

Writings of E. J. Ashworth on the History of Logic. Second Part: 1989-2011

First Part of the Bibliography of E. J. Ashworth: 1964-1988

ANNOTATED BIBLIOGRAPHY

1. "La sémantique du XIV siècle vue à travers cinq traités Oxoniens sur le *Obligations*," *Cahiers d'Épistémologie* (1989).
2. "Boethius on topics, conditionals and argument-forms," *History and Philosophy of Logic* 10: 213-225 (1989).
3. Paul of Venice on Obligations. The sources for both the *Logica Magna* and the *Logica Parva* versions. In *Knowledge and the Sciences in Medieval Philosophy (vol. II)*. Edited by Knuuttila Siimo, Työrinoja R., and Ebbesen Sten. Helsinki: Yliopistopaino 1990. pp. 407-415
Proceedings of the Eighth International Congress of Medieval Philosophy, Helsinki, 24-29 August 1987
4. The doctrine of signs in some early Sixteenth-Century Spanish logicians. In *Estudios de Historia de la Lógica. Actas del II Simposio de Historia de la Lógica, Universidad de Navarra, Pamplona, 25-27 de Mayo de 1987*. Edited by Angelelli Ignacio and D'Ors Angel. Pamplona: Ediciones Eunat 1990. pp. 13-38

"In this paper I intend to discuss the doctrine of signs as it was presented by six Spanish logicians from the first half of the sixteenth century, all of whom except Naveros studied or taught at the University of Paris. I shall consider the *Termini* of Gaspar Lax, whose second edition appeared in 1512; the *Termini* of Juan Dolz, which appeared about 1510; the *Dialecticae introductiones* of Juan de Celaya, published as early as 1511; the *Summulae* of Domingo de Soto, which appeared in 1529 and were heavily revised for their second edition in 1539; the posthumous *Termini perutiles* of Fernando de Enzinas, published in 1533; and the *Praeparatio dialectica* of Jacobo de Naveros, published in 1542. I shall, of course, be mentioning various other authors, particularly from Paris, both to set the stage for the work of the Spanish logicians, and in order to trace subsequent developments.

There are three reasons why I have chosen to focus on the doctrine of signs. First, there is the link with the doctrine of signification. For the early sixteenth-century logician, at least for those writing in the medieval tradition, to signify was to be a sign; and unless we understand how the notion of sign was handled we will be unable to understand such crucial debates as that concerning the question whether words signify concepts or things (1). In particular, we will be likely to fall into the modern trap of translating the word '*significatio*' by the word 'meaning', and thereby misreading large portions of medieval and post-medieval logic and philosophy of language (2). Second, it is in the late fifteenth and early sixteenth centuries that logicians broke away from the medieval trend of discussing signification only in relation to *voces* or utterances (3), and attempted to present the linguistic sign in a much wider framework. Third, recent attention has been focussed on the sign-theory of later authors, particularly the seventeenth-century John of St. Thomas, and I think it is important to reveal the true pioneers in this field (4).

(1) See E. J. Ashworth, "Jacobus Naveros (fl.ca.1533) on the Question: 'Do Spoken Words Signify Concepts or Things?'," in *Logos and Pragma. Essays on the Philosophy of Language in Honour of Professor Gabriel Nuchelmans*, edited by L. M. de Rijk and H. A. G. Braakhuis, pp. 189-214 (Artistarium, Nijmegen: Ingenium Publishers, 1987); and E. J. Ashworth, "'Do Words Signify Ideas or Things?' The Scholastic Sources of Locke's Theory of Language", *Journal of the History of*

Philosophy 19 (1981), pp. 299-326, reprinted as Study VII in E. J. Ashworth, *Studies in Post-Medieval Semantics* (London: Variorum Reprints, 1985).

(2) For examples of such misreading, see E. J. Ashworth, "Locke on Language", *Canadian Journal of Philosophy* 14 (1984), pp. 45-73, reprinted as Study VIII in *Studies in Post-Medieval Semantics*.

3. Two medieval exceptions to this trend were Robert Kilwardby and Roger Bacon. For references, see below notes 31 and 32.

4. See John N. Deely, translator and editor, with Ralph Austin Powell, *Tractatus de Signis. The Semiotic of John Poinsett* (Berkeley: University of California Press, 1985). See also E. J. Ashworth, "The Historical Origins of John Poinsett's 'Treatise on Signs', *Semiotica* 69 (1988), 129-147.

5. Domingo de Soto (1494-1560) and the doctrine of signs. In *De ortu grammaticae. Studies in Medieval Grammar and Linguistics Theory in Memory of Jan Pinborg*. Edited by Bursill-Hall Geoffrey L., Ebbesen Sten, and Koerner Konrad. Amsterdam-Philadelphia: Benjamins 1990. pp. 35-48

"Doctrines of signs permeated medieval culture, being found in such diverse fields as medicine, rhetoric and theology (Maierù 1981). However, despite Augustine's important insight that words could be treated as one type of sign (Markus 1957; Jackson 1969) it seems true to say that the notion of a sign as such was not of central importance to medieval logicians. Certainly words were spoken of as being signs, but no attempt was made to place them in a wider setting. Peter of Spain in his *Summulae Logicales* had focussed on the notion of a *vox* or utterance, so that the distinction between significative and non-significative was introduced only in a linguistic context (Peter of Spain 1972:1-2) and his commentators were thus given no incentive to go beyond this context. William Ockham did give a general definition of sign in his *Summa Logicae*, but he immediately said that he did not intend to use the word 'sign' in this wider sense (William Ockham 1974:89); and his remarks were later echoed by Albert of Saxony (Albert of Saxony 1522:f.2ra). The only medieval exceptions to this trend in the field of linguistic sciences seem to have been Robert Kilwardby, who discussed signs as such in his grammatical work (Kilwardby 1975:1-7) and Roger Bacon who, when writing on logic, followed Augustine in firmly subordinating the notion of a linguistic sign to the notion of a sign in general (Roger Bacon 1978:81-84; Pinborg 1981:405). One of Jan Pinborg's many achievements was to find and publish Roger Bacon's treatise *De Signis*. Hence, it seems appropriate that in a volume devoted to Pinborg's memory, some attention should be paid to another logician, Domingo de Soto, who attempted to place linguistic signs in a wider context." p. 35

References.

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Kilwardby, Robert. 1975. "The Commentary on Priscianus Maior' ascribed to Robert Kilwardby." Selected texts ed. by Karin Margareta Fredborg, Niels J. Green-Pedersen, Lauge Nielsen, Jan Pinborg. Introd. by Jan Pinborg, "The Problem of the Authorship," by Osmund Lewry. (= *CIMAGL*, 15) Copenhagen.

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Peter of Spain. 1972. *Tractatus called afterwards Summule Logicales*, ed. by L.M. de Rijk. Assen: Van Gorcum.

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William Ockham. 1974. *Summa Logicae*. Ed. by Philotheus Boehner, Gedeon Gal, Stephen Brown. (= *Opera Philosophica*, 1.) St. Bonaventure, New York: Franciscan Institute.

6. Equivocation and analogy in Fourteenth-Century logic: Ockham, Burley and Buridan. In *Historia Philosophiae Medii Aevi. Studien zur Geschichte der Philosophie des Mittelalters. Festschrift für*

Kurt Flasch zu seinem 60. Geburtstag. (vol. I). Edited by Mojsisch Burkhard and Pluta Olaf. Amsterdam, Philadelphia: B. R. Grüner 1991. pp. 23-43

"In this paper I shall explore the notions of equivocation and analogy as they were handled by William of Ockham in his logical writings; (1) and I shall compare his position with those adopted by Walter Burley and John Buridan.(2) I realize that Ockham's views on these issues have already been discussed in print, (3) and I shall not be able to point to hitherto unnoticed material in his works. My main intention is to place his views in perspective, by locating them in their historical context. This project is one which has been touched on only indirectly by scholars, (4) yet it is crucial to the proper understanding both of Ockham himself and of later developments in the theory of analogy.

