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A Logic to End Controversies: The Genesis of Clauberg's *Logica Vetus et Nova*

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Abstract: This article provides an analysis of Johannes Clauberg's intentions in writing his *Logica vetus et nova* (1654, 1658). Announced before his adherence to Cartesianism, his *Logica* was eventually developed in order to provide Cartesian philosophy with a Scholastic form, embodying a complete methodology for the academic disciplines based on Descartes' rules and a *medicina mentis* against philosophical prejudices. However, this was not its only function: thanks to the rules for the interpretation of philosophical texts it encompassed, Clauberg's *Logica* was meant to provide a general hermeneutics designed to put an end to the quarrels raised by the dissemination of Cartesianism. Such quarrels, according to Clauberg, were caused by the misinterpretation of Descartes' texts in Revius' *Methodi cartesianae consideratio theologica* (1648) and *Statera philosophiae cartesianae* (1650) and in Lentulus' *Nova Renati Descartes sapientia* (1651), which criticized the apparent lack of a logical theory in Descartes' philosophy and its supposed inconsistencies. Clauberg answers their criticisms by giving a clear account of Descartes' logical theory and by undermining the interpretative criteria they assumed, in light of a general theory of error. Polemics over Cartesian philosophy, in this way, favored the development of a comprehensive Cartesian methodology for academic disciplines and of the first hermeneutics for philosophical texts.

Keywords: Clauberg, logic, Descartes, hermeneutics, method, Revius, Lentulus, *medicina mentis*.

It is well known that the dissemination of Cartesian ideas caused acrimonious debates. Among them, one must mention those provoked by the introduction of Cartesian philosophy to the Dutch Academies, where Henricus Regius, Adriaan Heerebord and Johannes De Raey can be counted among the first scholars spreading the new philosophy: their teaching, indeed, caused the well known Utrecht and Leiden crises, in 1641 and 1647.¹ Therefore, different strategies were used

¹On the relevant context, see C.L. Thijssen-Schoute, *Nederlands Cartesianisme, avec sommaire et table des matières en français*, Amsterdam: N. V. Noord-Hollandsche uitgevers mij., 1954; T. Verbeek, *Descartes and the Dutch. Early Reactions to Cartesian Philosophy, 1637-1650*, Carbondale-Edwardsville: Southern Illinois University Press, 1992.

to ease the introduction of the new philosophy into the Academic curriculum: for instance, by showing the concordance of the new and old paradigms, as Johannes De Raey did in his *Clavis philosophiae naturalis aristotelico-cartesiana* (1654)² with respect to the physics. On the other hand, Johannes Clauberg (1622-1665) proposed a different integration of old and new philosophy. Aiming to initiate a general reform of the sciences for Protestant universities, and thus to reshape Descartes' philosophy into a Scholastic form,³ in his *Logica vetus et nova* (1654) he integrated the principles of Cartesian method with the logical teaching provided in the Reformed academies. With a new foundation in Cartesian method, Scholastic logic served to sharpen Descartes' few rules and to turn them into a comprehensive theory, allowing their teaching as the basics of a new method for philosophy. Clauberg's logic, therefore, was intended to establish the fundamental rules for the right formation of concepts and their combination in reasoning in light of Descartes' method and Aristotelian syllogistic. Introducing students to Cartesian methodology, moreover, it served to eradicate prejudices and to exercise the mind in a novel way of reasoning, thus working as an actual *medicina mentis*.

Besides providing a Scholastic version of Descartes' method, however, Clauberg's logic had another main end, namely, to provide interpretative criteria for philosophical texts.⁴ This followed from his effort to develop a comprehensive theory of reasoning, as this theory has not only to teach how to convey concepts but also how to deal with their expression. Indeed, this had been established by Clauberg before his adherence to Cartesianism.⁵ In his *Ontosophia* (1647) he outlines

²See Andrea Strazzoni, "La filosofia aristotelico-cartesiana di Johannes De Raey," *Giornale critico della filosofia italiana* 31 (2011), pp. 107-32.

³See Massimiliano Savini, "Methodus cartesiana e pansophia: i primi dibattiti intorno al metodo cartesiano e il progetto di riforma del sapere nelle Provincie Unite," in B. Lotti, P. Dessi (eds.), *Eredità cartesiane nella cultura britannica*, Firenze: Le Lettere, 2011, pp. 29-47.

⁴Clauberg's *Logica* was preceded by some other treatises integrating hermeneutics into logic. This is the case with Bartholomäus Keckermann's *Systema logicae* (1600; in *Systema systematum*, Hannover: Heirs of G. Antonius, 1613), Clemens Timpler's *Logicae systema methodicum* (Hannover: Heirs of G. Antonius, 1612), Johann Conrad Dannhauer's *Idea boni interpretis et malitiosi calumniatoris* (Strasbourg: W.C. Glaser, 1630) and Justus Brawen's *Commonefactio logica, tam analysis interpretativam et criticam, quam universam et privam synthesis exhibens* (Rostock: N. Kilius, 1643). Traces of a general hermeneutics are present also in Alexander Richardson's *The Logicians School-Master* (London: J. Bellamie, 1629). Their analysis is beyond the scope of the present contribution. For a comparison between Dannhauer's hermeneutics—mainly aimed at theological debates—and Clauberg's, see Antonella Del Prete, "Du bon usage de Descartes: l'art de lire chez Johann Clauberg," forthcoming. See also Massimiliano Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, Paris: Vrin, 2011, pp. 265-267. On the relevant context, see Lutz Dannenberg, "Logik und Hermeneutik im 17. Jahrhundert," in J. Schröder (ed.), *Theorie der Interpretation vom Humanismus bis zur Romantik – Rechtswissenschaft, Philosophie, Theologie*, Stuttgart: Franz Steiner Verlag, 2001, pp. 75-131; Id., "Logique et herméneutique au XVIIe siècle," in J.C. Gens (ed.), *La logique herméneutique du XVIIe siècle*, Argenteuil: Le Cercle herméneutique, 2006, pp. 15-65; Günter Frank and Stephan Meier-Oese (eds.), *Hermeneutik, Methodenlehre, Exegese. Zur Theorie der Interpretation in der Frühen Neuzeit*, Stuttgart, Bad Cannstatt: Frommann-Holzboog, 2011.

⁵This is to be dated back to 1648: see Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, p. 27.

a bipartite structure of logic that will be fully developed in his *Logica*: it is divided into *genetica* (concerning the formation and the expression of concepts) and *analytica* (or the interpretation of the discourses of other people and the analysis of their truth).⁶ However, his *Logica* also aimed to put an end to the controversies that arose over Cartesian philosophy, whose deepest cause, according to Clauberg, was ignorance of the criteria in interpreting philosophical texts. The development of his logic, therefore, can be appreciated in light of an analysis of the polemical context of its dissemination, since the logic roughly sketched out in his *Ontosophia* is fully developed in the text that appeared after Clauberg's adoption of Cartesianism and in the midst of his quarrel with the Dutch theologians.

In paying close attention to the hermeneutical function of Clauberg's logic, the following considerations serve to highlight its development through an analysis of a particular controversy, namely, Clauberg's quarrel with the Dutch theologian Jacob Revius (1586-1658) and with the German philosopher Cyriacus Lentulus (1620-1678).⁷ The arguments and the interpretative criteria adopted by his adversaries are, indeed, identified and undermined in his *Logica*. After a survey of the context of the development of Clauberg's *Logica*, therefore, I will focus on the criticisms of Descartes' adversaries, on Clauberg's answer—both in respect of its polemical and of its more positive aspects—and on the hermeneutical criteria he assumed. Inspired by a charity principle, these criteria were developed in answer to the critiques brought forward by the Dutch theologians, as well as serving as general means of interpretation applicable to every philosophical text. It is my opinion that the emergence of a Cartesian comprehensive logic, as well as of a general hermeneutics, had one of its reasons in the need to put an end to the controversies over Descartes' thought: their analysis will help to assess the contribution of Cartesianism to the development of the logic and hermeneutics set forth in Clauberg's *Ontosophia*.

⁶Johannes Clauberg, *Elementa philosophiae sive Ontosophia*, Groningen: J. Nicolaus, 1647, pp. 274-277.

⁷My contribution follows the impressive results achieved by Massimiliano Savini in his *Le développement de la méthode cartésienne dans les Provinces-Unies (1643-1665)*, Lecce: Conte, 2004; Id., "L'insertion du cartésianisme en logique: la *Logica vetus & nova* de Johannes Clauberg," *Revue de Métaphysique et de Morale* 49 (2006), pp. 73-88; and Id., *Johannes Clauberg: methodus cartesianiana et ontologie*. On Clauberg's hermeneutics, see also Jacqueline Lagrée, "Sens et vérité chez Clauberg et Spinoza," *Philosophiques* 29 (2002), pp. 121-138; Guillaume Coqui, "L'obscurité du sens chez Clauberg," *Methodos* 7 (2007), on-line review [accessed on 21 August 2013] <http://methodos.revues.org/656>; and Id., *La logique de Clauberg et sa théorie cartésienne de la connaissance*, PhD diss., Universities of Bourgogne and Siena, 2008. On Clauberg's philosophy, see Eugenio Viola, "Scolastica e cartesianesimo nel pensiero di J. Clauberg," *Rivista di Filosofia Neo-Scolastica* 67 (1975), pp. 247-266; Carlo Borghero, "'Méthode' e 'Géométrie': interpretazioni seicentesche della logica cartesiana," *Rivista di Filosofia* 79 (1988), pp. 25-58; Francesco Trevisani, *Descartes in Germania. La ricezione del cartesianesimo nella Facoltà filosofica e medica di Duisburg (1652-1703)*, Milan: Franco Angeli, 1992; Id., "Johannes Clauberg e l'Aristotele riformato," in G. Canziani (ed.), *L'interpretazione nei secoli XVI e XVII. Atti del Convegno internazionale*, Milano: Franco Angeli, 1993, pp. 103-126; Theo Verbeek (ed.), *Johannes Clauberg (1622-1665) and Cartesian Philosophy in the Seventeenth Century*, Dordrecht: Kluwer, 1999.

