

[History of Logic from Aristotle to Gödel \(www.historyoflogic.com\)](http://www.historyoflogic.com)

by Raul Corazzon | e-mail: rc@ontology.co

Bibliography of the Medieval Theories of Supposition: Third part

Contents of this Section

This part of the section [Medieval Logic](#) includes the following pages:

Medieval Logic

[Medieval Logic: A General Overview](#)

General Bibliography on Medieval Logic

[Studies in English: A - J](#)

[Studies in English: K - Z](#)

[Studies in French, Italian and German](#)

[List of the Contents of the European Symposia on Medieval Logic and Semantics](#)

Boethius' Contribution to the Development of Medieval Logic

[Boethius logic as a discourse on Being](#)

[The Philosophical Works of Boethius. Editions and English Translations](#)

[Bibliography on Boethius' logical works and Commentaries \(A-Ebb\)](#)

[Bibliography on Boethius' logical works and Commentaries \(Eco-Ree\)](#)

[Bibliography on Boethius' logical works and Commentaries \(Shi-Z\)](#)

Latin Logic until the Eleventh Century

Pages under construction:

Selected Bibliography on Latin Logic until the Eleventh Century

The Birth of the Liberal Arts: the *Trivium* (Grammar, Dialectic, Rhetoric)

Logic and Grammar in the Twelfth Century

Selected Bibliography on the Twelfth Century

The Development of Logic in the Thirteenth Century

The Development of Logic in the Fourteenth Century

Selected Bibliography on the Thirteenth and Fourteenth Centuries

Medieval Theories of Supposition

Medieval Theories of Supposition

Bibliography on the Medieval Theories of Supposition:

[A - Din](#)

[Dut - Kay](#)

[Kli - Rea \(Current page\)](#)

[Ric - Z](#)

Bibliography of studies in other languages:

[Studies in French, Italian, Spanish, Portuguese and German](#)

[On the website "Bibliographia. Annotate bibliographies"](#)

Bibliography of the Medieval Theories of Mental Language

Bibliography of studies in English:

[A - Kel](#)

Kin - O'Ca

Pan - Z

Bibliography of studies in other languages:

French, Italian, German, Portuguese, Spanish, Latin

Annotated Bibliographies of Historians of Logic

Bibliography

Studies in English Kli - Rea

1. Klima, Gyula. 1995. "Existence and Reference in Mediaeval Logic." In *New Essays in Free Logic: In Honour of Karel Lambert*, edited by Morscher, Edgar and Hieke, Alexander, 197-226. Dordrecht: Kluwer.
 "'The expression 'free logic' is an abbreviation for the phrase 'free of existence assumptions with respect to its terms, general and singular' .
 Classical quantification theory is not a free logic in this sense, since its standard formulations commonly assume that every singular term in every model is assigned a referent, an element of the universe of discourse. Indeed, since singular terms include not only singular constants, but also variables², standard quantification theory may be regarded as involving even the assumption of the existence of the values of its variables, in accordance with Quine's famous dictum: "to be is to be the value of a variable"⁽³⁾." (p. 197)
 "In this paper I am going to give a brief, primarily systematic (as opposed to primarily historical) account of how it was possible for medieval logicians to maintain Aristotle's theory of the four categoricals and to dispense with these existential assumptions in the framework of their theory of reference, the *theory of supposition*. Besides the informal account I will also indicate how these informal ideas can be put to work in a formal semantic systems. By this I hope to show that the ideas of medieval logicians can provide us with valuable insights even in the apparently modern field of free logic." (p. 198, a note omitted)
 (1) Lambert (1983), p. 104 (emphasis in the original). Cf. Lambert (1991).
 (2) See Lambert (1983), p. 105, n. 9.
 (3) Quine (1953), p. 15. Concerning the real import of Quine's dictum and its relationship to free logics see Lambert (1983), pp. 110-112.
 References
 Lambert, Karel (1983): *Meinong and the Principle of Independence*, Cambridge: Cambridge University Press.
 Lambert, Karel (1991): "The Nature of Free Logic", in Karel Lambert, ed., *Philosophical Applications of Free Logic*, Oxford: Oxford University Press, 3-13.
 Quine, Willard Van Orman (1953), "On What There Is", in Willard Van Orman Quine, *From A Logical Point of View*, Cambridge/MA: Harvard University Press, 1-19.
2. Kneale, William Calvert, and Kneale, Martha. 1962. *The Development of Logic*. Oxford: Clarendon Press.
 Reprinted 1975 with corrections.

Chapter IV. *Roman and Medieval Logic*, § 4. *Proprietates Terminorum* pp 246-274. "The theory of the *proprietates terminorum*, which is very prominent in later medieval logic, took shape in the second half of the twelfth century, and it seems to have grown out of the discussions of Abelard and his contemporaries about the structure of categorical propositions. Since, however, it is not yet possible to trace the details of this development, we shall begin our consideration with the earliest printed version of the theory, namely that of William of Shyreswood in his *Introductiones in Logicam*. From the manner in which this is presented and from its occasional references to other views we may safely conclude that the general doctrine was already well known when the author wrote." (p. 246)

(...)

"As its name implies, the theory of the *proprietates terminorum* is intended to provide an account of the different roles that words or phrases can have when they appear as terms in propositions.

But it is assumed in this theory that a word or phrase which is capable of serving as a term must first have significatio in the sense of conveying or presenting, as William says, a form." (p. 247)

3. Kneepkens, Corneille Henry. 1987. "*Suppositio* and *Supponere* in 12th Century Grammar." In *Gilbert de Poitiers et ses contemporains. Aux origines de la "Logica Modernorum"*, edited by Jolivet, Jean and Libera, Alain de, 325-351. Napoli: Bibliopolis.
4. Knuuttila, Simo. 2013. "Supposition and Predication in Medieval Trinitarian Logic." *Vivarium* no. 51:260-274.
Abstract: "Many fourteenth-century logicians took affirmative propositions to maintain that the subject term and the predicate term stand or supposit for the same. This is called the identity theory of predication by historians and *praedicatio identica* (or one form of *praedicatio identica*) by Paul of Venice and others. The identity theory of predication was an important part of early fourteenth-century Trinitarian discussions as well, but what was called *praedicatio identica* by Duns Scotus and his followers in this context was something different. After some remarks on Scotus's view and its background, I shall analyse Adam Wodeham's explanation of Scotus's *praedicatio identica* and how he understood the assumptions pertaining to supposition in the Scotist approach. I also describe Wodeham's own solution to Trinitarian sophisms, which did not deviate from the identity theory of predication."
5. Libera, Alain de. 1982. "The Oxford and Paris Traditions in Logic." In *The Cambridge History of Later Medieval Philosophy*, edited by Kretzmann, Norman, Kenny, Anthony Patrick and Pinborg, Jan, 174-187. Cambridge: Cambridge University Press.
"Terminist logic grew to maturity in the period 1175-1250, a period that was also crucially important in the development of the universities of Paris and of Oxford. Scholars have recently focused their attention on divergences in the early development of the logical and semantic theories that constitute terminist logic, divergences suggesting that one cluster of doctrines is to be associated with Oxford, another with Paris. In view of the very marked differences between British and continental logic in the early fourteenth century, it seems important to investigate whether such differences can be traced backwards into the thirteenth and late twelfth centuries. As I hope to show, such divergences do in fact exist even if they are not so great as to make the traditions of Oxford and of Paris entirely independent. Although by the turn of the thirteenth century terminist logic was acknowledged by all logicians as a common frame of reference, various interpretations of important issues were still being put forward. If divergences between the traditions of Oxford and Paris are to be established, the evidence is likely to be found in the discussions concerning the various properties of terms, such as supposition, appellation, ampliatio, and restriction." (p. 174, a note omitted)