My study of Ockham is part of a series in which I intend to explore the notions of equivocation and analogy as they were handled by logicians from the mid-thirteenth to the end of the sixteenth century. (5) I became interested in this issue when I noticed that virtually the only logician ever referred to in discussions of Aquinas's theory of analogy is Cajetan, despite the fact that he wrote over two centuries later, and had a rather different philosophical agenda. In fact, there are a number of striking dissimilarities between logicians contemporary with Aquinas and such sixteenth-century logicians as Domingo de Soto. Some of these are of minor importance. For instance, sixteenth-century logicians had access to more of the Greek commentators on Aristotle's *Categories*, and they tended to discuss analogy in the context of commentary on the *Categories* rather than in the context of commentary on the *Sophistici Elenchi*. Others affect the general approach: here I have in mind the different theories of signification which were predominant in the two periods, and the more-or-less complete abandonment of the grammatical doctrines of *modi significandi*. Yet others are crucial to the details. In the thirteenth century, the analogy of attribution was the important kind, and the analogy of proportionality was barely mentioned. The reverse is true after Cajetan. In the thirteenth century, the key notion was that of signification *per prius et posterius*, and the implications of this were spelled out partly in terms of concepts (whether one or more), but especially in terms of common natures. In the sixteenth century the focus was on concepts, whether one imprecise concept matched with more than one precise concept, or one formal concept matched with more than one objective concept. In addition, sixteenth-century logicians worried about the differences between intrinsic and extrinsic denomination, not an issue which had concerned late thirteenth-century logicians.

The fourteenth century had two big contributions to make to the changes in doctrine that I have just outlined. First, John Duns Scotus's arguments about the univocity of being seem to have persuaded logicians that it makes sense to postulate just one concept of being, even if one goes on to reject the claim that *<ens>* is a univocal term. Second, Ockham and his followers diverted attention from common natures, which they rejected, to words and concepts. Sixteenth-century discussions of analogy have to be understood in terms of a reaction to these fourteenth-century developments, and not just in terms of a reaction to the writings of Thomas Aquinas. I shall leave the elucidation of Scotus and his influence to others; but it must be remembered that in concentrating on Ockham and the logicians I am telling only part of the story." pp. 23-25

(1) William of Ockham, *Summa Logicae*, edited by P.Boehner, G.Gál, S.Brown, Opera Philosophica I (St.Bonaventure, N.Y.: St.Bonaventure University, 1974); *Expositio in librum Praedicamentorum Aristotelis*, edited by G. Gal in Opera Philosophica II (St.Bonaventure, N.Y.: St.Bonaventure University, 1978); *Expositio super libros Elenchorum*, edited by F. del Punta, Opera Philosophica III (St.Bonaventure, N.Y.: St.Bonaventure University, 1979). I shall also refer to the following theological writings: *Scriptum in librum Primum Sententiarum Ordinatio. Distinctiones II-III*, edited by S. Brown with G.Gál, Opera Theologica II (St.Bonaventure, N.Y.: St.Bonaventure University, 1970); *Quaestiones in librum Tertium Sententiarum (Reportatio)*, edited by F.E. Kelley and G.I. Etzkorn, *Opera Theologica VI* (St.Bonaventure, N.Y.: St. Bonaventure University, 1982); *Quodlibeta Septem*, edited by J.C. Wey, Opera Theologica IX (St. Bonaventure, N.Y.: St.Bonaventure University, 1980).

(2) Much research remains to be done on both Burley and Buridan. I shall draw most of my material relating to Burley from his 1337 commentary on the *Categories* in *Burlei super artem veterem*

Porphirii et Aristotelis (Venetiis, 1497). For Buridan I have used *Iohannes Buridanus. Quaestiones in Praedicamenta*, edited by J. Schneider (Munich: Verlag der Bayerischen Akademie der Wissenschaften, 1983) and extracts from his *Summulae* in S. Ebbesen, *The Summulae. Tractatus VII. De Fallaciis* in *The Logic of John Buridan*, edited by Jan Pinborg (Copenhagen: Museum Tusulanum, 1976), pp.139-160.

(3) The most recent and best discussion is found in M. McCord Adams, *William Ockham* (Notre Dame, Indiana: University of Notre Dame Press, 1987), Vol. II, pp.903-960, especially pp.952-960. See also G. Leff, *William of Ockham: The Metamorphosis of Scholastic Discourse* (Manchester: Manchester University Press, 1975) pp.149-164 for a detailed but very confused discussion. A much earlier work, containing some useful material, is M.C. Menges, *The Concept of Univocity Regarding the Predication of God and Creature According to William Ockham* (St. Bonaventure, New York: The Franciscan Institute, Louvain: E. Nauwelaerts, 1952).

(4) For a bibliography of works on fallacies, which of course include equivocation, and some discussion. see S. Ebbesen, *The way fallacies were treated in scholastic*, *Cahiers de l'institut du moyen-age grec et latin* 55 (1987), 107-134.

(5) See E.J. Ashworth, *Analogy and Equivocation in Thirteenth-Century Logic: A New Approach to Aquinas*. I am currently writing a paper on equivocation and analogy in sixteenth-century logicians. Full documentation of my claims about thirteenth and sixteenth-century logic will be found in these papers.

7. *Nulla propositio est distinguenda: la notion d'equivocatio chez Albert de Saxe*. In *Itinéraires d'Albert de Saxe. Paris-Vienne au XIV siècle. Actes du Colloque organisé les 19-22 juin 1990 dans le cadre des activités de l'URA 1085 du CNRS à l'occasion du 600 anniversaire de la mort d'Albert de Saxe*. Edited by Biard Joël. Paris: Vrin 1991. pp. 149-160

8. "A Thirteenth-century interpretation of Aristotle on equivocation and analogy," *Canadian Journal of Philosophy* Supplementary volume 17: 85-101 (1991).

"This paper is a case study of how a few short lines in two of Aristotle's logical works were read in the thirteenth century. (1) I shall begin with a quick look at Aristotle's own remarks about equivocation in the *Categories* and the *Sophistical Refutations*, as they were transmitted to the West by Boethius's translations. (2) I shall continue with an analysis of the divisions of equivocation and analogy to be found in an anonymous commentary on the *Sophistical Refutations* written in Paris between 1270 and 1280. (3) I have chosen this author's work to focus on, because it offers a remarkably full account which brings together the elements found in many other logical works from the second half of the thirteenth century. In the course of my analysis I shall attempt to show the part played by four different sources: (1) the Greek commentators of late antiquity; (2) the new translations of Aristotle's *Physics* and *Metaphysics*; (3) the reception of Arabic works, particularly the commentaries of Averroes; and (4) new grammatical doctrines, notably that of *modi significandi*. At the same time, I hope to throw some light on the development of the doctrine of analogy as it was understood by late thirteenth-century logicians." pp. 85-86

(1) For full Bibliographies and more information on the matters touched on here, see E.J. Ashworth, 'Signification and Modes of Signifying in Thirteenth-Century Logic: A Preface to Aquinas on Analogy,' *Medieval Philosophy and Theology* 1 (1991) 39-67; E.J. Ashworth, 'Analogy and Equivocation in Thirteenth-Century Logic: Aquinas in Context,' *Mediaeval Studies* (forthcoming); E.J. Ashworth, 'Equivocation and Analogy in Fourteenth Century Logic: Ockham, Burley and Buridan,' *Historia Philosophiae Mediaevalis. Studien Zur Geschichte der Philosophie des Mittelalters*, B. Mojsisch and O. Pluta, eds. (Amsterdam: B.R. Gruner forthcoming).

