exceeds the capacity of students and that they cannot comprehend it by themselves. However, they defend their case by stressing that very competent regent masters are didactically successful: “they know how to break and chew solid food in proportion to the capacity of students.”

To remedy the problem, the Thomist *via antiqua* developed innovative pedagogical tools in the *modus expositionis*, a form of commentary that stays close to the original without much digression. And they developed a new literary genre, called *copulata*, that offered a concise and systematic exposition of Thomist Aristotelianism in the form of a text book. Adapted for didactic purposes, the *copulata* concisely excerpt and interpret source texts and already paraphrased manuals, sometimes followed by an interpretation in the *modus quaestiones*. They were probably developed following the rhythm of the lectures, and therefore, indifferently called *copulata*, *compilata* or *notata*. The didactic purpose of these texts were noticeable from the layout and the sketchy treatment of the problems discussed. One should, however, not forget that these books

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7 Meuthen (note 6, 182); Tewes (note 6, 371).
8 Tewes (note 6, 371) thinks that the complaint about incomprehensibility is directed against the Albertists, and in the first place against Heymericus de Campo. It seems however that the reply has been redacted by someone from the Thomist camp, p.ex. Henry of Gorcum (p. 373).
9 Goris (note 3), 4; Ehrle (note 6), 283.
were intended for 16–20-year-old Bachelors’ students and sometimes even much younger.\textsuperscript{11} According to the University of Cologne historian Erich Meuthen, students did not understand the study-material in any way, not even in the *copulata*-form, and just learned everything by heart – something that happened as well at the University of Paris.\textsuperscript{12} The young students were also to assist and participate in disputationes, the other backbone of academic training besides the ordinary lectures, and to practice these disputations themselves. However, most of the disputationes were formal, questions as well as the answers, and here much of it could also be learned by heart, according to Meuthen, even though in some cases new content was searched for.\textsuperscript{13}

This contribution situates here, at the crossing of the formation of the school’s identity in doctrinal tenets and pedagogical aids, as presented in the concise manuals, which the students just had to memorize even if they could not understand it. By moving our attention to a student’s manuscript compilation, composed of a variety of texts, genres, and other “bits of solid food,” we can get a better understanding of what philosophical identity reached on the “ground-floor” of basic university education. Student compilations were often assembled by a student during his study career in one personal study book, thus documenting actual teaching and learning practices, reflecting faintly the official prescription in the statutes designating the curriculum, but adding so much more real practice. The patchwork of texts shows how the students are to navigate through the curriculum, with the help of manuals, explanations and drawings on the same topic, disputation manuals, handbooks, etc. This leaves the student sometimes up to 6 or 7 textual and visual units that discussed the topic of one single book of Aristotle. Therefore, a study of a personal manuscript from an early-stage student, as we would like to present it here, has to pay attention as to how a student was trained to navigate through a variety of texts and literary genres and, at the same time, how the different units were aligned to convey or build a tradition with specific tenets that identify a school.

The selected manuscript (Würzburg, University library, M. Ch. F. 118) shows several texts interpreting the tenets of Aristotle’s *De anima*: (in order of appearance) a manual called *Parvulus philosophiae naturalis*, allegedly of Peter of Dresden [item 2], two visual representations about the powers of the soul [item 3 and 4], an exposition and questions on this manual by a local anonymous.

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\textsuperscript{11} Meuthen (note 6), 184, 115–16.
\textsuperscript{12} Meuthen (note 6), 184.
\textsuperscript{13} Meuthen (note 6), 116–17.
master [item 6], Aristotle’s *De anima* [item 7], and Lambertus de Monte’s *Copulata* [item 8]. All units relate to the topic of the soul, all written in the 15th century, though with different perspectives and interpretations. Together they form a compilation of a body of knowledge about the soul as taught in the late-medieval University of Cologne. The contemporary writings were compiled under the directorship of the regent Lambertus of Monte in the case of the Cologne *bursa montana* in this period (*secundum processum et doctrinam magistrorum regentium Coloniae in bursa Lamberti de Monte*).\(^{14}\) It is however unclear how his supervision affects the entire corpus of tools and teachings, and how these tools relate to the school’s tradition and identity.

The tenets of doctrines that surfaced in this paper are not intended to illustrate the rivalry between Albertists and Thomists, nor to give a full picture of what Thomism means for late 15th-century Cologne. Rather it will give insight into actual classroom teachings during the Thomist profiling in the *bursa montana* under Lambertus de Monte’s reign. This contribution is narrowed down to two specific doctrinal issues that surfaced in the cluster of texts interpreting *De anima*: 1. visual perception, and more specifically about the localization of the organ of sight, 2. the status of the formative imagination (also called fantasy). These issues form two case studies, by means of which we show how the different textual and visual units agree, cross-reference each other and disagree, with the objective to research the shaping of an identifiable outlook.

In section 2, the manuscript and texts are introduced in more detail. Sections 3 and 4 deal respectively with vision, and imagination. Here the textual arguments are presented semi-chronologically. With the aim to gain insight into the actual classroom teachings, our point of departure is the contemporary teaching in the form of an *expositio* [item 6]. This *expositio* is basically an explanation with questions on the basis of the manual called *Parvulus philosophiae naturalis* [item 2]; and this is why both are therefore juxtaposed in this contribution. The resulting teachings are subsequently contrasted with, on the one hand, the regent’s commentary on *De anima* [item 8], and on the other hand, the visual representations that capture a summary of the teachings [item 3 and 4]. In section 5 some conclusions will be drawn with regard to the question of the teaching and transmission of a Thomistic school-tradition in the Cologne *Bursa montana*.

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14 Cf. Hoenen 1995 (note 2), 333; Ernst Voullième, Der Buchdruck Kölns bis zum Ende des fünfzehnten Jahrhunderts, Bonn 1903, 52f, note 137.
The manuscript here under discussion, Würzburg’s University Library, M. Ch. F. 118 (in the following abbreviated as W), is a compilation of philosophical texts used in the arts faculty. The manuscript is a personally annotated compilation, assembled (and written) by an anonymous Cologne student, listing the texts he had to read for the period of his study. Our manuscript W is closely related to manuscript B (Berlin, SB, lat.fol.40) and B2 (Berlin, SB, theol.fol. 247), which show similar texts, among which include a local contemporary explicative lecture and question series [6]. I have used both Berlin manuscripts to verify and improve my reading of W (see appendices for transcriptions). The manuscripts of B and B2 are similar student compilations to W. Manuscript B is dated to 1487–1488, and B2 is identified as being from the hand of John Parsow, who was registered as a student in the University of Cologne. Manuscript W belongs to this group, and is logically produced in the same educational circumstances, in the late 15th century in Cologne.15 The year 1493 is mentioned on fol. 191r of W, and I assume that the entire manuscript is written around this date with a margin of 6 years, based on the coherence of the compendium, and the time frame for one’s study career.

This manuscript is of particular interest for two reasons: 1. it features two folio-size pen-drawn diagrams16 on the powers of the soul [items 3 and 4]17, and 2. it features a hitherto unknown exposizio based on classroom teaching of Cologne sometime around the 1490s [item 6]. Both units provide insight on how the different entries in the compilation form an identifiable study-unit for the student, and how he was to unpack these teachings. Although the pen drawings are not originally developed for this particular teaching [6], they were originally conceived for didactic

15 W is dated to 1493 on fol. 191r “Anno M quadringentesimo nonagesimo tertio.”

16 I warmly thank Angelika Pabel of the Universitätsbibliothek Am Hubland, Würzburg, who confirmed the presence and features of these two diagrams in the manuscript during my preliminary research.


17 Comparable diagrams appear also in the following manuscripts: Berlin, SB, theol. fol. 247, Vatican, BAV, pal. Lat. 1055, Norrköping, SB, 426 fol., Leipzig, UB fragm. Lat. 242, Tübingen, UB, Mc 335. Additionally, I know of one drawing pasted in an incunabulum: Ljubljana, Ti. 468.
reasons, and are therefore of interest in the tracking of school-traditions, especially because the
drawings were annotated and adapted to the new teachings, as this contribution will show.\textsuperscript{18}

Putting aside a dozen other natural philosophical and ethics texts that I will not deal with, the
manuscript contains the following main titles on faculty psychology—all at the beginning of the
compilation, and here mentioned in order of appearance.\textsuperscript{19}

[1] 1r \textit{Liber de anima} Aristotelis (page otherwise blank)
[3] 11v Linear drawing of the powers of the soul, with some inscriptions.
[4] 12r Figurative drawing of the powers of the soul, with many inscriptions.
[6] 15r-34v Anonymous exposition with questions on the \textit{Parvulus philosophiae naturalis}. Inc.:
\begin{quote}
\textit{Gloriosus peripatheticorum dux philosophorumque iubar Arestotiles radicatus et
proixe in philosophicalibus libris scientiam nobis tradidit philosophicalem ...}
\end{quote}
(34v): \textit{hac vita et tantum de 3\textdegree tractatu et per consequens de toto parvulo
philosophie. finitur. deo gratias.}
-- 35r-37v blank
[7] 38r-79r Aristoteles, \textit{Libri De anima tres}
-- 79v-83v blank
[8] 84-140v Lambert of Monte, \textit{Copulata super tres libros Aristotelis De Anima iuxta doctrinam
Thomae de Aquino}
-- 141r-143 blank
-- etc.