6. Loux, Michael J. 1979. "*Significatio* and *Suppositio*. Reflections on Ockham's Semantics." *The New Scholasticism* no. 53:407-427.
Abstract: "In this paper, I examine Ockham's views on "*significatio*" and "*suppositio*" in the light of pre-ockhamistic terminist treatments of these notions. What I try to show is that Ockham's views here are not simply nominalistic variants on traditional terminist themes. While conceding that Ockham's nominalism is central in his theory of terms, i try to locate the "semantical" underpinnings of his views on "*significatio*" and "*suppositio*". What I suggest is that Ockham's account deviates from those of his predecessors in taking the notion of standard reference or personal "*suppositio*" as conceptually prior to the notion of meaning or "*significatio*", and I conclude that perhaps a rejection of the atomistic semantics of his predecessors motivates this revision of the traditional theory of terms."
7. Malcolm, John. 1977. "On the Disappearance of *Copulatio* as a Property of a Term." *Franciscan Studies* no. 37:120-138.
"Perhaps the most original contribution of the medieval logicians was the development of the doctrine of the properties of terms. William of Sherwood lists four such properties: *significatio*, *suppositio*, *copulatio* and *appellatio*. (1) The other two leading 13th century "terminists," Peter of Spain (2) and Lambert of Auxerre, (3) include these four in their discussions. By the 14th century, however, *copulatio* is gone from the list. It does not appear in Ockham and is used by Burleigh, *De Puritate* (4) p. 54, to signify the uniting or connecting of a predicate with a subject. But this is to describe the function of the copula which joins (the subject and predicate) terms and hence *copulatio* is no longer considered as a property of a term. I am going to present an hypothesis to account for the disappearance of *copulatio*. I shall maintain, in short, that when *suppositio* and *copulatio* were first introduced there was a distinctive role for *copulatio* to play, but they underwent a parallel change in meaning which rendered *copulatio* superfluous. To try to substantiate this claim I shall offer a four-stage development. The first stage, which predates the actual use of the expression "properties of terms," concerns *significatio* and *appellatio*. The second and third stages reflect the introduction and transformation, respectively, of the *suppositio-copulatio* distinction. The fourth stage is *post-copulatio*." (p. 120)
(1) William of Sherwood, *Introductiones in Logicam*, ed. M. Grabmann. Sitzungsberichte der Bayerischen Akademie der Wissenschaften, Phil. Hist. Abteilung, Jahrgang 1937, Heft 10 (Munich, 1937), p. 74.
(2) Peter of Spain, *Summulae Logicales*, ed. De Rijk (Assen, 1972)-
(3) Lambert of Auxerre, *Logica (Summa Lamberti)*, ed. Alessio (Firenze, 1971).
(4) Burleigh, Walter, *De Puritate Artis Logicae*, ed. Boehner (St. Bonaventure, New York, 1955).
8. Markosian, Ned. 1988. "On Ockham's Supposition Theory and Karger's Rule of Inference." *Franciscan Studies* no. 48:40-52.
"Abstract: "Elizabeth Karger has suggested an interpretation of Ockham's theory of the modes of common personal supposition ("TM") according to which the purpose of TM is to provide certain distinctions that Ockham will use in formulating a unified theory of immediate inference among certain kinds of sentences. Karger presents a single, powerful rule of inference that incorporates TM distinctions and that is meant to codify Ockham's theory of immediate inference. I raise an objection to Karger's rule, thereby calling into doubt the interpretation of Ockham that is based on attributing that rule to him."
9. Marmo, Costantino. 2013. "Scotus on Supposition." *Vivarium* no. 51:233-259.
Abstract: "In his commentaries on Porphyry and Aristotle's *Organon* (*Categories*, *Peri hermeneias*, *Sophistici elenchi*, and *Topics*) and in his other works, John Duns Scotus shows his knowledge of both the modistic theory of language and the theory of supposition. My contribution sheds some light on the relationship between Scotus' philosophy of language and the theory of supposition, collecting and commenting on all the passages in which he makes use of it or discusses some

theoretical points. I take into special account the almost unknown commentary on the *Topics*, which is preserved in a Vatican manuscript."

10. Matthews, Gareth. 1964. "Ockham's Supposition Theory and Modern Logic." *The Philosophical Review* no. 73:91-99.
Reprinted in *Inquiries into Medieval Philosophy: A Collection in Honor of Francis P. Clarke*, edited by J. F. Ross, Westport: Greenwood, 1971, pp. 131-140.
"Reading Philotheus Boehner on medieval logic,² one may get the idea that medieval supposition theory is, in part, a kind of quantification theory. Up to a point this is a helpful idea to have. But one may also get the idea from reading Father Boehner that the main difference between modern quantification theory and the relevant portion of medieval supposition theory is a difference over the interpretation of universal propositions. This last idea, it seems to me, is quite wrong-headed. It needs to be done away with completely if one is to be at all clear about how medieval supposition theory is related to modern mathematical logic. I wish to do my part in doing away with it.
In his discussion of supposition theory Father Boehner has something to say about Peter of Spain, William of Ockham, and Walter Burleigh. But in comparing the medieval theory with modern logic Boehner seems most interested in the logic of Ockham. So, since I can also make my own points with reference to Ockham alone, I shall take Ockham's *Summa Logicae* as the medieval source for the remarks to follow." (p. 131 of the reprint)
(...)
"I conclude that the idea that Ockham and modern logicians agree on the interpretation of particular propositions but differ on the interpretation of universal propositions is both wrong and wrong-headed. It is wrong because in fact they differ on both counts. It is wrong-headed because, once one realizes that Ockham quantifies over terms whereas modern logicians quantify over variables, one can see that Ockham and the moderns are not free to agree on the interpretation of any categorical propositions —whether A, E, I, or O." (p. 140)
11. ———. 1973. "Suppositio and Quantification in Ockham." *Noûs* no. 7:13-24.
"We have been able to dispose of the idea that the doctrine of descent in Ockham constitutes a rudimentary quantification theory without returning to the issue of equivalence. Let me say in conclusion that there are ways of re-raising the issue of equivalence so as to make it worth discussing, even though the quantification issue is now settled. The doctrine of descent forms part of the account Ockham gives of the meaning that general terms have when they are used in propositions to stand for (*supponere pro*) individuals falling under them. These are, perforce, nonempty terms; in the usual case they will be polyreferential. (Ockham has to tell a special story about the meaning of empty terms—see, for example, 2.14.) We can now ask whether Ockham considers the expansion got by descending on a polyreferential term in an A, E, I, or O proposition equivalent to the original. Counting in favor of saying 'No' to this question are chiefly (a) the fact that Ockham never claims equivalence, and (b) the obviousness of the nonequivalence of an O proposition like (4) and its predicate term expansion (in this case, (4b)). Counting in favor of saying 'Yes' is the fact that it is far easier to see how one might seek to elucidate the meaning of a general term in a given proposition by producing an equivalent proposition than by producing merely an entailed proposition. To decide this question one would need to get clear on the central issue of what Ockham thinks it is for a general term in such-and-such a proposition to stand (determinately, confusedly, or what have you) for individuals falling under it. I should like to have tackled that issue in this paper. But I have found I had enough to do clearing aside the idea that the doctrine of descent in Ockham is a rudimentary theory of quantification." (pp. 22-23)
(4) Suppose we say that
(a) 'unicorn' is an *empty term*, on the grounds that there is no presently existing individual falling under it; that
(b) 'god' is a *monoreferential term*, on the grounds that there is one and only one presently existing individual falling under it, and that

(c) 'man' is a *polyreferential* term, on the grounds that there are two or more presently existing individuals falling under it. (p.21)

References

[2] Geach, Peter Thomas, *Reference and Generality* (Ithaca: 1962).