(2) *Aristotelis Latinus I 1-5. Categoriae vel Praedicamenta*. L. Minio-Paluello. Leiden: E.J. Brill 1961 and *Aristotelis Latinus VI 1-3. De Sophisticis Elenchis*. B.G. Dod. Leiden: E.J. Brill, Brussels: Desclée de Brouwer 1975.

(3) *Incerti Auctores, Quaestiones super Sophisticos Elenchos*, S. Ebbesen, ed. *Corpus Philosophorum Danicorum Mediaevalis* VII. Copenhagen: Gad 1977. Of the two sets of questions edited by Ebbesen I shall use only the first (the SF commentary).

(4) *Aristotelis Latinus I 1-5. Categoriae vel Praedicamenta. Categories* 1a1-6 in *Aristotelis Latinus I 1-5. Categoriae vel Praedicamenta*, 5. (Latin citation omitted)

9. "Analogy and equivocation in Thirteenth-Century Logic. Aquinas in context," *Mediaeval Studies* 54: 94-135 (1991).
 "I suggest how mistaken it is to read Aquinas through the eyes of Cajetan, who wrote over two centuries later, by examining how analogy was handled by logicians, including the young Duns Scotus, between ca 1230 and ca 1300. I show how analogy entered the logic texts in the context of equivocation; and I argue that the emphasis on analogy "per attributionem", the absence of the analogy of proportionality, and the development of a threefold classification of analogy all throw considerable light on Aquinas' own discussion, particularly in the passage from his "Sentences" commentary which was used by Cajetan."
10. "Signification and modes of signifying in Thirteenth-century logic: a preface to Aquinas on analogy," *Medieval Philosophy and Theology* 1: 39-67 (1991).
 "My study of Aquinas in the context of thirteenth-century logic has two parts. In the first part, which constitutes the present essay, I shall explore the general theory of language that lies behind theories of equivocation and analogy. I shall explain such key concepts as imposition, signification, and *res significata*, and I shall pay particular attention to the notion of *modi significandi*. In the second part, to be published separately, (*) I shall survey thirteenth-century accounts of equivocation from Peter of Spain to John Duns Scotus. I shall show how the discussion of analogy came to be subsumed under discussions of equivocation and how logicians developed a threefold classification of analogy that has a close relation to Aquinas's own classification in his *Sentences*-commentary."
- (*) See: *Analogy and equivocation in Thirteenth-Century Logic. Aquinas in context*
11. "Logic in late Sixteenth-Century England: Humanist Dialectic and the New Aristotelianism," *Studies in Philology* 88: 224-236 (1991).
 "In this paper I intend to look at the kind of logic that was taught at Oxford and Cambridge in 1590, and that was central to the undergraduate curriculum. I shall begin with a survey of the authors who were studied during the sixteenth century; then I shall consider the contents of their texts, with particular emphasis on the interplay between logic, dialectic and Aristotelianism. My main purpose is to explain what humanist dialectic might have been, and what it actually became in the hands of the textbook writers." p. 224
12. Logic in late Medieval Oxford. In *The history of the University of Oxford - vol. II - Late Medieval Oxford*. Edited by Catto Jeremy C. and Evans Ralph. Oxford: Clarendon Press 1992. pp. 35-64
 Co-author Paul Vincent Spade
13. "Analogical concepts. The Fourteenth-Century background to Cajetan," *Dialogue* 31: 399-413 (1992).
 "Cajetan attacked three views of the concept of being: that it is a disjunction of concepts; that it is an ordered group of concepts; and that it is a single, separate concept which is unequally participated by substances and accidents. I discuss these views as they were presented by the 14th-century philosopher Peter Aureol, Hervaeus Natalis, and John of Jandun. I thereby shed light on medieval theories of analogy, of signification, and of the so-called objective concept."
14. "New light on medieval philosophy: the *Sophismata* of Richard Kilvington," *Dialogue* 31: 517-521 (1992).
 "In this review-article of a recent edition and translation of the *sophismata* of the 14th-century English philosopher and theologian, Richard Kilvington, I place *sophismata* (i.e., puzzle-sentences) in their literary, institutional, and philosophical context. Kilvington's *sophismata* are particularly characterized by their use of the mathematical language of proportion and the analysis of continuous magnitudes and processes, as well as by their focus on the syntactico-semantic properties of terms. They have important implications for theories of reference."
15. "The *Obligaciones* of John Tarteys: edition and introduction," *Documenti e Studi sulla Tradizione Filosofica Medievale* 3: 653-703 (1992).
16. Ralph Strode on inconsistency in Obligational disputations. In *Argumentationstheorie. Scholastische Forschungen zu den logischen und semantischen Regeln korrekten Folgerns*. Edited by Jacoby Klaus. Leiden, New York, Köln: E. J. Brill 1993. pp. 363-386
 "Treatises on obligations represent one of the interesting new developments of medieval logic.(1)

They set out the rules which were to govern a certain kind of disputation, the obligational disputation. Truth was not at issue in such disputations, since their starting point was normally a false proposition; (2) nor was any particular subject-matter explored. Instead, according to Strode, their purpose was both to provide exercise for beginning students in handling logical inferences; and to prepare them to reason from truths in real-life situations.(3) He compared these disputations to the military exercises which young soldiers had to undergo before they could participate in real battles.(4)

Obviously both the acceptance of falsehoods and the application of rules in isolation from a given subject-matter have their dangers; and one of the features of obligations treatises is the way they explore the different kinds of inconsistency which can arise in a disputational setting. In this paper I intend to discuss Ralph Strode's reaction to earlier attempts to amend the rules so as to avoid some of these kinds of inconsistency. So far as Strode's predecessors are concerned, my main focus will be on Roger Swyneshed (5) and on an anonymous author whose treatise on obligations was preserved in a Merton College manuscript, (6) though I shall also pay some attention to Richard Kilvington. (7)

(1) For bibliography and discussion, see Paul of Venice, *Logica Magna*. Part II Fascicle 8. [*Tractatus de Obligationibus*] ed./trad. E. J. Ashworth, published for the British Academy by the Oxford University Press, 1988. Two papers which are particularly relevant to the theme of this paper are: P. V. Spade, 'Three Theories of Obligationes: Burley, Kilvington and Swyneshed on Counterfactual Reasoning', *History and Philosophy of Logic* 3, 1982, 1-32; and E. J. Ashworth, 'Inconsistency and Paradox in Medieval Disputations: A Development of Some Hints in Ockham', *Franciscan Studies* 44, 1984, 129-139.

(2) Some authors, including Strode, explicitly allowed the possibility of a true *positum*: see Paul of Venice, op. cit., p. 33; Ralph Strode, *Obligationes*, Oxford Bodleian Library MS Canon. misc. 219, fol. 37"; Spade, op. cit., p. 12 (for a discussion of Burley on this point).

(3) Strode, *ibid.*, fol. 37', fol. 37va. The second point is made even more clearly by the anonymous Merton author who refers to jurists and moral philosophers in this context: see N. Kretzmann and E. Stump, 'The Anonymous De Arte Obligatoria in Merton College MS. 306"', in *Mediaeval Semantics and Metaphysics. Studies dedicated to L.M. de Rik*, ed. E. P. Bos, Nijmegen: Ingenium, 1985, pp. 243 sq., § VI. (Short title: *Anon. Merton*). It should be noted that I use the phrase 'anonymous Merton author' for convenience, and not because we know that he was actually a Mertonian. In Paul of Venice, op. cit., I referred to him as Pseudo-Dumbleton.

(4) Strode, op. cit., fol. 37ra.

(5) Swyneshed's treatise was probably written between 1330 and 1335. For discussion and an edition of the text, see P.V. Spade, "Roger Swyneshed's Obligationes: Edition and Comments", *Archives d'histoire doctrinale et littéraire du moyen age* 44, 1977, 243-285. (Short title: *Swyneshed*).

(6) See note 3 above. This treatise was probably written during the period 1335-1349: see Anon. Merton., p. 239.