1. Controversies over Cartesianism

Logica vetus et nova came out in the midst of a controversy involving, besides Clauberg, Revius and Lentulus, and the Cartesian professors Tobias Andreae and Christopher Wittich: this controversy followed heated discussions about Cartesian philosophy that had been raging in the Dutch Republic since 1641. Three stages can be acknowledged in these debates. The first is the Utrecht crisis, occasioned by the definition of man as an accidental being that was given by Henricus Regius in his *Disputationes medicae de illustribus aliquot quaestionibus physiologicis* (1641). This position aroused Gysbertus Voetius' harsh criticisms, expressed in some corollaries to his disputation *Diatribes theologica de Iubileo* and his *Appendix ad Corollaria theologico-philosophica*, both of December 1641, and further in his *Admiranda methodus* (1642-1643).⁸ The second quarrel arose with the break-up between Regius and Descartes, caused by the assertions of the Dutchman expounded in his *Fundamenta physices* (1646), *Explicatio mentis humanae* (1647) and *Brevis explicatio mentis humanae* (1648), where Regius admitted that mind can be something corporeal and that only Revelation can ground the truth of scientific theories.⁹ The third controversy is the Leiden crisis.¹⁰ Between February and March 1647, indeed, Revius presided over five disputations, *De cognitione Dei* and *De Deo ut est ens a se*, accusing Descartes of Pelagianism.¹¹ In March, moreover, Jacob Triglandius accused Descartes of blasphemy.¹² Kept informed by Heereboord—who later wrote an *Epistola* to the Curators of Leiden University (1648)¹³—Descartes addressed a defensive letter to the Curators on 4 May 1647, after which a nominal ban of Cartesianism followed in the same month. However, at the end of the year De Raey publicly attacked the Aristotelian professor Adam Stuart,¹⁴ and Heereboord wrote a *Praefatio* to Descartes' *Notae in programma quoddam* (a commentary on Regius' *Explicatio*, 1648), attacking Revius and

⁸See Theo Verbeek (ed.), *La Querelle D'Utrecht: René Descartes et Martin Schoock*, Paris: Impressions nouvelles, 1988.

⁹See Theo Verbeek (ed.), *Descartes et Regius. Autour de l'Explication de l'esprit humain*, Amsterdam: Rodopi, 1993; Id., "Regius's *Fundamenta physices*," *Journal of the History of Ideas* 55 (1994), pp. 533-551.

¹⁰See Verbeek, *Descartes and the Dutch*, pp. 34-51.

¹¹Jacob Revius, *Analectorum theologorum disputatio XXIII. De cognitione Dei, tertia*, Leiden: J.N. van Dorp, 1647, art. 13.

¹²Jacobus Triglandius, *Systema disputationum theologiarum in confessionem et apologiam Remonstrantium*, Leiden: B. et A. Elzevier, 1650, p. 50.

¹³Later published in his *Disputationes selectae* (1650) and *Meletemata philosophica* (1654): see Adriaan Heereboord, *Selectae ex philosophia disputationes*, Leiden: F. Moyard, 1650, pp. 70-90; Id., *Meletemata philosophica*, Leiden: F. Moyard, 1654, pp. 1-20.

¹⁴Heereboord, *Meletemata philosophica*, pp. 18-19.

Stuart.

This polemical context set the ground for the controversy directly involving Clauberg, who issued in 1652 his *Defensio cartesiana*, supporting the Frenchman against the critiques contained in three treatises: Revius' *Methodi Cartesianae consideratio theologica* (1648) and *Statera philosophiae cartesianae* (1650), and Lentulus' *Nova Renati Descartes sapientia* (1651); these works sought to improve the criticisms directed against Descartes during the Leiden crisis. After Clauberg's intervention with his *Defensio*, the controversy went on with the publication of Lentulus' *Cartesius triumphatus* and Revius' *Thekel, hoc est levitas Defensionis cartesianae* (1653). It was after these interventions that Clauberg's *Logica* saw the light in 1654.¹⁵

Descartes' Method Discarded

After his 1647 disputations, Revius pursued his attacks in his *Methodi cartesianae consideratio theologica*, taking Descartes' method into account in a broad sense. Considering the historical narration in Descartes' *Discours*, or his key text, Revius outlines eight stages of the method, namely, the arguments going from radical doubt up to the demonstrations of the existence of God. As a commentary on the *Discours* and other texts of Descartes, Revius' *Consideratio* aims to address Descartes' philosophical project by showing the contradictions and inconsistencies in his texts. The first two stages of the method concern respectively Descartes' learning and examination of Scholastic knowledge.¹⁶ Through them, Revius focuses on Descartes' analysis of Aristotelian philosophy and on his rejection of Scholastic logic. Whereas the Frenchman rejected this logic as a mere expository means in the second part of his *Discours*, according to Revius no conclusion can be argued without any formal argumentation and logical notions. The rejection of logic, therefore, is inconsistent with the very first rule of Descartes' method, as evidence is provided only by well-formed arguments. On the other hand, the other rules of the method cannot provide such order: as the second one increases the difficulties in understanding, the third one presupposes that what is more simple is more easy to be understood, and the last one requires an infinite ability in revising all the factors involved in a problem. Revius emphasizes Descartes' use of terms such as *omnia* or

¹⁵Other texts involved in the controversy were those of Tobias Andreae, addressing Revius in his *Assertio methodi cartesianae* (Groningen: J. Cöellen, 1653-1654), but also Regius' positions in his *Brevis replicatio reposita Brevis explicationi mentis humanae* (Amsterdam: L. Elzevier, 1653), and those of Christopher Wittich, such as his *Dissertationes duae* (Amsterdam: L. Elzevier, 1653). In the next years, other polemical texts appeared: such as Revius' *Psychotheomachia* (Leiden: H. de Vogel, 1654), *Kartesiomania* (Leiden, 1654-1655) and *Anti-Wittichius* (Leiden: H. de Vogel, 1655). Their analysis is far beyond the scope of the present contribution, which is focused on the development of Clauberg's logic as a means to answer the criticisms contained in the works of Lentulus and Revius that appeared before 1654.

¹⁶Jacob Revius, *Methodi Cartesianae consideratio theologica*, Leiden: H. de Vogel, 1648, p. 14.

perfecte, which are to be applied, in their strictest sense, only to divine omniscience.¹⁷ Moreover, because the model of Descartes' method is that of the mathematicians, Descartes' spurning of syllogisms turns out to be contradictory, as mathematics is syllogistic.¹⁸ The very demonstration of the existence of the *ego* is also syllogistic: like Gassendi, Revius considers the argument of the *cogito* an enthymeme.¹⁹

The acknowledgment of Descartes' inconsistencies turns, from the third stage of the method, on more theological topics, such as those discussed during the Leiden crisis. These aim to show, ultimately, that Descartes' philosophy was inconsistent with Calvinist orthodoxy. In fact, this stage concerns the relinquishment of all bookish knowledge and of Revelation, opening the way to enthusiasm.²⁰ The fourth step consists in doubting every kind of knowledge, including mathematical truths and those concerning God, through the hypothesis of a deceiver genius.²¹ In this way, Descartes introduced a provisional, atheistic hypothesis in order to refute atheism itself.²² Likewise, Revius' consideration of the fifth and sixth stages is devoted to theological problems, as these concern Descartes' rejection of the truths of faith and of the use of the senses, in virtue of his radical doubt.²³ The *cogito* being the only first principle in his philosophy, no place is left for any truth of faith as a first principle, whereas he admitted that they were beyond any doubt.²⁴ The last two stages of Descartes' method, or his search for something certain, namely, the *ego* (in the seventh stage) and his demonstrations of the existence of God (in the eighth one), are rejected in the same way. The argument of the *cogito* was in fact borrowed by Descartes from Augustine: however, the Frenchman impiously negated the existence of everything else.²⁵ Moreover, Revius rejects Descartes' proofs of the existence of God as they are based on an ambiguous account of "idea." The

¹⁷*Ibid.*, pp. 27-30. See R. Descartes, *Oeuvres*, ed. by C. Adam and P. Tannery, Paris: Cerf, 1897-1913 (hereafter cited as AT) VI, p. 17.

¹⁸Revius, *Consideratio*, pp. 30-31.

¹⁹*Ibid.*, pp. 31-33. See Pierre Gassendi, *Disquisitio metaphysica seu dubitationes et instantiae adversus Renati Cartesii metaphysicam, et responsa*, Amsterdam: J. Blaeu, 1644, pp. 38-39.