12. ———. 1984. "A Note on Ockham's Theory of Modes of Common Personal Supposition." *Franciscan Studies* no. 44:81-96.
 "The last half of this century has seen an amazingly energetic and resourceful effort to understand Ockham's supposition theory. The result is that we are much more sophisticated in our approach to the subject today than anybody could have been before. Yet, despite the fact that we now have, not only critical editions and translations of Ockham's logic texts, but also elaborately formal reconstructions of the theory of supposition itself, there is no clear consensus about what Ockham was up to in presenting his theory of the Modes of Common Personal Supposition (hereafter, following Alfred Freddoso,(2) "MCPS")." (p. 81, a note omitted)
 "In his long introduction to Part II of Ockham's *Summa Logicae*, Alfred Freddoso suggests, somewhat off-handedly, that Ockham's theory of MCPS may be "part of his theory of inference." (p. 28) I once heard a similar suggestion from Calvin Normore. In the remainder of this note I want to begin to fill out the Freddoso-Normore suggestion. As we shall see, my way of beginning to fill it out provides an additional reason for denying the equivalence claim and hence for denying that Ockham's theory of MCPS is meant to be a quantification theory." (p. 84)
 (2) Alfred J. Freddoso and Henry Schuurman, trans., *Ockham's Theory of Propositions: Part II of Summa Logicae* (Notre Dame: 1980), "Introduction" by Alfred J. Freddoso.
13. ———. 1997. "Two Theories of Supposition?" *Topoi. An International Review of Philosophy* no. 16:35-40.
 Abstract: "In a recent paper [*] Paul Vincent Spade suggests that, although the medieval doctrine of the modes of personal supposition originally had something to do with the rest of the theory of supposition, it became, by the 14th century, an unrelated theory with no question to answer. By contrast, I argue that the theory of the modes of personal supposition was meant to provide a way of making understandable the idea that a general term in a categorical proposition can be used to refer to the individual things that fall under it.
 Once that idea had been made acceptable, truth conditions for the various forms of categorical proposition could be given without any specific appeal to the ideas of descent and ascent in terms of which the modes had been defined."
 [*] P. V. Spade, "The Logic of the Categorical: The Medieval Theory of Descent and Ascent", in Norman Kretzmann, ed., *Meaning and Inference in Medieval Philosophy*, Dordrecht: Kluwer, 1988, 187-22.,
14. Meier-Oeser, Stephan. 2000. "The meaning of 'significatio' in Scholastic logic." In *Signs and Signification. Vol. II*, edited by Gill, Harjeet Singh and Manetti, Giovanni, 89-107. New Delhi: Bahri Publications.
 "Studies in scholastic theories of signification usually focus on what Roger Bacon (*De signis*: 132) has called the "difficilis dubitatio utrum vox significet species apud animam an res" (the difficult question, whether spoken words signify mental concepts or things), or, in Scotus' words (*Ordinatio*, vol. 6: 97), the "magna altercatio... de voce, utrum sit signum rei vel conceptus" (the great altercation, whether the spoken word is a sign of the thing or of the concept). But as interesting and important this question may be, it covers just one aspect of the numerous and complex problems linked with the scholastic concept of 'significatio'. For since scholastic terminology generally made a clear cut distinction between 'significatio' and 'significatum', the two questions, what words signify (or what their significatum is), and what signification itself may be, lead in different directions. By leaving aside the former question, I shall concentrate on the latter.
 The question about meaning or signification is deemed, especially since the 'linguistic turn', to be one of the most fundamental questions, philosophy has to

account for. Of course, it is by no means a recent question. And yet it is, in a specific sense, not as old as one might suggest. It may be controversial, whether the problem of meaning ('Bedeutungsproblem'), as Weisbergerer (1930:17f) has stated, did not matter in classical Greek philosophy, or, as Cassirer (1925: 86) has claimed, already for Plato made up the "starting point of philosophy", whether Aristotle in the first chapter of his *Peri hermeneias* had offered "not even a sketch of a general theory of meaning" (Kretzmann 1974:5), or at least the "rudiments of a semantic theory" (Weidemann 1982). What has to be noticed, is, that the very term and concept of signification had not yet become a problem in classical Greek philosophy -- and could not even have been as such, due to the simple fact, that a concept of meaning or signification in a terminological sense did not exist. Indeed, the word or linguistic sign (*semainon*) was said to signify or mean something (*semainei ti*) and speech (*logos*) was characterised as significative (*semantikós*). But whereas in modern translations this is usually expressed in terms of words having meaning, there is, as far as I can see, at least in classical Greek no equivalent noun for 'meaning' or 'Bedeutung'. The history of terminology shows, that the corresponding Greek noun of the latin '*significatio*' was *semasia*'. But the earliest evidence for the use of '*semasia*' in the sense of meaning (of a word) seems to be a passage in the *De signis*, written by the Epicurean Philodemus of Gadara around the middle of the first century. In all earlier occurrences this term means 'sign' or 'signal' or an act of signalising (cf Ebert 1987:108sq.).

So it seems as if semantics is not necessarily in need of the concept of signification or meaning. Because for quite a long time philosophy did not even have a word for it. But once introduced, it could give rise to such problems, as, referring to the concept of meaning, Charles Morris (1971:95) has pointed out by noticing that " 'meaning' signifies any and all phases, of sign-processes (the status of being a sign, the interpretant, the fact of denoting, the significatum)".

By considering the meaning of '*significatio*' in scholastic logic, I do not intend to give a comprehensive outline of the various theories of signification that have been worked out by that tradition, but rather want to confine myself to the more modest purpose of giving an account of the use of that term in scholastic logic. So, even if the title of my paper seems to offend the Wittgenstein's prominent advice "don't ask for meaning, ask for use", I will observe it insofar, as I am going to *take a look at the concrete use of 'meaning' or rather 'signification' in scholastic logic, which however, as we shall see, not quite the same. By so doing, I do not intend to establish something like the scholastic meaning of signification.* For if we are told by Wittgenstein and many others, that "the meaning of a word is its use in language", we will be confronted here with the fact, that the usage of '*significatio*' -- and thus its 'meaning' -- is highly divergent in itself." (pp. 89-90)

References:

Cassirer, E. 1925. *Die Philosophie der Griechen*, in: M. Dessoir (ed.): *Lehrbuch der Philosophie* (Berlin).

Ebert, Th. 1987. *The origin of the Stoic theory of signs in Sextus Empiricus*, Oxford Studies in Ancient Philosophy 5, 83-126.

Kretzmann, N. 1974. *Aristotle on Spoken Sound Significant by Convention*, in: J. Corcoran (ed.): *Ancient Logic and Its Modern Interpretation* (Dordrecht, Boston) 3-21.

Morris C. W. 1971. *Signs, Language and Behavior*, in: *Writings on the general 'Theory of Signs'* (The Hague).

Weidemann, H. 1982. *Ansätze zu einer semantischen Theorie bei Anstoteles*: Zeitschrift für Semiotik 4, 241-257.

Weisgerber, L. 1930. *Sprachwissenschaft und Philosophie zum liedeutungsproblem*, in: *Blätter für Deutsche Philosophie* 4.

15. ———. 2013. "The Hermeneutical Rehabilitation of Supposition Theory in Seventeenth-Century Protestant Logic." *Vivarium* no. 51:464-481.
Abstract: "The paper focuses on some aspects of the early modern aftermath of supposition theory within the framework of the protestant logical tradition. Due to

the growing influence of Humanism, supposition theory from the third decade of the sixteenth century was the object of general neglect and contempt. While in the late sixteenth-century a number of standard textbooks of post-Tridentine scholastic logic reintegrated this doctrine, although in a bowdlerized version, it remained for a century out of the scope of Protestant logic. The situation changed when the Strasburg Lutheran theologian J.C. Dannhauer, who in 1630 developed and propagated the program of a new discipline which he called 'general hermeneutics' (*hermeneutica generalis*), accentuating the importance of supposition theory as an indispensable device for the purpose of textual interpretation. Due to Dannhauer's influence on later developments of hermeneutics, which in the seventeenth and early eighteenth centuries was regarded as a logical discipline, supposition theory is still present in several logical treatises of the eighteenth century. The explication of the underlying views on the notion of supposition and its logico-semantic function may give at least some clues as to how to answer the question of what supposition theory was all about."