Among the commentators used in this compilation are two self-proclaimed Thomists from Cologne:
Johannes Tinctoris of Tournai (d. 1496)\textsuperscript{20} and Lambertus of Monte (1430/35–1499). This is
important to notice, because it gives an indication of a Thomist school-philosophy. However, this

\textsuperscript{18} For more details about the history of the image, see: Annemieke R. Verboon, Brain ventricle
diagrams: A century after Walther Sudhoff new manuscript sources from the XVth century, in:

\textsuperscript{19} For a catalogue description, see: Hans Thurn, Die Handschriften aus benediktinischen
Provenienzen: vol. 2: 1, Die Handschriften der Universitätsbibliothek Würzburg, Wiesbaden
1973, pp. 102–5. I choose not to follow Thurn entirely, due to some inconsistencies.

\textsuperscript{20} Johannes Tinctoris de Tornaco (of Tournai) (died 1469) was a medieval scholastic and Thomist,
master of the bursa Corneliana, and student of Gerardus de Monte.
does not necessarily imply that Cologne was the place of origin of the manuscript, because these authors were also read in other Thomist-orientated universities, for example Leipzig, and Uppsala. The works of Johannes Tinctoris of Tournai concern several Aristotelian natural philosophical works but not De anima, and is therefore not of direct concern here.²¹

There are seven quite heterogeneous textual units about the soul in W, which the student has to unpack, to align, to oppose, to consult and to master for preparing his exams. Aristotle’s De anima [7] might not need further introduction. The other texts are less well known.

Lambertus of Monte (ca. 1430/1335–1499) was Master of Arts and Theology in a leading position at the Bursa Montana in Cologne by the end of the 15th century.²² He is considered a defender of the Thomistic interpretation of Aristotle, against that of Albert the Great. He wrote, among others, a Copulata super tres libros De Anima [8]. The Copulata originated in classroom teaching. It is a compilation condensing Aristotle’s texts, paraphrased and typographically highlighted, followed by the interpretation in the question-form, answered according to the doctrine of the school.²³ According to the title page, Lambertus’ Copulata offers an interpretation of De anima according to the doctrine of Thomas Aquinas (Copulata super libros de anima Arestotelis cum textu iuxta doctrinam excellentissimi doctoris sancti Thome de Aquino hic continentur). The Copulata form a good example of the formation of a tradition by systematizing and codifying Aquinas’ corpus in one commenting document. Lambertus de Monte included also large parts of Henry of Gorcum and his uncle Gerardus de Monte in his Copulata, according to Goris.²⁴ And for his part, Lambertus’ texts were revised after him by his followers in the so-called Processus Lamberti de Monte (Goris 19). Many of the copulata were published from the 1480s onwards as


²² Lambertus de Monte: 1455–1477 master in the arts faculty, 1473–1499 master in theology, in 1478/79 rector, and between 1475–1497 three times dean of the theology faculty. Meuthen (note 6), here 182.


²⁴ Goris (note 3), 20.
schoolbooks by the Cologne ‘school press’ of Heinrich Quentell, and this is also the case for Lambertus de Monte’s *Copulata super libros de anima*. The many copies available in print, but also in manuscript indicates how widespread and used the text was.

The *Parvulus philosophiae naturalis* [2] is a short, late-medieval philosophy manual. The text has been written for educational purposes, probably by Peter of Dresden before 1404 (and > 1380) at, or in the geographical and intellectual surroundings, of Prague University. His authorship would fit the time frame and the region. A few manuscript copies identify the author as Peter of Dresden, and one of these MS is written in Erfurt, and very early – before 1408 – which makes it a rather reliable source for identification. The manual is an abridgment of 1. *Physica*, 2. *De generatione et corruptione* and 3. *De anima*. The text of the *Parvulus philosophiae naturalis* is...

25 The *Copulata super libros de anima* was published seven times between 1485–1498 (Hain 11582–11584, 1713).


27 Petra Mutlová casts some doubts on this, however. Petra Mutlová, Radicals and heretics: rethinking the Dresden school in Prague, PhD Diss. (Budapest: Central European University) [unpublished] 2010, here p. 57.

28 Vienna, ONB, 5242, fol. 5V (15th century). München clm 18917 (written in Erfurt, ante 1408). A manuscript presently in Vienna claims that the author of the *Parvulus* was *Magister Petrus Gerticz, quondam rector scolarum in Dresen* and a codex from Munich has a heading of *Tractatulus parvus translatus per M. Petrum de Dresden ex summulis Alberti*.

a summary of the *Summa naturalium* (also *Philosophia pauperum*) of Albert of Orlamünde (d. 1345) (active in the region of Erfurt), long considered to be a work of Albert the Great. Part III of the *Parvulus philosophiae naturalis* coincides with part V (recension A) of the *Summa naturalium*, which in its turn was largely copied from the treatise *De potentis animae et objectis* (Anonymus Callus), 30 which is largely reliant on *De anima et potentiis eius* (Anonymous Gauthier, ca. 1225). 31 Because of this affiliation the text of the *Parvulus philosophiae naturalis* is widely considered to convey the views of Albert the Great.

With its 80 manuscript copies extant, from the 15th century alone, the *Parvulus philosophiae naturalis* was a true bestseller. 32 It has been used in Bachelor-level education in many Central and East European universities. A short tour among the manuscripts demonstrate their use at the universities of Prague, Leipzig, Cracow, Erfurt, Vienna, Basel, and others. The *Parvulus philosophiae naturalis* has been described in the prologue of our Cologne *expositio* [6] (see below) as designating novices, young students, as its readership, facing their first introduction to the natural philosophy of Aristotle. The text offers a selection of relevant topics and promises the students a clear introduction. 33 We can imagine the *Parvulus philosophiae naturalis* being used as a study tool


32 For the copies of the *Parvulus philosophiae naturalis*, see Verboon (note 18), p. 218.

33 Quam ob eius prolixitatem ac obscuritatem novicii et in physicali scientia nondum inbutis satis est grave propallare ac declarare eatenus (ut novicii in aristotelis scientiam securiorem habeant ingressum verum etiam faciiliorem) tractatulus hic compendious ac fructuosus ubiores eiusdem scientie continens flores discipulis nondum fundatis est coelementatus. Berlin, Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, MS theol. fol. 247, f. 62r; Berlin,
supporting the official Bachelors’ readings of *De anima* (3½ months prescribed), and the *Physica*, but the *De generatione et corruptione* (the three make up the *Parvulus philosophiae naturalis*) was part of the Master phase in Cologne. As far as we know the *Parvulus philosophiae naturalis* is not mentioned in any Cologne statutes. We know however more about its use in other universities. The *Parvulus philosophiae naturalis* was used, for example, in the University of Leipzig as a handbook in the *lectio* for Bachelor-level education. A Leipzig statute from 1496 mentions the *Parvulus philosophiae naturalis* among the *resumtiones*—a kind of rehearsal class covering the easier topics, comparable to the *lectiones extraordinariae* found elsewhere, which were readings allowed during the short vacations at Christmas, Easter, and Pentecost, and during the longer summer vacation. One can very well imagine that the same is the case in the colleges of Cologne. At least three manuscripts (see note 33) suggest a lectured exposition of the *Parvulus philosophiae naturalis* in the *bursa montana* in the late 1480s and early 1490s, which we corroborate from the Cologne origin of these manuscripts and the texts from associated Thomist scholars in the same manuscripts, such as Johannes Tinctoris of Tournai, Gerhardus de Monte and Lambertus de Monte.

Several explanations have been written on the *Parvulus philosophiae naturalis*, most by anonymous Masters. Thurn, in his description of W, represented the exposition [6] on the *Parvulus philosophiae naturalis* as glossae, a term indeed sometimes found in the text to describe the explanation, but it does not reflect the rather systematic, though concise, disclosure of the *Parvulus philosophiae naturalis*. This form of exposition has an origin in classroom teaching. Adapted for

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34 Meuthen (note 6), 115.
36 Rudolf Helssig, Die wissenschaftlichen Vorbedingungen für Baccalaureat in Artibus und Magisterium im ersten Jahrhundert der Universität, Gutenberg 1909, p. 52.
37 Berlin, SB, theol.fol. 247; Berlin, SB, lat.fol.40; Würzburg, UB, M ch fol. 118.
38 Many commentaries have been written on the textbook and, while most remain anonymous, some have been identified: Johannes Peyligk (Lotter: Leipzig, 1499); Bartholomaeus Arnoldi de Usingen (Leipzig [Stöckel], 1499); Jan ze Stobnicy (Cracovie [Hochfeder], 1503); Magnus Hundt, *Introductorium in Aristotelis physic*, Parvulus philosophiae naturalis vulgariter appellatum cum propria non extranea declaratione (Leipzig [Stöckel], 1500).
39 Manuscript B reads “explicit parvulus philosophie cum glosa brevissima.”
didactic purposes, it interprets the concise text, and is followed by an interpretation in the *modus quaestiones*. The *quaestiones* are usually answered according to the doctrine of the school, but as we will see here, this is not as clear-cut as it sounds. The *expositio* [6] that concerns us here, with the opening words *Gloriosus peripatheticorum dux philosophorumque*, is found in 8 manuscripts written in Cologne and Leipzig (with variations), which indicates that the text is a revised and official version, and not a *reportatum* (notes from the student).\(^{40}\) We will see that the explanation [6] is related to Lambertus’ *Copulata* [8]. The lecturer/author has not yet been identified, but was most probably a young Master at the University of Cologne, charged to lecture on the *Parvulus philosophiae naturalis* between ca. 1487 and ca. 1495. I have compared our anonymous’ interpretation of the cogitative power with tenets described in the *Positiones circa Physicorum et De anima*, a manual with official disputed questions from Cologne in 1494, i.e. the same time and period, but was not able to find our Master’s position described.\(^{41}\)