(7) Since I wrote this paper, *The Sophismata of Richard Kilvington*, edited and translated by Norman Kretzmann and Barbara Ensign Kretzmann, has appeared in two volumes: translation, introduction and commentary, Cambridge: University Press, 1990; edition, Oxford: University Press for the British Academy, 1990. However, I have drawn my material from Spade, op. cit., pp. 19-28, and from E. Stump, "Roger Swyneshed's Theory of Obligations", *Medioevo* 7, 1981, 143-153.

17. Les manuels de logique à l'université d'Oxford aux XIV et XV siècles. In *Manuels, programmes de cours et techniques d'enseignement dans les universités médiévales*. Edited by Hamesse Jacqueline. Louvain-la-Neuve: Université Catholique de Louvain, Publications de l'Institut d'Etudes Médiévales 1994. pp. 351-370
18. "Obligationes treatises: a catalogue of manuscripts, editions and studies," *Bulletin de Philosophie Médiévale* 36: 118-147 (1994).
19. La doctrine de l'analogie selon quelques logiciens jésuites. In *Les jésuites à la Renaissance. Système éducatif et production du savoir*. Edited by Giard Luce. Paris: Presses Universitaires de France 1995. pp. 107-126

20. "Suarez on the analogy of Being. Some historical background," *Vivarium* 33: 50-75 (1995).
"I argue that Suarez is best read as part of a tradition which predates Cajetan with respect to the classification of types of analogy, and which to some extent predates Scotus in its insistence on a concept of being which is both one and analogical. I draw on three Fifteenth century philosophers and theologians, Capreolus, Dominic of Flanders, and Soncinas, and one Sixteenth century writer, Domingo de Soto."
21. "Late Scholastic Philosophy. Introduction," *Vivarium*: 1-8 (1995).
"Late scholastic philosophy coexisted with Humanism, Renaissance philosophy, and early modern philosophy from the late fifteenth to the late seventeenth century. It was characterized by its relation to institutions of higher learning, its method of presentation, its focus on Aristotle, and its explicit concern with problems stemming from the work of medieval philosophers."
22. Analogy, univocation, and equivocation in some early Fourteenth-Century authors. In *Aristotle in Britain during the Middle Ages. Proceedings of the International conference at Cambridge 8-11 April 1994 organized by the Société Internationale pour l'Etude de la Philosophie Médiévale*. Edited by Marenbon John. Turnhout: Brepols 1996. pp. 233-247
23. Domingo de Soto (1494-1560) on analogy and equivocation. In *Studies on the History of Logic. Proceedings of the Third Symposium on the History of Logic*. Edited by Angelelli Ignacio and Cerezo Maria. Berlin, New York: Walter de Gruyter 1996. pp. 117-132
"In 1543 the Spanish logician, Domingo de Soto, published a commentary on Aristotle's *Categories*. As one might expect, Soto offers a detailed discussion of the opening lines in which Aristotle presents a definition of equivocal terms, but his discussion also includes an analysis of analogical terms, together with an account of the conceptual correlates of such terms. The purpose of this paper is to show how Soto's analysis fits into a long tradition of commentary on the *Categories*. In particular, I wish to show that although Soto betrays the influence of Thomas de Vio, Cardinal Cajetan, whose short book, *On the Analogy of Names*, was published in 1498, it is a great mistake to suppose that the history of analogy from the thirteenth to the sixteenth century should be read through the eyes of Cajetan. At the same time, I hope to throw some light on the background to Suarez, for it seems to me that there is a close relationship between the doctrines found in Soto and those developed by Suarez.
My paper is divided into three parts. In the first part, I shall look at the notion of equivocation and how it came to be related to analogy. In the second part, I shall describe Soto's divisions of analogy and how they are related to those of Cajetan. In the third part, I shall discuss what Soto had to say about the imposition of analogical terms and about their relationship to concepts and natures." p. 117
24. "Autour des Obligationes de Roger Swyneshed: la *Nova responsio*," *Etudes Philosophiques* (3): 341-360 (1996).
"I examine a number of sources according to which Swyneshed (despite the claims made by Angel D'Ors in his recent articles) does give a *nova responsio* partly in the form of the rule 'One can deny a conjunction whose conjuncts have already been granted.' I show that this *nova responsio* is linked to a rejection of the rule 'Every proposition following from a set of propositions which have already been granted must be granted', and I attribute this rejection to a theory whereby an inference is based on the logical relations between just two propositions."
25. Petrus Fonseca on objective concepts and the analogy of Being. In *Logic and the workings of the mind: the logic of ideas and faculty psychology in early modern philosophy*. Edited by Easton Patricia A. Atascadero: Ridgeview 1997. pp. 47-63
"Petrus Fonseca was a Portuguese Jesuit who lived from 1528 to 1599. He was one of those responsible for drawing up the Jesuit *Ratio Studiorum* which set the curriculum for Jesuit schools across Europe, and he was also responsible for initiating the production of the Coimbra commentaries on Aristotle, or Conimbricenses, which served as texts for many schools and universities in the seventeenth century. He was himself the author of two popular texts, an introduction to logic, and a commentary on Aristotle's *Metaphysics*. His logic text was one of two alternatives prescribed by the *Ratio Studiorum* of 1599, and may have been used at La Flèche; his *Metaphysics* commentary was used at many Jesuit schools, and may also have been used at La Flèche.

In short, Fonseca was a leading figure in the Scholastic Aristotelian tradition of the late sixteenth century, a tradition which lies behind many of the developments in early modern philosophy, and which in many ways is more important than the humanist tradition represented by Petrus Ramus. I have chosen to discuss Fonseca on objective concepts and the analogy of being both because an examination of these issues will help us to understand how logic came to be bound up with the philosophy of mind and because the history of how these issues were treated helps solve a small problem about Descartes's sources. My paper has four parts. I shall begin by giving a historical outline of treatments of analogy and their relevance to Descartes. Secondly, I shall discuss late medieval theories of signification, particularly as they appear in Fonseca, in order to show how logicians turned away from spoken language to inner, mental language. Thirdly, I shall explain how it was that analogy, as a theory of one kind of language use, was particularly bound up with the discussion of concepts. Finally, I shall look at the distinctions Fonseca made while discussing the concepts associated with analogical terms." p. 47 (notes omitted)

