

**Bibliography of Joseph S. Freedman on Philosophy in Central Europe (1500-1700): Second Part**

'Central Europe' should be roughly equated with the Holy Roman Empire and with the German language area of Europe.

**First Part of the Bibliography: 1984-2004****ARTICLES**

1. ———. 2005. "Disputations in Europe in the Early Modern Period." In *Hora Est! On Dissertations*, 30-50. Leiden: Universiteitsbibliotheek Leiden.

Kleine publicaties van de Leidse Universiteitsbibliotheek, Nr. 71.

"During the early modern period, disputations constituted a major component of the curriculum at schools and universities scattered throughout Europe. Disputations and disputation theory are the subject matter of a number of recent publications. (1) A number of recent scholarly writings on university history have also included detailed discussion of this same topic. (2)

The present article intends to highlight some results of this recent research (including my own as Scaliger fellow in Leiden) and place it within the context of the abundant and valuable holdings at the Leiden University Library.

A working definition of disputation can be constructed by looking at the theory as well as the practice of disputations. (3) The disputations were frequently examined within the context of textbooks and other writings on logic. (4) Beginning in about the year 1550, writings devoted specifically to the subject-matter of disputations were published in Europe. (5) Curriculum plans, instructional schedules, and statutes frequently discuss disputations that are to be held, often mentioning genres and categories thereof. (6) And

most importantly, one can examine actual extant disputations themselves, though it is possible to become almost overwhelmed by the sheer mass and variety of them which are extant in European and non-European libraries. Within this complex context, disputations during the early modern period can be understood here as logical exercises – held on a very wide range of possible subject-matters – which were held by two or more participants as part of academic instruction at European schools and universities. (7)

These disputations were almost invariably held in Latin and were known by a variety of different names. *Disputatio* and *dissertatio* were especially common; *exercitatio* / *exercitationes* and *thesis* / *theses* were among other terms which was sometimes used. (8) To date, a multi-institutional or multiregional pattern for the use of these various terms has yet to be identified.

At Leiden University, the inaugural disputation in philosophy – i.e., the disputation held in partial fulfillment of requirements for the terminal degree in philosophy and the arts – apparently was known as a *disputatio philosophica inauguralis* until the 1720s, when the name seems to have changed to *dissertatio philosophica inauguralis*. (9)" (p. 30)

(1) Among recent encyclopedia articles, books/monographic treatises, journal articles and bibliographies pertaining to this topic the following can be mentioned here: Hanspeter Marti, 'Dissertation' and 'Dissertation', Gert Ueding, ed., *Historisches Wörterbuch der Rhetorik*, vol. 2 (Tübingen: Max Niemeyer, 1994): pp. 866–884; Margreet J. A. M. Ahsmann, *Collegium und Kolleg. Der juristische Unterricht an der Universität Leiden 1575–1630 unter besonderer Berücksichtigung der Disputationen*, aus dem Niederländischen übersetzt von Irene Sagel-Grande (Frankfurt am Main: Vittorio Klostermann, 2000); Donald Leonard Felipe, *The Post-Medieval Ars Disputandi Ph.D. Dissertation*, University of Texas, Austin (USA): 1991); Hanspeter Marti, 'Die Wissenschaftsgeschichtliche Dokumentationswert alter Dissertationen,' *Nouvelles de la Republique des Lettres* 1 (1981): pp. 117-132; Ferenc Postma and Jacob van Sluis, *Auditorium Academiae Franekerensis: Bibliographie der Reden, Disputationen und Gelegenheitsdruckwerk der Universität und des Athenäums in Franeker 1585-1843* (Leeuwarden: Fryske Akademy, 1995); Hanspeter Marti, *Philosophische Dissertationen deutscher Universitäten* (München et al.: K. G. Saur, 1982). The following older study is still valuable: Ewald Horn, *Die Disputationen und Promotionen an den deutschen Universitäten vornehmlich seit dem 16. Jahrhundert*, *Elfte Beiheft zum Centralblatt für Bibliothekswesen* (Leipzig: Otto Harrassowitz, 1893; reprint ed.: Nendeln / Liechtenstein: Kraus Reprint / Wiesbaden: Otto Harrassowitz, 1968).

2. Disputations and their place in instruction during the 16th and 17th centuries – primarily in Central Europe – are frequently mentioned within the following collection of articles: Joseph S. Freedman, *Philosophy and the Arts in Central Europe, 1500–1700. Teaching and Texts at Schools and Universities*, *Variorum Collected Studies Series CS 626* (Aldershot et al.: Ashgate / Variorum, 1999), Index 3.

A very valuable discussion of disputations, together with a detailed list and analysis of philosophy disputations held at the University of Basel during the 17th Century is given in Wolfgang Rother, *Die Philosophie an der Universität Basel im 17. Jahrhundert. Quellen und Analyse* (Dr. phil. Dissertation, Universität Zürich, 1980), pp. 62-66, 97-99, 326-330, 450-451.

3. The concept of definition was itself a subject-matter that was regularly discussed as part of academic instruction on logic during the early modern period; the concept of definition – including various kinds of definitions – was also usually examined in published writings on logic. For example, refer to the following: Cornelius Valerius, *Tabulae, quibus totius dialecticae praecepta maxime ad usum disserendi necessaria breviter & summam exponuntur, ordine perspicuo digestae* (Antwerpiae: Ex officio Christophori Plantini, 1575), pp. 27-32 [UBL 191 E 26: 2]; Johannes Rudolphus Faber, *Totius logicae Peripateticae corpus ... Nec-non totius organi Aristotelico-Ramei compendium* (Aurelianae: Apud viduam & haeredes Petri de la Roviere, 1623), pp. 537-542 [UBL 546 B 12]; Daniel Wytttenbachius, *Praecepta philosophiae logicae* (Amstelodami: Apud Caesarem Noëlem Guerin, 1781), pp. 142-166 [UBL 652 B 11]. Definition itself was considered by early modern academic authors as a problematic concept. A detailed discussion of the concepts of classification and definition is given in Freedman, *Philosophy and the Arts* (see footnote 2), I: 2-7.

4. Hundreds of examples could be given in this connection, including the following: Bartholomaeus Keckermannus, *Gymnasium logicum, id est, de usu et exercitatione logicae artis absolutiori & pleniori, libri III. Annis ab hinc aliquot in Academia Heidelbergensis privatae praelectionibus traditi* (Hanoviae: Apud Guilielmum Antonium, 1608), pp. 122-152 [UBL 650 D 9: 2]; Faber, *Totius logicae [...] compendium* (see footnote 3), pp. 537-542; P[etrus] van Musschenbroek,

Institutiones logicae praecipue comprehendentes artem argumentandi. Conscriptum in usum studiosae juventutis (Lugduni Batavorum: Apud Samuelem Luchtmans et filium academiae typographus, 1748), pp. 197-206 [UBL 652 B 8]; Wyttenbachius, Praecepta (see footnote 3), pp. 235-238. The above-mentioned work by Keckermann was first published in the year 1605; refer to Joseph S. Freedman, 'The Career and Writings of Bartholomew Keckermann (d. 1609)', *Proceedings of the American Philosophical Society* 141, no. 3 (September 1997): pp. 305-364 (343).

5. These also included disputations held on the subject-matter of disputations themselves; for example, see Joh. Nagelius (praes.) & Leonh. Appoltus (resp.): *Specimen academicum [...] de modo disputandi*. Altorfii, 1737 [UBL 17 B 68]. The topic of this disputation – the manner in which Jewish teachers in Nuremberg and in Regensburg conduct disputations when teaching their students – is very unusual during the early modern period. The text thereof is written in Latin but contains many passages in Hebrew.

6. The following detailed discussion of disputations within a curriculum description for a school in Duisburg published in the year 1561 can be mentioned here: Henricus C. Geldorpheus, *De optimo genere interpretandae philosophiae, in quo explicatur simul ratio atque ordo Scholae Dusburgensis* (s.l.: 1561) [UBL 20643 F 16].

Numerous curriculum plans in which disputations are discussed and cited within Joseph S. Freedman, 'Philosophy Instruction within the Institutional Framework of Central European Schools and Universities during the Reformation Era,' *History of Universities* 5 (1985): pp. 117-166.

7. Hanspeter Marti's definitions of *disputatio* (German: Disputation) and *dissertatio* (German: Dissertation) point to the difficulties involved in any attempt to define each concept. His definitions are given here in full: 'Allgemein versteht man unter D[isputation] ein Streitgespräch oder eine Streitschrift, speziell die seit dem hohen Mittelalter bis zum späten 18. Jh., an Universitäten und anderen Schulen neben der Vorlesung (*lectio*) verbreitete, institutionell festverankerete Art des gelehrten Unterrichts. Die Vielfalt der Erscheinungsformen sowohl der mündlichen wie der schriftlichen D[isputation] lässt keine allgemeingültige Beschreibung ihres Ablaufs bzw. ihrer Gattungsmerkmale zu. Typisch für die Bedeutungsvielfalt des Begriffs <D[isputation]> ist, daß damit nicht bloß das Streitgespräch und die schriftliche Thesenbehandlung (*Dissertation*), sondern auch, obwohl selten, der Gegenstand des mündlichen Disputationsaktes bezeichnet wird.' Marti, 'Disputation' (see footnote 1): 866; 'Unter einer D[issertation] wird heute einzig die Inauguraldissertation, Hauptbedingung für den Erwerb des Doktorgrades an den Universitäten, verstanden. Deshalb wird hier vor allem auf sie und ihre Geschichte eingegangen. Bis ca. 1800 wurde jede Abhandlung <D[issertation]> genannt, die den Gegenstand einer mündlichen, auch bloß übungshalber veranstalteten Disputation vorstellte und in der Regel dem Streitgespräch als Einladungsschrift zugrundelag. Als D[issertation] konnte damals auch eine akademische Streitschrift bezeichnet werden, über die nicht disputiert wurde oder, seltener, eine Rede sowie der ganze Disputationsakt.'