Manuscripts containing a *Parvulus philosophiae naturalis* in combination with an exposition of the *Parvulus philosophiae naturalis*, are regularly accompanied by two diagrams [3, 4]. The *expositio*, however, does not form the direct source of the diagrams—the diagrams have a longer tradition, the first of which I know of, dating from about 1310.\(^{42}\) As I have argued elsewhere, the *Parvulus philosophiae naturalis* fulfills an important role in the diffusion of the iconographical type of the faculty-psychology diagrams, the linear as well as the figurative. However, contrary to what I argued earlier, the 15th-century diagrams in the context of the *Parvulus philosophiae naturalis*, are rather developed to illustrate the explanations (*expositiones*) on the *Parvulus*, rather than the

\(^{40}\) Berlin, SB, theol. fol. 247; Berlin, SB, lat.fol.40; Munich, BSB, clm 8401; Würzburg, UB, M ch fol. 118; Würzburg, UB, M ch fol. 297; Vatican, BAV, pal. Lat. 1055; Norrköping, SB, 426 fol.; Tübingen, UB, Mc 335.

\(^{41}\) *Positiones circa libros Physicorum et De anima Aristotelis iuxta ... processum magistrorum Colonie in bursa Montis regentium* – a disputation manual according to the Cologne practices contained positions of all the major masters of the Bursa Montana. Heinrich Quentell (Erben), 1508 (ed. Princeps 1494) (Hain 13304). For more about this disputation manual, see also: Andrew Cunningham & Sachiko Kusukawa, Natural philosophy epitomised: a translation of books 8–11 of Gregor Reisch’s *Philosophical pearl* (1503), Farnham 2010, here p. lx–lxii.

Parvulus philosophiae naturalis itself. As I have published already on the figurative diagram of the powers of the soul in general and on those in W in particular, I refer the interested reader to these publications for further reference.

Most surprising in this student manual is perhaps the absence of the commentary of De anima by Thomas Aquinas. After all, the compilation is composed in the context of teachings in the Thomist faction. This student apparently learned about the Thomist doctrinal tenets second hand, at least in the Bachelor phase – through the Copulata of Lambertus who summarized and interpreted Thomas Aquinas’ position in his entire corpus (I presume for our topic mainly on De anima, and the Summa Theologica Question 78 and 89). As strange as it may sound that the student did not read Thomas Aquinas first-hand, one should not forget the enormous task of interpreting the different texts in order to get an overview of Aquinas doctrine. That is exactly where the Copulata performs a handy shortcut.

3 About vision
Study material is often the result of layering levels of interpretation, because it is summarizing, contrasting, paraphrasing textual interpretations. We have already seen an example above in the text history of the Parvulus philosophiae naturalis [2]. Peter of Dresden summarized the Summa Naturalium which, in its turn, condensed, combined, and paraphrased other manuals and other texts, etc. This study material is the result of masters teaching and preparing their courses. Therefore, the layering information is the result of developing study material. In this paper, I would like to unpack several of these layers, in order to gain a better understanding of the dynamics of teaching and learning. For a more in-depth study, I will narrow down my focus on 1) vision, and 2) formative imagination. A short introduction into the philosophy of sense perception and cognition in general is indispensable for this purpose.

First, I will explore the example of vision. Aristotle dealt with vision in De anima book II, chapter 7 and book III, chapter 2. Aristotle states that the object of the sense of sight is the visible, and what is visible has color. The colored things can only be seen in light. Aristotle advocated for a theory of intromission by which the eye received rays. In De anima, Aristotle does not discuss the organ of sight directly, but alluded to the eye (II, 1, 412b). In De sensu et sensibilia he argues that the visual organ proper is composed of water; wherefore it is that the pupil that consists of water, is

43 Verboon (note 18), 216.
44 Verboon (note 16).
45 See above.
the eye proper. Galen paid particular attention to the crystalline lens, which he described as a round lens in the middle of the eye. He concluded that the crystalline lens is the principal instrument of vision operating extramission. Johannitius in the 9th century, favored the extramission theory of sight, reinforced the centrality of the crystalline lens, and developed theories about tunics behind the vitreous humor, and the retina, whose role was to nourish the vitreous humor and conduct visual spirit through the hollow optic nerve. While retaining many features of Galen’s anatomy—the hollow nerves and crystalline lens—al-Haytham (Alhazen), in his *Book of Optics*, nonetheless argued for intromission. He was the first to explain that vision occurs when light bounces on an object and then is directed to one’s eyes. Avicenna, who offered a more systematic review of the Galenic account of the eye as part of his overall adherence to Aristotelian theory, also advocates intromission as a model. When we turn to Thomas Aquinas’ Commentary on *De anima*, he seems much more subtle on the question: What is the proper object of sight (book II, chapters 14 and 15). In II.2, Aquinas seems to opt for the eye as the matter of sight (also I.10), and more precisely the pupil (I.2) in which is a liquid humor (II.17), through which the eye receives a representation (*species*) of the visible object (III.1). A *species* is a qualitative representation of the actual object instantiated in a medium that effects our senses – I will translate *species* with ‘representation’ in the following. This nutshell presentation can obviously not do justice to the entire tradition. Its function here is just to mention the elements from which later interpreters could choose.

Let us now examine the presentation of the text units in W. When we read the 15th-century paraphrase of *De anima* in the *Parvulus philosophiae naturalis* [2], it is possible to realize how many centuries of interpretation have become conflated. The *Parvulus philosophiae naturalis* is systematically dealing with the object, medium and organ of each sense. According to the *Parvulus philosophiae naturalis* the object of sight is the visible thing. For the visible thing to be seen it is necessary that the medium be illuminated and thus made transparent by the presence of light (*lumen*; *lux* in the illuminating body). The most appropriate organ for vision is the eye, or more precisely the pupil, in which circulates the crystalline humor. There is a nerve reaching out to the

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46 ‘Ten Treatises on the Eye’ and the ‘Book of the Questions on the Eye’. See for more details:

pupil from the brain, and in this nerve, is a seeing spirit (spiritus visibilis). This seeing spirit receives the representation of color of the crystalline humor. At this point the species of color transfers from the illuminated medium into the spirit as medium. The species instantiated in the spirit, is transferred somewhere up to the common sense.

In order for a sense to have an actual sense perception, four things are needed, according to the Parvulus philosophiae naturalis. Two of these things are outside our being: an external object, and a medium. And the other two things are inside our body: a spirit, and an organ. The qualities are isolated from the external object, and placed in a medium. They affect the organ of sense by means of the medium, and are then transferred to the spirit (an internal medium). In this state, the representation arrives in the common sense. This scheme of four conditions, is discussed for each of the five senses. Because the actuality of the sensorial impression is achieved after the four above-mentioned conditions of object, medium, organ, and spirit, the actual sensorial impression takes place after the phase of being in the spirit. Now from this account, it is clear enough that actual vision, sound, etc., takes place in the nerve, because it occurs in the spirit, after the organ, but logically before the common sense (see below). It follows that the actualization of sight does not take place in the organ. In the Parvulus philosophiae naturalis the actual visualization takes place in the nerve where the spirit and seeing powers resides, whereas the sense organ of vision, is the pupil.

Our late 15th-century student had a critical master, instructor, who sought more precision in his expositio [6]: Why not have the actualization take place in the organ? In the expositio [6] it is argued that the ultimate organ of vision is the optical nerve. This is clear from his account about the


48 The Parvulus philosophiae naturalis follows herein its model the SN. Geyer (note 29), f. 49*.

three assumptions made in the *Parvulus philosophiae naturalis* about the actuality of the sense perception: The same four conditions need to be fulfilled: an external object, a medium, the organ (which is the closest to the sensory power); and fourthly, the sensitive spirit. The *expositio*-master gives an example of vision: the fourth necessary requirement for vision is the organ in which is located the power of vision, and that organ is the optical nerve. And so, the power of vision operates in its organ. Apparently, there are more organs involved in the power of sight, argues the instructing master to his student: the more distant organ of vision is the eye. The closer one is the pupil. The closest one is the optical nerve. And this knowledge is usually known by those physicians who have studied the anatomy of the head, declares the master.