26. L'analogie de l'être et les homonymes. *Categories*, 1 dans la "Guide de l'étudiant". In *L'enseignement de la philosophie au XIII siècle. Autour du "Guide de l'étudiant" du ms. Ripoll 109. Actes du Colloque International*. Edited by Lafleur Claude and Carrier Joanne. Turnhout: Brepols 1997. pp. 281-295
 "Mon étude se divise en trois parties. En premier lieu, comme introduction à mon thème principal, je donnerai un bref aperçu de l'analogie dans les manuels de logique et dans les commentaires sur Aristote. Ensuite, je traiterai du sujet de la logique aristotélicienne en général et du sujet des *Catégories* en particulier. Mon but ici est de montrer l'importance de l'être, surtout dans le contexte de deux questions : y a-t-il une science unique des catégories, et quels sont les rapports entre la logique et la métaphysique? Pour terminer, j'aborderai les rapports entre homonymes, synonymes et paronymes, interprétés comme des réalités et non pas comme des mots, dans le contexte de la question : pourquoi Aristote a-t-il placé les homonymes avant les synonymes et les paronymes?" p. 283
27. Analogy and equivocation in Thomas Sutton O.P. In *Vestigia, Imagines, Verba. Semiotics and logic in medieval theological texts (XIIth-XIVth century)*. *Acts of the XIth Symposium on Medieval logic and semantics. San Marino, 24-28 May 1994*. Edited by Marmo Costantino. Turnhout: Brepols 1998. pp. 289-303
28. Aquinas on significant utterance: interjection, blasphemy, prayer. In *Aquinas's moral theory: essays in honor of Norman Kretzmann*. Edited by MacDonald Scott and Stump Eleonore. Ithaca: Cornell University Press 1998. pp. 207-234
 "Aquinas's interest in the moral significance of speech led him to modify the prevalent intellectualist approach which saw language as primarily a rational system intended to express truths and not modifiable either by the context or by a speaker's intentions and emotional states. First I lay out the standard thirteenth-century view adopted by Aquinas in his commentary on *De interpretatione*; then I consider the relation between animal noises and language, the role of the imagination, the effects of passion, slips of the tongue, and linguistic incontinence, and the place of appropriated language."
29. Antonius Rubius on Objective Being and Analogy: one of the routes from early Fourteenth-Century discussions to Descartes's *Third Meditation*. In *Meetings of the Minds. The relation between Medieval and Classical Modern European Philosophy*. Edited by Brown Stephen F. Turnhout: Brepols 1998. pp. 43-62
 "In this paper I shall use Rubius's tract on analogy to show how a rich medieval tradition survived into the seventeenth century and to shed some light on the problem of Descartes's sources for the notion of an idea's objective reality. I shall proceed as follows. First, I shall state the problem as it has been set out in recent secondary literature. Second, I shall trace the distinction between formal and objective concepts from the early fourteenth century to the early seventeenth century in the context of the discussion of analogical terms. Third, I shall examine the analogical use of terms as it was presented by Rubius. Fourth, I shall explain why a theory of language use and a theory of concepts came to be linked together. Finally, I shall discuss what Rubius had to say about formal and objective concepts, and I shall suggest a relationship between this account and Descartes's own attitude towards mental contents and simple natures."

30. Text-books: a case study - logic. In *The Cambridge History of the Book in Britain (vol. 3)*. Edited by Trapp J.B. and Hellenga Lotte. Cambridge: Cambridge University Press 1999. pp. 380-386
 "This book covers the years 1400 to 1557. In such a long period, we would expect great changes in the logic text-books used at Oxford and Cambridge. Indeed, there were great changes, but their timing is some what unexpected. If one considers just books written by Englishmen and copied or printed in England, then there is hardly any change at all between 1400 and 1530, the year in which the last surviving edition of the compilation text-book known as *Libellus Sophistarum* was printed. A period of fifteen years follows in which no surviving logic text was either written or printed, and then suddenly in 1545 we are confronted with the *Dialectica* of John Seton, a work which was to go through fourteen editions by the end of the sixteenth century, and which represents a completely different type of logic.(1) In what follows, I shall focus on the *fortuna* of just one type of logic text in use between 1400 and 1530, namely the treatises devoted to *obligationes*, or the rules prescribing what one was obliged to accept and reject in a certain kind of logical disputation. It is necessary first to consider the place of logic in the curriculum and the type of instruction which was offered, then to say something about fourteenth-century logicians and the *obligationes* texts used in the fifteenth century, and finally to examine the *Libelli Sophistarum* and other early printed texts in relation to fifteenth-century manuscript collections."

(1) A useful chronological list of logic books printed in England before 1620 is in Schmitt 1983b [*John Case and Aristotelianism in Renaissance England*, Kingston and Montreal] pp. 225-9. For English logic during the sixteenth century: Ashworth 1985b [*Introduction to Robert Sanderson. Logicae artis compendium*, Bologna], especially pp. XXIII-XXXIII; 1991; Giard 1985 [*La production logique de l'Angleterre au 16e siècle, Les Études philosophiques*, 3, 303-324]; Jardine 1974 [*The place of dialectic teaching in sixteenth century Cambridge, Studies in the Renaissance*, 21, .31-62]. No attention should be paid to Howell 1956 [*Logic and rhetoric in England, 1500-1700*, Princeton] whose account of developments in logic, particularly during the medieval period, is wildly inaccurate, and this vitiates his judgements about the texts described.

31. Domingo de Soto on *Obligationes*: His use of *Dubie positio*. In *Medieval and Renaissance Logic in Spain. Acts of the 12th European Symposium on Medieval Logic and Semantics*. Edited by Angelelli Ignacio and Perez-Ilzarbe. Hildesheim: Georg Olms 2000. pp. 291-307
 "Soto's *Opusculum obligationum* was published in 1529 as the last treatise in his *Summulae*. (1) I have chosen to discuss it in this paper both because it is one of the very last serious discussions of the medieval doctrine of *obligationes*, and because it sheds some light on the history of *dubie positio* as a type of obligational dispute. This is important, because *dubie positio* is one of the areas pertinent to medieval epistemic logic, and the material found in *obligationes* treatises has not yet been the subject of much investigation. (2) In what follows, I shall first discuss the nature of *dubie positio* and its relation to other types of obligational disputation. I shall then describe the rules which were used. Third, I shall take up a particular problem concerning apparently indubitable propositions, such as 'I exist'. Finally, I shall discuss a sophisma in which the response 'I am in doubt about it' seemed to cause problems for one of the standard obligational rules.

(1) Domingo de Soto, *Opusculum obligationum in Summulae* (Burgos, 1529), ff. cl ra-cliii vb; Domingo de Soto, *De obligationibus in Summulae* (Salamanca 1554-1555: reprinted Hildesheim, New York: Georg Olms, 1980), ff 156 ra-159 vb. The latter is a reproduction of the third edition which, as Dr. Angel d'Ors has shown, modifies the second edition in certain respects: see Angel d'Ors, "Las "Summulae" de Domingo de Soto", *Anuario Filosófico (Universidad de Navarra)* 16 (1983), p. 212. All my references are to the 1529 edition unless otherwise specified.

(2) For a good discussion of some other sources, see Ivan Boh, *Epistemic Logic in the Later Middle Ages*, (London and New York: Routledge, 1993). See also William Heytesbury, 'The Compounded and Divided Senses' (pp. 413-434), and "The Verbs 'Know' and 'Doubt'" [chapter 2 of the *Regulae*] (pp. 435-479) in Norman Kretzmann and Eleonore Stump, trans., *Logic and the Philosophy of Language*, vol. 1 of *The Cambridge Translations of Medieval Philosophical Texts*, (Cambridge: Cambridge University Press, 1988)."

