MEDIEVAL PHILOSOPHY

An historical and philosophical introduction

John Marenbon



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'Dr Marenbon's book is an authoritative, comprehensive, yet accessible survey of medieval philosophy, written by an expert at the height of his critical powers. Not only does the book guide the reader through the diverse issues of medieval philosophy, but provides sagacious instruction and illuminating commentary on the central topics of its chosen period of study.'

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- treats all four main traditions of philosophy that stem from the Greek heritage of late antiquity: Greek Christian philosophy, Latin philosophy, Arabic philosophy and Jewish philosophy
- provides a series of 'study' sections for close attention to arguments and shorter 'interludes' that point to the wider questions of the intellectual context
- combines philosophical analysis with historical background
- includes a helpful detailed guide to further reading and an extensive bibliography

All students of medieval philosophy, medieval history, theology or religion will find this necessary reading.

John Marenbon is a senior research fellow at Trinity College, Cambridge, UK.

MEDIEVAL Philosophy

An historical and philosophical introduction

John Marenbon



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CONTENTS

	Preface Methods of reference Abbreviations	ix xi xiii
1	Introduction	1
2	The ancient traditions in medieval philosophy	6
	 What was ancient philosophy? 6 Some Aristotelian themes 7 Plato, and the Hellenistic Schools 13 Plotinus's Neoplatonism 16 Porphyry and Aristotelian logic 20 Iamblichus and Proclus 22 Old and new religions 25 Translations, Latin philosophy and the Latin Fathers 28 Augustine 29 	
3	Old traditions and new beginnings	34
	 Boethius and the logical curriculum at the end of antiquity 35 Study A: The problem of prescience in Boethius's 'Consolation' 42 Monks and encyclopaedists: the Latin West from 525–780 46 Interlude i: Philosophy and a manuscript culture 48 The last pagan philosophers, and their Christian pupils 50 Study B: Eternity and the universe: Augustine, Boethius and Philoponus 53 The East, from Justinian to the Umayyads 56 	
	 5 The varieties of philosophy under the 'Abbâsids 62 6 Alcuin and philosophy at the court of Charlemagne 70 	

CONTENTS

 John Scottus Eriugena and the ninth century 73 Study C: Gottschalk, Eriugena and his contemporaries on predestination and salvation 78
 Commentary traditions: Byzantium and the Latin West 82 Interlude ii: Priscianus ad regem Osdroe 83

4 Traditions apart

- 1 The beginnings of medieval Jewish philosophy 85
- 2 The kalâm tradition 88 Interlude iii: Arabic free-thinkers? 90
- 3 Fârâbî 91
- 4 Ismailis and Neoplatonists 100
- 5 Avicenna 103
- 6 Ancient philosophy, logic and metaphysics in the eleventh-century Latin West 114
- 7 Anselm 119 Study D: Anselm's 'ontological' argument 124
- 8 Psellos, Italos, and the twelfth-century Byzantine Aristotelians 129

5 Latin philosophy in the twelfth century

- 1 Logic and grammar at the turn of the twelfth century 132
- 2 Peter Abelard 135
 Study E: Abelard on universals 139
 Interlude iv: Abelard, the Philosophus and the ancient philosophers 144
 Study F: Abelard and early medieval ethics 145
- 3 The schools, Platonism and William of Conches 148
- 4 Gilbert of Poitiers 152 Study G: Abelard and Gilbert on possibility 156
- 5 The beginnings of Latin scholastic theology 160
- 6 The Platonisms of the later twelfth century 161 Interlude v: Platonism and poetry 163
- 7 The Parisian schools of the later twelfth century 164
- 8 Beyond Paris: the scientists and the translators 169
- 9 The variety and distinctiveness of twelfth-century Latin philosophy 171

6 Philosophy in twelfth-century Islam

- 172
- Islamic theology and Avicenna 172 Interlude vi: Suhrawardî – theosophist or philosopher? 177

85

131

- 2 Philosophy in al-Andalus 178
- 3 Averroes 182 Interlude vii: Marriage in the Republic 191
- 4 Maimonides and Jewish Aristotelianism 192

7 Philosophy in Paris and Oxford, 1200–77

- 1 Paris and Oxford universities: the translations, the curriculum and the forms of philosophical writing 206 Interlude viii: Pseudepigrapha and the medieval Aristotle 214
- 2 Grammar and logic 218
- 3 Arts Masters and theologians: 1200–50 224
- 4 Theology in Paris: Bonaventure and Albert the Great 230
- 5 Thomas Aquinas 236 Interlude ix: Aquinas and the historiography of medieval philosophy 245 Study H: The five ways 247 Study I: Aquinas on eternity and prescience 251
- 6 Latin Averroism: the Paris Arts Faculty in the 1260s and 1270s 254
 Study J: The eternity of the world: Bonaventure, Aquinas and Boethius of Dacia 258
 - Study K: The potential intellect, Aquinas, Averroes and Siger of Brabant 262
- 7 The 1277 condemnations and their significance 266

8 Philosophy in the universities, 1280–1400

271

- 1 The Albertine tradition 272
- 2 Henry of Ghent, Godfrey of Fontaines and Peter John Olivi 275
- 3 Duns Scotus 280 Interlude x: Scotus, the King of France and the Jews 287 Study L: Scotus on possibility 290
- 4 Between Scotus and Ockham 293
- 5 William of Ockham 296 Study M: Ockham and the problem of prescience 305
- 6 The Paris Arts Faculty and fourteenth-century Averroism 308
- 7 Oxford and Paris theology after Ockham 311 Interlude xi: Holcot and the philosophers 314
- 8 Logica modernorum 319
- 9 John Buridan 322
- 10 The late fourteenth century 325 Interlude xii: How far can you go? Biagio Pelacani di Parma 327

205

CONTENTS

9	Phi	losophy outside the universities, 1200–1400	329
	1	Outside the universities: philosophy, courts and the vernacular in the Latin West 330	
	2	Byzantine philosophy 335	
	3	Philosophy in Islam 338	
	4	Jewish philosophy 339	
10	No	t an epilogue: 'medieval' philosophy, 1400–1700	349
	Gu	ide to further reading and material	353
	Bib	liography	385
	Ind	ex	437

PREFACE

This book is not, despite its title, a revision of the Introductions to Early and Later Medieval Philosophy I wrote twenty years ago. But it owes its origin to a request for one. Would I, asked my publishers, like to up-date my two books so that they could be issued as a single volume? I quickly realized that there was so much I wanted to change, or rather, so little I was willing to retain, that it would be much better to offer an entirely new Introduction. Routledge bravely accepted my proposal, and here now is the book. In its conception of what constitutes medieval philosophy, it could hardly be more different from the two earlier Introductions. They focussed exclusively on the Latin tradition. with Islamic and Jewish material introduced only in so far as it affected the Christian thinkers in the universities. This new book aims to introduce all four main traditions of medieval philosophy that go back to the same roots in late antiquity: the Greek Christian tradition, the Latin tradition, the Arabic tradition and the Jewish tradition (written in Arabic and in Hebrew). Chronologically, the scope may seem at first to be not so different from that of my old books, since the stopping date is 1400, only about seventy-five years later than the improbably early point where Later Medieval Philosophy finished. But, as I argue in my Introduction and in the final, brief chapter, 1400 is a completely arbitrary deadline, and the best approach to the material considered here might be to envisage a period running from c. 200 to c. 1700 - a long Middle Ages so long that it hardly remains the Middle Ages - as a unit for teaching and study. Although, then, this book covers almost all the ground that would be expected of an introduction to medieval philosophy, to me its central point lies more in what it fails, in its present state, to do. I see it as incomplete: the first of two volumes (the second to run from 1400-1700) which, taken together, are designed not so much to cover medieval philosophy as to challenge the idea of it as a coherent historiographical unit.

* * *

The most pleasant feature of finishing a book is the chance it gives to thank those who made the writing of it possible. First and foremost, this book, and

PREFACE

indeed almost all my work on medieval philosophy, could never have been accomplished were it not for the generosity of Trinity College, Cambridge, in supporting me. I am also indebted to Sheila and Maximus for their tolerance and support in living with someone trying to write so much so quickly.

In June 2005, just before I started writing this book in earnest, Scott MacDonald gave me the chance to present my plan and my ideas about methodology to the annual Cornell Medieval Philosophy colloquium: I am grateful to him, and to all of the colleagues there who contributed to the discussion, as I am to William Courtenay and his graduate students, to whom I spoke about the same issues more recently. Many friends have kindly accepted my requests to read sections of the book and comment on them: I would like to thank Jennifer Ashworth, Clare Jarmy, Taneli Kukkonen, Martin Lenz, Tony Street and Sophia Vasalou. I am especially grateful to Henrik Lagerlund, who read the whole manuscript, and above all to Margaret Cameron, who has advised me constantly, since I began writing, both on detail and on issues of method and aim. Without her help, this book would certainly have been worse. I would also like to thank Priyanka Pathak, Development Editor in Philosophy at Routledge. Without her interventions - reminding me of the deadline and the production schedule - this book would certainly have been much better, but it would not be finished by now, and probably never. I am also grateful to Geraldine Martin for seeing the book through production with care, efficiency and grace.

In October, as I was right in the middle of my writing, my mother died suddenly at the age of ninety. I dedicate this book to her memory, and that of my father, who died many years earlier.

> John Marenbon, Trinity College, March 2006

METHODS OF Reference

Where possible, references to primary texts are made to standard divisions, such as book, chapter, section, or question and article. Where there are no suitable standard divisions, the edition is cited by author (unless obvious from context) and will be listed in the Bibliography. Cross-references to other discussions in this book are placed within brackets and take the form: (Chapter 5, section 3).

A list of editions and translations of primary works will be found under the name of each author in the Bibliography (medieval names are cited given name – e.g. 'John' – first; Arabic names are given in the form most usually known, with the definite article (*al*) omitted). In the *Guide to further reading and material*, the reader should consider herself or himself referred automatically to the bibliography, under the name of the author in question, where editions and translations will be listed. Where the relevant authors are not named in the title to a section, the Guide will say '<u>Texts</u>: *Bib* John of Hatch End, Peter of Villanulla etc.', telling readers to look in the Bibliography under these names. Sometimes extra information, where necessay – e.g. where certain texts are printed in a collective edition, which of two translations is preferable, is given in the Guide; this information is in addition to what can be found from simply looking up the Bibliography under the name of the writer(s) in question.

References to secondary literature are, in the vast majority of cases, confined to the Guide to further reading and material. Where, however, an interpretation or idea is taken very closely from a particular scholar, I have included a reference (by name and date), for which the details can be found in the bibliography.

In the *Guide*, an asterisk is used to mark secondary books or articles that would be especially good starting places for study – wherever possible they are in English. Resources available on the web (as of 2006) are mentioned within squiggly brackets, and the symbol || is used to separate the listing of primary sources from secondary literature.

ABBREVIATIONS

Archives d'histoire doctrinale et littéraire du moyen âge
Aristoteles Latinus (1961–)
Arabic Sciences and Philosophy
Beiträge zur Geschichte der Philosophie und Theologie des
Mittelalters
Brill's Studies in Intellectual History
Commentaria in Aristotelem Graeca
Corpus Christianorum series latina
Corpus Christianorum series graeca
Corpus Christianorum continuatio mediaeualis
Cahiers de l'Institut du Moyen-Âge Grec et Latin
A Companion to Philosophy in the Middle Ages (Gracia and
Noone, 2003)
Corpus Scriptorum Ecclesiasticorum Latinorum
The Cambridge Translations of Medieval Philosophical Texts
Stump and Kretzmann (1988)
McGrade, Kilcullen and Kempshall (2001)
Pasnau (2002)
Documenti e studi sulla tradizione filosofica medioevale
Pontifical Institute of Mediaeval Studies
JP. Migne Patrologia Latina
Routledge Encyclopaedia of Philosophy (Craig, 1998)
Stanford Encyclopaedia of Philosophy (http://plato.stanford.
edu/contents)
Spicilegium sacrum lovaniense, études et documents
Storia e letteratura

Abbreviations of frequently cited websites

Aug	http/www.fh-augsburg.de/~harsch/augustana
Fa	http://www.ccel.org/fathers2
For	http://www.forumromanum.org/literature/table

ABBREVIATIONS

- Gal http://gallica.bnf.fr
- K http://individual.utoronto.ca/pking/resources
- Ll http://thelatinlibrary.com
- M http://www.muslimphilosophy.com
- Sc http://www.ulb.ac.be/philo/scholasticon (The *Bibliotheca vir*
 - *tualis* is also available at http://abelard.paris-sorbonne.fr)

INTRODUCTION

The aim of this book is to provide a history of medieval philosophy which will serve as an introduction to the subject. *A* history: there are many different histories of medieval philosophy that have been written, and will be written. My history will not make them redundant, but it has its own special aim and so its particular emphases. It advances a view of both what medieval (Western)¹ philosophy is, and what should be involved in studying the history of philosophy, that is both broader and bolder than what is usually expected.

Traditionally, historians of medieval (Western) philosophy have begun either with the earliest Christian thinkers, in the second and third centuries, or with Augustine (b. c. 354) and Boethius (b. c. 475–7), or with Alcuin at the end of the eighth century. They have ended either by about 1350, with the generation after Ockham, or have added some account of the later fourteenth and fifteenth centuries, or concluded with the 'Silver Age' of scholasticism in the Iberian peninsula, going up to Suárez (d. 1617), but omitting 'Renaissance' philosophers such as Ficino (1433–99). Geographically historians of medieval philosophy have had to range wider than their colleagues working on the ancient or early modern periods, since the major thirteenth-century thinkers are greatly influenced by Islamic philosophers and by Jewish thinkers living in Islamic lands. In most cases, however, this non-Christian philosophy is treated just in so far as it is a source for Latin thinkers such as Aquinas and Duns Scotus, except by writers who are offering histories of specifically Islamic, Jewish or Byzantine philosophy.

My broader conception of medieval philosophy rests on a story – one of the most fascinating of the narratives that can be told about philosophy and its past. Centuries after the era of Plato (c. 429–347 BC) and Aristotle (384–322 BC), which is often regarded as *the* age of ancient philosophy, there

¹ The whole tradition which stems from the Greek Neoplatonic schools (and, ultimately, from Plato and Aristotle) – in its Christian Latin and Greek, Islamic Arabic and Persian, and Jewish Arabic and Hebrew versions – can be called 'Western', so long as this word is understood in a very broad sense, as marking a distinction between Europe, North Africa, the Near and Middle East, from such places as India, China, Japan and sub-Saharan Africa. The philosophies of these regions form distinct traditions, which will not be discussed here, despite their enormous intrinsic interest.

flourished in the Hellenized world of the Roman Empire a school of philosophy now called 'Neoplatonism' - its exponents would have thought of themselves, rather, as Platonists or, more simply, as philosophers. Its founder was Plotinus (c, 205–270) and it lasted at least until the time of Olympiodorus (d. after 565). Despite their allegiance to Plato, the Neoplatonists believed in the unity of true philosophy. It was a harmony, primarily, of Plato and Aristotle, whose texts featured as prominently in their curriculum as Plato's. It also incorporated elements from other schools, especially the Stoics, whose thinking the Neoplatonists disparaged and yet, in ethics above all, absorbed. The Neoplatonists were pagans; indeed, Neoplatonic philosophy had become, by the sixth century, the last refuge of paganism in a Christian society. But they had an incalculable influence on thought within the three religious traditions - Christianity, Islam and Judaism - which, over the next millennium and longer, would dominate Europe, North Africa, the Near and Middle East. Both Greek and Latin Christian writers were so affected by Neoplatonic thinking that one would find it hard to disentangle even the doctrine of Christianity, as understood in the Middle Ages, from it. In the lands of Islam, Muslims, Jews and Christians benefited from the translation into Arabic of much of what had been studied in the last of the ancient Neoplatonic schools at Alexandria.

Four traditions of philosophy, then – Byzantine, Christian 'Latin' (mainly written in Latin, but also in the European vernaculars), Islamic and Jewish all can be said, in a certain sense, to begin from late ancient Neoplatonism. And all four traditions belong to cultures dominated by a monotheistic, revealed religion, different in each case (except for Latin and Greek Christianity), but closely related. The importance of this common starting point and context remains, despite the fact that each tradition has elements and strands that derive more directly from its own particular culture and religious traditions - most obviously, the aspects of philosophizing most closely connected with the particular religions, but also, for instance, the extra presence of Stoicism in Latin thought thanks to the writings of Cicero and Seneca. These elements and strands, linked in various ways to the common tradition, should not be excluded from the story, even though they tend to make it less neat and unified. Their centripetal tendency is counter-balanced by another factor linking the traditions together: the direct relationships between the four traditions as they evolved. In the Islamic world, the traditions of Christian, Islamic and Jewish philosophy were closely intertwined, whilst philosophy written in Arabic, both Islamic and Jewish, had an enormous influence through translations on Latin Christian thought in the later Middle Ages. Earlier, Latin thinkers had looked to Byzantine thought, whilst in the fourteenth-century Latin scholasticism would affect philosophers both in Byzantium and in the Jewish communities in Latin Europe.

Is it history, though, or rather a fiction to conceive medieval philosophy in terms of the tradition of Neoplatonism? Most accounts of medieval philosophy in the Latin, Islamic, Jewish and Byzantine traditions present it as, centrally, a development of Aristotelian thought. For, as they point out, the greatest philosophers writing in Arabic - Avicenna, Averroes and Maimonides - all thought of themselves as Aristotelians, and in the Latin West the university curriculum from c. 1250 onwards was structured around the texts of Aristotle, whose eminence was such that he was called simply 'the Philosopher'. These observations are true, but Aristotle's works were part of the Neoplatonic curriculum and it was for this reason that they were transmitted and translated. There is, however, an important twist in this story. The Neoplatonists had a particular place for Aristotelian thinking within their system, in which it was subordinated to the profounder truths about the intelligible world discovered through Platonic metaphysics; medieval readers, who studied in translation the texts themselves of Aristotle transmitted by the tradition, had no need to follow the Neoplatonic approach; in some cases they were not even aware of it. Neoplatonic ways of thinking could, therefore, be changed, challenged or even undone from within. Medieval philosophy can be seen, then, as the story of a complex tradition founded in Neoplatonism, but not simply as a continuation or development of Neoplatonism itself. This qualification is underlined by the fact that not just Aristotelianism, but other strands of pre-Neoplatonic Greek philosophy – some of Plato's own work, Stoic ideas, traces of Epicurean and Sceptical thinking - survived in a few texts available in the Middle Ages and exercised some influence.

The large geographical range of this Introduction is clear from what has been said, and the chronological scope seems as though it must be so broad as to rule out 'medieval' from the title altogether. Must not the starting point be at least as early as the Greek pagan world of the third century AD, but with long glances cast back to the Hellenistic Period and the time of Plato and Aristotle, six centuries before? As to its ending, if the Byzantine tradition comes to a close as this distinctive civilization declines following the fall of Constantinople to the Turks in 1453, in many ways, the most thorough and ruthless treatment of many of the problems formulated by the Neoplatonists, and discussed through the intervening centuries, was given by Leibniz (1646-1716), and Descartes (1596-1650), despite his devotion to the new, seventeenth-century science also looks back, through Suárez and Aquinas, to this tradition. Spinoza (1632–77) can be seen as belonging to the line of Jewish philosophy running back to Maimonides, and although one strand in the Islamic tradition – the best known among historians of philosophy – hardly survived beyond the twelfth century, others lasted well into what, from the European point of view, are modern times.

The periodization of the history of philosophy I wish to champion (it is not the only plausible one, but a good case can be made for it) is, indeed, one in which the whole epoch from *c*. 200 until *c*. 1700 is seen as a unit, a genuine long Middle Ages. In this book, I follow this periodization, but I do not, for practical reasons, follow it through to its conclusion. In an introductory survey

(Chapter 2), I discuss ancient Neoplatonism and its Aristotelian cargo, as well as the earliest Christian and Jewish contacts with the Greek philosophical tradition. But, since there exist fine general works on this period of late ancient philosophy. I do not try to give the same degree of detail here as in the following sections. The book stops, abruptly, at the year 1400. That date for an ending is entirely arbitrary, the result of extrinsic factors, such as word-limits, deadlines and readers' expectations about the period covered by an introduction to *medieval* philosophy. Some histories of medieval philosophy include within their scope just the elements in fifteenth- to seventeenth-century philosophy which they consider to be continuations of the medieval tradition, in especial the Iberian 'Silver Ages' scholastics, such as Fonseca and Suárez. This strategy fits into a conception of medieval philosophy, very different from mine, as fundamentally a tradition of Christian philosophy, characterized, if not defined, by the thinking of Augustine, Anselm, Aquinas and Scotus. From my perspective, such a selection of supposedly medieval elements in the period from 1400 onwards would be arbitrary and diseducative. The present book, despite its length, should really be considered as the first volume of a two-volume introduction to the long period of philosophy from 200 to 1700: less, then, of an attempt - if and when it is completed – to write another history of medieval philosophy than to replace the idea of *medieval* philosophy with a more illuminating periodization for the material.

Within the very broad chronological and geographical range I have outlined, which material am I to count as philosophy? There is no convenient medieval definition of 'philosophy' which a historian can adopt. Either the word has too wide a meaning, covering every sort of intellectual discipline, or it is, in one way at least, too narrow, ruling out any theorizing which relies on revealed premisses (and so most of the work of Aquinas, Scotus and Ockham, for example). A modern criterion of what counts as philosophy needs to be used – a move which does not go against my attempt to give an account that is historical as well as philosophical, so long as the texts and passages so selected are each traced back to their wider contexts, which will often fall outside philosophy. But which modern criterion? Philosophers who work on medieval thought tend to select just those texts and passages which deal with problems close to ones that concern contemporary analytical philosophers. I prefer to use a wider understanding of 'philosophy', according to which the word covers whatever is considered by professional philosophers today.

That, in general terms, is what I set out to do in the following pages. I shall now explain more practically how their contents are arranged, and so how this book may best be used.

The order of the chapters and their sub-sections is, roughly, chronological; in particular, the different traditions – Greek, Latin, Islamic, Jewish – are treated together, as they each develop over time. There are two sorts of material in addition to the main sections which make up each chapter: 'Interludes' and 'Studies'. The interludes are very short discussions aimed mainly to give context to the main narrative, and to introduce details which, though not central, might be illuminating or stimulate useful reflection. They lead away from the concentrated analysis of positions and arguments to wider questions in intellectual and cultural history. The object of the studies (which are confined to the Latin tradition, simply because it is at present my own main field of expertise) is, by contrast, to give a more detailed and rigorous analysis of the arguments of some texts or groups of texts than is usually found in a general history of philosophy. They are mostly devoted to very well known texts (such as Boethius's Consolation, Anselm's Proslogion and Aquinas's De unitate intellectus) and theories (Abelard on universals, Aquinas on the existence of God, Scotus on possibility). These obvious choices are deliberate: students coming fresh to medieval philosophy will wish to learn about these texts and problems - and, in any case, their celebrity is based on their intrinsic interest. In a few instances, however, for the sake of added breadth, less well-known texts and positions are chosen. In all cases, however, English translations of the material, or at least large parts of it, are available.

A number of themes (themselves intertwined) link together groups of the studies, and/or tie them to discussions in the main sections of the book: time and eternity; the problem of prescience, the problem of predestination; possibility and necessity; universals; the existence of God; (see Index) intellectual knowledge; the good for humans; the eternity of the world.

The Guide to further reading and material is a very important part of the book. First, it gives, not merely details (keyed to the Bibliography) of primary texts and translations (including what is available freely on the web), but a discussion of the secondary literature which, where appropriate, explains and comments on the different interpretations and approaches. Although I hope that my book is more than an annotated bibliography, any single author writing about the vast range of subject-matter I include, and who is forced to compress even major authors into sections of a few thousand words, must consider a main function of his book as that of a gateway to the thought, research and scholarship of his many colleagues. Second, this Guide fills some of the very many gaps I have to leave in the main text. Without turning large parts of my chapters into lists, I cannot even name many of the interesting, though secondary, thinkers of the period; without reducing my account of every philosopher to an outline, I cannot look at all the aspects of their work. The references in the Guide should help to fill some of these gaps.

Although I have described a methodology, I have deliberately refrained from discussing methodological issues at length here or trying to justify my position. The Guide gives details of some of the issues and tendencies. I hope that from working through this book itself the reader will finish up by being, though probably not convinced by the virtues of the approach I have followed, in a good position to see the problems in writing such a history as well as the philosophical opportunities it offers.

THE ANCIENT TRADITIONS IN MEDIEVAL PHILOSOPHY

The story of philosophy from before 500 to around 1400, among Christians, Muslims and Jews, revolves around the heritage of ancient thinking. Revealed religious doctrines have their impact, and there is much re-thinking and many original developments. Yet the tradition of Greek philosophy from antiquity, in its many re-appropriations and transformations, is a central thread.

Which ancient Greek philosophy? The dominant philosophical school in the years from c. 200-c. 600 was Neoplatonism, and it had a pervasive influence on the Middle Ages: on philosophers writing in Arabic, by means of a translation movement that made much of its curriculum available to them; on the Latin tradition, through figures such as Augustine and Boethius; and on the Greek tradition, both directly and through some of the Church Fathers. An introduction to the Neoplatonic School and its doctrines is therefore the main business of this chapter. But, as explained in the Introduction, Neoplatonism brought with it a cargo of Aristotelian writing, and texts were also available from some of the other schools of ancient philosophy that preceded the Neoplatonists. After a quick look at how philosophy was conceived and studied in ancient Rome, this chapter sketches some important Aristotelian themes, and then considers what of Plato himself and of the Hellenistic schools of philosophy was transmitted to the Middle Ages, before turning to the Neoplatonists and the late ancient Jewish and Christian thinkers who took up Neoplatonism or earlier forms of Platonist thought.

1 What was ancient philosophy?

The language of philosophy in the Roman Empire was Greek. A few educated Romans wrote philosophy in Latin – most notably Lucretius, Cicero and Seneca (Chapter 2, section 8), but even their work belonged to a Greek tradition, and Marcus Aurelius (121–80 AD), the philosopher who was also Roman Emperor, used Greek for his *Meditations*. So did Plotinus, although he lived and worked in Rome. Marcus Aurelius, Cicero and Seneca were wealthy, public figures and philosophers merely in their spare time. Most of the outstanding philosophers of antiquity and late antiquity, however, were, as

Socrates, Plato and Aristotle had been, professional teachers of philosophy, although their pupils in some cases consisted of a circle of adult followers, and some rich families had their own, household philosopher. Schools of philosophy were in some cases institutions established at public expense (for example, Marcus Aurelius set up chairs of Stoic, Platonic, Epicurean and Aristotelian philosophy in Athens in 176 AD); some were supported by private endowments, whilst others were attached closely to a particular master and did not survive him. Philosophy was considered a type of higher education, to be studied only after a course in what the Romans called the 'liberal arts', predominantly grammar and rhetoric, with perhaps some mathematics, music and astronomy.

In one way, these ancient philosophical schools were very different from most medieval or modern schools or universities. As the terms of Marcus Aurelius's endowment indicate, a school was not a place where someone studied simply philosophy, but rather a particular tradition of philosophy, such as Stoicism or Platonism. Each tradition had its authoritative texts and characteristic doctrines, although these doctrines were less fixed among the Platonists and Aristotelians than among the Stoics and Epicureans. The reason why philosophical schools were schools in the sense of sects is related to a more general way in which the concept of philosophy in the ancient world differs from what the modern philosophical reader might expect. In antiquity, philosophy was not one academic subject among others: it was a way of life. Each of the main philosophical schools claimed to provide a route to leading the happy life, but they differed both in their understanding of what happiness consisted in (Wisdom? Virtue? Freedom from pain?), and how to reach it. The promises of a philosophical school were, then, more akin to those of a religion than those of an academic discipline, and they tended to be similarly exclusive. As a way of life, philosophy was at once more all-absorbing for those engaged in it professionally (the schools were communities, and in the case of the Epicureans, isolated ones), yet it had a more popular appeal than now: rich men kept their household philosopher or attended the lessons of a Plotinus, not so as to satisfy their curiosity, but in order to live better lives. The contrast between ancient philosophy as a way of life and philosophy in later centuries is not, however, absolute. And, in the Middle Ages, at certain moments, for certain thinkers, philosophy – as distinct from theology, and in spite of the institutional structures - did seem to offer, as it had done to the ancients, a way of life

2 Some Aristotelian themes

Almost the whole of Aristotle's work was brought, within the Neoplatonic tradition, to medieval thinkers. Some of the concepts and arguments found there will be presented in the course of the following chapters, when a particular medieval discussion uses them. This section aims just to indicate

the range and shape of Aristotle's thought, and to look at five areas of it which are especially important to all four of the medieval traditions: his logic, his theory of scientific method, the aims of his *Metaphysics* and his ideas about the human soul and its ways of knowing.

The texts of Aristotle which survive, probably collected from the lectures he gave, are encyclopaedic in their scope. Aristotle was a keen natural scientist, fascinated by botany, zoology and human biology, as well as by meteorological phenomena and fundamental physical laws. His urge to collect and classify extended to the study of politics where, in addition to a theoretical treatise, he made a large collection of the constitutions of Greek city-states. He also wrote on rhetoric and poetics, combining technical analysis with ethical and psychological concerns. For philosophers his central works are the logic – the so-called *organon*, including his treatment of scientific method; his study of the soul; the *Metaphysics* (all discussed below); and the *Physics*, *On Generation and Corruption* and the *Nicomachean Ethics*.

Logic

Aristotle was the first person to formulate an explicit theory of correct reasoning: so he boasted himself (*Sophistical Refutations* 183b34–36). He was able to learn from the exploration of forms of argument in the Socratic argument contests recorded in Plato's early dialogues. The *Topics* probably shows his first steps in formulating logical principles: it is designed to teach its readers how to construct 'dialectical' arguments: arguments which, in keeping with the idea of a real contest, use generally accepted premisses that will be granted by the interlocutor. In an argument, says Aristotle (*Topics* 100a25–27), 'when certain things have been laid down, something other than what has been laid down necessarily results from them.' This definition captures the idea of logical consequence. Aristotle takes it further in the *Prior Analytics*, developing it into his formal theory of 'syllogistic', which he applies to 'demonstrations', arguments in which the premisses must be not merely accepted, but necessary (in the Aristotelian sense of invariable: for instance, 'Every man is mortal').

Aristotelian syllogistic is, to use the contemporary label, a system of predicate or term logic. That is to say, it studies how one proposition follows from others in virtue of the relationship between the terms of the propositions. (Here and throughout the book, the medieval practice of taking 'proposition' (*propositio*) to mean an assertoric (token-) sentence, not a proposition in its more modern sense is followed.) Consider the following two propositions:

- (1) Every human is mortal.
- (2) Every philosopher is human.

From (1) and (2) it follows that

(3) Every philosopher is mortal.

If (1) and (2) are expressed in a form closer to Aristotle's Greek, this point becomes obvious, if it is not already:

- (1a) Mortal is predicated of every human.
- (2a) Human is predicated of every philosopher.

That (3) follows from (1) and (2) has nothing to do with the meaning of the terms 'human', 'mortal' and 'philosopher', but with the form of the propositions. In general, from 'Every *A* is *B*' and 'Every *C* is *A*', it follows that 'Every *C* is *B*'. Aristotle distinguished thirteen further such patterns of inference, made up of sets of three propositions that are either universal affirmatives (labelled 'A' propositions), as in this example, universal negatives ('E'; 'No human is incorporeal'), particular affirmatives ('I'; 'Some human is a philosopher'), or particular negatives (O; 'Some human is not a philosopher'), where the first two propositions, the premisses, share a common ('middle') term (in the example above, 'human'). For instance,

- (4) No pianist hates Chopin.
- (5) Some Liszt-hater is a pianist.
- (6) Some Liszt-hater does not hate Chopin,

is a valid syllogism, of the pattern *EIO*. Aristotle held that the four first-figure patterns or 'moods' in which the middle term is the subject of the first proposition and the predicate of the second (along with the two examples given, *EAE* and *AII*) are self-evident, and he shows how the other syllogisms can be reduced to these ones using a series of conversion rules.

Aristotle's other logical works introduce concepts and techniques needed for syllogistic, and also add new philosophical dimensions. On Interpretation discusses assertoric statements and their relations such as contradiction and contrariety, but it also sketches a highly influential semantics, in which words are signs for thoughts, and thoughts for things, and it ventures into difficult questions of possibility and necessity. The Sophistical Refutations explore fallacious, but apparently valid arguments. The Categories (Chapter 2, section 5) fits less easily into the framework of logic, although all the ancient writers include it in the organon (the corpus of logical works): in some ways, it seems to preface the Topics, but it is more concerned with what Aristotle would treat in more depth in his Metaphysics. The late ancient and Islamic logical curriculum also included two other Aristotelian works: the Rhetoric and the Poetics.

Scientific knowledge

In the remaining treatise of the *organon*, the *Posterior Analytics*, Aristotle puts his syllogistic to work in presenting his theory of scientific knowledge. Scientific knowledge is knowledge of the causes of what is necessarily (invariantly) the case. It is gained by demonstration: by framing syllogisms which proceed from premisses that are necessarily true and are better known than their conclusions – that is to say, the general laws on which these conclusions are founded. The *Posterior Analytics* does not, therefore, offer a model for scientific enquiry, but one rather for ordering the results of enquiry into a system of knowledge.

Aristotle's theory seems, though, as if it will be circular: for how is the necessary truth of the premisses of a demonstration to be shown except by further demonstrations? Aristotle will not accept that scientific knowledge could be founded in such a way. Rather, he argues that each science has its own fundamental first principles, which cannot themselves be demonstrated but are self-evident. We grasp them using *nous* ('intellect'). An upshot of this approach is that each branch of knowledge is a separate structure, although Aristotle does allow that some sciences borrow as first principles propositions that are proved in another science (harmonics, for example – the science of musical harmonies – takes its first principles from arithmetic).

Metaphysics: its nature and aims

'Metaphysics' was not Aristotle's own name for the text (or, rather, the set of material, not all of which belongs together) by him which goes under that name. The title may have been chosen by an editor just because the work was placed after (*meta*) the *Physics*, or it may have been meant to indicate that here Aristotle deals with things beyond the physical world. Aristotle himself describes the aim of the *Metaphysics* in a number of different, and arguably incompatible, ways: as the study of first principles, or of being *qua* being, or the investigation of substance, or as being about immovable substances, that is to say, the gods. This final, theological aspect led many later ancient philosophers to envisage the *Metaphysics* as an investigation, not of being in general, but of the highest sort of being, which is beyond sensory apprehension.

In Book 12 of the *Metaphysics*, Aristotle unites theology and cosmology. He pictures the universe as a set of concentric spheres – over fifty of them – revolving ceaselessly around the stationary earth. The motion of each sphere, he argues, must be due to its own incorporeal mover, and these movers, in turn, owe their motion to their wish to emulate the perfect, and therefore circular, motion of the First Mover. This First Mover or Cause, Aristotle's God, is Intellect (*nous*): its only activity is to contemplate itself. Aristotle has a terminology, developed especially in the *Physics*, but used throughout his work, to classify the type of causality exercised by *nous*. He distinguished

four ways in which x can be said to cause y: x can be y's matter (the wood from which the table is made) – its *material* cause; or y's form (what it is to be a table, a human and so on) – its *formal* cause; or x can bring about y – its *efficient* cause; or it can be y's goal – its *final* cause (as winning my beloved's heart is the final cause of my buying a bunch of red roses; Aristotle and most pre-Cartesian thinkers extended final cause if all things in nature). Aristotle thinks of his God, *nous*, as the final cause of all things, but not as their formal, material or efficient cause.

The soul

For Aristotle, having a soul (*psuchê*) is what distinguishes a living thing from something inanimate, such as a stone (anima is the Latin for soul, and so the etymology of the English word preserves the Aristotelian theory). His theory of soul depends on two interconnected distinctions: between potency and act, and between matter and form. An acorn is *potentially* an oak; when it has grown up into a tree, it is *actually* one. The water in my saucepan is *actually* cold but *potentially* hot; after I have put it on the light, it is *actually* hot and, because it can cool, *potentially* cold. Matter and form are the constituents into which any particular of a natural kind - such as John Marenbon or Sabre the dog - can be analysed, though not physically separated. A thing's form is its definition or essence: that by which it is one sort of thing rather than another, a human or a dog. Only by informing matter does a form constitute a concrete, particular thing. Form stands to matter as act to potency. Uninformed matter is pure potency; it becomes a thing through the form which actualizes it. Pure unenmattered form does not exist, at least not in the sublunar world. (In Aristotle's cosmology, the lowest of the concentric spheres surrounding the world is that of the moon. The physics of the supra-lunary realm - the heavenly spheres – is different from that of the sublunar world.)

The soul, says Aristotle (*On the Soul II*, 412a–13a) is the form of a natural body which potentially has life. A soul, that is to say, has the relationship to body of form to matter: it is the capacity for life-functions. A living, that is to say ensouled, thing performs various life functions depending on the sort of thing it is: a tree grows, a dog grows, moves, sees, hears, seeks pleasure and avoids pain; humans do all of these, and they reason too. A body *capable* of performing such functions has been actualized to a first degree – and its soul is this first actualization. The human soul, then, includes among other capacities one which is unique among earthly living things: the ability to reason, which belongs to what Aristotle calls the intellect (*nous*).

Cognition, for Aristotle, is a type of assimilation. The most obvious case is in sensible cognition. When I feel with my hand that a stone is hot, the heat in the stone turns my hand from being potentially to being actually hot. When I hear a bell ringing, my sense of hearing is converted from potency to act by the sound: whilst I am hearing the ringing, the ringing is the form of my sense of hearing. Intellectual cognition has as its objects, not the forms which give things their sensible characteristics, but the forms or essences which make objects the sort of things they are: not the lines of John's face or the colour of his eyes, but the humanity by which he is human. Since there is nothing about John's humanity that distinguishes it from any other human's humanity, intellectual knowledge is of universals, not particulars, and it is using this knowledge of universals that, according to Aristotle, we form syllogisms and elaborate the sciences in the manner he sets out in the *Posterior Analytics*. But, although intellectual thought is of universals, Aristotle insists that it has to be accompanied by *phantasmata*, sensible images in the mind. Aristotle, then, sets the distinguishing feature of humans very high: cognitive processes such as perceiving the sensible characteristics of things, remembering them, manipulating and combining the images of them are the work of the senses, which are shared by humans and non-humans. The intellect is responsible just for what might be called abstract thinking.

It will already be clear that 'soul' in Aristotelian usage has different connotations from the word as it is popularly used today. In modern usage, souls are thought to belong to humans alone, and those who use the term tend to presume that the soul does not perish with the body but is immortal. If we want to say that there is no life after death, we are likely to deny that we have *souls* at all. For an ancient Greek philosopher, there is no presumption from the term alone that a soul is not mortal. Plato, however, argued strongly that human souls are immortal. What was Aristotle's position?

It seems that Aristotle did not think that human souls in any straightforward sense survive death. His explanation of the soul as the form of the body points to this view: if the soul is a body's capacity for life-functions, it does not seem to be something that can exist apart from the body. Although 'capacity' may be too reductive in its connotations (if we were to envisage capacity in terms of, for example, a car having the capacity to achieve a certain speed because its parts are configured in a certain way), Aristotle himself says (On the Soul 413a) that 'it is not unclear that neither the soul nor certain parts of it, if it has parts, can be separated from the body'. He does, however, qualify this view (On the Soul, 403a, 413a) by saying that, if there is a function or part of the soul which is not an actuality of the body, it could be separated from the body. And, in a famously obscure passage (On the Soul, 430a), Aristotle writes in a way that could suggest that there is indeed such a part of the soul. In the soul, as in every part of nature, he explains, there is something which is potential and something active, which is its cause or maker. Besides intellect as Aristotle usually considers it in On the Soul - something which is in potency and becomes all things (in the ancient Greek and Arabic traditions, it was usually called the 'material intellect'; in the Latin tradition the intellectus possibilis: 'possible' or, as I shall translate, 'potential' intellect), there is also, he says, intellect which makes all things and which he compares to light. Aristotle continues:

This intellect is separable and impassive and unmixed, being in its essence activity. For that which makes is always superior to that which is passive, and the original cause $(arch\hat{e})$ to the matter . . . And intellect does not think at one time and not at another. In separation, it is just what it is, and this alone is immortal and everlasting . . . and without this nothing thinks. (III.v; 230a)

The commentators were left, as they still are, to puzzle out Aristotle's meaning. The active intellect – as this intellect which makes all things came to be called – clearly plays an important part in human intellectual cognition: but what? Is it a part, an immortal one, of each human soul, or something external to individual human beings? What is its relation to the intellect which, according to the *Metaphysics*, is the First Mover of the universe?

3 Plato, and the Hellenistic Schools

Paradoxically, the Neoplatonists transmitted Plato's own texts far less well than they transmitted Aristotle's. In all the medieval traditions, Plato's thought was for the most part digested in the form that Platonists – Neoplatonists, mostly, but in some cases earlier followers (Chapter 2, section 7) – presented it. The Plato of modern philosophy and scholarship, who wrote logically acute and imaginatively subtle dialogues, has hardly a role in medieval thought, and even when translations of his dialogues were made, as in the case of the *Meno* and *Phaedo*, translated into Latin by Henry Aristippus in the twelfth century, they were largely ignored.

Two works of Plato's were, however, known more directly. The Timaeus was widely read in the Latin West from c. 800 onwards, especially in the twelfth century. (There were two partial translations - a fact which marks out the popularity of this dialogue in later antiquity: one, generally used, by Calcidius (fourth/fifth century) accompanied by his rich commentary; one, even less complete, by Cicero.) To the modern reader, though, the Timaeus seems to give a very odd perspective on its author: it is Plato's account of the making of the universe - his fullest account of the physical universe, but containing little in the way of tight argument, and often using the language of myth. Plato presents the Timaeus as the continuation of the conversation which was begun in the *Republic*, and he begins the dialogue with a summary of the previous evening's conversation. As a result, a summary of the Republic by Plato himself was known in the medieval Latin West and exercised an influence on political and ethical discussion (Chapter 5, section 2, Interlude iv). The Republic was much better known in Arabic, though probably not directly: two of the leading philosophers would use it, Fârâbî (he would also produce his own paraphrase of Plato's Laws) and Averroes (Chapter 6, section 3, Interlude vii). This presence of the *Republic*, though marginal, is important, because it is Plato's most important political text and shows a side of his thought which hardly survives in Neoplatonism.

What was the influence of the other main Schools of ancient philosophy – the Cynics, Epicureans, Stoics, Sceptics and the Peripatetics (followers of Aristotle) – on medieval philosophy?

Although Cynicism had no known medieval influence as a philosophical school, its great proponent, Diogenes, became the heroic representative in numerous anecdotes, popular in Arabic and Latin, of the unworldly philosophical life. Epicureanism might, in principle, have been known in Latin countries, since one of its great expositions, Lucretius's poem De rerum natura ('On the Nature of Things') survives in a few medieval manuscripts. But they were little read, and the antipathy of late ancient Christians and pagans to Epicurean ethical ideas ensured that only one or two medieval writers (Chapter 5, section 2, Interlude iv) took them seriously. In the Latin tradition, the Scepticism of Arcesilaus (c. 316-c. 240 BC) and the New Academy was known through Augustine, who used Cicero as his source. The Islamic tradition, which had the material from the Neoplatonic curriculum in such abundance, seems to have been more poorly supplied with these alternative texts. But a case can be made that sceptical and materialist aspects of Greek thinking, which disappeared with the coming of Neoplatonism, were kept alive in Persia and re-surfaced in some eighth- to tenth-century writing in theological and literary circles. Certainly, atomism, one of the Epicureans' characteristic positions, was a favoured position among early Islamic theologians.

Stoicism, which was the dominant school in the period before the rise of Neoplatonism, certainly had an important bearing on medieval philosophy. Although the Neoplatonists condemned the Stoics and their materialism, they adopted much of their ethical teaching. The Stoics held that the only true goods for humans are the virtues (including wisdom), although a person should, all things being equal, prefer health and wealth, for instance, to sickness and poverty, since it is in accord with human nature to do so. Nonetheless, health and wealth are in themselves indifferent, and the wise do not at all regret their absence if they are deprived of them. The Stoics also considered that a person is either wholly virtuous, or not at all (though he may be on the verge of becoming so) – just as someone standing on a river bed will drown whether there is an inch of water, or fathoms of it, above his head. The Stoic sage is entirely unmoved by any deprivation or apparent suffering that can be inflicted on him, because he cannot lose virtue, the one thing which carries real value. The Neoplatonists found this idea highly congenial, and they radicalized it by playing down the idea of living in accord with nature and maintaining that the goal for humans is a mystical elevation to the level of the Intellect (in Ennead I.4 Plotinus out-stoicizes any Stoic!).

The writings of the most famous Stoic philosophers survived only as fragments. Latin philosophers were in fact able to learn a good deal of Stoic thought from Cicero (c. 106–43 BC) and Seneca (4 BC–65 AD). Cicero, a politician and Rome's greatest orator, was also a pioneer of philosophical

writing in Latin. Although eclectic in his views, he reflected the sway of Stoic thought at this period. His most sophisticated philosophical dialogues were little read, but his *De officiis* ('On Duties') and especially *De inventione* ('On Devising Arguments') – a rhetorical treatise which, incidentally, enters into a discussion of the virtues – were more widely used. Seneca was a convinced Stoic, and his letters and essays gave a good idea of Stoic moral thought. The attribution to him from early on of an (almost certainly inauthentic) exchange of letters with St Paul made him especially acceptable to Christian thinkers.

Although it was the Neoplatonists who transmitted his works to the Middle Ages, Aristotle's own Peripatetic School, as revived in the late second century BC, was influential both through its effect on the Neoplatonists and directly. The practice of writing close commentary on Aristotle's texts, which would remain perhaps the most characteristic feature of late ancient and medieval philosophy, was begun by Andronicus of Rhodes in the first century BC. Its leading Peripatetic exponent was Alexander of Aphrodisias, who worked c. 200 AD; only a few of his commentaries survive, but his work was much used by Porphyry and other Neoplatonic commentators (Chapter 2, section 4). For example, it is Alexander who orientated the problem of universals around the idea of abstraction: the way in which a line, though unable to exist apart from matter, is considered in mathematics as if it were immaterial provides an analogy to how the common nature, by which for instance humans are humans, might be considered apart from any individual human being. Through Porphyry and Boethius, these ideas entered the Latin tradition (Chapter 3, section 1), and they reached Avicenna too, by a different route (Chapter 4, section 5).

In his independent treatises On the Soul and (if it is his) On the Intellect, both of which became available in Arabic, Alexander gave an answer to some of the questions Aristotle had left open in his account of the intellect. So far from being a part of each individual human's intellect, the active intellect is in his view identical with Aristotle's God, the Intellect which thinks itself and is the final cause of the universe. Human souls do not, then, have any immortal part or aspect – a conclusion which fits in with Alexander's overall naturalizing tendency. A passage near the end of On the Soul (Bruns, 1887, 89–91) starts by indicating otherwise. Alexander fully accepts Aristotle's view of cognition as assimilation: the intellect therefore becomes what it thinks. He also believes that the human intellect can have the active intellect as its object of thought and that, since it will be assimilated to this immortal being, it will become itself immortal. Yet he immediately draws back from any idea of everlasting life for the human soul, affirming that the potential (or 'material') intellect is corruptible and, in a rather slippery piece of reasoning, suggesting that it is the thought of the active intellect, rather than the human thinker, which is immortal.

The last of the ancient Peripatetic school of commentators was Themistius (c. 317-c. 388). He was a less speculative thinker than Alexander, and he

concentrated on producing explanatory paraphrases of Aristotle's works. In his paraphrase of *On the Soul*, he puts forward some distinctive views about the nature of the active intellect and immortality. The active intellect, he believes, is not God, but it is a transcendent being, which he likens to Plato's idea of the Good – a reminder that Themistius was an Aristotelian working at a time when Neoplatonism was becoming dominant. This external active intellect enters the human mind, like a ray of light, and accounts for its grasp of the first principles of reasoning. And the human soul, he believes, is immortal in the sense that part of it, the potential intellect, can be joined to and perfected by the active intellect; but this immortality does not seem to be individual.

4 Plotinus's Neoplatonism

Plotinus, who was born in Egypt (c. 204 AD) and spent most of his adult life, nearly until his death in 270, in Rome, was a Platonist. The success of his teachings led to Platonism succeeding Stoicism as the dominant philosophical school in late antiquity – indeed, it became to all intents and purposes the only one. Plotinus's thought seems, to the modern eye, a world away from Plato's, and historians usually describe it and the tradition it began, as Neoplatonism, a label which these late ancient teachers and thinkers, who saw their goal as expounding the true meaning of Plato's texts, would have found disturbing. There was, indeed, one very important difference in outlook. Among Plato's central concerns was politics: how people should live together in society. To a great extent, Plotinus and his successors turned away from such questions, preferring to show a way for individuals to live the philosophical life and attain happiness whatever the outward circumstances. There is also a striking difference in form between Plotinus's treatises - extended meditations on a problem, often one raised by a text of Plato's, which pose, and answer questions, explore objections and tease out difficulties - and Plato's own dialogues, with their range of characters, settings and manners of writing. Yet Plotinus should be seen as offering a plausible, rational and coherent development of Plato's general position and outlook, in the light of the debates and discussions of the intervening centuries. He should be seen - in the way a growing number of recent specialists present him - as a philosopher responding argumentatively, though within a particular tradition, to ultimate questions, rather than as the deviser of a fantastic metaphysical system.

Imagine Plotinus looking at the world, with all its variety of material things, plants, animals and reasoning human beings, and asking what is its cause. To this question, Plotinus wanted, not a historical answer, tracing back causes and effects over time, but an ultimate explanation. We ourselves might wish to reject a demand for such explanation as illegitimate, but even so we should have to recognize that almost every ancient and medieval philosopher, and many philosophers even now, would feel entitled – indeed, as philosophers,

obliged – to make it. Plotinus's way of answering the question calls on two notions prominent in Plato's thinking. One of them is the view, put forward in the various versions of Plato's theory of Ideas, that the world of physical objects which we see, hear, taste, smell and touch is explained by a non-physical world of 'Ideas' or 'Forms', which we cannot perceive sensibly but can grasp mentally (*eidos* – 'form'; *idea* – 'idea'; both terms are used). The other is the thesis, suggested by Plato's description of the Good, the supreme Idea, in the *Republic*, and by his *Parmenides*, and expounded formally by Plotinus ([*Ennead*] VI.9.1), that everything which exists does so as a result of unity – a position which implies, at least for Plotinus, that the existence of each thing is to be explained by that which gives it unity.

Yet Plotinus modifies the simple, dualistic vision of a sensibly perceptible world of becoming and multiplicity contrasted with the world of permanently existing, unitary Ideas, perceptible only by the trained philosopher's mind. He is much influenced in this by the cosmogony given by Plato himself in the *Timaeus*. Here Plato depicts a divine architect copying the pattern of the Ideas so as to give form to the physical world - not directly, however, but with a soul, a World Soul, as intermediary. Given that Aristotle and other Greek thinkers thought of any sort of life-activity as being the working of a soul, it made sense to think of the movement and activity of the whole universe, from the motions of the planets to the life-cycles of plants and animals and the lives of humans, as depending on a World Soul, itself modelled according to the Ideas. Plotinus calls his lowest so-called hypostasis or Level of Explanation 'Soul'. Soul is not identical to the World Soul, nor to individual souls; and Plotinus also (IV.3.2) rejects the idea that these souls are parts of Soul, separated into portions as wine might be poured into many glasses, although he thinks that they may stand to Soul as theorems do to a complete branch of knowledge. Soul stands behind the whole range of phenomena that make up the life of the universe, from the elements and their workings (even they are ensouled: VI.7.11) to the discursive reasonings which humans use in their philosophical investigations.

As the myth in the *Timaeus* indicates, the Level of Explanation above Soul is constituted by the Ideas or rather, for Plotinus, by Intellect (*nous*) which contains the Ideas. For Plato, the Ideas were themselves free-standing entities, dependent on nothing except perhaps the supreme Idea, the Idea of the Good. But Plotinus followed the view of those Platonists who, influenced by Aristotle's idea of God as *nous* contemplating itself (cf. Chapter 2, section 2), had preferred to make the highest principle in the universe a thinker, rather than an object of thought. Intellect does not, however, constitute the highest Level of Explanation for Plotinus. Since it contains a multiplicity of Ideas, and they are the objects of its thinking (although it is a non-discursive, immediate mode of thought), Intellect is not absolutely unified: the explanation for it, and ultimately for everything, is the highest Level of Explanation, which is called the One or the Good, but cannot be described except negatively or through its effects. Unlike Soul or Intellect, the One does not think, even nondiscursively; it is beyond even any thinking.

The three hypostases – Soul, Intellect and the One – are referred to above as 'Levels of Explanation', but this phrase should not be allowed to give the impression that the hypostases are mere constructions; 'explaining' here means accounting for, and hupostasis translates literally as 'substance'. Plotinus would certainly have held that everything exists on account of the One, and derives from the One, although he also holds that the One itself is not a thing, nor a being because it is prior to all being (e.g. VI.9.3). But how does this derivation take place? Why, indeed, is there anything apart from the One? If the One is totally perfect, and its absolute unity is a facet of this perfection, why is it the ground for the existence of anything else? Plotinus answers, along lines he could find in the Timaeus (29e), that for the Good to remain alone in the universe and unproductive would be begrudging (e.g. V.4.1). It is the very nature of the Good to diffuse itself into all the different possible forms of being: the beauty of the whole is the greater, because of the variety, just as an accomplished picture contains colours which are not themselves beautiful, or a well-written play has slaves and peasants, as well as heroes, among its cast (III.2.11).

Plotinus's problem in explaining how the derivation takes place is that the One is (to the extent that it can be described at all) absolutely unchanging and simple. How can something come from it? Plotinus suggests (V.4.2) that two different acts can be distinguished in all things: the act by which the thing itself is constituted (for instance, the warmth which is what it is for fire to be itself), and an act which goes out from the thing (the warmth transmitted by the fire). This distinction applies even to the One. Its secondary activity is to produce an act of intellect, and that act, in itself entirely indefinite, is given form by making it, the One, the object of its thought. And so the process of derivation is nearer to final than efficient causation: it requires the derived hypostasis to look back at its origin in order to become what it is - filled with the Ideas, which were a unity in the One but are many in it (VI.7.16). By the same sort of process, Soul is produced as a secondary activity of Intellect which is given its form by looking back to Intellect, its origin. As part of the filling of every level of being, Soul enters into bodies - yet Plotinus cannot regard this descent with equanimity; he describes it censoriously as audacity (tolma).