50 W 30v: “*NOTA AD HOC QUOD SENSUS ACTU SENTIT.* Secundo ponit tres suppositiones que valebunt pro declaracione sensuum. Et est prima suppositio hec cuius ad actuale sentu requiruntur quatuor. Duo intrinsica animali scilicet spiritus sensibilis quia continuetur in nervus protensis a sensu communi ad sensum particulares. Et secundo organum quod est proximus subiectu potentie sensitiva. Sic etiam sunt duo extrinseca, scilicet obiectum quod movet potentia in organo per sua speciem. Et secundo medium per quod fertur species objecti ad organum et spiritu. Verba gratia: actuale sentire primo requiritur color qui videtur, secundo medium ut aer per quem videtur, tertio requiritur spiritus visibilis qui defert speciem coloris ad sensu communis. Quarto et ultimo requiritur organum in quo est potentia visiva scilicet nervus opticus.”

51 W fol. 30v: “*OBJECTUM VISUS EST VISIBILE.* Iam ex sequitur determinare de sensibus exterioribus et primo de visu circa quae primo ponit obiectum visus. Dicens obiectum visus est visibile, idest color et lumen. […] Secundo ponit cuius medium dicens medium visus est medium illuminatum ut aer aqua et per declaratione istius ponit distinctionem inter lucem, radium, lumen, et splendorem […] Tertio ponit organum oculi, dicens quod oculi quem tangit nervus opticus protensusa cerebro ad pupillam. Nervus autem opticus dicitur vena quedam que vadit de sensu communi ad oculum et in media via dividitur ita que una pars illius nervi vadit ad dextrum oculum, alia vero ad sinistrem.

Verissimum autem organum oculi non est pupilla sed nervus opticus in quo coniunguitur duo oculi ut declarari solet in capite phisico. Ex quo patet quod corpus visus per duos oculos non apparit duo sed unum propter unitatem organi de modo ibi est modo venit. Quarto ponit spiritu visibilem: dicens quod sit quidam spiritus visibilis procedens a pupilla et deferens secum speciem coloris in nervo optico, usquam ad sensum communis, quia illud fit complecium iudicium de re visa. Et ex isto textu patet quod oculus est aque nature quia in pupilla est humor cristallinus
The Parvulus philosophiae naturalis does not concentrate on detailed explanation where vision is actualized, but the instructing master does so in his expositio [6]. The master explains that the nerve between the common sense and the eye divides somewhere in the middle in two nerves, one leading up to the left eye, and the other to the right eye; therefore, the power of vision does not reside in the pupil, but in the optical nerves connecting the two eyes together. In his explanation about sight, the instructing master is not necessarily original (recalling Alhazen), but he is autonomous in his expositio on the Parvulus philosophiae naturalis.

The master commenting [6] on the Parvulus philosophiae naturalis [2] had found an additional source in Al-Hazen, whose description of the anatomical and physiological structure of the eye is essentially the same as Galen’s: The eye is in a way an outgrowth of the brain. The hollow optical nerves form the essential connection. At the forefront of the brain two hollow nerves take form, crossing at the optic chiasma (nervus communis), and then branching again, each nerve to the opposite eye, reaching their respective eye sockets. After passing though the eye socket and reaching the eye, each nerve “embraces” the vitreous humor where it is inserted into the crystalline humor. This crystalline humor is the most transparent of the eye liquids and therefore most apt to receive the species. Al-Hazen is also explicit about the whereabouts of actual sense perception, i.e. at the crossing of the two nerves. The major difference is that our teaching master has one optical nerve that divides in two, and its optical and anatomical sources mention two nerves that cross each other.

The figurative diagram [4] in W illustrates the master’s account of the organ of vision precisely with one branching nerve [fig. 2]. Between the first ventricle of the brain where the common sense resides, a nerve departs, and divides somewhere at the middle in two tubes, one to

ad quod humidum recipiuntur ymagines rerum visibilium que ulterius referuntur per spiritu visibilem ad sensum communem.”

52 See the quotation in the note above.
53 De usu partium corporis humani, X, ii, 55, p. 463.
the left eye and the other to the right eye. It is not an anatomical drawing and not precise about the attachments of the nerve and socket, nor the composition of the eye. A brace from the figure’s right eye leads to a short summary: object is the color \textit{(objectum – color)}; the organ is the optical nerve \textit{(organum – nervus obticus)}; and the medium is air or water \textit{(medium – aer vel aqua)}.

Aristotle \[7\], Thomas and Lambertus \[8\] did not spend much thought on the precise organ of sight, assuming simply that it would be the eye.\footnote{55} The \textit{expositio} shows significant interest in assigning the correct organ to sight.\footnote{56} The \textit{expositio}-master \[6\], explaining the \textit{Parvulus philosophiae naturalis} \[2\] (scheme of object, medium, and organ of sense), felt obliged to give it some serious reflection and finds a useful source in the optician Al-Hazen, in which geometry and anatomy were combined (is this interest possibly related to the weight given to optics and geometry as reflected in the Master’s degree curriculum of Cologne?). The diagram keeps pace with the instructing master in the case of vision, assigning the optical nerve as the organ of sight \[Fig. 2\].

In the case of sight, Lambertus de Monte’s \textit{Copulata} \[8\] is not of great influence, but that is different in the case of the imaginative power (also fantasy), as we will see below. With this mental power, we shift from the case study of an external sense to an internal sense, and from a directly perceivable object (like the quality of color), to an accidental sensible which are not directly perceivable but only intentionally.

4 Imagination

Traditionally, in late-medieval philosophical psychology the explanatory burden of sensory cognition lays normally on a range of one to five powers. There are different models organizing these sensory powers, more or less indebted to the different psychological functions that Avicenna described. From the 13\textsuperscript{th} century onwards, a major discussion revolves around the ontological basis of these functions. If a power has an independent organ, operation, and/or object of its own, it can be counted as a separate power. Some philosophers decided for only one ontologically distinct

\footnote{55 For Lambertus de Monte the object of vision is color. He says however not much about its organ. There is no specific topic or question dealing with the organ of vision. At one instance he mentions the eye, in the framework of the question whether color first affects the medium and then the sense of vision. Lambertus de Monte, \textit{Copulata}. Quentell: Cologne, about 1492. p. ex. Fol. 34rb: Queritur quid sit objectum visus, and 37vb – 38ra.}

\footnote{56 The Master phase prescribes lectures in Peckham’s \textit{Perspectiva communis}, the treatise \textit{De proportionibus} and \textit{De latitudine formarum}.}
power (Olivi, for example), others on four (Thomas Aquinas, for example), yet others five (Albert
the Great, for example).57

Our MS W brings forth the question of fantasy as a distinct power, i.e. whether fantasy is a
distinct ontological entity. Almost all the sources in W would all deny fantasy a distinct entity,
except the Parvulus philosophiae naturalis [2]. W is clearly committed to the Thomist reading, but
where Thomas Aquinas places the acts of fantasy in the power of imagination, others place it in the
cogitative power (expositio [6], Lambertus de Monte [8]), while the diagrams in W [3, 4] seem
compelled towards neither of them. In this section I present the different arguments the student of
W had to evaluate.

The Parvulus philosophiae naturalis [2] distinguishes between five internal senses: common sense,
imagination, formative power (or fantasy), estimative (cogitative for human beings) power,
memory—plus the dual motive power.58 This five-sense-model is indebted to Avicenna’s account
and Albert the Great’s (by means of the Summa Naturalium part V of which the Parvulus
philosophiae naturalis part III is extracted). The scheme is not explicitly justified in the Parvulus
philosophiae naturalis in any way. We can interpret the system of the scheme as follows: The model
associates different acts with different objects (accidental and incidental), and distinguishes between

57 See for example: Juhana Toivanen, Animal consciousness. Peter Olivi on cognitive functions of
the sensitive soul (Jyväskylä Studies in Education, Psychology and Social Research 370),
Jyväskylä 2009, here 192ff; Carla di Martino, Ratio particularis. Doctrines des sens internes
d’Avicenna à Thomas d’Aquin, Paris 2008, esp. part II; and the somewhat dated but still useful
Nicolas H. Steneck, Albert the Great on the classification and localization of the internal senses,
in: Isis. An international review devoted to the history of science and its cultural influences 65:2

58 The indirect model of the Parvulus philosophiae naturalis, is De anima et potentis (anonymous
Gauthier) that proposes the two principles that organize and divide the powers of the soul: 1. one
principle of distinction is according to reality, secundum rem, which distinguishes the powers
hierarchically, in this case on the basis of their organ. The other principle 2. distinguishes
between the powers secundum cognitionem, and this principle of knowing the differences is by
means of their object. De potentis anime et objectis eius (Anonymous Callus) refuses the organs
as principle of organization, and retains only the objects as principle of distinction. See Gauthier
(note 31), 9–10. So do the SN and the Parvulus philosophiae naturalis. They show minimal
interest in organs, but also minimal interest in the objects of the powers.
composing and retentive powers. The common sense apprehends all different sensory qualities of the external objects. Imagination preserves these representations. The formative power is a middle power composing sense images with each other. The cogitation and memory have as their object incidental perceptions, like friendship, a relational quality. Cognition has the task to bring forth, to extract, these non-sensorial perceptions from the sensations. Memory is the power storing them for further reference. The Parvulus philosophiae naturalis relates not to the ontological basis of these powers, i.e. whether there is a real entity corresponding to them.