32. L'equivocité, l'univocité et les noms propres. In *La tradition médiévale des catégories (XIIIe-XVe siècles). Actes du XIII Symposium européen de logique et de sémantique médiévales (Avignon, 6-10 juin 2000)*. Edited by Biard Joël and Rosier-Catach Irène. Louvain: Peeters Publishers 2003. pp. 127-140
33. Language and logic. In *Cambridge companion to Medieval philosophy*. Edited by McGrade Arthur Stephen. Cambridge: Cambridge University Press 2003. pp. 73-96
 "I survey the texts used and the developments from Augustine onwards, and discuss views of the purpose and nature of language and logic, emphasizing their cognitive orientation. I examine the basic semantic notion of signification, the distinction between conventional and natural language, and the notion of mental language. I discuss extended uses of language, especially paronymy and analogy, and theories of reference, especially supposition theory. Finally, I consider various types of paradox: "There is no truth" in proofs for the existence of God, the Liar paradox, and the paradoxes of strict implication as treated in theories of inference."
34. Singular terms and singular concepts: from Buridan to the early Sixteenth century. In *John Buridan and beyond. Topics in the Language Sciences 1300-1700*. Edited by Ebbesen Sten and Friedman Russell. Copenhagen: C. A. Reitzel 2004. pp. 121-151
 "This article considers medieval treatments of proper names and demonstrative phrases in relation to the question of when and how we are able to form singular concepts. The logical and grammatical background provided by the authoritative texts of Porphyry and Priscian is examined, but the main focus is on John Buridan and his successors at Paris, from John Dorp to Domingo de Soto. Buridan is linked to contemporary philosophers of language through his suggestion that, although the name 'Aristotle' is a genuine proper name only for those who have the appropriate singular concept caused by acquaintance with Aristotle, it can be properly treated as a singular term by subsequent users because of their beliefs about the original imposition of the name."
35. Singular terms and predication in some late Fifteenth and Sixteenth century Thomistic logicians. In *Medieval theories on assertive and non-assertive language*. Edited by Maierù Alfonso and Valente Luisa. Florence: Leo S. Olschki 2004. pp. 517-536
 Acts of the 14th European Symposium on Medieval Logic and Semantics. Rome, June 11-15, 2002.
36. "Ockham et la distinction entre les termes abstraits et concrets," *Philosophiques* 32: 427-434 (2005).
 "Quand j'ai lu l'ouvrage magistral de Claude Panaccio, je me suis rendu compte que j'aurais de la difficulté à en discuter, parce que je suis d'accord avec tout ce dit l'auteur, surtout en ce qui concerne les problèmes du langage. Je trouve en particulier décisif les arguments qu'il présente contre les thèses de Paul Spade. Ce dernier a argumenté, en se basant sur trois prémisses, qu'il n'y a pas de terme connotatif simple dans le langage mental. Premièrement, chaque terme connotatif a une définition nominale qui, en principe, ne contient que des termes absolus. Deuxièmement, un terme connotatif est synonyme de sa définition. Troisièmement, il n'y a pas de synonymie dans le langage mental. Il s'ensuit que, dans le langage mental, un terme connotatif sera remplacé par une séquence de termes absolus qui, selon Ockham, réfèrent aux substances et qualités individuelles d'une manière directe. En opposition à Spade, Panaccio a montré qu'il est impossible d'éliminer les concepts connotatifs simples du langage mental et que les termes connotatifs simples ne sont pas synonymes de leurs définitions nominales. Il est vrai que par ses analyses du langage Ockham voulait montrer que l'on pouvait parler du monde sans multiplier les entités, mais on peut atteindre cet objectif tout en admettant une certaine complexité au niveau des concepts simples. En outre, Panaccio a établi deux thèses importantes. D'abord, Ockham ne s'intéresse pas à la construction d'un langage mental idéal mais plutôt au fonctionnement idéal de notre esprit. En deuxième lieu, l'étude de ce fonctionnement idéal ne nous donne pas toutes les solutions aux problèmes de signification parce que, pour comprendre l'acception des termes, il faut connaître les intentions des impositors, ceux qui ont donné leur signification primordiale aux termes oraux. Selon Panaccio, Ockham présente une théorie externaliste de la signification du langage." p. 427
37. Logic teaching at the University of Prague around 1400 A. D. In *History of Universities. Vol. 21 (I)*. Edited by Feingold Mordechai. New York: Oxford University Press 2006. pp. 211-221
 Review of: *Logica modernorum in Prague about 1400. The Sophistria disputation 'Quoniam*

quatuor' (MS Cracow, Jagiellonian Library 686, ff. 1ra-79rb), with a partial reconstruction of Thomas of Cleves' *Logica* - Edition with an Introduction and Appendices by Egbert P. Bos, Leiden, Brill, 2004.

"This book is largely (45-432) an edition of a *Sophistria* text that represents logic teaching at the University of Prague around 1400 A.D. While the anonymous author shows few signs of intellectual distinction, both the topics chosen for discussion and the large number of direct references to other logicians make the work a valuable source for those interested in the undergraduate curriculum of the late middle ages. The editor, E.P. Bos, has done an excellent job of presenting the Latin text in as perspicuous a fashion as possible, and has provided the reader with an analysis (8-10) of the somewhat haphazard way in which the Prague master presented his sequences of arguments. However, in order to understand the text, or to glean from it anything about university teaching, one needs a good deal more than that. While Bos does provide some basic information about the logicians referred to (11-21), he tells the reader very little about Prague or its curriculum, and his brief list (28-32) of some of the views expressed in the text sheds little light. On page 28 he writes, 'I shall discuss these views in more detail later in the introduction', but unfortunately the promised amplification is never provided. Nor is it clear why some of the views were listed. For instance, the division of singular terms into three types (29-30), including the vague individual (*individuum vagum*), such as 'this human being'. is merely the standard interpretation, found in Albert the Great and many later commentators, of a remark by Porphyry in his *Isagoge*. In what follows, I shall provide some context for the *Sophistria* text, before attempting to resolve the issue of its nature and purpose."

38. "Metaphor and the logicians from Aristotle to Cajetan," *Vivarium* 45: 311-327 (2007).

"I examine the treatment of metaphor by medieval logicians and how it stemmed from their reception of classical texts in logic, grammar, and rhetoric. I consider the relation of the word 'metaphor' to the notions of *translatio* and *transumptio*, and show that it is not always synonymous with these. I also show that in the context of commentaries on the *Sophistical Refutations* metaphor was subsumed under equivocation. In turn, it was linked with the notion of analogy not so much in the Greek sense of a similarity between two proportions or relations as in the new medieval sense of being said *secundum prius et posterius*. Whether or not analogy could be reduced to metaphor, or the reverse, depended on the controversial issue of the number of acts of imposition needed to produce an equivocal term. A spectrum of views is canvassed, including those found in the logic commentaries of John Duns Scotus."

39. Developments in the Fifteenth and Sixteenth centuries. In *Mediaeval and Renaissance Logic*. Edited by Gabbay Dov and Woods John. Amsterdam: Elsevier 2008. pp. 609-644
Handbook of the history of logic: Vol. 2.

"To understand the significance of these developments for the logician, we have to consider three questions. First, how much of the medieval logic described in the previous chapters survived? Second, insofar as medieval logic survived, were there any interesting new developments in it? Third, does humanist logic offer an interesting alternative to medieval logic?

In Part One of this chapter I shall consider the first two questions in the context of a historical overview in which I trace developments in logic from the later middle ages thorough to 1606, the year in which the Jesuits of Coimbra published their great commentary on Aristotle's logical works, the *Commentarii Conimbricenses in Dialecticam Aristotelis*. I shall begin by considering the Aristotelian logical corpus, the six books of the *Organon*, and the production of commentaries on this work. I shall then examine the fate of the specifically medieval contributions to logic. Finally, I shall discuss the textbook tradition, and the ways in which textbooks changed and developed during the sixteenth century. I shall argue that the medieval tradition in logic co-existed for some time with the new humanism, that sixteenth century is dominated by Aristotelianism, and that what emerged at the end of the sixteenth century was not so much a humanist logic as a simplified Aristotelian logic.

In Part Two of this chapter, I shall ask whether the claims made about humanist logic and its novel contributions to probabilistic and informal logic have any foundation. I shall argue that insofar as there is any principled discussion of such matters, it is to be found among writers in the Aristotelian tradition." p. 610