²⁰Revius, *Consideratio*, p. 35.

²¹To such genius, according to Revius, Descartes ascribed divine features, without distinguishing him from the true God, *ibid.*, p. 48. Revius rehashes the accusations of Triglandius.

²²*Ibid.*, pp. 47-51. On the difference with Revius' and Schoock's accusation of indirect, speculative atheism, see Aza Goudriaan, *Jacobus Revius: A Theological Examination of Cartesian Philosophy: Early Criticisms (1647)*, Leiden: Brill, 2002, p. 35.

²³"*Ventilantur haec, et tum contradictionem, tum impietatem continere*" (Revius, *Consideratio*, p. 53).

²⁴*Ibid.*, pp. 59-71.

²⁵*Ibid.*, pp. 75-77. See Romans I, 19-20; Augustine, *Civitas Dei*, XI, 26.

theologian addresses Descartes' misuse of the term, since he replaced its original, scholastic meaning with an unclear one. This objection, however, not only concerns the meaning of "idea," but is considered by Revius as an example of Descartes' general attitude, in the introductory letter of his *Consideratio*.²⁶ According to Revius, indeed, Descartes ascribed to the term "idea" eight different meanings, making its use inconsistent:²⁷ consequently he rejects Descartes' arguing for the existence of an extra-mental entity on the basis of the properties of a mental content.²⁸

In his works, Clauberg will refute all of Revius' criticisms. However, whereas in his *Defensio* he will face them with direct arguments, in his *Logica* he will adopt a subtler approach, revealing the interpretative strategy of his opponent. Namely, he will address Revius' misuses of the inconsistencies in Descartes' texts and his stressing the meanings of terms in order to draw paradoxical consequences from this. Also, Revius' theological criticisms, or the arguments concerning the inconsistency of Descartes' doubt with the Reformed creed, will be addressed by showing that Descartes maintained a preliminary, emendative function of doubt, whose use is consistent with Calvinist orthodoxy.

Geometry, Logic and Theology

The other texts to be considered as shaping the development of Clauberg's logic are Revius' *Statera philosophiae cartesianae* (1650), his answer to Heereboord's *Epistola ad curatores*, and Cyriacus Lentulus' *Nova Renati Descartes sapientia* (1651).

In his *Statera* Revius carries on the critiques expounded in the *Consideratio*, presenting Cartesian philosophy as striving for an unreachable degree of certitude in every kind of knowledge. The Dutch theologian focuses first on Descartes' supposed application of the geometrical method to metaphysics or rational theology. Roughly following Heereboord's *Epistola*, in which the merits of Descartes are declared through the appreciations of Jacob Golius,²⁹ Revius esteems Descartes as a mathematician—thanks to Frans van Schooten's Latin edition of Descartes' *Géométrie* (1649)—rejecting, however, his geometrical or synthetic metaphysics. In fact, one cannot have any clear and distinct notion of God serving as premise in geometrical demonstrations.³⁰ In his critique, Revius assumes the deductive rearrangement of Descartes' metaphysics—displayed in his *Responsio* to

²⁶Revius, *Consideratio*, p. III (unnumbered).

²⁷*Ibid.*, pp. 86-87.

²⁸*Ibid.*, p. 119.

²⁹Heereboord, *Meletemata philosophica*, p. 14.

³⁰Jacob Revius, *Statera philosophiae cartesianae, qua principiorum eius falsitas et dogmatum impuritas expenditur ac castigatur*, Leiden: P. Leffen, 1650, pp. 7-14.

Mersenne—as representative of all his arguments, regarding one text as the key example of his philosophy.³¹ Showing the contradictions within one text, between its different editions³² or with other texts, however, is still the core of Revius’ strategy. In fact, the critique he gives of Descartes’ geometrical method not only concerns his arguments in metaphysics. In his *Statera* Revius also takes into account Descartes’ natural philosophy: through a comparison of relevant passages from Descartes’ *Principia*, he shows that the Frenchman was concerned with false, imaginary or just probable principles, though he promised geometrical certainty for his conclusions. Accordingly, he made his whole philosophy a sophism,³³ and his method ultimately *vitiosus*, as it presupposes the existence of a deceitful God. Revius extensively quotes Regius’ *Brevis explicatio mentis humanae* with regard to the considerations on God being a deceiver, like a good father or a physician could be. Instead of clear and distinct conclusions, then, Descartes’ philosophy leads to skepticism and an appeal to Revelation as the only means to guarantee the truth of our statements, as Regius has shown.³⁴ The appeal to the interpreters of Descartes, which is aimed at showing the contradictory consequences of his thought, is actually a frequent strategy in Revius’ *Statera*. Roughly following the progression of Descartes’ *Principia*, after having criticized the Cartesian principles of motion,³⁵ Revius focuses on the problems of soul and body, and thus on metaphysics again.³⁶ He refers to the critiques of Kenelm Digby,³⁷ Regius,³⁸ and Gassendi in his *Obiectiones* and *Disquisitio metaphysica* (1644),³⁹ which he regards as drawing the necessary consequences of Descartes’ philosophy.

Also, Revius considers the developments of Cartesian physics in light of the factors preventing Descartes from publishing his *Le monde*. Such is the case of Galileo’s condemnation,

³¹*Ibid.*, pp. 9-11. See AT VII, pp. 160-170.

³²Such is the case with his critique of the changes in the title of Descartes’ *Meditationes*: “*De animae porro immortalitate ita variat Cartesius [...]. Inscriptio Meditationum eius ex editione parisiensis talis est: [...] Meditationes de prima philosophia, in qua Dei existentia et animae immortalitas demonstratur. Hoc, quasi se recolligens, amstelodamensi editione mutavit in haec verba. In quibus Dei existentia et animae humanae a corpore distinctio demonstratur*” (Revius, *Statera*, p. 32). See René Descartes, *Meditationes de prima philosophia, in qua Dei existentia et animae immortalitas demonstratur*, Paris: M. Soly, 1641, and *Meditationes de prima philosophia, in quibus Dei existentia et animae a corpore distinctio demonstrantur*, Amsterdam: Elsevier, 1642.

³³Revius, *Statera*, pp. 15-20.

³⁴*Ibid.*, pp. 39-48. See Henricus Regius, *Brevis explicatio mentis humanae, sive animae rationalis: ubi explicatur, quid sit, et quid esse possit*, Utrecht: Th. ab Ackersdijck, G. à Zijll, 1648, pp. 10-11.

³⁵Revius, *Statera*, pp. 108-124.

³⁶*Ibid.*, p. 144 *et seq.*

³⁷*Ibid.*, pp. 151-154, 160-164. He quotes from Kenelm Digby’s *Two Treatises* (Paris: G. Blaizot, 1644), chapters XXVI, XXXII, XXXV.

³⁸Revius, *Statera*, pp. 171-173, referring to Regius’ positions on man as *ens per accidens*.

³⁹Revius, *Statera*, pp. 184-186.

leading him to a dissimulative approach to be noticed in several contradictory statements such as in those concerning imaginary spaces, supposed to be fictitious entities by Descartes in his *Discours*, but regarded as real in his *Principia*, or his apparent denial of *creatio ex nihilo*, whereas he conceived of a new, created world. Moreover, Descartes' comparing his world with Ovidian chaos does not help his development of a scientific, physical theory.⁴⁰ Despite his promises, therefore, his actual method in physics offers only hypothetical or unclear conclusions.⁴¹

Revius' further considerations focus on the mixture of philosophy and theology⁴² and on the accusation of Pelagianism addressed to Descartes,⁴³ following Heereboord's narration of the events that occurred during the Leiden crisis. What is relevant for our considerations, however, is the overall strategy underlying Revius' criticisms, as this is undermined in Clauberg's *Logica*. Mainly based on the juxtaposition of texts devoted to different topics, on the appeal to the interpreters of Descartes' philosophy, and on the criticisms of the role of mathematics in philosophy, these points will be systematically addressed by Clauberg in his *Defensio* and *Logica*.

Revius' criticisms are continued in Lentulus' *Nova Renati Descartes sapientia* (1651), a commentary on Descartes' *Discours* and *Principia* straightforwardly facing Descartes' rejection of Scholastic logic. Following Revius' arguments, Lentulus describes Descartes as a good mathematician who, however, wrongly applied a method inspired by mathematics to every discipline.⁴⁴ Thus, he made a small set of notions the basis of an inquiry into more difficult topics, being unable, however, to reach any evident conclusion. In fact, he did not clarify the first notions on which philosophy is to be based: as these are in one place conceived as those of mathematics, and in another place as the notions of mind and thought.⁴⁵ Besides the application of Descartes' method to every field, Lentulus rejects evidence as a truth criterion, since it coincides with Descartes' personal perception of things and paves the way for enthusiasm in philosophy.⁴⁶ Doubt, therefore, turns out to have no role in Descartes' metaphysics except in eradicating all previous

⁴⁰*Ibid.*, pp. 54-55, 58-63. Revius quotes Descartes' *Discourse*, part V, in its Latin version (see René Descartes, *Specimina philosophiae*, Amsterdam: L. Elzevier 1644, p. 39), and *Principia philosophiae*, part II, art. XXI (see AT VIII-1, p. 52)

⁴¹Revius, *Statera*, pp. 67-75.