The Parvulus philosophiae naturalis reads the following about the fantasy and the cogitative power—the two powers on which we will focus:

The formative power, that others have called fantasy, is a power that combines species with species and thus making extraordinary beings or monsters, like chimeras. It was defined as follows: fantasy is effected by a sense that is effected by sensibles that are external. Fantasy was called apparition or vision.

The estimative (power) also called the cogitative, whose task it is to draw forth nonsensed intentions, like friendship and enmity, from those sensibles. And by means of this power, the sheep judges the wolf is his enemy.

60 Avicenna, Liber de anima I 5 (p. 89). “The power that is called the imaginative has the task of composing one thing from imagination with another, and dividing one thing from another, as it likes.” However, according to Avicenna, the ‘formative’ (formativa, formans) refers to the storehouse of imagination, in the imagination (Liber de anima I 5 [pp. 88–89]; IV 2, [p. 13]; V 8 [p. 183]).
61 De anima 3, 429a1.
63 cf. Albertus de Orlamünde, Summa naturalium, V.vi, 55*.
64 Avicenna, Liber de anima I 5 (p. 89).
65 Peter of Dresden, Parvulus philosophiae naturalis: “Aestimativa est, quae etiam cogitativa dicitur, cuius officium est elicere intentiones non sensatas ex sensatis, ut intentiones amicitiae et
One can appreciate the conciseness of the definitions, but also imagine the level of abstractness for an average student. Fantasy is an operation of combining different mental representations (species) that can result in unreal representations. Fantasy is being activated by sensory species coming from a power activated by the external senses. In the scheme of the *Parvulus philosophiae naturalis* fantasy then uses the species present to the common sense or stored in the retentive imagination.

The estimative/cogitative power is activated by intentions, forms we cannot perceive by means of our external sensory apparatus, for example “hostility.” Intentions are drawn from (ex) the “sensible”, according to the author—but there is no substantive: a sense object, or a sense representation? The example of the sheep and wolf indicates that the *Parvulus philosophiae naturalis* author is thinking about a form of incidental perception. The cited sheep-wolf example (originally from Avicenna) should not make us think that this account is uniquely about nonhuman animal perception. On the contrary. The example makes clear that this process of incidental perception is an operation done by animals and humans, because both have a sensorial apparatus.

The words used in the manual to describe the process of incidental perception are “elicere” and “iudicare”—although, the *Parvulus philosophiae naturalis* says nothing about the nature of this process; it is usually understood in the late Middle Ages as a low-level, non-predicative judgement—one could say ‘intuitive’ or ‘automatic’.66

The *Parvulus philosophiae naturalis* remains imprecise about many elements involved in cogitation—a major drawback for conciseness. For that very reason, the master of the *expositio* [6] working with the textbook *Parvulus philosophiae naturalis* [2] was obliged to unpack the two phrases in the manual with a more elaborate treatment, see [appendix text A]. The master first comments on the *Parvulus philosophiae naturalis*, highlighting typographically in capitals his starting point (here FORMATIVA POTENTIA EST). The formative power combines sense species with other sense species, giving rise to composed images like a chimera, goat-horse, golden mountain. Then he continues with QUE AB ALIIS VOCATUR (FANTASIA) in an attempt to distinguish the formative act from the fantasizing act. In the *Parvulus philosophiae naturalis* this distinction is not made, but it is quite common since Avicenna was thought to have made efforts to

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66 Anselm Oelze, Theories of animal rationality in the later Middle Ages, PhD Diss. (Berlin: Humboldt-Universität zu Berlin) [unpublished], 2016, part III.
distinguish a power for reproducing representations from a power for recombining new images. At the same time, he comments on Aristotle’s dictum “fantasy is a motion from the actual sensing *(fantasia est motus factus a sensu secundum actum)*—mentioned in the *Parvulus philosophiae naturalis* but not interpreted. The *expositio*-master interprets the fact that species are diffused from imagination to cognition (*sic*), and that this movement causes fantasy. However, in this way, fantasy is defined not as power, but as act. He explains that this distinction is causal and not “identical”—a technical term that might indicate that fantasy is not substantially distinct. Fantasy is thus described as an operation that is somewhere between imagination and cogitation, put in motion by the sense representation preserved in the imagination. Once considered fantasy as an operation rather than a power, we can consider it as an act of another power, here the cogitative power *(erroneously (?)* named a ‘cognitive’ power):

And fantasy is “motion from a sense,”68 meaning that “fantasy is being caused by movement and by the diffusion of sensible species from a preservative power towards another, that is the cognitive,69 etcetera,” like [mentioned] in the text. And fantasy is not defined here primarily as power, but as an act of fantasizing, from which act we can come in the cognitive power.70 The aforementioned division is causal, and not identical, because fantasizing is done by that which sensible species are diffused from: the preservative power into the cognitive.71

Secondly, the anonymous instructor [6] comments on what the *Parvulus philosophiae naturalis* [2] says about the estimative power. The estimative or cogitative power is responsible for drawing out non-sensorial intentions—these are in the mental representation, but not directly accessible, as for example hostility, friendliness, harmfulness or usefulness. These contents can be extracted out of previously sensed species. The master is quite interested in the question of how incidental perception can be explained (here and in the question, that follows below). The master concludes this paragraph that the cogitative power is one in number but has separated tasks: a formative, a fantasizing, an estimative, and a cogitative. It is immediately clear that the *expositio*-master wants to follow another pattern as presented in the *Parvulus philosophiae naturalis*, and denies fantasy as

67 Aristotele, *De anima*, III.3 429a1.
68 See note 61.
69 One would expect “cogitative” instead of “cognitive,” but that is not the case.
70 Cognicionem *B, W*.
71 W 32ra [appendix text A].
being an ontologically distinct power. It is generally known that Thomas also denies the formative operation a distinct entity, and combines it with the imagination. Indeed, Thomas Aquinas combined the fantasizing act to the power of imagination—but only in the case of human beings.\textsuperscript{72} Nonhuman animals have no power for combining new images, according to Thomas Aquinas. All they can do is to reproduce existing representations as stored in the imagination. Nonhuman animals grasp intentions only naturally (instinctively),\textsuperscript{73} whereas human animals by means of “collatio” (comparison). Once human beings have made their unreal representations in the imagination it can be evaluated by the cogitative power. The cogitative power benefits, according to Thomas, from a perfusion by a sort of reflux (refluentia) of the intellect.\textsuperscript{74} Animals, obviously have no intellect. To make this distinction clear, the third inner sense is called cogitative power in humans and called estimative power in the case of nonhuman animals.

Our expositio–master however attributes fantasy and the formative act to the cogitative power. This is quite a different move. He adds immediately a question in which one can expect him to elaborate and justify his choice. Having unpacked the four phrases of the \textit{Parvulus philosophiae naturalis} manual about the formative and cogitative power, the master [6] now reproduces the topic into a question: “What is the object of the cogitative power and what is its organ?”; see [appendix text B]. This question, is unfortunately not presented as a full-fledged quaestio disputata, as there are no counter arguments, nor dismissal of these alternative views. He starts his answer by addressing incidental perception: the cogitation grasps the accidental qualities of the sensible object (sensibile per accidens). By means of those sense species that were already in the senses (species que prefuerunt in aliis sensibus), the very singular substantial form (substantia rei quod est particularis) is drawn out by the cogitative power.

The expositio–master follows with an argument about our problem with fantasy. Fantasy is twofold: it consists in a fantasizing act (recomposing and recombining representations of sensibles), and that is how it is defined in the text (\textit{Parvulus philosophiae naturalis}), but fantasy can also be

\textsuperscript{72} Thomas Aquinas, \textit{Summa Theologica}, Ia, Q. 78 Art. 4 co.: “Avicenna vero ponit quintam potentiam, mediam inter aestimativam et imaginativam, quae componit et dividit formas imaginatas; ut patet cum ex forma imaginata auri et forma imaginata montis componimus unam formam montis aurei, quem nunquam vidimus. Sed ista operatio non apparat in aliis animalibus ab homine, in quo ad hoc sufficit virtus imaginativa”, cf.: ST. I, Q.12 a. 9 ad 2, DeV., Q. 8 a. 5 co.; DeV., Q. 8 a. 9 co., etc.).

\textsuperscript{73} Thomas Aquinas, \textit{Summa Theologiae} I, q. 78 a. 4 co.

\textsuperscript{74} Thomas Aquinas, \textit{Summa Theologiae} I, 78, 4, ad 5. -II, q. 3 a. 3 co.
taken as power, and in that sense, it is not different from the cogitative power (because fantasy as such has no distinct substance). The cogitative power can be said to be ‘formative’ when combining species, and ‘fantasy’ when evaluating the representations. The cogitation can only be found in rational animals (human beings), and is also called particular reason or passive intellect (both by Thomas Aquinas) when collating particular intentions. The nonhuman equivalent for the cogitative power is called the estimative power.