This mechanism of derivation may also explain one of the greatest puzzles in Plotinus's scheme of things. According to him (I.8.3), matter is evil (and it is what explains there being evil in the universe). What, then, is the relation of matter to the One? If Plotinus allows it to exist independently (which seems to have been Plato's view), then his scheme of hypostases will provide only a partial answer to the question about the ultimate explanation of things. But if matter derives from the One, then so, apparently, does evil. Scholars still dispute how, or if, Plotinus freed himself from this dilemma, but the most plausible suggestion (III.4.1, III.9.3; O'Brien, 1996) is that matter is produced by Soul in a way that echoes, but reverses, the way in which Soul derives from Intellect, and Intellect from the One. Soul *needs* to enter body and it must generate matter as a receptacle for this to take place (though, as Plotinus remarks, the temporal language is misleading: unensouled body never did, or could, exist). Matter remains, however, separate from soul and unmixed with it: it is 'as if a net immersed in the waters was alive, but unable to make its own that in which it is' (IV.3.9). Whereas in their derivation the lower hypostases look back to the higher one and are defined by it, matter has no power to turn back to its origin; hence its lack of any definition, which makes it a privation, the opposite of substance, and so evil. Plotinus seems, then, to hold that there is evil as the necessary consequence of the Good diffusing itself, through Intellect and Soul, as far as it possibly can.

The preceding paragraphs may suggest that Plotinus saw himself, rather in the way a modern metaphysician might do, as elaborating a theory so as to answer certain fundamental questions. That impression would be misleading, because for Plotinus, as much as for any ancient thinker, philosophy was a way of life. His speculations did not merely allow him to establish a particular philosophical position: they enabled him both to free himself from the ties of his body, and even to achieve some sort of union with the One. In fact, Plotinus held that a part of each of our individual souls always remains above the level of Soul itself, in the timelessly eternal world of Intellect (IV.8.8; V.1.10), although we are not usually conscious of it. A number of his compositions (VI.9 is a very good example) read as guidebooks, based on Plotinus's own experience, to the ascent from the material, sensibly-perceptible world, through the levels of Soul and Intellect and even to the ineffable One itself – at which stage philosophizing will have led, not merely to an abandonment of sensation, but of thinking itself (VI.9.7).

Plotinus's influence over the next millennium would be enormous, and not merely through the structure of his metaphysics. He raises and explores many of the questions (far more than a quick sketch can reveal) which it became essential for thinkers in the monotheistic traditions to resolve: how to talk about an ineffable God; the meaning and coherence of the divine attributes of simplicity, immutability, eternity and goodness; God's presence in space and relation to time; the Problem of Evil. Plotinus's influence was in part direct (on Augustine (Chapter 2, section 9) and in Islam (Chapter 3, section 5), but even more important indirect, through the later Neoplatonists. And their developments and changes of direction meant that what was offered to later thinkers by their tradition, though resting firmly on Plotinus's vision, was quite different both in the difficulties it posed and the opportunities it offered.

5 Porphyry and Aristotelian logic

Porphyry of Tyre (c. 232–c. 305) was the pupil and editor of Plotinus. Late in his own life, he put Plotinus's writings into an order intended to lead readers on their spiritual journey from the world of appearances to apprehension of the One and, by breaking up some longer treatises arrived at six 'Enneads' (groups of nine). He was also a prolific author of treatises and especially (as almost every later Neoplatonist would be, unlike Plotinus) of commentaries, on Plato, Aristotle and others. Few of these works have survived. Although Porphyry perhaps gave Plotinus's metaphysics his own particular reading, by suggesting that only the One is truly real, and all other things are merely appearances of it, by and large he seems to have been the faithful follower of his teacher, and he may have compiled and published the *Enneads* so as to defend Plotinian Platonism against the criticisms and innovations of Iamblichus. Yet there is one important respect in which Porphyry did differ from his master and, by doing so, changed the whole course of philosophy.

Plotinus, though usually respectful of Aristotle, was unimpressed by Aristotelian logic, and especially unimpressed by the Categories. Enneads VI.1-3 are devoted to criticizing Aristotle's doctrine of categories and advocating, instead, a set of categories based on Plato's Sophist. It is not difficult to see why any Platonist would find the Categories objectionable. Aristotle divides all things into four: universal substances, particular substances, universal accidents and particular accidents. By a particular substance he means a member of a natural kind - this human or that horse; a universal substance is human or horse in general. Accidents are the various features of how a substance happens to be. Aristotle distinguishes nine: quality, quantity, relation, condition, posture, place, time, action and being-acted-on. A particular accident, then, would be, for instance, this particular whiteness by which this particular horse is white, and a universal accident would be whiteness in general. For Platonists, it was a fundamental belief that universals are ontologically prior to particulars: that is to say, were it not for the universals (Plato's Ideas), the particulars would not exist. Although Plotinus seems to have allowed the notion of Ideas of particular things, he would still have completely accepted the principle that particular corporeal things, such as this man or this horse, are at the lower end of the scale of being, and their existence is to be explained by looking away from the sensible world of particulars to Soul, Intellect and ultimately the One. Yet the Categories (2a5-6) asserts unequivocally that 'if the primary substances did not exist, it would be impossible for any of the other things to exist'; indeed, it is hard not to see Aristotle here as writing deliberately to puncture Plato's claims about the intelligible world, of which mundane objects are supposedly the mere shadows - and what would he have made of the even more extravagant views of the Neoplatonists?

How, then, did Porphyry, otherwise Plotinus's loyal pupil, come to accommodate the *Categories* within his intellectual framework? He did so by

insisting that, as a work of Aristotelian logic, it is concerned primarily with language, though not language in itself but 'the words that are used to signify things'. But the things which the words of ordinary language signify are not, of course, the intelligible realities of Neoplatonic metaphysics, but the particular substances and qualities we perceive with our senses. These particular physical objects and their attributes are the basis of our ordinary mental concepts and – as *On Interpretation* and Porphyry's commentary on it explain – words are signs for concepts and through them things. And so, as Porphyry puts it (Porphyry, 1992, 81–2), although God, the intellect and the intelligibles are primary by nature, they are secondary, and particular sensible things are primary, with respect to significant expressions.

The idea that Aristotle's subject matter was different from Plato's and complementary to it (he even wrote a work, now lost, on the harmony between Plato and Aristotle, although he balanced it with one on their differences) opened the way for Porphyry to create within Neoplatonism a distinctively Aristotelian brand of thinking, based around the exegesis of logical texts and strongly influenced by the great Peripatetic commentator of Aristotle, Alexander of Aphrodisias. His attention, and that of most of his successors, was focused on the *Categories* and *On Interpretation*, the two of Aristotle's logical works furthest removed from formal logic. Although only a fairly brief commentary of his on the *Categories* survives, he also wrote a very extensive one, and a long commentary on *On Interpretation*, lost but partly discernible through Boethius's (second) commentary (Chapter 3, section 1), which is closely based on it. There Porphyry discussed, in an Aristotelian context, subjects such as semantics, predication, memory and imagination, the nature of modality, free will and determinism.

Porphyry's most famous work is his short Introduction (*Eisagôgê*, latinized as *Isagoge*) to logic, and to the *Categories* in particular, which quickly became the first part of the Neoplatonic (and thence the medieval) Aristotelian curriculum. The *Isagoge* explains the nature of and distinctions between five 'predicables' – the different types of predicate used in a simple assertoric sentence: genus ('(A) human being is an *animal*'), species ('Bonzo is a *dog*'; but 'genus' and 'species' are relative terms – 'Animal is a species of living thing'), *differentia* ('Human being is *rational*'), distinguishing feature (*idion*; 'Human being is *capable of laughter*') and accident ('John is *tired*'). Although Porphyry is mostly bringing out ideas already suggested in the *Categories*, his terminology emphasizes how the category of substance can be seen as a hierarchy (what became known as 'Porphyry's Tree'), divided into two highest genera (corporeal and incorporeal substance), and then sub-divided by *differentiae* into lower genera and species until the 'most specific species' (for instance, human being or dog) is reached.

Near the beginning of the *Isagoge*, Porphyry mentions three questions about genera and species which he is *not* going to discuss, because they would require a long investigation, unsuitable for an introductory work: (1) whether

they exist (huphestêken) or consist only in pure concepts; (2) if they exist, whether they are corporeal or incorporeal; (3) and if they are incorporeal, whether they are separate or whether they exist in and around sensible things. Porphyry's Questions, as they came to be known, would for more than a millennium exert an extraordinary fascination over logicians, few of whom would copy Porphyry's own restraint in leaving them unanswered. The way these questions are framed (cf. Porphyry, 1998, XXXVI-LXI) probably reflects Porphyry's own wish to reconcile Aristotle and Plato, and to oppose them both to a Stoic (or, at least, a Stoicizing) view of universals. Universals are not, Porphyry hints the reply may be, 'only pure concepts' - fictions or less than fictions, as the Stoic view had it. And he leaves it open for there to be, as his interpretation of the Categories required, 'Aristotelian' universals concepts, signified by the words of ordinary language, which are based on the universal specific and generic forms in each particular of a natural kind - as well as separate Platonic Ideas. Part of the difficulty, and also the fertility, of Porphyry's questions for medieval Latin philosophers was due to the fact these later readers were unaware of this context: Porphyry's Platonism was hardly acknowledged, and his Stoic background went completely unrecognized.

6 Iamblichus and Proclus

If Porphyry introduced into Neoplatonism an Aristotelian strain of down-toearth thinking about language and the everyday, physical world, his pupil Iamblichus (c. 240-c. 325) was especially responsible for pulling the tradition in what might be seen as the opposite direction – towards religion and rite. There was much already in Plotinus's thought which, despite his dedication to reasoned argument, gave it a religious character: the three hypostases are his God, and the goal of his speculations is mystical contact with the highest aspect of this deity. But Plotinus seems to have had no taste for religious ritual or observance - even the modest piety depicted in the Life may have been Porphyry's exaggeration. Despite his predilection for Aristotelian rationalizing, Porphyry was more involved in pagan worship than his teacher. Not only did Porphyry have a wide-ranging interest in different religions (an aspect, perhaps, of his encyclopaedic turn of mind), he also recognized Christians as the enemy of pagan Neoplatonism and wrote a long, polemical work against them (unsurprisingly, it has survived only in their counterattacks). By contrast, Plotinus had been content merely to attack the Gnostics, a sect regarded by the Christians as heretical, which held that the physical world is evil. Moreover, Porphyry thought that theurgy - the ritual practices by which gods were made to manifest themselves in physical things, such as statues - was useful, though not for philosophers and not as a way of ascending to the higher reaches of the intelligible world.

Iamblichus went far further. For him the pre-Platonic – Pythagorean and Egyptian – origins of Platonism and the practice of theurgy were central

to his work as philosopher and hierophant. Iamblichus considered Plotinus and his follower, Porphyry, far closer to the Gnostics than they would have admitted (Shaw, 1995). By holding that part of the human soul never descends into the body and making it a philosopher's goal to cut himself off so far as possible from his bodily existence, Plotinus and Porphyry were desacralizing the world of nature and ignoring the gods who had been worshipped, in Egypt and the East, long before the time of Plato. Iamblichus's writings sought to restore the soul to its proper place in the world of nature, and they looked to theurgy as a way of making divinity manifest in the physical world.

Despite this emphasis, the curriculum which Iamblichus established, and which would remain in use by Neoplatonists until the end of antiquity, involved a thorough study of not just Plato but also Aristotle. First, students worked through Aristotelian logic, beginning with Porphyry's Isagoge. Then they read Aristotle's Ethics and his books on natural science, texts by Euclid and others on mathematics and then Aristotle's Metaphysics. Only then did they begin to study Plato's dialogues, in an order which corresponded to a scheme of ascending virtues – political, purificatory and contemplative. The Timaeus and then the Parmenides were the final texts to be studied, the summation of all that had been learned. Although Aristotle, and Aristotelian logic, was studied, therefore, as a preparation for higher, Platonic wisdom, Iamblichus did not simply explain the harmony between Plato and Aristotle as Porphyry had done, by the difference in their subject matters. As can be seen from his influential commentary on the Categories (lost, but partly reconstructible from later commentaries, especially Simplicius's), Iamblichus moulded his understanding of Aristotle's work to the Platonic and pre-Platonic position. Iamblichus justified this unAristotelian reading of Aristotle by claiming that Aristotle had not invented the doctrine of the Categories himself but taken it from the ancient Pythagorean, Archytas. (He was influenced by a treatise on the Categories, claiming to be by Archytas, but actually written long after the time of Aristotle.)

From the fifth century onwards, the two great Neoplatonic schools were at Athens and Alexandria. The Platonic Academy at Athens was a re-creation rather than a direct ancestor of Plato's own Academy, a private institution, lavishly endowed by wealthy pagans. Both schools were strongly influenced by Iamblichus, and he was probably responsible for a good many of the innovations in the structure of Neoplatonic metaphysics that are found most explicitly set out in the works of Proclus, head of Academy at Athens for nearly half a century (437–85). Although large amounts of his prolific output, including all his Aristotelian commentaries, have been lost, much more by Proclus can still be read than is the case for any other of the late Neoplatonists: among the surviving writings are commentaries on the *Timaeus*, *Republic, Parmenides* and other dialogues, and treatises, including the vast *Platonic Theology* and the more concise *Elements of Theology*. The *Elements*, translated

and adapted in various ways, would have an important effect on all the different medieval traditions of philosophy.

In the *Elements*, set out (like Euclid's *Geometry* and Spinoza's *Ethics*) in the form of propositions each followed by their proofs, Proclus attempts to show that the complicated structure of his universe can be derived from a small number of what he takes to be self-evident principles. The most basic of them (Props. 1–6; 11–13) is the idea, fundamental to every Neoplatonist, that all things exist in virtue of being unities and so by participating in some way in unity. Another (Prop. 25) takes up and generalizes the notion, by which Plato and Plotinus had explained why the Good diffused itself: whatever is complete or perfect will produce the things it is capable of producing. Another, however, points to the difference of perspective between post-Iamblichan Neoplatonists and their predecessors. With the hierarchy stretching from the One down to matter in mind, Proclus says (Prop. 57) that the higher the level of a cause, the lower down stretch its effects. Soul, for instance, exercises its effects only on animate things, whereas Intellect not only causes them by being a cause superior to Soul, but also causes inanimate things, because it is the locus of the Ideas; and the Good exercises its causal efficacy even more widely, since it, unlike Intellect, is the cause of privation as well as form. This view of Intellect's causal efficacy becomes more plausible in the light of Proclus's splitting the hypostasis Intellect into three: Being, Life and Intellect.

The tripartition of Intellect is only a beginning – triads abound: Proclus's universe is a thickly populated one. Especially important is the rule (cf. Prop. 21) that, in any participation, there must be an unparticipated term, a participated one, and a participant. So, for example, in thinking about a particular thing participating in a Platonic Idea, it would be necessary to consider the Idea itself, which is not participated, the reflection of it, which is an immanent form of the thing's body, and the participant, the thing in question. Proclus uses this rule to distinguish, on each level of reality, a 'monad' or first term, which derives from the superior level, and which is unparticipated, from the participated and participant members of it. Just as, by this principle, there are intellects which derive from unparticipated Intellect and souls deriving from unparticipated Soul, so there must be ones or, as Proclus calls them, 'henads', deriving from the unparticipated One. The inclusion of henads, which exist at each level of the universe (Prop. 125), enables Proclus to fulfil the project of his *Platonic Theology*, matching his metaphysics with the pagan pantheon by identifying each henad with one of the traditional pagan gods, angels or daemons. The detailed interrelations of this system are rendered especially elusive by Proclus's adherence to the Neoplatonic maxim that 'everything is in everything, but in a manner appropriate to each': the entities separated out into triads remain, none the less, aspects of one another (Prop. 65), and whilst every intellect understands all things, only the unparticipated intellect understands them unconditionally rather under a particular aspect (Prop.

170). And so Proclus's universe begins to resemble not so much an elaborate and fixed hierarchy as a hall of mirrors.

As this sketch indicates, Proclus is far less concerned than Plotinus had been to map the course of a spiritual journey from the world of senseperception and discursive reason to mystical contact with the One, and more interested in setting out a logician's scheme classifying every reality. Yet he too is a religious thinker, in a deeper sense than his tabulation of the gods would require. Like everyone in the later tradition, he rejects (Prop. 211) Plotinus's view that part of the soul always remains undescended. Nor does he believe that, unaided, a human soul can become aware of its true, divine self. Supernatural assistance is necessary, and here Proclus looks to theurgy, although he makes it clear that theurgy belongs at the end of philosophical study, as its culmination and not as a substitute for it. Along with theurgy would go the study of what Neoplatonists from Porphyry onwards had treated as revealed texts, especially the Chaldaean Oracles. That writings such as these should come at the *end* of a philosophical curriculum should underline, what will already have become obvious: the meeting of Christianity and Platonism, which will now be considered, cannot be seen as an encounter between religion and philosophy, unless philosophy is recognized as a religion too.

7 Old and new religions

The earliest encounter between what was to become the Christian tradition and Platonism antedates not merely Plotinus and Neoplatonism, but the diffusion of Christianity itself. It took place in the person of Philo, a rich Jew who lived and worked in Alexandria from c. 25 BC to sometime before 50 AD. Although Philo was a pious follower of his religion, he was thoroughly Hellenized. Completely at home with the Greek philosophy of his time, especially Stoicism and Platonism, he probably knew no Hebrew: the commentaries on the Pentateuch that comprise much of his work are based on the Septuagint (a Greek translation which, conveniently, he believed to be divinely inspired; medieval Latin theologians would take the same attitude to their Latin Vulgate Bible, prepared by Jerome). For Philo, Moses was a consummate philosopher on the Greek model, and the Greek philosophers who lived after him had learned from his writings. Philo did not allow the apparent content of the torah to disturb this picture. He was able to interpret the account of creation in Genesis along broadly Platonic lines and, although he insists (On the Creation 171) that the world was created and is not without beginning, he does not seem to rule out the pre-existence, as in the *Timaeus*, of formless matter. According to the Timaeus, a pattern, the Ideas, is imposed upon the world (through the World Soul). Philo, too (On the Creation 14–21), sees the universe as being ordered by copying 'a world of Ideas', but whereas Plato's Ideas were independent entities and the demiurge's job consisted just

in copying them, Philo places the Ideas in the divine reason (*logos*). Although many Middle Platonists similarly put the Ideas into God's mind (thus giving Plotinus the starting point for his second hypostasis, Intellect), Philo was among the earliest. The device would prove especially useful to Christian authors, who could equate the *logos* with the Son, the second person of the Trinity. Once Philo moved beyond the story of the six days of creation, he turned to allegory, following the methods of the Stoic commentators of Homer. He thought he could show that, when rightly interpreted, the apparently circumstantial narrative contains a moral, and sometimes a metaphysical, meaning.

Anyone looking back at Philo from the perspective of Augustine, or that of the Middle Ages, will be most struck by how unproblematic is his relation to pagan philosophy, and to Platonism in particular. Two early Greek Christian thinkers, Justin Martyr (d. *c*. 165) and Clement of Alexandria (*c*. 150–before 215) who were influenced by him also shared this attitude. They accepted the idea that the Greek philosophers plagiarized Moses, but they also claimed that people who thought rationally, even before the Incarnation, were participating in the divine *logos* – the Word or Reason, the second person of the Trinity – by doing so. Wise pagans were in effect Christians before Christ, a position which would be taken up again, though apparently independently, by Abelard in the twelfth century (Chapter 5, section 2, Interlude iv).

Origen (c. 184/5-c. 254) was also much influenced by Philo, especially in his many commentaries on Scripture, some of which would circulate in Latin translation; though a further element was now added to allegorical exegesis - the prefigurement in the Old Testament of the New, and the fulfilment in the New Testament of the Old. In defending Christianity against the attacks of Celsus, a pagan Platonist, Origen shows himself more learned and able as a philosopher than any of his Christian predecessors. But the most interesting of Origen's works from the wider perspective of the history of philosophy is his On First Principles (Peri archôn/De principiis) - a text which led to his posthumously being branded a heretic, although many of his opponents, from Jerome onwards, were willing none the less to value his work as a commentator. Unfortunately, it is not always possible to speak with certainty about Origen's position in On First Principles, because the work survives intact only in a Latin translation by Rufinus (made in 397-8), which to some extent softens or omits heterodox passages. Even, though, to judge by this translation, the accusations of heresy should not surprise, because Origen follows a path which only a handful of Christian thinkers would dare to tread in later centuries, and usually with similar sorts of consequences: he moulds the shape of Christian doctrine to accord with his own deepest moral and philosophical convictions.

One passage (II.9.3–6) goes to the heart of Origen's outlook. It is remarkable because, in ways, at least in its starting point, it seems closer to the mental universe of Rawls or Dworkin than that of the Roman Empire. Origen catalogues what, in modern terms, we would call the different 'life chances' given to rational beings. Although he begins with the difference between those of heavenly beings and those on earth, Origen concentrates on the human world. None of us chooses where and to whom we are born: in the civilized world of Greece, or among barbarians who have excellent laws and customs, or among cruel and inhuman barbarians (and, in a striking departure from any assumption of a uniform, natural moral code, Origen alludes to races where cannibalism or patricide are sanctioned). Nor do we choose whether we are born and brought up as a slave or given a good education; nor whether we are afflicted by ill health or blindness. Since God is just, he cannot be responsible for this inequality. In him there is no variety or diversity, and so the rational beings of which he is the cause were created by him equal and similar. But they were endowed with free will, and Origen supposes that they all pre-existed as incorporeal beings. During this time, they could decide, using their free will, to follow and imitate God or neglect God and fall away from him. It is this freely taken decision - not their God-given nature but their own choice - which determines their subsequent lives. The souls which become incarnate as humans have fallen further away from God than those which remain as angels, but less far than those which become demons. The fall is not, however, final: through good lives, and through punishment (which Origen considers always as purifying and improving), even the souls which have fallen lowest can finally return to God, though the habit of sinning can become like a second nature, and Origen does not seem to allow in practice for the salvation of the devil, although it remains a possibility in theory. To complicate matters, while he rejects the Stoic idea that the very same history of the universe may be repeated, he accepts that our world is one of many different worlds which have been and passed away, and that after it many more will come to be.

The eschatology of On First Principles, with its pre-existing souls, is partly reminiscent of Plato's theory of reincarnation. Yet it would be wrong to think of Origen as some scholars used to do (the earliest was none other than Porphyry, in a fragment of Against the Christians preserved by Eusebius) as a Platonist manqué. On the contrary, he was far keener to mark the difference between Christian teaching and pagan philosophy than Justin or Clement had been. Moreover, his central intuition could hardly be more opposed to the Platonism of his day. Plotinus, his contemporary, based his thinking on the idea that the self-diffusion of the Good requires that every possible grade of being be filled, from the highest to the lowest. And Neoplatonists from Iamblichus onwards would even more emphatically proclaim a hierarchically ordered universe, stretching from the One right down to matter, in which every being has its set place. By contrast, Origen proposes a moral drama, in which rational beings are the only important actors, and their differences must be explained entirely in terms of choice, responsibility, habituation, corrective punishment and reformation.

8 Translations, Latin philosophy and the Latin Fathers

In the Middle Ages, outside Byzantium, very few thinkers – Christians in the Latin world, Muslims, or Jews – knew Greek. Since the language of ancient philosophy was Greek, they had to rely on translations. In the Latin tradition, the translation movement had begun in late antiquity. But, because educated Romans were able to read Greek, it was surprisingly restricted. Although a considerable amount of Greek patristic work, including Origen's *On First Principles*, was translated, the philosophical texts hardly went beyond the versions by Cicero and Calcidius of Plato's *Timaeus*, and Aristotle's logical treatises (except the *Posterior Analytics*), which were translated by Boethius (Chapter 3, section 1). Some of Plotinus's *Enneads* were put into Latin, but the versions did not survive into medieval times.

In Islam, a very extensive programme of translation was begun early on (Chapter 3, section 4), but wide-scale translation of philosophical texts into Latin did not take place until the twelfth century. For this reason, the relatively small amount of ancient philosophy originally written in Latin had a very special importance for the earlier medieval tradition in Western Europe. Cicero and Seneca (Chapter 2, section 3) were both quite widely read. Apuleius (123/5–180 AD), author of the Golden Ass, left two short works on Socrates and Plato, and a Periermenias - an introduction to Aristotelian syllogistic written with a distinctive terminology and including criticism of Stoic logic. Three lesser-known, later Latin authors were even more influential. Calcidius, probably a fourth-century Christian, did not merely translate the *Timaeus* but provided it with a commentary, many times longer than the text itself and full of stimulating ideas and material from the ancient tradition otherwise inaccessible to medieval Latin writers. Macrobius was a younger contemporary of Augustine's, and a cultivated, devout pagan. He wrote (c. 430) a commentary on the Somnium Scipionis ('The Dream of Scipio') with which Cicero ended his De republica ('On the Republic'), a work otherwise mostly lost. Cicero's dream vision, which tells of rewards and punishments after death and exhorts its readers to work for the common good, becomes a vehicle for discussion not only of astronomy and the immortality of the soul, but also of the three hypostases of Neoplatonism, which are described in terms close to those of Plotinus. Martianus Capella, a pagan working in fifth-century North Africa, wrote an encyclopaedic prosimetrum (410-39 or 470s) De nuptiis Philologiae et Mercurii ('On the Marriage of Mercury and Philology'), in which seven books, one devoted to each of the seven Liberal Arts, were preceded by two books telling the allegorical marriage of philology to Mercury, heavenly wisdom; they recount, perhaps not wholly without humour, many elements of late ancient pagan religion and some Neoplatonic themes, such as the ascent of the soul. Perhaps because it so neatly contained the curriculum of liberal arts, this unlikely work became an important vehicle for teaching and thought in the early Middle Ages.

Another philosophical source for the early medieval Latin thinkers was the material they could find in the Latin Church Fathers: Augustine – the subject of the next section – beyond all, but others too. Neither Tertullian (second or third century), who, living before the popularity of Platonism, had an interestingly materialist conception of the soul, nor the philosophically-cultivated Lactantius (*c*. 250–320) were much read in the Middle Ages. For sophisticated discussion of the Trinity, rooted in the early Christian Greek discussions, medieval theologians could turn to Hilary of Poitiers (*c*. 315–367). Jerome (*c*. 347–419), translator of the accepted ('Vulgate') Latin version of the Bible, was more of a scholar and polymath than a philosopher, but his interests touched on many philosophical questions, and he would strongly appeal to the analytically-minded Abelard. His contemporary, Ambrose of Milan (*c*. 333/40–97), was deeply influenced by the Neoplatonism of Plotinus, as well as Platonizing Jewish and Christian writers, such as Philo and Origen. His Biblical commentaries and treatises were widely copied in the Middle Ages.

Marius Victorinus (d. c. 362) spent most of his life as a pagan. An orator with a deep interest in Greek philosophy, he translated parts of Plotinus and Porphyry's *Isagoge*, and wrote a logical commentary and textbooks. After his conversion c. 355, he was especially concerned to apply his understanding of Plotinus to the Trinity. He recognized that the first hypostasis, the One, is for Plotinus completely unknowable and prior even to being. Victorinus applied this uncharacterizability to the Father, and he identified the Son with the second hypostasis, Intellect, in which the One is made manifest. He believed that through this use of negative theology, he avoided making the Son subordinate to the Father and so could champion their consubstantiality. Although Victorinus was much less widely read in the Middle Ages than Augustine or Ambrose, he influenced some authors, such as Alcuin, and he was an important predecessor, as a Latin logician, for Boethius (who often speaks of him quite slightingly).

9 Augustine

Augustine was, along with Aristotle and Boethius, the most important influence on how medieval philosophy developed in the Latin West. Far more than any other Latin Church Father, Augustine responded to ancient philosophy, Neoplatonism in particular: borrowing, adapting, rejecting, considering and re-considering his stance. As a result of such changes in his views, the variety of forms in which he wrote, and the open, questioning manner of many of his non-polemical works, he did not bequeath a single, solid body of doctrine but, rather, the basis for many different, sometimes contradictory, positions.

Augustine was born in 354 in Tagaste, a Roman town in North Africa. The Roman Empire had been Christian since Constantine's conversion in 312, but pagan worship was still allowed, and the upper classes tended to hang on to paganism, which they saw as intrinsic to their traditions and culture. Augustine had a Christian mother and a pagan father. He received a rhetorical education, which taught him a magnificent Latin style (but left him without Greek). Reading Cicero inspired an interest in philosophy, but it was not until he was in Milan in 384, as a young professor of rhetoric, that he came across the 'books of the Platonists' – probably parts of Plotinus's *Enneads* in Marius Victorinus's translation. Before then, he had for a long time followed Manichaeism, a dualist, materialist religion, popular at the time. Augustine subsequently presented Neoplatonism as an essential stage in the spiritual journey which led to his Christian conversion in 386 and baptism in 387 (where 'conversion' should be understood as a turning of his whole life to Christian aims).

Augustine's earliest surviving writings date from just after his conversion, when he was staying with like-minded Christian friends in the country at Cassiciacum. They, and most of the works he wrote in the next few years, are philosophical dialogues, on themes such as scepticism, language, happiness, free-will and the soul, hardly touched by specifically Christian doctrine and, in their conversational manner and lack of a metaphysical agenda, nearer to Plato's own dialogues – which Augustine would not have known – than anything by Plotinus or Porphyry. One of these dialogues, *De ordine* ('On Order') puts forward (II.12.35–18.47), as a method of raising oneself step by step to contemplation of the divine, the idea of the seven Liberal Arts, which would become an organizing principle for education in the Latin West.

In 395/6 Augustine became Bishop of Hippo, not far from his home town. His *Confessiones* ('Confessions'), written shortly afterwards, is one of the most remarkable of all literary philosophical works. Addressed to God, and in prayer to him, Augustine tells a story of his life, focussing on moments of interior turmoil and spiritual development, but ending (in Books X–XII) with explorations of the nature of memory and time, and an exegesis of the opening of Genesis. The subjects of these more abstract investigations link with, and illuminate, the earlier books, exercises in memory and the recovery of past time, whilst Augustine's life story is far from merely personal, since it tells of the part alienation and return, by grace, of a soul to God.

As a bishop Augustine's duties were heavy, and he was occupied writing sermons and polemicizing against both the Donatists, a dissident sect within the African Church and – increasingly in his last years – the Pelagians. Pelagius (*c*. 360–after 418) was a Briton, a Christian layman and moral reformer. Alarmed at the extent to which Christianity, no longer a persecuted faith but the state religion, was being regarded as a mere formality, Pelagius emphasized everyone's duty to live the best moral life. In doing so, he stressed our freedom to be able to live well, if we try hard to do so. In this way, he softened the teaching of the Apostle Paul, who had stressed the need for divine grace, freely-given and undeserved, before humans can act well. Pelagius did not completely deny the need for grace. He held that whilst people who live

morally good lives deserve some reward from God, it is only through grace that they receive a reward quite out of proportion with their merits: eternal happiness in heaven. Augustine, however, was completely opposed to Pelagius's position. In a long series of treatises, he re-affirmed and developed the Pauline position, leaving little, if any, room for straightforward human freedom to choose to act well. Without grace, which they can do nothing, when ungraced, to deserve, fallen human beings cannot but sin; further, unmerited grace is needed if a person is to remain without sin to the last moment of his or her life – and it is people's state at this last moment which determines whether they go to Heaven or Hell. Not many medieval Christian thinkers were willing to follow Augustine's line in all its rigour (or to admit that it was really so harsh), and modern philosophers of religion still debate whether Augustine's theological views here leave him enough room for a rounded ethical theory.

During the later period of his life, however, Augustine also found time to write two of his greatest works: *De trinitate* ('On the Trinity', 399–422/6) and *De civitate Dei* ('On the City of God', 413–26/7). (Another remarkable text also dates from this period: *De Genesi ad litteram* ('Literal Commentary on Genesis', 401–15), which, despite its title, does not offer a literal reading of the Genesis creation story, but an account according to which God's initial creation was instantaneous, but God had included in it 'seminal reasons', which allowed the different features of creation to develop over time.) A look at some of their ideas illustrates Augustine's comprehensive and original cast of mind, and helps to show why and how he exercised such an influence – and cast such a shadow – over medieval Christian thought.

In De trinitate, Augustine explores the extent to which God, and in particular, divine triunity, can be understood in human language by human minds. One of the passages (V.3.4-11.12) from which stems a whole stream of medieval discussion concerns predications about God - when we say 'God is F' or 'God Fs' where 'F' might stand for, say, 'good' or 'create'. Ancient logic drew a distinction between substantial predication, when the genus, species or differentia of something was predicated of it ('Socrates is animal/ human/rational') and accidental predication, where an accident is predicated ('Socrates is white'). Extending this idea, Augustine argued that no predications about God, who is immutable, can be accidental. When we say of God just that he is (he exists), we are making a straightforward substantial predication. If we predicate of God attributes in the Aristotelian categories of quantity or quality, these predications must be understood substantially too. That is to say, God is not good or great because he participates in goodness or greatness; rather, he is goodness or greatness. When, talking about the Trinity, we say 'God is the Father' or 'God is the Son', we are making a relative, but non-accidental predication, and any predications in other categories should be taken metaphorically, except that it is never true that God is acted on, whilst it is literally true of God (and 'perhaps most truly of God alone') that he acts. *De trinitate* goes on to show how, when we consider the processes of the human mind, we discover various triads – the mind, its knowledge of itself, its love of itself; memory, understanding and will – which are images of the Holy Trinity and help humans to grasp its triunity.

Augustine wrote *De civitate Dei* in response to the sacking of Rome by the Goths in 410. He wanted to answer the charges made by the pagans that this unprecedented disaster had taken place because worship of the traditional gods had been banned in 391 and so the city was left without their protection. More deeply, though, Augustine wished to reject and replace a view of history which some of his Christian contemporaries espoused. Once the Roman Empire had become Christian, it was tempting to see its success and stability as the working of divine providence. Augustine argues against both pagan and Christian triumphalist versions of Roman history. The story of Rome, he insists, was from the beginning one of bloodshed and disasters, and he is highly sceptical about the virtues and good intentions of the Roman empirebuilders. Although God does indeed decide which nations flourish and which decline, his design is inscrutable: he afflicts both the good and the wicked; earthly success is no simple sign of divine favour. The true lines of the divine plan will be discerned, not in any secular history, but in the Biblically-centred salvation history to which Books 12-22 of the City of God are devoted: from the fall of the rebel angels, the creation of man, the generations of God's chosen people, first the Jews and then the Christians, through to the final judgement and the states of eternal damnation or beatitude. The City of God itself is not to be identified with any state, or even with the Church. It comprises that group of people from Adam onwards, including some apparently pagans, but internally or implicitly Christian, who are predestined by God for salvation. Its identity, then, is as inscrutable as providence itself.

Although Augustine's attack on polytheist paganism is remorseless, his attitude to the Platonic philosophers is different. He accepts not only that, by using their reasons, they correctly discerned the one, true God but also that, in setting forth the scheme of three hypostases, they showed an understanding of the Trinity. Although a careful reading of this text, and other of Augustine's works, shows him deeply critical of the failings of the philosophers, their pride and their fear, which made them into opponents of the Christian truth they came so close in some ways to grasping, chapters of *De civitate Dei* could be taken – and were (Chapter 5, section 2, Interlude iv) – to depict ancient philosophy in a golden light.

Politically, *De civitate Dei* is deeply ambiguous. On the one side, it makes clear that salvation, which is all that matters in Augustine's view, depends on individual virtue and, much more, unmerited divine grace. The most that even a good ruler can do is to ensure the peace which prefigures heavenly peace and allows people to devote themselves to spiritual ends. On the other side, Augustine argues that only a community arranged so as to pursue the true common good can be considered a genuine commonwealth (*respublica*), and

only Christians correctly identify this good. From such ideas some medieval theorists managed to construct a political Augustinism, in which a Christian theocracy becomes responsible for leading the people to salvation – a stance which Augustine, who in his role of bishop was willing to call on the power of the state to suppress religious opposition, may not have found as offensive as some of his underlying principles should have made it.

OLD TRADITIONS AND New Beginnings

Although the beginning of this chapter follows on from the last chronologically, it may seem as if it takes a step back in time. Boethius, with whom it begins, was a Christian who wrote in Latin and was born towards the end of the fifth century, but his intellectual world was far closer than Augustine's to that of the Greek pagan philosophers, whose works he could read in the original and knew well. The same is even more obviously true of the pagan philosophers and their Christian opponent, John Philoponus, later in the sixth century. These instances of a sort of counter-flow in intellectual history underline the impossibility of making any more than an arbitrary and institutional division between medieval philosophy, as we have come to call it, and the thought of later antiquity. But Boethius's longer-lived and politically more fortunate (or cunning?) successor, Cassiodorus already seems to inhabit a different intellectual universe.

Cassiodorus leads quite smoothly – though over a gap of two centuries, where little that could count as philosophy was done in the Latin West - to the revival of philosophy at the time of Charlemagne. But the Latin tradition was not the only one, and in this period it was the least important. At this early stage, however, it would be misleading to think in terms of the four separate but intertwining traditions (Latin, Greek, Islamic and Jewish) into which medieval philosophy divides from the tenth century onwards. Rather, there was the Latin tradition on the one hand, and that of the Eastern Empire and beyond, on the other. In the sixth and early seventh centuries, this was mostly a Greek tradition, part Christian, part pagan, although Syriac-speaking Christians also played a part. After the conquests by Muhammad and his followers, this tradition was not merely carried on, but revivified in the lands of Islam, which included large parts of the former Roman Empire and also Persia. For its first three centuries Islam was home to a philosophical culture which was diverse in both the languages and the religious faiths of its practitioners, and also in the extent to which new elements were mixed with those stemming from the Neoplatonic Schools. The thinkers from the Islamic Empire discussed in this chapter include Christians writing in Greek, Syriac or Arabic, Jews who used Arabic but were also Hebraists, one or two figures who hardly fit into any of the religious groupings, as well as Muslims, writing in Arabic. In Byzantium – that relatively small part of the Roman Empire which remained unconquered – the tradition of ancient philosophy did not flourish as it did in Islam. But some philosophizing went on, and Byzantine culture was a very strong influence on thought in the Latin West in the ninth century.

After looking at Boethius, Cassiodorus and the Latin encyclopaedists, this chapter will turn to the Eastern tradition, as it was transformed in the years from *c*. 550 to 850, before returning to the Latin and Byzantine traditions in the years up to *c*. 900.

1 Boethius and the logical curriculum at the end of antiquity

Augustine lived through the shock of the sacking of Rome. Yet a century later, Severinus Manlius Boethius (born c. 475-7) was able to enjoy the life of a Roman aristocrat, even though Italy was under the rule of the Ostrogothic king, Theoderic. Since 395, the Roman Empire had been split into an Eastern Empire, with its capital at Constantinople, and a Western Empire, with its capital at Ravenna. Rome was no longer a centre of political importance, but it retained its ancient institutions and ceremonies, and Boethius played an important part in them. It was only when, in his mid-40s, Boethius accepted the post of Theoderic's Master of Offices (his chief minister) and moved to Ravenna that he entered, fatally, into real political life and a mixture of court intrigue and suspicion by Theoderic led to his trial and execution. The Christianization of Roman society that Augustine had worked for was almost complete in the Western Empire. Although Boethius had a thorough education in the classics of Greek and Latin literature and in Neoplatonic philosophy, his family, along with all the Roman elite, were Christians. Theoderic and his Goths were Christians too, but Arians (they did not accept the full divinity of Christ), and Boethius may have become suspect when, after a schism with the Eastern Christians was resolved, it was feared that he might support a re-conquest of Italy by the Eastern Emperor.

Boethius is very important to the history of medieval philosophy in three main ways. He was the main transmitter of ancient logic, as developed within the Neoplatonic curriculum, to the Latin West – and, indeed, his work provides a vantage point from which to view this Greek tradition, which would also influence later Greek, Islamic and Jewish philosophy. Boethius also wrote some short theological works (*Opuscula sacra*) which were innovative and influential in their method, and one of the most widely-read literary philosophical works of the Latin Middle Ages, the *De consolatione Philosophiae* ('On the Consolation of Philosophy').

The logical curriculum

Since the work of Porphyry (Chapter 2, section 5), the whole Aristotelian logical organon had become a fundamental part of the Neoplatonic curriculum. Students would start from Porphyry's own *Isagoge*, and go on to the *Categories*, *On Interpretation*, the *Prior* and *Posterior Analytics*, the *Sophistical Refutations*, the *Topics* (and also the *Rhetoric* and the *Poetics*, but Boethius ignored these two texts).

The first three works of the logical curriculum all received extensive commentaries from Boethius: two each on the Isagoge and On Interpretation, one on the Categories. Boethius's commentaries are based very largely on the Greek tradition, but they are not slavish copies. Indeed, Boethius seems to have made a very deliberate decision, far-reaching in its consequences, about his relationship to this tradition. Most of Boethius's Greek near contemporaries were much influenced in their treatment of Aristotelian logic by Iamblichus. They were not content to explore Aristotle's theories on their own terms, as applying to the sensible world, in the way Porphyry had been, but intruded Neoplatonic doctrines into their accounts of his texts. Although Boethius knew later material, his preferred source was Porphyry: his commentary on the Categories is very close to Porphyry's surviving question-andanswer commentary, and the second long commentary to On Interpretation is generally accepted as the best source for Porphyry's lost commentary on this text. Logicians in the Latin West had access to the ancient logical commentary tradition through Boethius, and because of his preference for Porphyry they came to know a far more purely Aristotelian tradition than if they had known the Greek commentators of his time (some of whose works were, however, translated in the thirteenth century).

Boethius's strongly Aristotelian leanings are also evident when he is commenting on a work where he cannot base himself on a Porphyrian commentary - Porphyry's own Isagoge; and especially in his discussion of Porphyry's questions about universals (Chapter 2, section 5) in the second commentary, which would be the basis of the fierce twelfth-century debate (Study E). Boethius's Greek contemporaries (De Libera, 1999) tackled Porphyry's questions, which centred on whether universals are separated from matter or not, by distinguishing between three sorts of genera and species: there are forms 'before the many' which are separate from matter, the archetypes according to which all things are made (the Greek writers thought especially of Plato's *Timaeus*); forms 'in the many', immanent forms in each particular, which are not separated from matter; and forms 'after the many', which are collected by the mind from particulars and so are separate from matter, since they are mental, but not unqualifiedly separate. Boethius does not use this scheme at all; rather, his solution, he says, is taken from Alexander of Aphrodisias (whose writings had influenced the Isagoge itself).

Boethius (1906, 161–2) poses the problem by saying that either universals (genera and species) exist in reality, or they exist in thought alone. But they

cannot exist in reality, because every real thing is one in number, but universals are common to many at the same time. If they exist in thought, then either they are thoughts which represent how things really are, or not. They could only represent how things are, however, if universals did exist in reality - and it has been established that they do not. And so they are 'false or empty' thoughts, which misrepresent how the world is. Discussion of universals is, consequently, time wasted. Boethius's decisive step, in refuting this argument, is to reject the claim that thoughts which do not represent the world as it is are therefore false or empty. To do so, he calls upon the notion of abstraction: mathematicians do not deal in false or empty notions when they consider lines as if they were separate from bodies, although lines exist in reality only in bodies. Similarly, in grasping a universal, the mind 'takes the nature of the incorporeal thing from the bodies and gazes at the pure nature alone, as the form in itself.' Boethius complicates this basic 'Abstractionist Reply' in various ways: he introduces the notion of inductive abstraction (finding what is common to different particulars), as opposed to mathematical abstraction; he suggests that one and the same likeness is universal in thought and sensible in particulars. Above all, whereas the Abstractionist Reply suggests that universals are, in the final analysis, mental constructs based on - and so not falsifying - the way the world is, Boethius at moments gives the strong impression that, in grasping universals, the intellect is gaining a better purchase on reality than the senses can do. Untypically, Boethius seems here to be allowing a Neoplatonic theme into his logic - one which he would elaborate further when he discussed divine prescience in the Consolation.

Boethius's contribution to the theory of syllogistic argument was to write two handbooks (mostly covering the same ground), which would provide medieval Latin readers with a clear introduction to the theory in the period before the twelfth century, when the *Prior Analytics* became available. But he was an important, though not always illuminating, source for two other sorts of theories of argument. Besides Aristotelian syllogistic, a term-logic, there was the propositional logic developed by the Stoics. By late antiquity it had become thoroughly confused with the term-logic of Aristotelian syllogistic. Boethius's monograph *De syllogismis hypotheticis* ('On Hypothetical Syllogisms') is the best surviving evidence of this confusion. In a hypothetical syllogism one of the premisses is a molecular proposition which uses 'if' or 'or' (understood as exclusive disjunction) as a connective. So, for instance, the following syllogism is hypothetical:

If it is day, it is light (*Si dies est, lux est*) It is not light.

Therefore

It is not day.

Is this not propositional logic: 'If p, then q; not q; therefore not p', where p and q stand for the propositions 'It is day' and 'It is light'? Not, it seems, according to Boethius, who thinks of it as a piece of term-logic in which 'is day' and 'is light' are predicated of a vague subject understood in the verb (the 'it' of the English is not separately expressed in the Latin) (Martin, 1991). The design of the treatise, devoted for the most part to a laborious calculation of the various different possible forms of hypothetical syllogism, provides further proof of this lack of theoretical grasp. Boethius quite simply did not think in terms of propositions and propositional operations, such as negation and entailment.

During the course of antiquity, Aristotle's *Topics* generated its own system of logic. The practical orientation of Aristotle's discussion recommended it to lawyers, and Cicero produced his own, short *Topics*. Boethius wrote a commentary to it, and a monograph called *De differentiis topicis* ('On Topical *differentiae*'). Topical theory is mainly concerned with *discovering* arguments, which need not be formally valid, but merely persuasive to their hearers. The topical *differentiae* are the classifications of types of such arguments; knowing the *differentiae* helps the arguer to find a persuasive line of reasoning. Suppose, for example, I were trying to persuade you to acknowledge that Wolf is a great composer of Lieder. I would start by searching my mind for any information I could use to put my case, and I would recall that everyone agrees that another composer, Schubert, writes great Lieder. At this point I would turn to the list of topical *differentiae*, and I would see that the *differentia* 'from equals' gives me my argument:

Everyone accepts the greatness of Schubert as a composer of Lieder. Wolf is Schubert's equal as a composer of Lieder.

Therefore

Everyone should accept the greatness of Wolf as a composer of Lieder.

Associated with this, as with every *differentia*, is a 'maximal proposition' (*maxima propositio*), in this case: 'equal things are to be judged equally.' The maximal proposition indicates how to put the argument together. Although it could also be added to the argument as a premiss in order to make it formally valid, Boethius did not seem to think of using maximal propositions in this manner. Rather, a topical argument relies on the principle which the maximal proposition enunciates for its strength, and this strength will vary, depending on how close the maximal proposition is to being a logical truth.

OLD TRADITIONS AND NEW BEGINNINGS

Monophysitism, Nestorianism and the Opuscula sacra

Of Boethius's five Opuscula sacra, the important ones are I, V and III (which is not a theological work at all). V (Contra Eutychen et Nestorium; 'Against Eutyches and Nestorius'), written c. 513, has as its background a doctrinal controversy which split the world of Eastern Christendom, and is important for understanding the whole cultural history of the Near and Middle East. By the fourth century, a technical vocabulary for talking about the persons of the Trinity and the incarnate Christ had been evolved. Father, Son and Holy Spirit were each described as a 'hypostasis' – *hupostasis*, a word which could mean substance (etymologically: that which stands under), but also for the Neoplatonists (Chapter 2, section 4) referred to a level of explanation of reality and so, in their view, to a realization or manifestation of the divine. Orthodox doctrine, established at the Council of Constantinople (381), held that Christ is one hypostasis with two natures, a human and a divine one. Such a formula emphasizes that the living Christ was genuinely God incarnate, but it does so at the cost of apparent paradox: how can the same one substance have two natures? Nestorius (380-450/1), a priest from Antioch, resolved the paradox by positing two distinct hypostases – the Word and the man – to correspond to the divine and human natures. Eutyches (c. 370–after 451) opposed Nestorius but also tried to resolve the paradox, in the opposite way, by proposing that Christ, even when incarnate, had just one, divine nature. Both theologians were condemned by the Orthodox Church, but gave rise to distinctive Christian sects in the East – the followers of Nestorius (Nestorians) in Persia; the followers of Eutyches (Monophysites) in Syria, Egypt and Ethiopia.

Much of the most intricately argued, logically rigorous theology in the East, even up to the tenth century, was concerned to show which answer (alone!) to this Christological problem is rationally coherent: for example, Leontius of Byzantium putting the orthodox position in the earlier sixth century, John Philoponus, arguing the Monophysite case later that century, Yahyâ Ibn 'Adî writing in Arabic on the same themes in the 900s. Boethius's close links with Eastern theology make him the main Latin writer to have addressed this problem, when he tries to show in Treatise V that, once the technical terms are clearly defined, both the Nestorian and the Monophysite positions fall foul of Aristotelian logic or physics. In similar fashion, Treatise I (De trinitate; 'On the Trinity') applies the techniques of logic to thinking about the Trinity. Boethius knows that Augustine has already followed this path in his discussion of God and the Aristotelian Categories in his De trinitate; he follows and develops Augustine's thinking, proposing on the way an ontology that fuses Platonic and Aristotelian themes to make God the single, transcendent Platonic Idea, of which the images are the immanent forms in each concrete whole. Where he goes beyond Augustine is in charting the exact point at which logic breaks down in analysing the Trinity. There are two reasons for disquiet about saying that there are relations of paternity, filiation and spiration between the three persons of the Trinity, but they are none the less one God. The first is that God's immutability is compromised by predicating of him relation, one of the categories of accident. The second is that no thing can be its own father, son or spirit. The first problem, Boethius explains, is illusory, because all relations are extrinsic: the fact that x bears a relation to y (for instance, x is taller than y, x is the father of y) changes neither x nor y. As for the second, some relations can be reflexive (something can be so related to itself) – for example, *equal to* and the *same as*. Where predications about God differ from those about his creatures is that, because of the 'otherness' attached to transitory things, the relations of paternity and filiation are never reflexive except in the case of the Trinity.

Treatise III (known in the Middle Ages as '*De hebdomadibus*'; 'On Groups of 7') is a strictly philosophical discussion, with no mention of specifically Christian doctrine; it begins by setting out a series of metaphysical axioms. The starting point is a view to which Platonists, who believe that evil is merely a deficiency in goodness, are committed: merely by virtue of existing, a substance is in some sense good. This position is the germ of a development which was to be very important in medieval metaphysics: the idea that there are some 'transcendental' attributes true of all substances (Chapter 7, section 3). Boethius's special concern here, though, is to explain how all substances are good in that they exist, and yet are not 'substantially' (in modern terms, 'essentially') good in the way God is. The difficulty arises because there seem just to be two ways in which a thing can be good: by participation in goodness, in which case it is good only accidentally; or substantially, in which case the thing's substance is goodness itself and so it is identical with God.

Boethius's answer, which takes the form of a thought-experiment, aims to provide a principled way for distinguishing between what it is for a thing *a* to be F in that it exists, and what it is for *a* to be substantially F. If God exists, he is substantially good. But suppose *per impossibile* that God did not exist: substances would not then be good in that they existed (although they might still be good by participation). Boethius's discussion implies that, if *a* is substantially F, it is *inconceivable* that it is not-F, whereas if *a* is F in that it exists it is *impossible* that it is not-F. The distinction seems to be between what we would call 'logical impossibility' (a not-good God is like a square circle) and impossibility given the fundamental way in which the world is set up – a notion near to what some contemporary philosophers call 'metaphysical impossibility'.

'De consolatione Philosophiae'

Boethius wrote the *Consolation* when he was in prison awaiting execution; these circumstances provide the basis for its dramatic setting and form. A personification of Philosophy appears to Boethius as he laments his sudden

change of fortune and the fact that the wicked prosper whilst the good are oppressed. Her task is to bring him comfort by showing that he has nothing to lament. True happiness is not damaged even by the fate about to befall him, and despite appearances the good flourish and the wicked fail in their aims.

Philosophy begins her arguments (Book II and first part of III) by putting forward a *complex* view of the highest good and maintaining that the goods of fortune which Boethius has lost – riches, status, power and sensual pleasure – are of very limited value. He can still retain sufficiency, which is what those who desire these goods are really seeking, and he can be virtuous. Some goods of fortune, such as the people he loves, are of true value, but he has not lost them. In the second part of Book III, she develops a different, *simple* view of the highest good. Basing herself on Neoplatonic assumptions, Philosophy shows that the perfect good and perfect happiness are not merely in God: they *are* God. Perfect happiness is therefore completely untouched by changes in earthly fortune, however drastic.

Philosophy continues (III.11–12) by explaining how God rules. He acts as a final cause. He is the good which all things desire, 'a helm and rudder, by which the fabric of the world is kept stable and without decay.' Despite God's non-interventionism, Philosophy explains in Book IV.1–4, drawing on Plato's *Gorgias*, how Boethius's initial complaint about the prosperity of the wicked and oppression of the good is ungrounded. Everyone wants happiness, and happiness is identical with the good. If people are good, they have gained happiness; if they are wicked, they must be unhappy and so be powerless, because they cannot gain what they want. Indeed, since evil is a privation of existence, by being wicked people punish themselves, by ceasing to exist as humans and becoming other sorts of lower animals.

But the argument changes direction again at IV.5, when the character Boethius refuses to accept Philosophy's counter-intuitive claims. Philosophy now portrays God as the efficient, rather than the final, cause of all things. Divine providence is the unified view in God's mind of the course of events which, as fate, unfold over time. The apparent inequities in people's lives are based on good reasons: God may, for instance, be helping the good to become even better through adversities, or helping the wicked to repent. Such an interventionist God seems to leave no room for human freedom of choice, especially since Philosophy goes on to explain that the causal chain of providence includes all that happens and that 'chance' events are still the result of a chain of causes, but one which is unintended or unexpected. But Philosophy (V.2) excepts from the causal chain acts of volition in so far as they are rational and so uninfluenced by attention to worldly things or the passions. A further threat to freedom of choice, posed by God's foreknowledge, is considered at length in the later part of Book V (see Study A).