⁴²*Ibid.*, p. 197 *et seq.*

⁴³*Ibid.*, p. 221 *et seq.*

⁴⁴Cyriacus Lentulus, *Nova Renati Des Cartes sapientia: faciliori quam antehac methodo detecta*, Herborn, 1651, pp. 57-58; see AT VI, p. 551.

⁴⁵Lentulus, *Sapientia*, p. 57.

⁴⁶*Ibid.*, p. 55.

knowledge from the minds of his followers in order to supplant it with Descartes' convictions.⁴⁷ On this critique Lentulus grounds his refutation of the argument outlined in Descartes' *Discours* against the old logic, rejected as merely expository or a means of disputing.⁴⁸ Lentulus replies to Descartes' argument underlining that the Frenchman made no distinctions between *syllogistica* and *topica*, that is, between formal reasoning and the discovery of the topics of argumentation, and that syllogisms are the only means of arriving at conclusions. Moreover, even the expository role of logic should not be condemned, since it has a didactic value.⁴⁹ Lentulus takes Descartes' words in their literal sense. Clauberg, on the other hand, will put Descartes' rough disregard for logic into the critical context of his *Discours*, where logic is discarded as the symbol of the sterile Scholastic method. Lentulus, in fact, traces it back to the *Organon*, to Pierre de la Ramée's dialectics and to Bartholomäus Keckermann's systematization, being consistently represented as a developed theory of reasoning,⁵⁰ whereas Descartes' proposal is dismissed as an enthusiastic, solipsistic and reckless attempt to replace a well-ordered system of sciences. According to Lentulus, such an attempt has political reasons, since he depicts Descartes as a "crypto-Jesuit" scheming to undermine Reformed theology.⁵¹

Eventually, Clauberg will assume the point of view of Lentulus on the value of Scholastic logic. Aware of the insufficiency of Descartes' four rules in regard to the theory of argumentation, he will consider such logic as necessary to provide students with means in defining, dividing, judging and arguing conclusions. These basics, indeed, had been neglected by the Frenchman. This topic is first addressed in Clauberg's *Defensio cartesiana*, and deepened in his *Logica*.

2. The Preliminaries to the Logic

As Clauberg declares in its introduction, his *Defensio* is aimed to refute Revius' and Lentulus' theses and to provide a specimen of Descartes' philosophy.⁵² In order to fulfill such tasks, Clauberg assumes a precise interpretative criterion for Descartes' texts, namely, he detaches

⁴⁷*Ibid.*, p. 79.

⁴⁸AT VI, p. 549.

⁴⁹Lentulus, *Sapientia*, pp. 50-51.

⁵⁰“*Audeat Cartesius ieiunitatem suam cum una pagina Keekermanni nostri, vel etiam Rami comparare, audeat cum Organo Aristotelis contemnere*” (*ibid.*, pp. 223-224; see also pp. 30-31).

⁵¹*Ibid.*, p. 16.

⁵²Johannes Clauberg, *Defensio cartesiana, Praefatio ad lectorem*, p. III (unnumbered), in *Opera omnia philosophica*, Amsterdam: P.&I. Blaev, 1691.

Descartes' acroamatic treatises, the *Meditationes* and *Principia*, from the more exoteric *Discours de la méthode*, where Descartes provides the fundamental rules of reasoning. Thus, Clauberg recognizes in Descartes' *Discours* the very basis of a new logic, as well as a means to understand Descartes' further treatises, since these embody a more developed physical and metaphysical theory.⁵³ In this way, Clauberg focuses on the hermeneutics of Descartes' writings, aimed against Revius' spiteful comparisons of different Cartesian works, whether acroamatic, exoteric, dogmatic or historical.⁵⁴ This criterion will be consistently embodied in his *Logica*. In the *Defensio*, therefore, Clauberg sets forth the basis of his later logical treatise: that is, the rules of the method embodied in a more comprehensive theory of reasoning, and the interpretative criteria in reading Descartes' texts.

Such rules are treated in chapters X to XVI of Clauberg's *Defensio* in light of a theory of error. His logic, indeed, is overtly designed as a *medicina mentis*,⁵⁵ as he would fully declare in the *Prolegomena* to the second edition of the *Logica* (1658).⁵⁶ The analogy between medicine and logic had already been used by Keckermann and Dannhauer:⁵⁷ however, this function of logic is particularly stressed by Clauberg, who would concede the novelty of his approach in the *Prolegomena*.⁵⁸ This is a consequence of his attempt to develop a methodology grounding a philosophy that aims to overcome the Aristotelian worldview. His logic, indeed, not only teaches how to avoid error—which is the task of every logical theory—but how to cleanse the mind of the prejudices of Aristotle's philosophy. A theory of error, thus, is required in order to justify the adoption of new rules in the formation of concepts and in their disposition in reasoning. Nevertheless, besides being developed in light of a Cartesian, dualistic standpoint, such a theory relies also on Bacon's philosophy, which had a wide dissemination in the Dutch context. Indeed, Bacon provided a comprehensive consideration of the causes of error which proved to be useful for

⁵³*Ibid.*, p. 944.

⁵⁴“*Alii libri historici, alii sunt dogmatici, ita hunc librum, ut historicum, a Meditationibus et Principiis, ut dogmaticis, esse distinguendum, non, ut Revius facit [...] cum iis confundendum*” (*ibid.*, p. 943).

⁵⁵“*Ab exemplo medici, qui morborum curandorum causam et originem indagat. Morbi vero animi cum sint ignorantia et errores, horum origo omnino philosopho eos curaturo est investiganda*” (*ibid.*, p. 1056).

⁵⁶The title of chapter I of *Prolegomena* states that “*Futuro logico et philosopho errorum et imperfectionum humanae mentis in rebus cognoscendis originem et causas investigandas esse*” (*ibid.*, p. 769).

⁵⁷Bartholomäus Keckermann, *Systema logicae maius*, in *Systema systematum*, Hannover: Heirs of Guilielmus Antonius, 1613, I, p. 67; Johann Conrad Dannhauer, *Idea boni interpretis et malitiosi calumniatoris*, Strasbourg: J. Stadelius, 1652 (4th ed.), pp. 30-32. See Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, p. 218.

⁵⁸“*Novum hoc esse et insolitum in logicae vestibulo*” (Clauberg, *Opera*, p. 769).

Clauberg in order to undermine some gnoseological assumptions of Aristotelian philosophy.⁵⁹ In fact, Clauberg outlines a logic pursuing the Baconian project of the development of an *organon* embodying a systematic theory of error. Such a theory is implied by Descartes' philosophy: however, as in the case of the whole logic, Descartes just established but did not develop this theory in detail.⁶⁰ This theory is provided by Clauberg through an analysis which had been commenced by Descartes in his *Discourse*, *Meditationes* and *Principia*, figuring out how prejudices are acquired during childhood—when our attention is focused on bodily needs—and then retained by the brain in the traces left by spirits.⁶¹ Descartes set out the basics of a physiological consideration of the causes of prejudices: these are broadened by Clauberg both in his *Defensio* and in the *Prolegomena* to his *Logica*. The physiological background of the theory of error as set forth by Descartes allows Clauberg to adopt a truly medical approach in his considerations. Hence, in his *Defensio* he mentions Heraclitus, Bacon and Piccolomini as sources for the theory of the humidity of the brain as one of the causes of the formation of prejudices.⁶² Elaborating his point, in the second chapter of the *Prolegomena* he considers the weakness of children's brains as the first cause of philosophical prejudices: since a young brain is too humid, it leads the mind to think about only those objects directly affecting the body.⁶³ Also, Clauberg broadens Descartes' perspective on the causes of errors considering, with a consistent appeal to Bacon's philosophy, the social causes of error, which had been neglected by Descartes, such as the errors transmitted by language⁶⁴ and ancient fables.⁶⁵

It is thus in accordance with the overall plan to develop a Cartesian logic which is also a *medicina mentis* that Clauberg considers the first precept of Descartes' method, which prescribes following only clear and distinct perceptions: it is aimed against precipitation and anticipations in

⁵⁹See chapter XI, "*de praecipitantia in iudicando fugienda*" (*ibid.*, pp. 977-981), quoting Bacon in his critique of the habits inherited from childhood, at § 5 (see *De dignitate et augmentis scientiarum*, London: J. Haviland, 1623, VI, § 4) and on the misuse of doubt, at § 8 (see *De augmentis scientiarum*, I and V, § 5). In chapter XII, "*de anticipatis opinionibus in iudicando fugiendis*," Bacon is quoted with his *Novum organum* (in *Instauratio magna*, London: J. Billius, 1620), *Praefatio* and I, aphorism 109 (see Clauberg, *Opera*, p. 983). On the use of Bacon by Clauberg, see Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, pp. 220-224; Id., "L'insertion du cartésianisme en logique," pp. 85-88; Andrea Strazzoni, "The Dutch Fates of Bacon's Philosophy: *Libertas Philosophandi*, Cartesian Logic and Newtonianism," *Annali della Scuola Normale Superiore di Pisa – Classe di Lettere e Filosofia* 4 (2012), pp. 251-281, at pp. 258-261, 267-269.

⁶⁰See Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, p. 213.