The master [6] thus retains only four senses: common sense, imagination, cogitation, and memory. The scheme to reduce the powers to four is comparable to Thomas Aquinas, who also denied fantasy a distinct power. In the section about what internal senses are, the master comments and summarizes some positions, see [appendix C], confirming his deviation from Thomas Aquinas. He writes that all the operations the Albertists attribute to fantasy are in fact all to be found in cogitation, therefore there is no ontologically distinct reality between the two powers. Thomas Aquinas joins fantasy to imagination. And others, like himself, join fantasy to the cogitative power.75 One of these “others” is Lambertus de Monte, an established venerable Cologne master, regent of the Thomist faction in the period under study.76 Now I turn to Lambertus de Monte, in hopes of finding an argument for placing the operation of imagining unreal representations in the act of cogitation.

**Lambertus de Monte’s *Copulata***

In W, we find Lambertus de Monte’s *Copulata* [8], offering yet another source for the student to construct and help his apprehension of philosophical psychology. Indeed, Lambertus de Monte in his *Copulata super tres libros De Anima* [8] deals with the question whether fantasy is a distinct power from the others, see [appendix Text D]. In his determination, he relies heavily on Thomas Aquinas, but gives it the same surprising twist we have seen in the *expositio*.

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75 W, fol. 31va, cf. [appendix C]

76 An analysis of the philosophical argument on imagination in the cogitative power will be proposed in the volume “Studying the Arts in Medieval Bohemia”, edited by Ota Pavlíček, to be published in the series Studia Artistarum, Brepols.

77 For an extended analysis of the doctrinal tenets of Lambertus de Monte, I refer to ‘Lambertus de Monte on the phantasms of unreal things. Reworking Thomas Aquinas’s restrictive clause of the formative imagination, or: why animals cannot imagine golden mountains’, in: Ota Pavlíček ed., *Studying the Arts in Medieval Bohemia*, Studia Artistarum (Brepols, forthcoming), where I re-use some manuscript quotations.
In his determination, Lambertus de Monte advances first two arguments in favor of the statement. The first reason to think that fantasy is a distinct power is because Aristotle gave a definition of this power as motion from actual sensing, and considered fantasy to exist in a determinate bodily organ. Secondly it is argued that fantasy is distinct from the other senses because its operation is different, i.e. fantasy composes sense perceptions (species) with each other and with incidental perceptions (intentiones) and therefore it is some new power. This point of view is not attributed to some specific philosopher by Lambertus.

Lambertus de Monte then determines that fantasy (or formative imagination) is not a distinct entity because its operation can be ascribed to other powers. In the case of animals, fantasy is an operation of the imagination—however, they have only the power to reproduce stored images, and no capacities to combine stored images into new ones. The reason for this is quite interesting: if animals would be able to compose non-existing representations, then they would behave in awkward fashion, because they are not capable of telling the difference between reality and non-real, composed images.

If they [unreal representations] were in all animals, and fantasy is the start of all action, it follows that animals are being moved indeterminately according to the fantasy-composition they would have made of things. They can however not judge this [unreal representation] being a fantasy, the way it happens in human beings, and therefore they [the animals] are being moved indeterminately according to such a fantasy-composition.

Animals are therefore not capable of imagining a monster, only capable of reproducing images stored in the imagination. Their ‘reduced’ fantasy should be situated in the imagination.

In the case of human beings however, whereas fantasy is situated in the cogitative power. He explains:

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78 See note 61. See also Thomas Aquinas’ question: “Does phantasy have a determinate organ?” in Commentary on De anima Book II. 4. 413b15-24.
79 Lambertus de Monte, Copulata: “Si enim fierent in omnibus aliis animalibus, cum fantasia fit principium motus, sequeretur quod animalia indeterminate moverentur propter compositionem fantasticam quae haberent de rebus. Non enim possunt hoc iudicare esse fantasma sicut contingit in hominibus et ideo secundum talem compositam fantasiam moverentur et per consequens indeterminate fiunt,” cf. [appendix Text D].

26
What is to be asserted is that this operation is being subordinated to the cogitative power. And this is clear because those operations are not made by all animals, but only in human beings.\(^{80}\)

The imagination is physiologically and operationally the same, for human and non-human animals. But the cogitative power is not the same for both. The cogitative power in human beings operates on a higher level thanks to the intellect that is joined to it (\textit{coniunctionem intellectus}). Lambertus de Monte also speaks of “\textit{ex redundantia rationis}”—an “overflowing of the intellect” to the cogitative power, cf. [appendix Text D]. The term \textit{redundantia} appears to be a way to meet with Aquinas’ “\textit{refluentia}.” Thanks to this intellecctive perfusion, the human being is able to act and react rationally to ‘non-sense’ (creative unreal) representations. In the human being, the formative act of fantasy uses stock representations of \textit{per se} sensibles, but also of incidental perceptions, so that we can imagine not only monsters, but even \textit{harmful} monsters under our beds. Therefore, the operation of forming new and unreal entities is done by the cogitative power, in the case of human beings.

An inevitable question, is whether Lambertus de Monte [8] could be the \textit{expositio}-master [6] commenting on the \textit{Parvulus philosophiae naturalis} [2]. The \textit{expositio}-master seems to go in the direction of Lambertus’ interpretation, but is not explicit about fantasy’s possibility of using incidental perceptions. There are two reasons to assume that Lambertus de Monte does not coincide with the \textit{expositio}-master. Firstly, Lambertus is regent master of the \textit{bursa montana} which is an important job, and incompatible with commenting on a simple manual intended for rehearsing freshmen. Secondly, in the \textit{expositio} it reads “\textit{alii autem comprehendunt eam (fantasiam) sub virtute cogitative}”—the use of the third person would be awkward if it were to concern the master himself. However, although identification is not likely, it cannot be firmly excluded in this phase of research.

In either case, the new standpoint is not formalized in Cologne teaching at this time of the period under examination.\(^{81}\) In the \textit{Positiones}, a manual published in Cologne (1494) gathering

\(^{80}\) Lambertus de Monte, \textit{Copulata}: “Dicendum quod illa operatio reducitur ad virtutem cogitativam. Et hoc sic patet quia tales operationes non fiunt in omnibus animalibus, sed solum in hominibus,” cf. [appendix Text D].

\(^{81}\) The same idea is reflected, however, in Gregor Reisch’s, \textit{Margarita philosophica}, II, 23 (ed. transl. Cunningham, Kusukawa (note 41), here 206–207. Gregor Reisch studied in the University of Freiburg-im-Breisgau between 1487 and 1489/90, and matriculated in 1494 at the University of Ingolstadt. He composed his digest \textit{Margarita Philosophica} during the years 1496–98
official disputation questions and standpoints, there is no mention of the view that the formative operation is an act of the cogitative power instead of the more traditional Thomist view that the formative power is an act of the imagination in both, human and nonhuman animals.\footnote{This is important to note, because it means that this viewpoint is not part of the official school-tradition. However, this viewpoint is held and represented by an important regent, and his teaching is reflected in Bachelor training. Whether the cogitative-fantasy position is a determinate tenet of the identity of the Thomist \textit{bursa montana} in Cologne of the late 15$^{th}$ century needs to be analyzed further, as well as the philosophical advantages of this position, and its originality and origin.}

Diagrams

After \textit{De Anima} III of Aristotle \cite{7}, the manual \textit{Parvulus philosophiae naturalis} \cite{2}, its local \textit{expositio} with questions \cite{6}, a second local authoritative text about the soul by the regent Lambertus de Monte \cite{8}, it is not yet enough for the student. He has also two images \cite[3, 4]{} about the powers of the soul at his disposal to study and evaluate his understanding of the matters at stake. In the visual representations, the localization issue is more in the foreground, it is therefore telling to start with the determination on the question of the localization of the organ of the cogitative power.

The master of the \textit{expositio} \cite{6} writes that the cogitative power is situated in the organ that is at the top of the head, where the brain is humid. The high position in the head relates to the idea that this sense is the highest inner sense, and therefore most close to the intellect.\footnote{Considering the fact that the intellect is immaterial, though localized in the entire body, it makes no sense to situate the cogitation on the summit of the head to be closer to the intellect.\footnote{Even in an Averroistic viewpoint, where one intellect is operating in all human beings, it is not considered being situated above one’s head, but rather being everywhere in the sublunar, in and outside all bodies, but only reactive if appropriate fantasmata are produced. The \textit{expositio}-text}}

\begin{quote}
(Cunningham & Kusukawa (note 41), xviii), and had it printed in 1503 (ed. pr.) by Johannes Schott in Freiburg-im Breisgau (xxvii).
\end{quote}

\footnote{The \textit{Positiones circa libros Physicorum et De anima Aristotelis iuxta ... processum magistrorum Colonie in bursa Montis regentium} represent the positions of the following Cologne masters teaching by the end of the 15$^{th}$ century: Gerard Terstegen (d’Heerenberg) also called Gerardus de Monte; Gerardus ab Elten; Henri de Gorkum; Henri d’Orsay; Lambertus de Monte; Henricus de Orsoe. I have consulted the online copy of Heinrich Quentell (Erben): 1508, and especially the section on the number of senses (g4) and the cogitative power (g5).}

\footnote{See [appendix B].}
intellect nonetheless visually outside the physical body [Fig. 2]. Maybe to stress the immateriality of the intellect?