Marti, 'Dissertation' (see footnote 1): 880.

8. See the various title pages reprinted in this publication.

The online catalog of Leiden University Library provides with extant information concerning this transition of names. An online search conducted on January 12, 2005 provided the following information. An 'any word' search for *disputatio philosophica inauguralis* produced inaugural disputations held at Leiden University in the years 1642, 1660, 1661, 1662, 1663, 1664, 1665, 1667, 1669, 1670, 1671, 1672, 1676, 1679, 1680, 1681, 1684, 1685, 1688, 1690, 1693, 1698, 1702, 1703, 1707, 1721 and 1728. An 'any word' search for *dissertatio philosophica inauguralis*

resulted in finding inaugural disputations held at Leiden University in the years 1725, 1728, 1730, 1734, 1743, 1745, 1751, 1753, 1764, 1766, 1769, 1774, 1780, 1790, 1808, 1818, 1822 and 1831.

2. ———. 2005. "A Neglected Treatise on Scientific Method (*Methodus Scientifica*) Published by Joannes Bellarinus (1606)." In *Geschichte Der Hermeneutik Und Die Methodik Der Textinterpretierenden Disziplinen*, edited by Schönert, Jörg and Vollhardt, Friedrich, 43-82. Berlin: de Gruyter.

Historia Hermeneutica. Series Studia Band 1.

"The text consists of an introduction and four 'Books' [libri]. In the introduction, Bellarinus equates scientific method [methodus scientifica] with the practice of the sciences [praxis scientiarum].

In Book 1 [Concerning science and the knowable], Bellarinus defines science [*scientia*] in terms of cognition [cognitio].

In Book 2 [Concerning rules of logic], it is noted that science focuses on universals. In Book 3 [Concerning the instruments of knowledge], it is stated that ten instruments [instrumenta], through which cognition [cognitio] is made certain [certa] and evident [evidens].

In Book 4 [Concerning method] Bellarinus defines method [methodus] as the correct way to discover, 'be taught' and teach [scientific] knowledge [recta ratio scientiam inveniendi, discendi, atque docendi]; he equates method with scientific method when this knowledge is perfect knowledge."

"As common as discussions of method - and of scientific method in particular - are in recent scholarship and pedagogy, our knowledge of the early evolution of these two concepts is still relatively scant.(1) This article will highlight a neglected treatise on the concept of scientific method - published by Joannes Bellarinus in the year 1606 (\*) - which appears to be the first known published treatise bearing this title. This treatise can be placed in the context of late sixteenth- and early seventeenth-century discussions of method, definition theory, classification theory, and the classification of academic disciplines. Such early discussions of scientific method and related concepts can be used to provide useful insights pertaining to recent scholarly discussions on these same subject-matters.

The history of the concept of method during late middle ages has not yet been studied extensively. And while this concept was mentioned occasionally within some writings during the early sixteenth century, it was not until mid-century that the concept of method begins to be accorded direct and extensive discussion. Such discussions of method are very numerous from the 1550s onward. The bulk of these discussions - contained within treatises on method itself, within treatises on logic, and within treatises on other subject-matters - have yet to be studied; the authors of many treatises containing such discussions on method have been forgotten for centuries.

(...)

A thorough examination of the concept of method during the late sixteenth and early seventeenth centuries would require a separate study extending well beyond the parameters of this article. Here the following summary points can be made concerning discussions of method during this period (I - III): (I) the distinction between method and order was sometimes discussed during this period, as was the distinction between method and reason (ratio); (II) the concept of method was often understood as having various degrees of perfection and/or imperfection; (III) the concept of method was often explained with the aid of the concepts of definition

and/or classification and/or demonstration.(5) As shall be elucidated shortly, all three of these points pertain to the content of Joannes Bellarinus's treatise on scientific method." (pp. 43-45, some notes omitted)

(\*) Joannes Bellarinus: *Praxis scientiarum, seu methodus scientifica practice considerata, ex Aristotele potissimum acceptis*. Mediolani: Apud haer. Pontij & Joan. Baptistam Piccaleum impressores archiep. 1606.

(1) The books by Henry Batter and Lutz Danneberg cited in this article provide bibliographical information on recent studies pertaining to method and scientific method. Henry H. Bauer: *Scientific Literacy and the Myth of the Scientific Method*. Urbana and Chicago 1992; Lutz Danneberg: *Methodologien. Struktur, Aufbau und Evaluation*. (Erfahrung und Denken 71). Berlin 1989. -- The following older but still very valuable study examines the concept of method as discussed by selected Italian, English, and German authors during the late sixteenth and early seventeenth centuries: Neal W. Gilbert: *Renaissance Concepts of Method*. New York 1960.

(5) The concept of method as examined by numerous Central European authors during the late sixteenth and early seventeenth centuries is discussed in Joseph S. Freedman: *Philosophy and the Arts in Central Europe, 1500-1700. Teaching and Texts at Schools and Universities*. (Variorum Collected Studies Series, CS626). Alderhot u.a. 1999 - see here particularly my articles: *The Diffusion of the Writings of Petrus Ramus in Central Europe, c.1570-c.1630*, pp. 106-111; *Encyclopedic Philosophical Writings in Central Europe during the High and Late Renaissance (ca. 1500-ca. 1700)*, pp. 222,223, p. 232, p. 245 (Table L) and pp. 251-252 (Table R). The concept of method was discussed - from the middle of the sixteenth century onwards - within treatises specifically devoted to method as well as within general treatises on the subject-matter of logic: for example, refer to the following: Hieronymus Borrius: *De Peripatetica docendi atque addiscendi methodo*. Florentine: Apud Bartholomaeum Sermattellium 1584. [Chicago, Illinois, USA, Newberry Library: Case / B / 235 / .1034]; Augustinus Hunnius: *Dialectica seu generalia logices praecepta (...) consueverunt*. Lovanii: Apud Hieronymum Wellaeum 1561 (pp. 165-171: de methodo). [Municipal Library / Stadtbibliothek (StB) Trier: Ao / 80 / 20]

(2)1 Many additional writings from this period pertaining to the concept of method are mentioned in the monograph *Renaissance Concepts of Method* by Neal Gilbert (fn. 1).

3. ———. 2006. "Ramus and the Use of Ramus at Heidelberg within the Context of Schools and Universities in Central Europe, 1572-1622." In *Späthumanismus Und Reformierte Konfession. Theologie, Jurisprudenz Und Philosophie in Heidelberg an Der Wende Zum 17. Jahrhundert*, edited by Strohm, Christoph, Freedman, Joseph S. and Selderhuis, Herman J., 93-126. Tübingen: Mohr/Siebeck.

"The brief residence of Petrus Ramus (1515-1572) in Heidelberg (1569-1570) is a matter of record; detailed examination thereof has also been given by Kees Meerhoff, both in a previous publication as well as in his contribution to this volume (1). Yet very little is known concerning the extent to which Ramus's writings were utilized in Heidelberg during the five decades following his death. In this article, extant evidence concerning the utilization of Ramus's writings in Heidelberg between 1572 and 1622 is evaluated within the context of how Protestant academic institutions in Central Europe made use of those writings in the course these same decades (2)." p. 93

(1) Kees Meerhoff, *Ramus et l'Université. De Paris à Heidelberg (1569-1570)*, in: Idem/Michel Magnien (eds.), *Ramus et l'Université*, Paris: Editions Rue d'Ulm,

2004, 89- 120.

(2) The year 1572 has been chosen here since it is the year of Ramus's death.

"In an earlier publication I have argued that there does not appear to have been a "Ramist" position with regard to the following two selected points of doctrine: the classification of philosophical disciplines and the concept of method. Tables V-XI will be utilized in order to investigate whether or not one can speak of a "Ramist" and/or a "Non-Ramist" position with regard to a third point of doctrine: the concept of definition. Definition was an important concept that was regularly discussed within writings on logic during the 16th and 17th centuries (56).

Table V provides a synopsis of how Wilhelm Roding discusses the concept of definition within his 1574 edition of the logic of Petrus Ramus; Roding republished this edition in 1576, i.e. while a teacher in the Paedagogium in Heidelberg". At the top of Table V, the manner in which definition - together with conjugate, *notatio* and *distributio* - is subsumed within the subject-matter of logic is evident. *Notatio* is the category Ramus uses to refer to nominal definition. For Ramus, definition is synonymous with what many other authors referred to as "real definition" (*definitio rei*). Ramus's distinction between perfect and imperfect definition (the latter considered as synonymous with "description") appears to have been adopted by the vast majority of authors who discuss the concept of definition during the late 16th and early 17th centuries.(58) Roding's own commentary pertaining to Ramus's "that which is defined" (definition) is presented in full at the bottom of Table V; this commentary includes a positive comment concerning Aristotle (see Table V: C.) Tables VI and VII contain dichotomous charts - which outline sub-categories of definition given by Petrus Ramus and Philipp Melanchthon - within a text on logic published in Lemgo by Rupertus Erythropilus in the year 1588. (59) On the basis of these two sub-categories of definition, the following three points can be made. First, Ramus's categories of definition are much simpler than Melanchthon's. Melanchthon's categorization includes a list of laws and conditions as well as a list of rules, all of which serve to regulate the making of good definitions; Ramus's categorization, on the other hand, presents some examples of definitions but no regulations that govern them.