The argument of the *Consolation* can be read as a progression: from the more readily acceptable Stoic ideas which underlie the complex conception of the highest good, to the more difficult Neoplatonic metaphysics involved

in the simple conception; from the Aristotelian view of God as final cause to that, held by the late pagan Neoplatonists as well as by the Christians, of God as an efficient cause; to a point where, Boethius's initial worries resolved, Philosophy can indulge with him in the refined logical analyses of the end of Book V. But the tensions between the different lines of argument may seem more worrying. The Consolation is not just a dialogue; it is a Menippaean satire or prosimetrum, in which the prose is interspersed with verse passages (including, as III metrum 9, an epitome of Plato's Timaeus much commented on in the early Middle Ages). Menippaean satire was a genre in which the pretences of learning were often held up to ridicule. Given that this dialogue is by a Christian writer, and its intended audience is Christian, whereas the figure of authority is a representative of *pagan* philosophy, it is open to ask whether the author Boethius endorsed Philosophy's position as completely as his self-depiction appears to do. Boethius's aristocratic distaste for stating the obvious makes his intentions peculiarly difficult to divine, but it left his text - one of the most widely read in the medieval West (and translated even into medieval Hebrew and Greek) - open to a whole diversity of interpretations.

Study A: The problem of prescience in Boethius's 'Consolation'

Philosophers distinguish between necessary and contingent events. Necessary events are those which cannot but come about; contingent events are those which may or may not happen. Ancient and medieval philosophers in the Aristotelian tradition thought of necessary events as invariant ones, such as the movements of the stars, or the death *sometime* of any human being. They considered contingent events principally as those brought about by human choices - for example, that I drink (only) three glasses of wine tonight. If, as Neoplatonists, Jews, Christians and Muslims believe, there exists an omni-perfect God, then there seems two good reasons to doubt whether any event is contingent. First, since such a God is perfectly good and omnipotent, he will ordain a particular, best course of world-history, and so whatever happens will be predestined and thus, it seems, necessary. For Christian thinkers, this problem - the 'Problem of Predestination' often took the form, linked to the doctrine of grace, which has already been broached in connection with Augustine (Chapter 2, section 9). Second, since God is omniscient, it seems that he must know every truth, including all of the events which take place in the future. Intuitively, it is easy to see that, if God knows that tonight I shall drink three glasses of wine, then my drinking them is necessary, since otherwise I would have the power retrospectively to transform God's knowledge into false belief.

Among medieval Latin thinkers, one of the best known attempts to tackle this second problem – 'the Problem of Prescience' – was the long discussion in sections 3–6 of Book 5 of Boethius's *Consolation of Philosophy*. Although Philosophy has proposed a view of the universe in which all external events belong to a gap-less chain stemming from the first cause, God, she has excepted the movements of human minds. They are outside the chain and so not, apparently, determined by causes; the Problem of Predestination seems to have been avoided. But not the Problem of Prescience. God's knowledge extends even to people's innermost thoughts and decisions (*Cons.* V.3.5), and so his omniscience seems to imply that not even human inner choices are themselves contingent. Boethius (the character in the dialogue) presents the problem in two versions:

(1) If God sees all things and can in no way be mistaken, then there necessarily happens what he by providence will have foreseen will be (*Cons.* V.3.4).

(2) If things are capable of turning out differently from how they have been foreseen, then there will no longer be firm foreknowledge of the future, but rather uncertain opinion (*Cons.* V.3.6).

Boethius argues that (1) and (2) have drastic consequences (V.3.29–36): since, he considers, human actions will not be based on 'the free and voluntary movements' of the mind, no one will be better or worse than anyone else, or more or less worthy of punishment and reward, and both hope and prayer will become pointless. Although many contemporary philosophers would not agree that moral responsibility for a choice is removed when it is determined, Boethius and most medieval philosophers thought this consequence was obvious. And so they had to find some way of rejecting (1) and (2).

The reasoning behind (1) and (2) seems to be the following:

(3) God knows every event, including all future ones.

Since knowledge, as opposed to mere opinion or belief, is only of what is true.

(4) When someone knows that an event will happen, then the event will happen.

(5) (4) is true as a matter of necessity, because it is impossible to know that which is not the case.

(6) If someone knows an event will happen, it will happen necessarily (4, 5).

(7) Every event, including future ones, happens necessarily (3, 6).

The pattern behind (2) is similar, in reverse: from a negation of (7), the negation of (3) follows.

(3)-(7) – and its reverse – are, however, fallacious arguments. What follows from (4) and (5) is not (6) but

(8) Necessarily, if someone knows an event will happen, it will happen.

In terms of propositional logic, the mistake can be put as being due to confusion over the scope of the necessity operator. In (8), which is all that the arguer is entitled to infer from (4) and (5), the necessity operator ranges over the whole conditional, so that the form is: Necessarily (If p, then q). But the conclusion, (7), (Necessarily q) does not follow from it and (3). (7) does indeed follow from (6) and (3), because in (6) the necessity operator applies just to the consequent (the form is: If p then necessarily q). But it is (8) not (6) that is established by the preceding argument. Boethius lacked the grasp of propositionality which would have allowed him to think in terms of operators and their scope. None the less, he intuitively grasped that the problem has a deeper level – the idea that God's knowledge is in the past with respect to the events and so fixed – and he set out to tackle it.

Philosophy identifies (V.4.21–3) the character Boethius's central difficulty as being the apparent incompatibility between a future contingent event's being fore*known* and yet not having a necessary outcome. Philosophy considers that

(9) Only what is necessary is certain.

It follows that

(10) Future contingent events are not certain.

But Philosophy also believes that

(11) If someone knows something, he thereby knows it as something certain.

If God knows future contingent events, it follows from (10) and (11) that he judges them as being other than they are. But

(12) If something is judged otherwise than as it is, it is not known.

Therefore, if God knows future contingent events, he does not know them. The way that Philosophy avoids this contradiction is to reject (12). How? Philosophy would not query that only what is true can be known and 'judging something otherwise than as it is' seems to mean judging falsely, rather than truly. But Philosophy's point is that to talk simply of *A* knowing *x*, where *A* stands for any knower, and *x* for any object of knowledge, is an over-simplification. Rather, as she announces:

The cause of this error is that each person considers that everything that is known is known just according to the power and nature of the things that are known. The truth is the very contrary. For *everything that is known is grasped not according to its own power, but rather according to the capacity of those who know it.* (V.4.24–5)

The italicized statement (the 'Modes of Cognition Principle') demands that knowledge be *relativized* to different levels of knowers, who have different sorts of objects of knowledge. Philosophy at first (V.4) develops this scheme in a complex way, in relation to different levels of cognition and their different objects. In Boethius's Neoplatonism, intelligence, God's way of knowing things, was distinguished from reason, the way in which humans (but not other animals) know things intellectually, and the two levels of cognition shared by humans and other animals: imagination – sensory cognition, when the object is absent (as when I remember your face), and sense-perception. Each level of cognition has its proper sort of object. For intelligence, it is what Philosophy calls pure Form, and identifies with God. Reason grasps universals which have been abstracted from particulars – for example, the humanity by which different human beings are human. Imagination has images as its objects, and the senses particular bodily things. Philosophy's scheme is hierarchic: she claims that a cognizer knows not only its proper object but also all that lower cognizers would know through their proper objects.

After explaining this idea, Philosophy concentrates on a rather simpler aspect of it. God's way of being and knowing, she argues, is eternal, and divine eternity, she says, is not the same as just lacking a beginning and end, but it is rather (V.6.4) 'the whole, simultaneous and perfect possession of unbounded life.' (This became a classic definition of eternity in the Middle Ages; whether it is atemporal eternity, as most modern commentators believe, is discussed in Study B.) A being who is eternal in this way, Philosophy argues, knows all things – past, present and future - in the same way as we, who live in time, know what is present. She then goes on to show why, so long as God knows future events by their being present to him, his omniscience leaves room for contingency. She distinguishes two sorts of necessity: simple and conditional. The examples she gives of the former are necessities based on natural invariabilities: it is simply necessary that the sun rises. Conditional necessities include a gualification. For instance, it is conditionally necessary that I am walking, when I am walking (or when someone sees that I am walking). From this conditional necessity, it does not follow that it is simply necessary that I am walking.

Some modern commentators interpret this distinction as a sign that the author Boethius was in fact able to recognize the scope-distinction fallacy in (3)-(7). But a careful reading of the passage suggests that Philosophy is making a different point. In order to understand what it is, we need to consider how possibility and necessity were understood in the Aristotelian tradition which Boethius followed in this respect.

Aristotle understood modality according to various paradigms. One of them has been called (Knuuttila, 1993) the 'statistical' understanding of modality, because it reduces modality to temporal frequency: a temporally unspecified proposition is necessary if it is always true, and impossible if it is never true. On this view, although the future is open to alternative outcomes, there is no room for synchronic alternative possibilities. Suppose that, as a matter of fact, I am sitting down now (call this time t^{1}), and that my sitting or standing is within my choice – I am alone in my room, and I can sit or stand as I wish. Is it possible that I am standing now, at t^{1} ? Ordinary language (not just in English) suggests that it is *not* possible. We do not say, when I am sitting now, I *would be* visible through the window' but 'If I *were* standing now, I *would be* visible through the window'. Modern modal logicians usually think otherwise. They accept that, although 'I am sitting at t^{n} is true, it is also true that 'Possibly, I am

standing at t^{\prime} . My sitting at t^{\prime} and my standing at t^{\prime} are two alternative synchronic possibilities, the first of which, as it happens, is actually the case. The Aristotelian position was in line with the other, ordinary language view. At t° , it was possible that at t^{\prime} , the next instant, I would be standing, but at t^{\prime} itself only what is actually the case is possible: 'what is, necessarily is, when it is', as Aristotle says in *On Interpretation* (19a23). In short, the present is necessary.

When she talks about conditional necessity, Philosophy is arguing that, since God knows all things as if they were present, future events are necessary, in relation to their being known by God, in just the way that anything which is presently the case is necessary. And this necessity of the present is an unconstraining necessity – those who accepted Aristotelian modalities did not think that because, when I am sitting, I am sitting necessarily, my freedom to stand has been at all curtailed. Indeed, as Philosophy stresses, in themselves the future events remain completely free. Philosophy is thus able to explain how, as known by God, future contingent events have the certainty which makes them proper objects of knowledge, rather than opinion, whilst nevertheless retaining their indeterminacy.

* * *

2 Monks and encyclopaedists: the Latin West from 525–780

The encyclopaedias of late antiquity

Although Boethius worked within a tradition – that of the late ancient Neoplatonic schools – in which little importance was given to originality, his commentaries show at least the degree of intelligent selection of inherited material that is found in Greek contemporaries such as Ammonius, and his *Opuscula sacra* and the *Consolation* are the products of a mind both subtle and innovative. Nothing from the Latin world for nearly three centuries after his death reaches anywhere near to this intellectual level. Indeed, in the sixth to eighth centuries, as Roman administration broke down, and barbarians invaded or slowly established their kingdoms, intellectual activity was restricted and philosophical speculation seems to have ceased. But, in southern Europe, there was at least the opportunity for compilation. Two of the works of these encyclopaedists would be important for medieval Latin philosophy: Cassiodorus's *Institutiones* and Isidore of Seville's *Etymologiae*.

Boethius's successor as Theoderic's Master of Offices, Cassiodorus was also a (much less aristocratic) aristocrat with an interest in philosophy. Yet his intellectual development and aims contrast sharply with Boethius's, and they suggest patterns which would become characteristic of the medieval Latin West. Cassiodorus spent the first half of his improbably long life (484/ 90–590 or perhaps earlier) becoming and acting as the leading functionary and rhetorical propagandist of Theoderic and his Ostrogothic successors. When the Eastern Emperor, Justinian, finally defeated the Goths and took Italy under his control, Cassiodorus turned from composing official letters to theology, writing a rather derivative treatise on the soul, and an exposition of the Psalms, which emphasizes rhetorical and logical analysis. After a period in Constantinople, he returned (554) to the monastery of Vivarium, which he had probably already set up on his family lands in the very south of Italy.

At Vivarium, Cassiodorus wrote his most popular work, the *Institutiones* ('Teachings') – a handbook very widely disseminated and particularly influential in the early Middle Ages. Whereas Boethius was a philosopher by training, whose interests always remained philosophical, even when he was discussing fine points of Christian doctrine or (arguably) exposing the ultimate limitations of human reasoning, Cassiodorus wished firmly to subordinate secular studies to the goal of Christian learning. The *Institutiones* might be seen as a preparation for the type of commentary he had given to the Psalms; and Book II of the *Institutiones*, which gives short accounts of the seven Liberal Arts, might be considered as an addendum to Book I, on the books of the Bible, and the writers of the Church. Yet it was Book II which most interested medieval readers, and the brief sketch of logic (II.iii), concentrating on Aristotelian syllogistic, would be used when fuller expositions were unavailable, or as an introduction.

Sixth-century Spain was ruled by another branch of the Goths, the Visigoths, who (587) renounced Arianism in favour of Catholic Christianity. Isidore (before 559–636), Bishop of Seville, had the benefit of a good classical education (though no Greek). His compositions include moralizing, historical and scientific treatises, but his most influential work (more than 1,000 manuscripts survive) is the Etymologiae ('Etymologies'), an encyclopaedia in which, as the title indicates, much of the discussion is organized around the etymologies, genuine or fantastic, of words. This method does not prevent Isidore from providing a short doxography (VIII.vi) of ancient philosophy -'On the Philosophers of the Gentiles', which would be widely copied, and giving (II.xxii-xxxi) a concise summary of logic. Although other elements of ancient philosophy appear sporadically elsewhere in the *Etymologiae*, the fact that in both this and in Cassiodorus's popular encyclopaedia, and also in Martianus Capella, logic is the only part of philosophy to receive a section to itself may well help, along with Augustine's influence, towards explaining the fundamental position it would take for Latin thinkers in the early Middle Ages.

Insular culture and the monasteries

Any history of European intellectual life will give an important place to the culture which developed in seventh- and eighth-century England, once a Roman province and settled by the (subsequently Christianized) Anglo-Saxons,

and Ireland, never Romanized but converted to Christianity over the previous century and a half. In Ireland of this period there were written Latin Biblical commentaries, as well as the linguistically extravagant poetry of *Hisperica Famina* and the parodic grammar of 'Virgilius Maro Grammaticus'. Soberer England was the home of Aldhelm, a ponderous Latin prose stylist and poet, and Bede (672/3–735), most famous as a historian, but also the writer of Christian poetry, Biblical commentaries and didactic treatises. None of this work, however, touches significantly on philosophy, even in the broad sense in which this book is tracing it. There was interest in natural phenomena, as reported in ancient texts, in grammar and orthography, and in the Church Fathers, especially in their role of Biblical commentators. The self-styled Irish 'Augustine' wrote ingeniously on the miracles in Scripture, giving a naturalistic explanation for all of them, but this exegetical stance was not tied to a wider theoretical outlook (as it may have been by the twelfth-century readers of this treatise).

Insular learning in the seventh and eighth centuries does, however, anticipate one important aspect of early medieval Latin philosophy. The Irish commentators, Aldhelm and Bede were all monks. The monastic movement had begun in the East, in the early fourth century, when groups of hermits gathered around ascetics like Anthony. But, in the West, it flourished in monasteries, where men or women lived a communal life of prayer, bound by a Rule, such as that of Benedict (d. 560). And, in Ireland, early Christian culture and learning was centred almost exclusively in its distinctive and rigorous form of monasticism. Although Benedict's Rule, which was imposed on monasteries in adapted form in the early ninth century, emphasized manual work and prayer, monasteries such as Corbie, St Amand and Bec (in Northern France), Tours and Fleury (on the Loire) and St Gallen (in Switzerland) would become, in the period from 800–1100, centres not merely for the conservation and production of manuscripts but for learning and philosophical speculation.

Interlude i: Philosophy and a manuscript culture

"... the conservation and production of manuscripts ... 'The phrase has heavy implications for the study of medieval philosophy, because manuscripts were a central feature of medieval thinkers' study and writing, and the difference between a culture based on manuscripts, and our own, with its printed books and electronic media, is one that the historian of philosophy should not ignore. The difference is not just that each copy of a work required the labour of being written out by hand. In the Latin Middle Ages up to the later thirteenth century, when paper began to be used (it was available from earlier in Islam), books were on parchment or vellum, animal (usually sheep) skins which had to be elaborately prepared before they could be used for writing, and which were needed in large quantities (one famous manuscript, the Codex Amiatinus of the Bible, required 500 sheep). Books, then, were expensive, precious items, and although some texts and notes are in the hands of their medieval authors, copying had its own skills and technology and it was usually undertaken by expert scribes, mainly, in the earlier Latin Middle Ages, monks working in their monastic scriptoria. Notes, letters and drafts would often have been written on wax tablets (which, of course, do not survive).

It was rare, therefore, for individual scholars, especially in the early Middle Ages, to own more than a few books (although there were some exceptional bibliophiles). In order to have a range of material, they needed the use of a library. The great libraries were in the monasteries in the earlier Middle Ages, and later in the convents of the friars. But even the biggest early medieval monastic libraries were tiny by any sort of modern standard, comprising just a few hundred volumes. Moreover, monastic practice, founded on the Rule of St Benedict, favoured slow and careful reading; the usual custom was for a monk to borrow a single book for a year at a time. In consequence, we should expect that, up until 1200 at least, Latin scholars would have access, depending on where they happened to be, only to a limited number of the texts theoretically available. The importance of cultivating the memory – a characteristic feature of medieval education – becomes obvious, as does the reason behind the practice of quoting, often not quite exactly, from memory. It becomes clear too why every sort of florilegium, compendium and handbook was so useful, and why the excerption, adaptation or abbreviation of existing authorities was so valuable. It also helps to explain why the curriculum was focussed on a small number of textbooks which were very intensively studied.

In the Islamic world, the position would be different. Paper was available from early on and philosophers such as Avicenna seem to have been both avid buyers of books and users of princely libraries. From the thirteenth century, paper came into use in the Latin West too, and copying became more highly organized and efficient, making books much more easily available to theologians and philosophers in the universities than they had been in the earlier medieval schools.

3 The last pagan philosophers, and their Christian pupils

In the East, by contrast with Italy, Christianity had not entirely won over the educated elite. The Greek tradition on which Boethius relied as a logical commentator was preserved in the pagan schools of Athens and Alexandria. Ammonius (before 445–517–26) was probably the most influential head of the Alexandrian school. Like his contemporary, Boethius, he had a penchant for logic. And, although he incorporated into the discussion of prescience in his commentary on *On Interpretation*, Chapter 9, an Iamblichan theme which Boethius reserved for the *Consolation*, he seems not to have been very attracted to the higher Neoplatonic metaphysics. He was, however, like all the philosophers of his time, keen to show the harmony of Plato and Aristotle, and he was strongly committed to the view – which seems completely misplaced to modern scholars – that Aristotle considered God not just as a first mover and final cause of all things, but as an efficient cause, not unlike the Creator God of Jews and Christians.

Ammonius was certainly a pagan, but he seems to have made a peace with the Christian authorities which, in this time of persecution, other philosophers regarded as treacherous. One of his sharpest critics was Damascius, who had become head of the School of Athens when, in 529, Justinian closed down this anachronistically pagan institution for good. Together with other philosophers, among them Priscianus the Lydian, and Olympiodorus and Simplicius from Alexandria, Damascius went to Persia, where they were received by the cultured King Chosroes (Khusrau). Priscianus wrote a set of *Solutions* to philosophical problems Chosroes had posed him (the one work of pagan philosophy to be translated into Latin by Eriugena, four centuries later), and Chosroes even had included in his peace treaty with Justinian of 532 the provision that these philosophers could return to the Empire and 'live there without fear for the rest of their lives and according to their own choice, without being constrained to think what would contradict their views, or to change the beliefs of their ancestors.'

Two of the most influential followers of the late Neoplatonic school were, however, Christians: John Philoponus (*c*. 490–570s) and a little earlier the writer known as 'pseudo-Dionysius'.

Pseudo-Dionysius

Sometime near the end of the fifth century, someone – possibly a Syrian monk – produced a set of writings which claimed to be by Dionysius, the wise Athenian converted by St Paul (Acts 17, xvi–xxxiv). Although there were doubts at first about the authenticity of such 'newly discovered' writings, Maximus the Confessor's use of them ensured their acceptance in the Orthodox Church, and they had also been put into Syriac by Sergius of

Resh'aina shortly after they were written. They were translated into Latin in the ninth century (first by Hilduin, Abbot of St Denis, and then by Eriugena (Chapter 3, section 7) and their authenticity was not queried until the time of Lorenzo Valla, in the fifteenth century. Only at the end of the nineteenth century was it shown that the Dionysian writings depended on Proclus and so could not date from much earlier than 500.

The dependency on Proclus is one of the features that makes the pseudo-Dionysian corpus so unusual and important among patristic writings, especially those available in Latin, where the dominant form of Platonism was that of Plotinus and Porphyry, as found in Augustine. Also unusual is the manner in which the author Christianizes his pagan source. For Augustine, the coincidence and contrast between Platonic philosophy and Christian doctrine is a matter for constant, anxious debate. By contrast, pseudo-Dionysius takes the main structural features of Proclus's philosophical system and re-expresses them in Christian terms. Proclus had fitted pagan gods to the elaborate hierarchy of emanations he described. Pseudo-Dionysius uses a somewhat trimmed-down version of the hierarchy as a way of explaining the ordering of the angels (in his Celestial Hierarchy) and of offices and liturgical practices in the Church (in his Ecclesiastical Hierarchy). Other aspects of Proclean Neoplatonism needed more adaptation. In the tradition of commentary on the *Parmenides*, it had become common to apply the series of negations to the One, and the series of positive statements to lower hypostases. The absolute transcendence of the One was thus guaranteed by a negative theology. Christian authors, however, had to be able to explain how God acts to create the world and watch over his creation. Augustine had met this challenge by ascribing some of the characteristics of the second hypostasis (nous) to God himself. Pseudo-Dionysius follows a different strategy. In his longest treatise, On the Divine Names, he considers the extent to which God can be described by his various names, such as 'Goodness', 'Being' and 'One'. He is willing to allow such positive descriptions of God, so long as they are understood to apply to the effects which are pre-contained within him as their cause. In the brief Mystical Theology, however, the author complements this approach with a graded negative theology. The nearer one comes to God, the more restricted language becomes, until finally all speech and thought is wrapped in darkness. No words can describe God. None the less, the author explains, although every description must be denied, it is truer to deny that God is drunk or angry, than that he is good or that he exists.

John Philoponus

John Philoponus (*c*. 490–570s) was a Monophysite Christian and a student of Ammonius. His early works are Aristotelian commentaries in the manner of his teacher; some of them, indeed, seem to be Ammonius's lectures, as recorded by him. But half way through his career Philoponus launched an

assault on a number of central Aristotelian positions which were unquestioningly accepted by the pagan Neoplatonists. The anti-Aristotelian arguments appear first in his commentary on the *Physics* (c. 517), but they may well be later additions. Quite probably Philoponus began his new phase with his polemical *On the Eternity of the World against Proclus*, written in 529, perhaps not coincidentally the year when Justinian closed the pagan School of Athens. Later, Philoponus wrote an *On the Eternity of the World against Aristotle*, which can be partially reconstructed from the quotations in the counter-attack directed to it by Simplicius.

As these titles indicate, one of Philoponus's main concerns was to vindicate the Christian view that the universe has not existed eternally but had a beginning (see Study B). But he also rejected Aristotle's view that the stars are made of aether, a fifth element in addition to earth, water, air and fire, from which the sublunary world is made. Nor did he accept the Aristotelian idea that motion of these four elements is explained by each having its natural place (air below fire and so on) to which it returns; rather, the elements seek their place in a God-given order. He re-examined the Aristotelian (and Platonic) notion of prime matter – as a sort of unformed something which acts as the substrate for forms - and substituted for it pure three-dimensional extension. He rejected, too, Aristotle's account of projectile motion. Suppose I throw this book at you: what makes it continue to move through the air? Aristotle thought that he needed to posit a succession of external movers – pockets of air, in this case - each moved by the previous one. Philoponus argued, rather, that such motion could be explained by an initial impetus given to the object.

Philoponus extended his impetus theory theologically, so as to argue that it was from God's initial impetus that the stars and also animals have their movements. And, in general, whilst aspects of Philoponus's physics and cosmology anticipate seventeenth-century developments (and played a part in bringing them about), the motive behind his anti-Aristotelianism is exactly what his arch-opponent, Simplicius, objected to: a wish to remove from the visible universe, especially the heavens, the power and mystery it had for the pagan Neoplatonists, in favour of the omnipotent God of Christianity. This emphasis is particularly evident in his commentary on the beginning of Genesis, On the Making of the World (after 546). During the final twenty or so years of his life, Philoponus devoted himself to more specifically theological writing. He defended his Monophysitism - the position that Christ has just one nature (cf. Chapter 3, section 1) – with the same sort of logically based arguments that Boethius used to support the orthodox doctrine of Christ's two natures, and he developed a view of the Trinity in which he came much closer than most Christians to accepting that there are, indeed, three Gods. Philoponus's doctrinal writings were quickly forgotten, but he was a very important figure in the wider Eastern tradition, where he was known as 'John the Grammarian': the influence of his anti-Aristotelian arguments on Islamic, Jewish and, through them, Latin Christian writers, would be considerable.

Study B: Eternity and the universe: Augustine, Boethius and Philoponus

Most medieval writers distinguished between the following two questions:

- (1) Is the world (meaning the entire universe, apart from God) created?
- (2) Did the world's existence have a beginning?

Modern scholars would tend to say that Plato, Aristotle and much of the ancient tradition answered (1) and (2) negatively, whereas Christians, Jews and Muslims gave positive replies. By contrast, medieval thinkers generally accepted that the ancient philosophers agreed with them that the world is in some sense created, but that they denied that it had a beginning (although there was also an important strand of medieval thinking which held Aristotle not to have definitely concluded that the world is eternal). This issue was central in marking out how different Christians, Jews and Muslims treated the relation between the doctrines of their religion and the reasonings of the ancient philosophical tradition. Some of its most fascinating developments would come in the work of Maimonides (Chapter 6, section 4) and in debates at the University of Paris in the late thirteenth century (Study J). But the problem was already being discussed in late antiquity: Augustine and Boethius had a more nuanced approach to it than any of their successors, whilst John Philoponus invented some of the main arguments which would reappear through the coming centuries.

These discussions are linked to problems about the meaning of eternity. We might nowadays wish to distinguish between two contrasted notions of eternity. X is timelessly eternal (T-eternal) if it exists, but it is without extension or position in time. X is perpetually eternal (P-eternal) if it always exists. There is a weaker and stronger form of P-eternity. X is weakly P-eternal if it exists at every moment of time; it is strongly P-eternal if it exists at every moment of time and time lacks a beginning or end or both, so that the extension of X in time is infinite.

Although later medieval Christian theologians considered very carefully the nature of God's eternity (Study J), they kept the question separate from their debates about justifying the position that the world is not *P*-eternal. For Augustine, Boethius and Philoponus, the questions are linked, and, for them as for their successors, there are more complex notions of eternity than the two just contrasted.

'What did God do before he made the world?' In the mouth of a pagan, this was not an innocent question. It suggests some of the most serious arguments used to show that the world could not have a beginning: if it did have one, what did God do before he created it? Was he just idle? And why did he pick the particular moment he did for the act of creation? Why not earlier or later? Some

evade the power of the question with a joke: before he made the world, God made Hell for those who ask such questions, says Augustine (*Confessions*, XI.12–13. 14–15), but he will answer it seriously:

... if someone's flighty sense should wander through images of past times and marvel that you, all-powerful, all-creating and all-sustaining God, maker of heaven and earth, had held back from such work for numberless centuries before you did it, let that person wake up and pay attention: the things he marvels at are false.

Times themselves, explains Augustine, were made by God as part of his creation. Before God made the world, there was no time, and so there could be no question of time passing by – of God's remaining idle for countless years and then, at some given moment, no sooner or later, creating. Moreover, Augustine even offers, elsewhere, an explanation of why time could not exist before the world. Time, as many ancient philosophers from Plato onwards held, cannot exist without movement, and there was no movement until the universe began to be formed (*Confession* XII.9.9–12.15; XII.19.28) or until there were angels who had mental movements (*City of God* XI.12). (The theory, though, does not fit well with the view Augustine goes on to develop in *Confessions* XI, that, because only the present moment, not past and future, really exists, time needs to be analysed psychologically, as the affections caused in the mind by things which pass.)

Augustine's solution does seem to answer the pagan's most difficult implied questions, although at the cost of conceding that the world has no beginning in time: it begins with time, and that cannot be a temporal beginning. Given that he accepts that the world will always (though in a changed way) endure, then, according to Augustine it is weakly P-eternal, because there is no time at which it does not exist. Could it even be strongly P-eternal? Augustine might have been loath to admit it, but his theory perhaps does not rule it out: it does not seem to be obviously incoherent for time to be made and yet have no beginning. Indeed, what Augustine says about divine eternity helps to make this view plausible. God (XI.13.16) does not (of course) 'precede times by time', but because of 'the loftiness of his ever-present eternity'. Whereas temporal things are in flowing time, so that their future is always changing into the present and the past, God exists in a fixed, stable present. At first sight, this seems to mean that, for Augustine, God is T-eternal, but the position is more complicated. Augustine's divine eternity clearly has duration, during which there is no change. God is not in time because he exists in a special, permanent way; attributing to him a position or extension in time is inappropriate, because it suggests that he is or could be limited by time, but Augustine may well have accepted that it is true that God exists now, and did yesterday, and will exist tomorrow.

Boethius's interest in the eternity of the world is in order to contrast it to the way in which God is eternal. After he had introduced and defined divine eternity in the *Consolation*, he goes on (V.6.9–11; cf.V.6.6 and *Op. sacr.* I) to say that it is

wrong to take Plato's view that the world lacks a beginning and end to mean that he thought that it is co-eternal with the creator.

It is one thing to be led through an unending life – what Plato attributed to the world – and another thing to have embraced all at once the whole presentness of unending life – what, as has been made clear, is the distinguishing feature of the divine mind. Nor should God seem to be older than created things in quantity of time, but rather because he is distinguished by the simplicity of his nature.

It would be wrong to draw from this passage the conclusion that Boethius accepted the idea – attributed here to Plato, earlier to Aristotle, and in the *Opuscula sacra* to 'the ancient philosophers' – that the world is *P*-eternal. It is Philosophy, not Boethius himself, who is speaking, and even she merely reports Plato's position. Still, the final sentence probably is Boethius's own view: it is fully in agreement with Augustine's position and expresses the position which follows from Boethius's conception of divine eternity. That too echoes Augustine in *Confessions* XI, but makes the view a little more explicit. God's eternity is a way of living in which the whole fullness of life is grasped at once: it is an unchanging ever-presentness. Many modern interpreters have been content to label this view as 'timeless eternity'; others have accepted the label, but tried to explain how, none the less, Boethian eternity has duration. But it can be questioned whether Boethius thought that God was really *T*-eternal, although he is to be considered in some way beyond or above time.

John Philoponus took a far sharper view of the contrast between pagan insistence on an eternal world and Christian belief in a beginning – one which anticipated, and indeed influenced, medieval discussions. In part, Philoponus's stance reflects his determination in the later part of his career to assert and argue rationally for a set of positions which fitted Christian beliefs but went against what the Neoplatonists commonly accepted (Chapter 3, section 3). It may also be linked to his way of thinking about divine eternity. Whereas Augustine and Boethius think of God as somehow both having duration and yet being eternally present and living his life at once, Philoponus (John Philoponus, 1899, 114:20– 116:1; Sorabji, 1983, 118) clearly conceives eternity as spread out, though without change and entirely uniform. Since this conception makes divine eternity more time-like (it is, as it were, just another time-stream), Philoponus wanted to find positive arguments to show that the created universe, unlike eternity, has not gone on for ever but had a beginning: that, at least, it is not strongly *P*-eternal.

Philoponus found these arguments by looking at Aristotle's own conception of infinity (*Physics* III, 204a–8a). According to Aristotle, the infinite is what has no limit: it can always be added on to, never traversed – that 'of which some part is always outside.' This theory enabled him both to do justice to the intuition that the infinite in some sense exists, and to avoid the paradoxes which its existence generates. The infinite, argues Aristotle, exists in potency, but never in act:

that is to say, there can never exist anything infinitely large or infinitely numerous or infinitely long, but the series of whole numbers or of days or of the generations of human beings can go on being added on to infinitely. Aristotle believes that the series of days and of generations does, indeed, also stretch back infinitely in time, because the world is eternal, but this infinity is merely a potential one, because the humans have died and the days have passed.

Philoponus, however, does not accept that such infinities are potential (see Guide for references). The reason is that he thinks of the particulars which make up these infinities as being countable. Aristotle bases his claim that the infinity of, for instance, past days is potential, because the infinity exists only a part at a time, as each day comes and goes. But, says Philoponus, such an infinity has to be traversed as it is counted unit by unit, and so it is even more obviously impossible than if the infinite number of days existed at once, since they might not have to be enumerated in that case. Once he has in effect ruled out Aristotle's recourse to potentiality, Philoponus is able to introduce a number of paradoxes about the infinitely large. No number can be larger than infinity. Yet, if the world and its species, as Aristotle claimed, are eternal, an infinite number of humans lived before the time of Socrates, and some additional number of them have lived since - infinity + n. Moreover, there must have been an infinite number of humans, an infinite number of horses, an infinite number of dogs and so on infinity multiplied by *m*. These arguments would be repeated, elaborated and answered through the coming centuries; they depend, though, just on the sleight of hand by which Philoponus introduces countability into the notion of what is potentially infinite.

* * *

4 The East, from Justinian to the Umayyads

Christian philosophy in Byzantium and Persia

Despite Justinian's closure of the School of Athens in 529, the School of Alexandria continued, but it came to be staffed and attended by Christians. Two of them whose names are known, are Elias and David, and some of their logical commentaries survive. Elias made sure verbally to separate himself from the beliefs linked to pagan philosophy, while sticking to that tradition, even, it seems, with regard to the eternity of the world. The tendency for Plato (perhaps as more obviously irreconcilable with Christian doctrine) to be dropped from the curriculum is illustrated by the fact that whereas Elias probably did teach his works, it does not seem that David, at the end of the century, continued doing so: he concentrated on Aristotle's *Organon*. The final figure in this tradition of commentators was probably Stephanus, about whose biography there are many doubts, but who was probably born in

Athens *c*. 550–5, went to Alexandria *c*. 570 and was summoned by the Emperor Heraclius in 610 to teach at Constantinople; commentaries on Aristotle's *On Interpretation* and *On the Soul*, highly traditional, though with occasional openly Christian remarks, are probably by him.

The tradition of the ancient schools was carried on, however, by a succession of logicians writing in Syriac, into which Aristotle's logic (up to *Prior Analytics* I.7) had been translated. The Syriac tradition goes back to the period before the Greek schools were closed or declined. According to the thirteenth-century Syriac historian, Bar Hebraeus, it was Sergius of Resh'aina (d. 536), who first translated Greek philosophical (and medical) works into Syriac. Sergius had studied in Alexandria when Ammonius was teaching there. In addition to numerous translations (of Galen, but also of the pseudo-Dionysius) he wrote a commentary on, and an Introduction to, the *Categories:* like most of the Greek commentators, he is unoriginal, but he is imaginative in selecting material from different parts of logic and ordering it so as to put forward his own conception of how the subject should be studied.

The leading logician of the next generation (whose works belong to the Syriac tradition, even if they were perhaps originally composed in Persian) is Paul the Persian, a Nestorian theologian and philosopher at the court of Chosroes (Khusrau Anûshirwân, 531-78), who ended up becoming a Zoroastrian. His Treatise on Logic shows a clear view of the structure of logic as discipline: beginning with the study of the predicables, and leading, through attention to the Categories and the components of propositions, to syllogistic. It also indicates at several points a failure to fully grasp the idea of syllogistic as a *formal* system. Another introduction to logic by Paul, reproduced in an Arabic work (Miskawayh's Classification of <the types of> Happiness), presents more clearly and definitely than in its Greek sources (Elias, David and their milieu) the 'analytic' division of propositions which would be taken up by Fârâbî and play an important part in his thought: those which induce certainty, and are true in all respects (treated in the Posterior Analytics); those which induce imaginary impressions and are false in all respects (treated in the *Poetics*); those which induce strong opinions, which are more true than false (treated in the Topics); those which induce error (the subject of the Sophistical Refutations) and those which are persuasive and equally likely to be true or false (Gutas, 1983). Nearly a century later Severus Sebokht (d. 666/7) translated a treatise by Paul from Persian into Syriac, and he also wrote about this treatise in a couple of letters, showing an interest in questions about free will which seems closer to what emerges in Boethius's commentary than anything to be found in Ammonius.

For the most powerful and original thinker in this period, however, it is necessary to turn back to the Greeks, but away from the schools of philosophy in the last stages of their decline: to the unlikely figure of an ascetic monk. Maximus ('the Confessor' or, in the Greek tradition 'Homologetes'; 580– 662), though well educated, did not think at all highly of pagan philosophy. His most interesting speculative work, the Ambigua ('Difficulties' - addressed to John: the second set to be written, though published first), is a commentary on difficult passages in, particularly, Gregory of Nazianzen, a fourth-century theologian and it is to him and Gregory of Nyssa that he looks back especially; although he also absorbed much from On the Nature of Man by Nemesius of Emesa, a Christian who was much influenced by Aristotle, and from Origen (Study C) and, above all, from pseudo-Dionysius. Maximus is celebrated especially for his unbending and almost solitary opposition to the doctrine of monothelitism ('one-will-ism'), which was championed by the Emperor and the rest of the Eastern Church as a way of making Chalcedonian orthodoxy more acceptable to the Monophysites. They, it will be recalled, held that Christ had only one nature; monothelites conceded that he had two natures, a human and a divine one, but qualified the position by adding that he had only a single will. For his opposition, Maximus, by that time nearly eighty years old, was exiled and had his tongue and right hand cut off; but when, after his death, monothelitism came to be recognized as a heresy, he came to be considered a confessor of orthodoxy. Yet, in spite of - and to an extent because of - his concentration on Christian doctrine, Maximus can be a powerful philosophical thinker; passages of abstract exposition and argument are juxtaposed with contemplations of Biblical themes.

Maximus radicalizes the already strongly negative theology of pseudo-Dionysius. In *Difficulty* 10, Maximus argues that two of Aristotle's categories, place and time, are always found together and serve to give everything bounds, except for God. He is beyond being, unbounded and unknowable (*PG* 90, 1179–80). In some places, Maximus goes further and recognizes that God is not one thing, his creation another. God is 'all things to all things', but he is not himself a thing at all. By allowing there to be things which participate in him and so creating them, God in effect creates himself. Maximus (Perl, 1994) links this participation with the Incarnation. Theologians in the orthodox tradition of Chalcedon, like Maximus, anxious to stress that the Son is one *hupostasis*, not two, held that his human nature was 'enhypostasized' in the second person of the Trinity. In the Incarnation, therefore, human nature receives God's perfections and is deified in everything but what distinguishes it as *human* nature.

Geopolitical transformations

Although thinkers in the sixth and seventh centuries like Elias, David, Stephanus, Maximus and the Syriac Christians enjoyed far more stability in the Eastern Roman Empire than they could have done in the West, they worked against a backdrop of war, loss and reconquest. Even by Boethius's time, the Eastern Empire was already shrunken. Spain had been taken over by the Visigoths at the beginning of the fifth century, North Africa had been lost to the Vandals shortly afterwards, and Italy was ruled, though nominally under the Eastern Emperor's jurisdiction, by the Ostrogoths. In the decades after Boethius's death, Justinian and his great commander, Belisarius, briefly restored much of the old Empire, reconquering Italy at the end of the hard-fought Gothic wars, and taking back North Africa and even a little of southern Spain. But, from *c.* 570, Italy was attacked by the Lombards and gradually, though never totally, came under their control. At much the same time, hostilities with the Persian Empire led to wars, losses and reconquests. By 616, the Persians had taken over most of the eastern provinces of the Empire, but the Emperor Heraclius counter-attacked and, in 630, entered Jerusalem triumphantly. But both these great Empires of antiquity, the Roman Empire and the Empire of the Sassanians, were about to be challenged by – and in the case of the Sassanians lost to – an entirely new power.

Already in the seventh century, Mecca, in the Arabian peninsula, about a hundred miles inland from the Red Sea, was a prosperous trading town, and also recognized as a holy place, a centre for pilgrimage by the Arabs who, despite the strong influence of neighbouring and resident Christians and Jews, had mostly remained pagans. In about 610, Muhammad, an inhabitant of Mecca, came to consider, as a result of the visions he had experienced, that he was 'the messenger of God'; he encouraged his fellow Meccans to follow the way of life he was teaching and he also received what he considered to be revelations, shorter and, later, longer passages of rhymed prose, which were recited by him and his followers, written down and given definitive form after his death as the Qu'ran. The God whom Muhammad enjoined his followers to worship was the God of the Jews and the Christians. The Arabs traced their ancestry from Abraham, by way of Ishmael, and Muhammad accepted the whole tradition of Jewish prophets, with Jesus, son of the Virgin Miriam, as another in their line; the Qu'ran, for which he was the intermediary, was the definitive revelation for which these teachings and prophecies had prepared. 'Islâm', submission (to God), as the new way of life came to be called, is strictly monotheistic, and any notion that God 'adopted a Son' is fiercely rejected.

Muhammad's teaching, which also stressed the need for the rich to help the poor, did not win over the wealthy merchants who controlled Mecca, and in 622 he made his *hijra* to Medina (in Islam, chronology starts from the *hijra*). He succeeded in expanding his support there, gaining ascendancy over Mecca to which, eventually, he returned in triumph. By the time of his death, in 632, the previously warring tribes of Arabia had been unified under his leadership. Under the next two Caliphs ('successors' to Muhammad, leaders of Islam), Abû Bakr (632–4) and 'Umar (634–44), the Muslim armies conquered the Persian Empire, Syria, Iraq, Egypt and much of North Africa, and before 700 their conquests had been extended even further and included the overthrow of the Visigothic kingdom of Spain.

Arabic and Greek thinking under the Umayyads

The beginnings of Islamic philosophy are far more closely linked with political events than early Christian thinking, because within a few decades of the first revelations to Muhammad, a vast Empire was under Muslim rule. Neither of the two strands of Islamic philosophy - the tradition of kalâm, and the Greekbased tradition of *falsafa* - would properly develop until the time of the 'Abbâsids, after 750. But some of the foundations or premisses of the kalâm tradition would be laid. They, like so much in Islamic history, are linked to the problems of succession after the death of Muhammad. Many thought that his natural successor was 'Alî, his cousin and the husband of his favourite daughter, Fâțima. When the third Caliph, 'Uthmân, was murdered in 656, 'Alî finally became Caliph. But he was faced by rebellion from those who believed that he should punish 'Uthmân's killers, among whom was Mu'âwiya, the governor of Syria. At the battle of Siffîn, Mu'âwiya avoided probable defeat by asking for the question to be put to arbitration. Some on 'Alî's side thought it was wrong for him to have agreed to this request. They departed from 'Alî (kharaja – from which they took the name 'Kharijites'). The arbitrators decided against 'Alî. He would not accept their decision, but soon afterwards he was murdered, and Mu'âwiya was quickly able to gain support as Caliph, and move the capital of his dynasty, the Umayyads, to Damascus.

These events produced various factions. In particular, 'Alî's supporters – the shi'at 'Alî, 'Alî's party' would not accept Mu'âwiya's legitimacy: Shi'ism would become an important factor not just in Islamic politics, but also in Islamic thought. The Kharijites put forward a stern moral principle; anyone who committed a serious sin made himself the equivalent of a non-believer. This principle could be used to justify the murder of 'Uthmân, or rebellion against the Umayyads. The opposite view – that even a grave sinner remained, or at least should be considered, a believer – was held in a wide variety of forms, and described as the doctrine of postponement (*irjâ*' – its upholders are thus 'Murji'ites') because the judgement of the grave sinner was postponed until after his death.

Besides this thinking about sin and membership of the Islamic community, the other main subject of doctrinal debate in this early period was determinism. There was an underlying fatalism in pre-Islamic Arabic culture, which was partly absorbed into, partly contradicted by the Qu'ran's emphasis on divine omnipotence. Those Muslims who wanted to stress human responsibility and to free God from any responsibility for evil, were labelled by their opponents as 'Qadarites', because they wished to attribute power (*qudra*) to act to humans – though the word could also be applied to the fatalists (*qadar* means fate or predestination). But when and how did these tensions and uncertainties about doctrine produce philosophical discussion?

Much of the theological activity in early Islam was centred around the thoroughly unphilosophical activities of discussing the minutiae of the grammar of the Qu'ran, and collecting and scrutinizing the pedigree of *hadîth*, sayings and stories of the Prophet. *Kalâm* was recognized as a different sort of activity, which involved arguing about and justifying the teaching of Islam (and, to many, was to be criticized for that reason). Although there may be a link with Aristotle's *Topics*, the practice itself, many historians believe, antedates Aristotelian influence. It was doubtless influenced to some extent by methods of Syriac theological discussions, and by the need to defend Islam against Christians and Manichees, but the characteristic problem-findingand-solving manner of the *mutakallimûn* may stem also from the Qu'ran itself, which so often raises and then answers a challenging question.

The leading school of kalâm in early Islam was that of the Mu'tazilites who, as will become clear (Chapter 3, section 5; Chapter 4, section 2), certainly had among them thinkers who, by any standards, are imaginative philosophers working within a theological context. But, historiographically, the Mu'tazilites are rather like the Stoics: none of the many works written by the early and most creative members of the school survives, and so their views have to be pieced together from later accounts. The origins of the movement are especially obscure (and, equally, the origins of their name, which means 'those who keep themselves apart' - perhaps from extreme politico-religious positions). Following Shahrastânî, the great twelfth-century historian of religion, Wâsil Ibn 'Atâ' (d. 748/9), along with the even shadowier 'Amr Ibn 'Ubayd, have traditionally been seen as the founders. Wâsil, who organized merchant-missionaries to combine their commercial business with preaching correct Islamic doctrine, certainly seems to have been a defender of free-will and moral responsibility (so, to some extent, a Qadarite), and he was the originator of the so-called 'intermediate' position about the status of grave sinners. He said that the state of such sinners was intermediate - they were not properly believers, but nor were they non-believers and it was not, therefore, permissible to wage war against them or kill them. Wasil's formula was, therefore, designed less as a positive, new position, than as an attempt to find a compromise on which Kharijites and Murji'ites could agree. The 'intermediate position' became a characteristic tenet of the Mu'tazilites, but in the late eighth century their thought developed in all sorts of ways which Wâsil's quite simple ideas do not at all anticipate.

Under the Umayyads the cultures, languages and religions of the conquered peoples continued to flourish. Following the authority of the Qu'ran (for example, xxii.17), and the example of Muḥammad, Jews and Christians ('the People of the Book'), and also Sabaeans (both the Mandeans and the pagans of Harrân who managed to identify themselves as Sabaeans) were allowed to live and practise their faiths in peace, so long as they submitted themselves to Islamic rule and paid a tax, set at a higher rate than for Muslims. For the many, mostly Syriac-speaking Christians in the East opposed to Chalcedonian orthodoxy, especially the Nestorians and the Monophysites, Islam thus brought relief, since they no longer faced persecution from the Byzantine authorities.

The most famous Christian thinker of this early Islamic period, John of Damascus (d. before 754), was, however, a follower of Byzantine (Chalcedonian) orthodoxy. His grandfather had been Mu'âwiya's chief official, and his father and John himself followed as Umayyad administrators until, under 'Umar II (717-20), Christians were barred from such posts, and John became a monk. His most famous work, The Source of Knowledge, was written in 743. It consists of an introduction to logic (the *Dialectica*), a study of heresies and a treatise On the Orthodox Faith, which was the first Greek theological summa; translated into Latin c. 1150 by Burgundio of Pisa, it would be an influence on the development of Latin systematic theology too. In logic, John restricts himself to giving definitions of philosophy and a basic description of the material of the Isagoge and the Categories; he is even less adventurous, then, than the Syriac Christian logicians of the preceding centuries. On the Orthodox Faith is a compilation, but in some areas John may also be doing his own thinking. For example, it has been argued (Frede, 2002) that he does more than simply paraphrase Maximus the Confessor's ideas about human action and freedom, and that his changes prepared the way for the development of the notion of will in Aquinas and other Latin thinkers. A short Dispute between a Muslim and a Christian is a more personal work, in the sense that the Muslim's objections to Christianity and traps ('if Christ suffered on the cross voluntarily, then the Jews must be thanked for doing God's will') reflect his first-hand knowledge of Islamic thinking. Not surprisingly, John has the Christian arguing for human free-will, with God finishing his work of creation after the sixth day, against the Muslim, who makes use of Biblical quotations that seem to show God's predetermination. The terms of the argument remain general, however; there is no attempt to analyse the concepts involved.

5 The varieties of philosophy under the 'Abbâsids

The seizure of power in 750 by the 'Abbâsids, the descendants of the Prophet's uncle, al-'Abbas, would have two important effects on philosophy in the lands of Islam. Whatever the reality of their policies, the caliphs of the new dynasty set themselves up as righteous moral and religious leaders, and so it is not surprising that, for a period, they – and especially al-Ma'mûn (813–32) and his successor al-Mu'taşim (833–42) – should have favoured the most adventurous and morally uncompromising schools of Islamic thought, the Mu'tazilites. They also shifted the centre of power away from Damascus to the new city of Baghdad, to which al-Manşûr, the second 'Abbâsid Caliph, moved in 762, and they went out of their way to appeal to the Persians, whose support had helped to bring them to power. This move from Greek to Persian influence had an unexpected outcome: the revival of a *Greek* tradition of philosophy.

The Early Mu'tazilites

In the early 'Abbâsid period the Mu'tazilite school took on a definite form and, in the persons of Abû-l-Hudhayl al-'Allâf (c. 740-c. 840) and al-Nazzâm (d. probably before 840), it had two creative and wide-ranging thinkers. It was Abû-l-Hudhayl who defined the five principles which, officially, distinguished the Mu'tazilites. One principle was the unity of God, another was God's justice, and a third related principle that of the promise of reward (for the good) and of punishment (for the evil). Of the other two principles, which were linked to the preliminary phases of the movement, that of 'enjoining what is good and forbidding what is evil' became less important but that of the intermediate position of grave sinners remained characteristic. The first principle signals the Mu'tazilites' firm rejection of any sort of anthropomorphism and adoption of a negative theology which they found some difficulty in fully describing. It is also linked to their most notorious position - their insistence on the createdness, as opposed to the eternity, of the Qur'an: notorious because, in 833, the Caliph al-Ma'mûn began the mihna - the official enforcement of this doctrine through tests of prominent theologians and officials, and, where needed, through punishment. When, about fifteen years later, the *mihna* was given up by al-Mutawakkil, there was a backlash against the Mu'tazilites, who were strongly associated with it. The second and third principles point to their sense of a moral order which not only binds humans, but also determines how God acts towards them. Scholars of Islamic thought today recoil from the label of 'rationalist' used by an earlier generation to characterize these thinkers: they point out that they were all theologians, working within the framework of an unquestioned revealed religion, and moulded in their processes of thought by the particular features and exigencies of Arabic grammar and Islamic law. Yet the very discipline of kalâm, which the Mu'tazilites, more than anyone, practised single-mindedly, involved a commitment to argument and thus a search for rational coherence. A complete study of their thinking would present it as a theology, with close links to other Islamic disciplines - law, Qu'ranic exegesis and grammar. But here the emphasis will be on those strands in their discussions which link with the philosophical concerns that are the subject of this book.

Abû-l-Hudhayl was a Basran, who came to Baghdad only late, in the 820s, but became influential on Manşûr and his court there. His metaphysics has little directly to do with the five Mu'tazilite principles. The background to it was provided especially by three slightly earlier theologians. Al-Aşamm (d. 816/17) proposed that there exist only bodies and no accidents. When a body changes, the model is not of a substrate that remains the same and properties which alter. Rather, the body should be seen as being transformed by God. In principle, there is no limit to the degree of transformation which God can effect instantly: he can, if he wishes, make a mustard-seed into a mountain. Dirâr Ibn 'Amr (728–96) held an almost contrary view. Bodies, he believed, are simply conglomerations of accidents. These accidents are not, however, independently existing items. Rather, they can exist only when brought together as a body. Dirâr distinguished between certain constitutive accidents, which he describes as the parts of a body (they are mostly in pairs: life and non-life, heaviness and lightness, roughness and softness, warmth and coldness, wetness and dryness, and also colours and tastes and health/ right-functioning) and other non-constitutive ones, such as capacities, pain and knowledge or ignorance.

By contrast with these other two thinkers, who developed a whole range of theological views, Mu'ammar (d. 830) was especially concerned with the constitution of the natural world, which he envisages as made up of atoms ('particular indivisible substances', as he calls them). Bodies are made by the assemblage of atoms: four are needed to construct a plane, which has length and breadth, and another four which give height and so make a cuboid. God creates atoms, but he is not responsible for the accidents which they bear: these accidents – which are all that humans perceive – arise naturally from the atoms. Mu'ammar's problem is to explain why this thing (for example, the whisky in my glass) has this accident (for example, wetness), and that thing (my carpet) has that accident (dryness). He can gesture towards an answer by saving that these accidents stem from the atoms, but he does not have the fine-grained theory of atomic structure which would make such a response more than a gesture. When he is asked about a single thing's changing accidents, however, he is in even more difficulties – if, for example, I spill my whisky on the carpet, making it wet and, in my annoyance, my face turns red. Mu'ammar's answer is that there is a ma'n \hat{a} or determining factor which explains this change, and a $ma'n\hat{a}$ which explains the $ma'n\hat{a}$ which explains the first ma'nâ, and so on, to infinity. Mu'ammar's contemporaries and successors were rightly critical of this theory, which proposes no answer to the question it is supposed to resolve.