16. Miller, Barry. 1973. "Proper Names and *suppositio personalis*." *Analysis* no. 33:133-137.
 "Proper names may be used so as to be self-referring, as in ' "Tom" is a three-lettered word' and ' "Tom" is a noun'. They may also be used to refer to their bearer, as in 'Tom is running'. And the point I want to discuss is whether 'Tom' may not be used in a third way, one in which it refers neither to itself nor to its bearer. What I have in mind may be illustrated from the case of common names. As a parallel to ' "Tom" is a three-lettered word' and ' "Tom" is a noun' we have ' "Man" is a three-lettered word' and ' "Man" is a noun' respectively.
 As a parallel to 'Tom is running' we have 'A man is running'. But, in addition, we have 'Man is a species', in which 'man' clearly refers neither to itself nor to individual men. So the question I am raising is whether there is any use of 'Tom' that parallels this last use of 'man'.
 In the middle ages that same question was framed in terms of whether proper names did or did not have *suppositio personalis*, with William of Sherwood saying they did and Peter of Spain saying they did not. I think that William was right. I will argue therefore that there is a use of 'Tom' that does parallel that of 'man' in 'Man is a species', and in which 'Tom' refers neither to itself nor to Tom. This, I suggest, is to be found in 'Tom is an individual'." (p. 133)
17. Moody, Ernest. 1953. *Truth and Consequence in Mediaeval Logic*. Amsterdam: North-Holland.
 Reprint Westport: Greenwood Press, 1976.
 "While these terminist logicians appear to have been familiar with the *Prior Analytics*, *Topics*, and *Sophistical Refutations* of Aristotle, as well as with the traditional Boethian writings, their text books do not follow the order, nor cover the whole content, of Aristotle's *Organon*. The "traditional" sections treat only of the following subjects: (1) the proposition, both categorical and hypothetical; (2) the predicables; (3) the categories (omitted by Shyreswood); (4) the syllogism; (5) the topics or *loci communes*; and (6) the fallacies.
 What is new in these text books is a section treating of "the properties of terms", introducing the conception of the supposition of subject and predicate for a common undetermined subject, and using this notion in the analysis of quantification, temporal determinations of the copula or verb, adjectival determinations of subject or predicate, and logical functions of relative pronouns. A sharp distinction is made between the property of "signification" and that of "supposition", such that the logical analysis of categorical propositions, and of their truth conditions, is carried out in a formal and extensional manner in terms of the property of "supposition".
 (p. 4)
 (...)
 "These new branches of logical investigation, represented by the treatises on the supposition of terms and by those on the syncategorematic signs, were destined to receive an elaborate development during the century following on Shyreswood and

Peter of Spain. The part played by Priscian's grammatical syntax in the development of this approach to the logical analysis of language is strikingly evident from the constant citations of the Roman grammarian which occur in Shyreswood and the other terminist logicians.")p. 5)

18. Mullaly, Joseph P. 1945. *The Summulae Logicales of Peter of Spain*. Notre Dame: Indiana University Press.
Introduction, pp. IX-CIV. § 4. Antecedents and Nature of the Logica Moderna: A. A Theory of Supposition, pp. XXXVIII-LVIII.
"Three of the seven treatises which enter into the composition of the *De Proprietatibus Terminorum* are expressly dedicated to a categorizing treatment of supposition—the treatises on Suppositions, Amplifications and Restrictions. A fourth treatise, that on Relatives, is so integrally bound up with the conception of supposition that it is practically impossible to regard it as other than a further application of the conception. Indeed, it is from the conception of the supposition of relatives which is held by the grammarians that the logicians derived the concept of supposition in the first place.
The first problem in connection with "suppositio" is the genesis of the term and the evolution, if any, of the conception.
In classical Latin, "suppono" is commonly used in the sense of "substitute". Cicero uses it in a very suggestive manner when he says "...non esset difficile alium in suppositi locum supponere."(26) It is probably from the classical usage of the term "supponere" that "suppositio" originally stems. The conception of a term substituting for or standing for something other than itself occurs frequently in Priscian but it is always in relation to the pronoun(27)." (pp. xlv-xlvi)
(26) Cicero *Actionis in C. Verrem Secundae* 5, 30.
(27) "...pronomina loco priorum accipiuntur nominum..." Priscian, op. cit., [*Institutiones Grammaticae*, ed. by M. Hertz (Leipzig, 1854-1859)] XIII, 31. Also cf. *ibid.*, II, 18; XVII, 13; XVII, 34; XVII, 54; XVIII, 32.
19. Murdoch, John E. 1975. "From Social into Intellectual Factors: An Aspect of the Unitary Character of Late Medieval Learning." In *The Cultural Context of Medieval Learning*, edited by Murdoch, John E. and Sylla, Edit Dudley, 271-338. Dordrecht: Reidel.
"It remains to examine one final analytical language; it is the most comprehensive of all in its applications: the *theory of suppositio* of the so-called *logica moderna*. This is not the place to pause for even the most compendious description of the theory or of the service it was to philosophy in general. This, together with considerable detail about what I would call its vocabulary and rules or algorithms, can be gleaned from other sources.(61)
For our purposes it is enough to note that, as an analytical language, it was used to treat any philosophical problem. My past interest has been in its application to problems within natural philosophy, most notably those *de motu*. But it was similarly applied in theology as well. As part of logic, wherever it was brought to bear, it functioned metalinguistically. That is, its application amounted to an invocation of the procedural rule to adopt a second intentional point of view; one dealt not with individual entities, but with propositions and with terms within propositions(62) that stood for (*supponit pro*) such entities. Accordingly, the elucidation of the kind of supposition that was had by the terms in a given problematic proposition was one of the most common ways of resolving the problem carried by the proposition, especially when that problem had to do with the analysis of continuous processes or quantities, with the determination of the proper order of "parts" within those processes or quantities, or with the setting of limits for them." (pp. 285-286, a note omitted)
(61) William & Martha Kneale, *The Development of Logic* (Oxford, 1962) pp. 246-274; Ernest Moody, *Truth and Consequence in Mediaeval Logic* (Amsterdam, 1953) ch. 1-3; Philotheus Boehner, *Collected Articles on Ockham* (St. Bonaventure, 1958) pp. 174--267; L. M. De Rijk, 'The Development of Suppositio naturalis in Mediaeval Logic', *Vivarium*, 9 (1971) 71-107; 11 (1973) 43-79 and the other articles