40. *Les théories de l'analogie du XIIIe au XVIe siècle*. Paris: Vrin 2008.
Conférences Pierre Abélard, Université de Paris-IV Sorbonne (2004).
"Afin de donner au lecteur une idée plus précise du plan de mon exposé, je dirai que dans les trois premiers chapitres, j'essaierai d'expliquer le trajet qui mène des Catégories et des Réfutations sophistiquées d'Aristote à la tripartition de l'analogie telle que Burley la présente. Dans le premier chapitre, je donnerai un bref historique de la réception des textes et de l'apparition de l'analogie d'attribution au XII^e siècle. Je parlerai aussi des antécédents de la notion dans les textes des théologiens de la fin du XII^e siècle et du début du XIII^e siècle. Dans le chapitre il, je commencerai par un bref aperçu de la pensée de Thomas d'Aquin au sujet de l'analogie en général, avant d'examiner l'analogie de proportionnalité plus en détail. Dans le chapitre in, nous serons de nouveau avec Gauthier Burley et sa doctrine des concepts analogiques. Pour terminer, je consacrerai le dernier chapitre à deux problèmes concernant le langage parlé ou écrit : quand faut-il désambiguïser les propositions en faisant des distinctions, et quel est le rôle de la métaphore dans les discussions des théologiens et logiciens du Moyen Âge ?
Prenons comme point de départ la question de savoir pourquoi les auteurs du Moyen Âge ont cru nécessaire de développer une théorie de l'analogie sémantique. Afin de trouver une réponse, nous devons répondre à trois questions préliminaires : 1) Quelles sont les théories métaphysiques et théologiques qui ont produit l'analogie métaphysique? 2) Quelle est la théorie du langage qui prédominait? (3) Quels sont les textes canoniques qui donnaient les instruments que l'on pouvait utiliser pour résoudre le problème des rapports entre réalité et langage? Dans ce qui suit, j'esquisserai une réponse aux trois questions, avant de parler plus en détail des textes logiques. Ensuite je retournerai aux théologiens afin de parler d'une solution au problème des noms divins qui semble contenir les racines d'une théorie de l'analogie. Pour terminer ce chapitre, j'expliquerai comment l'arrivée des nouvelles traductions d'Aristote et des écrits arabes a mené à la théorie de l'analogie telle qu'on la retrouve chez Thomas d'Aquin. Évidemment je ne serai pas en mesure de donner les réponses avec toute la complexité qui s'impose, surtout à la première question, mais ces quelques remarques, même superficielles, pourront déjà nous indiquer la direction à suivre." pp. 15-16.
41. Le syllogisme topique au XVI^e siècle: Nifo, Melanchthon et Fonseca. In *Les lieux de l'argumentation. Histoire du syllogisme topique d'Aristote à Leibniz*. Edited by Biard Joël and Mariani Zini Fosca. Turnhout: Brepols 2009. pp. 409-423
"Examiner l'argumentation topique, les règles de validité du syllogisme topique, les rapports entre l'analytique, la dialectique et la rhétorique soulève deux problèmes. Tout d'abord, il y a une difficulté de vocabulaire. Dans son *Introductio in dialecticam Aristotelis* de 1560, le jésuite Francisco de Toledo parle du *sylogismus dialecticus seu topicus*, mais en général les logiciens des XV^e et XVI^e siècles parlaient du syllogisme dialectique et non du syllogisme topique (1). Ensuite, il y a une divergence entre d'un côté l'argumentation, le syllogisme, et les règles de validité auxquels s'intéressent les logiciens, d'un autre côté les arguments informels, les techniques de la persuasion et les stratégies non-déductives auxquels s'intéressent les rhétoriciens (2). Afin d'étudier les rapports entre ces deux groupes, et la place des arguments informels dans la logique, s'il y en a, nous devons aborder la notion de forme logique, non par le biais d'un examen du syllogisme dialectique, mais par le biais d'un examen des notions de conséquence, d'argumentation, et de syllogisme en général. Nous allons découvrir que, pour comprendre les rapports entre la logique et la rhétorique, l'enthymème est beaucoup plus important que le syllogisme dialectique.
Les auteurs de petits manuels humanistes et ramistes ne nous offrent pas de discussion approfondie et détaillée de ces notions. Seuls les aristotéliens s'en occupaient, et pour cette raison, nous allons examiner trois auteurs qui étaient certes influencés par l'humanisme, mais qui travaillaient dans un cadre aristotélien enrichi par la logique médiévale. L'italien Agostino Nifo (ca. 1470-1538) a publié sa *Dialectica ludicra* en 1520 (3). Il connaissait très bien la logique médiévale, mais il connaissait aussi bien les commentateurs grecs, et je ferai référence à ses propres commentaires sur les *Premiers Analytiques* et sur les *Topiques* d'Aristote (4). L'allemand Philippe Melanchthon (1497-1560) a publié son premier manuel de logique, *Compendiaria dialectices ratio* en 1520, et son dernier, *Erotemata dialectices* en 1547 (5). Il manifeste l'influence de l'humanisme par ses exemples et ses simplifications. Le jésuite portugais Pedro da Fonseca (1528-1599) a publié ses *Institutiones*

dialecticae en 1564 (6). Chez lui aussi l'influence humaniste est manifeste, surtout par ses références aux commentateurs grecs et son vocabulaire plus classique que médiéval.

Mon exposé se divisera en deux moments. À titre d'introduction, nous examinerons les trois notions clés de conséquence, d'argumentation, et de syllogisme. Ensuite, nous examinerons les textes de Nifo, Melanchthon et Fonseca à la lumière de ces trois notions.(7)" (pp. 409-410)

(1) FRANCISCO DE TOLEDO [FRANCISCUS TOLETUS], *Introductio in dialecticam Aristotelis*, dans *Opera omnia philosophica I-III*, Cologne 1615-1616 ; réimpr. Hildesheim, Georg Olms, 1985, p. 74b. Dans une édition de JEAN VERSOR [JOHANNES VERSOR], Petrus Hispanus. *Summulae logicales cum Versorii Parisiensis clarissima expositione*, Venise, 1572, réimpr. Hildesheim, New York, Georg Olms, 1981, f° 138 v, on trouve le titre "De syllogismo Topico seu probabili", mais dans le texte Versor parle du syllogisme dialectique. Voir aussi ROBERT SANDERSON, *Logicae artis Compendium*, ed. E. J. Ashworth, Bologna, Editrice CLUEB, 1985, p. 179: "Syllogismus Topicus, qui Dialecticus stricto, est qui ex probabilibus vel quasi probabilibus parit probabilem opinionem conclusionis". Pour deux sources médiévales, voir GILLES DE ROME [Aegidius ROMANUS], *Super libros Posteriorum Analyticorum*, Venise, 1488; réimpr. Frankfurt, Minerva G.M.B.H., 1967, sign. a 5rb : "syllogismus topicus [...] non est necessarius, sed est ut in pluribus"; et GUILLAUME D'OCKHAM, *Summa logicae*, ed. P. Boehner, G. Gal et S. Brown, St. Bonaventure, N.Y., St. Bonaventure University, 1974, p. 359: "Syllogismus topicus est syllogismus ex probabilibus".

(2) Pour plus de détails, voir E. Jennifer ASHWORTH, "Developments in the Fifteenth and Sixteenth Centuries", in D. M. GABBAY & J. WOODS (eds.), *Handbook of the History of Logic 2. Mediaeval and Renaissance Logic*, Amsterdam-Boston, Elsevier, 2008, p. 609-643.

(3) AGOSTINO NIFO [AUGUSTINUS NIPHUS], *Dialectica ludicra tyrunculis atque veteranis utilissima peripatheticis consona : iunioribus sophisticanribus contraria*, Venetiis, 1521.

(4) AGOSTINO NIFO [AUGUSTINUS NIPHUS], *Super libros Priorum Aristotelis*, Venetiis, 1554; et AGOSTINO NIFO [AUGUSTINUS NIPHUS], *Commentaria in octo libros Topicorum Aristotelis*, Parisiis, 1542.

(5) PHILIPPE MELANCHTHON, *Compendiaria dialectices ratio*, dans *Opera. Corpus reformatorum XX*, Brunsvigae, 1854; réimpr. New York et Frankfurt am Main, 1963; PHILIPPE MELANCHTHON, *Erotemata dialectices*, dans *Opera. Corpus reformatorum XIII*, Halis Saxonum, 1846; réimpr. New York et Frankfurt am Main, 1963.

(6) PEDRA DA FONSECA [PETRUS FONSECA], *Instituições dialécticas. Institutionum dialecticarum libri octo*, ed. J. Ferreira Gomes, Universidade de Coimbra, 1964.

(7) Pour quelques textes, voir l'annexe. [pp. 424-430]

42. "The problem of religious language: What can we learn from twelfth-century discussions?," *Paradigm. Rivista di Critica Filosofica* 27: 141-152 (2009).