Second, Melanchthon divides definition into *definitio nominis* and *definitio rei*; for Ramus, *definitio* is equivalent to *definitio rei*. And third, both Ramus and Melanchthon distinguish between perfect definition and imperfect definition. Yet Ramus equates imperfect definition with description while Melanchthon does not." (pp. 106-107, some notes omitted)

(56) Refer to the discussion of definition (and the related concept of classification) in the following article: Joseph S. Freedman, *The Study of Sixteenth- and Seventeenth Century Writings on Academic Philosophy: Some Methodological Considerations*, in: IDEM, *Philosophy and the Arts*, I: 1-40, 2-7. 24-28.

4. ———. 2007. "Christian Wolff's Two-Volume Philosophical Treatise on the Family (*Oeconomica*) in Context." In *Christian Wolff Und Die Europäische Aufklärung*, edited by Stolzenberg, Jürgen and Rudolph, Oliver-Pierre, 217-231. Hildesheim: Georg Olms.

Akten des 1. Internationalen Christian-Wolff-Kongresses, Halle (Saale), 4.-8. April 2004.

Teil 3: Sektion 5: Kosmologie; Sektion 6: Theologie; Sektion 7: Praktische Philosophie.

"The past decades have witnessed a steadily increasing interest in the career and

philosophy of Christian Wolff.(1) The focus of the current study is a work which Christian Wolff began to publish shortly before his death: his two-volume philosophical treatise on family life (*oeconomica*). (2) This treatise has not been accorded attention within scholarship pertaining to Wolff nor within the very sparse existing literature pertaining to philosophical writings on the family.(3) Yet this same treatise not only provides discussion and insights concerning a number of points of doctrine extending beyond the subject matter of *oeconomica*, but also presents some hereto neglected biographical information concerning Christian Wolff himself. Table 1 (p. 229 f. below) presents a section and chapter synopsis of Christian Wolff's two-volume philosophical treatise on family life and also gives full bibliographical references for each volume of this treatise. The treatise as a whole is divided into four sections. Section 1 (consisting of three chapters) and the first two chapters of section 2 were published in 1754 within the first volume of this treatise; chapters 3 through 5 of section 2, section 3 (chapters 1 through 3), and section 4 (chapters 1 through 3) were published in 1755 within the second volume. Originally published in 1754 and 1755, respectively, these two volumes appear not to have been republished or reissued until 1972 (as part of the scholarly Olms edition of Christian Wolff's writings). The entire text of the treatise consists of a total of 900 axioms, which correspond to the treatise's short introduction (*Prolegomena*) together with the content of sections 1 through 4." (p. 217)

(...)

"Before proceeding to discussion of Wolff's philosophical treatise on family life, brief attention should be given to the first volume - originally published in the year 1728 - of Wolff's three-volume treatise on logic. (4) This first volume actually is devoted to the subject-matter of philosophy considered generally. (5) In this work, Wolff divides that subject-matter into the following general parts: logic, metaphysics, practical philosophy, physics, and what he refers to as "philosophy of the arts" (*philosophia artium*). (6) Metaphysics consists of ontology, general cosmology, empirical psychology, rational psychology, and natural theology; included within philosophy of the arts are grammar, rhetoric, and poetics. (7) Wolff places *oeconomica* - along with universal practical philosophy, natural law (*jus naturae*), ethics, politics, and the "law of nations" (*jus gentium*) - within the category of practical philosophy.

In the introduction to the first volume of his *Oeconomica* Wolff notes the dependence of this same discipline on psychology and ethics; he also notes that ethics itself presupposes ontology, psychology, natural theology, universal practical philosophy, and cosmology.<sup>8</sup> Wolff states that *Oeconomica* discusses the actual practice of that subject-matter which is demonstrated in theory within his own treatise on natural law. Missing from this list is politics, and Wolff considers *oeconomica* as a separate academic discipline therefrom." (pp. 218-219)

(...)

"Wolff's philosophical treatise on the family contains very frequent citations, however, from some of his other philosophical writings. In the introduction to his *Oeconomica* Wolff names the philosophical disciplines which serve as the foundation for family life. Yet conversely, Wolff's *Oeconomica* provides valuable discussion concerning a number of other philosophical topics; these topics include (1) the concept of scientific method and (2) two ontologically basic categories - *habilitas physica* and (natural) virtue - which rest at the foundation of human generation and subsequent growth, and (3) a number of concepts which fall within the general realm of epistemology. His *Oeconomica* is worthy of examination not only because it presents a detailed, philosophical, systematic treatment of the family as well as education within a domestic framework, but also - and perhaps more

importantly for historians of philosophy - because it provides interesting and valuable discussion of some points of doctrine the significance of which extend beyond the domains of family and domestic life." (pp. 226-227)

(1) 1305 titles are listed within Biller's bibliography on Christian Wolff; title numbers 1050 through 1305 were published between 1998 and 2004 while title numbers 495 through 1049 were published between 1980 and 1997; see Biller, [*Wolff nach Kant. Eine Bibliographie*, Hildesheim: Georg Olms,] 2004.

(2) See Table 1, p. 229 f. below.

(3) Some professional literature on natural law within Wolff's writings touches tangentially on selected topics which also are discussed within Wolff's *Oeconomica*, see Biller, 2004, p. 81 (448), 114 (681-682), 194 (1229), 198 (1250); also refer to footnote 16 below.

(4) *Logica*, 1.

(5) The full title of this general treatise on the subject-matter of philosophy is given within footnote 14 below.

(6) *Logica*, 1, §§ 55-75; in § 39 in this same work Wolff seems to argue that philosophy of law and philosophy of medicine might also be included within the realm of philosophy.

(7) *Logica*, 1, §§ 40, 71. Also included here within philosophy of the arts is a subject-matter referred by Wolff as *Technica*; here (§ 71) Wolff appears to indicate that these subject-matters often are excluded from philosophy.

(8) *Oeconomica*, 1, § 4.

(Some notes omitted)

5. ———. 2007. "The 'Melanchthonian Encyclopedia' (1597) (\*) of Gregor Richter (1560-1624)." In *Fragmenta Melanchthoniana. Band 3: Melanchthons Wirkung in Der Europäischen Bildungsgeschichte*, edited by Frank, Günther and Lalla, Sebastian, 105-141. Ubstadt, Heidelberg, and Basel: Verlag Regionalkultur.

(\*) *Judicia florentis scholae Melanchthonis* (1592); *Criseis Melanchthonianae* (1597).

6. ———. 2008. "An Extraordinary Broadsheet on Natural Philosophy: The *Theatrum Universitatis Rerum* (1557) by Christophorus Mylaeus." In *Sol Et Homo. Mensch Und Natur in Der Renaissance. Festschrift Zum 70. Geburtstag Für Eckhard Kessler*, edited by Ebbesmeyer, Sabrina, Pirner-Pareschi, Helga and Ricklin, Thomas, 241-315. München: Wilhelm Fink.

Humanistische Bibliothek: Texte und Abhandlungen. Reihe I: Abhandlungen. Band 59.

"The present study is devoted to a broadsheet consisting mainly of an extensive series of such dichotomous charts pertaining principally to the subject-matter of natural philosophy. This broadsheet -- bearing the title "Theatre of the Universe of Things" (*Theatrum universitatis rerum*) -- was published in the year 1557 by Christophorus Mylaeus [Christophe Milieu] d. 1570). Only one published copy thereof is known to have survived."(\*) p. 242

"The very top of the broadsheet presents the title of the work -- *Theatrum universitatis rerum* as well as the division of its subject-matter (*universitas rerum*) into *Natura ipsa* and *Natura altera*. The bulk of the broadsheet consists of dichotomous charts that also include longer and shorter text segments. These

dichotomous charts and accompanying texts focus mainly on natural philosophy and include discussion -- contained pages A through O -- of incorporeal things, celestial heavens, stars, the four elements (fire, air, water, and earth), inanimate 'corporeal things (e.g., stones, metals), plants (e.g., roots, herbage, fruits, trees), beasts (e.g., fish, birds, mammals), the human being considered with respect to his/her component parts, and the human being considered as a whole. Captions placed above selected segments of these dichotomous tables briefly summarize the content of those segments; this content is also supplemented by texts that are placed below -- and linked to -- other segments of these same dichotomous tables.

(...)

Table C (I.-VI.) summarizes the content of the dichotomous tables that together serve to constitute the bulk of his own *Theatrum universitatis rerum*. Its principal subject-matter is *universitas rerum*, which Mylaeus describes as 1. that variety of all things to be found in nature and 2. the unity, harmony, and consensus brought to this diversity and discord (through God). In the *Theatrum universitatis rerum*, Mylaeus notes (I. of Table C) that "the universe of things" (*universitas rerum*) consists of five components without clearly listing what they are. These five components, however, clearly correspond to the titles to the five "Books" (*libri*) contained within the 1551 edition of Mylaeus's treatise on historiography (Table B): 1. *De natura*, 2. *De prudentia*, 3. *De principatu (principatus)*, 4. *De sapientia*, and 5. *De literatura*. In the *Theatrum universitatis rerum*, these five components are paired with two distinct categories of nature. The first (*natura ipsa*) corresponds directly to *natura*; the second (*natura altera*) comprises *prudentia*, *principatus*, *sapientia*, and *literatura*. The terms "nature" (*natura*) and "natural" (*naturalis*) were used in a multitude of ways within philosophical writings during the sixteenth century; the prominence which Mylaeus gives to these two uses of the term nature in this broadsheet was probably less common. He describes both *natura ipsa* and *natura altera* at some length, and states that the latter is the "imitator, assistant, and vicar" (*imitatrix, adiunx, & vicaria*) of the former.' On the basis of Mylaeus's description of *natura altera*, it could be understood as equivalent to -- or: roughly equivalent to -- human nature. Humans are made -- by virtue of the goodness of "that same superior, providing, and ingenious nature" (i.e., God) -- with a body that empowers us to act and a mind that empowers us to contemplate." (pp. 244-245, notes omitted)

(\*) Christophorus Mylaeus, *Theatrum universitatis rerum*. Basileae: Ex officina Johannis Oporini, 1557 mense Martio. The only known extant copy is owned by the Bayerische Staatsbibliothek Munchen and has the call number 20 Enc. 19m / Res [a digital copy is now available at the Münchener Digitalisierungszentrum (MDZ)].