- of De Rijk cited in the bibliography to his recent edition of Peter of Spain (above, note 60 [Peter of Spain, *Summule logicales*, ed. L. M. DeRijk (Assen, 1972)]).
- (62) Since suppositio is a significative relation had by terms only as they occur in propositions, this qualification is necessary.
20. Muré, Dafne. 2013. "Suppositum between Logic and Metaphysics: Simon of Faversham and his Contemporaries (1270-1290)." *Vivarium* no. 51:205-229.
Abstract: "This article is the result of research on the occurrences of the terms *suppositio*, *supponere* and their linguistic derivations in the literature on fallacies (comments on the *Sophistical Refutations*) of the second half of the thirteenth century. The authors analysed are Albert the Great, Giles of Rome, Simon of Faversham, the so-called *Incerti Auctores* (Anonymous C and SF), the Anonymous of Prague (P) and John Duns Scotus.
The central elements that emerge are the role played by the notion of *suppositum* and by the linguistic context (*adiuncta*, *determinatio*) to determine the denotation of an expression, and the importance of the metaphysical problem of the unity and identity of *suppositum* in both the theory of predication and the theory of inference. Both subjects, obviously, are closely connected."
 21. Normore, Calvin Gerard. 1997. "Material Supposition and the Mental Language of Ockham's *Summa Logicae*." *Topoi. An International Review of Philosophy* no. 16:27-33.
"William Ockham begins his *Summa Logicae* by dividing language into three types, written, spoken and "conceived, having being only in the understanding".(1) He goes on to argue that this conceived language or 'mental' (*mentalis*) language, as he frequently calls it, is in some ways the most basic type. It is composed of terms which are natural whereas spoken and written language are instituted *ad placitum*. Spoken and written terms have their signification because of their subordination to the terms of mental language which play very much the roles Frege attributes to senses (*Sinne*).
Ockham's views about mental language seem to have developed considerably during the part of his life in which he wrote extensively about issues in the philosophy of language. I will be concerned here only with what might be thought his 'mature' view as this is presented in the (relatively) late *Summa Logicae*. In this work the terms of the mental language (concepts (*conceptus*) as he also calls them) are acts of the mind and the formation of a mental sentence is some kind of production of such acts." (p. 27)
(1) "Est autem sciendum quod sicut secundum Boethium, in *I Perihermenias* triplex est oratio, scilicet scripta, prolata, et concepta, tantum habens esse in intellectu, sic triplex est terminus, scilicet scriptus, prolatus et conceptus." Ockham *Summa Logicae* I, c. 1 (*Opera Philosophica* I, p. 7, l. 13-16). Hereafter I will abbreviate *Summa Logicae* as S.L., *Opera Philosophica* as OP and will place simple citations of this work in the text.
 22. Nuchelmans, Gabriel. 1983. "Medieval Problems Concerning Substitutivity (Paul of Venice, *Logica Magna* II, 11, 7-83) " In *Atti del Convegno Internazionale di Storia della Logica (San Gimignano, 4-8 December 1982)*, edited by Abrusci, Vito Michele, Casari, Ettore and Mugnai, Massimo, 69-80. Bologna: CLUEB.
 23. Oesterle, John A. 1944. "Another Approach to the Problem of Meaning." *The Thomist* no. 7:233-263.
"Thus John of St. Thomas, in defining *suppositio*(4) [*] is insisting that terms or words have *suppositio* only when they are in a proposition and hence that *suppositio* is a property only of propositional terms or words, not of terms or words simply* This understanding of *suppositio*, however, was strongly contested in his time, and some writers insisted that *suppositio* was merely the employment of any name to signify the understanding of a thing. The consequence is, as John of St. Thomas points out, a failure to distinguish *suppositio* from signification and the further consequence of assuming that any name must have *suppositio* whether in a proposition or not. Note here, for the moment, the ultimate consequence which

could be drawn from such a position: that if any name must have *suppositio*, and especially if *suppositio* is confused with signification, then it is an easy step to assume that a name has meaning only as it is in the context of a proposition, since it is only in the context of a proposition that there can be *suppositio* (i.e., standing as the logical subject or the logical predicate); and finally, how easy the step would be to assume also that every name must be verified, since *suppositio* requires verification.

It would be interesting to know whether the writers John of St. Thomas had in mind took these consequences; if so, the problem of meaning (or more likely, the problem of signification or *suppositio*) was being argued then." (p. 236)

(4) There is no exact English equivalent for *suppositio*. "Supposition" fails to carry the precision, and "supposes" is hopelessly inadequate. As John of St. Thomas' definition indicates, it is a certain kind of "standing for" within the proposition. [*] *Cursus Philosophicus*, Vol. I, p. 29¹⁰. (All pagination is from the Reiser edition.)

24. Panaccio, Claude. 1984. "Propositionalism and Atomism in Ockham's Semantics." *Franciscan Studies* no. 44:61-70.

"The term "propositionalism" has been proposed as a label for Ockham's theory of language by the Spanish scholar Teodoro de Andrés in his 1969 book, *El nominalismo de Guillermo de Ockham como filosofía del lenguaje*. For de Andrés' Ockham, the proposition rather than the term is "the primary complete linguistic unit" and the "primary reality" of knowledge.(1) On the other hand, the expression "semantical atomism" is used by Michael Loux in a 1979 paper to characterize the standard terminist tradition which, he claims, Ockham breaks with.

For Loux's Ockham, "the meaning of a general term is a function of the roles it plays in propositional contexts" and "it is impossible to isolate a non-propositional component in a speaker's linguistic knowledge."(2)

Andrés' and Loux's interpretations are remarkably similar to each other. I will call them "propositionalist interpretations of Ockham's semantics." (p. 61)

(...)

"I will here discuss the arguments in favor of the propositionalist interpretation and show that they cannot support the very strong claims that are supposed to rest on them. I will briefly consider two auxiliary arguments and, then, come to grips with the really central one." (pp. 62-63)

(...)

"I have tried to show elsewhere that, although Ockham's semantics does not show much theoretical interest in the demonstratives, it does systematically resort to them in practice to play a role very much like that of the logically proper names of Russell's logical atomism, that of providing a means for direct singular designation.

(35) If that is true, we are now very far from the propositionalist interpretation of Ockham's semantics." (p. 70)

(1) Teodoro de Andrés, *El nominalismo de Guillermo de Ockham como filosofía del lenguaje* (Madrid: Editorial Gredos, 1969) 219-20, 233-36, and passim.

(2) Michael Loux, "Significatio and Suppositio: Reflections on Ockham's Semantics," *The New Scholasticism* 53 (1979): 423-24.

(35) Claude Panaccio, "Occam et les démonstratifs," *Historiographia Lingüistica* 7 (1980): 189-200.

25. ———. 2013. "Ockham and Buridan on Simple Supposition." *Vivarium* no. 51:371-384.

Abstract: "What is at stake, philosophically, in the disagreement between Ockham and Buridan is whether there is simple (or material) supposition in the mental language or not. The key difference is that Ockham's theory allows for the possibility of use/mention ambiguities within mental language, while Buridan's approach, whatever it is exactly, does not."

"On the whole—and this will be my provisional conclusion—, no second-order Buridanian theory, whether descriptive or intuitivistic, seems clearly superior to Ockham's straightforward acceptance of simple supposition in mental language. The

key difference, in the end, is that Ockham's theory allows for the possibility of use/mention ambiguities within mental language, while Buridan's approach, whatever it is exactly, does not. My own feeling at this point is that a philosophical theory of human mental language should not rule out *a priori* the possibility of such confusions within our own minds."