Abû-l-Hudhayl was an atomist too. He thought that only six atoms, themselves incorporeal – two for right and left, two for front and back, and two for up and down – were needed to make a body. Most experts read Abû-l-Hudhayl as suggesting that these groups of six atoms form some particular shape (one idea, since abandoned by its originator, is a rhomboid, made from putting two pyramids bottom to bottom), and that the atoms themselves are this shape, despite being dimensionless. It is not clear, though, that the testimony need be read to make his position so incoherent: he might just be holding that at least six atoms, two in each dimension, are required for solid figures and therefore for bodies, and no more than this. Abû-l-Hudhayl's views on accidents are sharply different from Mu'ammar's. The only accidents, he believes, which inhere in atoms individually are motion and rest. Other accidents – both Mu'ammar's constitutive ones, such as colour and roughness, and his non-constitutive ones, such as knowledge – inhere only in bodies. There are also, according to Abû-l-Hudhayl, accidents of composition (and also juxtaposition and contiguity) and separation, which hold together a thing as that thing through time, or bring its dissolution. Unlike Mu'ammar, Abû-l-Hudhayl stresses that it is God who is responsible, not just for creating atoms, but for putting them together into bodies and taking them apart through these accidents. In this way, the mere observation of the perdurance of things through time and of their changing is immediate evidence of God's existence and governance of the universe.

An atomism on the lines of Abû-l-Hudhayl's, though adapted and refined, would become standard among the Mu'tazilites. Abû-l-Hudhayl seems to have reached his system through borrowing, combining and adapting the ideas of earlier thinkers. They all seem to have known some of the ideas in Aristotle's Categories, and all to have rejected the central Aristotelian notion of substances which have a certain nature or essence. For Aristotle, in the Categories as in the Metaphysics, the sublunar world consists of a whole variety of different particular substances (humans, horses, trees), belonging to different natural kinds and, as such, having different essential properties. Although these substances come into and go out of existence - the human dies, the tree is burnt - they have a certain stability, and act as substrates for accidents, many of which are impermanent or fleeting. By contrast, Abû-l-Hudhayl and his predecessors all envisage a highly unstable world, in which the type of explanation offered by a theory of natures or essences has to be replaced, as in the case of Mu'ammar, by something far vaguer and less satisfactory. His idea of things being made up of conglomerations of accidents has some precedent in the Greek tradition, in the work of Philoponus, but for the most part the difference in approach seems to be the result of a different outlook on the world. And, although that outlook could be linked with a tendency to see God's power everywhere, as it was by Abû-l-Hudhayl, Mu'ammar's wish to exclude such explanation shows divine omnipotence was not its only basis.

Abû-l-Hudhayl's thought covered a far wider area than basic metaphysics. For example, as a theologian, he wanted – and, as a faithful reader of the Qu'ran, needed – to be able to make statements other than merely negative ones about God. Dirâr Ibn 'Amr had been content to say that, for example, 'God is mighty' means 'God is not unmighty', and that 'God hears and sees' means that he is not deaf or blind. As this last example shows, he was not just playing with words: his point must have been that such concepts are altogether inapplicable to God, and so we must not, in talking about him, observe the normal conversational implicature which makes us, for instance, take that described as 'not mighty' as being ranked in strength below that described as 'mighty'. Abû-l-Hudhayl adds two extra elements to this theory. When I say that God is mighty, I do three things:

- (1) I deny that God is unmighty.
- (2) I state that there is an act of God's might, which is identical with God.
- (3) I refer to the object of this act.

(3) provides Abû-l-Hudhayl with a good answer to the obvious objection such a view raises: how can God's might, his wisdom, his goodness and all the other attributes be distinguished from one another, if the sentences in which they are predicated of God are all interpreted in terms of an act which is *identical* with God? Abû-l-Hudhayl replies that the objects of all these acts are different. He has, then, in embryo at least, a theory which is not unlike the one which Maimonides and Aquinas would propose, centuries later: God is completely unitary and beyond description, but he can be said to be wise, mighty, good and so on because of his creation.

Abû-l-Hudhayl's nephew, Abû Ishâq Ibrâhîm al-Nazzâm was a philosopher, theologian and much more: a witty, elegant writer, equally at home in writing poems on the beauty of boys as discussing ontology, interested in Greek philosophy and Persian religion. His metaphysics was much less influential than his uncle's, but is one of the most elaborate, imaginative and original schemes devised by any medieval thinker. He rejected atomism, maintaining that matter can be divided ad infinitum. He also proposed a distinction between substance and accident even more sharply different from Aristotle's view than any of the other Mu'tazilites. The only accident he accepted was movement, understood in a very broad sense: movement is dependent on human will and includes not just, for instance, my walking over to lunch, but also my conversation there and my silence afterwards, my knowledge that it is now the middle of August and my ignorance of so much I need to know in writing this book. Bodies are composed of elements - not just fire, air, water and earth (themselves composed of more basic elements such as light and dryness), but also colours, tastes and textures - which are mixed with, and are able to interpenetrate each other. Often, an element in something is in a state of latency (kumûn). For example, there is fire in latency within a piece of wood, but it is held in equilibrium by the other ingredients. When the wood is brought close to other fire, this equilibrium is lost, and the fire destroys the structure of which it formed a part.

Another unusual feature of Nazzâm's account of the physical world was his idea, probably linked to the speculations of the late pagan Neoplatonist, Damascius, that motion cannot be explained as continuous movement, because of the impossibility of traversing the infinite divisions which comprise any distance, but involves leaps. The various thought-experiments on this theme which the sources attribute to Nazzâm are complicated by the fact that he is at once defending himself against attack from atomists such as Abûl-Hudhayl and trying to fight them on their ground, by showing that they too need to postulate jumps.

In his thought about God's relation to humanity, Nazzâm tried to negotiate between his (and his fellow Mu'tazilites') strong intuitions about the absoluteness of the moral law, which binds even God, and the claims of divine omnipotence. He believed that wrong acts are performed only as the result of the restrictions or the wish to avoid harm which affect contingent, bodily things. Since God is unrestricted and not able to be harmed, he can do no wrong. He cannot, therefore, lie and so he has to carry out his promise to reward the righteous and punish the wicked. Indeed, he has no choice but to arrange all things for the best, and al-Nazzâm did not take the refuge in God's inscrutability so appealing to many theologians. He was willing to spell out the consequences of this stipulation to some extent. God *cannot* punish children in hell, he said (more humanely than Augustine). But God's freedom more generally is preserved because Nazzâm also insisted that there are numberless ways in which God could make the world for the best (*al-aşlah*). It is a position which, implicitly at least, involves a completely unAristotelian conception of synchronic possible states of affairs.

There were many other Mu'tazilite thinkers of this period besides those who have been mentioned. Abû-l-Hudhayl and Nazzâm exercised their influence at the Court in Baghdad, but their roots were in Basra. But there was also a Baghdad school of Mu'tazilites, founded by Bishr Ibn al-Mu'tamir, who died in old age in 825. Its atmosphere was less refined and intellectual, its goals more missionary than those of the Basrans.

The translation movement

At much the same time as the Mu'tazilites were developing their various views. with the support of the 'Abbâsid caliphs, the same rulers were giving official backing to a translation movement which, by the time it petered out at the end of the tenth century, had put into Arabic (in many cases by way of Syriac) a large part of Greek science and philosophy, as cultivated in Alexandria in late antiquity. Although they, and especially al-Ma'mûn, may also have had a genuine intellectual interest, there were good political reasons for the 'Abbâsids to encourage translations (Gutas, 1998). The first 'Abbâsids gained and retained power with Persian support. Zoroastrianism, the state religion of the Sassanians, had developed a very open attitude to foreign sciences. According to a later report, Zoroastrians believed that Zoroaster himself had written a book which seems to have come straight from Jorge Luis Borges's imagination. Comprising twelve thousand volumes, written in red ink and bound in water-buffalo skin, one word was in one language, the next word in a different one and so on; when all existing languages had been exhausted, Zoroaster began again with the first one. This book contained not just all languages but all the sciences: the tradition of learning went back to Zoroaster, and the Greeks, it was believed, had taken their knowledge from the Persians. Finding and translating scientific and philosophical texts was thus a matter of recovering the dispersed ancient Persian heritage and reappropriating it. By adopting this ideology and transferring it to Arabic translation, al-Mansûr was able both to appeal to the Persians who had kept their own religion, and to assure those converting to Islam that they could still keep their cultural heritage. For al-Ma'mûn, translations of Greek science

had a different political value. The Islamicization of the empire had progressed, and al-Ma'mûn sought to present himself, like a Persian monarch, as the font of political, religious and cultural authority; it was valuable for him to be able to put forward Islam as the repository for ancient Greek wisdom, spurned by the Greeks' Christian descendants, the Byzantines.

Many of the earliest translations were scientific, especially astronomical and astrological works. One very early philosophical translation, however, was that of Aristotle's *Topics* made in 782 by the Nestorian patriarch Timothy I at the request of al-Manşûr's successor, al-Mahdî. It illustrates another reason for looking to the Greeks: the *Topics* is a handbook for argument, and al-Mahdî knew that it was important for Muslims to be able to argue convincingly against the Manichaeans, Christians and others who challenged them.

In the mid-ninth century, a large number of philosophical translations were made in the circle of the philosopher al-Kindî: he probably could not read Greek himself, but may well have chosen material for translation in line with his interests. Kindî thus knew a whole range of Aristotle's works, including some of his logic, works on natural science, his Ethics, Metaphysics (translated by Eustathios, probably a Greek Christian) and On the Soul, sometimes from paraphrases (as in the case of On the Soul), sometimes through close versions (as with the Metaphysics). Two translations produced in al-Kindî's circle are of particular importance, because of the way they added adapted Neoplatonic texts to the mainly Aristotelian material. The Book of the Pure Good is closely based on Proclus's Elements of Theology; it was not used extensively in Islam, but was extremely important in the Latin tradition, where it was translated by Gundisalvi (Chapter 5, section 8) as the Liber de Causis. Unknown in the Latin West, but much more influential in Islam, were the Theology of Aristotle and the other two pieces (the Letter on Divine Science and the sayings ascribed to the 'Greek Sage') which make up the Arabic Plotinus. They all derive from the same source, a paraphrase of parts of Plotinus's Enneads IV-VI, which is now thought to have been compiled in Kindî's circle. The adaptor had distinct metaphysical views to which he tried to make Plotinus conform: most strikingly, Plotinus's One becomes something like the Creator God of Islam and the indescribability of the One is discussed in terms which reflect Mu'tazilite thinking about the divine attributes (Adamson, 2002).

The *Theology of Aristotle* was dedicated to the Caliph al-Mu'tasim and so composed during his reign from 833 to 842. In some respects, the translation work of Kindî's circle was eclipsed and replaced by that of two Nestorian translators, Hunayn Ibn Ishâq (d. 873) and his son Ishâq Ibn Hunayn (d. 911). Hunayn, whose knowledge of Greek was remarkable – he is said to have recited Homer by heart, although he is not recorded as having translated any Greek poetry – translated for the most part into Syriac, but also into Arabic. Along with many versions of medical works, he also translated Galen's epitomes of Plato and Galen's logic. Ishâq concentrated on

OLD TRADITIONS AND NEW BEGINNINGS

philosophy: his translations include Aristotle's Categories, On Interpretation, On Generation and Corruption, Physics and Ethics.

Kindî

Abû Yûsuf Ibn Ishâq al-Kindî (c. 801–66) was not, as Latin-centred historiography traditionally holds, the first Islamic, or Arabic, philosopher. Rather, as the last section will have indicated, he was the animator and organizer of a collaborative project – in line with the 'Abbâsids' ideology – to translate, study and use every aspect of Greek science – he is said to have written over 200 works, mostly scientific and mathematical – and this interest shaped his particular approach to the lively philosophical tradition which already existed. Kindî shared some of the preoccupations of the Mu'tazilites, but he tried to show that they could best be tackled using Aristotle, whose work he knew more fully and directly than the *mutakallimûn* did, and which was completed by the *Theology* (that is, in fact, Plotinus), a text to which he had a particular affinity.

Kindî's most substantial surviving philosophical work is the (apparently unfinished) treatise On First Philosophy, dedicated, like the Theology of Aristotle, to Mu'tasim. The title sounds Aristotelian, as does the programme of enquiry announced in the first chapter, which moves through the four sorts of cause distinguished by Aristotle - efficient, material, formal and final to investigate the First Cause. And Kindî ends this chapter with a plea to accept the truth from those who have dedicated themselves to philosophy in the past – 'from the people who are not of our tongue', remarking (in line with Aristotle, *Metaphysics* 993a–b) that knowledge of the truth needs to be built up bit by bit, through collaborative effort. To judge from the beginning of the second chapter, where Kindî starts his proper exposition, the reader would suspect that the work is a primer of Aristotelian thought, starting off with a treatment of sense-perception and moving on to the need for intellect and the use of demonstration to reach the truth. But then the discussion changes direction. Kindî wants to show both that there exists something infinite, which is without a cause, unchanging and perfect, and that it is not a body. He also contends, using arguments that go back to John Philoponus (Study B), that the world must have had a beginning: it cannot have existed for an infinite time. Kindî would remain one of the only thinkers in the Arabic Aristotelian-Neoplatonic tradition to hold that the world is not eternal, whereas this position was argued at length – also using Philoponus-type arguments – by the *mutakallimûn*.

Kindî continues his treatise by arguing that all things are both multiple and yet one, and that they must depend for this unity on something other than themselves. From this, he is able to show, in the final chapter, that this unity in things derives from the One, which is infinite and which does not belong to a genus. He alone is one in truth. Other things are one only in a restricted way; he is above the attributes (sifat – the word used in discussing this question in kalam) which the 'heretics' attribute to him.

By moving from the Aristotle of the Metaphysics to the Aristotle of the Theology, but diverging radically from the Theology in order to insist that the universe is not eternal, Kindî has managed to reach a conclusion fully in line with the Mu'tazilite interpretation of Islamic orthodoxy favoured by Mu'tasim. This syncretism between revelation and Greek philosophy and cosmology is even more striking in a short treatise written to answer a question put by Mu'tasim's son, whom he tutored. Could he give an explanation 'by rational argument' of verse 6 from sûra 55: 'The star and the tree bow down <before him>'? Kindî is particularly concerned with 'the star', which he takes as referring to the celestial sphere, which metaphorically 'bows down' in the sense of obeying God. He then uses the opportunity to give a version of Aristotelian cosmology and to evoke a Principle of Plenitude which is nearer to the Timaeus than to what is found in Aristotle. In his generosity God has set up the universe so that everything which is potential and is not impossible comes into actuality, and this is the best (al-aslah) act of all acts - the phrasing suggests that Kindî is proposing his own, Aristotelian solution to the kalâm debate about *al-aslah*.

In looking at philosophy in Islamic lands in Kindî's time, it is important, therefore, not to project backwards too sharp a distinction between the Aristotelian-Neoplatonic tradition and the theological one. From the tenth to twelfth centuries, a group of thinkers would mark themselves out self-consciously as *faylasûf*, philosophers following the ancient tradition. Although in a sense Kindî stands at the beginning of their project, his aims were much closer to those of the *mutakallimûn*.

6 Alcuin and philosophy at the court of Charlemagne

In the Latin West, too, it was at the court of a great ruler that philosophy began once again to flourish. For courts, as well as monasteries and cathedral schools, were centres of culture in the early Middle Ages, and the Englishman who might be called 'the first medieval Latin philosopher' appropriately combined in his life and his education all the three backgrounds. Alcuin was educated at the cathedral school of York, and he spent the last years of his life (796–806) as Abbot of Tours. But, from the 780s, with some interruptions, his special sphere of activity was the court of Charlemagne: he was one of the scholars, Latin poets and thinkers whom the uneducated but intellectually ambitious king gathered round the court which, finally, settled at Aachen. By the 790s, Alcuin had become a very influential figure, instrumental in the educational reforms instituted throughout the Empire, and with his own circle of pupils. Although he commemorated the masters and library of York in an *opus geminatum* (twinned prose and verse), Alcuin probably found his

material and his intellectual interests on the Continent. Yet, in his quiet way, he was a great innovator.

At first sight, Alcuin's work seems almost entirely derivative, a patchwork of mostly unacknowledged quotation and summary of authoritative texts, especially Augustine's. But Alcuin was not gathering and repeating material mindlessly. He thought through his sources. He took distinctive positions, which are manifested only in how he adapted the words and ideas of others. A good example of his method is the little treatise De vera philosophia ('On True Philosophy'), which forms the preface to his textbook on grammar, where he sets out the reasons for studying the Liberal Arts. One of the texts he echoes is Boethius's Consolation - the earliest known allusion; and it is striking how the ambiguities of Boethius's personification of Philosophy are simplified into a Biblical figure of Wisdom. But Alcuin also presents the Liberal Arts as columns supporting Solomon's temple, 'the house of wisdom'. In doing so, he is able to integrate the early Augustine's idea (Chapter 2, section 9) of these disciplines as stages in reason's ascent to divine contemplation with Cassiodorus's premiss that these studies find their true purpose in Biblical exegesis. Alcuin himself carried out the programme this passage suggests, since he was a prolific writer of scriptural exegesis, derived from patristic commentaries.

Alcuin's logical textbook, De dialectica, although also mostly an assemblage of existing material, has more than just a symbolic importance as the first medieval Latin logical textbook. First, its composition illustrates how, as one of the seven Liberal Arts, logic would have a definite place, denied to any other part of philosophy, in the early medieval Latin curriculum (Cassiodorus, one of Alcuin's sources, had already foreshadowed this development). Since grammar, too, was intensively studied, Alcuin's work prepares the way for the flowering of a logico-linguistically based way of philosophizing in the eleventh- and twelfth-century schools. Second, Alcuin brings out a particular theme in this textbook which he develops more widely in his work. His one important source besides the encyclopaedias of Cassiodorus and Isidore is a fourth-century paraphrase - part free-translation, part commentary - of Aristotle's Categories known as the Categoriae Decem. Alcuin's abbreviation of this text dominates the whole treatise, and logical study is not seen, following Cassiodorus, Isidore and, indeed, the ancient curriculum, as leading to the examination of argument-forms, but rather as centred round the Categories. Alcuin believed that Augustine was author of the Categoriae Decem, and he reissued the work, under this attribution (which became accepted), with a prefatory poem. The Augustinian connection helps to explain why he found the Categories so important. In De trinitate (V.1.2-V.2.3), Augustine examines whether the Aristotelian Categories apply to God (Chapter 2, section 9). In De fide sanctae trinitatis ('On the Faith of the Holy Trinity'), his reworking and abridgement of Augustine's treatise, Alcuin gives this theme great prominence, and in the prefatory letter he goes so far as to

say that 'the deepest questions about the Holy Trinity cannot be elucidated except with the help of the subtle reasoning of the theory of the Categories.'

Alcuin's was not the only approach to logic open to a Carolingian thinker. One of the most remarkable products of Charlemagne's court thinkers was the Libri Carolini ('Caroline Books') or, more correctly, Opus regis Karoli contra Synodum ('King Charles's Work against the Synod', i.e. the second Niceaean Council): the official answer, issued in Charles's name but written (791–3) by Theodulf of Orleans, to the Byzantine position on image-worship. Near the end of the work (IV.23), Theodulf turns to logic in order to attack his opponents. He quite unnecessarily wraps up a simple point in a variety of syllogisms and he pauses to explain the logic of his objections with an ostentatious display of learning. Clearly, he believed that his skill with syllogisms was, just in itself, a powerful weapon. Theodulf composed the Opus regis Karoli while Alcuin was away in England. Although the relationship between IV.23 and De dialectica is disputed, it seems most probably that Alcuin's textbook had already been written and Theodulf knew it. But the nature of Theodulf's interest in logic was quite different from Alcuin's: for him, the forging of arguments was all important, and he made special use of the best source then available for the theory of syllogistic, Apuleius's Periermenias.

Alcuin's best pupil was probably the Englishman, Candidus Wizo. Like his master, he worked by excerption and assembly of authoritative texts. The extracts which can be associated with him show the same strong interest as his master's in the Categories and their relation to God, but they also contain a proof of God's existence (drawn from Augustine), discussions of the Trinity (which makes use, unlike Alcuin's, of Boethius's *Opuscula sacra*), exercises in syllogistic technique, and passages – including excerpts from Calcidius's *Timaeus* commentary – which reveal a curiosity about the philosophy of the pagan past. Another of Alcuin's pupils, Fredegisus wrote a short treatise *De substantia nihili et tenebrarum* ('On the Substance of Nothing and on Shadows'), which develops the rather naïve semantic thesis that the word 'nothing' must designate something, and so nothing must be an existing substance.

From the work of Alcuin and his pupils, the three ways in which philosophizing would take place in the Latin world up to about 1200 are already evident: in the form of, and in thinking stimulated by, logic; in presenting and analysing Christian doctrine; and – so Alcuin's use of the *Consolation* and the citation of Calcidius among his followers hint – in connection with a small group of ancient philosophical works, which would come properly into use, along with a rather wider range of logical texts, in the following century. For the moment, by far the most important philosophical source was Augustine; it is fitting, though incorrect, that the favoured logical text, the *Categoriae Decem*, should have been attributed to him too.

7 John Scottus Eriugena and the ninth century

Philosophy in the monasteries and at court

Although Charlemagne's empire disintegrated, and the reign of his son, Louis the Pious, was seen as a time of cultural decline, in the great monasteries there continued, not just Biblical exegesis and encyclopaedic compilation - such as that which Hrabanus Maurus (c. 783-856), abbot of Fulda, made his life's work – but some more speculative thinking. Ratramnus (c. 800–after 868), a monk of Corbie, wrote not only on theological topics, such as the Eucharist, but also, in the 860s, a treatise De anima ad Odonem ('On the Soul, to Odo'), directed against a view going back to an otherwise unknown Irishman. Macarius, and based on a distortion of Augustine, that human souls are both many and yet all one thing. Ratramnus may have been right to see a realist view of universals behind Macarius's view, since (non-Platonic) realists hold precisely that universals are both one and yet many. Ratramnus, who must have been reading Boethius's Opuscula sacra carefully, found in Treatise 5 a passage (Ratramnus of Corbie, 3:198-204) which he rather twists so as completely to deny existence outside the mind to universals. The views of another intellectual monk of the mid-ninth century, Gottschalk, are discussed in Study C.

Eriugena and the liberal arts

It is as the opponent of Gottschalk over predestination that John Scottus Eriugena, the outstanding Latin philosopher of the ninth century, is first recorded (Study C). John was not a monk, and he seems to have been a master at the court of Charlemagne's Hellenophile grandson, Charles the Bald, from the 840s. 'Scottus' means, in this period, Irishman, and 'Eriugena', rather more pretentiously, the same thing. John was the most remarkable of a group of emigrant Irishmen (they included Martin, schoolmaster at Laon, and Sedulius at Liège, as well as some pupils of Eriugena's) who outstripped the continental scholars in learning. At Charles's court he seems to have taught a curriculum based around the seven liberal arts – the linguistic arts of the 'trivium' (grammar, logic and rhetoric) and the mathematical arts of the 'quadrivium' (arithmetic, geometry, astronomy and music) - using Martianus Capella's *De nuptiis* as a textbook. Although it is hard to be sure exactly which of the surviving glosses are his work (Chapter 3, section 8), John seems to have been an imaginative exegete, fascinated with the mythology of paganism and eager to take the chance to show his knowledge of Platonism gathered from Macrobius, the Timaeus and Calcidius. He considers that the principles of the liberal arts, the subject of Martianus's prosimetrum, are innate in human beings. But they are not easy to recover, and are not properly captured by their sensory manifestations. He explains the story of Orpheus

and Eurydice in this sense (John Scottus, 1939, 192–3). Orpheus represents the beauty of sound, and Eurydice 'the art of music in its profoundest reasons'. Like Orpheus trying to rescue Eurydice from the underworld, the musician descends to the depths of the discipline of music to recover 'the rules of the art by which the sounds of music are arranged.' But, like Orpheus, he fails: what he produces are mere 'transitory, bodily sounds', which lack the reason of music.

Eriugena, the Greeks and the Periphyseon

The court of Charles the Bald looked to Byzantium as a model for cultural emulation. It is not, then, surprising that Charles should have decided that the manuscript of the writings of (as everyone thought) Dionysius the Areopagite, sent by the Emperor Michael the Stammerer as a gift to his father, needed a better translation than Hilduin, Abbot of St Denis, who scarcely knew Greek, had managed. He turned to John Scottus, who probably knew some Greek (and may have already used some Greek texts: see Study C), and managed to become proficient before he made the translations. He went on to translate other Greek books from the same tradition of Christian Platonism: the *Questions to Thalassius* and the *Ambigua* by Maximus the Confessor, Gregory of Nyssa's *On the Making of Man* and probably one non-Christian work (see Interlude ii). Studying these texts transformed his outlook, although some of the central tendencies in his thought, such as the wish not to see God as a punisher, are found already in his *De praedestinatione*.

Eriugena wrote several works which show his thorough absorption of the Greek writers - a commentary on pseudo-Dionysius's Celestial Hierarchy, an unfinished commentary on John, and a homily on the prologue to this gospel which provides a beautiful, prose-poetic summary of his thought. But it is in the Periphyseon ('About Nature' - also known as De divisione naturae, 'On the Division of Nature', but the Hellenizing title is authentic and telling), written c. 862-6, that Eriugena develops his system to the full. The Periphyseon is a dialogue, between a master and a pupil who draws out his teacher's thought by raising objections or asking for further explanations. In its structure it draws on two models familiar to the Carolingians. Eriugena divides universal nature into four: that which is not created and creates (God); that which is created and creates (the 'primordial causes': see below); that which is created and does not create (the world of nature); and that which is not created and does not create (God, as that to which all things return). He discusses the first division by examining, in the tradition of Alcuin and his pupils, who looked back to Boethius and Augustine, whether any of Aristotle's ten categories are predicable of God. He discusses the remaining divisions by commenting on the opening of Genesis. Genesis commentaries, concentrating especially on the story of creation, were written by a number of Church Fathers and Carolingian masters, including Alcuin himself. These parallels

with ninth-century models help to show that the *Periphyseon* is not entirely removed from the intellectual world in which it was produced, but it would be misleading to take them very far. In each case, Eriugena, inspired by his reading of Gregory of Nyssa, pseudo-Dionysius and Maximus, follows a path which would have been quite unexpected to his contemporaries.

For Augustine, one of the main points of thinking about God in relation to the Categories is to explain that, although the nine types of accident apply to him, if at all, in a special way, God is, more properly than anything else, being, the first of the categories (essentia/ousia; he avoids the term 'substance' which might seem to imply that God is a substrate for accidents). The Carolingian logicians followed this line of thinking enthusiastically. By contrast, the aim of the first book of the Periphyseon is to show that none of the Categories applies to God, not even being. Even before he starts to discuss the Categories themselves, John has brought up this central point. At the beginning of the whole work, Eriugena proposes a division even more fundamental than the four-fold one: into what exists, and what does not exist. He is particularly interested in one sort of failure to exist: when something does not exist because it is beyond being. For John, it is God, and God alone, who does not exist in this way. Already, Eriugena is separating himself sharply from Augustine, and almost all the thinkers in the Latin tradition with the exception of Marius Victorinus. They had shied away from Plotinus's view, adopted and made more definite by the later Neoplatonists, that the One, the ultimate ground of explanation is not a being, but beyond being. Instead, they tended to think about God in terms associated with the second hypostasis, Intellect – an understandable choice given the active role which God plays in the Christian story of creation, salvation and final judgement. Eriugena is enabled to embrace the Neoplatonic view more fully, because of a distinction he takes from pseudo-Dionysius.

There are, Eriugena explains (I 458A-D), two sorts of theology (ways of speaking about God): affirmative or 'cataphatic', and negative or 'apophatic' theology. Cataphatic theology affirms attributes of God. Such affirmative propositions are true, he says, following a suggestion of Maximus the Confessor's, so long as they are understood, not literally, as if we were stating that God is one of the things which exists, but causatively. God is not literally good or just, nor literally does he even exist. But he is the cause of goodness, justice and being, and so these attributes may be said of him metaphorically - as, indeed, may less obvious ones: so God is a lion, God is (even) a worm. Apophatic theology denies every attribute of God, stating in each case that he is beyond that attribute: God is not F (good, wise . . .) but more-than-F. Eriugena takes these expressions very seriously. They are not to be read as meaning just that no human, or no creature, can understand God. In Book II (586–90), John puts forward a view which he recognizes as being so strange and shocking that he makes the Pupil in the dialogue at first reject it: that God does not know what he is. Eriugena argues for this position on two

grounds. The first looks back explicitly to the discussion of the Categories. If none of them can be properly understood to apply to God, then there is no reply to the question 'What is he?', because any such reply would give his substance. God has no substance, because he is not one of the things which exists, and so even he cannot know himself, because he is not a something to be known. Second, John appeals to the idea of God's infinity. If God is really infinite, he argues, he lacks all bounds, and so he cannot be defined, and he is therefore in principle unknowable as to what he is.

God, then, is nothing. And Eriugena (III, 681A-C) proposes that the nothing from which, according to Christian doctrine, God created all things is simply the nothing which is God himself. Is this merely a verbal trick? It might seem so at first sight. The statement of Christian belief, 'God created the universe from nothing' does not identify an item from which God created the universe, but rather means that there was nothing pre-existing which God used as matter for his creation. Eriugena might seem, however, to be taking 'nothing' as if it designated something and then adding the further twist that God, which it designates, is not a thing at all. Perhaps, though, Eriugena is not in the least confused, but is trying to point out boldly that the standard way of thinking which lies behind the paraphrase proposed above - God did not use anything pre-existing – should be rejected. The paraphrase conceives God as a being which brings into existence (in a special way: without preexisting matter) another being, the universe. For Eriugena, there are not two beings, God and the universe. Only the universe is a being (or, rather, a multitude of beings). God is, very strictly, not something at all. But he becomes manifest in the universe. The term 'theophany' ('divine appearance'), which John took from the Greek writers, helped him to set out this view. God can be perceived only in theophanies, not directly; and the whole of creation is a theophany. As he puts it himself (III, 681A):

When [God] is understood to be beyond understanding, he is rightly called nothing through excellence. But, when he begins to appear in theophanies, he is said to proceed as it were from nothing into something, and that which was properly thought to be above every essence is also known properly to be in every essence. Thus every visible and invisible creature can be called a theophany . . .

Eriugena's treatment of God and the Categories does much more, though, than set out the basis of John's starkly negative conception of God. It revises the theory of the Categories in various ways, suggesting distinctions and interrelations between them which cannot be found in Augustine or Boethius. There is also a fundamental and more radical difference between Eriugena and the commentary tradition transmitted by Boethius, and as it would go on to be followed by logicians in the Latin West. Boethius (Chapter 3, section 1) had adopted Porphyry's view that Aristotelian logic should be taken on its own Aristotelian terms, as applying to the sensible world. Eriugena (in the manner of some of the late Neoplatonic commentators) tries to read his Platonism into the doctrine of the Categories. First substances, he says, are immaterial, as are quantity and quality: bodies are the result of their concourse. Place is considered, not just as the boundary of bodies, but as definition, and Eriugena then develops a theory (I, 485A) whereby defining is seen as creative – an idea he will develop further in Book III.

In the treatment of Genesis, which occupies Books II–V, Eriugena is strongly influenced both by Augustine and Ambrose, and by the Greeks: Origen, Basil, Gregory of Nyssa and Maximus. His way of exegesis combines two seemingly contradictory tendencies. On the one hand, he considers the sacred text to be meaningful in an almost magical way: there are infinitely many possible interpretations of it, and even the shortest passage contains numberless meanings, just as the smallest part of a peacock's feather contains an innumerable variety of colours (III, 749C). Although this view might seem to give him free rein to use Genesis as a mere vehicle for the systematic ideas he wishes to expound, Eriugena's respect for the Bible makes him highly attentive to every detail in its language, every turn of phrasing, every omission.

The second division of nature, which is created and creates, consists of the 'primordial causes'. They are like both Platonic Ideas in the mind of God and the 'seminal reasons' which Augustine uses in De Genesi ad litteram to explain how, although divine creation was instantaneous, its effects developed gradually and continue according to natural law. From Ambrose Eriugena takes the cue so completely to allegorize the story of Paradise that Adam and Eve are no longer seen as two historical, or even mythological individuals - an attitude that allows him to adopt Maximus's view that sexual differentiation was a consequence of the Fall. Eriugena does not, however, dwell much on the fallen state of humanity. Rather than envisaging, in Augustine's fashion, Original Sin as having thoroughly corrupted human nature, Eriugena, influenced by the Greeks, and also perhaps by a Pelagian stream in early medieval theology, tended to think of the effects of the Fall as more external. Humans have a highly favoured position in his scheme of things, and John underlines the Biblical theme of man as the image of God: the human intellect even (II, 585 A-B) shares with God the inability to know itself for what it is in essence – although the essence of the human intellect is knowable, by God alone.

Indeed, Eriugena has an extraordinarily extensive view of the powers of the human soul. Following Maximus, often verbatim, he describes (II, 572C–3B) its three motions: those of the intellect, the reason and the sense. The first motion, around God himself, which is beyond the nature of the soul itself, knows God 'according to what he is' – although this is just to know that he is not any sort of thing and cannot be defined for what he is; the motion of the reason (the activity of the third hypostasis, soul, according to the usual Neoplatonic scheme) knows God rather as the cause of all things. Eriugena's

dualism is complete: the soul needs a body and uses it for its third and lowest motion, but not only is it distinct from it: it can be said to create its own body (II, 580B). Indeed, he even claims – developing the idea broached in Book I of definition as creative – that everything is created in man and subsists in him (III, 764 ff.). These fantastical sounding theses need careful interpretation if they are to be made coherent, but they are argued for in detail in the context of John's whole position, not merely asserted.

Although Eriugena is commenting on Genesis, he proposes an unusual reading of Chapter 3, v. 22 ('... lest perhaps he stretches out his hand and takes even from the Tree of Life and eats and lives for ever . . .'), according to which it is a prophecy that Adam will finally eat of the Tree of Life and live eternally. Books Four and Five are devoted to discussing this Return of all things to God, as described in the fourth division of nature - that which is not created and does not create. In Study C (below) this idea, strange in the Latin tradition, is put into the context of John's earlier work and the theological controversies of the time. This discussion will show that Eriugena should not be treated as if he were entirely isolated from his own time and country. Yet, in the main, and despite his influence on the commentary tradition, the direction Eriugena set was not followed. He managed, on the basis of the unsystematic Greek Christian texts, to reassemble a highly structured Neoplatonic view, which would have appealed to Proclus and his followers, except for its success in incorporating the Genesis story, and he read this view back into his treatment of logic. By contrast, from Eriugena's time at least until the end of the twelfth century, it was on the basis of a more down-to-earth, Aristotelian thinking about logic and language that the best philosophers would develop their wider, metaphysical thinking.

Study C: Gottschalk, Eriugena and his contemporaries on predestination and salvation

Augustine left a confused picture of how Christians were to regard divine predestination (Chapter 2, section 9). But his late works clearly stressed human beings' utter dependence on God's freely-given grace, and it was this aspect of his thinking that appealed to Gottschalk (c. 803–867/9), a Saxon nobleman given as a child oblate to the monastery of Fulda, who lamented his discontent with his monastic life there, in one of the finest Latin poems of the Middle Ages. Gottschalk proposed, and spent his life from the 840s onwards defending, a theory of Dual Predestination (DP) that God has chosen some human beings to whom he will give the grace which makes them worthy to be saved, and others whom he will damn (Gottschalk, 1945, 202):

(DP) Every human being is either predestined to be saved, or else predestined to be damned.

God's choice does not depend upon people's merits, but Gottschalk insists that God is acting justly in condemning those he chooses to eternal damnation.

Gottschalk was supported by some of the most learned of his contemporaries, including Lupus, abbot of Ferrières and a noted scholar of the Latin classics. But DP was attacked with ferocity by other leading figures in the Church, including Hincmar, the Archbishop of Rheims, and Hrabanus Maurus, the encyclopaedist, Biblical commentator, abbot of Fulda and then Archbishop of Mainz. Gottschalk was condemned by a council at Quierzy in 849 and confined for life in the monastery of Hautvillers. Hincmar and Hrabanus were concerned that DP undercuts the basis for morality – both because DP presents God's justice as arbitrary, and because it removes people's motivation for acting in accord with Christian teaching, by seeming to imply that nothing they do will change their eternal destiny. Hincmar and Hrabanus accept that God fore*knows* whether a given person will be saved or damned (and they do not enter into the problems raised by prescience), but they insist that there is only single predestination:

(SP) Some human beings are predestined to be saved, and only they will be saved. All other human beings are not predestined at all.

SP supposedly relieves God from the charge that he has chosen at random certain humans and determined them to damnation. But since those who are not predestined, and so do not receive the grace they need, will therefore be damned, the difference between DP and SP seems, at most, to be that between doing and allowing. By DP people are sent to Hell as a result of an action by God – although this action is a choice *not* to give them grace – whereas in SP God allows people to be damned when he fails to predestine them to salvation. Hincmar, at least, tried to distinguish his position more sharply from Gottschalk's by suggesting at times that those who are damned choose not to accept the grace they are offered, or that God withholds his grace from those whose misuse of it he foresees.

Hincmar turned to John Scottus around 850, when he was teaching at the royal court, and asked him to answer Gottschalk. When it is considered in the context of the controversy which gave rise to it, John's treatise *On Divine Predestination* is a strange work. Unlike the *Periphyseon*, it still takes its starting point mostly from the Latin tradition, although it seems to show some knowledge already of pseudo-Dionysius and Gregory of Nyssa. In part, it is a far more intellectually adept version of the type of response given by Hrabanus and Hincmar, rejecting DP in favour of SP and one-sidedly citing Augustine to back up this position. Although Eriugena stresses that humans retain the free choice of their will (*liberum arbitrium*) even after the Fall, he clearly rejects Pelagianism, because he holds that they *have* lost the 'strength and power' of the will: without the help of unmerited grace, they cannot use their wills well enough to be saved. But Eriugena also develops two linked original lines of thought.

First, he wishes to distinguish between the rational will and human nature itself. God created human nature, and it is an – he suggests, indeed, the only –

essential feature of humans that they have a rational will. Such a will must be free, and so free to do evil – as indeed happened – and so it will be punished. But human nature itself did not do evil, and it remained uncorrupted and will not be punished.

Second, Eriugena wishes to show how the wicked are responsible for their own punishment. He suggests that this punishment might consist simply in ignorance or in knowledge of deprivation of the beatific vision. Or, in his most elaborate development of the theme, John thinks of predestination, not as a decision taken by God about each individual person, but rather as a single set of laws, which affects the good and the wicked differently. God gives every being a nature, and that nature has certain bounds. Nothing is able to go beyond its natural bounds, but rational creatures (humans and angels) have the power to will to go beyond them. Modifying the idea (found in Augustine and very explicitly in Boethius's Consolation IV.2.32-5) that evil is a deficiency of goodness and being, and that the wicked in a sense cease to exist, John explains that evil people wish to withdraw so far from God, the supreme essence, that they entirely cease to be and become nothing. God's laws have set up a measure that prevents them from realizing their wish. The very same laws, then, which bring happiness to the good, circumscribe the wills of the evil and so, by being frustrated in their desires, the wicked are punished, or rather, they punish themselves: 'one and the same law . . . disposes the republic in the justest order, as it brings life to those who wish to live well and death to those who desire to live badly' - just as the same food tastes sweet to a healthy person and bitter to a sick one.

Eriugena does not, however, fully integrate this bold line of thought with the broadly Augustinian doctrine of grace he accepts. He still insists that grace is necessary: it is only those predestined to salvation whose wills are freed so that they rejoice to stay within the bounds set by divine law and do not wish to go beyond them. God cannot be blamed for punishing sinners, since they punish themselves; but their sin and their punishment are inevitable, it seems, unless God chooses to give them grace. True, human nature itself is not subject to punishment, but it is hard to see how this concession helps individual humans who are not given grace and so sin and are punished, or how it makes God's behaviour towards them any less arbitrary.

Eriugena's apparent acceptance of orthodox doctrine did not spare his treatise from two attacks, by Florus of Lyons and Prudentius of Troyes (who acutely spotted how little room his theory of grace left for the freedom of the will he claimed to have vindicated), nor from condemnation, in 855, at the Council of Valence. Nonetheless, in Book V of the *Periphyseon*, John returned to the question of salvation and damnation, developing both of the two main original ideas from his earlier work, and adding something even bolder. The idea that human nature itself remains untainted and unpunished is given a dynamic form through the theme of the Return (which involves 'the restoration of human nature to its pristine state' (880B)), a re-possession of Paradise which, according to Eriugena, stands for the integrity of human nature. 'The irrational motion of the wronglydirected will in a rational nature is punished', he says (944B), echoing the theory of *On Predestination*, but human nature itself will remain 'everywhere in itself and in all its participants good, saved, whole . . . incorruptible, impassible, immutable.'

Eriugena adapts the idea of *theôsis* (deification), which he took from the Greek tradition, in order to extend this theory. The Greek Fathers tended to see salvation in terms of *theôsis*, which meant assimilation to God, rather than complete identity with him. Some, such as Athanasius and Gregory of Nyssa, conceived of it as a destiny for all humankind: because God had become a human, all humans would be deified. Others – especially Maximus the Confessor, one of Eriugena's favourite authors – were keen to avoid Origen's heretical belief in universal salvation, and they argued that only the good would achieve *theôsis*. Eriugena follows Maximus and reserves deification – especially as found in Gregory of Nyssa, in his notion of the general return of all humanity to the pristine state of nature.

Towards the end of the Periphyseon, this basic scheme undergoes a couple of modifications. At first, it seems that Eriugena wishes (977B-8B) to propose a threefold division of humanity at the last judgement. There will be the deified, who receive theophanies; then there will be those who lived good, but not the best lives, and who will receive sense-impressions which act as rewards for them; and there will be those who lived badly, and who will also receive sense-impressions, but ones which will take the form of wild beasts and act as punishment for them. Right at the end, however, when he gives an interpretation of the parable of the wise and the foolish virgins (1011A–18D), John puts forward what could be taken just as a further explanation of the form of sensual reward those who lived reasonably well will receive, except that John is apparently talking about *all* those who are not deified. He explains that almost all 'foolish and improvident men are . . . happy and content with their noble birth, their large families, their robust bodies, strength and health, their quickness of wit and charm of tongue, a beautiful and attentive wife . . . and an abundance of lands and possessions.' It is to *this state* – the earthly paradise of the Carolingian aristocrat (or the satisfied twenty-first century consumer) – 'of merely natural goods without the ornaments of virtue' that those who are not deified will return. No Stoic was ever quite so sweepingly contemptuous of the goods for which ordinary men and women strive. No God was ever so much of an intellectual or spiritual elitist as Eriugena's - or so indulgent to everyone who fell however far below this standard. But it remains an open question whether Eriugena's different proposals show confusion, hesitancy or simply the prudent tact of someone who wished, in effect, to deny that anyone receives eternal punishment.

* * *

8 Commentary traditions: Byzantium and the Latin West

At the same time as Eriugena was using a handful of Greek Christian texts to reconstruct a whole Neoplatonic system that would not have been alien to Proclus or Damascius, Photius (820-91), twice-deposed Patriarch of Constantinople, was compiling his vast *Bibliotheca*, a record of his extensive reading in the Greek literature of the past. The letters collected in his Amphilochia show that, not surprisingly perhaps for a Patriarch, he had views about problems in Christian doctrine, but in the Bibliotheca - although it covers every area of learning - he set a trend which would at once free and constrict Byzantine thinking. While many Greek churchmen remained suspicious about any sort of pagan learning, a succession of Byzantine philosophers would, like Photius, patiently exhume and commemorate the Hellenic past. This activity was kept quite distinct from theology, but was often constrained by a deference to the thinkers of the past, and an interest in them which had the detachment neither of the modern historian nor the independent philosopher. Among Photius's Amphilochia there is a commentary on the Categories (qq. 137-47) and (qu. 77) a discussion of genera and species related to the Isagoge. The approach to the Categories is that of the extended paraphrase, seemingly aimed at a beginner in the subject. The discussion of the *Isagoge* is more sophisticated and, unlike many commentaries on this passage, it takes very seriously the question of whether genera and species are *corporeal* or not. Careful investigation of the possible sources is needed to see to what extent Photius has developed a personal view. The scholia on the *Isagoge* and the Categories written c. 900 by Arethus of Caesaria certainly do not seem to be more than a compilation, perhaps just copied from one or more manuscripts glossed with material from David, Elias, Philoponus, Simplicius and earlier Neoplatonists.

The contrast between the boldness of Eriugena and the more imitative attitude of his contemporary Byzantines is, however, only partial. Even the *Periphyseon* itself is like a commentary (or two commentaries: on the *Categoriae Decem* and on the Hexaemeron), and Eriugena's earlier work had been in commenting in glosses on Martianus Capella. Latin philosophers at the end of the ninth century followed that model, commenting on Martianus, Boethius's *Consolation of Philosophy* and his *Opuscula sacra*, on Macrobius's *Somnium Scipionis* and on the pseudo-Augustinian paraphrase of the *Categories*. The records of this teaching and studying in the 850s–890s survive in glosses, written in the margins and between the lines of manuscripts. At the end of the century, however, Remigius (early 840s–908), a monk of Auxerre who took charge of the cathedral school at Rheims in 893 and taught in Paris from 900, produced continuous commentaries on the *Consolation* (Chapter 4, section 6) and Martianus Capella, weaving together material from the glosses, including, for Martianus, Eriugena's.

OLD TRADITIONS AND NEW BEGINNINGS

The glosses on the *Opuscula sacra* also show traces of Eriugena's thinking. Most interesting are the glosses on the *Categoriae Decem*. The earliest manuscripts are characterized by a number of glosses in which the logical ideas of the pseudo-Augustinian paraphrase become the pretext for metaphysical or theological excursions reminiscent of the *Periphyseon*, although without its rigour. Soon, however, these are all but eliminated from the tradition; the apprentice logicians are more concerned to master the basic concepts of the Aristotelian theory of Categories than follow their predecessors' flights of fancy.

Interlude ii: Priscianus ad regem Osdroe

Imagine that you are looking at a manuscript (Milan, Ambrosiana B 71 sup.) which – so the world's leading palaeographer tells you – is from Auxerre, written between 850 and 875. It is a copy of the one logical text ninth-century thinkers studied closely, the *Categoriae Decem*, and in the margins there are glosses. On microfilm they are impossible to read, but if you look carefully at the manuscript itself, you can decipher them. At one point, the Latin writer talks about *fantasiae*, and the gloss in the margin reads: *priscianus ad regem Osdroe dixit quid inter fantaston et fantasiam et fantasma*. The part of the sentence from *dixit* translates easily enough: '. . . said what <the distinction is> between *fantaston* and *fantasia* and *fantasma*'. But who on earth is King Osdroe? And which 'Priscian' is meant?

The answer is both obvious and unexpected. 'Osdroe' is none other than Khusrau (Chosroes) I Anushirwan, the philosophy-loving Sassanid King of Persia who reigned at the beginning of the sixth century. 'Priscianus' is Priscianus Lydus, one of the pagan Greek philosophers who went to his court after the closure of the School of Athens. Just as Paul the Persian dedicated a logical treatise to Anushirwan, so Priscianus Lydus sent him the answers to a series of questions, mostly about natural science. Priscianus Lydus's *Solutiones ad Chosroem* was translated (and survives only) in Latin, very probably in the mid-ninth century, and most likely by Eriugena – the one pagan philosophical text he seems to have known in the Greek. The glossator of the Milan manuscript makes use of the translated text for his explanation, and so he was probably closely linked to Heiric of Auxerre, Eriugena's follower.

As you unscramble these garbled words, the apparently distant worlds which have been spanned in the course of this chapter and the last come to seem like the neighbours they were: the last pagan philosophers, the Persian monarch whose ideology would still haunt the 'Abbâsids, Charles the Bald and his Hellenophilic court, the monk of Auxerre, bewildered but also fascinated by ideas, and names, he could hardly understand.

TRADITIONS APART

The mixing of cultures illustrated by the 'Priscianus' gloss was, by the late ninth century, a hangover from the past. In the tenth and eleventh centuries, each of the three traditions, Byzantine, Latin and Eastern, follows its separate path. Byzantium is no longer an important influence on the Latin West, and the Eastern tradition develops separately. Only in the twelfth century would the different traditions once again interact (Chapter 5, section 8), with new material translated into Latin from Greek and, from Arabic.

The Latin and Byzantine philosophy of the period will be discussed in the second half of this chapter. Each was rooted firmly in a language and was pursued against the background of a religious orthodoxy – the Catholic Church of the Latin West based in Rome, and the Orthodox Church based in Constantinople. The Eastern tradition was more complicated. Arabic had now become the *lingua franca* of the lands of Islam and it was used for most philosophical and theological writing, although Persian speakers would sometimes write in their own language, and a tradition of Syriac literature survived. In the tenth century, intellectual life in Baghdad remained open to Christians as well as Muslims – indeed, the Aristotelian movement was mainly the work of Christians, although its outstanding thinker, Fârâbî, was a Muslim. Besides this Aristotelian school of thought, which Avicenna would adapt and develop in the tenth century, there was the *kalâm* tradition as well as various varieties of thinking which combined philosophical and theological ideas.

This chapter begins, however, with another stream within the Arabic tradition – one which would come to constitute a fourth tradition of medieval philosophy: Jewish philosophy.

1 The beginnings of medieval Jewish philosophy

Jewish philosophy, of course, had its roots earlier than the tenth century. As well as Philo of Alexandria's Platonic commentary on Genesis (Chapter 2, section 7), there were other Jewish writings from the Hellenistic period with a philosophical orientation, like the fourth book of Maccabees (first century BC); and the Babylonian rabbis, though they could be hostile to philosophy,

also engaged in quasi-philosophical argumentative strategies and, arguably, allegorical explanations of scriptural passages. None the less, it is only in Islam that the medieval Jewish tradition of philosophy began in earnest, heavily influenced by the various forms of philosophizing carried on by the Muslims among whom the Jewish thinkers lived. The two earliest of these Jewish philosophers illustrate the influence of two different strands of Arabic culture. Isaac Israeli worked in the Neoplatonic philosophical tradition of Kindî, whilst Saadia was influenced by *kalâm*, although his work is in many ways distinct from it.

Isaac Israeli, also a famous physician, was born in 850 and died at a very advanced age. He wrote in Arabic, possibly for a Muslim as well as a Jewish audience, though some of his books have survived only in Hebrew; two, the *Book of Definitions (Kitâb al-hudûd)* and the *Book on the Elements (Kitâb al-Usțuquṣṣât)*, were translated into Latin in the twelfth century. Isaac is a Neoplatonist, who writes and argues as a philosopher, but upholds the creation of all things by God from nothing; in this attitude, he is close to Kindî, whose work is an important source for him. Although Isaac took over, especially from a lost pseudo-Aristotelian treatise, a Neoplatonic scheme of emanation (which he likes to describe in terms of light coming out of shade), it turns out to differ from Plotinus's scheme in a number of ways. Most importantly, the second hypostasis, Intellect, is considered to be a conjunction of first form and first matter, and to have been created by God, who has both power and will. The third hypostasis, Soul, is divided according to the Aristotelian scheme, into rational, sensible and vegetative soul.

For both Jewish and Muslim thinkers, prophecy is a very important topic, since for them, unlike Christians, it is the main way in which the divine is mediated to humans. Through a semi-naturalistic account of prophecy, such thinkers as Fârâbî, Avicenna and Maimonides would help to reconcile their religion with an Aristotelian philosophical outlook. In his *Book on the Elements* (Chapter 2), Isaac takes the first steps in this direction. When God wants to reveal his plans for the world, he does so through the intermediary of Intellect. As a Neoplatonist, Isaac believes that Intellect contains the Platonic Ideas – unenmattered, universal forms. These forms themselves are not revealed to humans, but rather a sort of form which is intermediate between them and the corporeal forms we perceive with our senses. These forms then require interpretation, a task in which 'the light and brilliance' of Intellect is required. For those people whose mental darkness obscures the Intellect's light only the corporeal expression of the forms, and not their spiritual meaning is evident.

A younger contemporary of Isaac's, Saadia ben Joseph al-Fayyûmî (882– 942) was the head or *Gaon* of the ancient Talmudic academy of Babylon. As a religious teacher, Saadia's immersion in the Jewish liturgy and Talmudic tradition was complete, and yet his intellectual world was that of contemporary Arabic thought, and he wrote, in Arabic, for a Jewish audience cultivated in Arabic; one of his greatest achievements was making a translation, which became standard, of the Bible into Arabic. His two important philosophical works are a commentary on Genesis (tafsîr kitâb al-mabâdî) and - much the most important source for his ideas - a treatise On Doctrines and Beliefs (al-amânât wa-l-i'tiqâdât). Saadia is often considered as a Jewish mutakallim or, more specifically, Mu'tazilite. But the description is accurate only in part. In his emphasis in the treatise on divine unity and justice, along with the confidence in reason and its ability to explain how God acts, Saadia is close to the Mu'tazilites. He is far less interested, however, in subtle metaphysics than thinkers like Nazzâm and Abû Hâshim, much more single-mindedly devoted to the task of arguing for the truth of the teaching of orthodox Judaism, against what he sees as its main rivals: theories derived from ancient philosophy, dualism and various heterodox Jewish doctrines. Moreover, a direct comparison with his Islamic contemporaries is made difficult by the very different conditions of their working lives and the transmission of their texts. Saadia wrote as an authoritative figure, trying to guide orthodox Jewry; the Mu'tazilites spent their lives in debate with each other, and with rival schools. Saadia's thought is systematically expounded in a treatise that survives; the thinking of the Mu'tazilites has to be patiently reconstructed from later testimonies.