7. ———. 2008. "Die Debatte Um Frauen Und *Gender* in Der Schulphilosophie Des 16. Und 17. Jahrhunderts. Der Fall Clemens Timpler (1563/4-1624)." In *Heißer Streit Und Kalte Ordnung. Epochen Der "Querelles Des Femmes" Zwischen Mittelalter Und Gegenwart*, edited by Hassauer, Friederike, 206-217. Göttingen: Wallstein Verlag.

[The Debate on Women and Gender in Sixteenth and Seventeenth Century Academic Philosophy: The Case of Clemens Timpler (1563/4-1624)].

"Philosophie wurde im 16. und 17. Jahrhundert an Schulen und Universitäten in ganz Europa gelehrt. In den einzelnen akademischen Institutionen verstand man darunter das Studium einiger oder aller der folgenden wissenschaftlichen Disziplinen: Metaphysik, Physik, Mathematik, Ethik, Familienleben (*oeconomica*), Politik, Logik, Rhetorik, Grammatik, Poetik und Geschichte. (1) Im Rahmen jeder dieser

Disziplinen wurde ein breites Spektrum an verschiedenen Themen mehr oder minder eingehend erörtert. Die meisten philosophischen Texte, die in diesen zwei Jahrhunderten – sowohl druckschriftlich wie manuskriptschriftlich – zirkulierten, entstanden in Verbindung mit der genannten akademischen Lehre.

Zwei eng miteinander verknüpfte Themen werden in diesem Artikel von besonderem Interesse sein: Frauen und Gender. Sie werden in den veröffentlichten Schriften eines in dieser Epoche tätigen Philosophielehrers erörtert: Clemens Timpler (1663/4-1624). (2)" (p. 205)

(...)

"Es wurde erwähnt, daß einige von Timplers Ansichten über Frauen auch von anderen akademischen Philosophen des 16. und 17. Jahrhunderts vertreten wurden.(53) Timpler scheint zu einer großen Gruppe jener Philosophen gehört zu haben, deren Ansichten über Frauen vielleicht am genauesten als Mittelgröße zwischen zwei Extremen beschrieben werden können. Timpler hätte sich sicherlich nicht der Meinung angeschlossen, daß Frauen keine Menschen seien (54) – eine Auffassung, die im Zeitraum zwischen 1500-1700 einige Anhänger zu haben schien. Timpler hätte ebensowenig die Meinung akzeptiert, daß Frauen keine moralischen Tugenden hätten. (55) Gleichwohl wäre er wohl kaum so weit gegangen, in seinen Schriften den Frauen ausführliches Lob zu spenden.<sup>56</sup> Eine eingehendere Untersuchung des Konzepts von ›Frauen und Gender‹ innerhalb einer großen Anzahl philosophischer Werke des 16. und 17. Jahrhunderts werden vonnöten sein, sollen Timplers Ansichten zu diesem Thema präziser in einen größeren Zusammenhang gestellt werden." (p. 216)

(1) Der folgende Aufsatz erörtert Fachgebiete der Philosophie als Gegenstände des Philosophieunterrichts in Zentraleuropa: Freedman, Joseph S.: »Philosophy Instruction within the Institutional Framework of Central European Schools and Universities during the Reformation Era«, in: *History of Universities*, 5, 1985, S. 117-166 (Nachdruck in: Freedman, Joseph S.: *Philosophy and the Arts in Central Europe, 1500-1700. Teaching and Texts in Schools and Universities*, Aldershot u.a. 1999, II (Variorum Collected Studies Series, CS 626)).

(2) Vgl. Freedman, Joseph, S.: *European Academic Philosophy in the Late Sixteenth and Early Seventeenth Centuries. The Life, Significance, and Philosophy of Clemens Timpler (1563/4-1624)*, 2 Bde., Hildesheim u.a. 1988 (Studien und Materialien zur Geschichte der Philosophie, Bd. 27). Im folgenden Buch ist Clemens Timpler kurz erwähnt: Maclean, Ian: *The Renaissance Notion of Woman*, Cambridge u.a. 1983. Einige Titel aus der inzwischen zahlreichen Literatur zu Frauen und Gender in der Frühen Neuzeit (in umgekehrter chronologischer Reihenfolge): Richards, Penny u. Munns, Jessica: *Gender, Power, and Privilege in Early Modern Europe, Women and men in history*, Harlow 2003; Jansen, Sharon: *The Monstrous Regiment of Women: Female Rulers in Early Modern Europe*, New York 2002; Wunder, Heide: *He is the Sun, She is the Moon: Women in Early Modern Germany*. Übers. v. Thomas Dunlap, Cambridge, MA 1998; Hull, Suzanne W.: *Women according to Men: the World of Tudor-Stuart Women*, Walnut Creek, CA 1996; Weisner, Merry E.: *Women and Gender in Early Modern Europe*, Cambridge u.a. 1993; Schiebinger, Londa: *The Mind has no Sex? Women in the Origins of Modern Science*, Cambridge, MA 1989. Vgl. auch die Titel in Anm. 56.

(53) Vgl. nochmals die in den Anm. 11, 23, 27, 31, 46, 48, 51 und 52 erwähnten Schriften.

(54) Vgl. Fleischer, Manfred S.: »›Are Women Human?‹ The Debate of 1595 between Valens Acidalius and Simon Gediccus«, in: *Sixteenth Century Journal*, 12, no. 2, Summer 1981, S. 107-121. Es wurde darauf hingewiesen, daß Timpler –

ähnlich wie viele andere Philosophen des 16. und 17. Jahrhunderts – die Vorstellung von Frau als Sklavin des Mannes ablehnte; vgl. Anm. 31.

8. ———. 2009. "Necessity, Contingency, Impossibility, Possibility, and Modal Enunciations within the Writings of Clemens Timpler (1563/4-1624)." In *Spätrenaissance-Philosophie in Deutschland 1570-1650. Entwürfe Zwischen Humanismus Und Konfessionalisierung, Okkulten Traditionen Und Schulmetaphysik*, edited by Mulsow, Martin, 293-318. Berlin: Walter de Gruyter.

"The four modal concepts of necessity, contingency, possibility, and impossibility are examined within Timpler's textbook on metaphysics. Section 8 of Timpler's collection of philosophical exercises is devoted to discussion of necessity and contingency. Timpler's textbook on logic discusses necessary and contingent formal enunciations and also presents brief treatment of the concept of modality itself. In discussing modal concepts and modality Timpler cites a variety of sources. Most frequently cited are Aristotle, Sacred Scripture, "scholastics" (*scholastici*), Franciscus Piccolomineus (1520-1604), Francisco Suárez (1548-1617), and Jacob Zabarella (1533-1589). Timpler's discussions of modal concepts also include citations of other authorities, including Cicero, St. Augustine of Hippo, Thomas Aquinas, John Duns Scotus, Averroes, Chrysostomus Javellus, Julius Caesar Scaliger, Benedictus Pererius (c. 1535-1610), Petrus Ramus (1515-1572), and Bartholomew Keckermann (d. 1609). In the case of some of the questions (*quaestiones*) and problems (*problemata*) contained in Timpler's writings pertaining to modal concepts, however, no sources are cited at all.

With regard to Timpler's citations of sources the following two points should be mentioned. First Timpler may have relied on some authorities more heavily than his infrequent citations of them would suggest. And second, Timpler was usually quite eclectic in his use of such authorities. In many cases for example, when arguing in his textbook on metaphysics that something is possible which nonetheless never was nor will be -- Timpler uses Aristotle in order to support his own view. Yet when arguing that absolute necessity does not conflict with free will, Timpler cites several passages from Aristotle to the contrary; yet Timpler concludes that Aristotle's testimony is not sufficient in this case. In his textbook on metaphysics, Timpler argues that Jacob Zabarella incorrectly defines necessary and contingent things; in doing so, Timpler notes that Zabarella misinterprets Aristotle. On the other hand, Timpler agrees with Zabarella's distinction between that which is possible and that which is absolutely necessary.

Timpler appears to have regarded himself primarily as a metaphysician, and he makes metaphysics central to his thought. Most of Timpler's views on modality are elucidated within his textbook on metaphysics. The most basic ontological components of this latter textbook are diagrammed in Table A1." (pp. 295-296).

9. ———. 2009. "The Godfather of Ontology? Clemens Timpler, "All That Is Intelligible", Academic Disciplines During the Late 16th and Early 17th Centuries, and Some Possible Ramifications for the Use of Ontology in Our Time." *Quaestio. Yearbook of the History of Metaphysics* no. 9:3-40.

Paper read at the International Conference *Origin and Development of Modern Ontology*, held at the Università di Bari (Italy) 15-17 May 2008.