26. Parsons, Terence. 1994. "Anaphoric Pronouns in Very Late Medieval Supposition Theory." *Linguistics and Philosophy* no. 17:429-445.
"This paper arose from an attempt to determine how the very late medieval (1) supposition theorists treated anaphoric pronouns, pronouns whose significance is derivative from their antecedents. Modern researches into pronouns were stimulated in part by the problem of "donkey sentences" discussed by Geach (1962) in a section explaining what is wrong with medieval supposition theory. So there is some interest in seeing exactly what the medieval account comes to, especially if it turns out, as I suspect, to work as well as contemporary ones. Besides, finding a good analysis of pronouns has proved to be very difficult, and so we might possibly find some insight in a historically different kind of approach.
I discuss a version of supposition theory that aims at producing *analyses* of sentences containing quantified terms, (2)' as articulated around 1400 by Paul of Venice, and as further developed by certain logicians such as de Soto and Celaya in the 1400's and early 1500's, (3) Much of what I will say also applies indirectly to earlier versions of supposition theory (before 1400)."
(1) I say very late medieval' because the period in question (1400-1600) would normally be classified as Renaissance. I am individuating the period by its themes, not solely by its dates.
(2) This was not obviously the intent of the great developers of supposition theory from 1250 to the late 1300's: Peter of Spain, William Sherwood. Roger flacon, William Ockham, Walter Burleigh, John Buridan. For them suppositional "descended forms" follow logically from the sentences under discussion, but they do not *analyze* those sentences because they are not generally equivalent to those sentences. (This is important in Geach's (1962) criticisms of supposition theory.) A burning issue in scholarship on supposition theory is: what was it is supposed to be *for*? One popular answer is that it is supposed to yield an analysis of quantification. This answer accords well with later accounts, but poorly with earlier ones, because the earlier "analyses" are often obviously not equivalent in truth value to the sentences being "analyzed." (See e.g. Matthews, 1964.) I assume equivalence in the theories under discussion.
(3) For details of the mature theory see Ashworth (1974).
27. ———. 1997. "Supposition as Quantification *versus* Supposition as Global Quantificational Effect." *Topoi. An International Review of Philosophy* no. 16:41-63.
Abstract "This paper follows up a suggestion by Paul Vincent Spade that there were two Medieval theories of the modes of personal supposition. I suggest that early work by Sherwood and others was a study of quantifiers: their semantics and the effects of context on inferences that can be made from quantified terms. Later, in the hands of Burley and others, it changed into a study of something else, a study of what I call global *quantificational effect*. For example, although the quantifier in $\sim\forall xPx$ ' is universal, it can be seen globally as having an existential effect; this is because the formula containing it is equivalent to $\exists x\sim Px$ '. The notion of global effect can be explained in terms of the modern theory of normal forms. I suggest that early authors were studying quantifiers, and the terminology of the theory of personal supposition is a classification of kinds of quantifiers. In this theory, to say that a term has distributive supposition is to say, roughly, that it is quantified by a universal quantifying sign. Later authors turned this into a theory of global quantificational effect. In the later theory, to say that a term has distributive supposition is to say that the overall effect is as if the term were universally quantified with a quantifier taking (relatively) wide scope. The difference between these two approaches is illustrated by the fact that the term 'man' is classified as

having distributive (“universal”) supposition in ‘Not every man is running’ in the earlier theory, whereas in the later theory that term does not have distributive supposition; it has determinate (“existential”) supposition. In the paper I explain these options, and I argue from several texts that the earlier and later medieval theories actually worked like this. In an appendix I make further efforts to clarify the obscure early accounts, as well as the nineteenth century “doctrine of distribution”. The last section of the paper discusses the “purpose(s)” of supposition theory.”

28. ———. 1997. "Missing Modes of Supposition." *Canadian Journal of Philosophy* no. Supplemetary volume 23:1-24.
"Supposition theory is a medieval account of the semantics of terms as they function in sentences. The word 'supposition' is probably interchangeable with our word 'reference,' but I'll leave it as 'supposition' so as to identify the medieval source of the theory I discuss here. Medieval writers had a great deal to say about supposition; this paper focuses on only one part of the theory, the study of what is now generally called the theory of *modes of common personal supposition*. The word 'common' is used here as in 'common term,' as opposed to 'singular term,' but in fact, the theory focuses on common terms along with the quantifiers that accompany them. The word 'personal' is a technical term indicating that the word in question is used in its normal way to refer to the things it is true of, as distinguished from occurrences in which it refers to itself (as in "Giraffe' is a noun') or refers to a particular thing intimately related to the things it is true of (as in 'Giraffe is a species'). So we might describe this as a theory of the modes of reference of quantified common terms used normally
29. ———. 2006. "The Doctrine of Distribution." *History and Philosophy of Logic* no. 27:59-74.
"Peter Geach describes the 'doctrine of distribution' as the view that a term is distributed if it refers to everything that it denotes, and undistributed if it refers to only some of the things that it denotes. He argues that the notion, so explained, is incoherent. He claims that the doctrine of distribution originates from a degenerate use of the notion of 'distributive supposition' in medieval supposition theory sometime in the 16th century. This paper proposes instead that the doctrine of distribution occurs at least as early as the 12th century, and that it originates from a study of Aristotle's notion of a term's being 'taken universally', and not from the much later theory of distributive supposition. A detailed version of the doctrine found in the Port Royal Logic is articulated, and compared with a slightly different modern version. Finally, Geach's arguments for the incoherence of the doctrine are discussed and rejected."
"1. Introduction
This paper is about the 'doctrine of distribution' as described and criticized by Peter Geach. My goal is to provide an alternative to Geach's account of the history of the doctrine and to defend the doctrine against his claims that it is incoherent. This paper discusses:
(1) what the 'doctrine of distribution' is;
(2) some of Peter Geach's criticisms of the doctrine;
(3) Geach's story of the history of the doctrine;
(4) an alternative account of the history of the doctrine;
(5) the version of the doctrine as it occurs in the Port Royal Logic;
(6) a defence of the coherence of the doctrine."
30. ———. 2008. "The Development of Supposition Theory in the Later 12th through 14th Centuries." In *Handbook of the History of Logic. Vol. 2: Mediaeval and Renaissance Logic*, edited by Gabbay, Dov and Woods, John, 157-280. Amsterdam: Elsevier.
"Soon after the time of Anselm (1033–1109) and Peter Abelard (1079-1142), universities began to be founded. Logic was taught pretty much as it had been before the year 500; it consisted of work from Aristotle's *Categories* and *On*

Interpretation, and material from the first few sections of his *Prior Analytics*. There was also material from the Stoics on propositional logic. In the early 1100's, western scholars acquired Latin versions of additional work by Aristotle, including his *Sophistical Refutations*, which dealt extensively with fallacies. This inspired original new work by medieval scholars. Sometime in the 12th century a number of original texts suddenly appeared containing a fairly extensive group of interrelated theories, usually employing the term 'supposition', which means pretty much what we mean by "reference" or "standing for". The texts were similar, expounding much the same doctrines, and often employing the same or closely similar examples. Clearly there was some common source, but the texts themselves contain no indication of the origin of the doctrines, and the early history of the topic is unknown. This essay is an account of some of the main theories of this tradition, often called Supposition Theory. For want of space, the commonest known themes will be treated, without extensive details of how the theories varied from author to author. The picture given here is then a kind of ideal framework of a large tradition." (p. 157)

31. ———. 2013. "The Expressive Power of Medieval Logic." *Vivarium* no. 51:511-521.
Abstract: "This paper is about the development of logic in the Aristotelian tradition, from Aristotle to the mid-fourteenth century.
I will compare four systems of logic with regard to their expressive power.
1. Aristotle's own logic, based mostly on chapters 1-2 and 4-7 of his *Prior Analytics*.
2. An expanded version of Aristotle's logic that one finds, e.g., in Sherwood's *Introduction to Logic* and Peter of Spain's *Tractatus* 3-5. Versions of the logic of later supposition theorists such as William Ockham, John Buridan, and Paul of Venice. Version 4 is the logic without relatives (anaphoric pronouns); version 5 adds relatives.
I am ignoring modals, conditionals that are not *ut nunc*, infinitizing negation, exclusives and exceptives, all exponibles, all insolubles, and terms with simple or material supposition, ampliation and restriction, and many other things."
32. ———. 2014. *Articulating Medieval Logic*. New York: Oxford University Press.
Chapter 7: *Modes of Personal Supposition*, 184-226.
"This chapter has two parts. The first part, sections 7.1–7.7, explains an historical version of the theory of modes of personal supposition. The second part, sections 7.8–7.12, deals with a refined version of that theory.
7.1 Introduction to the medieval theory
A common term which is used personally(1) has what is called a mode of (common) personal supposition.(2) A mode of supposition is something like a kind of quantificational status. It is a status that a term has in a proposition based on where it occurs in the proposition and what quantifier word occurs with it and with other terms in the proposition. Three modes of common personal supposition are widely discussed:
• Determinate Supposition
• (Confused and) Distributive(3) Supposition
• Merely Confused Supposition" (p. 184)
(1) Medieval logicians held that expressions can be used in three ways. An expression can be used materially (with "material supposition") as in 'Man is a noun'; used in this way the expression supposits for itself or for a similar expression. An expression can be used simply (with "simple supposition") as in 'Man is a species'; used in this way the expression supposits for a related form in the external world or for a mental concept. (Realists held the former; nominalists something like the latter.) Finally, an expression can be used personally (with "personal supposition") as in 'A man is an animal,' to supposit for things that "fall under" the term. (Realists would say that in personal supposition a term supposits for things that fall under the form that the word supposits for when used with simple supposition; some nominalists would say that in personal supposition a term

supposits for the things that its associated mental concept naturally signifies.) The topic of this chapter concerns words used personally.