⁶¹See René Descartes, *Discours de la méthode*, II, AT VI, p. 13; *Meditationes metaphysicae*, I, AT VII, p. 17; *Principia philosophiae*, art. 72, AT VIII, p. 36. See Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, pp. 208-213.

⁶²Clauberg, *Opera*, p. 1058.

⁶³*Ibid.*, p. 771.

⁶⁴See *Defensio*, chapter XI, § 14 (*ibid.*, p. 980), quoting Bacon, *Novum organum*, I, aphorisms 43 and 59.

⁶⁵See his *Logica*, *Prolegomena*, chapter IV, §§ 81-85, in Clauberg, *Opera*, p. 777.

judgment, whose causes are consistently analyzed by Clauberg in the *Defensio*.⁶⁶ In order to answer the criticisms on the insufficiency of Descartes' method in guiding reason, moreover, Clauberg integrates this method with Scholastic logic in presenting its other three precepts. Notions are to be analyzed into their simplest elements,⁶⁷ and then reorganized in synthetic order: beginning with doubting and questioning, these are to be combined to form more complex ones.⁶⁸ Finally, the fourth precept allows Clauberg to outline several cases of error in reasoning, concerning definitions, divisions, induction and syllogisms—namely, the basics of scholastic logic, which are to be used in analyzing concepts and in their arrangement in a synthetic order.⁶⁹ Hence, Descartes' rules become the ground for a novantique logical theory, insofar as his four precepts are combined with the traditional means of reasoning, and enlightened by a theory of error. Their integration would become clearer in his *Logica*.

In accordance with his novantique perspective, in his *Defensio* Clauberg outlines a structure of logic already presented in his *Ontosophia* (1647) and inherited from the Ramistic tradition,⁷⁰ i.e., one divided into *genetica* and *analytica*. Since Descartes did not want to provide a teaching method, however, he did not develop a comprehensive logic. On the other hand, Clauberg announces a quadripartite logic in his *Defensio*, where the first and second part expound the rules of *genetica*, the third and the fourth those of *analytica*. *Genetica* concerns the formation of thoughts and reasoning—syllogisms and judgments—and their expression in speech. *Analytica* concerns the analysis of the thoughts of other people as these are expressed in language: first, of the meaning of single words and of whole discourses; secondly, of their conformity to the rules of the right formation of thoughts, that is, of their truth.⁷¹ This logic embodies hermeneutics: as Clauberg will point out in his *Prolegomena* to the *Logica*, he is completing the logic created by Aristotle, who only figured out a science of interpretation. Plainly, since logic concerns words—as these denote

⁶⁶“*Methodum recte iudicandi regula praescribit optimam, [...] ab authore in tria membra particulatim diducitur, quorum primum est, omnem in iudicando praecipitantiam esse vitandam; secundum, omnem in iudicando anticipationem vitandam; tertium, nihil amplius esse iudicandum aut concludendum quam quod rationi pateat, sive quod menti attendenti praesens sit et apertum*” (*ibid.*, p. 977). See AT VI, p. 550. The causes of such errors are treated in chapters XI, XII and XIII (*supra*, n. 59). Moreover, Clauberg devotes chapters XXXII to XXXIV to discussing childish prejudices.

⁶⁷Clauberg, *Opera*, p. 986.

⁶⁸*Ibid.*, p. 990.

⁶⁹*Ibid.*, pp. 993-995: see §§ 6-8 and 12: “*peccatur in hoc precepto primo si pars aliqua in divisione omittatur [...]. Secundo, quando in definitione pars explicans omittitur [...]. Tertio, quando inductio non omnia particularia enumerat [...]. Septimo peccant [...] qui brevibus et disiunctis syllogismis omnia probare et expedire conantur.*”

⁷⁰On the topic, see Klaus Petrus, *Genese und Analyse: Logik, Rhetorik und Hermeneutik im 17. und 18. Jahrhundert*, Berlin: W. de Gruyter, 1997; Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, pp. 197-208.

⁷¹Clauberg, *Opera*, p. 998.

ideas—it has to deal with a general theory of interpretation, which is distinct from the special hermeneutics developed by theologians and jurists. However, the occasion for the development of Clauberg’s logic and, through it, of his hermeneutics, was his polemic with Revius and Lentulus: besides setting out a comprehensive method for the sciences, this motivated him to illustrate some hermeneutical criteria designed to undermine the misinterpretation of Descartes’ texts. As Clauberg himself underlines, in fact, one needs to take into account the *milieu* of the development of his *Logica*.⁷²

Enduring Criticisms

The project set out in Clauberg’s *Defensio* of Cartesian logic was finally brought to realization thanks to the publication of two other texts, the *Cartesius triumphatus* (1653) of Lentulus and the *Thekel hoc est levitas Defensionis cartesianae* (1653) of Revius. As in the case of the previous treatises, these eristic texts also share some common points. Besides criticizing Clauberg’s interpretative criterion of distinguishing between acroamatic and exoteric texts—since in Descartes’ *Meditationes* one can find the metaphysics of his *Discours*⁷³—it is worth noticing how in his *Cartesius triumphatus* Lentulus focuses mainly on the *stylus scripturae* of Descartes.⁷⁴ Therefore, this commentary on Descartes’ writings turns out to be an analysis of their overtones, to be traced back to Descartes’ *spiritus superbus, maledicus, mendax, fugax et impius*, which also inspired Clauberg’s philosophy.⁷⁵

Like Lentulus, even Revius rejects the distinction between Descartes’ exoteric and acroamatic texts, as one can find both popular and more specialized considerations in every text of the Frenchman.⁷⁶ In the same manner, the overall style of Descartes is disregarded as ambiguous, since the Frenchman alternates between suggesting a mathematical kind of certitude for his conclusions and using verbs such as *videre* or *putare*, analyzed by Revius according to their etymology.⁷⁷ The stylistic analysis of Descartes’ texts, thus, is at the top of the agenda of his adversaries. On the other hand, Revius’ *Thekel* still focuses on the foundations of a Cartesian

⁷²*Ibid.*, pp. 781-782.

⁷³Cyriacus Lentulus, *Cartesius triumphatus et nova sapientia ineptiarum et blasphemiae convicta*, Frankfurt: J.F. Weiss, 1653, pp. 1-2.

⁷⁴“*Quod ut in doctrinae errore demonstrando et defendendae doctrinae modo recensendo fecimus, iam denudando stylo et scribendi genere faciamus*” (*ibid.*, p. 37).

⁷⁵*Ibid.*, pp. 37-38, 41, 48, 75, 77.

⁷⁶Jacob Revius, *Thekel hoc est levitas Defensionis cartesianae*, Brielle: M. Feermans, 1653, pp. 4, 36, 80.

⁷⁷*Ibid.*, pp. 39-41.

system of the sciences: namely, on the role of doubt and of method in philosophy, as well as on that of mathematics. As Lentulus did in his *Cartesius triumphatus*, regarding doubt as the boundless *deletio* of every kind of knowledge,⁷⁸ Revius considers it a means to force readers to accept Descartes' own beliefs.⁷⁹ On the other hand, the Frenchman is criticized for not having developed a consistent method. Chiefly, his first rule is inconsistent with the very rejection of the *Organon*, as clarity and distinction are guaranteed only by formal reasoning.⁸⁰ Descartes, in fact, equated logic with sophistical reasoning, since he did not know logic, ignoring the systematizations of Jacob Horneius, Franco Burgersdijk, Dannhauer, Cornelius and Jacobus Martini, as he had been educated by the Jesuits. So far, the political and religious motives of the criticisms of Descartes (regarded as an emissary of Jesuits) become clear in Revius' *Thekel*, in addition to Lentulus' *Sapientia*.⁸¹

The criticisms expressed in these last exchanges can enable us, finally, to discern the reasons behind the composite structure of Clauberg's *Logica*, which can be appreciated as a detailed answer to the rejection of the Cartesian method and to certain interpretative criteria of Descartes' texts. A last observation, however, is worth making here. One can understand the role of mathematics in Clauberg's system of the sciences in light of his answers to Revius' and Lentulus' criticisms against the mathematization of metaphysics.⁸² Quoting the introductory letter to the French edition of Descartes' *Principia* in his *Defensio*, Clauberg recalls how mathematics serves the preparation to philosophy, cleansing our mind of errors and providing a habit of rigorous reasoning.⁸³ Plainly, Clauberg highlights the paradigmatic value of mathematics for philosophy and its role as a medicine or training for the mind. In his *Thekel*, on the other hand, Revius merely restates that Descartes applied mathematics to theology—according to his synthetic abridgement of his metaphysics⁸⁴—and that it cannot be used except in the disciplines subordinated to mathematics, such as music, astronomy, or architecture, in accordance with tradition.⁸⁵ Revius' main concern seems to be with

⁷⁸Lentulus, *Cartesius triumphatus*, p. 21.

⁷⁹Revius, *Thekel*, pp. 134, 166, 180.

⁸⁰*Ibid.*, p. 241.

⁸¹*Ibid.*, p. 228.

⁸²See chapter XVIII of *Defensio cartesiana*, “*applicatio methodi in studio mathematico et cartesianae mathematicorum in philosophando imitatio*” (Clauberg, *Opera*, p. 999).