"The first known mention of the term ontology (*ontologia*) occurs in a short

encyclopedic treatise – within the section therein that examines metaphysics – first published by Jacob Lorhard in the year 1606 (1). Lorhard's discussion of metaphysics – which he equates with ontology – is excerpted directly from a textbook on metaphysics first published by Clemens Timpler in the year 1604 (2). What was (and: is) the significance of this new concept, and what part did the metaphysics of Timpler play in its introduction? This article will endeavor to place possible answers to these questions into the following four broader contexts: 1) the scope of academic disciplines taught during the late sixteenth and early seventeenth centuries; 2) concepts that could/should be considered as being ontologically basic/important – and those academic disciplines which discussed them – during the late sixteenth and early seventeenth centuries; 3) the emergence of encyclopedic academic writings and the concept of «All that is Intelligible» (*omne intelligibile*) during the early seventeenth century; 4) ontology as understood in the early seventeenth century as well as some potential applications of ontology in our time. This contextual material includes philosophical texts and curricular information with a primary (but not exclusive) focus on Central Europe." (p. 3)

(1) J. LORHARDUS, *Ogdoas scholastica: continens diagraphen typicam artium: grammatices latinae, grammatices graecae, logices, rhetorices, astronomices, ethices, physices, metaphysices, seu ontologiae*, Apud Georgium Straub, Sangalli 1606 [Halle ULB: Gc 6]. Concerning this work by Jacob Lorhard, refer to the following doctoral dissertation (Department of Philosophy, University of Bari, Italy): M. LAMANNA, *La nascita dell'ontologia. L'opera metafisica di Rudolph Göckel (1547-1628)*, Dipartimento di Filosofia - Università degli Studi di Bari, 2008 [now published: Hildesheim: Georg Olms, 2013]. Also refer to the following Website: [www.formalontology.it](http://www.formalontology.it) [now moved to [www.ontology.co](http://www.ontology.co)].

(2) C. TIMPLERUS, *Metaphysicae systema methodicum*, Excudebat Theoph[ilus] Caesar, Steinfurthi 1604 [Marburg UB: XIV b 100]. The following additional imprints of this textbook are extant (listed here by place and date of publication): Lich 1604, Hanau 1606, Frankfurt a.M. 1607, Marburg 1607, Hanau 1608, Frankfurt a.M. 1612, Hanau 1612, and Hanau 1616. Timpler's short treatise on the liberal arts (*Technologia*) was included with all of these extant imprints from the year 1606 onwards. In this article, the 1616 imprint will be cited: C. TIMPLERUS, *Metaphysicae systema methodicum [...] in principio accessit eius technologia; hoc est tractatus generalis et utilissimus de natura et differentiis artium liberalium*, Apud Petrum Antonium, Hanoviae 1616 [Freiburg/Br. UB: B 2272 bi]. A full bibliography of all of the imprints of all of Timpler's extant published writings is given in J.S. FREEDMAN, *European Academic Philosophy in the Late Sixteenth and Early Seventeenth Centuries: The Life, Significance, and Philosophy of Clemens Timpler, 1563/64-1624*, 2 vols., Olms, Hildesheim-Zürich-New York 1988 («Studien und Materialien zur Geschichte der Philosophie», 27), vol. 2, pp. 740-768.

10. ———. 2010. "Published Academic Disputations in the Context of Other Information Formats Utilized Primarily in Central Europe (C. 1550-C. 1700)." In *Disputatio 1200-1800. Form, Funktion Und Wirkung Eines Leitmediums Universitärer Wissenskultur*, edited by Gindhart, Marion and Kundert, Ursula, 89-128. Dordrecht: Springer.

"What is – or: what can be understood to fall under the umbrella of – an academic disputation? An answer to this question can be approached by placing such

disputations within the context of other information formats – which could also be referred to in this context as instructional media – that were utilized in academic instruction (held primarily in the German language area of Europe) during the period between 1550 and 1700. (1)

When comparing disputations to other information formats / instructional media the following two general questions arise: 1. What is meant by – and what is included within the context of – information formats / instructional media? 2. To what extent can and/or should disputations be considered to include (a) published disputations as well as (b) disputations that were held orally but concerning the content of which we have relatively little – or no – written information?

The constituent parts of academic instruction during this period can be placed within two broad categories: 1. the presentation of accepted knowledge and doctrines falling within subject-matters belonging to the academic curriculum and 2. academic exercises intended to provide students with basic skills pertaining to that curriculum. Accepted knowledge and doctrines normally were orally delivered to students in the form of lectures. Many of these lectures have survived in written form, either as unpublished manuscripts (as lecture manuscripts and as notes taken by students) or in published form (usually as textbooks). (2) Also extant – both in published and unpublished form – are collections of commonplaces, encyclopaedias, lexicons and other book-length writings generally intended

to supplement lectures and published textbooks. (3)" (pp. 89-90)

(1) (...) 1547 is the earliest publication date of any disputation that could be located in the course of research done for this study (and previous studies by this author). Manuscript records of such disputations from the early sixteenth century do exist; two such manuscript collections can be mentioned. Disputations held at the University of Leipzig in partial fulfilment of the Master of Arts degree from 1512 through 1553 are extant at Leipzig UA: Urkundliche Quellen B 066 (1512–1527), B 067 (1527–1539), B 068 (1540–1553). A collection of public and private disputations held at the University of Heidelberg Faculty of Arts during the years 1537 and 1538 is extant in manuscript form: Bibliotheca Apostolica Vaticana (Vatican Library, Vatican City) Pat. Lat. 201; a film of this collection is available at Saint Louis (Missouri / USA), Vatican Film Library: Film Roll 3638.

One may ask why there do not appear to be any (or: hardly any) published disputations prior to this date. It could be argued that opposition to intricately organized (i.e., »scholastic«) disputations by some (»humanist«) authors active in the late fifteenth and early sixteenth centuries (e.g., Desiderius Erasmus, Juan Luis Vives) served as a factor here, cf. the relevant discussion given in Ku-ming (Kevin) Chang, *From Oral Disputation to Written Text. The Transformation of the Dissertation in Early Modern Europe*, in: *History of Universities* 19 (2004), pp. 129–187 (159–161, 184). The earliest examples of published disputations found here were published in connection with instruction at the University of Königsberg in the late 1540s (see the first title cited within fn. 36 as well as A. in Table 13). It could also be argued that Jesuit academic institutions played a leading role holding published disputations during the second half of the sixteenth century, cf. the following publications: Ulrich G. Leinsle, *Dilinganae disputationes. Der Lehrinhalt der gedruckten Disputationen an der Philosophischen Fakultät der Universität Dillingen 1555–1648*, Regensburg 2006; Gerhard Stalla, *Bibliographie der Ingolstädter Drucker des 16. Jahrhunderts*, Baden-Baden 1977.

(2) Refer to the following article: Ann Blair, *Note-Taking as an Art of Transmission*, in: *Critical Inquiry* 31 (2004), pp. 85–107.

(3) Refer to the following publications (monograph, article, and bibliography): Ann

Moss, *Printed Commonplace-Books and the Structuring of Renaissance Thought*, Oxford 1996; reviewed by Joseph S. Freedman in *Scientia poetica* 2 (1998), pp. 222–242; Joseph S.

Freedman, *Encyclopedic Philosophical Writings in Central Europe during the High and Late Renaissance (c. 1500 – c. 1700)*, in: *Archiv für Begriffsgeschichte* 37 (1994), pp. 212–256 as reprinted in Joseph S. Freedman, *Philosophy and the Arts in Central Europe, 1500–1700. Teaching and Texts at European Schools and Universities during the High and Late Renaissance*, Aldershot / Brookfield 1999, VI; Giorgio Tonelli, *A short-title list of subject dictionaries of the sixteenth, seventeenth, and eighteenth centuries as aids to the history of ideas*, London 1971, exp. ed., rev. and annot. by Eugenio Canone, Firenze 2006.

11. ———. 2012. "Philosophy Instruction, the Philosophy Concept, and Philosophy Disputations Published at the University of Ingolstadt, C. 1550 - C. 1650." In *Dichtung - Gelehrsamkeit - Disputationskultur. Festschrift Für Hanspeter Marti Zum 65. Geburtstag*, edited by Sdzuj, Reimund B., Seidel, Robert and Zegowitz, Bernd. Köln, Wien, und Weimar: Böhlau Verlag.

"In the year 1981, Hanspeter Marti published an article on the value of published philosophical disputations (that is, disputations published in connection with philosophy instruction at academic institutions) for research on topics pertaining to Early Modern

European studies. (2) The following year, this article was followed by his publication of an extensive bibliography of philosophical disputations published in Central Europe between the years 1660 and 1750. (3) His bibliography has been widely utilized in the three decades following its publication; in part due to the publication thereof, increased attention has also been accorded to disputations as an important academic genre. (4)

The present study is focused on philosophical disputations published in Ingolstadt – in connection with academic instruction held at the University there – during the hundred-year period between c. 1550 and c. 1650. Here, provisional answers will be given to

the following five questions. First, what was the scope of philosophy instruction at the University of Ingolstadt during the period between c. 1550 and c. 1650? Second, how did this scope evolve during that same period? Third, what were those subject-matters falling

within the parameters of philosophy, the sciences, and the arts at the University of Ingolstadt during the period? Fourth, what can be said concerning the content of this Ingolstadt philosophy instruction? And fifth, to what extent can published philosophical disputations help provide answers to these first four questions?

One additional, more general question must also be posed here. During the 16th and 17th centuries, which academic subject-matters were generally understood to fall within the parameters of European academic philosophy? An answer can be ventured here on the

basis of discussions of this same matter found in literally hundreds of philosophical writings published during these two centuries. (5)"

(2) Marti: *Der wissenschaftsgeschichtliche Dokumentationswert* (1981) as cited in full in the Bibliography [In: *Nouvelles de la République des Lettres* 1 (1981): 117–132.]. „Philosophical Disputations“ here refer to philosophical disputations and dissertations published in connection with academic instruction. No attempt will be made here to distinguish between disputations and dissertations; refer to Hanspeter

Marti's articles on the same in: *Historisches Wörterbuch der Rhetorik* (1994) as cited in the Bibliography. [Tübingen: Niemeyer]

(3) Marti: *Philosophische Dissertationen* (1982) as cited in the Bibliography.

[*Philosophische Dissertationen deutscher Universitäten 1660–1750. Eine Auswahlbibliographie*, unter Mitarbeit von Karin Marti. München: K.G. Saur, 1982.]