(2) Some authors (see Marsilius of Inghen 1 (57–9)) believe that terms used materially can also be assigned a mode of supposition, since they are common terms. (Dutilh Novaes 2007, 62 suggests that he was the first to hold this.) For example, in ‘Every donkey in that sentence is bisyllabic’ the word ‘donkey’ is a common term that stands for any word spelled d-o-n-k-e-y. On this analysis, ‘donkey’ has distributive material supposition in that sentence. According to some, even discrete terms used materially are common terms, and can have modes of supposition, as in ‘Every this uttered this morning was the subject of the sentence in which it occurred.’

Most authors either disagree with this view, or ignore it.

(3) Some authors use ‘distributed’ and some use ‘distributive’; I use these interchangeably. (The term ‘distributed’ may presuppose that a term cannot have that mode of supposition unless it has been distributed by some distributing sign; see section 7.4.)

References

Dutilh Novaes, Catarina. 2007. *Formalizing Medieval Logical Theories: Suppositio, Consequentiae and Obligationes*. Dordrecht: Springer.

33. Pérez-Ilzarbe, Paloma. 2004. "Complexio, Enunciatio, Assensus: The Role of Propositions in Knowledge according to John Buridan." In *Medieval Theories on Assertive and Non-Assertive Language*, edited by Maierù, Alfonso and Valente, Luisa, 401-413. Firenze: Olschki.
"This paper is an attempt to rethink Buridan's ideas concerning knowledge (which are well known after the work of de Rijk and Zupko) from two perspectives: On the one hand, I explore Buridan's theory of knowledge in the hope that it will shed some light on the intuition that the structure of propositions determines the justification of our beliefs on various different levels. On the other hand, I would like to contribute to demonstrating the consistency of Buridan's thought, which has been remarked by almost all scholars working on Buridan: in particular, I am interested in exploring the benefits of using supposition theory when applied to the theory of knowledge.
The aim of this paper, suggested in the subtitle: the role of propositions in knowledge, is therefore to explore the interweaving between Buridan's theory of propositions and some aspects of his theory of knowledge. I will start by examining Buridan's conception of *scientia* (as opposed to *error*, *opinio* and *fides*), from the perspective of two distinctions which are very important to Buridan's theory of the proposition: *complexio* / *enunciatio* and *enunciatio* / *assensus*. Then I will recall Buridan's analysis of propositions (and his use of supposition to define truth conditions) to show its consistency with this conception of knowledge." (pp. 401-402, two notes omitted)
34. Perini-Santos, Ernesto. 2013. "When the Inference 'p is true, therefore p' Fails: John Buridan on the Evaluation of Propositions." *Vivarium* no. 51:411-424.
Abstract: "For John Buridan, truth-bearers are assertions. This fact explains why the inference 'p is true, therefore p' may fail. On the one hand, the tense of the verb plus the time of utterance do not determine the time about which a sentence is intended to be true: the intention of the speaker is needed. On the other hand, since the meaning of vocal and written words is conventional, it may seem that they can be used with different meanings on each side of the inference. While the antecedent may talk about a situation different from the present one, this doesn't make it the actual situation of utterance, and the words have meanings only in the actual situation of use. Although such situations are different, in both of them we are asked to see the importance of identifying features of which the disquotational schema doesn't keep track and that can only be specified in the context of use."
35. Perreiah, Alan Richard. 1967. *Is There a Doctrine of Supposition in the Logica Magna?*, Indiana University.

Available at ProQuest Dissertation Express. Order number: 6715146.

36. ———. 1971. "Approaches to Supposition Theory." *The New Scholasticism* no. 45:381-408.
 "The past 25 years have seen an increasing interest in later medieval logic and in the theory of supposition. A review of literature reveals, however, wide differences of interpretation of supposition-theory. Taking the theory in the widest sense as a contribution to semiotic or the theory of signs, this study shows how supposition has been variously treated as a syntactical, semantical and even pragmatical theory. The main views of P. Boehner, E. Moody, P. Geach, D. P. Henry, W. C. Kneale and L. M. De Rijk are examined, compared and appraised with respect to overall progress in the elucidation of supposition theory."
37. ———. 1986. "Supposition Theory: A New Approach." *The New Scholasticism* no. 60:213-231.
 "For the past three decades the theory of supposition (*suppositio*) has been a crux of scholarship in medieval logic. Although supposition was one of the banner doctrines of the logics modernorum, its nature and purpose have remained elusive to modern interpreters. In this paper I outline an alternative approach to supposition theory. The paper has three parts.
 Part I reviews a few of the difficulties which modern conceptions of supposition theory have encountered.
 Part II offers an interpretation of supposition theory as a system of conceptual notation.
 Part III develops some connections between supposition as conceptual notation and the medieval art of memory.
 A conclusion will suggest some of the advantages of the present interpretation over earlier ones." (p. 213, notes omitted)
38. Piolata, Thomas. 2021. "The Significance of Supposition: Abelard and Bonaventure on the Question of God Begetting God." *Collectanea Franciscana* no. 91:27-49.
 Summary: "This article treats the way in which Peter Abelard and Bonaventure deal with the logic of the phrase *Deus genuit Deum*, that is, how to understand logically the idea – rooted in the *Creed* – that God generates God ("God from God"). As Augustine had affirmed, essence cannot generate itself. Consequently, this aspect of the faith poses a potential problem. To handle it, the logical theory of supposition is key. This theory concerns the reference of a given term in a phrase, and not its signification. Abelard did not have the privilege of supposition. By the time of Bonaventure, however, it had become a standard tool of logical analysis. The goal of this study is thus to articulate the logical treatment of this phrase in Abelard and Bonaventure, and thereby to highlight the importance of the theory of supposition."
39. Price, Robert. 1970. "William of Ockham and *Suppositio Personalis*." *Franciscan Studies* no. 30:131-140.
 "Many have suggested that Ockham's theory of *suppositio* is in some sense an anticipation of contemporary quantification theory; usually this is qualified by the suggestion that Ockham quantifies over terms or qualities rather than individuals.(1) There is also some discussion as to whether the theory is semantical or syntactical in character.(2) Both these matters are, I think, tied together. If we must force a later distinction
 on Ockham: what he did was to develop roughly the same semantical theory which was later used to interpret contemporary quantification theory. He did so, however, in order to interpret the simple categoricals which have a quite different syntax.
 (...)
 In order to give a clear account of these matters I will first give in contemporary materials a theory which would serve Ockham's purposes.
 What this amounts to is the presentation of a semantical interpretation for quantification over sorted individuals which emphasizes those features which are relevant to Ockham's account.(3) I will then present a rough outline of Ockham's theory as it appears in the first *Summa* in order to stress the parallels between it and