⁸³*Ibid.*, § 2, quoting René Descartes, *Principia philosophiae*, Amsterdam: L. Elzevier, 1650, *Epistola auctoris ad Principiorum philosophiae interpretem gallicum*, p. 9 (unnumbered). See also Clauberg, *Opera*, p. 1000: “*de usu mathematicum in humano ingenio poliendo et acuendo ad alia studia [...]. Mentem vero praeparari mathematico studio, etiam ad cognitionem Dei naturalem.*”

⁸⁴Revius, *Thekel*, p. 300.

⁸⁵*Ibid.*, p. 292.

the avoidance of the development of a Cartesian theology, or with the vindication of Reformed theology against Descartes the *iesuitaster*.⁸⁶

3. *The Logica Vetus et Nova*

Genetica

As Clauberg declares in the first part of the treatise, his logic is grounded in three logical stages entailing the Cartesian method or *modus cognoscendi*: respectively, clear and distinct perception, the formulation of right judgments, and the retainment of concepts in memory.⁸⁷ These *gradus* recur in all his *genetica* and *analytica*, shaping Clauberg's logic according to an original structure.⁸⁸

First of all, the condition for clear and distinct perception is *attentio*, acquired mainly through mathematical studies.⁸⁹ This perception concerns *themata*, or whatever can be attained by the mind, such as the concepts of substances, attributes, and modes.⁹⁰ Whereas substances are extended or immaterial—following Descartes' metaphysics—attributes are considered in light of traditional logic: essence, existence, perfection, unity, cause, subject, object, whole and part.⁹¹ The concepts of genus, species and difference are also taken into account, since they are necessary to provide definitions and divisions and in ordering concepts.⁹² Descartes' method grounds all these operations of the mind. Apart from the first rule, roughly concerning perception, the rule of analysis prescribes right divisions and definitions—since dividing enables defining⁹³—whereas synthesis

⁸⁶*Ibid.*, p. 139.

⁸⁷Clauberg, *Opera*, pp. 785-786.

⁸⁸Revius based one of his criticisms on Descartes' violation of the traditional structure of logic, where *ordo seu methodus* is regarded as its ending point: see Revius, *Thekel*, pp. 48-51, referring to De la Ramée's broad structure of logic, and to Zabarella's *De methodis* (in *Opera logica*, Venice: P. Meietus, 1578), book III, chapter I, § 2. This structure, however, is also followed in the later Port Royal *Logique*: see Paul Schuurman, *Ideas, Mental Faculties and Method: The Logic of Ideas of Descartes and Locke and Its Reception in the Dutch Republic, 1630-1750*, Leiden: Brill, 2004, chapter III.

⁸⁹Clauberg, *Opera*, p. 787. Clauberg also considers more traditional conditions for such perception, as he considers morning as the best time for studies. Moreover, the consideration of the method is preceded by some brief remarks on what is to be known, on the kinds of knowledge, and on who is going to acquire knowledge: all these questions are surveyed mainly in light of the differences in temperaments, with reference to the physiological aspects of perception: *ibid.*, pp. 784-785.

⁹⁰*Ibid.*, p. 788.

⁹¹*Ibid.*, p. 790.

⁹²See chapters VIII-X.

guides us in ordering concepts from the simplest to the more complex.⁹⁴ One can notice how Clauberg embodies Descartes' method in the traditional structure of logic, in which definitions, divisions and order are the foundations of any argument.⁹⁵

The problem of order brings Clauberg to consider judgment, in which error may occur. Doubt is still the means to avoid mistakes in reasoning, as it takes the form of suspension of judgment in the case of unreliable perceptions.⁹⁶ Attention in perception and doubt in judgment are the two cornerstones of Clauberg's *medicina mentis*. It is in the consideration of judgment, therefore, that Clauberg comes to integrate syllogistics into his Cartesian method, that is, to ground syllogisms in clear and distinct perception.⁹⁷ Syllogistic arguments being the paradigm of formal reasoning—as mathematics is—they encompass the last stage of *medicina mentis*, as they serve to exercise the mind in rigorous thinking.⁹⁸ The criterion of clarity and distinction, finally, grounds the third logical *gradus*, memory: since knowledge is easily retained by the mind whenever it is evident. Also, memory is aided by means of diligence, which embodies, in turn, the right application of Descartes' fourth rule.⁹⁹

The main problem addressed in the second part of Clauberg's *Logica*, the *genetic hermeneutica*, concerns the clear and distinct expression of thoughts. The first requirement for such expression is that no notions should be taught except those that one can acquire by oneself, which are plainly the clear and distinct ones. Therefore, these need to be expressed by means of *brevitas* and *facilitas*, and by stimulating *iucunditas* with speech.¹⁰⁰ Addressing Lentulus' criticisms of doubt as an instrument for imposing the very opinions of Descartes, Clauberg develops a way of expounding concepts aimed to stimulate the reader in developing his own conclusions. The application of this criterion to elenctic, didactic, acroamatic or exoteric texts—their kind being

⁹³“*Ad definiendum opus est divisione, opus eadem ad res omnes distincte percipiendas*” (*ibid.*, p. 796). Actually, one cannot have clear and distinct perceptions without analysis or division. See *infra*, n. 109.

⁹⁴*Ibid.*, p. 797.

⁹⁵One can find the chain of *definitio*, *divisio* and *ordo seu methodus* in Philipp Melanchthon's *Erotemata dialectices* (Frankfurt: C. Egenolph, 1550) with relevant similarities to the logic of Johann Sturm, Pierre de la Ramée, Zabarella and Burgersdijk. See Savini, *Le développement de la méthode cartésienne*, pp. 39-51. In Clauberg's logic *methodus* comprehends the overall *genetica*, being something different from *ordo*. This integration of Descartes' rules with traditional ones had been already carried out in his *Defensio: supra*, nn. 66-69.

⁹⁶Clauberg, *Opera*, p. 800.

⁹⁷Clauberg devotes chapters XIV to XVII to the problem of arguing for conclusions, treating induction and syllogism—or the two ways of *argumentatio*—in traditional terms: *ibid.*, pp. 805-813.

⁹⁸Mathematicians, in fact, work mainly through enthymemes: *infra*, n. 108.

⁹⁹*Ibid.*, pp. 813-815.

¹⁰⁰*Ibid.*, p. 819.

determined by one's end and audience¹⁰¹—is made possible by *attentio*, to be followed in expressing thoughts as well.¹⁰² Its primary condition, however, is *perspicuitas*, the *virtus docentis*. Clauberg devotes the whole of chapter IV to perspicuity, providing suggestions on the ways one can choose the right terms and phrases. Ultimately, their choice follows the distinction between exoteric and acroamatic expressions, the *leitmotif* of his hermeneutics, respectively determining the use of metaphorical or unequivocal terms.¹⁰³ More than *brevitas*, *perspicuitas* is to be followed in defining concepts.¹⁰⁴ Clauberg relies on Descartes' method as he did in the first part of his *Logica*, firstly considering definitions and divisions. Indeed, these allow a clear and distinct perception on the reader's part as they serve to distinguish—and analyze—concepts.¹⁰⁵ Subsequently, he focuses on the problem of *ordo doctrinae*, or synthetic order. In chapter IX, for instance, he provides some suggestions on the articulation of the order of thoughts from the easiest to the most difficult concepts: for instance, through the use of examples, by restating definitions, or by similitudes.¹⁰⁶

Gradually focusing on complex combinations of concepts, Clauberg finally comes to the problem of *probatio*, namely, induction and syllogisms, paying attention to the actual context in which these are carried out. Induction and imperfect syllogisms (like conditional or disjunctive ones), are more fit to explain than to prove our assertions. On the other hand, formal or perfect syllogisms are the key to any cogent argumentation.¹⁰⁷ According to Clauberg, complete syllogisms are more suitable for disputations, as they necessarily convince the audience. On the other hand, enthymemes fit the needs of arguing conclusions in less polemical contexts, as is the practice of mathematicians. Clauberg, therefore, defines the *cogito* as an abridged syllogism, integrating Descartes' proceeding in metaphysics into a traditional theory of argumentation.¹⁰⁸

Ultimately, one can discern in the *genetica hermeneutica* the results of the debates on the question of interpreting Descartes with regard to his method and to his way of expressing thoughts.

¹⁰¹*Ibid.*, pp. 817-818.

¹⁰²*Ibid.*, pp. 819-821.

¹⁰³*Ibid.*, pp. 822-824.

¹⁰⁴*Ibid.*, p. 826.

¹⁰⁵*Ibid.*, pp. 826-827. *Supra*, n. 93.

¹⁰⁶*Ibid.*, pp. 827-830.

¹⁰⁷*Ibid.*, pp. 835-836, see §§ 99-100. In chapter XV (*ibid.*, pp. 837-838) Clauberg focuses on the differences between dialectic arguments, based on *syllogismi tentativi* and *argumenta ad hominem*, and conclusive philosophical arguments (*argumenta analytica*).

¹⁰⁸*Ibid.*, p. 836: see §§ 101-102.

Descartes' texts followed the rules prescribed in the *genetica*,¹⁰⁹ therefore no *hermeneutica analytica* (or the third part of logic) should be required in interpreting his texts. On the other hand, such hermeneutics does not primarily address the lack of clarity and distinction of concepts or of their expression, but is focused on the confrontation between two main characters, the *analyticus* and the *calumniator*, or else the good interpreter and the malicious reader of texts. A brief outline of the contents of the third part of Clauberg's *Logica* will confirm its intended role to end the polemics with Revius and Lentulus.

