

# INTRODUCTION TO MEDIEVAL LOGIC

*Second Edition*

ALEXANDER BROADIE

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# INTRODUCTION TO MEDIEVAL LOGIC



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## PREFACE TO THE SECOND EDITION

The opportunity to prepare a second edition has enabled me to make substantial improvements in the light both of my own subsequent misgivings and of criticism by reviewers, particularly E. J. Ashworth, Peter King, Norman Kretzmann, Stephen Read, and J. A. Trentman. I am happy to acknowledge their help.

Peter T. Geach has sharpened up my thinking on a number of medieval logic matters and I am grateful to him for that as for much else besides.

Among the major changes, I have extended my account of the different sorts of supposition, and of the logical problems relating to intentional contexts. The discussion of the most elementary part of medieval syllogistic is now not quite so breathless; the Conclusion also is more substantial, as is the Bibliography. The chapter 'Inference Theory: Medieval and Modern' has been deleted, as I no longer think that I can say anything useful about the topic without taking the matter a good deal further than would be justified in a book of the kind I had it in mind to write. Except where otherwise stated, the translations from Latin are my own.

This new *Introduction to Medieval Logic*, though appreciably longer than the first edition, has the same shape as before, and also the same character. Other books of a very different character could be written under that title, and I hope that some of them will see the light of day.

*Glasgow 1992*

A.B.



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# I

## Introduction

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There can be no doubting the central role accorded logic in the educational scene in the Middle Ages. There are two related aspects to this role, one institutional and the other scientific. The first is that at the heart of the medieval educational system were the seven liberal arts, divided into the trivium, three arts of language, and the quadrivium, four mathematical sciences. The arts of the trivium, the 'trivial' arts, were grammar, rhetoric, and logic, and during a period of several centuries practically every university graduate received a training in those arts.

The second aspect of the role of logic explains the first. Logic was considered as a propaedeutic to the remaining sciences. Robert Kilwardby<sup>1</sup> states the position in his great work *The Rise of the Sciences*, where he writes:

The origin of this science, as was mentioned before, was as follows. Since in connection with philosophical matters there were many contrary opinions and thus many errors (because contraries are not true at the same time regarding the same thing), thoughtful people saw that this stemmed from a lack of training in reasoning, and that there could be no certainty in knowledge without training in reasoning. And so they studied the process of reasoning in order to reduce it to an art, and they established this science by means of which they completed and organized both this [science] itself and all others; and it is the science of the method of reasoning on all [subject] matters.<sup>2</sup>

<sup>1</sup> English Dominican c.1215–1279. Taught at Paris and Oxford. Became Prior Provincial of the English Dominicans 1261. Archbishop of Canterbury 1272–c.1277. Cardinal Bishop of Porto 1278.

<sup>2</sup> *De Ortu Scientiarum*, ch. 53, para. 494. Trans. taken from *The Cambridge Translations of Medieval Philosophical Texts* (hereinafter *CTMPT*) (Cambridge, 1988), ed. N. Kretzmann and E. Stump, vol. i, 265.

In a similar spirit Kilwardby's contemporary Peter of Spain<sup>3</sup> begins his *Summule Logicales* with the words: 'Logic is the art which provides the route to the principles of all methods, and hence logic ought to come first in the acquisition of the sciences.'<sup>4</sup> William of Sherwood<sup>5</sup> said of grammar, rhetoric, and logic that they teach us respectively to speak correctly, ornately, and truly.<sup>6</sup> As regards logic, part of what he had in mind was that logic is a tool with whose aid we can reach the truth by a rational investigation of what is already known to be true. That is, logic can prevent us from slipping from truth to falsehood. Considered in this light it was bound to be concluded that there was no person who could not benefit from a training in logic, for truth is a goal that we all by our very nature seek.

Medieval logic is of course a vast field, involving a wide diversity of subjects investigated over a very long time span. Within it are several subjects which were perceived as sufficiently distinct to merit separate treatises. Fallacies were studied as a distinct area,<sup>7</sup> as were so-called insolubilia.<sup>8</sup> The latter were characteristically propositions whose truth value is problematic in virtue of a self-referential element. The 'liar paradox' in its basic form, namely that my proposition 'I am saying something false' appears to be false if it is true, and true if it is false, is the most famous insoluble, though very many more were discussed.

There was also an extensive literature on obligations exercises.<sup>9</sup> In these exercises, which are in the form of a disputation, an opponent seeks to manoeuvre a respondent into

<sup>3</sup> Born c.1205. Studied arts at Paris. Professor of medicine at Siena 1246-50. Dean of Lisbon and Archdeacon of Braga 1250. Archbishop of Braga and Cardinal Archbishop of Tusculum 1273. Elected Pope John XXI 1276. Died the following year.

<sup>4</sup> *Summule Logicales*, ed. L. M. de Rijk, 1. Cf. Aristotle, *Topics*, 101 b 3-4.

<sup>5</sup> c. 1200/10-between 1266 and 1272. Student at Oxford. Master at Oxford 1252. Treasurer of Lincoln from 1254/8.

<sup>6</sup> *Introductiones in logicam*, ed. M. Grabmann, 30.

<sup>7</sup> See *CTMPT*, 245-61: 'The fallacy of composition and division', for part of Peter of Spain's contribution to the field.

<sup>8</sup> See *The Cambridge History of Later Medieval Philosophy* (hereinafter *CHLMP*), ed. N. Kretzmann, A. Kenny, J. Pinborg, ch. 12; also P. V. Spade, *The Medieval Liar: A Catalogue of the Insolubilia-Literature*, also *CTMPT*, 338-68, for Albert of Saxony on insolubilia.

<sup>9</sup> See *CHLMP* ch. 16; also *CTMPT*, 370-412 for Walter Burley on obligations; also Paul of Venice, *Logica Magna*, Pt. II, fasc. 8, ed. E. J. Ashworth.