"This paper discusses a recent book by Luisa Valente, *Logique et théologie: Les écoles parisiennes entre 1150 et 1220*, in which she gives a rich account of how twelfth and early thirteenth-century Parisian theologians attempted to solve the problems of religious language by appeal to the notions of propriety and translatio. Words had a proper signification when used in accordance with their original meaning, whereas translatio involved a semantic shift from the proper sense to a new extended sense. However, words used in this way were equivocal, and towards the end of the period theologians tried to save the univocity of at least some of the words we apply to both God and creatures. Their efforts form the background to the new thirteenth-century theory of analogy, a theory to which some contemporary philosophers of religion have returned."

43. Terminist logic. In *The Cambridge History of Medieval Philosophy. Vol I*. Edited by Pasnau Robert and Dyke Christina van. Cambridge: Cambridge University Press 2010. pp. 146-158
"Terminist logic is a specifically medieval development.(1) It is named from its focus on terms as the basic unit of logical analysis, and so it includes both supposition theory, together with its ramifications,(2) and the treatment of syncategorematic terms. It also includes other areas of investigation not directly linked with Aristotelian texts, notably obligations, consequences, and insolubles (see Chapters to, 13, and 14).

Logic was at the heart of the arts curriculum, for it provided the techniques of analysis and much of the vocabulary found in philosophical, scientific, and theological writing. Moreover, it trained

students for participation in the disputations that were a central feature of medieval instruction, and whose structure, with arguments for and against a thesis, followed by a resolution, is reflected in many written works. This practical application affected the way in which logic developed. While medieval thinkers had a clear idea of argumentation as involving formal structures, they were not interested in the development of formal systems, and they did not see logic as in any way akin to mathematics.

Logic involved the study of natural language, albeit a natural language (Latin) that was often regimented to make formal points, and it had a straightforwardly cognitive orientation. The purpose of logic was to separate the true from the false by means of argument, and to lead from known premises to a previously unknown conclusion. In this process, the avoidance of error was crucial, so there was a heavy emphasis on the making of distinctions and on the detection of fallacies. The procedures involved often have the appearance of being ad hoc, and modern attempts to draw precise parallels between medieval theories as a whole and the results of contemporary symbolic logic are generally doomed to failure, even though there are many fruitful partial correlations. The core of the logic curriculum was provided by the works of Aristotle with supplements from Boethius, Porphyry, and the anonymous author of the *Liber sex principiorum* (about the last six categories), once attributed to Gilbert of Poitiers. The *logica vetus*, or Old Logic, included Porphyry's *Isagoge*, Aristotle's *Categories* and *De interpretatione*, and the *Liber sex principiorum*. During the twelfth century the *logica nova*, or New Logic, was rediscovered. It included the rest of the Organon, namely Aristotle's *Topics*, *Sophistical Refutations*, *Prior Analytics* and *Posterior Analytics*. Boethius's discussion of Topics, or ways of finding material for arguments, was also part of the curriculum, though in the fourteenth century his *De differentiis topicis* was largely replaced by the account of Topics given by Peter of Spain in his *Tractatus*. Together these works provided a basis for the study of types of predication, the analysis of simple categorical propositions and their relations of inference and equivalence, the analysis of modal propositions, categorical and modal syllogisms, fallacies, dialectical Topics, and scientific reasoning as captured in the demonstrative syllogism. The texts were lectured on and were the subject of detailed commentaries. Nonetheless, a need was felt for simplified introductions to the material and for the discussion of issues that were at best only hinted at by Aristotle." (pp. 146-147).

(1) Most of the literature dealing with terminist logic is in the form of articles and book chapters. Two bibliographical guides are E. J. Ashworth, *The Tradition of Medieval Logic and Speculative Grammar from Anselm to the End of the Seventeenth Century. A Bibliography from 1836 Onwards* (Toronto: Pontifical Institute of Mediaeval Studies, 1978), and Fabienne Pironet, *The Tradition of Medieval Logic and Speculative Grammar from Anselm to the End of the Seventeenth Century. A Bibliography* (1977-1994) (Turnhout: Brepols, 1997). The classic source of material is L. M. de Rijk, *Logica Modernorum A Contribution to the History of Early Terminist Logic* (Assen: Van Gorcum, 1962-7) vol. I: *On Twelfth-Century Theories of Fallacy*, and vol. II: *The Origin and Early Development of the Theory of Supposition*. Translations of various texts are found in N. Kretzmann and E. Stump (eds.) : *Cambridge Translations of Medieval Philosophical Texts*, vol. I: *Logic and the Philosophy of Language* (Cambridge: Cambridge University Press, 1988). Useful discussions are provided by P. Osmund Lewry, "Grammar, Logic and Rhetoric 1220-1320," in J. Catto, (ed.) *The History of University of Oxford*, vol. I: *The Early Oxford Schools* (Oxford: Clarendon Press: 1984) 401-33, and by N. Kretzmann et al. (eds.) *The Cambridge History of Later Medieval Philosophy: From the Rediscovery of Aristotle to the Disintegration of Scholasticism. 1100-1600* (Cambridge: Cambridge University Press, 1982).

(2) Not all of these ramifications will be discussed below. I shall omit the discussions of non-referring terms and of relations.

44. The Scope of Logic: Soto and Fonseca on Dialectic and Informal Arguments. In *Methods and Methodologies. Aristotelian Logic East and West, 500-1500*. Edited by Cameron Margaret and Marenbon John. Leiden: Brill 2011. pp. 127-147

BRIEF WRITINGS

Two articles in *Handbook of Ontology and Metaphysics* edited by H. Burkhardt and B. Smith (Munich: Philosophia Verlag, 1991):

- Joachim Jungius,
- Post-Medieval Logic.

Seven articles in *The Cambridge Dictionary of Philosophy*, edited by Robert Audi (Cambridge University Press, 1995), Second edition, 1999:

- Giordano Bruno,
- Tommaso Campanella,
- Marsilio Ficino,
- Pedro da Fonseca,
- Jean Gerson,
- Paracelsus,
- Giovanni Pico della Mirandola.

Nine articles in the *Routledge Encyclopedia of Philosophy*, (edited by Edward Craig) London & New York: Routledge 1998:

- Giordano Bruno,
- Language,
- Renaissance Philosophy of,
- Lipsius, Justus (1547-1606),
- Logic, Medieval,
- Logic, Renaissance,
- Paracelsus (Philippus Aureolus Theophrastus Bombastus von Hohenheim) (1493-1541),
- Patrizi da Cherso, Francesco (1529-1597),
- Paul of Venice (1369/72-1429),
- Renaissance Philosophy.

PUBLICATIONS AVAILABLE ON LINE

"Medieval Theories of Analogy", *The Stanford Encyclopedia of Philosophy (Fall 2011 Edition)*, Edward N. Zalta (ed.)

"Medieval Theories of Singular Terms", *The Stanford Encyclopedia of Philosophy (Fall 2011 Edition)*, Edward N. Zalta (ed.)

Nine articles published in the *Notre Dame Journal of Formal Logic* (PDF format) available at Project Euclid:

- Propositional logic in the Sixteenth and early Seventeenth centuries (1968)
- Petrus Fonseca and material implication (1968)
- Some notes on syllogistic in the Sixteenth and Seventeenth centuries (1970)
- The treatment of semantic paradoxes from 1400 to 1700 (1972)
- Strict and material implication in the early Sixteenth century (1972)
- Andreas Kesler and the later theory of Consequence (1973)
- The theory of consequences in the late Fifteenth and early Sixteenth centuries (1973)
- An early Fifteenth century discussion of infinite sets (1977)
- Multiple quantification and the use of special quantifiers in early Sixteenth century logic (1978)

EXTERNAL LINKS

On early-modern Scholastics see the excellent site [SCHOLASTICON](#) by Jacob Schmutz (in French).

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