- the previously presented theory. I will then turn to a discussion of historical developments along the lines already indicated." (pp. 131-132)
- (1) Cf., e.g., Philotheus Boehner, *Medieval Logic*, Manchester, 1952, and Gareth Mathews, "Ockham's suppositio theory and modern logic," *Phil. Rev.* 73 (1964), 91-9.
- (2) Cf., e.g., Ernest A. Moody, *Truth and consequences in mediaeval logic*, Amsterdam, 1953, and Manley Thompson, "Logic, philosophy, and history," *Rev. Meta.* 8 (1954-55), 91-7.
- (3) The relevance of such a system to Aristotelian logics was established by Timothy Smiley in "Syllogism and quantification," *J.S.L.* 27 (1962), 58-72.
40. Priest, Graham, and Read, Stephen. 1977. "The Formalization of Ockham's Theory of Supposition." *Mind* no. 86:109-113.
 "The point of the paper is to show that the medieval theory of personal supposition can be formalised using the standard tools of modern logic. A formal account of the modes of supposition is given and it is shown how these can be used to obtain the descensus in standard cases. The formalisation is used to show that Ockham's views on the supposition of the predicate in the "o" form are mistaken, and to refute the following claims: (a) the medievals omitted some modes of supposition; (b) they had too many modes of supposition; and, (c) their theory is incapable of handling multiple quantification."
41. ———. 1980. "Merely Confused Supposition: a Theoretical Advance or a Mere Confusion?" *Franciscan Studies* no. 40:265-297.
 "In this article we will discuss the notion of merely confused supposition as it arose in the mediaeval theory of *suppositio personalis*. The context of the analysis is our formalization of William of Ockham's theory of supposition sketched elsewhere.(1) The present paper is however, self-contained, although we assume a basic acquaintance with supposition theory. The detailed aims of the paper are: i) to look at the tasks that supposition theory took on itself and to use our formalization to relate them to more modern ideas; ii) to explain the notion of merely confused supposition and to defend it against certain criticisms; and iii) to discuss two issues closely related to the idea of merely confused supposition which we would not broach in a shorter article: the mode of supposition of terms in intensional contexts, and the possible existence of a fourth mode, often called *suppositio copulativum*. Our account is essentially a theoretical one which attempts to explain and account for a number of features of mediaeval supposition theory and, as such, it is ultimately to be tested against source material. Hence, although much of the evidence we shall offer comes from Ockham's writings, our conclusions apply to the mediaeval theory of supposition, in terms of descent, as it is found in a number of authors. Our earlier article drew on three works of Ockham's: *Summa Totius Logicae* (henceforth STL), *Elementarium Logicae* (EL), and *Tractatus Logicae Minor* (TLM).(2) Since then we have become aware of Gál's persuasive doubts concerning the authenticity of the last two works. His conclusion is that they cannot be taken as genuine texts of Ockham's until further research has been carried out.(3) We will find it possible here to draw most often on STL; however, the reader will note that our findings are consonant with both TLM and EL, and on occasions we will look there for support, and also to writings by later authors working in the same tradition."
 (1) G. Priest & S. Head, "The Formalization of Ockham's Theory of Supposition," *Mind*, 86 (1977), 109-13.
 (2) STL: G. de Ockham, *Summa Logicae*, eds. P. Boehner, G. Gál & S. Brown (*Opera Philosophica I*: St. Bonaventure, 1974). EL: "The *Elementarium Logicae* of Ockham," ed. E. Buytaert, *Franciscan Studies*, 25 (1965), 151-276 and 26 (1966), 66-173. TLM: "Tractatus Logicae Minor of Ockham," ed. E. Buytaert, *Franciscan Studies*, 24 (1964), 34-100.
 (3) STL, pp. 62*-66*.
42. ———. 1981. "Ockham's Rejection of Ampliation." *Mind* no. 90:274-279.

"The standard mediaeval account of the truth-conditions of modal and tensed sentences used a notion of "ampliation", whereby the class of objects for which a term supposits could be extended beyond the class of things of which it could be truly predicated. Ockham did not use the notion in his account. We examine why this was, explain Ockham's account, and argue that it is preferable to the ampliative one. In particular, the authors show the ambiguities found in modal and tensed sentences to be, contrary to popular opinion, different, and support Ockham's contention that the ambiguity in the tensed case is not one of sense (signification) but of reference (supposition)."

43. Read, Stephen. 1991. "Thomas of Cleves and Collective Supposition." *Vivarium* no. 29:50-84.

"The Modes of Supposition

In an anonymous commentary on Marsilius of Inghen's treatise on supposition, it is asked: "are there only three kinds of common [personal] supposition?"(1) The question is posed within the medieval theory of properties of terms, according to which various kinds or modes of supposition are ascribed to subject and predicate terms in propositions. Abstracting from the particular doctrines of particular authors, one may define the three standard modes of common personal supposition attributed to general terms in their occurrence in propositions as follows:

The mode of common personal supposition of an occurrence of a general term *t* in a proposition *P* is

i) *determinate* if *P* is equivalent to a disjunction of singulars with respect to *t*

ii) *confused* if not, and

a) *confused and distributive* if *P* entails a conjunction of singulars with respect to *t* ;

b) *merely confused* if not but *P* entails the result of replacing *t* by a disjunct term."

(p. 50)

(,,)

"Conclusion

Towards the middle of the fourteenth century, it was realised that, simply on grounds of symmetry or duality, a fourth mode of descent to singulars was possible, conjunct descent or *descensus copulativus*. This finally led, arguably in the person of Thomas Zeghenans of Cleves, a Paris master of the early 1370s, to the identification of a fourth mode of common personal supposition, *suppositio copulativus*. Independently, it had long been realised that the subjects of universal propositions permit both a distributive, or divisive, interpretation, and a collective one. This in itself can be a ground for postulating an additional mode of supposition, and indeed, one which can be linked to the new conjunct mode of descent. Thus the fourth mode of common personal supposition can equally well be called "collective supposition". (p. 82)

(1) (anon.,) *Commentum in Primum et Quartum Tractatum Petri Hispani et super tractatibus Marsilii de suppositionibus, ampliationibus, appellationibus et consequents*, Basle 1487, sign. r4r-r5v; also Hagenau 1495 (reprinted Frankfurt 1967) and 1503, sig. q5v-q6v: sig. r4r/q5v, questio nona: "Utrum tantum tres sunt species suppositionis communis".

(2) Most of what I write in this paper concerns the theory of supposition as it developed in the second half of the fourteenth century. Little has been written on the theory at this date. A recent and instructive article on the theory before this date is P. V. Spade, *The Logic of the Categorical : the medieval theory of descent and ascent*, in *Meaning and Inference in Medieval Philosophy*, ed. N. Kretzmann, Dordrecht 1988, pp. 187-224.

44. ———. 1999. "How is Material Supposition Possible?" *Medieval Philosophy and Theology* no. 8:1-20.

"In the early fourteenth century, material supposition was characterized as nonsignificative, when a term supposits for itself or other terms contrary to its normal signification. But this characterization is in tension with the doctrine of signification, which picks out the concept uniting the things for which the term supposits. This tension was appreciated by Thomas Maulfelt and others so that by

the end of the century, in John Dorp for example, a further concept was associated with each term, the concept of the term itself and its equiforms. Material supposition can then be subsumed under the theory of signification."

45. Rearden, Myles. 1982. "On teaching students logic." *Philosophy* no. 57:130-132. "Is Peter Geach right to dismiss the medieval theory of distribution? Arguably, the distinction between "suppositio distributiva et confusa" and "suppositio confusa tantum" is more durable than all the rest of supposition theory. There is still valid point about how general terms stand for individuals. "some man runs" and "every man runs" both stand for everyone. The difference is that the former does so disjunctively, the latter, conjunctively. That seems enough to salvage the essence of distribution theory. Geach's rejection of distribution stems from his view that it involves assimilating nouns to proper names as regards their manner of signification. Quite the contrary, medieval distribution theory accepted the difference between a name-like referring and a more general standing-for. Distribution theory continues to make sense, and so consequently does much of the logic of categorical propositions."
46. ———. 1984. "The distribution of terms." *The Modern Schoolman* no. 61:187-195. "The traditional doctrine of distribution retains some validity, contrary to the view of Geach in reference and generality. The history of the doctrine is outlined. The medieval distinction between descensus copulativus and descensus disiunctivus is the core of distribution. The class interpretation of categoricals obscures the doctrine. Contemporary quantifier theory reveals it again. Geach's arguments against it are analysed and criticised."