Saadia explores a number of individual philosophical questions with a fair degree of sophistication. For example, among the arguments he gives in *Doctrines and Beliefs* for the world having a beginning, there is the line of reasoning introduced by Philoponus, based on the impossibility of traversing an infinity. To the objection that, even in walking a short distance, we do in fact traverse an infinity, because any distance is infinitely divisible, Saadia answers that such infinite division is purely imaginary, not actual. Among the cosmogonic theories he goes on to criticize is Plato's, as expounded in the *Timaeus*, which is taken literally and rejected on grounds of improbability and, in some points, irrationality. Further on (Chapter 2), Saadia considers Aristotle, when – in a way that has direct parallels with the early medieval Latin tradition (Chapter 3, sections 6 and 7) – he considers the ten Aristotelian categories in relation to God. None of them, he argues, applies to him.

Saadia's most careful and original thinking is about the second-order question of how scriptural and oral religious tradition is related to reasoning. On the one hand, Saadia defends the reliability of tradition, noting (as Hume would do) that daily life requires a general credence in report, and naïvely insisting that falsification cannot occur within a large group such as the whole of the Jewish people. On the other hand, he considers that the truths passed on by tradition can also be reached by a combination of three ways of gaining knowledge: as an 'eye witness' (so, direct sensible perception); by reason; by inference (given that x is the case, y must have been the case). Tradition – which is itself, ultimately, eye-witness knowledge, the transmission of which it is reasonable to infer is reliable – is needed, because error is likely when

people engage directly in reasoning and inferring, and because it includes an historical account of those who served their peoples well or badly that functions as an encouragement to act well. But Saadia seems to consider that, in principle, the same truths and moral teaching as Tradition teaches can be reached through the three ways. Those who seek them out through these ways are not only in a position to defend them against rival beliefs, but grasp them better, like someone who works out through arithmetical calculation of what he has paid out how much gold he has left, compared with someone who finds out merely by weighing it.

2 The kalâm tradition

After 848, the Caliphs decided to go along with popular anti-intellectual sentiment and not only abandoned the *miḥna* – the inquisition by which they had sought to enforce the Mu'tazilite view that the Qu'ran was created – but set themselves in favour of the prophetic tradition and against speculative theology. The Mu'tazilites continued, however, to be intellectually active, away from the court, adapting and elaborating their own ideas. The two outstanding figures of this period, from the Basran school, were Abû 'Alî al-Jubbâ'î (d. 915) and his son, Abû Hâshim (d. 933). Their complex thought, like that of their predecessors, has to be reconstructed entirely from secondary reports: here is a glimpse of some of the themes which link most clearly with other philosophical discussion in the period and later.

Jubbâ'î was responsible for softening the Mu'tazilites' characteristic insistence on God's unbreakable obligation to do the best for humans, in accord with strict justice. For Jubba'î, God has fulfilled his obligation by giving them the best religion he can. He would have been at fault had there been a better way of making them believe truly and behave well and he had withheld it from them. He is not to be blamed, however, for not simply making humans more obedient than they actually are. It may have been he (rather than, as often thought, Ash'arî) who used the famous story of the three brothers to support this move away from rigorism. There were three brothers, the story goes: one was good, one wicked, and one died as a child. The good brother is rewarded in paradise, the wicked one punished in hell, whilst the third is neither rewarded nor punished. The third brother complains that, by dying early, he lost the chance to live well and merit paradise. He is told, however, that God made him die early, because he foresaw he would be wicked when he became an adult. But there is then no reply that can be given to the second brother's complaint that he too was not made to die before he did the evil which condemned him to hell.

Whilst al-Jubba'î held to the established Mu'tazilite view that God and his attributes are identical, his son, Abû Hâshim is most famous for introducing a modification, which was designed to save this position from the obvious objections to it (cf. Shahrastani, 1934, 131–49). The divine attributes, such

as having knowledge and power, are 'modes' (*ahwâl*; sing. *hâl*), which neither exist nor do not exist. Abû Hâshim explained his meaning by looking at everyday conceptual thought. A black ball and a red box have it in common that they are coloured. Their being coloured is not, however, another accident, beyond the blackness of the black thing and the redness of the red thing. Yet it is wrong, Abû Hâshim argued, to claim, as his opponents did, that the only thing that the black and the red thing have in common is the word 'coloured': it is a feature of reality that they have being coloured as a common characteristic, whereas they differ in that one is round and the other square. But how can this parallel apply to God, who has no accidents at all? Presumably Abû Hâshim's idea is that, just as something cannot be black without being coloured, or knowing without being alive, so something could not be God without having the attributes God has. These attributes are not accidental qualifications of him, adding to what he would otherwise be; but they are more than mere words: when God is described as 'wise' or 'powerful' these descriptions are verified by how things really are.

Abû Hâshim would have a powerful influence on the later Mu'tazilites, forging at least one group of them into more of a unified school. But it was another of al-Jubbâ'î's pupils who would have a vaster effect on Islamic thought. Abû-l-Hasan al-Ash'arî (c. 873/4-935/6) followed the ideas of al-Jubbâ'î until, c. 913, apparently as the result of a series of visions in which Muhammad spoke to him, he publicly renounced Mu'tazilite doctrine and converted to his own modified brand of traditionalism. The conversion did not amount to his giving up argumentative, philosophically sophisticated theology. On the contrary, Ash'arî retained the Mu'tazilite manner of argument and much of their metaphysical framework, but gave up their controversial theological doctrines which clashed with a literal reading of the Qu'ran (which he now held to be uncreated). So, for instance, Ash'arî rejected the Mu'tazilite view that God cannot be seen in the after-life, and their metaphorical way of interpreting scriptural references to God's face and hands, although he also insisted that God is not corporeal; and he considered that God's essence is distinct from his attributes, although he was not able to explain how.

Perhaps the most striking way in which Ash'arî and his followers (who would dominate *kalâm* in the following centuries) reversed Mu'tazilite teaching was over the question of freedom and responsibility. This shift was, paradoxically, favoured by the fundamental atomistic ontology of the Mu'tazilites, which was taken over by Ash'arî. The Mu'tazilites often used their atomism as a way of showing the complete power of God over everything, since their atomic universe required divine sustenance at each moment. But the Mu'tazilites' strong sense of moral responsibility led them to except human action from this sort of control by God. They held that, unless someone is actually the agent for an act, he does not merit blame or praise for it from God, who is just; and they thought of most human actions as being free

in this sense. By contrast, Ash'arî extended God's sway even to human action. He held that humans do not perform their acts, but acquire them; it is only God who acts. As it was developed by his followers, this idea was clearly taken to restrict human freedom, but Ash'arî himself may not have so intended it. When Ash'arî talked of an act being acquired, he wished thereby to characterize it as *not* being constrained; and, on one interpretation of his comments, the fact that all agents other than God must acquire the power for each act they perform does not rule out there being alternative choices of action open to them. It may be, then, that, in this important area of his thought, al-Ash'arî was not himself an Asharite.

Interlude iii: Arabic free-thinkers?

The early centuries of Islam may seem an unlikely venue for free-thinkers - sceptics, atheists, materialists. But there was certainly discussion, and perhaps to some extent advocacy, of such positions, in a way that disappeared from the Islamic world and is almost unknown in the medieval Latin West. According to a bold thesis recently proposed by Patricia Crone, these currents in Hellenistic philosophy, which had been driven out by Neoplatonism in later antiquity, survived among Greeks in Persia, and resurfaced in the Persian-leaning culture of the Islamic élite under the 'Abbâsids. The sustainability of her theory will depend on the extent to which denunciations of anti-Islamic ideas by theologians rested on genuine, rather than exaggerated or distorted, features of the writings they criticize. But at least one figure from the period has long been considered as heterodox and sceptical. Ibn al-Râwandî (born 815; d. c. 860 according to some, after 910 according to others) began as a Mu'tazilite, but later turned against this school and criticized its view bitterly. He seems to have been fond of deliberately contradicting himself - even writing a treatise and then a refutation of it. Rather than indicating an instability, this attitude of being able to see both sides of a problem may have been a thought-out sceptical position. It is found even in his most notorious work, the Book of the Emerald (Kitâb al-Zumurrud) in which prophecy – the very foundation of Islam – is attacked in all its manifestations.

Another thinker, a generation or two younger than ibn al-Râwandî, who dismissed the idea of prophecy was Abû Bakr al-Râzî (c. 865–c. 925). Râzî is one of the most famous of all medieval physicians and medical authors, in both the Islamic and the Latin traditions. As a wider thinker, his heterodoxy extended not merely to rejecting Islam but also to treating the philosophers' idol, Aristotle, with great reserve. Rather, Râzî very explicitly made Plato and Socrates his philosophical heroes. His views, so far as they can be pieced together, are eclectic. There is a strong Platonic element (he is said to have commented on the *Timaeus*). In particular, re-incarnation is at the heart of Râzî's view of the human condition. He thinks of souls as being imprisoned in bodies – animal and human. Although it is only from a human body that a soul will finally be able to free itself altogether from the need to become re-embodied, even within animals souls are to an extent rational (Râzî had a much wider conception of rationality than the Aristotelian tradition). The type of life which will lead the soul to liberation is the philosophical one, which Râzî conceives partly in Platonic terms of overcoming the passions, but partly in Epicurean ones, which also stress the importance of moderation.

In a dispute with an Ismaili dâ'î who was also named after the town of Rayy, Abû Hâṭim al-Râzî, some details of Abû Bakr's wider cosmology and metaphysics emerge. He was an atomist, but his theory was not the same as that held by the Mu'tazilites, because his atoms are not dimensionless, though they are physically indivisible. He also posited the eternal existence of five things: God, Soul, time, space and matter. Of all his views, however, the strangest in its context – though it will not seem strange to us – was a lack of élitism with regard to the availability of truth. In the tradition of Fârâbî, Avicenna and Averroes, a central theme would be the importance of restricting the truth to the small group of people intellectually capable of properly understanding it. But Râzî insists that everyone is as capable as he of questing after the truth, if only they would turn away from their other interests and apply themselves to philosophy.

3 Fârâbî

Whereas al-Râzî is a fascinating outsider, Abû Nasr al-Fârâbî is a central figure who would affect by influence and reaction not only both Avicenna and Averroes, but both the Jewish and Christian traditions. At first sight, Fârâbî's thought may seem to be a sort of Neoplatonic system, complete with what will strike modern eyes as a fantastical cosmology. Yet, once the terms within which he worked are understood, Fârâbî emerges not merely as a startlingly bold and imaginative philosopher, but as a remarkably tough-minded one.

TRADITIONS APART

Life, works and aims

Little is known of Fârâbî's biography. Probably of Turkish origin, he was born c. 870 and spent most of his life in Baghdad, which he left in 942; he died in Damascus, where he was protected by the prince, in 950 or 951. The attractive and fitting stories that make of him an ascetic, militant intellectual, living frugally and working as a gardener, lack a basis in historical evidence. But there is no doubt about his close connections with Christian scholars who continued the Aristotelian tradition, such as Yûhannâ Ibn Haylân, with whom he studied logic. One group of his writings, which includes paraphrases of Aristotelian logic and commentaries on On Interpretation and (no longer extant) the Prior Analytics and Nicomachean Ethics, and his little treatise On the Intellect, shows this affiliation clearly. But Fârâbî also wrote a series of more general discussions of philosophy, including the trilogy On the Attainment of Happiness, The Philosophy of Plato and The Philosophy of Aristotle and a treatise On the Harmony of the Two Sages (i.e. Plato and Aristotle). In addition, he produced three works with an important political component: The Principles of the Views of the Citizens of the Best City, Civic *Policy* and a paraphrase of Plato's *Laws*. As this last title indicates, Plato's political theories strongly influenced him. No complete translations into Arabic of any Platonic dialogues survive or are known to have been made. But Fârâbî would very probably have had access to Galen's epitomes of the *Republic* and the *Laws*, and there is evidence that some more literal versions of parts of the Republic were in circulation (Chapter 6, section 3, Interlude vii).

Fârâbî also wrote what he called the *Kitâb al-hurûf* ('The Book of the Letters/Particles'), first edited fifty years ago but still little studied. Its editor presents it as a work on Aristotelian metaphysics, since the *Metaphysics* was known as the *Kitâb al-hurûf*, because each of its sections was known by a letter. Recently (Diebler, 2005), though, it has been suggested that *hurûf* here may have its other meaning of 'grammatical particles', since much of the work is taken up by discussing the Aristotelian categories, the words for which are treated as particles. In fact, the subject-matter, as well as including a historical account of the development of language, philosophy and religion (see below), embraces both that of the *Categories* and that of the *Metaphysics*: perhaps Fârâbî's title was deliberately ambivalent.

Over the course of this wide range of texts, Fârâbî sometimes expresses differing or even contradictory answers to the same question: how far do Plato and Aristotle agree? What sort of immortality can humans attain? Is an active political life better than one of contemplation? Some scholars explain these discrepancies as cases where Fârâbî has followed different sources; some, most plausibly, in terms of the different types of his writing for different audiences. But others use such internal tensions to argue that Fârâbî is a writer who systematically conceals his real views, which the expositor is therefore obliged to search out like a detective. There is no doubt that, as texts such as the prologue to the paraphrase of the *Laws* reveal, Fârâbî believed that ancient philosophers often concealed their true meaning. It does not follow, however, that Fârâbî *systematically* disguised what he himself had to say, although there are certainly moments (an example will be mentioned below) when he appears to bring his teaching closer to accepted beliefs than he probably really held. The emphasis on Fârâbî's supposed concealments has been unfortunate, because it has tended to make both the supporters of this approach and its critics blind to the extraordinary extent of his achievements on a literal, but historically-informed reading of his work.

The Baghdad Peripatetic

The first level of Fârâbî's achievement was as a Baghdad Peripatetic - as a member of the movement of translators and philosophers (most, unlike him, Christian) who sought, following and extending the work of Syriac scholars, to continue the tradition of the Neoplatonic Schools, especially the Aristotelian part of its curriculum. In his own account of the history of philosophy, Fârâbî self-consciously links himself to this tradition and pointedly leaves Kindî and his circle out of the picture. Logic had been strong in the Syriac tradition, and directly linked to the last teaching of the ancient schools. Fârâbî blames a decision by the Christian bishops for the restriction of Syriac logical studies to the Isagoge, Categories, On Interpretation and I.1-7 of the Prior Analytics (on non-modal syllogisms). But he was able to study with his (Christian) teacher to the end of the Posterior Analytics, and he also worked on an extended logical curriculum, including the Topics, Rhetoric and Poetics, in a way which, as we shall see, had the most important repercussions for his whole thinking. Fârâbî was not the first in the Arabic tradition to take an interest in logic. Ibn al-Muqaffa' (d. 757) translated into Arabic a textbook which stopped with Prior Analytics I.7; the Topics was translated in 782 for the Caliph al-Mahdî; Kindî's works include an outline of the organon; and, of course, there were the translations by Hunayn Ibn Ishâq and Ishâq Ibn Hunayn (Chapter 3, section 5). Fârâbî was, however, the first important Arabic logical thinker. He defined logic by contrast with grammar. Grammar deals with the words of particular languages and corrects errors in using them; logic deals with the thoughts which are common to all peoples and helps to avoid faults in manipulating them. From Avicenna's reaction, it is clear that Fârâbî developed an extensive theory of modal logic, in connection with the Prior Analytics.

The commentary on *On Interpretation*, which survives, is remarkable for the thought it shows about how to adapt an analysis of propositions formulated in Greek to Arabic, in which, unlike Greek, there is no copula in ordinary speech. Fârâbî's strategy is, in effect, to invent a technical Arabic logical language which parallels Greek in its syntax and so can follow Aristotle's logical syntax without problems. When Aristotle goes on, in Chapter 9, to

TRADITIONS APART

discuss problems about future truth, contingency and necessity, Fârâbî is especially insightful. Although Aristotle himself had raised only the problem of logical determinism (does its being true now that I shall say something very stupid tomorrow mean that necessarily I shall say something very stupid tomorrow?), Fârâbî, in line with the ancient commentary tradition, brings up the question of whether God's foreknowledge of the future makes every event necessary (commentary on 19a32–b4). He explains that if something follows necessarily from something, it does not mean that it is necessary itself. Here he is identifying – far more clearly than Boethius (Study A), who worked against the same background of ancient sources, managed to do – the difference between wide-scope necessity, which yields a true conditional

1 Necessarily, if God knows that Zayd will stay at home, Zayd will stay at home.

from narrow-scope necessity which produces a false one:

2 If God knows that that Zayd will stay at home, then Zayd will stay at home necessarily

He does not, however, see the difference in formal terms, preferring rather to contrast the truth of 'the proposition' – that is (2) – with the fact that Zayd is in fact capable of staying at home or going away.

In the following section, Fârâbî puts forward a view which he attributes to Plato (Aflat $\hat{u}n$), but which does not seem to derive either from him or – as a recent translator and interpreter has suggested (Fârâbî, 1981, 95) – from Philo, the pupil of Diodorus Cronus in the fourth to third centuries BC. Fârâbî explains that, according to 'Plato' something can be eternally the case but not thereby necessary (and something possible which never comes to be the case). What Fârâbî is clearly doing here - in the name of his source - is categorically to dismiss the statistical account of modalities proposed by Aristotle and generally accepted in the ancient tradition and, for the most part, by medieval Aristotelians and Neoplatonists until Scotus in late thirteenth-century England (Study L). That is remarkable, but how does it further Fârâbî's argument? Is he anticipating and answering the objection that, even though (1) and not (2) is true, since what God already knows is past and so fixed, God necessarily knows that Zayd will stay at home and, therefore, given (1), (2) follows logically? (For details of this argument as it was understood more formally in the thirteenth-century Latin West, see Study I.) If so, he may be suggesting that, so long as there are many alternative ways in which things – from the beginning to the end – may have turned out, there can be certain divine foreknowledge, without rendering the future necessary, because it remains synchronically possible that things could be different.

TRADITIONS APART

Philosophy and happiness

The curriculum of the schools of Athens and Alexandria was organized in accord with the view shared by the Neoplatonists with almost every ancient philosopher – that philosophy is not a simple academic discipline, but a way of life, by studying which we can gain the highest human happiness. After Aristotelian logic and philosophy, which treated principally the world of sense perception, students would move to Plato and, through his texts, to higher levels or reality – a journey which became increasingly dependent on pagan prayer and ritual. This higher stage of the curriculum had no place for most Christians, whose religion was their guide to beatitude, and the Syriac tradition had shrunk the curriculum even further. With remarkable boldness, Fârâbî reasserted the ancient position, that it is through the study of philosophy, as practised by Plato and Aristotle, that humans can attain the great happiness. This approach, which guides his whole intellectual project, set him apart both from Kindî and his followers, for whom philosophy provided a way of establishing, more effectively than theologians could, the truths of Islamic religion, and from the Baghdad Peripatetics, for whom philosophy, despite their devotion to it, was a mere academic discipline.

Fârâbî's audacity did not stop with his revival of an approach to philosophy, and an estimation of it, which three centuries of cultural history might seem to have extinguished. There are three particular ways in which he carried through this approach that made it less a rediscovery than a reinvention. First, he moulded together the Neoplatonic view of intelligible reality with an Aristotelian cosmology, and described human access to this realm in terms of Aristotle's theory of intellectual cognition, thereby replacing the consummate philosopher's mystic ascent with a sort of self-divinization through the sober use of demonstrative reason. Second, he used his understanding of the range of Aristotelian logic to devise a way of reconciling his philosophy with revealed religion, but in a way which subordinated religious to philosophical truth. Third, he believed that the philosopher's search for happiness needed to be placed within a political setting and, inspired by what he knew of Plato's *Republic* and *Laws*, he investigated how the whole people, the great majority of whom were not philosophers, could flourish, led by those able through philosophy to grasp the truth.

Reformulating Neoplatonism

Fârâbî knew, from the *Theology of Aristotle* and elsewhere, the Neoplatonic scheme, according to which, from the One which is beyond even being, there emanates Intellect and then Soul, which is responsible for whatever reality there is in the material world. He also knew Aristotle's picture, in the *Metaphysics*, of Intellect as the final cause of the motion of a universe made up of concentric spheres.

The Neoplatonic and the Aristotelian schemes seem to differ sharply in the type of causality they attribute to their highest principle. For Aristotle, Intellect, the First Cause, functions only as a *final* cause. But, already, Ammonius (Chapter 3, section 3) had maintained that Aristotle's First Mover is also an efficient cause, and this move within late ancient Neoplatonism prepared the way for Fârâbî's step of combining the two schemes.

Fârâbî (most fully in *Best City*, Chapter 3) took Aristotle's cosmology, but in the more sophisticated form established by Ptolemaic astronomy, in which there were just nine concentric spheres, and the remaining irregularities of stellar motion were explained through epicycles. The production of these spheres and their movers or Intelligences is accounted for in Neoplatonic terms of emanation, so that it is not merely the motion of the spheres, but their existence that is explained. From the First Cause there emanates eternally an incorporeal First Intelligence which has two thoughts, of the First Cause and of its own essence. The first of these thoughts gives rise to the Second Intelligence, and the second thought to the first sphere. Similarly for each of the subsequent intelligences: by thinking of the First Cause, it produces the next Intelligence that emanates from the Ninth Intelligence is responsible neither for the production of another Intelligence nor of a sphere: rather, its role is in the sublunar world where human beings dwell.

Fârâbî's master-stroke in re-thinking Neoplatonism in Aristotelian terms was to identify this last Intelligence with the Active Intellect, as sketched by Aristotle in On the Soul. This move had been prepared by Alexander of Aphrodisias and Themistius (Chapter 2, section 3), who treated the Active Intellect as a definite, transcendent being; for Alexander, indeed, it is the same as the First Cause. But the positioning within the Aristotelian-Ptolemaic cosmology seems to have been Fârâbî's own (unless he found it in some source now lost - an unlikely hypothesis, because of the close way it fits with, and strengthens, the other elements in Fârâbî's thinking). The Active (or 'Agent') Intellect is not held by Fârâbî to be responsible for making the body of the sublunar world, in the way that the higher Intellects bring about the bodies of their spheres. It is the heavenly spheres which, through a complex process, bring about prime matter and determine the substances into which it is formed (though in the Letter on the Intellect, but not elsewhere, Fârâbî does say that natural forms emanate from the Active Intellect). Rather, the importance of the Active Intellect lies, as its origins within Aristotelian psychology would suggest, and as has already been indicated, in its part in the process of human thinking and so in enabling humans to reach their goal.

Indeed, despite the immensely greater importance Fârâbî attaches to the Active Intellect, in its function it remains exactly what it was for Aristotle. Humans begin merely with a potential or material intellect (the 'hylic intellect' – Fârâbî uses the adjective *hayûlânî*, taken directly from the Greek *hyle* = formless matter – and glosses [*Best City*, 13.2] 'which is intellect in

potentiality'): that is to say, humans are made in such a way that they are able to think, but not without the help of something which is not just thinking potentially but actually - the Active Intellect. Fârâbî compares its operation to light, which in the sphere of the senses makes colours, which are visible only potentially in the dark, actually be seen. Aristotle's active intellect could be seen as responsible both for abstracting universals from sense-perceptions, and for providing certain very basic principles of thought - the fundamental rules for logical reasoning. Fârâbî combines the two roles, arguing that the Active Intellect changes people's sensible perceptions into the basic truths which all people share (Best City, 13.3), such as that if a and b are each equal to c, then *a* is equal to *b*. The principles we gain from the Active Intellect are more far-ranging, Fârâbî goes on to explain, than this example of his: they include the principles of productive skills, those by which we become aware of good and evil in human acts and those which provide the basis for the knowledge of the First Cause and the superlunary world. But they are merely principles: 'The occurrence of the first intelligibles in a human is his first perfection, but they are brought to him in order to be used by him in order to arrive at his utmost perfection, which is happiness' (Best City, 13.5). In order to achieve the human goal, happiness, people need to work from the principles with which the Active Intellect endows them, not only by gaining complete theoretical knowledge but by achieving practical knowledge and practising it in virtuous lives.

Fârâbî (Best City, 15.9) charts a person's intellectual progress in four stages: his material intellect (Stage 1) becomes actual intellect (Stage 2), as he begins, with the help of the principles given by the Active Intellect, to think. The material intellect is, at this second stage, the matter to which the actual intellect is the form. The actual then (Stage 3) becomes the matter to what Fârâbî calls the 'acquired intellect' (al-'aql al-mustafâd) as form, and finally, when the acquired intellect is the matter to the Active Intellect, the 'human being is one on whom the Active Intellect has descended': he has achieved the highest happiness and his soul is 'as if united with the Active Intellect'. The phraseology has a supernatural, even mystical tinge to it – and Fârâbî will indeed, though only in a detached and naturalistic way, exploit its possibilities for explaining religious phenomena. All, though, that Fârâbî has committed himself to is the position (an Aristotelian one, according to some) that the happy life for humans is one involving the highest degree of excellence in action and wisdom in theoretical contemplation. In the Attainment of Happiness, he sets out the same human ideal, but without the apparatus of emanation, and as a preface to his book on the philosophies of Plato and Aristotle.

Religion and philosophy

These views of Fârâbî's seem – and in an important sense are – scandalous within the context of an Islamic society. His theory of religion and philosophy both conciliates his outlook with that of his fellow Muslims (and believers in

other revealed religions), and yet also sharpens the difference of perspective. Drawing (Attainment of Happiness, 55) on an idea already anticipated in the late ancient tradition as witnessed by Paul of Persia (Chapter 3, section 4), he distinguished between the different types of argument provided by the different disciplines of the wide logical syllabus which included, not just the Analytics, but also the Topics, Rhetoric and Poetics. The central distinction is between demonstration, as presented in the Posterior Analytics (known in Arabic as the *kitâb al-burhân* – 'The Book of Demonstration') – and rhetoric. When something is demonstrated, the intellect grasps the essences of what is involved and so gives assent; so - to supply an example - I grasp the essence of human being, which is rational, mortal animal, and so assent to the proposition 'human beings are rational'. But a thing can also be known, not in its essence, but by being imagined through a likeness of it (as I might have a mental picture of a human being). In this case, we are brought to give assent through persuasion. The grasp of the intelligibles is the province of philosophy, whereas religion concerns imaginative likenesses and conviction in that it is gained through persuasion. Where what a religion makes known through likenesses by persuasion are in fact the same intelligibles as philosophy grasps, then religion is a type of popularized philosophy, an imitation of philosophy proper, which allows the great majority of people, who are not capable of engaging in philosophical demonstration, to know the truth, though only metaphorically, not directly.

Fârâbî thus grants to the exponents of religion both that their beliefs may be true, and that there is a social need for truths to be represented and expounded in the religious way. But only philosophers know the truth directly, and the test of a religion's veracity is whether or not its imaginative representation of the truth accords with what philosophy has discovered. Fârâbî's theory of religion leaves it open for there to be any number of different religions that present philosophical truth in popular, imaginative form. From many comments, including the opening chapters of the Best City, where he seems determined to outdo not just Kindî but also the Mu'tazilites in establishing the absolute one-ness of God and his otherness from every created thing, it is clear that Fârâbî thought of Islam as a popular, imaginative representation of the truth (Christianity, with its divine Trinity, must have seemed less obviously acceptable as a popularized philosophy). Fârâbî's view of prophecy (e.g. Best City 14, 15.10) fits in with the double-sidedness of his theory of religion. He does not deny the truth of prophecies, but he explains them through a complex theory which involves the workings of the imagination under the influence of the intellect, itself, in the case of the highest form of prophecy, at the stage of quasi-identification with the Active Intellect. When a prophet predicts something which will happen, on Fârâbî's view it is as if he goes through a correct deliberation, using the principles of practical reasoning, but its conclusion comes immediately and in imaginative form: he simply visualizes the future event in question.

TRADITIONS APART

Politics and history

Fârâbî's theory of religion calls for a political theory to complement it – and, indeed, Fârâbî was one of the rare band of medieval thinkers (others were Abelard (Interlude iv) and Averroes (Interlude vii) -) who looked seriously at Plato's political philosophy. The aspect of Plato's ideal state which most struck Abelard, who knew only the brief epitome in the Timaeus, was its asceticism and its communism: the subordination of individual aims to the good of the whole. Fârâbî, who had a fuller, if not direct, knowledge of the Republic and the Laws, emphasized rather the role of the Philosopher-King and the division of society into groups of different natural ability, each reaching their good in different ways. 'Imâm', 'Philosopher' and 'Ruler' are words for the same person: one who has reached the stage of acquired intellect and so knows how happiness should be reached, and also has the oratorical skills to persuade people, through their imaginations, to the best course (Best City, 15.12; Attainment 58). Fârâbî's view of the complementary roles of religion and philosophy is embodied in the structure of the best city: its laws are philosophy in the mind of the ruler, but religion in the minds of the multitude. Fârâbî even suggests (Best City 16) that people's destiny after death depends on the type of city to which they belong - describing a sort of heavenly bliss for the inhabitants of the best city, extinction for the inhabitants of the ignorant city and a non-physical punishment for those who belong to a wicked city. It can be argued, however (Davidson, 1992, 57-8) that Fârâbî, no more than Alexander of Aphrodisias, accepted any life after death, though he allowed that in a certain sense humans could grasp immortality by the quasi-union described above with the Active Intellect ('acquired intellect'). He may even, though, have given up the view that any conjunction with the Active Intellect is possible for humans. According to reports by two later Arabic Aristotelians (Chapter 6, sections 3 and 4) Ibn Bâjja and Averroes, in his lost commentary on Aristotle's Ethics, apparently a late work, Fârâbî denied that any conjunction took place and said there that 'after death and demise there is no afterlife, that there is no happiness except for political happiness, that there is no existence except that which is perceived by the senses' and any idea of an existence other than one we can perceive through our senses is dismissed as 'old wives' tales'. And, although Ibn Bâjja denies that these were Fârâbî's real views, Averroes makes no such qualification (Pines, 1979; Averroes, 1998, 263-6).

One feature in particular of Fârâbî's thought, already indicated in this sketch, deserves to be brought out more distinctly. Despite the apparently Neoplatonic turn of his account of emanation (which is, in fact, simply the application of the best science available in his day), Fârâbî is a philosopher who consistently tries to demystify, making historical conjectures about patterns of cause and effect in order to explain how cultural circumstances and beliefs have come to be as they are. His account of the growth of language,

rhetoric, philosophy and religion in the kitâb al-hurûf (§§108–57) gives a striking example. Fârâbî begins by speculating, fascinatingly, on how languages first arose, and how different languages grew up because of the varying physical structures of the vocal organs among different peoples. He explains that the earliest ways of speaking and then writing were rhetorical, in his special sense that they are based on imaginative likenesses and seek to persuade. The art of poetry was also developed at an early stage. Then dialectical methods, in which the upholders of a view try to shape it so that it resists attack (Fârâbî has in mind the sort of argument contest described in Aristotle's Topics), were invented. But at a certain stage some people realized that certainty will never be reached by dialectic and they gradually came to distinguish demonstration from dialectic, as philosophy passed through the stage reached by Plato until it attained its fullness as found in Aristotle. In principle, Fârâbî believes, it is only at this stage that religion comes into existence, and it is intrinsically linked to law-giving: it is through religion – persuasion through imaginative likenesses of the true intelligibles – that the multitude of people are educated and guided towards happiness. But Fârâbî also recognizes that this simple scenario does not cater for the transfer of religion or philosophy from one culture to another, and he adapts his model so as to be able to take an external perspective on his own position as a philosopher in tenth-century Islam. He suggests (§149) that, whilst Islam depends on a perfect philosophy, its exponents do not recognize that philosophy as the truth since it has only been transferred to them as a philosophy from outside and after the religious ways of speaking and thinking had fully taken root.

Few thinkers can view themselves and their situation with Fârâbî's detachment. His most obvious influence, through Avicenna, left this aspect of his thinking aside, and his most distinguished pupil, Yaḥyâ Ibn 'Adî, though a prolific Aristotelian commentator and author of a treatise of ethics remarkable for its philosophical stance, not linked to any particular religion, was a committed Christian apologist. But there was one man who, arguably, would take up in his own distinctive way this radical, central strain in Fârâbî: the greatest of all Jewish philosophers, Maimonides (Chapter 6, section 4).

4 Ismailis and Neoplatonists

A major split had developed in the very early years of Islam, when a group of Muslims, the 'Shi'ites', remained loyal to Muhammad's cousin, 'Alî (Chapter 3, section 4). Their thinking in the period up to the late ninth century is hard to trace, but it seems already to have strongly emphasized the role of the Imam, the rightful successor to Muhammad, belonging to the line of 'Alî, as a spiritual leader with a special, near-prophetic ability to know the inner meaning of religious law. After the death of the Imam Ja'far al-Ṣâdiq in 765, the movement split into two main branches. There were the Ismailis, who recognized Ja'far's grandson, Muhammad Ibn Ismâ'îl, as (the seventh) Imam,

and the 'Twelvers', who recognized a different line, up to the twelfth Imam, Muhammad al-Mahdî. For both groups, the idea of the occultation of the Imam was important. The Twelvers believed that Muhammad al-Mahdî, who became Imam in 874, was hidden away in 940 and that he would one day reappear and bring in a new era. Ismailis at one stage believed the same about Muhammad Ibn Ismâ'îl. They divided past history into six eras, each governed by a new religious law initiated by a prophet: Adam, Noah, Abraham, Moses, Jesus and Muhammad. As the seventh Imam of the sixth era, it was for Muhammad Ibn Ismâ'îl to reappear and bring in the seventh era, that of the Resurrection. But, with the coming to power in Egypt of the Fatimids, an Ismaili dynasty, most Ismailis came to accept the delay of this reappearance, while they were ruled by a line of caliph-imams. In its developed form, Ismailism contrasts with Twelver Shi'ism by upholding allegiance to a real, living Imam, whereas the Twelvers believe that their Imam is occulted. Both groups differ from the Sunni majority by stressing the division between the outer meaning of religious law and its truer, inner meaning.

The Ismailis were proselytizers. Through their $da^{*}wa$, their mission, they sought not only to educate their fellows, but to convert others to Ismailism. But the leaders of these missions, the $d\hat{a}^{*}\hat{n}$ s, were often more than propagandists and religious teachers. Their cyclical view of history, combined with their belief in a hidden meaning of Scripture, made Ismaili intellectuals very open to look for wisdom in the Greek philosophers. The earliest Ismaili thinking about the universe took the form of a creation myth, in which God, who exists timelessly and placelessly, pronounces the word '*Kun*!' ('Be!') and creates all things from the letters $k\hat{a}f$ and $n\hat{u}n$ which make up this word. Neoplatonic thinking was introduced into Ismailism by two $d\hat{a}^{*}\hat{i}s$, Abû Hâtim al-Râzî (d. 934–5) – the philosopher Râzî's opponent – and Muḥammad al-Nasafî (d. 943). Among their main sources seem to have been adapted translations of Plotinus and Proclus similar to those used by Kindî and his circle, the *Theology of Aristotle* and the *Book of the Pure Good* (Chapter 3, section 5).

The most important of the philosopher- $d\hat{a}$ ' \hat{s} was Abû Ya'qûb al-Sijistânî (d. *c*. 975), who wrote a series of philosophical treatises, which also consider topics such as prophecy and reward and punishment in the after-life, but are not expositions of scripture or discussions of specifically Islamic dogma (as in *kalâm*). Sijistânî accepts the basic structure of the intelligible world, as established by Plotinus, with its hierarchy of the One, Intellect and Soul, and without the elaboration of the hierarchies found in later Neoplatonism. Whereas Christians strongly influenced by Plotinus, such as Augustine, tended to merge the One and Intellect in their discussions of God, Sijistânî insists on the absolute transcendence of God, in terms which outdo even Plotinus's own denials of positive attributes to the One. In *The Uncovering of Hidden Things* (*Kashf al-Mahjûb*) – known only in a Persian translation – Sijistânî devotes the first chapter to a thorough explanation of this negative theology. He does

not merely deny that God is in time or place or has any attributes, and also that he has being. He also denies the denial of any of these predicates. God is therefore, for example, both not-in-time and not not-in-time. It is equally important (I.7) not to assimilate God to anything else, and not to strip him bare. With regard to any positive attribute of creature *A*, by saying that God is not-*A*, assimilation is avoided, and by saying that he is not not-*A*, stripping is avoided. But the two propositions must be put forward together, since 'God is not-*A*' on its own merely strips God, whilst 'God is not not-*A*' assimilates him. Sijistânî seems, then, to accept that double negation has its expected positive signification (*X* is not not-*A* = *X* is *A*) *except* where it is paradoxically asserted along with the single negation, as in '*X* is not-*A* and not not-*A*'. For him, only such paradoxical statements adequately capture divine transcendence. He has gone, then, even further in developing a negative theology than Eriugena, a century before in the Latin West (Chapter 3, section 7).

Sijistânî's negative theology was taken to its logical conclusion about fifty years later by another dâ'î, Hamîd al-Kirmânî (d. 1021). Kirmânî was a prolific writer, who transformed the Ismaili system of cosmology he inherited, based on the Neoplatonic hypostases of One, Intellect and Soul, into one much closer to Fârâbî's, with a first Intellect, and then nine subsequent Intellects processing or emanating in turn from the Intellect above them. Kirmânî adopted Sijistânî's double negative theology, but he was afraid that even it did not fully protect God's absolute unity from positive characterization. He therefore insisted that all human discourse about God, including proofs of God's existence, does not in fact have God as its subject, but rather the first Intellect. In theoretical, philosophical terms, we simply know nothing about God himself. We are not, however, plunged into the ignorance and practical atheism to which Kirmânî's extremism seems to lead, because God does intervene directly in worldly affairs through his prophets and his imams. Ismailism thus rescues the inevitable deficiencies of human language and reasoning.

To an extent, the characteristics of Ismaili philosophy are also evident in the *Letters* of the self-styled Ikhwân al-Ṣafâ' – the 'Brothers of Purity'. The *Letters* form a substantial encyclopaedia, which treats mathematics, logic, astrology, physics, cosmology and metaphysics. Almost everything about the origin of the *Letters* is obscure and disputed. They date almost certainly from the tenth century and are probably, as the plural 'Brothers' indicates, the work of a group of authors. But who were these writers? Although Pythagoreanism influenced them deeply, the metaphysical scheme they propose elaborates the Neoplatonic hierarchy favoured by Ismaili philosophers. Beneath God is Intellect and then (universal) Soul and, they add, beneath Soul there is prime matter. This emanation takes place outside time, but within time Soul, informed by the archetypes derived from Intellect, splits into countless souls, which give form to matter. By turning from the senses to reason, and from reason to spiritual knowledge, human souls are able, the Ikhwân believed, to liberate themselves from matter and re-ascend to the celestial world. But they cannot do so without the help of prophecy – and the account which is given of the cycles of history and the six prophets, all linked to astrological changes, underlines further the Ismaili character of the work.

Yet it can be urged that the Ikhwân do not think of an Imam as an infallible, necessary guide to salvation, in the way characteristic of all Shi'ites, including Ismailis: the community of 'Brothers', which the reader is invited to join, can serve this salvific role in his place. Moreover, the Letters often show such a detachment with regard to particular faiths and sects that their authors, although deeply Islamic in their background, might best be regarded as philosophical, rather than religious teachers. This detachment is especially evident in the most famous letter, which reports the case of the animals against humans before the King of the Jinn. Humans are denounced for enslaving, torturing and killing animals of all types: the representatives of the different sorts of animal contest the humans' view that they have been given mastery over all animals, urging the superiority of animals in their capacities and their social life. Although at the end the judgement is provisionally in favour of the humans, on the grounds that they alone are promised immortal life, the balance of the argument has been strongly in the animals' favour. This ambivalence is just one of the many marks of the authors' literary delicacy - evident, also, in their carefully crafted and never entirely sympathetic caricatures of the representatives of the different religions and sects current in tenth-century Islam - which contrasts so happily with the clumsiness of their philosophizing.

5 Avicenna

Abû 'Alî al-Husayn Ibn Sînâ (before 980–1037) – Avicenna, as he was known to the Latins – is the most important philosopher in the Arabic tradition. The course of philosophy in Islam over the following six or more centuries depended mainly on him, and he was also highly influential on Latin thinkers from the later twelfth century onwards.

Life and works

There are two points about the complicated story of Avicenna's life which have a very important bearing on the understanding of his philosophy. First, Avicenna was an eminent physician (author of a work which became one of the standard medical text-books in the Middle Ages) and he was employed by a succession of princes: although he had his disciples, he was not a schoolteacher, or a religious functionary, but an independent philosopher. Second, he was born in the Eastern extremities of Islam, near Bukhârâ, and spent most of his life in the region. This distance may have helped him to foster his independence from the philosophers of Baghdad. For Avicenna's relation to this tradition was an ambiguous one. He thought of himself very clearly as an Aristotelian thinker, and he treated Fârâbî as a respected predecessor. Yet, although the elements in his thought are similar to Fârâbî's, and some themes – such as the scheme of emanation – are taken from him, the outlook which emerges is very different.

The character of Avicenna's principal surviving works underlines the difference. Fârâbî's longer texts are mainly direct commentaries on Aristotle and synthetic works, drawing as much on Plato as Aristotle, often with a decided political emphasis. Avicenna devoted himself, especially, to producing a series of encyclopaedic accounts of the Aristotelian curriculum (but with little ethical or political material), re-thought and re-ordered according to his own conception of it. The earliest is his Philosophy for 'Arûdî (al-Hikma al-'Arûdîya), which contains sections on logic (including rhetoric and poetics), physics, metaphysics and natural theology. Between 1020 and 1027 Avicenna composed his longest surviving encyclopaedia, The Healing (al-Shifâ'), with sections on logic, physics, mathematics and metaphysics. It was through this treatise, especially the sections on the soul (from the physics) and the metaphysics, which were translated in full into Latin, that Avicenna exercised his enormous influence on Latin philosophy. There followed swiftly a briefer survey, The Salvation (al-Naiât), compiled mainly from earlier pieces and, probably from much the same period, a concise and simplified presentation of his thought in Persian, Philosophy for 'Alâ' al-Dawla (Dâneshnâme-ve 'Alâ'î), with sections on logic, metaphysics and physics (in this order). Avicenna's latest surviving comprehensive treatise is his Pointers and *Reminders (al-Ishârât wa-l-Tanbîhât)*, which treats logic, then physics, then metaphysics. Although comparatively brief, Pointers is anything but simple: as the title indicates, Avicenna does not spell out all his views, but gives advanced students directions to enable them to reconstruct for themselves what he believes to be the correct philosophical system. Pointers - unknown in the Latin West - was studied intensely by Muslim scholars down to the last century and became the object of a tradition of commentary and supercommentary (Chapter 9, section 3).

The circumstances of Avicenna's life, moving from court to court at a time of political instability which often resulted in war, led to the whole or partial loss of a number of his writings, including *Fair Judgement (Kitâb al-Inṣâf)* and a book probably called *The Easterners (al-Mashriqiyyûn)*. *Fair Judgement* (fragments of which survive) was, unlike Avicenna's other works, a detailed, and very extensive, commentary on the whole of Aristotle. Its existence underlines his place in a tradition of peripatetic commentators, but its singularity within the *oeuvre*, and the fact that Avicenna did not try to re-write it, points to his priorities. Avicenna's various references to his book on 'Eastern philosophy', to 'Eastern' principles, proofs and views, have led many modern historians of Islamic thought to believe that, as well as the broadly Aristotelian philosophy found in his known works, Avicenna also originated an Eastern philosophy that 'marks an important step in the direction of that intellectual universe dominated by Illumination and gnosis which was to characterize most of later Islamic philosophy' (Leaman and Nasr, 1996, 250). Although it is true that Avicenna would be used within this theosophical tradition, and important (see below) to recognize, by contrast with Fârâbî, a strong religious element in Avicenna's thought, his 'Eastern philosophy' is much more convincingly construed in a quite different sense. Avicenna was from the East, Khurasan, and at one stage in his career he seems to have used 'Eastern' to characterize his own thinking, which was based on Aristotle but did not hesitate to re-construct and correct him, as opposed to the dominant tradition of more servile Aristotelianism in Baghdad in the West. Moreover, Avicenna seems to have abandoned this tag by the end of his career, though not his attempt to re-think Aristotle whilst remaining a Peripatetic: in *Pointers* he carries through that project to its furthest limit.

Logic

Avicenna's logic neatly illustrates this whole approach to the Aristotelian tradition: receptive and yet independent. Whereas the arrangement of his material in the logical part of the Healing follows the division of the Aristotelian treatises as taught in the School of Alexandria, and gives full consideration to rhetoric and poetics (as in his earliest encyclopaedia), in his late Pointers the material from the different texts by Aristotle is integrated so as to lead naturally to the discussion of demonstrative syllogisms; all other considerations (including the matter of the Categories) fall out or into the background. In the Healing as well as in Pointers, Avicenna succeeds in uniting a treatment of hypothetical syllogisms (which, as in Boethius, but more clearly, remain arguments within term logic) with the treatment of categorical syllogistic. Avicenna brings out further the formal nature of the discipline, by rejecting Fârâbî's view that logic deals with meanings which are common to all peoples, by contrast with the words of particular languages. Rather, he says, logic is concerned with meanings of meanings, 'second intentions'. In the proposition 'Every human is an animal', from the logician's point of view the term 'human' is of interest not because of what it means, but because it is the subject of the proposition, and 'animal' concerns the logician because it is the predicate. Although the proposition is not written out as a formal schema, the logician is supposed to envisage it as if it were.

In his treatment of syllogistic, Avicenna does not, like Aristotle, begin by studying assertoric syllogisms and then go on to modal ones. Rather, he provides a unified discussion, in which assertoric syllogisms are treated as having their own modality, and he manages, by identifying the different ways in which modal qualifications can be understood, to achieve the coherence which eluded Aristotle himself in this branch of his logic. Of the six types of necessity which he distinguishes (*Pointers* I.4), two are of especial importance. The necessity of '(A) human being is necessarily a rational body' is substantial $(dh\hat{a}t\hat{i})$. Unlike the necessity of 'God exists', it is not absolute, since, as Avicenna puts it, it would be false in the case of any particular human that he or she is always a rational body (since no human exists at all times). But it is true that *while the human exists as a substance* (that is to say, as the substance it is: a human), he or she is a rational body. By contrast, the necessity of 'All moving things are changing' is descriptive (*wasfi*) rather than substantial, since when a stone, say, is still it is not changing, but it remains the same substance, a stone: the necessity applies just when the moving thing is in fact moving.

The distinction between substantial and descriptive interpretations can be used widely in analysing propositions. Sometimes, the same proposition is true or false depending on whether a *dhâtî* or a *wasfî* reading is followed. For example, 'All who sleep wake' is true as a *dhâtî*, since every type of animal which sleeps also wakes sometimes, but it is obviously false as a wasfi, since it is never true of something that it wakes at the same time as it is sleeping. As recent analysts have noted, by this distinction Avicenna achieves much the same as Abelard does (Study G) by his distinction between composite and divided senses: so, to take an Abelardian example, 'It is possible that the person who is standing is sitting' is true according to the divided/dhâtî reading, and false according to the composite/wasfi one. But, beneath the apparent similarity, there is a double contrast which deserves further investigation. On the one hand, Abelard's analysis, but not Avicenna's, aims to show how the same arrangement of words can express two different logical structures: the difference rests on how the elements are grouped structurally and not, as for Avicenna, on supposing different qualifications. On the other hand, as it will be argued in Study G, Abelard's fundamental view of possibility cannot be analysed in terms of how propositions are structured, and the dhâtîlwasfî distinction would not do it justice either.

Metaphysics

In his autobiography, Avicenna recounts an incident that has become wellknown. Although he had read Aristotle's *Metaphysics* forty times, and knew it by heart, he did not understand what was intended by it. Then, one day, an insistent bookseller pressed on him as a bargain a copy of Fârâbî's *On the Purposes of Metaphysics*: as soon as he read it, he grasped the purpose of the Aristotelian text he knew so well. Although historians have been puzzled by the story, since Fârâbî's text is so brief, a convincing explanation has recently been suggested (Gutas, 1988, 242–54; Bertolacci, 2001). Fârâbî's main concern is to explain that Aristotle's purpose in the *Metaphysics* was not just, as the tradition of Kindî took it to be, to talk about Being, in the sense of God, the Supreme Being, and the Neoplatonic hypostases: rather, according to Fârâbî, metaphysics is 'universal science' which studies what is common to all beings; Theology, the study of God, is a *part* of this discipline. Avicenna clearly followed this lead in his various treatments of metaphysics, but in his own way. His approach is indicated well by his argument (e.g. *Healing – Metaphysics* [HM] I, 1–2) that the subject of metaphysics cannot be God, because it is among the tasks of metaphysics to enquire into the existence and attributes of God, and no science can enquire into the existence of its subject, since it must be able to take its subject's existence for granted. By contrast, then, with Fârâbî, the study of being in general led Avicenna to his own way, strikingly different from that of the *mutakallimûn*, of setting out God's uniqueness and the dependence of created things on him.

Three, closely interconnected themes follow this path and determine Avicenna's re-thinking of Aristotelian metaphysics: his response to the problem of universals; his famous distinction between essence and existence; and his view of God as the only thing which is necessary in itself. At the basis of all three is the fundamental question posed by the project of studying being as being (and still recognizable as a starting-point to contemporary metaphysicians): what are to count as items in the universe, and what are their most basic divisions?

Although it can be reformulated in various ways (as an issue in semantics, or logic, or psychology), the problem of universals concerns whether, in addition to particular things (John Marenbon, this pearl), universals (human being, stone) exist. An important strand of the ancient argument, with which Avicenna was familiar (De Libera, 1999, 499–509 and ff.), goes back to Alexander of Aphrodisias (Chapter 2, section 3) and would be transmitted to the Latin tradition by Boethius (Chapter 3, section 1). It uses the idea of abstraction and common natures in order to try to maintain that there is a basis in reality for predication (as in 'John is human') without allowing that there is any universal thing which is both one and many: just as we can without error regard a line in abstraction from matter, even though outside thought a line cannot exist except in matter, so it is possible to consider in abstraction the nature which John has in common with all other humans, even though this common nature cannot exist except as a concept or as the nature of a particular human.

Avicenna's development of abstractionism (*HM* V.1–2) is unusually sophisticated and successful. His point of departure is that universals, which are one and many, exist only as concepts; but this, he will show, does not prevent there from being real common natures of things. He argues that we can consider something, John Marenbon, for instance, just from the point of view of its nature – his being a human. In doing so, we must not, he says (*HM* V.1.9) add anything external which would make our consideration twofold. By this Avicenna means that we should not be considering whether this nature is universal or singular – whether it is such that the concept ($ma'n\hat{a}$) of it can be predicated of many things (as, in fact, it can) or not. As he puts it (*HM* V.1.4): 'The universal is one thing *qua* (*min ḥaythu*) universal, and another thing *qua* thing to which universality attaches'. The definition of, for instance, 'horseness', is not the same as and does not include universality in it, although the concept of horse can indeed be predicated of many. If we ask about this common nature, horseness, we should deny that it is either one or many, and that it either exists only in the mind or as a concrete thing.

But is this not a contradiction? Avicenna holds that the disjunctions 'one or many' and 'in the mind or as a concrete thing' are each equivalent to 'A or not-A': they are exhaustive of everything: how, then, can these disjunctions be denied of horseness and other common natures? Avicenna answers this problem by explaining (HM V.1.5) that he is not asserting 'Horseness qua horseness is not A or not-A' but rather 'Qua horseness, horseness is not A or anything else'. His point is that 'Horseness qua horseness' might be taken as a referring expression, picking out some particular sort of object, *B*, and that, if this were the case, it would be a matter of logic that B is A or not-A. In fact, however, the referring expression is 'horseness', and the 'qua horseness' indicates the aspect under which alone it is to be considered: that of its being horseness. Considered under this aspect, any affirmation about 'horseness' other than that it is horseness is false (compare: 'qua author of this book, the author of this book is not male or female'). And the same reasoning underlies Avicenna's response (HM V.1.9) to what might seem to be a trap for his theory of universals, which would make him commit himself to a realism he wants to avoid. Is the humanity of John, qua humanity, other than that in Peter? The answer must, of course, be negative, since humanity qua humanity identifies a common nature. But does it not follow that there are then two humanities which are numerically one, and so something that is both one and many? No, says Avicenna: the negation is absolute. Qua humanity, the humanity of John is humanity and nothing else at all, and for this reason it is wrong to affirm that it is different from the one in Peter; and yet it does not follow that it is not different and so numerically one with Peter's humanity.

Avicenna thus envisages common natures or, as he sometimes calls them, essences or quiddities ($m\hat{a}hiyy\hat{a}t$) which, considered in themselves, are neither universal nor individual; although, it should be stressed, he does not thereby commit himself to there being any more items in the world than things, which are particular, and the mental concepts of them, which can be universal – he has merely explained a certain veridical way in which things can be regarded. There is indeed another, apparently highly realist, strain in Avicenna's thought, developed when he discusses intellectual knowledge, which may seem to clash violently with this solution to the problem of universals: in fact, as will be explained, the two approaches cohere with and strengthen one another.

Avicenna's treatment of universals complemented another strain of thought that developed against a background very far from Alexander of Aphrodisias's neo-Aristotelianism (Wisnovsky, 2003). Among the *mutakallimûn*, there was a great controversy surrounding the question of whether there are non-

existent things. At stake was the status of mental concepts of universals, of purely imaginary entities (such as unicorns) and impossible ones (such as square circles). The Mu'tazilites held that universals and unicorns, which are concepts in the mind alone, are non-existent things; whilst impossibles, such as square circles, are non-existent and not even things. Most of the Ash'arites and other Sunni theologians, however, did not regard concepts as things. For them, existing and being a thing were identical. This controversy also touched the philosophers. Fârâbî had, with some qualifications, accepted the Mu'tazilite view that 'thing' has a wider reference than 'existence', and Avicenna seems to side with the other Sunnis, since he holds what can be called the 'co-extensionality thesis': that 'thing' and 'existent' are co-extensive. But there are two very important differences. Avicenna, like the Mu'tazilites, considered mental concepts to be things, and so, given his co-extensionality thesis, he defended a view about them which differed from those of both the Mu'tazilites and of their theological opponents: he held them to be existing things. (The table below shows the different positions.)

	<i>Mu'tazilites</i>	Ash'arites, etc.	Avicenna
Particular objects	t e	t e	t e
Concepts: universals	t ~e	~t~e	t e
Concepts: imaginary	t ~e	~t~e	t e
Impossibles	~t ~e	~t~e	~t~e

Key: t = thing; e = existent; ~ = not

Morever, although Avicenna held the co-extensionality thesis, he argued that 'thing' and 'existent' differ in their intension: it is not the same to talk of something's thingness as to speak of its existence.