The figurative diagram [4] structures the powers of the soul in object and organ [Fig. 2]. For the external senses, he adds also the medium. The diagram presents four inner senses: common sense, imagination, cogitation/estimation and memory. The first have as object the sensible that is sensed in a direct way (sensibile per se sensatum), the latter have as an object the sensible, perceived incidentally (sensibile per accidens). Fantasmata are not specifically located in the drawing, but somewhere between the ventricles. Fantasmata are said to be species of the inner senses (Species sensuum interiorum / dicuntur fantasmata). There is no direct connection between the intellect and the fantasmata or intentions, contrary to the linear diagram (see below) [Fig. 1], and contrary to similar diagrams in other manuscripts (cf. Berlin). One would expect a more explicit presence of fantasy in the cogitation, but there is not. The presented division is not compelling in the direction of the expositio-master [6], nor Lambertus de Monte’s [8], nor in Aquinas’ division. A second writing-hand in the MS W however, places fantasy in imagination—abiding thus with Aquinas’ proposition.

The linear diagram [3] [Fig. 1] also shows several hands. The diagram-hand has the intellect abstracting intelligibles from the fantasmata (abstrahit species intelligibiles a fantasmatisbus)—visualized with a vertical line between the agent intellect and memory and imagination. This conforms with Aquinas’ position. An addition is made in the margin, next to the vertical line towards imagination, saying that sensible species and intentions are both to be called fantasmata (intentiones, species sensata – dicitur fantasmata), referring to a generic use of fantasmata, comprising all inner representations.

The two diagrams [Fig. 1 and 2] then are not specifically developed in the context of the Parvulus philosophiae naturalis [2][85], nor the local master’s expositio [6], nor in keeping with Lambertus de Monte’s Copulata [8], but more in conformity with Thomas Aquinas’s theory on the

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85 See Verboon (note 18).
number and organization of the internal senses, in particular concerning fantasy as an operation of the imagination. The diagrams are however annotated to reflect the contemporary local teachings.

5 Conclusion
The intention of this article was to evaluate the coherence of doctrinal tenets in a young student’s manuscript compilation that reflects the teaching he received in the Thomist faction of the University of Cologne, known as the bursa montana, in the 1490s. This evaluation is based on two problems that served as case studies: 1. defining the organ of sight, and 2. the ontological status of fantasy (formative imagination). The student dealt with these questions with no less than five textual units: Aristotle’s De anima [MS item 7]; an early 15th-century manual called Parvulus philosophiae naturalis [MS item 2]; an expositio and questiones [MS item 6] on this Parvulus philosophiae naturalis; a textbook of the so-called Copulata-genre [MS item 8] of the 15th-century Cologne authority Lambertus de Monte (1430–99); and two visual diagrams [MS item 3 and 4]. The Parvulus philosophiae naturalis is based on an Albertist-Avicennean framework, whereas the expositio-master, Lambertus de Monte and the diagrams are committed to Thomas Aquinas’ interpretation, though with important variations.

Although the student compilation is clearly of a Thomist orientation, it is not as orthodox as the literature on the topic wants us to believe. The formative imagination, responsible for composing new content out of existing stored images, is not a distinct power, according to Thomas Aquinas, but a function of the power of imagination. Nonhuman animals, according to Aquinas, do not have the capacity to compose unreal representations, only to reproduce existing ones. Where Aquinas is silent about the reasons for nonhuman animals in their lack of a formative imagination, the 15th-century teachings propose an argument: animals cannot compose new content, for they have no modus operandi to judge the new content rationally. This is contrary to human beings: if human animals are exposed to unreal images, they can evaluate it as non-sense, and still act normal. Because the human formative power is corrected by the cogitative power, which is under the influence of reason, the expositio-master and the regent master Lambertus de Monte argue that the formative imagination is an operation of the cogitative power in human animals, rather than of the power of imagination (the position of Aquinas). A generous reading of the argument might plea for this shift because of the influence of the intellect in the cogitative power.

Even if ‘originality was not the greatest concern,’ according to Hoenen, and Goris, for the school-philosophy of both the Thomist and Albertist factions, we have here a tenet that is overtly in disagreement with an orthodox reading of Thomas Aquinas, offering an alternative—regardless of the question as to whether originality is an improvement. Moreover, the tenet that the formative
power is an operation of the cognitative power, is not only held by the regent master Lambertus de Monte, but has also expanded in teachings in the Bachelor phase.

Young students had quite a dynamic task to navigate through a variety of literary genres, and to align and differentiate between the different units to convey or build a tradition with specific tenets that identify a school. The diagrams [3 and 4] that are supposed to recapitulate the teachings, do not confirm the unconventional reading of the regent master and *expositio*. Instead they rather abide with the orthodox Thomist reading of fantasy being an operation of the imagination in humans as well as non-rational animals. And the *Parvulus philosophiae naturalis* [MS item 2] grants the formative imagination (fantasy) a distinct power, a position held in the Albertist faction of the *via antiqua*, but negated by the other sources in this MS W. The case study of the organ of sight is less controversial, but shows a comparable procedure. The teaching master of the *expositio* seemed intrigued by the question of the actual organ, and searched for additional information, which he found in Al-Hazen, to complement and detail the presented views. Thus, he was able to appoint the optical nerve as the ultimate organ where the image is actualized, instead of the more un-researched and uninteresting views simply appointing the eye.

This contribution in the didactics and transmission of Thomist Aristotelianism in the Thomist faction of the University of Cologne in the end of the 15th century, then confirms the concern for didactic successes and the interest in pedagogical tools, as mentioned in the scholarly literature. But this contribution also shows an important shift in doctrinal content during the transmission of the Thomist school content, thus indicating a critical attitude from the masters that not only seek to present Aquinas’ interpretation of Aristotle, but also to complement Aquinas where he remains unsatisfactory, and adapt Aquinas’ doctrine to reflect their progress in search of truth. Another contribution to the view in the scholarly literature is that the students were required to develop a more dynamic attitude than hitherto assumed in aligning different sources, in order to produce the ‘truth of the doctrines of the schools’ 86. The students might still learn portions by heart, but this student compilation shows that assimilation of the content needs an investment. The philosophical identity of the student then is of a clearly identifiable Thomist Aristotelian character, with personalized touches which reveal the update of teachings the students received, and his individual investment in understanding.

86 Goris (note 4).
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Appendices

Anonymous, Expositio with questions on *Parvulus philosophiae naturalis*.

*Inc.*: *Gloriosus peripatheticorum dux philosophorumque iubar Arestotiles radicatus et prolix in philosophicalibus libris scientiam nobis tradidit philosophicalem ...* (34v): *hac vita et tantum de 3° tractatu et per consequens de tot parvulo philosophie. finitur. deo gratias.*

W = Würzburg, University Library, M. Ch. F. 118, fols. 15r–34v.
B = Berlin, Staatsbibliothek, lat.fol.40, fols. 3r–34v (*expositio*)\(^87\), and 35r–54v (*quaestiones*).

Lambertus de Monte, *Copulata super tres libros Aristotelis De Anima iuxta doctrinam Thomae de Aquino*

MS Würzburg, University Library, M. Ch. F. 118, fol. 84r–140v. Here transcribed from editions\(^88\):
- ed. Q = [Cologne: Heinrich Quentell], ca. 1492. Darmstadt, inc. III 85
  (http://tudigit.ulb.tu-darmstadt.de/show/inc-iii-85/0167)
- ed. W = [Cologne: Conradus Welker, de Bopardia], 1486. Darmstadt, inc. III 86
  (http://tudigit.ulb.tu-darmstadt.de/show/inc-iii-86/0122)

Text A About the formative power and the estimative-cogitative power

Anonymous, Expositio with questions on *Parvulus philosophiae naturalis*.

(W 32ra; B2, 100rab)

FORMATIVA POTENTIA EST. Tertio determinat de tertio sensu interiori, scilicet virtute cogitativa, cuius pluria sunt nomina.

Dicitur enim primo potentia formativa, secundo solet etiam dici fantasia, tertio dicitur cogitativa, quarto vero estimativa. Secundum doctorem sanctum dicitur esse ratio particularis quia

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87 I have not been able to use the *expositio* in B for transcription here, only the question [text B].
88 Not having a copy of the relevant MS fols., I have not been able to reproduce the MS text, but only the incunable.
est collativa intentionem particularium. Solet esse dici intellectus passivus. Et hec nomina que nominant virtutem cogitativam\textsuperscript{89} secundum diversa eius officia.

Determinando igitur de virtute cogitativa. Primo diffinit eam inquantum potentia\textsuperscript{90} formativa – dicens formativa potentia est potentia componens speciem sensatam cum alia specie sensata et sic facit mirabilia entia ut chimeream, hicrcervum, aureum montem in Arabia, etceteriis, componit enim\textsuperscript{91} speciem aerei cum species montis.