Analyticus and Calumniator

According to Clauberg, the conditions for a correct grasp of the meaning of texts are still the basics of *genetica*, namely, attention, diligence and memory, or the main aids of Descartes' method.¹¹⁰ This constitutes the ground of Clauberg's hermeneutics. Indeed, the main rule guiding the interpretation of texts prescribes *non esse plus iudicandus quam perceperis*, considered in his *Defensio* as entailed by Descartes' first rule of the method.¹¹¹ Thereby, according to this rule a text must be read in the same way as we address every kind of philosophical problem, i.e., without any prejudice. This allows a correct grasp of the meaning of a text, or its *sensus verus*.¹¹² Therefore, the Cartesian method is the very foundation of Clauberg's hermeneutics, which aims to assess the meaning of a text through some *media interpretandi* against prejudices in reading texts. Since his whole logic is meant as a *medicina mentis*, Clauberg's hermeneutics makes no exception: it is addressed against malice in reading texts, considered the foremost prejudice in interpretation.¹¹³ Accordingly, his hermeneutics is part of a logic he had already figured out in his *Ontosophia*, but which acquires a Cartesian connotation as it relies on the Cartesian rule of clarity and distinction and on a theory of prejudices initiated by Descartes and developed by Clauberg in his *Defensio* and *Logica*.

¹⁰⁹See Clauberg's *Exercitationes*: "*nuspian apertius Cartesius est logicus, quam in libello de Passionibus animae; sed maxime etiam logicus est, ubi artem celat, ut in Meditationibus metaphysicis. Confer. Log. II. 14. [...] Ad recte definiendum opus esse praemittere divisiones, sancit Logica I. 103. Id quod videmus factum esse ab auctore*" (*ibid.*, p. 723).

¹¹⁰"*In analysi scriptorum opus esse attentione, neque me fugit memoriam desiderari ad ea retinenda, quae vel ad usum nostrum faciunt, vel ad sequentia in ipso authore intelligenda ac diiudicanda conducunt*" (*ibid.*, p. 844).

¹¹¹"*Quid autem in analysi [...] omnium primum esse oportet? [...] Cum nefas sit iudicare de eo, quod non perceperis, ante omnia id agendum [...] ut percipiatur [...] quis sensus verborum genuinus. Proinde etiam atque etiam notandum est, ut absque omni praeiudicio ad cuiusque scriptoris analysin accedentes non detrectemus prius esse discipulis quam censores*" (*ibid.*, p. 843). The rule is considered in chapter XIII of his *Defensio* (*ibid.*, pp. 984-986). See *supra*, n. 66.

¹¹²"*De vero orationis obscurae sensu investigando*" (*ibid.*, p. 843).

¹¹³"*Hoc enim commune est calumniatorum vitium, primo quidem aliis affingere quod non sentiunt, ac deinde, quasi sentirent, eos insectari*" (*ibid.*, p. 844).

In order to avoid any error coming from a prejudicial interpretation of texts, *hermeneutica analytica* consistently embodies precepts aimed to provide a favorable interpretation of philosophical texts: first of all, those of Descartes. In this way, Clauberg's purpose is to undermine the very basis of Revius' and Lentulus' criticisms and to allow the acceptance of the new philosophy in the universities. These *media interpretandi* are either borrowed from the hermeneutical tradition or developed by Clauberg in light of the polemics with Revius and Lentulus.

First of all, one needs to know the circumstances or the efficient causes of the genesis of a text, to be grasped in the text itself or from other sources. The life of the writer, his education, roles and functions are to be known by the *bonus interpretres* in order to find out whether the writer is an *analyticus* or a mere *dialecticus*. Moreover, it must be known to whom the text is addressed, for instance to doctors or unlearned people. These data have to be used by the interpreter in assessing whether the author adopts a proper *stylus scribendi*, whereas Lentulus ignored them in his *Cartesius triumphatus*.¹¹⁴ Another external factor is the occasion for writing, or the end of the author. Knowing this, one can understand the reasons behind the choice of some arguments, or whether the writer decided to use some debating points while not fully accepting them, as in the case of those who present atheistic arguments in order to refute atheism, as Descartes announced in the title of his *Meditationes*.¹¹⁵ Clearly, Clauberg addresses Revius' attacks on Descartes' provisional atheism, or the accusation of direct atheism in his *Consideratio*.¹¹⁶ Moreover, Clauberg criticizes the misinterpretation of the title with regard to the immortality of the soul—since it announced, in the 1641 edition of Descartes' *Meditationes*, the demonstration of the immortality of the soul, and in the 1642 edition, that of the distinction of soul and body. Revius, indeed, emphasized this apparent divergence in Descartes' aims in his *Statera*.¹¹⁷ Clauberg's *Logica*, in fact, echoes precise passages from the texts of the *querelle* with Revius and Lentulus.

Furthermore, according to Clauberg it is necessary to know whether someone writes by adapting to vulgar ways of considering things—as in exoteric texts—or whether they truly accept

¹¹⁴*Ibid.*, pp. 846-847. *Supra*, n. 74.

¹¹⁵“*Scopus authoris, ut et materia, de qua agitur, frequenter ex titulo vel proemio libri nobis innotescunt. Ita qui in titulo et exordio libri demonstrationes de Dei existentia promittit, non est cur cum atheis sentire putetur, etiamsi, eorum argumenta recenset. Imo si horum opiniones eo tantum fine referat, ut refutet, iniquus calumniator sit, qui propterea ipsas eiusmodi scriptori ut suas tribuerit*” (*ibid.*, p. 847).

¹¹⁶*Supra*, n. 22.

¹¹⁷“*Ita qui de anima humanae a corpore distinctione sic tractat, ut illius quoque immortalitas inde cognoscatur, modo hunc, modo illum scripto suo titulum indere potest, prout vel hic vel ille lectores magis videtur ad legendum invitare*” (*ibid.*, p. 847). *Supra*, n. 32.

them: circumstances ignored or used *in peiorem partem* by the *calumniator*, as Revius did in his *Statera* with respect to Descartes' dissimulation after the condemnation of Galileo,¹¹⁸ emphasizing the seeming contradictions flowing from the attitude of the Frenchman. In fact, one such apparent contradiction that Revius noticed was that between the denial of the *creatio ex nihilo* and the fiction of a new, created world; but this is openly addressed, on the other hand, in Clauberg's *Logica*.¹¹⁹

After the analysis of the circumstances of a text, this is to be surveyed by means of *lexica* and *rhetorica*. *Lexica* helps to grasp the meaning of single words by means of synonyms, such as those of "idea." Referring to the critiques put forward in Revius' *Consideratio*, Clauberg undermines them by justifying the use of synonyms as a crucial aid in providing definitions.¹²⁰ *Rhetorica*, on the other hand, is useful in finding out the *tropi* in a text, or figurative meanings.¹²¹ It embodies one of the aids to solve contradictions in texts, on which Revius' criticisms are mostly based.¹²² An author can state, indeed, equivalent, different or even contradicting points, to be considered in light of the kind of text in which they are contained, or as they are put into assertive, dubitative or guessing statements. All these differences have to be considered by the *bonus interpretes* in order to correct the defects in the exposition through a comparison of texts and phrases, whereas the *calumniator* accepts them *in peiorem partem*.¹²³ Therefore, Clauberg suggests that one should pay attention to the chronological order of writing and to the kinds of texts, as he consistently did in the *Defensio*, whether they are acroamatic, exoteric, elenctic or didactical.¹²⁴ Other criteria drawn from his polemics concern the reasonable attribution to an author of points he openly negated, or that he was not able to refute. This is a plain misinterpretation of one's text, unless there is relevant evidence for the contrary: an example is the case of Regius, who stated his belief in the mind's immaterial nature, while admitting that according to reason the soul can be a

¹¹⁸*Ibid.*, pp. 847-848. *Supra*, n. 40.

¹¹⁹"Itaque calumniator est, qui e.g. illud axioma: ex nihilo nihil fit, quod novit ab aliis accipi de generatione physica, in uno authore, qui male vult, ita explicat, quasi negationem creationis inferret" (*ibid.*, p. 860).

¹²⁰*Ibid.*, p. 849, see § 27. *Supra*, n. 26.

¹²¹*Ibid.*, p. 850.

¹²²*Ibid.*, p. 850, see § 31.

¹²³*Ibid.*, p. 856.

¹²⁴*Ibid.*, pp. 857-858. Del Prete underlines an important difference from Dannhauer's considerations on contradictions in texts, since Dannhauer mainly aims to provide texts with a logical systematization in order to solve contradictions, for instance by reducing non assertive propositions to assertive ones (Dannhauer, *Idea*, p. 100: "De secundo usu logicae in reducendis orationibus non logicis ad logicas"). Such concern with the internal coherence of texts is less important for Clauberg, who emphasizes other means of interpretation. See Del Prete, *Du bon usage de Descartes*.

bodily mode.¹²⁵ The clarification of his positions on Regius brings Clauberg to the discussion of the appeal to followers and other interpreters in analyzing someone's philosophy. No interpretation can be arbitrarily assumed as representative of the original theory, whereas Revius openly adopted this strategy.¹²⁶ On the other hand, the failure in proving a thesis must not be used to argue that an author rejects such a thesis, as in the case of the critiques of Socinianism.¹²⁷ This passage is to be read in light of the accusation of atheism against Descartes: the same argument had incidentally been used by the Frenchman in his *Epistola ad Voetium* in order to refute the accusation of being an atheist.¹²⁸ In sum, neither the failure in demonstrating a thesis nor the use of such a thesis as is designed to be refuted can be used to ascribe that thesis to an author.