(4) Refer to Freedman: *Published academic disputations in the context of other information formats used primarily in Central Europe (c. 1550–c.1700)* (2010) and Freedman: *Disputations in Europe in the Early Modern Period* (2005); these two articles were published in volumes (cited here in the Bibliography) that are devoted to the subject-matter of disputations (and dissertations).

(5) Freedman: *Classifications* (1994) discusses classifications of philosophy, the sciences, and the arts during the 16th and the 17th centuries.

12. ———. 2012. "Johann Kahl's Collection of Writings on Practical Philosophy (1595) in Context." In *Philosophie Der Reformierten*, edited by Frank, Günther and Selderhuis, Herman J., 241-298. Stuttgart-Bad Cannstat: Frommann-Holzboog.

PP = Johann Kahl, *Propaideia Practica* (1595).

"Johann Kahl (Joannes Calvinus or Calvus) is best known as an author of legal treatises. (1) His Law Dictionary – first published in 1600 with the title »Lexicon juridicum« – continued to be republished into the second half of the 17th century. (2) He also authored two treatises and two orations pertaining largely to practical philosophy, all of which were published in the year 1595. (3) These two treatises and two orations – as well as their relevance for jurisprudence and to Kahl's own commitment to Christianity – serve as the focus of this study." (p. 241)

(...)

"In commenting Kahl's writings on practical philosophy, the following five general Conclusions can be ventured. First, logic and Christianity are both given substantial emphasis – and also are closely interrelated – within Kahl's writings. (111) Kahl specifically emphasizes the importance of logic for all academic disciplines, and notes its particular importance for jurisprudence. (112) Kahl uses logic – as evident of his use of »method« (methodus), »logical analysis« (analysis logica), and other logical

concepts (e.g., causality) – throughout his writings. (113) And Kahl refers to prudence, the arts, intelligence, science, and wisdom as »logical« virtues(s) (virtus logica). (114)"

(...)

"Second, it has already been noted that Clemens Timpler utilized – and may have been the first person to introduce (in the year 1604) – the concept of »morality« (*honestas*); for Timpler, *honestas* is goodness that is normative »in and through itself« (*in se et per se*) within a specific social environment – as opposed to moral (i.e., universally valid) goodness. (122) Kahl did not make this distinction, yet it would appear that some components thereof can be ascertained within several statements found within his writings. In his discussion of the virtue of beneficence (when considered as a sub-category of virtue), Kahl notes the nothing is more pleasant and more unifying than the »similarity of good morals« (*morum similitudo bonorum*) among family members, citizens, and people (generally speaking). (123)

(...)

Third, Kahl appears to place substantial emphasis on the subject-matter of war. (125) He regards it to be of the highest priority for a commonwealth (*respublica*) to keep intact the right to wage war. (126) In the synopsis (*Synopsis politices brevissima*) that

precedes the text of Kahl's Commentary on Aristotle's »Politics« war and peace is mentioned within one of his three definitions of the commonwealth. (127)"

(...)

"Fourth, one can ascertain an independent outlook within Kahl's philosophical writings. Kahl's use of logical analysis provides him with a mechanism that (for example) he can use to organize commentary on Aristotle and Cicero in an independent manner; this also provides contexts for independent statements and judgments. "

(...)

"And fifth, a number of topics discussed – and positions taken – within Kahl's philosophical writings serve as indications not only of his interest in jurisprudence, but also of the importance of the former for the latter. (132)" (pp. 262-267)

(1) Recent literature that mentions Johann Kahl includes the following

[Bibliography, G.]: STROHM: *Calvinismus and Recht* [Calvinismus und Recht. Weltanschaulich-konfessionelle Aspekte im Werk reformierter Juristen in der Frühen Neuzeit, Tübingen 2008 (Spätmittelalter, Humanismus, Reformation. Studies in the Late Middle Ages, Humanism, and the Reformation 42).] as well as the articles authored by MAHLMANN/STROHM and ZWIERLEIN within STROHM/FREEDMAN/SELDERHUIS (Eds.): *Späthumanismus [und reformierte Konfession. Theologie, Jurisprudenz und Philosophie in Heidelberg an der Wende zum 17. Jh. Spätmittelalter und Reformation, Vol. 31, Tübingen 2006.]*

(2) Refer to the editions [Bibliography, D.] published in 1600, 1610, 1611, 1619, 1664, 1665, 1670, 1683, 1734, and 1759.

(3) Refer to the citations of these philosophical writings in Table C; in Bibliography [D.] these writings are also cited along with three philosophical disputations – published in 1599, 1600, and 1602 – in which Kahl is listed as the presider thereof.

(111) Kahl sometimes appears to use the terms »theology/theological« and »religion« as synonymous

with Christianity; for example, see PP 71; 77 (and V. in Table E.) as well as PP, 111 (and IV. in Table F). The importance of both logic and Christianity in Kahl's

»Themis Hebraeo-Romana [...] Iurisprudentia Mosaica [...] methodice digesta« (1595) is discussed – with the aid of extensive quotations from that legal treatise – in STROHM: *Calvinismus und Recht* [Bibliography, G.] 136 – 139.

(112) »Dialectica tam necessaria est [...] nedum in Iurisprudentia, inter omnes satis vaga & dispersa, evaserit, nisi forte peculiare ab ipsa natura lumen atque acumen logicum singulari Dei benedictione sortitus fuerit. Atque hinc plures Topica legalia, in usum Iuris studiosorum iam pridem exhibuerunt.« PP, 5. One additional indication of Kahl's emphasis on the importance of logic for jurisprudence is evident from the title of his »Jurisprudentiae Romanae [...] synopsis methodica« (1595)

[Bibliography, G.] as well as from the title of his treatise cited in footnote 111 above.

(113) For example, see PP, 2 – 73; 77; 97; 104 ff; 107 f (as quoted in III. C. of Table F); 128; 131(– 147);

168 and II. in Table G; also see PP3, fol.\*5 r, lines 1 ff; fol.\*5 v, lines 2 – 24, 44 f.

(114) See PP, 111 (and IV. in Table F)

(122) Refer to footnotes 109 and 110, to the corresponding passages in the text of this article, and to Table P.

(123) PP, 136 f. Also see footnote 56 and the corresponding passage in the text of this article.

(125) Kahl, of course, was not alone in discussing war within academic writings during this period; for example, two editions of a treatise on war by Albericus GENTILIS (Alberico Gentili) are cited in E. of the Bibliography. Philosophical

writings devoted to – or containing sections on politics normally devoted some attention to the subject-matter of war; refer to the following writings (cited in E. of the Bibliography): FREIGIUS: *Quaestiones oeconomicae et politicae*, 151; HOCKENHAFFEN: *Axiomata disciplinae moralis*, 150 – 153 (nos. 38 – 63); KIRCHNERUS/VELBRUGGEN: *Philosophiae practicae synopsis*, fol. D2 v – D4 r (nos. 160 – 175); TIMPLERUS: *Philosophiae practicae [...] politicam*, 454 – 506.

(126) In this context, Kahl also notes that war should be waged in accordance with the following

guide lines: »In respublica autem maxime quoque conservanda sunt iura belli (quod suscipiendum est eam solum ob causam, ut sine iniuria in pace vivatur) nec post victoriam crudeliter

tractandi devicti, verum tuendi, ait.« PP, 135 f.

(127) »Respublica vero seu politia est ad populi legitime consociati salutem iuste facta ordinatio: quicumque demum casus, seu pacis, seu belli, inciderit.« PP3, fol.\*6 r. All three of Kahl's definitions

of respublica are quoted within footnote 74.

(132) It has already been noted that (i.) Kahl's interest in jurisprudence probably began prior to his return to Heidelberg in 1586 and (ii.) he began to teach jurisprudence and publish legal writings well before he became a professor of jurisprudence in 1605; refer back to footnotes 16 and 17 as well as to the corresponding passages in the text of this article. An introductory section in one of Kahl's treatises on jurisprudence discusses the importance of philosophy (including logic and rhetoric) for the study of jurisprudence: CALVINUS, *De jurisprudentiae Romanae studio recte conformando* (1600) [Bibliography, D.] 1 – 48.

13. ———. 2012. "Johann Heinrich Alsted's, 'Philosophia Digne Restituta' (1612) Ein Kurzer Überblick Über Inhalt Und Bedeutung Des Werkes." *Nassauische Annalen* no. 123.

Johann Heinrich Alsted's *Philosophia digne restituta* (1612): A Brief Overview at Its Contents and Significance.

Wiesbaden: Verein für Nassauische Altertumskunde und Geschichtsforschung.

14. ———. 2012. "Georg Liebler's Textbook on Physics (1561) in the Context of His Academic Career." In *Die Universität Tübingen Zwischen Scholastik Und Humanismus*, edited by Lorenz, Sönke, Köpf, Ulrich, Freedman, Joseph S. and Bauer, Dieter R., 249-296. Ostfildern: Thorbecke.

Tübingen Bausteine zur Landesgeschichte 20.

"Instruction in the academic discipline of physics during the sixteenth century has received relatively little attention. (1) The textbook on physics first published by Georg Liebler in 1561 – and subsequently republished in expanded form in the year 1573 – appears

to have been widely disseminated during the last four decades of the sixteenth century. (2)

The 1561 edition of Liebler's textbook – in the context of his own career and of writings published by his own contemporaries – serves as the focus of the current study." (p. 249)

(...)

"Among the most difficult concepts mentioned within academic writings on physics

– and also within other philosophical subject matters – during the sixteenth and early seventeenth centuries is the concept of nature. The terms “nature” (*natura*) and “natural”

(*naturalis*) had a wide range of different meanings within individual academic writings during this period; individual authors sometimes did not explain all, some, or any of the ways in which they used these two terms.