De modo ibi QUE AB ALIIS VOCATUR\textsuperscript{92}. Ponit diffinitionem virtutis ymaginative inquantum fantasia dicens formativa potentia solet etiam vocari fantasia. Et “fantasia est motus factus a sensu”\textsuperscript{93} idest “fantasia causatur ex motu et diffusione speciei sensibilis ex una potentia reservativa, ad aiam, scilicet cognitiva, etcetera”, utque in textu.\textsuperscript{94} Et fantasia non diffinitur hic pro potentia principaliter sed pro actu fantasianti, ex quo acto devenire possimus in cognicione\textsuperscript{95} potentia. Praeterea dicta divisio est causalis et non ydemptica, quia fantasiani fit per hoc, quod species sensibiles diffunduntur de potentia reservativa in cognitivam. Et subinfer corollarium quod fantasiani inquantum actus dicitur apparitio sive visio, quia tunc apparat aliquid.

De modo ibi ESTIMATIVA QUE ET IAM. Tertio notificat // 32rb virtutem cogitativam inquantum estimativa vel etiam cogitativa dicens quod “est virtus cuius officium est elicere et extrahere\textsuperscript{96} intentiones non sensatas ex sensatis.” Hoc est aliquod intentum in specie, quod tamen non est representatun per speciem, cum illo quod est prius representatum in sensibus interioribus, ut, verbi gratia, intentiones amicitie vel inimicitie, nocivi vel utilis, quia intentiones elici possunt ex aliquibus speciebus prius sensatis, sic sunt si videtur aliquis cum gladio evaginato tunc species ab eo diffuse in visu presentaret eius calorem, magnitudinem, motum, etcetera. Similiter sunt in sensu communi. Sed in virtute cogitativa ex istis iam sensatis elicirna nova species vel aliquid contentum\textsuperscript{97}

\textsuperscript{89} Virtute cogitative B.
\textsuperscript{90} Potentia om. B.
\textsuperscript{91} tunc \textit{add. B.}
\textsuperscript{92} fantasia \textit{add.B.}
\textsuperscript{93} Aristotele, De anima, III.3 429a1.
\textsuperscript{94} In the \textit{Parvulus philosophiae naturalis} however it reads “Diffinitur tamen sic, fantasia est motus factus a sensu moto a sensibus que sunt extra. Unde fantasia dicitur apparitio sive visio.”
\textsuperscript{95} Cognitionem B, W.
\textsuperscript{96} Note that “et extrahere” is not in the \textit{Parvulus philosophiae naturalis}.
\textsuperscript{97} in \textit{add. B.}
aliaqua specie, quod nondum est representatum, cuiusmodi est inimicia et invasio, quia ex motu suo elicitur quod velit aliquem invadere. Et hoc facit virtus cogitativa. Et per illam virtute ovis iudicat lupum esse inimicum sue nature, quia per speciem lupi primo cognoscit lupum secundum eius colorum, magnitudinum, motum, et cetera. Ex quibus elicit speciem inimitie et contrarietatis, quae tunc fugit. Ex iste igitur patet quod virtus cogitativa est una potentia numero, habens divisa officia inquantum formativa98, inquantum fantasias, inquantum estimativa et inquantum cogitativa.99 Ex quo patet secundo quod fantasy non est potentia distincta a cogitative quia officia que attribabantur fantasie conveniuntur virtuti cogitativa.

Text B What is the object and organ of the cogitative power?
Anonymous, Expositio with questions on Parvulus philosophiae naturalis.

(W 32rb, B 53rb-54va, B2 110rb110va)
QUERITUR QUID SIT OBIECTUM virtutis cogitative et eius organum? Dicendum quod objectum est100 sensibile per accidens, idest substantia particularis in quantum cognoscibilis. Quia per sensus extereores ut per visum cognoscitur color rei; per sensum communem ut magnitudo, motus, etcetera; per virtutem cogitativam101 cognoscitur ipsa substantia rei que est particularis et hoc per easdem species que prefuerunt in alii sensibus. Sed ipsius organum est situatus in cacumine capitis ubi cerebrum est humidum, quia virtus cogitativa est altior sensus qui etiam est propinquior intellectui, ratione cuius dicitur ratio particularis vel intellectus passivus.

ARGUITUR fantasie actus, ergo non est potentia. Antecedens est quia “fantasia est motus factus etcetera.” Dicendum quod fantasie accipitur dupliciter: uno modo pro actu fantasiandi, vel pro actu sensuum interiorum102 et sic diffinitur in textu103. Alio modo pro potencia que dicitur estimativa et sic est potentia anime non autem distincta a cogitative vel estimativa. Ex quo patet quod virtus cogitativa dicitur formativa inquantum componit monstra, sed dicitur fantasie

98 fantasmata W.
99 Ex quo patet secundo quod fantasy non est potentia distincta a cogitative, quia officia que attribabantur fantasie conveniuntur virtuti cogitativa add. B.
100 objectum est om. W, est om. B.
102 interiorum om. W.
103 Id est: Parvulus philosophiae naturalis.
Text C  
**About the number of inner senses.**

Anonymous, *Expositio* with questions on *Parvulus philosophiae naturalis*.

(W 31rb, B2 98rb-99ra)

POTENTIE APPREHENSIVE DEINTUS SUNT QUINQUE SCILICET. De sensibus interioribus quatuor. Hic incipit determinare. Et primo praemittit unam divisionem et vult quod quinque sunt sensus interiores scilicet sensus communis, virtus ymaginativa, et fantasia, virtus cogitative, et virtus memorativa.

Arguitur: Quartuor sunt sensus interiores, ergo non quinque sensus. Antecedens, auctoritate doctoris in suis Passibus (*sic*). Autoritate etiam omnis medicorum qui ponunt quatuor sensus in capite secundum quod quatuor sunt ossa specialia capitis ut patet in capitibus mortuorum, ergo tamen quatuor sensus interiores. Dicendum quod sensus interiores possunt accipi dicitur.

Unomodo secundum quod sunt quinque sensus interiores quia ipsorum quinque sunt nomina. // 31va Et hanc divisionem ponit Avicennam in suo libro de anima quem in sequitur Albertus et sui sequentes. Aliomodo accipiuntur sensus interiores distinctiones realiter et non vocalem et sic sunt tamen quatuor sensus interiores. Primus est sensus communis, secundus virtus ymaginativa, tertius virtus cogitative, quartus virtus memorativa, ut dicit Doctor Sanctus in prima parte, similiter in questionibus *De potentia* et *Veritate*. Et Doctor Sanctus comprehendit fantasiam

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104 per *add. B, B2*.
105 sensum *B2*.
106 fantasmata *om. W*.
107 interiorum *B, B2*: exteriorum *W*.
108 dicitur inquantum reperire *W*.
110 autor *add. B2*.
111 exteriores *B2*.
112 Quod: Nomen etc. *B2*.
113 Secundum *add. B2*. 
sub ymaginativa\textsuperscript{114}, illa reservat fantasmata. Alii autem comprehendunt eam sub virtute cogitative, quia omnes operations, quas Albertisste attribunt fantasie, omnes conveniunt virtuti cogitative ut patebit. Patet ergo quod dicta divisio non est divisio rerum sed vocum quia datur per distincta nomina.

\textbf{Text D} \quad Is fantasy a distinct power?

Lambertus de Monte, \textit{Copulata DA}, [Cologne: Quentell], ca. 1492. book II, fol. liii ra, i6r.

Queritur utrum fantasia sit una potentia ab aliis distincta? Dicendum quod non.

Arguitur quod sic quia Arestoteles postea determinat de fantasie ergo debet poni specialis sensus. Dicendum quod Arestoteles ponit fantasiam ut est actus sensuum interiorum, quia dicit quod est motus factus a sensu secundum actum.

Arguitur: est una operatio in animalibus que non convenit alicui predictorum sensuum scilicet componere speciem cum specie et intentionem cum specie ergo erit una nova potentia scilicet fantasia.

Dicendum quod illa operatio reducitur ad virtutem cogitativam. Et hoc sic patet quia tales operationes non fiunt in omnibus animalibus, sed solum in hominibus. Si enim fient in omnibus alis animalibus, cum fantasia fit principium motus, sequetur quod animalia indeterminate moverentur propter compositionem fantasticam quae haberent de rebus\textsuperscript{115}. Non enim possunt hoc iudicare esse fantasma sicut contingit in hominibus et ideo secundum talem compositam\textsuperscript{116} fantasiam moverentur et per consequens indeterminate fiunt, ergo iste operationes per virtutem cogitativam inquantum cogitativa quod dicitur notanter quia sic in ea est redundantia rationis. Et propter talem redundantiam habet altiorem operationem quam estimativa in brutis.

\textsuperscript{114} Quia \textit{add. B2}.

\textsuperscript{115} propter compositionem fantasticam quam haberent de rebus \textit{om. ed. Welker}

\textsuperscript{116} talem compositam \textit{ed. Q: omnem ed. Welker}
Figure 1 Würzburg, UB, M ch f. 118. fol, 11v

Photo courtesy of the Universitätsbibliothek Würzburg.
Figure 2 Würzburg, UB, M ch f. 118. fol, 12r

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