In sum, Clauberg proposes a charity principle as the key—and novel—hermeneutical criterion to be followed by a *bonus interpretres*. According to such a principle, synonyms have to be understood according to their common meanings,¹²⁹ contradictory or dubious phrases are to be intended *in meliorem partem*, theories are to be considered in their entirety, and errors should not be used to condemn a philosopher. These principles are presented as new by Clauberg, and they are to be appreciated, in fact, as products of this controversy.¹³⁰ On the other hand, the presence of more traditional precepts can be noticed in some other *media interpretandi*;¹³¹ these, however, are subordinated to the charity principle as the main remedy against malice in reading texts. Such

¹²⁵Clauberg, *Opera*, p. 858, see § 66.

¹²⁶*Supra*, nn. 37-39. To the use of commentaries Clauberg devotes chapter XI of the third part of his *Logica*, see *ibid.*, pp. 859-860. The point also concerns the misuse of translations, since Revius used those of Descartes in order to find discrepancies in his theories: see Revius, *Consideratio*, pp. 9-10.

¹²⁷“*Quid igitur, si quis putas se refutare v. g. socinianos, rationes adferat, quae ad hoc negotium non sufficiunt, estne ideo cum socinianis sentire existimandus?*” (Clauberg, *Opera*, p. 858).

¹²⁸AT VIII-2, p. 175. On the similarities between Clauberg's and Descartes' arguments, see Del Prete, *Du bon usage de Descartes*.

¹²⁹Clauberg restates the case of the term “idea,” since the *calumniatores* usually notice mainly the differences between synonyms: Clauberg, *Opera*, p. 862.

¹³⁰“*Generalissimi novissimique interpretandi modi sunt, in dubiis benignora eligere, per omnes exponendi rationes ire, plures aequae verisimiles sensus admittere, non sine iusta causa damnare, nec levius erratum graviori refutatione persequi*” (*ibid.*, p. 862).

¹³¹See, for instance, Dannhauer, *Idea*, part I, sect. III, art. 5, “*de usu rethoricae*,” art. 6, “*de usu grammatico*,” or art. 7, “*de tertio interpretandi medio scopi consideratione*,” and art. 9, “*de quarto interpretandi medio historia auctori coeva*.” For a comparison between the means of interpretation used by Biblical exegetes, Dannhauer and Clauberg, see Del Prete, *Du bon usage de Descartes*, highlighting the novelty of Clauberg's approach with regard to the theologically oriented hermeneutics of Dannhauer. In Clauberg's *Logica*, indeed, several traditional *media interpretandi* are missing or only scarcely mentioned. This is the case with the use of *loci paralleli*, briefly considered by Clauberg (*Opera*, pp. 851, 857) and consistently employed by Flacius Illyricus, Salomon Glassius and André Rivet. Also, Clauberg does not take into account the divine authorship of texts, the knowledge of Biblical languages, the help of grace, the use of dogmas, and pays scant attention to the figurative sense of texts, which is deeply studied by Dannhauer: see Dannhauer, *Idea*, pp. 85-98; Clauberg, *Opera*, p. 850, § 29.

malice, in fact, can be considered as the prejudice impeding the correct grasp of the meaning of a text: to its eradication Clauberg devotes his *hermeneutica analytica*, which becomes a *medicina mentis* in respect of the acknowledgment of others' thoughts, as *genetica* is a *medicina* for the formation and the expression of our own thoughts.¹³²

4. The Role of Hermeneutics in Clauberg's Philosophy

The analysis here presented allows us to draw some concluding remarks on the role of logic and hermeneutics in Clauberg's philosophy.¹³³ According to him, metaphysics or *philosophia prima* as expounded in Descartes' *Discours* and *Meditationes* (and as examined by Clauberg in his *Exercitationes de cognitione Dei et nostri*, 1656) provides the foundation for the scientific status of philosophy.¹³⁴ Logic subsequently sets out the rules to be used in its other branches: first of all, in physics, following Descartes' tree of knowledge. *Ontosophia* is the last, since it requires a fully developed skill in abstraction.¹³⁵ Based on the evidence criterion, logic maintains its instrumental role as the art of reasoning, and it is entailed by Descartes' metaphysics.¹³⁶ Moreover, it shares with first philosophy its starting point, i.e., the assumption of the evidence criterion and the use of doubt.¹³⁷ Whereas metaphysics provides philosophy with a foundation, logic teaches the method for philosophy: a method implied by the *philosophia prima*, which is the very first stage on the path of philosophy. Indeed, the metaphysics expounded by Descartes in his *Discours* and, more deeply, in his *Meditationes*, serves to guarantee the certitude of evident perception, whose use in the actual proceeding of reasoning is ruled by the complex methodology defined in the *Logica*. Moreover, the use of doubt in metaphysics is designed to prevent the use of preconceived opinions in reasoning: it works as the first stage of a *medicina mentis* which is fully embodied by logic.

However, such a logic also serves to express thoughts and to interpret texts. The presence of hermeneutics in a logic is a consequence of the very nature of logic as a discipline concerned with

¹³²Dannhauer also presented his hermeneutics as a *medicina mentis* against obscurity in concepts and malice in reading texts: see his *Idea*, pp. 30, 32.

¹³³On the order of the sciences according to Clauberg, see Savini, *Johannes Clauberg: methodus cartesiana et ontologie*, pp. 44-69, 184-193.

¹³⁴See *Exercitationes de cognitione Dei et nostri*, II, § 7, in Clauberg, *Opera*, p. 596.

¹³⁵See his *Defensio cartesiana*, § 92, *ibid.*, pp. 834-835.

¹³⁶*Supra*, n. 109.

¹³⁷See his *Initiatio philosophi sive dubitatio cartesiana*, chapter I, § 11, *ibid.*, p. 1133.

signs.¹³⁸ Logic, therefore, naturally includes a hermeneutics—which is not a novelty in the history of philosophy. Clauberg’s novelty consists in his development of hermeneutics as an organic part of logic: namely, one of its main parts.¹³⁹ This had been announced in his 1647 *Ontosophia*, before his adherence to Cartesianism. However, this adherence finally led him to develop his logical systematization of Cartesian methodology, in which hermeneutics plays a crucial role. Clauberg’s hermeneutics, in fact, has the general purpose of preparing the reader for the evaluation of texts in light of the principles of the *genetica*, or Descartes’ rules of the method. This evaluation pertains to the last part of logic; however, it has its precondition in hermeneutics, as this allows the discovery of the true sense of a text. Since texts are to be evaluated from a novel point of view, namely, that of Descartes, it becomes particularly important to provide scholars with a comprehensive method for such an evaluation, starting with hermeneutics. This concerns every kind of philosophical text; however, as can be seen from the references to the contemporary debates on Cartesianism contained in his *Logica*, it is principally designed to deal with Descartes’ texts, the misunderstanding of which comes from the prejudices surrounding the new philosophy.

It is possible to argue, in conclusion, that the polemical context of the Dutch universities determined Clauberg to develop his hermeneutics also as a means against disputes over the new philosophy, resulting from a misinterpretation of Descartes’ texts. In this way the change of paradigms in early modern Europe favored the emergence of a general hermeneutics, one aimed not at theology—as in the case of Dannhauer’s¹⁴⁰—but primarily at philosophical treatises. If such a “logical” hermeneutics was announced in Clauberg’s *Ontosophia*, its development was a consequence of his adherence to Cartesianism, and an actual means to spread Descartes’ philosophy. In any case, the development of Clauberg’s whole logic is to be appreciated in light of his polemics with Revius and Lentulus, as these mainly concern the role of Descartes’ method. One can suppose, indeed, that Clauberg became aware of the insufficiency of a mere counter-objection to their criticisms. In order to rebuke them and to assess the suitability of Descartes’ method for academic teaching, therefore, he developed a comprehensive Cartesian methodology following the structure set forth in his *Ontosophia*, which was compatible with Scholastic logic. Such logic, furthermore, served as an actual *medicina mentis*, as it embodies a theory of prejudices and allows their eradication both with respect to the formation of concepts and reasoning and to the

¹³⁸*Supra*, n. 72.

¹³⁹Dannhauer, for instance, even while considering hermeneutics as a logical discipline, merely assumed logical means within hermeneutical rules, without considering hermeneutics as an autonomous part of a comprehensive logical system (*supra*, n. 124).

¹⁴⁰*Supra*, n. 4.

interpretation of texts. This eradication, ultimately, could serve the acceptance of Cartesian philosophy in spite of Revius' and Lentulus' criticisms. These disputes, therefore, are to be taken into account in giving a more accurate evaluation of the development of Clauberg's logic with regard to hermeneutics and to the overall Cartesian methodology criticized by Revius and Lentulus.¹⁴¹

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