What, then, did he mean by 'thingness'? The synonyms which he also used at times for it help to indicate the answer: 'truth', 'nature' and *mâhiyya*, literally 'what-ness' or 'quiddity' or, as it is most commonly translated, 'essence'. Something's thingness or essence is what distinguishes it as one sort of thing rather than another – a human as opposed to a horse, for instance. Despite its origins in *kalâm* dispute about non-existing things, Avicenna's distinction, which both the Islamic tradition and that of Latin philosophy would label as that between essence (*mâhiyya*) and existence (*wujûd*), turns out to fit into a different area of discourse. Avicenna's willingness to count concepts as existent things, his acceptance of the co-extensionality thesis, defused rather than continued the argument among the Islamic theologians. With regard to the question of what sort of items there are, the answer is straightforward: there are things/existents, some of which are concrete objects, others of which are mental concepts. But, in a manner that dovetails with his thought about common natures, Avicenna's distinction shows how any particular member of a natural kind can be regarded in two ways, which have a basis in the nature of things: as something of a certain sort (a human, a horse), and as something that exists. Existence is *not* thereby made an accident of essence, as some interpreters of Avicenna, both modern and from the Latin Middle Ages, have read his theory: it is impossible that there could be a non-existent essence (there could be a mental concept of a certain sort of thing that did not exist as a concrete particular; but Avicenna would consider the concept to exist). The distinction between essence and existence, none the less, provided Avicenna with a way of founding his theory of God's necessary existence.

This theory, however, had its own, different origins. Throughout his work, Avicenna was keen to propose a two-fold division of all things (e.g. HM I.6) into that which considered in itself does not exist necessarily and so is a possible existent (if it were impossible, it would not be an existent at all) and that which considered in itself does exist necessarily. Avicenna considered that the inter-linked concepts of necessary, possible and impossible were primary notions which we can, and can only, grasp directly, and so they cannot be properly defined in other terms. None the less, he recognized the need to try to explain what he meant by them. The most obvious Aristotelian way to explain the meaning of 'necessarily' in this distinction would have been by using his 'statistical' model of modality (Study A), according to which what is necessarily true is what is true at all times. But Avicenna followed the Peripatetic tradition and Fârâbî, and went against Kindî and the theologians, by holding that the world is eternal, in the sense of lacking a beginning (and even the mutakallimûn envisaged something - God's attributes - other than God and yet eternal in this way). Since Avicenna intended his distinction to separate God from all other things, he therefore characterized necessity in another way, also suggested by the Aristotelian tradition: an existent necessary in itself has no cause, whereas a possible existent does have a cause. Avicenna held that this distinction is absolute: nothing which has a cause is necessary of itself, because it requires its cause. Anything which is not necessary but merely possible in itself owes its existence to a cause. Given the cause, its existence is necessary too, but it is necessary from another, not of itself. The distinction between essence and existence supports this view very naturally (cf. HM VIII.4-5), since something exists necessarily just in case its essence is to exist. Only in this case does the mere fact of what the thing is (its whatness or essence) explain the fact that it exists.

Avicenna was thus able, in a way that would be taken up by both Islamic and Christian theologians, to mark the difference between God and his creation. He was not in any way unusual among Islamic philosophers or theologians in wishing to mark this distinction. But the usual way of doing so, among the Mu'tazilites and within the Neoplatonic tradition, had been by negative theology. Sijistânî and Avicenna's contemporary, Kirmânî take this approach to its extreme. Possibly Avicenna was influenced by the Ash'arite turn against the negative description of God, and very possibly also by the fact that Aristotle himself, by contrast with the Neoplatonists, has no place for negative theology. Although, then, Avicenna is at pains to stress divine uniqueness, one of the results of his metaphysics was to have made God, in a certain sense, describable. But this does not mean that he anthropmorphized God. On the contrary, a feature of Avicenna's philosophy which would be criticized by Islamic and Christian theologians alike was that it stripped God of his freedom and will, and it did not allow him knowledge except of universals. Avicenna's God, though an efficient as well as final cause is hardly less remote than Aristotle's Intellect rapt in self-contemplation. He is, Avicenna is sure, a creator, but not a creator who creates at a time or who decides of his free will to create.

The soul and intellectual knowledge

Despite the importance he attached to metaphysics, Avicenna was even more centrally concerned with the soul, the subject of his first philosophical composition, a *Compendium on the Soul*, and of what was probably his last, the little treatise *On the Rational Soul*. Avicenna constructed his theory of the soul within the context of a Fârâbîan scheme of emanation, adapted and made more coherent, so that the Active (Agent) Intellect, the last of the hierarchy of Intelligences, is responsible for the forms *and* matter of the sublunar world (cf. Chapter 4, section 3). None the less, the direction of his thinking turns out to be very different from Fârâbî's.

Avicenna is guided by two central ideas, both of which are opposed to Fârâbî's views and, though Avicenna would not have thought so, to Aristotle's. The first is that human souls - that is to say, the intellectual part of them which is alone distinctively human - are by nature immortal. That does not mean that they have always existed: Avicenna strongly resists the view espoused by Ismaili thinkers, reminiscent of Platonic metempsychosis, whereby individual souls derive from a universal soul. Rather, he thinks that human souls derive from the active intellect and are emanated by it into a bit of suitably-prepared matter, but they are incorporeal and survive the body's death. This position comes at the end of a long tradition of Neoplatonic Aristotelian commentary which prepared the ground for a theory of the soul's immortality by the way in which they interpreted Aristotle's view that the soul is related to the body as form to matter (Chapter 4, section 2). The commentators, followed by Avicenna, concentrate on suggestions in Aristotle that the soul is not just the body's formal cause, but also its efficient cause; whereas a formal cause is tied to that which it causes, an efficient cause can exist separately from it (Wisnovsky, 2003, 21–141). Avicenna produces a battery of arguments (Healing: On the Soul, 5.4) to show that the intellectual soul not only can, but *must* be immortal. The most sweeping is to the effect that the soul is incorporeal and simple (non-composite); its simplicity entails that it cannot contain, as well as the actuality of continued existence, the possibility of being destroyed. Therefore, since it does actually exist, it must continue to do so.

Avicenna's second guiding idea is that the soul engages in intellectual thought only by means of joining with the Active Intellect and receiving an intelligible form from it: in a sense, then, it does not do its own intellectual thinking. The soul as it exists in a new-born baby is what Avicenna calls 'material intellect': it is pure potentiality. From the Active Intellect it acquires, first of all, the primary notions, such as the ideas of the possible and necessary mentioned above. The structure of these notions gives it the basic tools for logical thinking. The complex and difficult process of human cogitation, putting thoughts together and framing syllogisms, is a physical process in the brain and involves finding appropriate images: it serves to prepare the human intellect to conjoin with the Active Intellect and actually think a thought. Through this pattern of cogitation and conjunction, the soul becomes more and more able to conjoin with the Active Intellect. Avicenna denies that there is any memory for thoughts, and he insists that humans can only think that one thought at a time. But a human intellect does not need to go through the process of cogitation again in order to think a thought it has previously thought: it can simply conjoin at will with the Active Intellect to think this thought. Eventually, as the intellect gains this capacity with regard to more and more thoughts, it becomes like an eye which has been restored to health: it can see whenever it wishes, although that does not mean that it is always seeing.

There seems to be a tension, even an incoherence, in Avicenna's account of intellectual knowledge, and the way in which it relates to his view of universals. On the one hand, there is a bottom-up approach, which begins from sensible particulars and arrives, through abstraction, at concepts (it is particularly prominent in the presentation in *The Salvation*). It fits in well with Avicenna's abstractionist theory of universals. On the other hand, there is the top-down approach, emphasized in the Healing according to which intellectual knowledge comes directly from the Active Intellect and his abstractionist theory of universals. But these two sides of Avicenna's thinking can be reconciled. The pure forms in the Active Intellect do not pose the ontological problems of the universal things, both one and many, which a realist posits: they are concept-like, although they are not reached by abstraction. (They are indeed, according to Avicenna's scheme, things – but just because all concepts, indeed all existents, are things.) From the epistemological perspective, there needs to be an explanation for what a grasp of forms in the Active Intellect offers which is not provided by the universal concepts gained through abstraction. Although Avicenna does not address this question, his presentation makes the answer fairly evident. Abstracted universals are grasped very near to the beginning of the process of understanding; the pure forms in the Active Intellect only at the end of it. In between, there is the complex, drawn out process of cogitation, involving scientific, syllogistic reasoning. It would seem, then, that whereas someone who has abstracted the universal Dog, for example, has a basic grasp of what dogs are, so that he can begin reasoning about them, the person who intellectually understands Dog by conjoining with the Active Intellect and receiving from it the intelligible form of Dog has a full scientific knowledge of dogs. An analogy – suggestive rather than close - might make clearer what seems to be Avicenna's idea. Suppose, nowadays, there existed a complete textbook of physics which, because of the difficulty of the subject, was written in terms that were completely incomprehensible to the ordinary, unprepared reader. For each topic, learners might, first of all, and quite easily, grasp the basic meaning of some of the fundamental concepts - weight, mass, momentum, for instance. After months or years of study, in which they reasoned about the interrelation of the concepts and perhaps carried out experiments concerning them, they would be in a position to read the relevant chapter of the text-book with understanding, and once they had read it, they could return to it directly whenever they needed, and grasp what it said, without having to repeat their previous reasonings and experiments.

Prophecy and the after-life

For some people, however, the lengthy process of cogitation can be avoided. They have the gift of intuition (*hads*), which enables them to establish conjunction with the Active Intellect without preparation and find the middle terms and conclusions of syllogisms effortlessly and without the possibility of error. Avicenna clearly believed that he himself was gifted in this way. His own account of his astonishing progress in philosophy, mostly self-taught, and his very explicit boldness in judging the ideas he read and reaching his own conclusions are not so much (or not only: Avicenna was by no account a modest man) boasts as illustrations of the workings of intuition.

Intuition is a particularly important concept for Avicenna, because he uses it to explain prophecy. The prophet is simply someone who has insight to the highest degree, even higher than Avicenna himself. He can simply gain at will from the Active Intellect any sort of intelligible forms and instantly grasp whatever syllogism he wishes. This intellectual ability may also be united with an imaginative ability, nearer to that described by Fârâbî, for presenting these thoughts in the form of images.

Human souls, Avicenna believes, are immortal, and he makes sure to include a rationalizing account of their rewards or punishments in the afterlife, very different from the physical Paradise and Hell of Islamic theology, but on analogous lines. For the person who has perfected his intellect in this life, the death of the body permits his soul to enjoy uninterrupted conjunction with the Active Intellect. Avicenna suggests lesser degrees of reward, or punishment, for other sorts of soul – including a form of punishment experienced by souls which find that they cannot achieve the intellectual fulfilment they desire, because they have neglected to improve their intellects through cogitation and now they are disembodied are no longer in a position to cogitate. In some places he suggests a state of near extinction in the after-life for the souls of people who led simple, entirely unintellectual lives. But he also sketches out a strange theory whereby simple believers in the Islamic theology of salvation and damnation are enabled to experience imaginatively the very rewards and punishments that a literal reading of the Scriptures promises them.

Avicenna's theory of the soul, prophecy and the after-life brings out more clearly than anywhere else how sharply opposed was his overall outlook to Fârâbî's, despite superficial similarities. Despite the apparatus of the spheres, the Intelligences and the Agent Intellect, Fârâbî tries to explain human thinking in its own terms, whereas Avicenna drains humans of the power to do anything but prepare themselves for thought in the highest sense. Fârâbî offers a naturalistic explanation of prophecy, which bears out his view that the prophets' messages are no more than popular expositions of truths which are best gained through scientific investigation, in which prophets have no special skill. For Avicenna, by contrast, prophets are endowed with almost super-human abilities of thought - which is, for him, conjunction with the Active Intellect. And whereas there is great room for scepticism as to whether Fârâbî really acknowledged any notion of an individual after-life for humans. Avicenna argues at length for the immortality of the soul and eternal reward or punishment. It is not therefore surprising that, though some of the Aristotelian features of his thought would be strongly attacked, Avicenna's system would become the basis for a thoroughly Islamic philosophy, in which the features of kalâm and the Aristotelian tradition within Neoplatonism were harmoniously combined (Chapter 9, section 3).

6 Ancient philosophy, logic and metaphysics in the eleventh-century Latin West

For the historian of philosophy, Latin Europe of around the year 1000 presents a stark contrast with Islam at the same period. The tenth century was a bad time for cultural life, as the Carolingian Empire disintegrated and towns and monasteries were attacked by Norsemen. Intellectual activity was mainly confined to a few great monasteries, and Latin philosophical thinking moved within a narrower circle than before or afterwards. None the less, some interesting developments were taking place in the tradition of commenting on the late ancient philosophical texts, in logic and – in connection with doctrinal controversy – even in metaphysics.

TRADITIONS APART

Commenting on ancient philosophy

The tradition of glosses and commentary on late ancient school-texts begun in the mid-800s (Chapter 3, section 8) continued through the tenth and eleventh centuries. The most interesting of the discussions were about Boethius's *De consolatione Philosophiae*, especially the hexameter poem (Book III, m. 9 'O qui perpetua . . .') which is placed centrally and provides, in the form of a prayer, an epitome of central themes from Plato's *Timaeus*. The early medieval commentators were struck by the discrepancy between Boethius's Christian belief - they also studied his Opuscula sacra - and the tenor of this metrum, which not only avoided specifically Christian language and ideas, in the same way as the rest of the Consolation, but seemed to endorse views that were definitely contrary to the faith, such as the existence of a World Soul and the re-incarnation of human souls. Remigius of Auxerres' approach (Chapter 3, section 8) was to treat Boethius's language as allegorical. He was disguising a Christian message, Remigius believed, in a dress that seemed to be pagan. So Philosophia was equated by Remigius with the Biblical figure of Wisdom (Sapientia) – an interpretative move already anticipated by Alcuin (Chapter 3, section 6), and probably in the miniature which seems to have been part of the edition prepared by Cassiodorus. Similarly, the passage on the World Soul discussed by making an analogy between the microcosm of a human being and the macrocosm of the universe, so diffusing its unacceptable implications.

Remigius's commentary was popular and much revised. But a little later, Bovo, abbot of Corvey (d. 916), wrote a short commentary just on Book III, m. 9 in which he directly refused to follow this Christianizing reading. He recognizes that Boethius had written the *Opuscula sacra* on matters of Christian faith, but he considers that in the *Consolation* Boethius wanted to teach the doctrines of the philosophers and said much that went against the Christian religion. Using Macrobius's commentary on the *Somnium Scipionis* as his source-book for Platonism, Bovo is able to reconstruct rather accurately the ideas from the *Timaeus* alluded to in the poem. There is another commentary, from roughly the same period as Bovo's, which also gives a straightforward Platonic reading of this metrum and uses the translated text of the *Timaeus* itself in the process.

Logic and metaphysics

Before the turn of the millennium, logicians had moved beyond the stages of Eriugenian speculation on the *Categoriae decem* and sober assimilation of this text and the *Isagoge*: now they began to grasp the whole of the *logica vetus*. The two leading logicians of the time were Gerbert of Aurillac and Abbo of Fleury. Their life stories present contrasting models. Abbo, typical of many scholars of the ninth and tenth centuries, spent his days, from shortly after his birth (*c.* 945) until his death (1004) as a monk – mainly at Fleury, a

monastery on the Loire which, from its manuscripts and their glosses seems to have been a centre for studying logic in the tenth and eleventh centuries. Gerbert, though a monk too, was also, like so many of the thinkers of the eleventh and twelfth centuries, master of a Cathedral School (in the 1070s and 1080s) – that of Rheims, where he included in his lectures Boethius's logical monographs, along with the *Isagoge, Categories* and *On Interpretation* (these constitute the *logica vetus*), and he knew Cicero's *Topics*.

Gerbert's only surviving logical work is a rather strange one. As its title - De rationali et ratione uti (literally: 'About rational and to use reason') indicates, the problem he sets out to discuss, brought up by students of the Isagoge (chapter 'On the common features of genera and differentiae'), is about the two terms 'rational' and 'to use reason'. We say, 'That which is rational uses reason'. But is this proposition not untrue, since in it we are predicating of something with a wider extension something that has a narrower one (since not all rational things are actually using reason)? By going through the types of predication and the ways in which 'act' and 'potency' can be used, Gerbert is able to to show how those contemporaries of his who had been disputing about this passage were using scraps of logical knowledge out of context. He throws in a good deal of extra knowledge for good measure - he has been reading Boethius on the Isagoge and on On Interpretation, including the untypically Neoplatonic passage, setting out a metaphysical hierarchy of intellectibles, intelligibles and natural things, at the beginning of the first commentary to Porphyry.

Gerbert was something of a polymath, interested and well-read in the Latin classics and exceptionally knowledgeable as a mathematician and astronomer, and, unlike most great scholars, he was honoured with the highest offices, becoming Archbishop and finally Pope. Abbo, though less celebrated, may be the more interesting logician. He wrote introductions to categorical and to hypothetical syllogisms. Categorical syllogistic is the Aristotelian theory of syllogisms, which early medieval writers knew from two main types of source: on the one hand, Boethius's two monographs (Chapter 3, section 1); on the other hand, Apuleius's Periermenias (Chapter 2, section 8) and the encyclopaedic accounts (Isidore, Cassiodorus, Martianus) wholly or partly dependent on him. Abbo was the first, and the last, medieval logician to compare the two expositions. In discussing hypothetical syllogistic, he made a philosophically more important juxtaposition. His main source was Boethius's treatise on the subject, but he reproduces, from Cicero, an account of stoic inference patterns which, unlike Boethius's hypothetical syllogisms, is genuinely propositional, and he also uses Boethius's De topicis differentiis, anticipating the way in which Abelard would combine material from these two Boethian textbooks as a starting-point for his propositional logic (Chapter 5, section 2).

The most interesting discussion of logic from the next generation comes from an unlikely source. Peter Damian (1007–72) was an ascetic, who strove

to discourage his fellow monks from giving too much importance to secular learning, including logic, when all that they need to know can be found in the Bible. Yet his own treatise De divina omnipotentia ('On Divine Omnipotence'), which used to be caricatured as suggesting that God is not subject to the law of non-contradiction, turns out to be one of the most adventurous logical discussions in the period before Anselm, and it shows that Damian, whatever his strictures on others, had been studying Aristotle and Boethius. The starting point is a comment of Jerome's: 'God can do everything, but he cannot restore the virginity of a girl who has lost it.' This vague remark raises three distinct sorts of problem: (1) How is God's omnipotence to be defined? (2) Could God restore the girl's virginity? (3) Could God undo the past, and make what has happened not have happened? The answers to the first two questions are fairly straightforward. For God (§4) to be omnipotent means that he can do whatever he wills; he cannot will to do evil, however, but this, says Peter, somewhat avoiding the issue, is not a lack of power but the result of his superabundant goodness. Although there are many cases, Peter argues, where it accords with God's best providence that a girl's virginity be lost, it cannot be ruled out that restoring it could be good, and in that case it is something God could do; all that is involved is a physical miracle

(3) is much more difficult. At first (), Damian points out that, although there are many everyday events which might or might not happen (I may or may not see my friend today), if we consider the 'way in which statements entail one another' (consequentia disserendi), then there is no openness to one or another outcome (ad utrumlibet). He means, as he explains, that 'if it will be that it will rain, then it is entirely necessary that it will rain, and for this reason it is completely impossible that it does not rain.' This principle applies to past, present and future: 'It is necessary that everything which was, was, and in the same way everything which is, while it is, is necessary to be, and it is necessary that everything which will be will be.' As his inclusion of the past and future indicate, Damian is certainly not talking here about the Aristotelian necessity of the present. At first sight he might seem to be mistakenly drawing the conclusion that, because 'If x was/is/will be the case, then x was/is/will be the case' is a tautology and so necessarily true, then, if x was/is/will be the case, x was/is/will *necessarily* be the case. In fact, what he goes on to say suggests that, on the contrary, in his own way he is noticing that an inference of this sort would not be valid.

The point he has just made about the necessity of the past, present and future, he explains, merely concerns 'the art of dialectic': it is just a matter of how words follow one another, and it has nothing to do with power and matter of things. It is very wrong, he says, to use such an observation about verbal logical necessity to restrict what God can do, especially since it would make him powerless to alter, not just the past, but the present and the future too – and Damian does not miss the opportunity to deprecate the study of logic, describing it as childish and worldly. What does Damian mean when he characterizes the necessity he had described as purely verbal? It seems that he recognizes implicitly, as Boethius (arguably) did not (Chapter 3, section 1), the weakness of arguments for determinism which stem from mistaking the necessity that one proposition is entailed by another for the necessity of one of the propositions, but that he lacks the apparatus to make the distinction between the scopes of necessity operators (wide-scope: necessarily, if p, then q; narrow-scope: if p, then necessarily q) which would explain why the inferences these arguments use are invalid. Instead, he falls back on the strategy of accepting the reason but describing it as purely to do with words and not reflecting on reality, and particularly not on the power of God.

But Damian has not yet solved his main problem. Although in one sense the future is what will happen, just as much as the past is what has happened, there is an important distinction: it is possible to affect now what, in fact, that future will be, in a way that it is not possible to affect the past. Damian rightly sees that God's power is in no way restricted by saying that he cannot make what is future not take place, because whatever does actually take place is the future. But to insist that there is no threat of determinism in the fact that whatever actually has taken place is the past does not offer any easy explanation of how God could *alter* what is past. Damian saw that he needed to do more, because he goes on (\$\$-10) to propose another idea. Echoing the language of Boethius's Consolation (Study A), he explains that God grasps all things, past, present and future, in a single glance. Since all time is present to God, his power extends to everything past and future, and all these things are not past or future, but present to him. Boethius had been putting forward a theory about divine prescience, however, whereas Damian is talking about God's power to influence the past. His point seems to be that nothing is past from God's perspective. God's power to determine events is the same, whether they are past, present or future to us, since they are all present to him. If I were to ask whether God can, now, make it that I was in Cambridge yesterday morning (time t), when in fact I was in France then, Damian's answer would be that I have put the question in a misleading way, because temporal indicators, such as 'now', do not apply to God's actions, though they do apply to what is brought about by them. If God so willed, God could, in his eternal present, make it so that I was in Cambridge at time t. (Note that this way of thinking suggests that Damian is nearer to an idea of synchronic modalities than most writers before Scotus (Study L).)

Some of the sharpest eleventh-century thinking about metaphysics was stimulated by the controversy in the 1060s and 1070s between Berengar and Lanfranc over the Eucharist. According to Christian belief, in the Eucharist the consecrated bread and wine become the body and blood of Jesus Christ. What does 'become' mean? Berengar, though not rejecting some sort of spiritual presence of Christ's body and blood, held in his *Rescriptum contra Lanfrannum* ('Reply against Lanfranc') that the bread and wine are to be understood as signs, and not as what is signified. In his De corpore et sanguine Domini ('On the Body and Blood of the Lord'), Lanfranc had argued – as Catholic and Orthodox Christians believe, indeed, today - that the bread and wine really turn into Christ's body and blood, although they continue to look, feel and taste like bread and wine. It was Berengar, rather than Lanfranc himself, who put Lanfranc's position into the language of Aristotle's Categories, although he did so in order to expose its weakness (Berengar, 1988, 138, 158–9). Clearly, in Aristotelian terms, a real Eucharistic presence of the sort envisaged by Lanfranc must involve a change of substance, and a continuity of accidents, since it continues to appear that there is bread and wine on the altar. There are two ways in which this continuity of accidents might take place. Either (1) numerically the same accidents, which accounted for the appearance, taste and feel of the bread and wine, could become the accidents of the body and blood; or (2) a set of accidents of exactly the same kind as those which accounted for the appearance, taste and feel of the bread and wine, but not numerically identical, could become the accidents of the body and blood. Berengar argues that, whilst (2) would be possible - God can create accidents and attach them to whatever substance he wishes, what happens in (2) is not rightly described as the bread and wine on the altar being changed into the body and blood of Christ. Rather, in (2) the bread and wine ceases to exist and is replaced by the body and blood of Christ which are made, miraculously, to look like bread and wine. By contrast, (1) – a real change of body and blood to bread and wine - is impossible, Berengar believes, even for God. His reason, although it is not spelled out, lies in his view of accidents: interpreting Aristotle plausibly, but differently from most twelfth-century thinkers, such as Abelard (Chapter 5, section 2), Berengar considers that accidents are individuated by the substances to which they belong. This bread's whiteness (w1) is distinguished from other particular whitenesses just in virtue of belonging to this loaf. It is a contradiction to suppose w1 can be transferred into being an accident of something else, X, which would then become white in virtue of it. If X becomes white, it will be white by a particular whiteness, w^2 , numerically different from w^1 , though exactly similar to it.

7 Anselm

Anselm is one of those brilliant thinkers, idiosyncratic and yet universal in their interests and importance, who seems to be almost independent of his historical and intellectual milieu, not because – as with Eriugena – he had access to sources unknown to others, but rather because of his apparent indifference to authoritative texts and traditions. His dialogues and treatises appear to be addressing afresh, guided only by the light of their author's own brilliance, the most serious philosophical problems which face a Christian. Of course, this impression is misleading. On inspection, Anselm's careful reading of the *logica vetus*, Boethius and Augustine is apparent; on close inspection, his links with the logical and semantic debates of his time become evident. Yet Anselm clearly had the rare ability to hit on ideas and formulations which retain or even increase their fascination and importance out of context – as his famous so-called Argument (christened 'ontological' by Kant) shows so strikingly (see Study D).

His writings and their themes

When Anselm wrote the first of his philosophical works, the Monologion, in 1075-6, he was already in his early forties. He had been born in Aosta, a town in the North Italian Alps, in 1033. Leaving home in his 20s, he came to study with Lanfranc at Bec, becoming a monk there in 1060; he would go on to be Abbot and, in 1093, to succeed Lanfranc as Archbishop of Canterbury. The Monologion already shows the hallmarks of his approach. Without recourse to authority, whether scriptural or patristic, Anselm proposes arguments to show that God exists, that he has the various perfections (goodness, justice, simplicity, eternity and so on) and that he is triune. (Anselm shares with Augustine the view, rejected by Aquinas and most later medieval theologians, that the doctrine of the Trinity can be known by reasoning, not just through revelation.) The Proslogion (1077-8) argues for the same conclusions, but more neatly and powerfully, with very little emphasis on divine triunity. Anselm went on to compose, between 1080 and 1086, three philosophical dialogues. In De veritate ('On Truth'), Anselm explores a concept of truth which includes the straightforward sense (Chapter 2) in which a proposition is true when things are as it states them to be, but is much broader, because he roots truth in his idea of *rectitudo* (rightness), and he attaches to it his interpretation of *iustitia* (justice) as rightness of the will. The second dialogue, De libero arbitrio ('On Freedom of the Will'), is also framed around these concepts, since free will is, he argues (Chapter 13), not a matter of being able to choose between alternatives (God and the good angels lack this freedom), but rather the power of preserving rightness of the will for its own sake. The third dialogue, on the fall of the devil (De casu diaboli), puts these notions to the test in analysing the moral psychology of Lucifer's rebellion: how could an angel's will, itself a good thing, abandon justice and choose evil rather than good? Probably at this time Anselm wrote his De grammatico (the title is untranslatable: see below), the one work of his - along with some *Philosophical Fragments* – which explores problems in logic and semantics without an immediate theological aim.

Of Anselm's later works, which are more explicitly directed to problems of Christian doctrine, the most important are *Cur Deus homo* ('Why did God become a Human?', 1095–8), and *De Concordia*, written in 1107–8, just before his death in 1109. *Cur Deus homo* seeks to demonstrate to anyone who accepts certain basic assumptions common to Jews as well as Christians that

God must have become incarnate and been put to death. God's providential plan, which is flawless, intends that some humans be saved (to replace the fallen angels). But, by original sin, humanity harmed God in ways that it cannot make good, since humans already owe God, as their creator, complete obedience; moreover, the gravity of any disobedience to God is so great that nothing merely created could be recompense for it. How, then, is 'satisfaction' to be made, as it must be if the divine plan is to be fulfilled? By a human, because it is for human sin. But by God, because only God can provide sufficient satisfaction. Hence the need for the sacrifice of God to himself. In his final work, *De concordia*, Anselm moved back to themes more familiar to him. Its full title 'On the compatibility of God's foreknowledge, predestination and grace with human freedom' explains its subject, which combines the topics of *De libero arbitrio* and *De casu diaboli* with the specifically Christian doctrine of grace.

Perfect-being theology

Anselm's most famous work, the Proslogion, is often considered to be presenting a proof that God exists, and the Monologion is envisaged as an earlier, less satisfactory attempt at the same goal. Since Anselm makes clear that the ability to formulate such arguments is granted only to someone who already believes in the Christian God, there can seem to be a circularity about his stance, which has led some commentators to suggest that he is not in fact trying to offer a proof at all. It is more profitable, however, to recognize that proofs of God's existence can be 'thinner' or 'thicker'. A thin proof attempts merely to show that there is some first cause and/or perfect being, without examining what is its nature (Aquinas's 'five ways', taken in isolation, are examples: Study H); a thick proof is designed to show that a supreme being with a certain set of attributes exists. Anselm wishes to provide thick proofs. As he puts it in the Monologion (Anselm, 1946, 13:5–10), he believes that he can show 'by reason alone' to someone, supposing he did not know, not just that 'there is one nature, the highest of all things that are', but that this nature is 'alone sufficient for himself in his eternal happiness' and it is he who 'through his omnipotent goodness grants and brings about that all other things are something and that they are in some way well' and also shows 'the many other things that we believe to be necessarily the case about God and his creation.' The Monologion and Proslogion are extended exercises in perfect-being theology: the working out of what must be the nature of an omni-perfect being, and they are more single-minded and tighter than anything Anselm could have found in Augustine and Boethius. Although Anselm talks in terms of arriving rationally at positions already held by faith, the rational investigation, as he conducts it, involves thinking carefully about what makes an attribute a perfection, and about how each perfection should be understood when applied to God and how, despite appearances they can be compatible. A test of Anselm's arguments is whether they yield a God with the set of perfections which, by doctrine and intuition, the Christian believes he has; but passing this test does not exhaust their purpose, which is to provide an analytical understanding which the believer previously lacked.

Anselm's main tool for perfect-being theology is what might be called the Principle of God's Necessary Perfection, which can be gathered from Monologion 15 and Proslogion 5. If F is a non-relative attribute, and it is better to be F, all other things remaining the same, than not to be F, then F is a perfection; and, if F is a perfection, God is F. In the *Proslogion*, this Principle is linked to a principle which Anselm had not hit upon when he wrote the Monologion. God is 'that than which nothing greater can be thought'. This formula is closely linked to the Principle of God's Necessary Perfection. If X lacks any perfection, then - provided all perfections are compatible - something greater than X can be thought, and so X is not God. The formula is probably what Anselm is referring to when he explains in the Proslogion (Anselm, 1946, 93:4-9) that here, by contrast with the Monologion, he is using a single *argumentum*, since the formula not only allows him to establish God's attributes but also – what he had had to prove separately in the earlier work - God's existence. But the formula needs to be elaborated in terms of the Principle in order to yield a definite set of divine attributes.

By the Principle of God's Necessary Perfection it is easy to show, as Anselm does in the Proslogion, that God is the maker of all things from nothing, and just, true and happy (Chapter 5); that he is capable of perception, omnipotent, compassionate, impassible and not a body (Chapter 6); and that he is uncircumscribed by place and time (Chapter 13) and has no parts (Chapter 18). But are these attributes compatible? There is an apparent clash between God's impassibility, compassionateness and his justice (Proslogion 8-11): does not compassion involve feeling pity and so not being impassible, and how can the mercy required by compassion be reconciled with justice? Anselm answers that God's compassion is purely in relation to its objects: they feel an effect, because they are spared punishment, but God is himself unaffected. God's mercy is, by contrast, to be considered purely in relation to himself: although, in relation to sinners, it is just for God to punish them, in relation to himself it is just, because it befits his goodness, to be merciful to them. (Here, as rarely in his reasoning, Anselm's ingenuity is rather fragile, since justice, by its very nature, needs to be based on agents and their deserts: the logic of Anselm's view would imply that an evil judge could justly punish the innocent, because it befits his wickedness to harm them.)

God's lack of circumscription by place and time seems not to contradict any other attribute, but on investigation (*Monologion* 20–24; cf. *Proslogion* 19–20) it turns out to involve a paradox. Consider the case of God and time. Since all things depend on God for their being, it seems that divine eternity should be interpreted as perpetuity: God lacks beginning and end because there is no moment at which he does *not* exist. But, if God exists at every

moment, then he can be divided into innumerable temporal parts and so will not be simple but composite. Would it not be better to say that God is timeless, and that he lacks beginning and end because there is no moment of time at which he *does* exist, because he is outside time? Anselm's answer is, in effect, to combine timelessness and omni-temporality into a single conception of divine eternity. Following Boethius, Anselm makes it clear that God's relation to time is quite unlike that of created things: his life is all-at-once; he is not changed in any way from moment to moment. He cannot, then, properly be said to be in time. But he is *always (semper)*: more definitely than Boethius, Anselm insists on the sense in which God's eternity contains all things.

Logic and semantics

The De grammatico, Anselm's one complete work that has no explicit theological aim, has sometimes been seen as a primer in Aristotelian logic, but it is more plausible to see it as a critique of Aristotle, especially in his Categories. The dialogue centres around paronyms (or 'denominatives'), as discussed in the Categories (1a12–15). Paronyms are like the grammaticus of the title: the words for them are derived from nouns which signify accidents, rather than substances (in this case from grammatica, 'knowledge of grammar' a grammaticus is someone who knows grammar; similarly, album 'the white thing' is considered to be derived from *albedo* = whiteness). A paronymic word, then, is one which talks about a substance (or composite of substances) in terms of one of its accidental qualities (and, strictly, which is related in verbal form to the word from which it derives; the term *sumptum* - 'derived word' - was used in the twelfth century for any such derived word, whether or not there is a verbal similarity). But Anselm and his contemporaries thought of paronyms not as a certain sort of word, although there are words for them, but as a certain sort of thing. The problem which Anselm has to resolve is whether his sample paronym, the grammaticus, is a substance or a quality. Aristotle holds that grammaticus is a quality, but there is a strong argument to show that grammaticus is a substance: every grammaticus is a human, and every human is a substance. Before he reaches a solution, Anselm goes through a series of complex analyses which show his mastery of the themes which were already being debated in connection with Priscian (Chapter 5, section 1). But what is his solution?

It is usually considered to be found at the end of the dialogue (Anselm, 1946, 163: 23–25). Here Anselm uses the distinction between *signification* and *appellation*. Signification is a causal semantic relationship between words and thoughts: a word 'w' signifies x by causing a thought of x in the listener's mind. 'Appellation' is often identified with 'reference' in contemporary usage but more accurately described as the pragmatic capacity of a word as used in a particular context to pick out an object (King, 2004, 93). Using these concepts, Anselm proposes that *grammaticus* is a quality, and the word

'grammaticus' signifies a quality but according to appellation grammaticus is a substance. This solution might seem to be satisfactory. The objects picked out by paronymic words - 'grammaticus', 'white thing' - are indeed substances, and so the words refer to or appellate substances; but the way in which these words talk about them is with respect to qualities such as knowledge of grammar or whiteness. Indeed, Anselm has arrived at an important semantic distinction between appellation, which must be envisaged purely extensionally, and an intensional semantic relationship, which is not the same as 'sense' in Fregean terminology, but can be similarly contrasted with reference. But paronyms are, primarily, *things*, not words, and this solution goes against the initial argument without providing any reason to reject it. A little earlier (Anselm, 1946, 154:7-21), however, Anselm provides what, in this respect, is a better answer. A grammaticus is a substance according to its being human (secundum hominem), and a quality according to its having knowledge of grammar (secundum grammaticam). This answer is not a prevarication, but a straightforward, common-sense solution, which however goes right against the theory of the Aristotelian categories. Anselm's ambiguity over how to solve the initial problem seems to invite his students to join him in questioning the Aristotelian theory, but also to provide them with a way to hold on to it. (Another, more consistent way, which Anselm did not wish to adopt, but some of his near contemporaries were doing (Chapter 5, section 1) would be to take the Categories as being just about words; in that case, the distinction between signification and appellation would clear up the problem.)

Study D: Anselm's 'ontological' argument

Anselm's 'Ontological Argument' is probably the most famous single argument devised by a medieval philosopher. Although it was somewhat ignored in the twelfth century, and usually not accepted in the thirteenth, from the early modern period it became a central subject of philosophical discussion. Descartes, Spinoza and Leibniz use and defend it; Hume and Kant reject it. Contemporary philosophers of religion have elaborated their own versions of it and, in doing so, explored difficult areas in the theory of modality. Studying this argument gives the chance, not just to look at the train of reasoning as Anselm seems to have intended it, and consider its strengths and weaknesses, but also to compare this medieval discussion with a modern reformulation of it: to what extent does it remain *Anselm*'s argument?

Anselm takes a specific argumentative situation in order to show that from his formula that-than-which-nothing-greater-can-be-thought, his single 'argument', it can be shown that God exists. Imagine the Fool mentioned in Psalms (xiii, 1; lii, 1) who denies that God exists. Even he grasps the concept that-than-which-nothing-greater-can-be-thought and so that-than-which-nothing-greater-can-be-thought is in his intellect. Anselm continues

And for certain that-than-which-nothing-greater-can-be-thought cannot exist in the intellect alone. For if it is in the intellect alone, it can be thought to exist also in reality (*in re*), which is greater. If therefore thatthan-which-nothing-greater-can-be-thought is in the intellect alone, that-than-which-nothing-greater-can-be-thought is that than which something greater can be thought.

(Proslogion II)

As this way of putting it indicates, Anselm is giving a *reductio ad absurdum* – the type of argument in which it is shown that, from a certain premiss p, and other premisses the truth of which is supposedly unquestionable, using valid reasoning, there follows a contradictory conclusion. If this is really so, it must be the case that p is false (because a valid argument with true premisses must have a true conclusion). In Anselm's argument, the proposition p, which he wants to prove false, is (5) 'God (= that than which nothing greater can be thought) does not exist in reality' and the contradictory conclusion is (10) 'that-than-which-nothing greater-can-be-thought is that than which something greater can be thought.'

Here is how he constructs his argument:

- (1) God is that than which nothing greater can be thought. [Premiss]
- (2) If someone understands an expression 'a', then a exists (est) in his intellect. [Premiss]
- (3) The Fool understands 'that than which nothing greater can be thought.' [Premiss]
- (4) That-than-which-nothing-greater-can-be-thought exists in the Fool's intellect. [2,3]
- (5) That-than-which-nothing-greater-can-be-thought does not exist in reality. [Premiss for *reductio*]
- (6) [A premiss asserting in some way that existence in reality is greater than existence in the intellect alone.]
- (7) If that-than-which-nothing-greater-can-be-thought exists in the intellect and not in reality, then something can be thought greater than it, namely, that-than-which-nothing-greater-can-be-thought existing in reality also. [6]
- (8) Something can be thought which is greater than that than which nothing greater can be thought. [4,5,7]
- (9) That-than-which-nothing-greater-can-be-thought is that than which something greater can be thought. [8]
- (10) It is not the case that that-than-which-nothing-greater-can-be-thought does not exist in reality. [Negation of 5, by *reductio*]
- (11) God exists in reality. [1, 10]

Premiss (6) is not given a precise formulation because the phrase in the text which indicates it (*potest cogitari esse et in re, quod maius est*: 'it can be thought

to exist also in reality, which is greater') is imprecise. Anselm may have meant to claim that everything which exists in reality is in some sense greater than what exists in the intellect alone, but since there are obvious counter-examples – is a really existing sin or disease greater than one just in the intellect? – it is better to stay with a weaker premiss which still serves the purpose needed in the argument, such as:

(6a) Something than which nothing greater can be thought is greater if it exists in reality and the intellect than if it exists in the intellect alone.

But, even interpreted as (6a), this step in Anselm's thought has often been found objectionable. Critics have protested, either that existence is not a property at all (or, in Kant's version, 'existence is not a predicate'), or that, even if it is a property, it is not a great-making property. Kant is right to point out that 'existence' is not a predicate, nor existence a property, like others. A thing must exist before it can be made the subject of any (other) predications/bear any (other) properties. But Anselm is making a contrast between different types of existence – existence in the intellect alone, existence in reality. It seems entirely reasonable to take an entity which certainly exists in some way – for example, as a character in fiction or as a concept in my mind – and to consider whether it has the additional property of existing in reality. And there is an obvious, intuitive way in which real existence is great-making – or is Walter Mitty, with his billions of imaginary dollars, genuinely as well-off as Bill Gates, with his billions of real ones?

Premiss (2), with its spatial-like talk of things 'in' the intellect, is likely to strike modern readers as strange. In fact, Anselm is probably assuming as a background the semantic theory, indebted to Augustine's De Trinitate and Boethius (especially his second commentary on Aristotle's On Interpretation), which he explains in the Monologion (Chapters 10 and 33). According to Anselm, spoken words naturally produce inner 'words' in the mind of the hearer. By 'words', Anselm means some sort of concept or image (he does not make it clear which) which resembles the object signified by the spoken word which generated it. The close resemblance between these concepts or images and what they are concepts or images of enables us to think about things other than ourselves. In (2)-(4), then, Anselm is claiming that the expression 'that than which nothing greater can be thought' generates a mental word in the Fool's intellect. Arguably, there is a weakness at this point, which Anselm himself came to notice, since it is difficult to think what could be the state of mind in which the Fool at once grasps the expression 'that than which nothing greater can be thought' well enough for it to generate a mental word, but not well enough for the grasp to make his denial of God's existence impossible, since Anselm will go on (Chapters 3 and 4) to show that that-thanwhich-nothing-greater-can-be-thought cannot be thought not to exist.

The most serious difficulty with the argument, however, lies elsewhere. When the Fool hears the expression 'that than which nothing greater can be thought', what concept is generated in his mind? Consider this parallel. You hear and understand the expression 'A city in Lapland which has a population of over 5 million.' The concept you grasp is one which has as its content a city in Lapland with a population of over 5 million. The ability to grasp such a concept does not imply that such a city really exists. That may well be an open question for you, until you check in a reference book and find that there is no such city. But the content of the concept is *not* a city in Lapland which has a population of over 5 million and exists only in the mind, not in reality. If it were, it would be wrong for you, after checking on the facts, to say 'There's nothing which corresponds to the expression I have just heard.' Similarly, the content of the concept which the Fool grasps in his mind is *not* that-than-which-nothing-greater-can-be-thought as something existing as a concept only and not in reality, but simply that than which nothing greater can be thought. In this case, however, Step (7) of the argument cannot be accepted. The concept which the Fool has in mind is not the arguably self-contradictory that-than-which-nothing-greater-can-be-thought and-yet-does-not-really-exist, but the plain that-than-which-nothing-greater-canbe-thought.

In the next chapter, Anselm argues that it is greater not to be able to be thought not to exist than to be able to be thought not to exist, and so, if a contradiction is to be avoided, then that than which nothing greater can be thought must be such that it cannot be thought not to exist. Some modern philosophers have considered this to be a separate argument for the existence of God, but Anselm himself very clearly does not envisage it as such. Not only does he end Chapter 2 in a way which would make a further argument for the real existence of thatthan-which-nothing-greater-can-be-thought seem superfluous ('without doubt that than which nothing greater can be thought, exists, both in the mind and reality'), but then he continues, in Chapter 3, by affirming that 'this indeed so truly is, that he cannot be thought not to be.' Anselm, then, has established that God really exists and he is using the Principle of God's Necessary Perfection to establish one of God's attributes: that his non-existence is inconceivable. Today, we would speak of 'necessary existence', and this description would not in itself be misleading, since one of the modern ways of thinking about possibility and necessity is in terms of conceivability. But problems can arise, as the story of the adaptation of Anselm's argument shows.

The most powerful forms of the ontological argument discussed by contemporary philosophers are variations of an argument devised by Alvin Plantinga, which draws ideas from Chapter 2 and Chapter 3 of the *Proslogion*. Although its detailed exposition is quite technical, the idea behind it is simple and elegant. Let the Fool admit that the existence of God is possible, and grant the premiss (which it might be thought is established by Chapter 3), that if God exists, he exists necessarily. From these two premisses, it follows intuitively, and, with a little fine logical footwork, formally, that possibly God exists necessarily. But, according to S5, the system of modal logic thought best to capture our ordinary modal notions, possibly necessarily *p* entails necessarily *p*. This deduction can be explained, according to the framework of possible worlds which provides the semantics for these systems. By this semantics, *p* is true necessarily if it is true at every possible world, and true possibly if it is true at some possible world, and in S5 all these

worlds are accessible to one another. To say that p is possibly necessarily true is to say that, with regard to one world, it is true at all worlds; but in that case it is true at all worlds, and so it is simply necessary. So, from the premiss, possibly God exists, Plantinga can show that God exists, and indeed necessarily exists.

Plantinga's argument is open to criticism on the grounds that it is questionbegging. Why would the Fool admit that the existence of God is possible, given what follows from such an admission? He need not be so much of a fool as that! Plantinga can defend himself by explaining that he is not trying to provide a proof of God's existence which an atheist will accept, but merely to show that the theist and the atheist are equally rational or irrational: the one in accepting, without being able to account for it, that God possibly exists, the other, equally without reason, in denying it. One might, however, also query whether the premiss that, if God exists, he exists necessarily, should be granted.

But what of the relation between Plantinga's argument and Anselm's? Plantinga does not claim to be paraphrasing Anselm; he is developing his own structure of reasoning using Anselmian elements. But it is questionable whether even the elements are genuinely Anselmian. Plantinga's argument rests on understanding possibility in terms of possible worlds (it should be remembered that *The Nature of Necessity*, published in 1974, was one of the pioneering works in introducing this way of discussing modality into analytic philosophy): the argument succeeds only if 'Possibly God exists' – derived from (3) in Anselm's argument – is taken to mean that God exists in at least one possible world. But there is every reason to think that Anselm's understanding of modality was completely different from that which is represented in terms of possible worlds. And it was not just a matter of his lacking the apparatus and metaphor of possible worlds: Anselm understood possibility and necessity quite otherwise.

Anselm brings out his view of possibility and necessity when answering the objections to his argument brought forward by Gaunilo, a monk of Marmoutiers. There he argues that that-than-which-nothing-greater-can-be-thought does not fail to exist at any place or any time, and this is an essential feature of it: if there were some time or some place at which it did not exist, then something greater than it could be thought (*Reply* 1). By this comment, Anselm shows that he thinks of possibility in terms of a single way that things happen along the line of time – in broadly Aristotelian, temporal terms, that is to say: although there are different possible ways in which the future might be, there are not, on this view, alternative possible worlds.

It might, however, be suggested that Anselm distinguished between a notion of possibility, conceived in Aristotelian, temporal terms, and an idea of conceivability, which is closer to the concept of possibility described by possible-worlds semantics. But in fact what Anselm says later in the *Proslogion* suggests that it is wrong to translate Anselmian conceivability (being able to be thought) into possibility, however understood. In Chapter 15, Anselm argues that that-thanwhich-nothing-greater-can-be-thought is that which is greater than can be thought – otherwise something greater than it can be thought. If being able to be thought – conceivability – is made equivalent to possibility, then God, being greater than can be thought and so not able to be thought, is impossible.

* * *

8 Psellos, Italos and the twelfth-century Byzantine Aristotelians

By comparison with the meagre range of ancient philosophy available in the Latin West in Anselm's time, Byzantine scholars, whose own language was Greek, had incredibly vast resources open to them. But they were stifled as philosophers by two elements in their culture which it was hard for even the most resolute to avoid. The one was a suspicion of the 'Hellenic' – anything relating to pre-Christian Greek culture – which became particularly keen where texts proposing pagan ideas and doctrines clearly contrary to Christian doctrine were concerned. The other, seen already in the character of Photius's work, was an admiration for encyclopaedic learning, in which texts from the past were summarized, excerpted, transcribed or re-written, with little thought from the medieval intermediary.

Michael Psellos (1018–96) was the leading Byzantine philosophical thinker of the eleventh century. An official academy existed at Constantinople, and Psellos, formerly an adviser to the Emperor, was given the position of chief philosopher ('Consul of the Philosophers') there. When he fell into imperial disfavour, he became a monk, and spent time then, and at the end of his life, in his monastery. In the interim, however, Psellos - an official, it seems, to the last - took the new Emperor's part in accusing the Patriarch, Michael Cerularius, of Hellenism. Yet Psellos's own interests ran in just that direction. His favoured ancient philosopher was none other than the hyper-pagan Proclus, and one of his favourite ancient texts seems to have been the Chaldaean Oracles, which late Neoplatonists had treated as revealed scripture - their answer to the Old Testament and the Gospels. In his shorter works, even those which start out as discussions of a text from a Greek Church Father, he is keen to discuss the philosophers, though also keen to explain that he is merely talking about them, not endorsing all they say: he stresses the extent to which ancient philosophical teaching accords with Christianity, but does not take risks in pressing the case.

In the case of a writer like Psellos, deeply versed in a long tradition, the question of originality is a difficult one. He was, for example, author of a number of commentaries on Aristotelian logic. He had a late ancient tradition of commentary to follow, and in the main he copied his sources. But recent research (Ierodiakonou, 2002) has shown how, in a paraphrase of On *Interpretation*, there are some comments which seem to depart from the sources; and there is no reason to think that this ability to think for himself

on occasion was exercised only in this particular commentary, but we are still a long way from having any distinctive outline of Psellos's philosophical views.

Despite his enthusiasm for 'Hellenic' philosophy, Psellos managed to protect himself against charges of heresy. His pupil, John Italos, the leading philosopher of the next generation, was not so fortunate. He had the same range of interests as his teacher, and seemed particularly keen as a commentator of Aristotelian logic, although he seems - properly scholarly investigations have not yet been undertaken - to have been entirely imitative in his approach. Some of the anathemas that were pronounced against him in 1076–7 show how perilous it was in Byzantium to bring Aristotelian philosophy to bear on theological questions. He was, for example, accused of explaining the two natures of Christ in 'dialectical' terms - something for which Boethius was revered in the West for doing. Other of the anathemas suggest that he allowed ancient philosophical teaching to make him adopt doctrines unacceptable to Christians, such as metempsychosis and the eternal existence of matter: he fell into the category of 'those who abandon themselves to Hellenic studies; not just to instruct themselves but who follow the vain opinions of the ancients and believe in them as truths . . .' But it is doubtful that he put forward these (Platonic) doctrines with the sort of confidence that his accusers suggest. A thirteenth-century author wrote a satirical account of John's being received in Hades by Pythagoras, who addresses him with these words: 'Although you are dressed in the clothes of the Galileans [i.e. Christians], wearing the tunic that they say is divine and heavenly – that is, of baptism - you, wretch, want to be received in this way among us who have lived in knowledge and in syllogistic wisdom; so - either take off that clothing, or go away from our group.' John, the writer reports, did not want to take off his tunic. He seems to have been a man anxious to harmonize ancient philosophy and Christianity, living among those who wished to see only discord. (Ironically, the author presents Psellos - who had escaped condemnation – as being honoured by the ancient philosophers.)

There was, none the less a flourishing of Aristotelian commentary in Byzantium during the generation of Italos and the following decades. Eustratius of Nicaea (c. 1050–c. 1120), who was, like Italos, condemned, in part for the way in which he allowed his Aristotelian training to enter into his theological discussions, wrote commentaries on parts of the *Posterior Analytics* and the *Ethics*, both of which were translated into Latin and used by authors in the thirteenth-century universities. Another, more prolific Aristotelian commentator was Michael of Ephesus (who probably worked in the first half of the twelfth century, though some scholars have identified him with a scholar working nearly a century earlier). Michael, too, was accused of heresy. Despite the language, and the imperial academy, it was harder to be a philosopher in Byzantium, the New Rome, than in Baghdad or in the lands only recently conquered by the Normans.

LATIN PHILOSOPHY IN The Twelfth Century

Historians of the Latin West often speak of a 'twelfth-century renaissance'. The label usefully signals how, in the twelfth century, especially in Paris, a whole constellation of gifted masters competed for students, exchanged ideas and criticized each other's arguments. There had been isolated brilliant figures, such as Eriugena and Anselm, but never before in the Latin Middle Ages such an interaction of sophisticated, philosophical thinkers. Yet the label can also mislead. The intellectual flowering of the 1100s was not, like the Renaissance proper of the fifteenth and sixteenth centuries, stimulated by the availability of new texts or translations. The basis for the thinking of the great twelfthcentury philosophers was provided by the texts of the logica vetus, most of which was in use from the ninth century and the rest from about 1000; by Priscian's Institutiones grammaticae, studied since the eighth century; by patristic texts and, especially, Boethius's Opuscula sacra; and by the quartet of Platonizing works which were known even in Carolingian times - Plato's Timaeus, Macrobius's Commentary on the Somnium Scipionis, Martianus Capella's De nuptiis, Boethius's Consolation. True, it was in the middle of the twelfth century that the great translation movement began in Toledo (Chapter 5, section 8), but it was not until after 1200 that its products began to transform intellectual life and to destroy the precocious philosophical culture which had flourished on such a thin soil of ancient philosophical material.

Moreover, the term 'renaissance' has too often been used (often in conjunction with talk of 'twelfth-century humanism' and 'the Platonism of the twelfth century') in a certain traditional historiography of medieval Latin philosophy to draw an unfavourable comparison with the thirteenth century. The twelfth century is, rightly, presented as a time of general literary and intellectual revival in which the boundaries between philosophy and literature were looser than at any other period in the Middle Ages. But it is then suggested that the thought of the twelfth-century is lightweight compared to what the university thinkers, with the whole of Aristotle behind them, would accomplish a century later, and that it can at best be regarded as preparing the way for these later achievements. Such judgements ignore the fact that there was a distinctive twelfth-century Latin philosophical culture, both more literary than that of the thirteenth-century universities, but also more solidly based on logical and linguistic analysis.