In a broadsheet largely devoted to natural philosophy that was published in the year 1557 by Christophorus Mylaeus (Table I), a central distinction is made between “nature itself” (*natura ipsa*) and *natura altera*. (46) The latter is apparently equivalent (or: roughly

equivalent) to human nature; the former – which is not directly defined or described – serves as the subject matter of his broadsheet. However, the terms nature and natural appear to have been utilized in (at least) eleven additional ways by Mylaeus in this

broadsheet (C in Table I). (47)"

(...)

"The following general comments concerning the 1561 edition of Liebler’s textbook on physics can be ventured here. First, Liebler appears to adopt a rather rigid disciplinary approach in his textbook on physics; he appears to avoid discussion of issues and questions that are interdisciplinary in scope.<sup>123</sup> Second, he seems constrained by – or at least conscious of – the need to avoid too much discussion of detailed subject matter in his textbook.<sup>124</sup> And third, it would appear that he sometimes struggles with the task of writing his textbook, which – as mentioned earlier – could be described as not being particularly well organized. (125)

Any real or perceived problems with Liebler’s textbook on physics notwithstanding, his textbook was republished – in its original or expanded version – at least ten times following its initial publication in the year 1561. (126) And the expanded version of this

textbook – published for the first time in 1573 – may have been the only extant textbook containing extensive commentary on the physics of Petrus Ramus. (127)

An examination of this expanded, 1573 version of Liebler’s textbook on physics, however, falls beyond the scope of the present study."

(1) The 1561 edition of Liebler’s textbook on physics (*Epitome philosophiae naturalis*) will be referred to here as Liebler (1561).

This edition of Liebler’s textbook on physics contains two separate paginations. The first pagination comprises the title page, the dedication, and a page of verse; the second pagination (pages 1 through 301) contains the actual text. In citing the text, the appropriate page numbers (without reference to the fact that they are contained within the second pagination) are given.

A copy of this 1561 edition owned by the Bayerische Staatsbibliothek München has been used to prepare the text, footnotes, and tables of this article; a copy hereof owned by the Universitätsbibliothek Tübingen is the source of the four pages from that same work that have been reproduced as illustrations in this article.

Refer to the following literature (cited in full in G of the Bibliography): Des Chene [Dennis. *Physiologia: Natural Philosophy in late Aristotelian and Cartesian Thought*. Ithaca, New York [et alia]: Cornell Univ. Press,] (1996); Freedman, “Professionalization” (2001); Freedman, “Mylaeus” (2008); Grafton and Siriasi [eds., *Natural particulars : nature and the disciplines in Renaissance Europe*. Dibner Institute studies in the history of science and technology. Cambridge, Mass.: MIT Press,] (1999); Leinsle [Ulrich G. *Dilinganae disputationes. Der Lehrinhalt der*

- gedruckten Disputationen an der Philosophischen Fakultät der Universität Dillingen, 1555–1648*. Jesuitica. Vol. 11. Regensburg: Schnell und Steiner,] (2006).
- (2) Refer to a. A.-B. in Table B as well as A. 1.–2. in the Bibliography.
- (46) Mylaeus, *Theatrum universitatis rerum* (1557) [Bibliography, F] as cited fully in Freedman, “Mylaeus” [Bibliography, G], p. 245, footnote 29; the relevant texts from this broadsheet are quoted there on pages 302–312. The 1551 edition of Christophorus Mylaeus’s treatise on historiography consists of five “Books” (libri); Book 1 is devoted to *natura ipsa* (which also is the subject matter of his *Theatrum universitatis rerum*). *Natura altera* is the focus of the remaining four Books; Books 2, 3, 4, and 5 discusses *prudentia, principatus, sapientia, and literatura*, respectively. See Mylaeus, *De scribenda universitatis scribendae* (1551) [Bibliography, F]. Concerning *natura altera* also refer to relevant texts as discussed, cited, and quoted in Freedman, “Mylaeus” [Bibliography, G], pp. 245, 282 (Table B), 312 (Table L, nos. 48–51).
- (47) Mylaeus, *Theatrum universitatis rerum* (1557) [Bibliography, F] as cited fully in Freedman, “Mylaeus” [Bibliography, G], pp. 268–269, footnote 182.
- (125) The following passage would appear to suggest that Liebler felt overwhelmed when attempting to discuss simple natural bodies: “Hactenus de primis et simplicibus naturae corporibus disservimus: nunc ad ea quae ex illis componuntur, nostra sese convertet oratio: ... Quorum omnium causas brevissime, sequentes vestigia Aristotelis, explicare conabimur.” Liebler (1561), p. 253. A very brief, single-page table of contents was included in the 1563 imprint (and all subsequent extant imprints) of Liebler’s textbook on physics; a (longer) subject-index accompanied all extant imprints thereof from 1586 onwards; refer to a. in Table B as well as to A. 1.–2. in the Bibliography.
- (126) See a. in Table B as well as A. 1.–2. in the Bibliography.
- (127) The writings – mainly on logic, rhetoric, grammar, geometry, and arithmetic – of Petrus Ramus and Omer Talon appear to have spread most widely in Central Europe from 1570 onwards; refer to the documentation and discussion given in the following article: Freedman, “The Diffusion of the Writings of Petrus Ramus” [Bibliography, G].

15. ———. 2012. “Philosophy Instruction, the Philosophy Concept, and Philosophy Disputations Published at the University of Ingolstadt, C. 1550 - C. 1650.” In *Dichtung - Gelehrsamkeit - Disputationskultur. Festschrift Für Hanspeter Marti Zum 65. Geburtstag*, edited by Sdzuj, Reimund B., Seidel, Robert and Zegowitz, Bernd. Köln, Wien, und Weimar: Böhlau Verlag.

“In the year 1981, Hanspeter Marti published an article on the value of published philosophical disputations (that is, disputations published in connection with philosophy instruction at academic institutions) for research on topics pertaining to Early Modern

European studies. (2) The following year, this article was followed by his publication of an extensive bibliography of philosophical disputations published in Central Europe between the years 1660 and 1750. (3) His bibliography has been widely utilized in the three decades following its publication; in part due to the publication thereof, increased attention has also been accorded to disputations as an important academic genre. (4)

The present study is focused on philosophical disputations published in Ingolstadt – in connection with academic instruction held at the University there – during the hundred-year period between c. 1550 and c. 1650. Here, provisional answers will be

given to the following five questions. First, what was the scope of philosophy instruction at the University of Ingolstadt during the period between c. 1550 and c. 1650? Second, how did this scope evolve during that same period? Third, what were those subject-matters falling within the parameters of philosophy, the sciences, and the arts at the University of Ingolstadt during the period? Fourth, what can be said concerning the content of this Ingolstadt philosophy instruction? And fifth, to what extent can published philosophical disputations help provide answers to these first four questions? One additional, more general question must also be posed here. During the 16th and 17th centuries, which academic subject-matters were generally understood to fall within the parameters of European academic philosophy? An answer can be ventured here on the basis of discussions of this same matter found in literally hundreds of philosophical writings published during these two centuries. (5)"

(2) Marti: *Der wissenschaftsgeschichtliche Dokumentationswert* (1981) as cited in full in the Bibliography [In: *Nouvelles de la République des Lettres* 1 (1981): 117–132.]. „Philosophical Disputations“ here refer to philosophical disputations and dissertations published in connection with academic instruction. No attempt will be made here to distinguish between disputations and dissertations; refer to Hanspeter Marti’s articles on the same in: *Historisches Wörterbuch der Rhetorik* (1994) as cited in the Bibliography. [Tübingen: Niemeyer]

(3) Marti: *Philosophische Dissertationen* (1982) as cited in the Bibliography. [*Philosophische Dissertationen deutscher Universitäten 1660–1750. Eine Auswahlbibliographie*, unter Mitarbeit von Karin Marti. München: K.G. Saur, 1982.]

(4) Refer to Freedman: *Published academic disputations in the context of other information formats used primarily in Central Europe (c. 1550–c.1700)* (2010) and Freedman: *Disputations in Europe in the Early Modern Period* (2005); these two articles were published in volumes (cited here in the Bibliography) that are devoted to the subject-matter of disputations (and dissertations).

(5) Freedman: *Classifications* (1994) discusses classifications of philosophy, the sciences, and the arts during the 16th and the 17th centuries.

16. ———. 2012. "Central European Academic Text on Preaching and Sermons During the Final Quarter of the Seventeenth Century: In the Service of Pietist Preaching?" In *Aus Gottes Wort Und Eigener Erfahrung Gezeigt*, edited by Soboth, Christian and Sträter, Udo, 227-255. Halle: Verlag der Franckeschen Stiftungen.

Erfahrung - Glauben, Erkennen, and Gestalten im Pietismus. Beiträge zum III. Internationalem Kongress für Pietismusforschung 2009.

17. ———. 2014. "The History of ‘Scientific Method’ (Methodus Scientifica) in the Early Modern Period and Its Relevance for School-Level and University-Level Instruction in Our Time." In *Renaissance Now! The Value of the Renaissance Past in Contemporary Culture*, edited by Dooley, Brendan. Oxford, Bern, Berlin, et al.: Peter Lang.

"Francis Bacon (1561-1626) is often associated with the concept of scientific method (*methodus scientifica*); however, it cannot be documented that he directly refers to it within his writings. (1) Yet it does appear that this concept began to be mentioned

and discussed no later than during Bacon's lifetime. (2)

Scientific method was discussed by what appears to have been a relatively small number of authors during the sixteenth, seventeenth, and eighteenth centuries. (3) Yet these early discussions of this concept are relevant to present day debates concerning the utilization of the scientific method when placed in the context of academic instruction at the school - and university - levels.

Scientific method appears to have its origin as a sub-category of the concept of method. Method [*methodus*] apparently began to be discussed as an independent concept from about the year 1550 onwards. (4) Textbooks on logic frequently (if not usually) contained a chapter or a section on method; monographic treatises and disputations devoted to this same concept are also extant. Method was often considered to have (at least) the two basic sub-categories of synthetic method and analytic method.