This culture had a narrow geographical basis: it flourished in the cathedral schools of Northern and Central France and - increasingly as the century wore on - it became centred at Paris, where a large number of masters were teaching. Its most distinguished exponents were Peter Abelard (section 2 of this chapter, Studies E, F and G), one of the great logicians of all time, but also a daring theologian and a powerful moral thinker; Gilbert of Poitiers (section 4 of this chapter, Study G), a less colourful character than Abelard, but intellectually almost as innovative; and William of Conches (Section 3), whose interests were less in logic and metaphysics than in science and understanding ancient philosophy. The first two-thirds of this chapter will revolve around these three thinkers, setting them in the context of the grammar, logic and theology of their times. The later twelfth-century lacks such outstanding figures, but it was a period when highly sophisticated work both in logic and theology went on in the Parisian schools (this chapter, section 7), and there was also a strong current of thinking influenced by Platonism (this chapter, section 6). And the work at this time of the translators in Toledo (this chapter, section 8) would help to transform philosophy in the following decades, so that the greatest achievements of the twelfth century fell quickly into oblivion.

1 Logic and grammar at the turn of the twelfth century

The work of Anselm or even Peter Damian shows that eleventh-century thinkers studied closely the texts and commentaries by Aristotle, Porphyry and Boethius which made up the logica vetus. Yet, apart from the set of glosses to the Categoriae decem, isolated annotations and a dialogue-form adaptation of Boethius, nothing in the way of commentary on these logical texts can be confidently dated to before the 1090s. By contrast, over a hundred commentaries on the logica vetus from c. 1100 - c. 1150 are known, and twenty or more of them probably date from before about 1120. They are a sign both that logic was now being studied more intensely and that, although Boethius's commentaries provided the model and very often a good deal of the material, teachers were no longer content with them alone. One deficiency in Boethius's commentaries was that they lacked the painstaking word-by-word exegesis which, it seems, twelfth-century teachers needed to provide for their very young, beginning pupils, and which also became a habit of thought for them. Literal commentaries, devoted almost exclusively to the basic construal of the argument (what was called the *continuatio*) began to be written, and commentaries which followed the more discursive, Boethian approach usually added a literal element. Moreover, the interpretation of some passages in Porphyry and Aristotle became the object of excited debate in which the ancient positions, as explained by Boethius, were often developed or rejected in favour of newer, subtler theories. A well-known example is the passage in

the *Isagoge* where Porphyry poses and does not answer his questions about universals. But the controversy over this particular passage has as its background a much more general difference over how the ancient logical texts should be understood.

By the 1080s or 1090s, there seems to have been a difference between some logicians who interpreted the texts of the vetus logica 'as being about things' (in re), and some who interpreted them 'as being about words' (in voce). On Interpretation is explicitly about language; but the Categories, the Isagoge (which was considered an introduction to the *Categories*) and Boethius's treatises on the topics and on division are open to being read either as being directly about things, or as being about words. The in voce interpreters seem to have made it a principle to insist that Aristotle was talking about the words 'substance', 'quantity', 'quality' and so on, or Porphyry about the words 'genus', 'species', 'accident' and the others. Such an interpretative stance need not carry with it any metaphysical belief about whether, in fact, there are things in the world to which correspond the words which the logical authorities, on this interpretation, discuss: indeed, no sane metaphysics would make *all* substances and accidents, particular as well as universal, into mere words. A number of writings from c. 1100 exemplify this metaphysically unworried interpretative stance: some anonymous commentaries, Abelard's earliest logical writings (Chapter 5, section 2) and the Dialectica of Gerlandus of Besancon, a text which presents a thorough account of the *logica vetus*, distinguished not only by its steadfastly verbal interpretation, but also the author's fondness for 'sophisms' which show how the position he wants to reject entails a laughable absurdity.

Besides Abelard, whose method of interpretation would soon change, the most famous of these exponents of in voce exegesis was Abelard's teacher, Roscelin. But Roscelin seems (perhaps not until later - he lived until after 1120) to have done far more than practise a certain type of exegesis. His views are known only from the reports of others, usually his opponents, but he seems to have proposed an account of the basic constituents of the world which comes as near as possible to providing a metaphysical correlate to in voce exegesis, without entirely depopulating the universe of things. In order to see his, and others', position clearly, it is helpful to bear in mind the main ontological categories suggested by the logica vetus as Roscelin and his contemporaries read it. First, there was a sharp distinction between natural things and man-made objects. Natural things might, in principle, be either substances or non-substances ('forms' as they were called – a word which covered both accidents such as Socrates's whiteness, and differentiae such as Socrates's rationality); and both substances and non-substances might be either particular or universal. (The and is italicized because this idea of particular forms, commonplace in the twelfth century, seems strange to many philosophers, though modern trope theorists have adopted something similar.) Non-natural particular things were not considered to be substances and so did not belong to any genus or species. To judge from the testimony of Anselm, who attributed to Roscelin the view that a universal is just a *flatus vocis* – the breath of air produced when we utter a word – and Abelard, who criticizes Roscelin's mereology (theory of parts and wholes) in his *Dialectica* (Peter Abelard, 1970, 554–5), Roscelin would not accept the existence of universal substances or universal forms, nor that of parts. He probably also did not count even particular forms as independently existing things, and so he was left with just particular whole things, natural and non-natural. It is not known whether he tackled the vast problems in, for instance, semantics created by so bold a theory.

The usual contrast with Roscelin's so-called 'nominalism' or 'vocalism' is the realism of William of Champeaux. He was teaching logic at the Cathedral School of Notre Dame in 1100, when Abelard, who had already been a pupil of Roscelin, arrived, drawn by William's fame as a logician. Abelard says explicitly (Peter Abelard, 1967, 65:82–89) that William was proposing a type of realism ('material essence realism'; cf. Study E), which Abelard's attack forced him to abandon in favour of a subtler form of realism (an 'indifference' theory; cf. ibid. and Lottin, 1959, p. 192:116-20). There seems, then, good reason to think that, at least by the time of this incident (c. 1108), William was not merely expounding the ancient texts in re, but was putting forward a definite, realist metaphysical position; though with what degree of selfconsciousness it is hard to say - the chronology is too imprecise at the moment to know whether he was responding to the view of a logician like Roscelin, or just to in voce exegetical practice, or whether Roscelin's theory was developed in response to William's or its like. It is more important, though, to realize that William's main concern in logic was not in the question of universals. He wrote two versions of a short logical textbook (his Introductiones), which presented the discipline as a linguistic one, intended - just as his contemporary, Gerlandus, envisaged it - to discern truth from falsehood. And William's interest in the construction of arguments went further: he had distinct views about how modal propositions should be construed (cf. Study G), and he proposed a distinction between the 'grammatical' and the 'dialectical' (logical) sense of sentences, which was based on detailed thought about Boethius's De topicis differentiis. This text, as will become clear, was of central importance for the development of logic as an argumentative discipline.

No known surviving logical commentary is attributed to William, but there has been an attempt to ascribe to him a whole set of the anonymous commentaries (including different commentaries on the same text). These attributions are unconvincing, not least because different 'William of Champeaux' commentaries propose diverse, incompatible views. What emerges from this material, however, is far more interesting than just the discovery of a body of work by a single author: it is the evidence of lively, sophisticated discussion among logicians even at the very beginning of the twelfth century. They need to be read along with one of the most remarkable records of intellectual life at this period, the *Glosulae* to Priscian's grammar. The same masters worked on grammar as on logic. Much of Priscian's text is occupied by the minutiae of Latin usage, but there are passages on more general semantic theory (based on that of Apollonius Dyscolus, a second-century Stoic grammarian). They provided an opportunity for philosophical discussion, linked to the issues raised by the *Categories* and *On Interpretation*, and the masters seized it. The tension between Priscian's theory of meaning, based on the meaning imposed by a word's putative inventor, and Boethian semantics, based on signification, led commentators of both Priscian and Aristotle to analyse what is meant by saying that a word is 'significative': is it the speaker or the listener who needs to be able to derive meaning from it? And what about words like 'chimaera', which seem to mean something but do not refer to any things? (Cameron, 2004). The Priscian commentators also shared with exegetes of the *Categories* an interest in defining the nature of utterances (*voces*) with close reference to physical theories about sound.

2 Peter Abelard

Abelard's life and works

Already, in talking of Roscelin and William of Champeaux, some of the important details of Peter Abelard's early life have been given. Born in 1079, Abelard was taught by Roscelin in his teens, before William's fame drew him to Paris. He rapidly quarrelled with his new teacher, however, and set up as a teacher of logic himself, at Melun, Corbeil and, finally, Paris. In the period from c. 1113 to 1117 he was at last in William's old post, at Notre Dame. Probably it was then that he wrote his great textbook of logic, the Dialectica. This was the time, too, of his romance with Heloise – a highly literate and intelligent woman, who was living with her uncle Fulbert, one of the canons of Notre Dame. Abelard became her tutor and, rapidly, her lover, and he agreed, against her advice, to a secret marriage. When it seemed to Fulbert that Abelard wanted to send her off to be a nun, he arranged for a gang to break into Abelard's room and castrate him. The castration was a turning point for him personally and intellectually. He decided to become a monk of St Denis (and insisted that Heloise become a nun). He still continued to teach logic, and his long commentaries on the Isagoge, Categories, On Interpretation and De topicis differentiis (the Logica Ingredientibus – LI) – date from his early days at St Denis (c. 1119), while his later commentary on the Isagoge (the Logica Nostrorum petitioni sociorum - LNPS) and De intellectibus ('On Acts of Thinking') were written about six years later. But these are the latest pieces of his logic which survive.

As early as 1113, Abelard was interested enough in the idea of teaching Christian doctrine to attend Anselm's classes (Chapter 5, section 5) at Laon (he was quickly forced to leave). As a monk, he began to concentrate much more on theological questions. He began to compile Sic et non ('Yes and No') - a vast collection of passages, mostly from the Church Fathers, which discuss disputable problems in Christian doctrine and take different sides (Chapter 5, section 5). In his first theological work, on the Trinity, he considered that he was attacking his old teacher Roscelin for heresy, but this treatise, the Theologia Summi Boni, was itself condemned as heretical at the Council of Soissons (1121). Abelard was forced to put the manuscript himself into the flames – an experience he described as being more painful than his castration. Yet, far from giving up the positions he had proposed, Abelard elaborated and defended them in a far longer version of his Theologia, the Theologia Christiana, written c. 1125. A remarkable section of the work (Book II) is devoted to the quasi-monastic virtues of the ancient philosophers (see Interlude iv). And Abelard, though he had not at first become a monk for spiritual reasons, began to take monasticism and monastic reform very seriously. He had left St Denis to set up his own hermitage/monastery/centre for advanced studies, the Paraclete, but in c. 1126 he was offered and accepted the position of abbot at St Gildas, on the Breton coast. But his reforming zeal turned the monks against him and, probably by 1132, he had set himself up again as a master in Paris. From this period date the last version of the Theologia (the Theologia Scholarium), commentaries on Paul's letter to the Romans and on the Hexaemeron (the Genesis account of creation) and wide-ranging lectures on Christian doctrine, recorded as Abelard's Sententie. Abelard also wrote two important ethical works: the Collationes ('Comparisons'; quite probably at St Gildas), and Scito teipsum ('Know Thyself'; c. 1138). In 1141, at the instigation of Bernard of Clairvaux, he was tried for heresy at the Council of Sens. Although his condemnation was ratified by the Pope, Abelard, already seriously ill, had sought refuge at Cluny, where the humane and learned abbot, Peter the Venerable, treated him, not as a heretic, but as an honoured guest. He died probably in 1144.

Abelard as a logical innovator

Abelard's earliest logical commentaries (on the *Isagoge*, *On Interpretation* and *De divisione*, from *c*. 1102–3) show him as an enthusiastic *in voce* exegete (Chapter 5, section 1). Although he had given up this approach ten years later, and believed that many passages of the logical textbooks are about things (and for some that there are alternative verbal and realist readings), he never relaxed his attention to the verbal formulation of positions, and – in a way which echoes Gerlandus's interest in sophisms – concern for linguistic ambiguities and the contradictions they can produce. It is characteristic of Abelard to cite a given formulation, and then consider the different logical ways in which it can be read. For example (*Dialectica*, Peter Abelard, 1970, 218), consider

1 If (*a*) it is possible that a thing happens otherwise than God has foreseen, it (*b*) is possible for God to be mistaken.

The antecedent (*a*) of this conditional can be read differently, depending on how it is divided up, as

(*a**) That-a-thing-happens is possible-otherwise-than-God-had-foreseen

or as

 (a^{**}) That-a-thing-happens-otherwise-than-God-had-foreseen is possible.

Abelard makes a great deal depend on this distinction, and other similar ones. (He believes that the problem of prescience, which so troubled Boethius (Study A), rests on fallaciously inferring the truth of (b) from (a): fallaciously, because (b) follows from (a^{**}) , which is false, but not from (a^{*}) , which is true (Marenbon, 2005a, 67–70).) It is important to bear in mind this feature of Abelard's method, because it helps to qualify in the right way the claim that Abelard devised a new system of *formal* logic. On the one hand, Abelard was completely clear-minded (despite the confusing medieval terminology) about the distinction between the formal validity of an argument and the truth of its conclusion. On the other hand, he did not, like a modern formal logician, work with a precise symbolic language, but in ordinary language, with its ambiguities and its inevitable reference to the matter of propositions as well as their logical form.

The system of logic Abelard devised was - so it has recently been shown (Martin, 1987, 1991, 2004) - a propositional logic. As logicians since Alcuin had done, he accepted Aristotelian syllogistic, though he saw the problems in, and adjusted, the modal syllogistic. As well as Aristotelian predicate logic, there had been in the ancient world a propositional logic - that of the Stoics. But by late antiquity it was no longer understood, and so Boethius's usefulness as an intermediary was limited (Chapter 3, section 1). None the less, Abelard seems, partly through a perspicacious reading through Boethius's work on hypothetical syllogisms, partly through his own imagination, to have reinvented a fully propositional system. A precondition for this discovery, to which his tendency to analyse and disambiguate sentences may have disposed him, was his grasp of propositionality. Abelard, by striking contrast with Boethius, understood the idea of propositional content and propositional operations (such as negation and consequence) on it; so, for example, he was fully aware of how negating 'If p, then q' is not a matter of negating the antecedent or the consequent (let alone any of the terms which constitute them), but of denying that q is entailed by p.

Abelard developed his propositional logic mainly in discussing topical inferences (Martin, 1987, 2004). Abelard wanted to show which of Boethius's topics and their maximal propositions provide a basis for true conditionals ('if ... then ...' propositions, or in Abelard's terms, consequentiae). He has a very stringent criterion for their truth. 'If p, then q' is true just in case (i) it is impossible that p be true and q be false (the modern criterion for strict implication) and (ii) p contains q in its meaning. Not every sound argument, therefore, can be made into a true conditional. From 'a is a human', one can conclude correctly that 'a is not a stone' (because it is impossible that any human should be a stone). But 'If a is a human, a is not a stone' is false, because 'a is human' does not contain in its meaning that a is not a stone. It does, however, contain in its meaning that 'a is an animal' (because 'human' means 'rational, mortal animal') and so 'If *a* is a human, *a* is an animal' is true. Abelard's way of evincing the falsehood of conditionals based on a given topic was to show that from it and uncontroversially true premisses there follows an unacceptable conclusion – either a contradiction or a violation of certain connexive principles, which ruled out propositions entailing or being entailed by their own negations. Unfortunately for Abelard, his rival in the mid-twelfth century, Alberic of Paris, was able to show that even the conditionals acceptable to Abelard produced conclusions which he rejected; the problem lay in an inconsistency in the system of propositional logic Abelard had set up for himself. This flaw does not undermine his achievement in understanding propositional logic, although it may help to explain why later medieval thinking in this area did little to develop his insights.

Abelard also proposed striking new ideas in many other areas of logic. For example, he investigated the functions of the verb 'to be' with great subtlety, and he is one of the few logicians ever to have tried to analyse impersonal propositions, such as 'It is good that there is evil.' His ideas about modality are examined below in Study G. One other theme is specially worth mentioning, because it links both to his treatment of conditionals, and to his nominalism (Study E). Abelard is the first medieval Latin author to look into the semantics of propositions, and he does so especially in the context of consequentiae. When we say 'if p, then q' (for instance, 'if it is a rose, it is a flower'), what we are tying together by the 'if ... then ...' relationship? Since this conditional would remain true even if no rose existed, the connection cannot be between things. Since it would also be true even if there were no one thinking it, it cannot, Abelard reasoned, be between the thought that it is a rose and the thought that it is a flower. The solution he chose makes explicit Abelard's understanding of propositionality. The conditional connects what the antecedent says with what the consequent says: we would call them 'propositional contents', Abelard terms them dicta ('what is said'; singular dictum). Whether or not it is part of a conditional, each proposition has its dictum, which is what it asserts or denies. But what exactly are these dicta? Abelard's comments on them hesitate between conceiving them like events

or states-of-affairs (as truth-makers), or more like propositions in the contemporary sense (as truth-bearers): between, that is, conceiving the *dictum* of 'John is balding' as the way things are which makes it true that John is balding, or as what is made true by this fact. What Abelard has no hesitation in declaring, however, is that *dicta* are not things: they are not extra items among the constituents of the world.

For twelfth-century thinkers, commentary on logical texts frequently went far beyond questions of logic. Many of the problems about basic ontology that thirteenth- and fourteenth-century writers would treat in connection with the *Metaphysics* could be discussed in relation to the *Categories* – a work which seems itself to be more metaphysics than logic – and the closely-linked *Isagoge*. The place of *On Interpretation* in the curriculum and the interest in Priscian ensured that these metaphysical discussions had a distinctively semantic twist, as Abelard's treatment of the problem of universals exemplifies.

Study E: Abelard on universals

Although Abelard comments sarcastically in the *Historia Calamitatum* about people who treat the problem of universals as if the whole of logic consisted in it, his solution is central to his thinking (at least up until the mid-1120s, when his interests changed), both because his metaphysics depends on it and it is the occasion for a remarkable piece of semantic theorizing.

Realists such as William of Champeaux held that there are particular and universal substances, and particular and universal forms. Abelard held that there exist only particular substances and particular forms. He believed that it is incoherent to say that any real thing is universal, and he elaborated strong arguments against each of the varieties of this realist view current among his contemporaries. The simplest form of realism – that probably held by William before about 1111, when Abelard's attack forced him to give it up - is 'material essence realism': there is one and the same substance or material essence (materialis essentia) in all the particulars of a given sort, which differ from one another on account of 'lower forms', where 'lower' means lower in Porphyry's tree (Chapter 2, section 5): the category substance is divided, first by the differential forms (differentiae) corporeal and incorporeal, into body and spirit, and then body is divided by successive *differentiae* until the most specific species – for example, human being – is reached. Humans are then divided by their accidental properties (also called 'forms'). But, on this view, Abelard points out, the same universal substance will be informed by contraries – animal, for instance, will have to be both rational and irrational. (LI [=Abelard 1919-33] 11-13)

Realists might complain that they hold the forms to inform particulars, not universals. The universal substance Animal is neither rational nor irrational, whereas Browny the ass is irrational, and Cicero the human is rational. But Abelard replies by asking: what is Browny? Clearly Browny cannot be identified with the forms which inform him. After some argument that textual corruption has made obscure, Abelard concludes that Browny is whatever is in him other than these forms. And the same is true of Cicero: he is whatever is in him other than the forms which inform him. But, according to material essence realism, both Cicero and Browny consist of the same material essence, and their various, differing forms. So Cicero and Browny are the same, and consequently the forms of rationality (in Cicero) and irrationality (in Browny) are not merely in the same universal, but the same particular.

Abelard adduces further arguments against material essence realism (taken to its logical conclusion, it reduces the world to ten universal things – the ten categories; if it uses accidents to differentiate particulars, it will thus make them prior to these particular substances, which will not therefore be able to act as their substrate), and a variety of arguments against the more subtle types of realism introduced in response to the successful attack on the material essence theory.

Abelard's own, positive theory is (on one interpretation at least: Marenbon, 1997a) less ontologically sparse than it might seem, because of the way he envisages forms. Forms are dependent on substances, but not absolutely. Every form belongs to some substance, and no form can inform one substance *A* and then go on to inform another substance *B*. But a given form, which in fact informs *A might have* in fact informed *B*: Cicero may have been rational by the particular rationality by which, as a matter of fact, Seneca was rational (*LI* 84, 92 and 129). None the less, Abelard does not reduce substances to aggregates of forms, but insists that each has its own essence, which (rather than any accidental properties) differentiates it from every other substance of the same species (*Dialectica* III, 2; Abelard, 1970, 420–1). In this ontology, then, there is a great variety of forms, as well as substances. There are signs, however, that as Abelard thought over his views in the 1120s, he decided that forms in some of the Categories (such as relation) did not have any independent existence.

Abelard combines this nominalism with an unquestioning belief that the Aristotelian and Porphyrean scheme of genera and species cuts the world at its joints. Although there is no such thing as a universal human, which is not Socrates, Plato or some other particular, it is uncontentiously true that Socrates, Plato and the others are all exactly alike in being humans, which means in being rational, mortal animals. Socrates and Plato, then, each have different, but exactly similar, particular forms of rationality and mortality, by which each is rational and mortal. Abelard does not consider it necessary to press the discussion any further and ask in virtue of what Socrates's rationality and Plato's rationalities are both rationalities. It is enough that they are exactly similar.

Abelard's ontological position raises a difficult semantic problem for him. If everything is particular, how can a sentence such as *Socrates est homo* ('Socrates is a human') be true, since '*homo*' is clearly here a universal word? Abelard recognized that he faced a difficult problem of semantics here. He discusses it both in *LI* and *LNPS*. Here just the (longer) analysis in *LI* will be discussed; the new features introduced in *LNPS* do, in fact, bear out the interpretation.

The modern reader will misunderstand the problem if it is put in the obvious modern terms, as being about the *reference* of *homo*. For Abelard and his contemporaries, it was a problem about signification. The *x* in this case – what is signified by *homo* in *Socrates est homo* – is clearly a universal; but no thing, according to Abelard, is universal. Abelard tackles this problem in two, complementary ways. On the one hand, he indicates a sort of *x* which is a thing, but is not universal, which can be signified by a universal word such as *homo*. On the other hand, he indicates a sort of *x* which such words signify.

Abelard is able to take the two approaches because signification is a very wide-ranging semantic term, and he distinguishes two varieties of it. There is signification through nomination (or just 'nominating'), and (unqualified) signification. Signification through nomination is fairly close to reference in the modern sense: it is a non-causal relationship between a word and a thing or things in the world. (Unqualified) signification is, rather, a causal relationship between a word and a mental intention (it does not, therefore, have much in common with the meaning of the semantic term usually juxtaposed with 'reference' in post-Fregean discussions: 'sense'). Consider again the general definition given for 'signification' in medieval discussions: a word 'w' signifies x by causing a thought of x in the listener's mind. Abelard splits it in two: the relationship between 'w' and x is one of (unqualified) signifying. Here is the passage of the *Logica* where, though a phrase may have been lost, Abelard announces his strategy clearly:

For <universal words> both (a) signify in a certain way through nomination a multiplicity of things, without however producing a thought deriving from the things and pertaining to each singularly [missing phrase giving (b)?] – so for (a) example this utterance 'human' both nominates single humans from a common cause, which is that they are humans, and for this reason it is said to be a universal; and (b) sets up a certain thought, which is a common thought <of all humans> and not a peculiar one <of any one human>, and which pertains to each of the singular humans of which it conceives the common likeness. (*Logica* on Porphyry, Abelard, 1919–33, 19)

In (a), then, the relation of nomination, a universal word refers to things – to everything of a given sort. The word can, none the less, be called 'universal', because there is a single reason why, for instance, 'human' refers to all and only humans: this 'common cause of imposition' is that humans are alike in being humans, they share the 'status' of being a human. But this status, Abelard insists, is not a thing. He points (LI 19–20) to other examples of causes which are not things in order to justify himself. In any case, his position seems clearly correct, given that *status* are ways things are, and only a philosopher who, unlike Abelard, was willing to reify facts and state-of-affairs, could therefore consistently consider

status as things. An interesting feature of Abelard's theory of reference, a consequence perhaps of his separating it from unqualified signification, is that the link which the impositor – the person who, for instance, first decides that furry animals of that sort should be called 'dogs' – establishes between the word and the world does not depend on what the impositor himself believes about the structure of the world. Once, pointing at an animal which really is a dog, the impositor has baptized it 'dog', the word 'dog' applies to whatever animals essentially resemble that dog, even though the impositor may have no idea of *differentiae* which distinguish dogs from hyenas and wolves.

So far as (b), unqualified signification, is concerned, Abelard has a very subtle explanation of how we are to understand the-thought-of-x which is what a universal word 'x' (ungualifiedly) signifies (LI_{20-2}). He distinguishes between the action of thinking (an intellectus) and the form or image which is the object of the thought. If, for example, I think of the Taj Mahal, I direct my thoughts towards an image of the Taj Mahal. Although Abelard talks quasi-pictorially about images, his distinction could apply equally to non-pictorial mental contents (for instance, he could, though he does not, say that I have a certain action of thinking which is directed towards the concept of justice or the notion of entailment). His point is not at all to distinguish between a conceptual and a pictorial element in thinking, but to bring out the lack of ontological standing and the intentional relation to the real world of mental contents. Abelard distinguishes, then, between thoughts in the sense of *intellectus* (acts of thinking), thought-contents, and the objects of thoughts. He believes that the acts of thinking and (mostly) the objects of thoughts are things: the acts of thinking are accidents in the mind (we might wish, nowadays, to talk of brain-states), the objects are humans, the Taj Mahal or whatever. Thought-contents, though, are not things – a point he brings out by asking us to consider (LI 21) the image of a tower to which we direct our thought of it. Clearly, the shape and height of the tower are not real forms which inform the act of thinking. The contemporary parallel is useful here. When I think of the Taj Mahal, there is one way in which a scientist, trying to measure my brain activity and correlate it with my account of my thoughts, would describe what is happening ('there was such and such a chemical change'), and another way in which I describe the image of the Taj Mahal ('white', 'beautiful', 'domed'). Moreover, we accept that the scientist is trying to describe what really is the case, but we are unlikely to believe that my domed, white and beautiful mental image is a real thing.

Unlike 'Taj Mahal', *homo* is a universal word, and so there is no single object in the world which is the object of the image to which the thought produced when someone hears it is directed. Rather, a confused conception of what all humans have in common is produced in the listener's mind. It is this mental image, which is not a thing – it is a thought-content, not an act of thinking or the object of a thought – which the universal word *homo* unqualifiedly signifies. Abelard's comment that the act of thinking directed towards this image 'pertain<s> to each of the singular humans of which it conceives the common likeness' indicates that the object of the thought consists of all singular humans. And so the two varieties of signification dovetail, since *homo* signifies all singular humans by nomination.

* * *

Abelard's theological project

In the course of the 1120s, Abelard turned the greater part of his energies towards what we might call now a 'theological' project. He carried it through in the successive versions of the *Theologia*, which investigate divine triunity, the Biblical commentaries and his Sententie, which cover all the main areas of Christian doctrine. The project has various different aspects. It can be seen as a step in the systematization of theology, in which Abelard is presented as the precursor, or even the institutor of the scholastic method which would develop in the later twelfth-century schools and shape the teaching of theology in the universities (Chapter 7, section 1). This aspect of Abelard's project is discussed below, in the wider context of twelfth-century theology (Chapter 5, section 5). It can be seen (and most often has been) as an attempt to apply the methods of logic to theology. This side of Abelard's project is certainly important, but it can be exaggerated, especially if his logic is seen as critical and destructive. Abelard was a finer logician than his predecessors and contemporaries, but his logical method in theology was not an innovation: Anselm had already provided the lead, and many of Abelard's contemporaries were already following his example. Another aspect of his project is Abelard's wish to make the ancient philosophers into examples of wisdom and good living to his contemporaries (Interlude iv); another is the development of a coherent and wide-ranging ethical theory (Study F). Most important, though, for Abelard himself was the attempt, throughout his works, to make Christian doctrine accord with rational thought and with his deepest moral intuitions.

In the nineteenth and early twentieth centuries, historians were keen to portray Abelard – to his praise or blame – as a rationalist, who challenged accepted Christian doctrine or even Christianity itself. (Jules Michelet, the great French historian, wrote of his attitude to Christianity, for instance that 'he handled it gently, but it melted in his hands'.) Modern scholars have rightly reacted to the anachronism in such a description, pointing to the patristic basis of many parts of his thinking, his serious interest in monasticism and Church reform and the careful qualifications – often overlooked by Bernard and his other critics – by which he sought, unsuccessfully, to protect his positions from any taint of heresy. Yet it remains true that Abelard wished to present a cogent and morally acceptable account of Christian doctrine, and he was willing if necessary to bend orthodoxy in order to do so. So, for example, without claiming that divine triunity can be explained by reason, Abelard tried to give a logically coherent account of it, and to lessen the anthropomorphism inherent in the idea of Father, Son and Holy Spirit by stressing that the persons of the Trinity can be understood as divine power, wisdom and love. Again, in explaining why it was necessary for the Son of God to suffer and die in order for humanity to be saved, Abelard placed the emphasis on the moral example thereby set by Christ of loving others to the extent of dying for them. And, in his discussion of grace, Abelard avoids Pelagianism by accepting that grace is necessary if a person is to live a good life; but he argues that it is freely available to those who seek it.

Interlude iv: Abelard, the Philosophus and the ancient philosophers

Although there had been a modest earlier tradition of eulogistic comments on Plato and Aristotle, the second book of the Theologia Christiana struck a completely fresh note in its unbridled praise of the ancient pre-Christian world and, especially, its philosophers. In the first version of his Theologia, the Theologia Summi Boni, Abelard had used ancient writers, including Plato, to provide testimony for the Trinity. He had been attacked for relying on writers who, his critics said, were pagans and therefore damned. So far from abandoning or qualifying his position when he re-wrote his book as the Theologia Christiana, Abelard explained that the wise people of the ancient world were pagans in name only. The fact that they had grasped the triune nature of God shows, he argued, that they were really Christians, and he even went so far as to suggest that perhaps Plato knew in advance of the Incarnation (II.15–16). In Abelard's view, the ancient philosophers exemplified the virtues, including the characteristically monastic ones of sexual abstinence and self-denial. From the opening of the *Timaeus*, he had an outline of Plato's *Republic*, but he took this ideal city, in which everything is owned in common and organized for the common good, as a reality. It seemed to him just like the monasteries of his own day - except that the virtuous behaviour of the 'pagans' there would put the monks of his own day to shame.

In his *Collationes*, probably written a few years later, an anonymous ancient philosopher – he has no revealed religion, and follows reason alone – puts on flesh and blood in a dream vision where, with Abelard, the dreamer, as judge, he debates first with a Jew, and then with a Christian. His views place him as a Stoic, and he shares the Stoics' disdain for worldly goods and sensual pleasure though – in a rare medieval rehabilitation of a school that was usually despised – the Philosopher also looks to Epicurus, whom he presents as the advocate

of an austere way of life. The Philosopher is treated with great respect in the dialogue. He has the better of the Jew in argument, even though the Jew is made to put forward a number of views that might be expected from a defender of Christianity. But the Christian out-argues the Philosopher and shows a number of his positions to be untenable, though Abelard, the judge, never delivers his judgement.

Clearly, Abelard does not in any simple sense identify himself with the Philosopher, or with any of the ancient philosophers. Yet, in a rather special way, he was indeed the *Philosophus*. For *Philosophus* – the term that, in the thirteenth century, would always designate Aristotle, the philosopher *par excellence* – was the title by which Abelard was known to his close pupils.

Study F: Abelard and early medieval ethics

Although Anselm of Canterbury did not develop a complete view of ethics, he analysed some important ethical concepts, such as rightness, justice (Chapter 4, section 7) and goodness (*Monologion* 1). At Laon, Anselm's namesake and his pupils were beginning to think about moral psychology, using Augustine as their starting point. Their theological focus did not obscure the philosophical issue. At what stage in the process of voluntarily performing a forbidden act, does a person sin? Anselm of Laon favoured a 'stages' theory, in which the amount of culpability increases as the sinner passes from the vaguest idea of performing the action, to actively contemplating it, planning it and putting it into effect.

It was, however, Abelard, who among the medieval Latins first elaborated a wide-ranging ethical theory – one which attempts to link together a view about the ontology of goodness and evil, and their relation to God, a semantics of ethical terms, a moral psychology and a theory of virtues. Abelard develops these theories especially in a set of works probably dating from the 1130s: the *Collationes*, the commentary on Romans, the *Sententie* and *Scito teipsum*.

'Good' and 'bad/evil', Abelard (*Collationes* Dialogue 2, [199-227]) holds (picking up on the analysis in Anselm's *Monologion*), often take part of their meaning from the sort of thing they qualify: a good horse is swift, and a good thief effective at stealing. Used in this way, 'bad' uncontroversially applies to, for instance, a lame horse. But 'good', 'evil' and 'indifferent' can also be used in an unqualified way. Abelard will not allow a lame horse, or even a human who acts badly and corrupts others, to be described as 'bad' in this unqualified way – because these features are not an essential part of these substances. Still, contrary to the usual view in his time, Abelard is willing to uphold the common-sense position that some things *are* genuinely evil in the absolute sense: not substances, but certain particular accidents such as death, sickness and sorrow. The existence

of such evil does not compromise the goodness of God's creation, because 'good' and 'evil' can be used to qualify, not only things, but also *dicta*, and it is according to this usage that divine providence, which is a scheme of how things happen, should be considered. Abelard is keen to insist: 'It is good that there is evil.' God, who is omnipotent, always ensures that there is the best outcome, and so, 'good' can be predicated, not of every thing, but of every *dictum*.

This best providence is, however, the result neither of God's choice nor of his nature. Taking a position which he knows few will accept, Abelard (*Theologia Scholarium* III.27–60) insists that God cannot do more or other than he does. He rules out any sort of idea that by choosing an action, God thereby makes it good – God would, in this case, be like the tyrant who sets his will up in place of law. And he then reasons that, given his goodness and omnipotence, whatever God has chosen to do at any given moment must be what it is best to do, and so to have done anything else would have been to do what was not best.

Like his older contemporaries in the School of Laon, Abelard develops his moral psychology by looking at the act of sinning (the developed theory is set out in Scito teipsum (Marenbon, 1997). By contrast with their stages theory, he identifies a particular moment at which someone, who was previously innocent, becomes guilty of a sin: the moment when the person *consents* to the act that he or she knows is forbidden. (The term 'consent' is introduced only at about the time of Scito teipsum, but it expresses an idea Abelard had by the early 1130s.) A person consents to an act when he is ready to perform it and will do so if not thwarted. A consent theory suggests a very different view of moral life from a stages one: when I look with delight at someone else's glamorous wife and think how pleasant it would be to seduce her, and how to go about it, I am not, in Abelard's opinion, sinning at all, so long as in the end I do not seduce her, because I know that it would be an evil act. Indeed, the more I struggle against my desires, the more violent and overwhelming I find the sexual attraction, the greater my merit, so long as I do not consent. If, however, I am ready to carry out the seduction but I am prevented, then I am as guilty as if I had slept with the woman. The actual performance of the sinful act adds nothing morally. Abelard's theory is, however, less an example of the internalization of ethics, in which mental states become the main objects of moral judgement, than that of his contemporaries (or the Augustinian view from which they derive). For Abelard, moral judgement is always in respect of an act, although the act might never in fact be performed.

The potential adulterer was described above as 'knowing' that his adultery would be evil. Abelard has a strong theory of natural law. He believes that all adults other than the mentally incapacitated at all times in history have been able to know what sorts of acts in general God forbids. Since God, on Abelard's view, very often forbids what we want to do – whether it is to sleep with this beautiful woman or to kill in self-defence the man who is chasing me, knife in hand – avoiding sin is a difficult matter. It is not, he stresses, enough not to *desire* to perform a forbidden act: I would prefer that the woman in question were not

married, and the last thing I desire is to kill my pursuer (in Abelard's example, indeed, he is my feudal lord, and if I murder him I will create a vendetta against myself and my family).

As will be clear, consequences are of no importance to Abelard in the moral judgement of an act. Given his overall view of divine providence, this decision is understandable: whatever someone does, even if the aim is evil, God will turn to good effect; it will be true of the *dictum* of a proposition affirming any act whatsoever, that it is good. A person cannot disturb God's good providence, but he can show contempt for God, which he does whenever he chooses some action forbidden by divine law. And, for Abelard, to sin is to show contempt for God.

A theory of virtues (as developed in the *Collationes* II and the *Sententiae*) may seem out of place in such a view, but Abelard adapts it to fit with the other elements of his theory. His main source is surprising – an ancient, pagan work, but not one that anyone now would describe as ethical. Near the end of his short, introductory treatise *De inventione* ('On Rhetorical Invention'), Cicero engages in a discussion of what things should be sought: those which are intrinsically worthy (*honesta*) – the virtues, knowledge and truth, those which are useful, and those which are both, and he goes on to classify the virtues. Abelard was profoundly affected by the whole passage, but he transforms the account of the virtues – prudence, justice, courage and temperance – so that only justice has independent standing. Prudence is its prerequisite, and courage and temperance are its props. To act justly is to act well, and Abelard is especially concerned with the avoidance of sin. He sees the moral life as a constant battle with fear, which courage is needed to resist, and with the temptation to pursue pleasure, which temperance holds in check.

Cicero was, above all, a Stoic in his ethics, and it is tempting to see Abelard, who followed the *De inventione* and knew some other of Cicero's works, and also read Seneca carefully, as a neo-Stoic moralist. There are moments towards the end of his autobiographical letter, the Historia calamitatum ('The Story of my Disasters') where he seems to adopt a Stoic fatalism, and he puts his exposition of the virtues into the mouth of the Philosopher in his dialogue, Collationes, who is fairly clearly a Stoic. Yet this identification should itself raise a query about Abelard's attitude to Stoic ethics, because, as mentioned above, it is the Christian who has the upper hand in the argument. Stoic theses such as the idea that a person is either entirely or not at all virtuous, and that virtue is the only good, are apparently defeated. Moreover, although Abelard's definition of 'good' may owe something to Cicero's discussion in *De inventione* of the intrinsically worthy and the useful, it is designed with a different aim in view. Whereas Cicero and the Stoics want to restrict the extension of 'good' in the unqualified sense to the virtues, knowledge and truth, Abelard wishes to leave it very wide. His striking view that non-substance things, such as death and illness are evil, and that their contraries, life and health, are good, could hardly be further from Stoicism.

None of Abelard's twelfth-century successors tried to develop a comprehensive ethical system as he had done, although the Paris theologians continued to

discuss many of the ethical questions he had considered (Chapter 5, section 5). The most widespread type of 'philosophical' ethics was that represented by the *Moralium dogma philosophorum*, from the middle of the century, which has been attributed variously to William of Conches and to the poet, Walter of Chatillon. Purporting to be the moral instruction given by Cicero, Seneca and others in a dream vision, the work draws largely on Cicero's *De officiis* ('On Duties'). But it is less a philosophical discussion than a classification of virtues (influenced by Abelard), illustrated by excerpts from classical Latin poetry – a reminder that ethical teaching, on the basis of the ancient texts, had been one of the traditional tasks of the medieval grammar master. Despite its floweriness, the *Moralium dogma philosophorum* – which assumes an unproblematically ancient perspective, without reference to Christian doctrine – retained the outlook of its sources. Vastly popular and much translated into the medieval vernaculars, its dilution of Cicero and Seneca had incalculably more influence than Abelard's perspicacious, sympathetic but critical account of Stoic moral thought.

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3 The schools, Platonism and William of Conches

The schools of Paris

The setting for most of the twelfth-century philosophical writing and debate discussed in the previous sections was Paris. When Abelard first vied with William of Champeaux for pre-eminence there, the school at Notre Dame was like any other cathedral school, with its one schoolmaster, and Paris itself was of no great political or economic importance. By the time Abelard returned there to teach in the 1130s, however, Paris had grown and the Capetian kings had made it a centre of their power and, most important, any qualified teacher was now allowed to set up a school, on payment of a licence fee to the cathedral authorities. Although the University of Paris would not be founded until 1200, the twelfth-century schools, with their many masters of grammar, logic and theology were already a university in less structured, less self-conscious form.

Bernard of Chartres and the problem of the 'School of Chartres'

Many accounts of twelfth-century philosophy give prominence, and often pride of place, not to Paris, but to Chartres. And, in contrast with the Aristotelian logic and analytical ethics which have been examined above, they characterize what is most remarkable in the thought of this century by the slogan 'the Platonism of the School of Chartres'. Two different historiographical questions, both debated, are at issue here. The first is a geographical question: where did the leading twelfth-century thinkers teach? The second is descriptive and evaluative: how is it best to characterize what is most exciting and distinctive in the philosophy of the period?

The school attached to the great cathedral of Chartres had been a distinguished one at least since the period of Fulbert, the schoolmaster there and then bishop at the turn of the eleventh century. Fulbert had followed Gerbert (Chapter 4, section 6) in introducing the whole range of the *logica vetus* to Chartres. A century later (c. 1110–24, perhaps earlier), Bernard was the teacher there. Bernard 'of Chartres' became famous rather as a follower of Plato - or, at least, it is as a Platonist that John of Salisbury, to whom he owes his celebrity, commemorates him in his Metalogicon (I.24; c. 1165: Chapter 5, section 6). Until recently, John's account was the main source used for Bernard's thought. From it, he emerges as a specialist in the two areas, very different to modern eyes, covered by twelfth-century grammar: the questions of semantics raised in connection with Priscian (as discussed in the Glosule, which were being written at much the same time), and the study of the ancient classical authors, including philosophical texts. There is not enough information in the Metalogicon to discern in Bernard any distinctive scheme of thought, though he seems to have adopted the view of Boethius's Opuscula sacra, according to which there is a single Platonic Idea, of which the forms immanent in particulars are in some sense the likenesses. An argument has been made that the oldest medieval commentary on Plato's *Timaeus* is his work, and it has been edited under his name. Even if the attribution is correct (and it may be wrong to look for a single author: commentaries from this period are often composed of strata contributed by different teachers), the commentary does little to sharpen the picture of Bernard's mind. It is the product of a careful, literal exegete, respectful of Plato and trying to shield him from responsibility for views (like wives being in common in the *Republic*) which he judges shameful.

No one questions that Chartres was the school were Bernard worked. But, according to many, a whole set of other important thinkers – Gilbert of Poitiers (Chapter 5, section 4), Thierry of Chartres (Chapter 5, section 6), William of Conches (see below) – also taught there. This view was rejected forty years ago by the historian Richard Southern, who considered it a 'romantic misconception'. But he did not silence the supporters of the School of Chartres. They can, indeed, bring forward testimony to connect Gilbert, Thierry and possibly William with Chartres, and a remark by Everard of Ypres (Chapter 5, section 7) shows that Gilbert must have sometime taught there. But there is no good reason to consider Chartres their main centre of activity, and solid evidence that both Gilbert and Thierry taught at Paris.

Some historians have accepted that Chartres was not the scholastic centre its advocates have claimed, but wish to use 'Chartrian' to describe a common intellectual tendency shared by the masters who have been linked with the school – not just the three mentioned, but also Bernard Silvestris and Alan of Lille (Chapter 5, section 7) who had been (wrongly) associated with Chartres by earlier scholars. But such a label invites misconstrual (why use that place-name?), and in any case there is *no* common tendency. Gilbert is no more of a Platonist than Abelard, while the Platonisms of William, Thierry, Alan and Bernard Silvestris are all rather different. If the dispute about the School of Chartres has a useful purpose, it is not that it has succeeded in identifying the geographical centre of twelfth-century thought, nor its spiritual core, but rather that, it has helped to point out the enormous variety of ways of philosophizing in the period.

William of Conches

William of Conches cannot be said with certainty to have taught at either Paris or Chartres. Late in his life, which stretched until after 1155, William acted as tutor to the sons of the Duke of Normandy; earlier he had been one of John of Salisbury's teachers, and John was certainly right to see in him the spiritual successor of Bernard of Chartres, since William too was a grammar teacher, author of a commentary on Priscian and commentaries on three of the Platonic quartet: the Consolation, Macrobius and, last, the Timaeus (c. 1125). His work on the Consolation, in its original and a revised version, became the standard commentary on this widely-studied text until the fourteenth century, when Nicholas Trivet's commentary replaced it. And the *Timaeus* commentary represents the high point of the study of Plato's dialogue in the Latin Middle Ages. But William had interests which went beyond those of Bernard. Even in his Consolation commentary, he showed (unlike Boethius himself!) a great interest in natural science, and shortly after he wrote it, he studied some scientific material translated from the Arabic, in particular Constantine of Africa's Pantegni, a translation of a tenth-century Arabic medical encyclopaedia. These influences are very noticeable in the Philosophia mundi, a treatise on natural science, as well in the Timaeus commentary, written shortly afterwards. As a result of his enthusiasm for naturalistic explanation and denial of the literal truth of such features of Biblical cosmology as the waters above the firmament, William was attacked by the Cistercian, William of St Thierry (who was also instrumental in 'denouncing' Abelard to Bernard of Clairvaux). Much later (1144–9), he revised the *Philosophia* into a dialogue-form work called the Dragmaticon, omitting some of the ideas that had been thought heretical. The *Dragmaticon* turned out to be a very popular work, especially in the later Middle Ages, when it was even translated into Catalan.

All three of the Platonic works William commented on contain passages which Christian readers would find hard to accept as literally true. In one sense, William's method here took to its extreme the tendency of commentators from Remigius of Auxerre (Chapter 4, section 6) onwards to Christianize their pagan, or insufficiently explicitly Christian, texts. He is in principle willing to admit that his pagan authorities might err, and that Christians should not follow them into heresy, but in practice he is very reluctant to accept that his revered Plato could be wrong. Rather, he says, Plato does not speak literally: he uses an *involucrum* or an *integumentum* – a metaphorical covering, which the interpreter needs to unwrap for the true meaning to become apparent. In another way, however, William's approach reflects his interests in natural phenomena and their explanation. Passages in his texts which give him opportunity to discuss physical phenomena attract his especial attention, and a comparison with Abelard's attitude to a famous interpretative problem is revealing.

There is no place for the World Soul described in the *Timaeus* in a Christian conception of heaven and earth. One way of 'saving' Plato (and Boethius, in his Consolation III, m. 9 epitome) is to suppose Plato was speaking metaphorically and was really referring to the Holy Spirit. William was happy to accept this idea in his earliest commentary, on Boethius, but then, because it proved controversial, he distanced himself from it more and more in each successive work, until he omitted it altogether in the Dragmaticon. In his Dialectica, Abelard rejects the idea of a World Soul with all the impatience of a logician towards the apparently absurd. But later he is eager to show (independently, it seems, of William) that Plato was indeed talking metaphorically about the Holy Spirit when he described the World Soul, and he does not withdraw from this view. It is important for Abelard to insist on this interpretation, because it forms part of his view that the ancient philosophers, such as Plato, were really Christians in all but name, and this position, in its turn, supports the view of natural law on which his ethics is founded. By contrast, William can afford to give up the identification of the World Soul with the Holy Spirit almost as soon as he has made it. For him, it is only a passing detail, because it does not allow him to draw out any scientific information. Unlike Abelard, William has no special interest in claiming Plato for Christianity, or in sketching a view of Christianity which would be worthy of a Plato: in his scientific Platonism the great value of the *Timaeus* is as a source of information about the physical universe.

As a natural scientist, William – the younger William, especially – is noteworthy for his keenness to explain away whatever he found physically improbable in the Bible: there cannot literally be waters above the firmament, he thinks, nor did God really 'de-rib' Adam so as to create Eve. But he is especially remarkable for his atomism: although atomistic theories of some sort were commonplace in the twelfth century, no one developed the theory so thoroughly as he (*Philosophia Mundi* I, 22; *Dragmaticon*, I, 6). The four elements must be 'simple in quality, minimal in quantity', as Constantine of Africa says. From this definition, which goes back to Galen but, for Constantine, is mere padding, William forges a whole atomistic theory (Pabst, 1994, 111). It follows, says William, that the elements *cannot* be, as it was usual for people in his time, following Aristotle, to say, water, earth, air and fire. Water, earth, air and fire are neither minimally small, nor are they 'simple in quality', since they contain a mixture of the qualities of dryness, moistness, hotness and coldness. The elements, then, are minimal, dimensionless particles, which each have a *single*, distinct quality. By combining them, what are usually called the elements but should be called *elementata* ('elemented things') are formed. William is aware that his theory is close to that of the Epicureans (he does not seem to be aware of how it differs by allowing atoms to be distinct in their qualities). In the *Dragmaticon*, he has his interlocutor challenge him on this very point (I.6.8), and he replies that there is indeed truth in what the Epicureans say; where they err is in saying that the atoms (this is the one moment where he uses the word) have no beginning.

William was a far less controversial figure than Abelard, and his move to the Ducal court may have been a deliberate step away from the rivalry and tensions of life in the schools. He shared with Abelard a wish to rationalize (if the word can be used without anachronism) Christian doctrine, but he seems to have been driven less by a desire for logical coherence or by moral considerations, than by his interest in natural science. Although his study of the ancient pagan authors was even more thorough than Abelard's, his approach to them as scientific sources made it easier for him to admit, when it was prudent for him, that they erred. And, in general, theology was simply far less important to him than to Abelard, who had made himself into a professional theologian. William was ready, when he was pressed, to retract or modify his doctrines, so long as he could continue to pursue his work on natural science and grammar. More than any other philosopher in the twelfth century, William anticipates the Arts Masters of Paris in the 1260s and 1270s.

4 Gilbert of Poitiers

Next to Abelard, Gilbert of Poitiers is the most powerful and innovative philosopher of the twelfth century. His life story is a far simpler one. Born *c*. 1085–90, he studied under Bernard of Chartres and then, at Laon, under Anselm. From *c*. 1126–*c*. 1142 he taught at Paris and at Chartres, where he was a canon and then chancellor, before becoming bishop of his native Poitiers in 1142. From the interests of his followers in the later twelfth century, Gilbert seems to have taught widely in the field of logic. But almost all of his philosophical thinking has been drawn from a single text, his extensive commentary on Boethius's *Opuscula sacra*, written in the 1130s or 1140s; his other surviving works, commentaries on the Psalms and on Paul's Letter to the Romans, do not discuss the areas of thinking, mainly metaphysics, in which he was so innovative.

Like Abelard, Gilbert was the object of an attack by Bernard of Clairvaux, directed against the Boethius commentary. Despite the help of eminent theologians such as Peter the Lombard and Robert of Melun (Chapter 5, section 5), however, Bernard was unable to make the Council of Rheims (1148) condemn Gilbert, and the bishop returned to his diocese with his reputation unblemished.

Gilbert's commentary on the *Opuscula sacra* is a close discussion of Boethius's text, a sort of ventriloquism in which Gilbert expounds each sentence in the way he thinks it needs to be read. With the exception of III, the *Opuscula sacra* (Chapter 3, section 1) are examinations of Christian doctrine, designed to support or attack various theological positions. But Gilbert – for whom, in any case, the Christological and Trinitarian disputes of the sixth century had little relevance – has different aims from Boethius's. One of them is to expound a metaphysics which, although it speaks in the language of Boethius, is very much Gilbert's own and takes its cue from twelfth-century problems and developments. Another is to consider far more deeply a problem Boethius certainly raises, in his discussion of God and the Categories: how can human beings talk about things concerned with God?

Gilbert's basic metaphysical distinction is between *what is (quod est)* and that from which it is (quo est) (e.g. [Gilbert of Poitiers, 1966] = G 91:51-8, 116:47-9). Driven by the needs of exegesis, Gilbert also uses a plethora of other, less explicatory terms to make the same distinction - especially subsistens (= quod est) and subsistentia (= quo est). Although Gilbert's point is metaphysical, it is easiest to approach it linguistically. Consider a particular concrete whole, such as the human being, Socrates. He can be described as 'an animal' and as 'a human', but also as 'a rational thing', 'a thing which is capable of laughter', 'a thing-six-foot-tall', 'a white thing'. The referent of each of these expressions is a *quod est*. Gilbert does not, of course, think that these *quod ests* are each different things: they are all the one thing. Socrates. But Socrates is a complexly-structured thing, as becomes evident when one considers the quo ests which correspond to each of these quod ests: animality, humanity, rationality, capacity-to-laugh, being-six-foot-tall and whiteness. Socrates is what he is in virtue of these multiple quo ests. He would not, for instance, be rational without a quo est of rationality to make him so, or white without a quo est of whiteness.

Quo ests, it will be seen, are what other twelfth-century thinkers call particular forms – either *differentiae*, such as rationality, or accidental ones, such as whiteness. But the terminology is not a piece of obscurantism or a mere relict of Boethius: as their meanings suggest, *quo ests* and *quod ests* have a correlative, causal relationship. There can be no *quod ests* without the *quo ests* which make them what they are (G 144:58–60; 145:95–100; 279:11–12), and no *quo ests* exist in act apart from a *quod est* (G 278:8–279:12). Gilbert's *quo ests* seem, then, to have less ontological independence than Abelard's particular forms. And there is room in Gilbert's system – as there does not seem to have been in that of Abelard or other contemporaries – for complex *quo ests*/forms. For example, Socrates's rationality is a simple *quo est*, but his humanity is a complex one, the structure of which is shown by Porphyry's tree:

TWELFTH-CENTURY LATIN PHILOSOPHY

it has to combine the *quo ests* corresponding to the *differentiae* of human (rationality and mortality) and the *differentiae* of all the ever more general genera to which the human belongs (having-senses, being-alive, being-bodily). The most complex *quo est* of all – which Gilbert calls a 'whole form' – is that which combines all the *quo ests* of Socrates: Socrateity – all his essential features and past, present and future accidental features (and, Gilbert adds, those which he does not even ever have in act: see Study G).