The concept of scientific method itself is mentioned no later than in the year 1578, when Jacob Zabarella briefly discusses it within his published treatise on method [*De methodis*]. (7) According to Zabarella, scientific method has two component parts, one of which is 'synthetic' [*demonstrativa*] and the other 'analytic' [*resolutiva*]. It is possible that other sixteenth-century authors - prior to, in, or after the year 1578 - utilized this concept as well. (9)

The first known work published specifically on the subject-matter of scientific method appeared in the year 1606. Its author, Joannes Bellarinus, was an Italian, Roman Catholic cleric whose writings - first published during the late sixteenth and early seventeenth centuries - were largely theological in content. (10) He published a large work which included a compilation of Tridentine doctrine and Roman Catholic catechism; that work apparently was first published in 1607 and went through at least twelve editions, including one from the year 1877. His treatise on scientific method, on the other hand, appears to only have been republished once (in 1630); very few copies of the 1606 edition of this treatise appear to have survived. (11)

Bellarinus's treatise on scientific method, which was first published in Milan in 1606, has the following title: *Praxis scientiarum, seu methodus scientifica practicae considerata. Ex Aristotele potissimum accepta*. It consists of a dedication, a detailed table of contents, a short index, and the text. The text consists of an introduction and four 'Books' [*libri*]. In the introduction, Bellarinus equates scientific method [*methodus scientifica*] with the practice of the sciences [*praxis scientiarum*]. (13)" (pp. 287-292

(...)

"One can conclude by making the following two general points. First, the scientific method can be utilized in elementary level instruction in order to teach logical ways of solving problems, analytical / critical thinking, and deductive reasoning, that is, general skills that transcend (natural) science instruction proper. Analogously late 16th-, 17th- and 18th-century discussions of scientific method are closely linked to the domain of logic.

They also focus on 'science' [*scientia*] insofar as science is understood to comprise a wide range of academic disciplines beyond [natural] science. (101)

One could make the case that the manner in which scientific method has often been utilized in instruction at the elementary school level over the past twenty-five years has its historical precedents dating back to the earliest known published discussions of this concept.

And second, while one might argue that logical thinking and deductive reasoning - both of which can be linked to the scientific method - do not themselves directly result in discovery; they also are not without relevance thereto.

Louis Pasteur's assertion, 'Chance only Favours the Prepared Mind' summarizes this point. Many of our simple, routine tasks - which we sometimes do so regularly that we are no longer conscious of them - are actions informed in great part by logic, thereby providing basic parameters for our more complex undertakings. We generally utilize methods - some of which we may or may not regard (or label) as scientific - in order to increase our chances of making discoveries and/or reaching other goals.

In the context of research, we endeavour to employ rational strategies for what we might refer to when we use constructs such as 'the systematic search for chance finds'." (pp. 314-316; some notes omitted)

(1) While Chapter 2. of Book 6 of Bacon's *De dignitate & augmentis scientiarum* is devoted to the subject-matter of method, he does not mention scientific method as such; see Francis Bacon, *Opera Francisci Baronis de Verulamio [... tomus primus: qui continet de dignitate & augmentis scientiarum libros IX.* (Londini [London]: In officina Joannis Haviland, 1623) [hereafter Bacon (1623)], 284-92. (...)

At the beginning (135) of Book 3 Chapter 1 of that same work, Bacon divides 'science' [*scientia*] into theology and philosophy; the latter is divided into natural theology [*numen*], natural philosophy [*natura*], and the study of man [*homo*], which includes a range of additional subject-matters beyond theology and natural philosophy; also see pages 141, 144, 145, and 181-2 with regard to Bacon's classification of the subject matters falling within the (broad) scope of science.

(2) Scientific method is apparently not mentioned in any of the three works by Francis Bacon - *The Two Books of Francis Bacon. On the proficence and advancement of learning, divine and humane* (London: Printed [by Thomas Purfott and Thomas Creede]

for Henrie Tomes, 1605.) [hereafter Bacon (1605)], Francis Bacon [=Franciscus de Verulamio], *Instauratio magna.* (Pars secunda, Novum organum.) Apud Joannem Billium typographum regium, 1620. [Oxford, Bodleian Library: Arch. A. c. 5] [hereafter Bacon (1620), and Bacon (1623) - cited in fn. 1. But here the following point must be noted. The subject-matter of the present study limits itself to those writings where 'scientific method' - and its Latin-language equivalent, *methodus scientifica* - are specifically mentioned. One could argue that a discussion of the history of the scientific method should not be so limited. In that case, however, one would need to find a viable and defensible way of deciding what does and does not fall within the framework of scientific method over a given extended period of time.

(3) This assertion is to be understood with respect to the tens of thousands of academic writings from the sixteenth, seventeenth, and eighteenth centuries (almost all of which were written in Latin) that are extant - in published and in manuscript form - at libraries in and beyond Europe. The overwhelming majority of these writings have not been utilized beyond the eighteenth century (or earlier).

(4) The first published work - or one of the first published works - devoted specifically to the concept of method is Jodocus Willichius, *De methodo omnium artium et disciplinarum informanda opusculum, una cum multis utilibus et necessarijs exemplis.* Francofordii ad Viadrum [Frankfurt/Oder]: Johannes Eichorn, 1550. Berlin SB: A 1573 (nr. 1) [hereafter Willichius, *De methodo* (1550)]. The best general survey concerning the concept of method during this period remains Neal Ward Gilbert, *Renaissance Concepts of Method* (New York: Columbia University Press, 1960). Also refer to the following two discussions of method: Joseph S. Freedman, 'The Diffusion of the Writings of Petrus Ramus in Central Europe, c.1570 - c.1630' *Renaissance Quarterly* 46, no. I (Spring 1993), 98-152: 107-11; Joseph S. Freedman, 'Encyclopedic Philosophical Writings in Central Europe during the High

and Late Renaissance (c. 1500-c.1700), *Archiv for Begriffgeschichte* 37 (1994), 212.-56, 221-3, 245-6. These two articles have been reprinted in Joseph S. Freedman, *Philosophy and the Arts in Central Europe, 1500-1700 Variorum Collected Studies Series, CS626* (Aldershot, UK and Brookfield, VT: Ashgate Variorum, 1999), IV and V, respectively.

(7) See Jacobus Zabarella, *Opera logica*. (Venetiis [Venice]: Apud P. Meietum, 1578) [hereafter Zabarella (1578)]; here the 1597 edition of Zabarella's *Opera Logica* (as reprinted in 1966) has been used; see id., *Opera logica [...] affixa praefatio Joannis Ludovici Hawenreuteri [...] editio tertia*. (Coloniae [Cologne]: Sumptibus Lazari Zetzneri, 1597; reprinted with an edition by Wilhelm Risse. Hildesheim: Georg Olms, 1966), [hereafter Zabarella (1597)]. It is possible that Zabarella utilized this term elsewhere in a work (in printed or manuscript form) prior to the year 1578.

(9) Refer to the point made in footnote 3.

(10) Joannes Bellarinus's treatise on scientific method is discussed in detail - together with brief discussion of his theological writings - in the following article: Joseph S. Freedman, 'A Neglected Treatise on Scientific Method (*methodus scientifica*) published by Joannes Bellarinus (1606)' Jorg Schönert und Friedrich Vollhardt, eds., *Geschichte der Hermeneutik und die Methodik der textinterpretieren den Disziplinen*, *Historia Hermeneutica. Series Studia 1* (Berlin, New York: de Gruyter, 2005), 43-82: 43-5, 65-6.

(11) The only copy of Bellarinus published in 1630 that I have located to date is Joannes Bellarinus, *Speculum humanae atque divinae sapientiae, seu Praxis scientiarum et methodus scientifica*. (Mediolani [Milan]: Apud haeredes P. Pontii, 1630) [Paris, Bibliothèque Nationale: Z 11253]. Concerning extant copies of the 1606 edition, refer to Freedman, 'Bellarinus' (fn. 10), 43.

(13) Bellarinus (1606), 3 (Num. 4).

(101) Bellarinus uses the term *scientia* to mean 'knowledge' as well as to mean 'science: In the latter sense, *scientia* is not identified with what would be referred to as natural science in the United States today. During the sixteenth, seventeenth, and eighteenth centuries, *scientia* usually denotes a wider or narrower range of academic disciplines (or is understood more broadly to mean 'knowledge'); refer to the following: Freedman, 'Bellarinus' (fn. 10), 46 (fn. 8), 48, 69; Joseph S. Freedman, 'Classifications of Philosophy, the Arts, and the Sciences in Sixteenth- and Seventeenth-Century Europe' *The Modern Schoolman*, vol. 72, no. 1 (November 1994), 37-65 and reprinted in Freedman, *Philosophy and the Arts* (fn. 4), VII; Giorgio Tonelli, 'The Problem of the Classification of the Sciences in Kant's Time' *Rivista critica di storia della filosofia* 30 (1975), 243-95. Concerning Francis Bacon's use of the term *scientia* refer to footnote 2 in this article.

## RELATED PAGES

[On the website "Theory and History of Ontology" \(\[www.ontology.co\]\(http://www.ontology.co\)\)](#)

[Joseph S. Freedman: First Part of the Bibliography: 1984-2004](#)

[Birth of a New Science: the History of Ontology from Suárez to Kant](#)

[Bibliography of the Ontologists from 16th to 18th Centuries: I. From Fonseca to Poincot \(1560 - 1644\)](#)

[Bibliography of the Ontologists from 16th to 18th Centuries: II. From Scheibler to Lambert \(1645 - 1777\)](#)

[Index of the Pages with Annotated Bibliographies of Contemporary Historians of Philosophy](#)