Gilbert must have been aware that his contemporaries were busy debating whether any things are universal. His implicit answer is clear: no – every *quo* est and so therefore every *quod* est is particular (or, to use the term Gilbert prefers, singular: G 167:7–19, 301:86–95). But there is an important distinction between his position and that of the twelfth-century nominalists. They claimed

2 No thing is universal

and so

3 Every thing is individual.

Gilbert accepts (2), but he rejects (3) completely. Everything, he agrees, is singular, but singularity is merely a necessary, not a sufficient condition for individuality. Whatever is exactly similar (conformis), in act or by nature, to something else is a *dividual* not an individual. Obviously there are vast numbers of quo ests of, say, rationality or whiteness which are exactly similar, and in any case, even if there happened not to be a *quo est* exactly similar to this one, there might by nature be one (G 143:52–144:78, 270:73–271:82). Gilbert believes that the only type of *quo est* which is not dividual but individual is the whole form of a quod est such as Socrateity (G 274:75-84) (cf. Study G). With this distinction in mind, Gilbert gives what, verbally at least, is a realist answer about universals. He is willing to accept that a group of exactly similar, singular quo ests can be considered one universal (a dividual, not an individual), because they produce exactly similar effects (G 269:34-50, 312:95–113). In effect, his examination of singularity and individuality gives him a principled way of allowing there to be a thing which is both one and many.

Gilbert's account of the constitution of concrete wholes is linked to a view about different disciplines and the relation between talking about created things and applying language to God. His starting point (G 79–80) is a passage in *Opuscula sacra* I.2 where Boethius, drawing on Aristotle's *Metaphysics* (1026a6–19), contrasts natural science, which studies non-abstract, changing things, with theology, which studies what is abstract and unchangeable, and mathematics, concerned with non-abstract but unchangeable things. The contrast between natural science and theology is clear. Boethius had combined Aristotelian and Platonic perspectives by maintaining that there are embodied particular forms in concrete things, but also a single Form, identifiable with God, from which they derive as images. Natural science is concerned, Gilbert believes, with the embodied forms, whereas theology is concerned with God. The task of mathematics turns out to be a strange and quite limited one (as if Gilbert had been forced by his text to take a third discipline into account, where the first two would have been sufficient for him). Mathematics examines *quo ests* apart from both the concrete wholes which they help to make, and the other *quo ests* with which they are combined. In practice, this requirement means that the mathematician's task is to assign *quo ests* to one of the nine categories of accident (G 86, 117–18). The work of analysing concrete wholes is thus left to natural science, and the important contrast is between natural science and theology.

Although it is these two pursuits which especially concern Gilbert, he recognizes a whole range of different disciplines - each of the liberal arts and ethics, for instance - and he has a theory of argument that recognizes this multiplicity. The theory has a remarkable resemblance to that of Aristotle's Posterior Analytics; yet it seems unlikely that Gilbert knew that work, and he probably developed his ideas by thinking about topical arguments. Gilbert observes that, when they reason, people make use of certain rationes - selfevident propositions - which have different names in different disciplines: for example, dialecticians call them 'maximal propositions', geometers 'theorems' (G 189:67–190:74). Some of these rationes are 'common' and can be used in every subject, but others are 'proper' and can be used in one discipline alone. It follows that the proposition expressing a *ratio* proper to Discipline A may be false in Discipline B, and that reasoning on the basis of it, which is correct in A, would lead to error in B. (When Gilbert discusses a set of what Boethius explicitly discusses as axioms, at the beginning of Treatise III, he very consistently gives all except one of them two readings - a scientific and a theological one). So, Gilbert points out, people who take the proper rationes of natural science, which would be appropriate for reasoning about humans and their relations, and use them in theology believe that it does not follow from 'the Father is God, the Son is God, the Holy Spirit is God' that 'the Father, Son and Holy Spirit are one God, not three Gods.' But, if they used the properly theological *ratio*, they would see that the inference is acceptable (G 72:46–65).

Gilbert's theory of the disciplines and their *rationes* does more than allow him to reject the critics of Christian doctrine. Although the direct application of the proper *ratio* of one discipline to another must be avoided, Gilbert – developing an idea in Boethius's *De differentiis topicis* – does allow for them to be transferred ('transumed', as he calls it) 'proportionately'. This principle allows the theologian to explore matters concerning God by using the accessible ways of argument proper to natural science, but bearing in mind that they do not fit completely – the transumption is merely proportionate. Gilbert is, then, developing in a more theoretically-conscious way Boethius's own methodological innovation of trying to mark out the moment at which the discourse of logic and science breaks down when discussing the divinity (Chapter 3, section 1). Transumption can also be used in the other direction, as Gilbert does in solving the puzzle posed in Treatise III (G 220–1). He thinks that, in terms of natural science, the problem Boethius faces is insoluble: if 'everything which exists is good by virtue of existing' is true, then everything will be substantially (essentially) good and so identical with God. But the sentence is not one of natural science, but ethics, and moralists here use 'good' by 'denominative transumption' from theological discourse. When we say that things are good by virtue of existing, we are using 'good' in the way that we use 'human', when we say, of a table, for example, that it is a piece of *human* artifice: it is human because it has been made by humans. What we are saying, therefore, is just that all existing things are good because they derive from God, who is essentially good.

Study G: Abelard and Gilbert on possibility

Abelard explains in the *Dialectica* (Peter Abelard, 1970, 195) that, according to his old teacher, William of Champeaux, modal propositions should be understood as being about the 'sense' – or, in his slightly later terminology, the *dictum* of – the non-modal proposition from which they derive. Take the non-modal proposition 'John is anxious'. For William, the modal proposition 'It is possible that John is anxious' should be understood as saying that John's-being-anxious/that John is anxious is possible. Abelard disagreed, and he denied that, interpreted in William's way, propositions were genuinely modal at all (Peter Abelard, 1970, 198). For him possibility and necessity should be understood to modify the way in which the predicate of a proposition inheres in the subject. 'It is possible that John is anxious' asserts, not that anxiety inheres in John, but that it possibly inheres.

The distinction between these two ways of analysing such propositions could also be made in more complicated cases, as Abelard does in his *Logica Ingredientibus*, commentary on *On Interpretation* (Minio-Paluello, 1956b, §18). Consider the proposition

(4) It is possible that the person who is standing is sitting.

(4), Abelard explains, can be understood as

(5) The following is possible: that the person is both standing and sitting (at the same moment)

or as

(6) The person is standing, and it is possible that he is sitting.

TWELFTH-CENTURY LATIN PHILOSOPHY

(5) is a *de sensu* or 'composite' reading along William of Champeaux's lines, whereas (6) accords with Abelard's own view of what, in the *Dialectica* he considers a genuinely modal proposition and he now calls a *de re* or divided reading. (He took the terms 'composite' and 'divided' sense from Aristotle's *Sophistical Refutations* (cf. Chapter 5, section 7). (5) is clearly false. (6), as Abelard recognized, is ambiguous. It might mean, what is uncontroversially true, simply

(7) It is possible that the person who is now standing has been sitting or will be sitting at some other time.

But it might mean

(8) It is possible that the person who is now standing is now sitting.

To accept (8) as true seems as though it would be to reject the Aristotelian view of possibility and of the necessity of the present, and to admit synchronic alternative possibilities (Study A). Does Abelard consider (8) true or false ?

In some passages, at least, Abelard shows that he is not content to go along with a straightforward statistical interpretation of modality. On a statistical view of modality, 'it is possible that the blind person sees' is false (granted that 'blind' means incurable loss of sight). Abelard, however, affirms (*LI commentary on Categories*; Peter Abelard, 1919–33, 272–3; cf. Martin, 2001, 110) that a blind person can indeed see at the time when he is blind, in the sense that he might never have become blind. In this way, Abelard explains, someone standing now *can* sit now, although he cannot sit and stand at once. This admission seems as if Abelard is accepting the truth of (8). But the matter is not so simple.

As this passage (and many others) indicate, Abelard likes to think of possibility in terms of potency attaching to things of a particular species (another of the Aristotelian paradigms) – and he seems to treat 'it is possible that x Fs' and 'xcan (*potest*) F' as interchangeable. It is possible for a member of species S to do whatever is not repugnant to his nature as an S: in this sense, it is possible for a person to be sitting now, even if as a matter of fact she is standing, or for a blind man to see.

This manner of attaching possibilities to persons rather than states-of-affairs is brought out very sharply by an argument in the *Theologia Scholarium* (III.39, 49–58). Since Abelard holds that God cannot do other than he does (Study F), it seems that it is not possible for a person to be saved who is in fact going to be damned, since he could be saved only if God willed so, and cannot will otherwise than he actually does. But Abelard explains that, whilst 'someone is saved by God' and 'God saves someone' mean the same, it does not follow that

(9) He (i.e. the sinner) can be saved by God,

and

(10) God can save him.

have the same meaning. In (9), the possibility is referred to the person in question and so to the species of thing he is, a human being. It should be taken as meaning that it is not repugnant to him, as something which has the nature of a human, that he should be saved, and is thus true. In (10) the possibility is referred to God's nature, and since *ex hypothesi* the person is wicked and is unfitting to be saved, (10) is false.

It appears, then, that Abelard does consider (8) true, but only in a way that does not commit him to alternative possible states of affairs. He uses the idea of potentiality to explain the intuitions for which synchronic alternatives are usually supposed to provide an account. And this stance was present even in the view he formulated in the *Dialectica* about the nature of modal propositions. When Abelard distinguishes between a *de sensu* and a *de re* reading, he is not looking at two different ways in which a modal operator can range over propositions – as if, by contrast with (5), which can rightly be rendered as: possibly (*p* and not*p*), (6) should be rendered: *p* and possibly not-*p*. On Abelard's reading (6) cannot be rendered illuminatingly in terms of propositional logic (it would be just: *p* and *q*) because the modal modifier applies not to what is said by a proposition, but to the relationship between the terms within a proposition.

By contrast with Abelard, Gilbert can be seen - when the implications of his scattered remarks are drawn together (as in Knuuttila, 1993, 75-82) - to have adopted a definite view of synchronic alternative possibilities and used it in setting out his metaphysics. He was brought to it by his belief in divine omnipotence. There are certain basic logical principles which Gilbert appears to think God could not change, but he suggests in passing remarks that God might have made different laws of nature (G 322:43-9) and he clearly accepts that he could have made different things from those which he actually has made. Some of his formulations are very explicit (though modern readers have often mistaken them as asserting the paradoxical position that God can undo the past): '... just as whatever did not exist is able to have existed, and whatever is not or will not exist, can exist, so also whatever existed can not have existed and whatever is or will be, can not exist.' (G 125:29–8). That Gilbert is not talking here, in an Abelardian way, about potentialities is clear, both because it would make little sense to talk of a non-existent thing's potentiality, and also because he makes it clear that the power in question is God's, not that of the objects concerned.

The outline of Gilbert's metaphysics above (Chapter 5, section 4) already touched on a point which becomes clearer in the light of this approach to modality. Socrateity, the 'whole form' of Socrates – that very complex *quo est* which includes everything that makes Socrates Socrates – is said to consist not just of every *quo est* Socrates actually has, has had and will have, but also those *quo est* she does not actually have, but has 'by nature' (G 144:77–8; 274:75–6).

By nature, Socrates can have any *quo est* which a human can have: for instance, he might by nature be made bald by the appropriate *quo est*(s), though in actuality he never loses his hair. He could not, presumably, have a *quo est* which would make him capable of flying by his own strength, since he is not suited to it by nature. Gilbert gives only the merest suggestion of his theory, but the *quo ests* an individual could have by nature appear to mark out every possible history for that thing or person. Gilbert's ideas point to the type of modern view in which the same individual maintains its identity across different possible worlds (Knuuttila, 1993, 81).

But Gilbert's view raises one immediate problem. Consider the whole form of Socrates and that of another man, Plato. Socrateity will consist of all the essential features of a human and of every *quo est* which a human can have; Plato-ness will consist of - all the essential features of a human and of every quo est which a human can have. Gilbert's contention is, we remember, that the only sort of *quo* est which is not exactly similar to some other quo est is the whole form of something. Yet his resort to what is Socrates's by nature seems to produce the result that all whole forms of individuals of the same species will be exactly the same. Gilbert could respond that although, if one sums up the quo est of each human in every providential plan (or, in modern terms, in every possible world), the result will be the same, for different humans these quo ests will be differently distributed between different possible worlds. For instance, Socrates has a full head of hair in the actual world, and in possible worlds a-h, but is bald in possible worlds j-t; Plato is bald in the actual world, but in none of the possible worlds a-t. No corporeal individual can have the same whole form in the same possible world, because their quo ests giving their spatio-temporal position cannot be the same. For his system - or rather, for it is hardly more, his suggestion or hint – to be coherent, Gilbert needs to identify individuals clearly through the complex quo est which includes only those quo ests they have in actuality, and only then to consider the different histories they might each have had in different possible worlds.

Gilbert's view of modality anticipates the thinking of Duns Scotus (Study L). It fits well into ways of thinking that centre on a divine decision to will a particular course of providence. Abelard's approach should not, however, be regarded as less sophisticated or plausible. His God, who cannot do other than he does, does not *choose* a providential scheme. And it makes good sense for Abelard to refuse to allow *dicta*, which he insists are nothing, to be modalized: we do not mislead ourselves when we identify as a *dictum* that I am typing, but we will do, he suggests, if we start to try to go beyond this nothing and attribute to it modal qualities – better far to stick to the capacities of the things that really exist, such as myself, my desk and my computer.

* * *

5 The beginnings of Latin scholastic theology

Although the modern reader may be more excited by the logic, metaphysics and ethics of the time, the study of Christian doctrine - what we call, but they did not vet, 'theology' was what drew most of the finest twelfth-century minds. Both William of Champeaux and Abelard himself exemplify the tendency for logicians to devote a large part of their energies to theology; Gilbert of Poitiers too, since he was clearly a highly skilled logician. Just a few masters, such as William of Conches and Bernard Silvestris (Chapter 5, section 6, interlude v), resisted the trend. The result was the development of the distinctly scholastic method of theology, which would dominate the intellectual life of the great universities from the thirteenth century onwards. Yet, at the same time as these theological techniques were being developed in the Paris schools, the monastic approach to spirituality held an enormous attraction, gained many recruits and generated its own quasi-philosophical literature. A treatment of twelfth-century thought in a history of intellectual life, rather than a history of philosophy, would leave room to consider Bernard of Clairvaux's own, rhetorically imaginative if philosophically incompetent writings, William of St Thierry and Ailred of Rievaulx's adaptation of Cicero to Christian monastic ends and the eclecticism of their fellow Cistercian, Isaac of Stella.

The most important figures in the development of systematic theology were Anselm of Laon and William of Champeaux (at the beginning of the century), Abelard (1130s), Hugh of St Victor (1130s and 1140s) and Peter Lombard, whose *Sentences* appeared in their final form in 1158. The ground on which systematic theology grew up was Biblical exegesis. It might be seen, in the first place, as an attempt by thinkers to clarify and arrange the thinking to which Biblical study led them, although in practice it involved very heavily the thinking that had already been done by the Church Fathers. It has two special characteristics: its method of posing questions and citing and reconciling conflicting authoritative texts about them, which would develop into the *quaestio*-technique of the universities; and its systematic arrangement.

The *sententiae* (usually translated 'sentences' – it means, roughly, 'views') of Anselm of Laon and William of Champeaux were short comments on points of doctrinal difficulty, which may have arisen originally from Biblical passages, especially those which seemed to contradict other parts of scripture. Abelard sharpened the idea of doctrinal difficulties to be answered when he compiled his *Sic et non* ('Yes and No') in the 1120s. In this work, he poses a series of questions, which range from ones that ask about fundamental and indisputable truths of the faith (Whether God is triune or not) to those for which the right answer is uncertain (Whether God alone is incorporeal; whether charity alone is virtuous). For each, as his title indicates, Abelard cites both authoritative texts which answer 'yes' and those which answer 'no', though in the cases of indisputable truths the contradictory texts do not really contradict, once they are properly contextualized. Abelard does not discuss

any of the individual questions or texts in *Sic et non*, but on occasions in his writings he works up some of the texts there into a debate with discussion. One remarkable instance is his discussion of whether God can do other than he does in *Theologia Scholarium* III.27–56 (Study F). Abelard assembles authorities for both sides of the question, but also develops at length the arguments for his own preferred solution, anticipating and answering objections to it. Some details of technical vocabulary and structure aside, what Abelard presents here is almost a fully-developed scholastic *quaestio* (Chapter 7, section 1).

Anselm's and William's *sententiae* are found within a large, loosely arranged collection (the *Liber Pancrisis*) mostly of patristic excerpts. They do not seem themselves to have aimed at a systematic arrangement of their material. Abelard, however, clearly paid attention to the way *Sic et non* was ordered in its different recensions, and by the 1130s and 1140s, theology masters in Paris saw it as their job to cover the whole area of Christian doctrine. Many masters followed a chronological arrangement: for example, in his *De sacramentis* ('On the Sacraments'), Hugh of St Victor begins with the 'work of creation' – starting from Genesis – and he goes on with the 'work of restoration', from the Incarnation to the end of time. Abelard followed a more rationally contrived order, which by the time of the *Sententie* moved from discussing faith (the Trinity, the essential attributes of God, the Incarnation) to charity (virtues, vices, merit and sin) and then the sacraments.

Peter the Lombard, who had been a pupil both of Abelard's and of the less adventurous, more Augustinian Hugh of St Victor, managed to bring together for the first time a number of aspects of this developing theological method, in a way which made it no accident that his Sentences should have been adopted as the textbook for medieval university theology (Chapter 7, section 1). The Sentences cover the whole range of Christian doctrine, in a fairly logical order. They begin (Book I) with God, the Trinity. Book II discusses the creation, and also the fall of man. Book III combines a treatment of the Incarnation with that of the virtues, and Book IV examines the sacraments. Like Sic et non, the Sentences are full of patristic citations. They are not arranged, on principle, to contradict one another, but they often do, and Peter will then step in to explain how they are to be reconciled. The Sentences, then, are not a commonplace-book or equivalent of a card-index, like Sic et non. Nor do they usually indulge in the very complex speculations of a work like the Theologia Scholarium. Rather, they present the Lombard's reasoned view about what is the correct, authoritatively sanctioned answer to each problem.

6 The Platonisms of the later twelfth century

The first half of the twelfth century belies its common description by historians as a time of Platonism. In the years from the 1140s to 1200, there was a far more noticeable Platonic current among some thinkers – or, rather, currents.

For the most striking characteristic of this later twelfth-century Platonism is its diversity.

One, very partial Platonist, is the historian, belletrist and wry commentator on the intellectual scene, John of Salisbury, who studied in Paris in the 1130s and 1140s (Abelard was one of his teachers), and wrote his *Metalogicon* in 1159. Although he makes Bernard of Chartres, 'the most perfect Platonist of our century', into one of his heroes, John is at other moments rather sardonic about the Platonists' over-ambition, preferring the more human philosophizing of Aristotle and his followers. In an earlier work, the *Entheticus de dogmate philosophorum* (1154–62), John had praised Plato unreservedly, but in particular as a philosopher who recognized the limitations of human reasoning.

The scientist and translator Hermann of Carinthia (Chapter 5, section 8) described his teacher, Thierry of Chartres (or Brito, 'the Breton') as 'the soul of Plato granted once again by heaven to mortals', and to some historians Thierry is a central exponent of a flourishing and adventurous twelfth-century Platonism. Yet almost everything about his career is obscure. He taught in Paris, and perhaps also at Chartres, certainly in the 1140s to 1150s, but perhaps from considerably earlier. He was clearly a wide-ranging arts master. He is commemorated as a pioneer of the *logica nova* (Chapter 5, section 8); he wrote commentaries on Ciceronian rhetoric, and he assembled an extensive corpus of texts on all the liberal arts, which he called the *Heptateuchon*. His modern reputation as a Platonist rests on a brief treatise on the Hexaemeron, De sex dierum operibus ('On the Work of the Six Days') and on a set of commentaries to Boethius's Opuscula sacra. De sex dierum operibus was transmitted, unfinished but probably in its original form, by Thierry's pupil, Clarembald of Arras. It consists of a 'natural and literal' exposition of the first five verses of Genesis, following a tradition which goes back to Augustine and the Greek Fathers, but particularly rigorous in its exclusive focus on naturalistic explanation, using the *Timaeus* and Calcidius as major sources. It seems to be an example of the 'scientific Platonism' of William of Conches, from whom it may borrow some ideas. But the second half of the work - at least as Clarembald presents it - discusses God and his triunity in terms of arithmetical analogies: the Father is unity, the Son otherness.

Three commentaries on the *Opuscula sacra* are usually attributed to Thierry, but they express some very divergent views; at least one of them, sometimes called *Librum hunc*, is probably based quite closely on Thierry's teaching. All three take as the starting point for their metaphysical speculations Boethius's own distinction (Chapter 3, section 1) between the one true form, identified with God, and the particular forms immanent in bodily things. According to *Librum Hunc* (Thierry of Chartres, 1971, 81–4; cf. ibid. 176, 276 for parallel discussion in the related commentaries), all other forms emanate from 'that simple divine form, which is the form of all things'. But the commentator wishes, in the final analysis, to do without these particular

forms. Were matter not to exist, there would just be the one form. Matter itself is also entirely without plurality, but plurality results from the conjunction of (unitary) matter and (unitary) form. How, then, is he to explain what distinguishes the form humanity from the form divinity? The rather unsatisfactory answer is that form gains its distinctive nature as the form humanity only from contact with matter; the analogy is given of a face seen in different mirrors, each of which are differently shaped and so make the face look different. But this way of envisaging the role of matter gives it a formal aspect, an ability to shape, which is hardly compatible with what is said about it elsewhere in the commentary.

Another route to Platonism was through pseudo-Dionysius. There is a vast unfinished commentary to *On the Names of God* by William of Lucca, written between 1169 and 1177. William, who was also influenced by the current of Porretanism (Chapter 5, section 7), has many ideas in common with the author of *Librum hunc*, although his identification of God's will as 'the Idea of all things' does nothing to explain the relation between God and a multiplicity of forms. A different side of pseudo-Dionysius is used by Richard of St Victor who, as well as becoming one of the authoritative writers on the Trinity for the scholastics, develops an elaborate, but carefully worked out, system of mystical ascent by grades of contemplation.

Interlude v: Platonism and poetry

Should Bernard Silvestris (c. 1100–60), who taught at Tours, be included in a history of medieval philosophy? Bernard wrote commentaries on Martianus Capella and the *Aeneid*, a fascinating poem, the *Mathematicus*, which explores the problem of predestination in a non-Christian context, and the *Cosmographia* (finished 1148), an allegorical prosimetrum (a work in alternating prose and verse) on the creation of the world and the living things, including humans, in it. The setting is resolutely free from Christian references, and for his material Bernard looks mainly to the *Timaeus* and Calcidius's commentary – the heroines of his drama are Noys (Intellect) and Endelichia (the World Soul), its anti-heroine Silva, the unformed matter from which the universe must be shaped – but also to the prosimetra of Martianus Capella and even Boethius.

The *Cosmographia* presents no philosophical argument, but it does offer a sustained meditation on the most substantial piece of ancient philosophy available to twelfth-century thinkers, untrammelled by the need to draw out explicit Christian parallels or contrasts. The fashion for philosophical prosimetra had been set by an unlikely figure, Adelard of Bath, who is famed more as a natural scientist (Chapter 5, section 8). It was followed by the many-talented Alan of Lille, who was also a distinguished theologian (Chapter 5, sections 5 and 7).

In his De planctu naturae ('The Lament of Nature'; c. 1160–70), Alan uses the model of Boethius's Consolation, interweaving prose with a whole variety of verse forms. In place of Philosophy consoling the lamenting philosopher, Nature, God's vicegerent, appears lamenting to Alan. Her sorrow is over the way in which men, by indulging in homosexuality, have gone against her order. The learned imagery and allusions are designed to appeal to students of grammar and logic. The work lacks the philosophical argumentation of the Consolation, though perhaps not its openness to various interpretations. The Anticlaudianus (1182-3) is a hexameter epic, in which a perfect man is created with the help of the liberal arts (described in a manner reminiscent of Martianus) and defeats the vices, but not before a celestial journey to fetch his soul, which God alone can provide. As in De planctu, Alan writes about Christian subject-matter and within what he takes to be a Christian ethical framework, but he develops much of his theme in non-Christian terms. He is careful in both works, however, to mark out a very clear line between what reason can grasp, and what faith reveals. And on issues such as the waters above the firmament, he turns out to be a theological conservative.

These highly-wrought texts highlight the twelfth century as time in Latin culture when boundaries between philosophical and literary writing were loose and could be crossed with ease and profit; that most technically accomplished of logicians, Abelard, composed his *Collationes* in the form of a dream-vision and wrote poetry which vividly captures some of his main ethical ideas.

7 The Parisian schools of the later twelfth century

The logical sects

The period from 1120–50 was a time when outstanding and distinctive logicians taught in Paris: not only Abelard and (it seems, though his logic does not survive) Gilbert of Poitiers, but also Adam of Balsham (or 'Parvipontanus'/of the Petit-Pont, where he had his school) and Alberic of Paris. The only logical work of Adam's which survives is the *Ars disserendi* ('The Art of Discourse'), completed in 1132. It shows his interest in examining fallacies in argument and in devising a novel vocabulary, which makes his ideas sometimes seem stranger than they are. Alberic's views are known only

at second-hand through commentaries by students who had been to his lectures. He seems to have been Abelard's arch-opponent, the realist adversary to his nominalism, and it was he who showed up (Chapter 5, section 2) the fundamental weakness in Abelard's system of propositional logic. Another distinguished logician, whose only surviving work is theological, was Robert of Melun.

From these teachers, there grew up the logical sects which were the characteristic feature of intellectual life in Paris in the second half of the twelfth century. Abelard's followers were called, as most historians now accept, *nominales*, those of Gilbert *Porretani* (more rarely *Gilebertini*), Adam of Balsham's followers *Parvipontani* (or *Adamitae*), Alberic's the *Albricani* or, unless this was a different sect, *Montani* (after the Mont St Geneviève, on the Left Bank, where Alberic, and also Abelard, taught), Robert's *Melidunenses* or *Robertini*. Each sect had a set of theses, usually related to the interpretation of the *logica vetus*, to which its followers apparently had to subscribe. Some of these theses are straightforward: *nominales* deny that genera are things, the other sects, all realists, affirm that they are. Many, however, are designed to seem paradoxical: the *nominales*, for instance, held that nothing grows, the *Melidunenses* that no species is predicated.

The surviving twelfth-century logical commentaries date in almost every case from before 1150 and so they can give information only about the beginnings of these schools. Fortunately, some text-books survive – a Porretan logical compendium, the long and very important *Ars Meliduna* for the followers of Robert of Melun, the *Introductiones montane maiores* and *minores* for the followers, probably, of Alberic, and the *Summa dialetice artis* by William of Lucca, a professed *nominalis* and admirer of Abelard.

To some extent, these schools carried on the agenda set for them by the earlier twelfth-century masters they were each following. For example, the nominales' claim that nothing grows is merely a shocking way of presenting Abelard's reductionist mereology which did not count integral wholes made up of parts as distinct items. Alberic's detection of a flaw in Abelard's rules for propositional logic had wide repercussions. Alberic's argument (reconstructed in Martin, 1987, 394-5) relies on taking for its two first premisses a conditional accepted as true by everyone ('if Socrates is a man, he is an animal': $p \rightarrow q$) and as a second premiss a conditional formed from the same propositions p and q of the form $p \& \neg q \rightarrow \neg q$, which on Abelard's and most systems is true in virtue of its form by the rule of simplification (or '&elimination'). This premiss will, of course, have an impossible antecedent (here 'Socrates is a man and not an animal'), and the Montani tackled the problem by refusing to accept conditionals with such antecedents. The Porretani rejected the second premiss for a different reason: they objected that p had no role to play in the inference. The nominales were left in confusion, whilst the *parvipontani* accepted for Abelard the unacceptable conclusion of Alberic's argument, in which the impossible $p \rightarrow -p$ entails its

own negation, because they held, like classical contemporary logicians, that from an impossibility anything follows.

Yet the mostly anonymous masters of these later twelfth-century schools included original thinkers. The Porretan treatise makes Gilbert's theory of different *rationes* in different disciplines its point of departure, but it develops a fascinating theory of predication, in which genuine predications take place only in natural science, and the seeming predications of logic and ethics need special analysis. There is no reason to think that all these reasonings go back to Gilbert himself. And, despite Abelard's confidence that he had shown all varieties of realism to be untenable, the realist sects (all, that is, except the *nominales*) devised new, sophisticated versions of realism. According to the *Ars meliduna*, for instance, when the mind considers a universal it grasps a *communio* ('coming together') of things. But then it adds a Platonic twist: in the case of universals in the category of substance (genera and species) this *communio* is what brings it about that what participates in it *is* something.

Some of the masters' innovations were linked to newly available logical texts - the logica nova, consisting of the texts of Aristotle's logical organon not in circulation by c. 1000: the Prior Analytics, the Sophistical Refutations and the Topics (the other text in the logica nova, the Posterior Analytics, was not much studied until the mid-thirteenth century). The Prior Analytics had already been available in parts to Abelard; the Topics was known well to John of Salisbury, though few of the logicians seemed to share his enthusiasm for it. But by far the most important text of the *logica nova* for these masters was the one which modern readers tend to think negligible: the Sophistical Refutations, Aristotle's guide to the fallacies on which incorrect, though someimes apparently cogent, arguments rely. Abelard had read the Sophistical Refutations, but the work did not interest him. From the late 1130s or even earlier, however, logicians began to study this text enthusiastically, attracted perhaps because of their interest in the interplay between verbal ambiguity and the analysis of argument. Later twelfth-century logic also shows the beginnings or development of parts of what would be called the logica modernorum, the branches of the discipline not found in the ancient sources (Chapter 7, section 2, Chapter 8, section 8): consequentiae (that is to say, propositional logic, going back to Abelard and before); the theory of the properties of terms (a theory of reference within propositional context); sophismata (the resolution of ambiguous propositions, closely related to the study of fallacies and going back to the time of Gerlandus of Besançon (Chapter 5, section 1); and the study of syncategoremata, words such as 'only', 'besides', 'begins', which need exposition before the logical form of the propositions containing them can become clear.

TWELFTH-CENTURY LATIN PHILOSOPHY

The theologians

With one exception, the logical sects seem to have had no equivalent among the theologians. Abelard's theology did, indeed, have influence (a far more lasting, though indirect influence than his logic), but it was exercised through the Sententiae collections which reflected Abelard's teaching, such as the Summa Sententiarum, which combined them with elements derived from Hugh of St Victor, and above all the *Sentences* of Peter the Lombard. Whereas in logic the new generation of masters seem to have seized on the very features which divided their teachers, in theology the movement was towards harmonization. Many of the theologians of 1150-1200 worked in the same mould as the Lombard, producing systematic Sentence collections and tackling the debated points of doctrine, often in a bolder and logically more sophisticated way than the Lombard himself had done. One of the most sophisticated was Peter of Poitiers, whose Sentences were completed c. 1170. He is able to take positions reached by Abelard and transmitted (and often rejected) by the Lombard and elaborate on them. For example, he, like everyone, rejects Abelard's view that God cannot do other than what he does. He does so by making a distinction between the compound and the divided senses of the proposition on which Abelard had based his reasoning:

(11) God can do only what is good to be done by him.

(11) means, in the divided sense, that God can do only what-is-good-to-bedone, that is to say, only that course of action which, as things stand, is the best one. In the composite sense, however, (11) means that whatever God does will be good to be done by him. Peter rejects the divided sense, but accepts the composite one, which does not restrict what God does, but rather affirms that, because God has done something, it is good. Although it might seem as if Abelard is here defeated by the very sort of distinction he himself was accustomed to making, in fact he would certainly have rejected the composite sense reading, because it involves the sort of voluntarism which he thought (rightly!) is the mark of a tyrant: 'This is what I want, and so I command. My wish is all the reason needed', as Abelard (*Theologia Scholarium* III.33) quotes mordantly from Juvenal.

The Porretans are the exception. There was a distinctive Porretan theological movement, shaped by Gilbert's view of the distinction between the different disciplines and his idea that they all, theology included, have their own set of principles. One example is provided by the *Sentences* (c. 1150) of Peter of Poitiers (or of Vienna – *not* the same Peter discussed in the paragraph above), which give a set of rules that apply to created things and, using Gilbert's notion of transumption, suggest that they can be used to reach some understanding of God. A more thoroughgoing attempt to base theology on a set of its own rules is found in Alan of Lille's *Regulae caelestis iuris* ('Rules of Heavenly Right; *c*. 1170–80). Alan differs from Gilbert by concentrating on these special rules, which he presents as in part a deductive system, one deriving from another, and on the distinction between the languages of natural science and theology, rather than on what they have in common. But his debt to Gilbert is clear, and he describes the idea of disciplinary rules in Gilbert's words.

The most fascinating of Porretan works is also perhaps the latest, the Dialogus Ratii et Everardi ('Dialogue of Ratius and Everardus'), written by Everardus of Ypres after 1191. Everardus was a follower of Gilbert's who had gone on to join the Cistercians, the order of Gilbert's persecutor, Bernard of Clairvaux. Everard's dialogue – a highly literary dialogue in which, unusually, the scene is richly set, and the discussion punctuated by vividly imagined interludes - is his attempt at a posthumous reconciliation. Everard offers, not just a highly intelligent presentation of Gilbert's central ideas, but a rethinking of some of them, designed to defend his master at just the point where he had been attacked. Gilbert had distinguished in the language of natural science between quo ests and quod ests and, though he considered this distinction inappropriate for the deity, he was still inclined to consider false propositions such as 'God is divinity' (Deus est deitas) or 'God is truth'. This position was one of the main grounds for Bernard's accusation of heresy, since it seemed to imply that there must be distinctions within God. Everardus develops the idea of mathematical discussion, which Gilbert had discussed only fleetingly (Everardus of Ypres, 1953, 257, 269–70). A regular mathematical sentence, he says, is of the form 'Divinity is divinity' and it should be understood factively, to mean 'Divinity makes God God'. The sentence 'God is divinity' should be interpreted, he says, according to the same formula, and so it will mean that God makes God God. So understood, Everard believes that Gilbert can be seen to be right to reject it, either as carrying no meaning, or else as false, because it is divinity, not God, which makes God God.

Even the Porretan school was not a neat grouping. Porretan ideas had an attraction for various Platonizing thinkers (witness the commentator on pseudo-Dionysius, William of Lucca: Chapter 5, section 6, and the *Liber de causis primis et secundis*: Chapter 5, section 8), and Alan of Lille was far more than merely a follower of Gilbert's. Besides his two literaryphilosophical works (Interlude v), he wrote a set of *Sentences* known as the *Summa Quoniam homines* (*summa* means textbook, and came to replace the title *Sententiae*; *quoniam homines* are the first words of the text) which in form follows the Lombard's general approach, but is more speculative and far wider ranging in its use of source material. He also composed another *Summa* directed against the various non-Christian and heretical groups – the Jews, the Muslims and the Cathars (Catharism was a dualist heresy, not unlike Manichaeism, widespread in southern France at this time), as well as a treatise on how to write sermons, and some sermons themselves, including a so-called *sermo* on the intelligible sphere which is the first known source for the dictum, attributed by him to Cicero, that 'God is an intelligible sphere, of which the centre is everywhere and the circumference nowhere.'

8 Beyond Paris: the scientists and the translators

Latin philosophy in the twelfth century, so the sections above have shown, was extraordinarily narrow both in its geographical setting – limited to Paris and perhaps one or two French cathedral schools – and in the range of sources used: mainly, as explained at the beginning of the chapter, the few ancient philosophical and logical texts that had been in use for at least a century, and in many cases much longer. Although this picture is correct so far as the main philosophical achievements of the period are concerned, it needs some qualification. First, there was a strand of scientific interest, which took some scholars across the Alps and led them to use new texts. Second, there grew up in Toledo a highly productive translation movement and, in connection with it, some original, though derivative, texts.

The new Arabic science has already been mentioned in connection with William of Conches (Chapter 5, section 3); Adelard of Bath (c. 1080-after 1150) was in some ways more directly engaged with it. Adelard studied at Tours, but later he travelled to Southern Italy and probably to Antioch. His earliest work, a short, allegorical prosimetrum, De eodem et diverso ('On the Same and the Different', c. 1110–15), is far from Plato, despite the Platonic title (referring to the constitution of the World Soul in the Timaeus), Adelard models himself partly on Martianus Capella, giving accounts of the seven Liberal Arts in order to show why love of wisdom should be preferred to love of the world, and proposing a solution to the problem of universals on the lines William of Champeaux adopted when Abelard forced him to abandon his material essence realism (Chapter 5, section 1). Adelard's later dialogue, the Quaestiones naturales ('Questions on Natural Science') is, however, as the title suggests, devoted to the explanation of natural phenomena in a rational way. Unlike William of Conches's Philosophia mundi, it seems not to show any Arabic influence, but Adelard went on to translate Arabic astronomical works into Latin, probably with the help of native speakers. Hermann of Carinthia, who worked in the South of France, was a more prolific and assured translator from the Arabic. In his De essentiis ('On the Essences'; finished 1143), he uses Aristotelian ideas he had gained from the astrologer Abû Ma'shar, whom he had translated, and perhaps from the philosophical tradition of Kindî.

Although Aristotle was put into Latin directly from the Greek in the twelfth century (Chapter 7, section 1), the most important translation movement was from Arabic into Latin and its liveliest centre was Toledo, the cultural centre of Christian Spain. There were two main currents of translating activity (Burnett, 2001, 2005). One of them centred around Gerard of Cremona (1114–87), a canon of the cathedral, whose main interests were in the liberal

arts and natural science along with its wider philosophical basis, as set out in a short treatise by Fârâbî which he translated as *De ortu scientiarum* ('On the Origin of the Sciences'). In his translations he fills areas in the liberal arts where the Latin curriculum had gaps, concentrating on geometry and astronomy, but also including Aristotle's *Posterior Analytics*. The scientific translations included the *Physics* and Aristotle's *libri naturales* (books on natural science) and, not the *Metaphysics*, but rather the inauthentic *Liber de causis* (Chapter 3, section 5; Chapter 7, section 1, Interlude viii).

The second current was linked to the archdeacon of Toledo, Dominicus Gundisalvi, who was active from the 1160s to the 1190s. Picking up on an interest evident from an earlier translation – that of *On the Difference between the Body and the Soul* by Qusta Ibn Lûqâ made by John of Seville before 1152 – Gundisalvi and his circle were especially interested in texts on the soul. They translated, not writings by Aristotle himself, but those from the Aristotelian, Islamic and Jewish philosophical traditions – most notably the section on the soul from Avicenna's *Cure* (and other parts of it, the Metaphysics and some of the logic), pieces on the intellect by Alexander of Aphrodisias, Kindî and Fârâbî, Ghazâlî's *Intentions of the Philosophers* (but not his *Incoherence of the Philosophers* – and so Latin thinkers were left with the impression – not, for that matter, totally false – that 'Algazel', as he was called, was an Avicennian philosopher through and through (Chapter 6, section 1)), and also the *Fountain of Life* by Jewish thinker, Solomon Ibn Gabirol.

All these translations would have a profound effect on how and what philosophy was studied in the following decades. Three traditions, one of which, the Latin, had developed almost entirely independently of the other two, the Islamic and the Jewish, had now been brought together. Even in the milieu of the translators, this process of interaction and merging had begun. It is symbolized by the person of 'Avendauth', as he was known to the Latins, who collaborated with Gundisalvi as a translator. 'Avendauth' was none other than Abraham Ibn Daud, pioneer of Aristotelianism in Jewish philosophy (Chapter 6, section 4). His Book of the Exalted Faith, though not translated into Latin, was among the sources for Gundisalvi's own eclectic compositions, along with his reading in the Latin tradition, Avicenna, Solomon Ibn Gabirol and other writers in Arabic. An even headier combination of sources is found in an anonymous text from a little later (c. 1200), the Liber de causis primis et secundis ('The Book of First and Second Causes'): Avicenna, Gilbert of Poitiers, pseudo-Dionysius and John Scottus Eriugena. Neither this anonymous writer, nor Gundisalvi, is capable of the original thinking which would make their writings more than a hotchpotch. The texts though show vividly how, at a time when a rather precise form of analysis, directed especially to the way in which claims were formulated, flourished in Paris, some philosophers preferred to become intoxicated by half-understood Neoplatonic metaphysics. Nor were such thinkers confined to Toledo. Whereas the translations of Aristotle and Avicenna were not

known outside Spain until the thirteenth century, the version of the Neoplatonic *Liber de Causis* had more rapid success, and one of its earliest readers was – as might perhaps be expected from his cast of mind and his enthusiasm for Eriugena – Alan of Lille.

9 The variety and distinctiveness of twelfth-century Latin philosophy

There were, to use the modern jargon, three main research programmes being pursued by the leading minds in the Latin world of the twelfth century, two of which were deeply rooted in the earlier Middle Ages. The one centred around the understanding of the *vetus logica* and the philosophical passages in Priscian, and looked back to a tradition of logic which had begun with Alcuin. Its first twelfth-century exponents were Roscelin and Gerlandus of Besançon; its last were the anonymous nominales, parvipontani, melidunenses and the rest. The second centred around understanding the Bible, exploring its apparent contradictions and, from this apparently incoherent material, structuring an orderly and comprehensive account of Christian doctrine, which did not gloss over the difficulties but used them as a means of refining and strengthening itself. It looked back to eleventh-century compilations such as Ivo of Chartres's Panormia, and more distantly to a tradition of doctrinal handbooks in the patristic era. Anselm of Laon and William of Champeaux were its twelfth-century originators, and it continued through Peter the Lombard to Peter of Poitiers and theologians of the turn of the century such as Praepositinus. The third programme was involved with the understanding of the natural world, by reasoning and by searching out and studying new sources. Adelard of Bath was an early follower of this tendency; Gerard of Cremona was, in his special way, one of its later and most important contributors. Very often the same individuals worked on more than one programme - for example, both Abelard and Gilbert of Poitiers were involved in the first two.

The pursuit of systematic theology, the second programme, was very clearly helped by the first: logic was used both to elaborate and resolve doctrinal problems. But the first programme, which extended far beyond what would now be considered logic, into metaphysics and philosophy of mind, continued until nearly the end of the century. And then, by and large, it was halted. The scholasticism of the thirteenth and fourteenth century universities could be seen as a combination of the second and third programmes (the third generalized, as it had been by Gundisalvi, to take in the whole range of newly available sources, philosophical as well as scientific). Knowledge of Aristotelian science, metaphysics and philosophy of mind, in their Neoplatonic setting, ended the attempt to found a whole philosophy on logic and semantics.

PHILOSOPHY IN Twelfth-century Islam

The complicated interplay between the theological and the philosophical traditions in the lands of Islam reaches its climax in the late eleventh and twelfth centuries. At the beginning of this period, Ghazâlî brings together the two traditions both in conflict and in harmony, because he is at once the fiercest critic of Avicenna and the person most responsible for reformulating kalâm along Avicennian lines. The most important developments in philosophy in Arabic of the following decades took place in the far Western part of the lands of Islam - Muslim Spain (al-Andalus) and the adjacent part of North Africa (the Maghrib) which was united with it under the Almohads. A distinctively Andalusian way of studying and practising philosophy had grown up among both Islamic and Jewish thinkers. Its most accomplished and daring proponent among the Muslims, Averroes, elaborated a type of purified Aristotelianism which would have immense influence on Latin and Jewish philosophers, although almost none in Islam. At the same time he engaged in a prolonged reflection on the compatibility between Islam and philosophy, which resulted in a harmonization more radical than Ghazâlî's. Among the Jewish thinkers, Maimonides devoted himself to a tortuous reflection on the relations between his ancestral faith and his favoured Aristotelianism which would loom behind successors up to and beyond the time of Spinoza.

1 Islamic theology and Avicenna

The kalâm tradition

Long after their period of glory, when the 'Abbâsid caliphs had cultivated their disputations and tried to enforce their views as orthodoxy, the Mu'tazilites continued to argue, teach and write. Understanding of the school, from its early days, has been transformed by publication of fourteen of the twenty volumes of the *Mughnî* of the $q\hat{a}d\hat{i}$, 'Abd al-Jabbar (930–1025), in which the complexities of intra-mural discussion of the favoured Mu'tazilite theses and their ontology of atoms, beings and attributes, are rehearsed at length. But the future of Islamic theology – *and*, strangely – philosophy, lay

with Ash'arites. In his two treatises, the Ash'arite al-Juwaynî (1028–85) follows the order for expounding theology which had by then been established for all Sunni theologians ('Abd al-Jabbar follows it too): after setting out general epistemological principles, there is discussion of the world's createdness and God's existence, and of God's unity and his attributes, along with criticism of Muslim and non-Muslim doctrines about this subject; then prophecy, God's determination of human actions, sin and punishment and faith are considered. This framework, especially the initial juxtaposing of the world as created with divine existence, proved helpful to a phenomenon of which Juwaynî is one of the early witnesses (Wisnovsky, 2004): the gradual encroachment on *kalâm* of Avicennian concepts and language, especially his distinction between essence and existence and between God as something necessary in itself and other things as necessary through another.

Despite the unacknowledged influence of Avicenna, Juwaynî's main concern is to argue for Ash'arite views within kalâm. The Mu'tazilites, Juwaynî reports, argue in favour of reasoning by claiming that the opposite view, reliance in prophetic revelation, itself takes for granted a train of reasoning to the effect that such revelation is reliable. He rejects their position because, he claims, it also requires prior reasoning to rely on reasoning. None the less. Juwaynî is argumentative, within a dogmatic framework, true to the ideals that Ash'arî had proposed. He tries, though without much success, to justify the Ash'arite position on the divine attributes, by which they are neither held to be identical with God (as for the Mu'tazilites) nor to exist separately from him. Juwaynî's idea (Irshâd, 14.1) is that a and b can be two things, and yet a not be other than b: he claims that reasoning, which his opponents have not provided, would be needed to reject this possibility. In his discussion of human activity, Juwaynî puts forward very firmly the line that had become standard among Ash'arites. No human creates his own acts: God is the sole creator of everything, human actions included.

Ghazâlî

Juwaynî's most famous pupil was Abû Hâmid al-Ghazâlî (1058–1111), who is to this day respected as one of Islam's greatest religious thinkers. In the simplistic account of Islamic philosophy which used to figure in the background to histories of medieval philosophy, Ghazâlî had a prominent and unambiguous role as the opponent of the Aristotelian philosophy practised by Fârâbî and Avicenna, which he attacks in his stridently titled *Incoherence of the Philosophers (Tahâfut al-falâsifa)*. Yet nothing is unambiguous about Ghazâlî. The story of his life and his search for truth, which he tells in his autobiography, *The Deliverer from Error (al-Munqidh min al-dalâl)*, shows something of his complex character. Born in Persia, Ghazâlî quickly gained a reputation as an outstanding legal scholar and was appointed to a prestigious post in Baghdad. He had studied *kalâm* as well as law, and

now he also made a deep but critical study of the work of the Arabic Aristotelians, the self-styled 'philosophers' (falâsifa). To this end, he produced an Arabic text closely based on Avicenna's elementary exposition in Persian of his system, Philosophy for 'Alâ' al-Dawla, which he called The Intentions of the Philosophers (Magasid al-falasifa). He linked to it his Incoherence of the Philosophers, an attempt to refute the teachings of the philosophers on each of the points where they contradict Islamic doctrine, among them their belief in the eternity of the world, their refusal to allow God knowledge of particulars or to distinguish between him and his attributes, and their denial of the bodily resurrection of the dead. (The fact already noted that the Intentions circulated in Latin translation alone, without the Incoherence led to 'Algazel's' being thought of in the Christian universities as an Aristotelian like Avicenna – a double irony because, as will become clear, there is an important element of truth in this misrepresentation.) In the same period, he wrote an Ash'arite theological treatise, Moderation in Belief (al-Iqtisad fi-li'tiqâd). But Ghazâlî was dissatisfied with what kalâm offered and, after a nervous breakdown, when he found himself unable to speak at all, he gave up his post and most of his possessions. Ismailism, one of the spiritual currents of the time, did not seem to attract him. Rather, he went off to seek wisdom with the Sufis, followers of an esoteric, mystical form of Islam, whose adepts sought direct experiential knowledge of the divine. During this period he wrote a treatise designed to reconcile Sufism with traditional Islamic doctrine (the *Ihyâ'*), and there followed a number of shorter works which also showed the influence of Sufism. After eleven years away, Ghazâlî took up teaching law again and wrote his major work on Islamic law.

This sketch bears out what Ghazâlî says in Deliverance, 'Ever since early youth my constant and habitual state was a thirst to reach the truth'. According to Deliverance, Ghazâlî - just like Descartes five and a half centuries later - decided that, in his quest for truth, he should reject all beliefs which did not give him certain knowledge. His standard for certainty was immediate evidence to the senses, and he was initially willing to take truths of logic and mathematics as equally certain. But he then put to himself a set of sceptical arguments which - and again the Cartesian parallel is striking led him to doubt both types of apparently certain beliefs. One is often deceived by the senses, he explains - for instance, stars seem to the senses to be small, but a rational argument shows that they are in fact large. Moreover, given that we are all used to dreaming and finding that what we thought existed has no reality, how do we know that what we experience in our waking lives and judge to be real will not turn out to be equally illusory from the perspective of some state which stands to our waking as our waking does to our sleeping? (Ghazâlî adds that perhaps an example of such a state is that which the Sufis sometimes reach.) As for what seem to be mathematical and logical truths, how can one be sure that there is not a hidden way of judging that shows them not in fact to be true, just as the judgement of reason shows that some senseimpressions (of, for instance, the stars as small) do not present things as they are in reality? The mere possibility that there could be such a judgement is enough to undermine certainty.

Unlike Descartes, Ghazâlî found no rational way to dispel this scepticism. Rather, he describes it as an illness which God cured after a couple of months. But the cure involved recognizing that certitude depends on 'a light from God'. It is not a light that gives knowledge itself, however, but rather helped to make fruitful Ghazâlî's search for truth, which required him to penetrate to the essence of each of the different ways of thought which promised to lead to knowledge. There were three he regarded as the most serious: Ash'arite theology, Aristotelian (Avicennian) philosophy and Sufism. Although he ended by giving pride of place to Sufism, which offered him dhawq, the 'taste' or direct experience of God, he saw value in both of these other ways. Certainly, he attacked Aristotelian philosophy in the name of kalâm, and Moderation in Belief could be seen as putting forward the positive theological doctrine to balance the purely critical, negative Incoherence of the Philosophers. But he also had grave reservations about kalâm: when, after his adoption of Sufism, he wished to commend his own Moderation in Belief, he did so by *distinguishing* it from the official Ash'arite treatises. One branch of philosophy, logic, he accepted as valuable without reservation, thereby helping to ensure its firm place in Islamic curricula for centuries to come. And, in practice, while he avoids any of his alleged heresies, Ghazâlî borrows much more from Avicenna than his Ash'arite predecessors had done, so that, from his time onwards, Avicennian philosophy and kalâm tend to fuse (Chapter 9, section 3).

One area in which, it seems at first sight, Ghazâlî is true to his Ash'arite heritage and attacks one of the very bases of Aristotelian and Avicennian thinking is causality. In Section 17 of the Incoherence he rejects the view that there is a necessary connection between causes and their effects. On the Aristotelian view, when a fire comes into contact with a piece of cotton, the cotton will burn, and the cotton will not burn unless it comes into contact with fire. According to Ghazâlî, the fire need not make the cotton burn, and the cotton could burn without fire. The reason is that the real cause of every event is God. In principle, God can link events together in any way he pleases, but in practice he has established a habitual course of nature, and we naturally expect types of event that we have seen frequently linked together – putting a match to cotton and its burning, for example – always to be linked. And they almost always are, though miracles are the exception. Ghazâlî therefore seems to have developed the tendency to occasionalism in kalâm atomism (Chapter 3, section 5) and generalized the Ash'arite theory of acquisition (Chapter 4, section 2), according to which humans cannot perform any action without first, in each case, receiving the power to act from God. Although this occasionalist theory of causality is the philosophical thesis for which he is best known, it has been questioned whether Ghazâlî held it at all, or whether,

rather, he accepted a strict Avicennian model of causality for all that happens in the sublunary world (Frank, 1992b; 1994). At one point (*Incoherence* 17.18) Ghazâlî does indeed seem willing to accept ordinary causality (fire burning cotton, for instance), so long as some means is posited of allowing for miracles. The dialectical method of the *Incoherence* makes it hard to know which of the positions proposed are ones Ghazâlî really holds – maybe he is just trying to show in the main argument of the chapter that philosophical doubts about miracles which go counter to ordinary causality are unfounded, because there is no *certainty* of a necessary connection between cause and effect. But Ghazâlî champions the closely related theory of acquisition elsewhere too (in *Moderation in Belief*, for example).

If Ghazâlî's God is, then, most likely the immediate cause of everything, humans lack the freedom of indifference; but this is not a consequence that would disturb an Ash'arite. What about God himself: how free is he? Ghazâlî insisted, against the Aristotelians and also against the Mu'tazilites, that the divine attributes are distinct from God, because this allowed him to envisage God as acting from his will, rather than merely according to his nature. There are passages in the *Incoherence* which suggest that, in the way Scotus would develop more fully in the Latin tradition (Study L), Ghazâlî envisaged synchronic alternative possible courses of providential history or, in today's terms, possible worlds, and so he was an innovator in modal theory (Kukkonen, 2000). But against these texts, which present at most hints of such a position, there should be considered a very important passage from the Ihvâ', written late in Ghazâlî's life, which became the focus for a centurieslong theological controversy. Here he argues, turning on its head the celebrated atheistic argument from the existence of evil, that since God is omnipotent and supremely generous, it must be that the way he has made the world is the very best way in which it could be made: nothing more excellent, perfect or complete than it is possible. Given his nature and power, then, it seems that God has no choice but to exercise his will exactly as he does namely, to bring into existence the very best of possible worlds. The position is the same as that which Abelard (Study F) and Leibniz would find themselves brought to. Both of these philosophers struggled against its deterministic consequences. Ghazâlî seems to have been happy to accept them: there was perhaps less to distinguish his God from Avicenna's than the difference in their ways of speaking about him might suggest.

Interlude vi: Suhrawardî – theosophist or philosopher?

In (most probably) 1191 a young philosopher – he had not yet reached 40 – was executed at Aleppo on Saladdin's orders. Suhrawardî, who until then had enjoyed the support of the local ruler and had a following of students, was an Avicennian turned Platonist. There is plenty in his *Philosophy of Illumination* that might have given the appearance of heresy. It presents, though not in the author's own name, a theory of metempsychosis, and it claims as its background a fantastical construction of ancient Chinese, Indian, Egyptian and Persian philosophy, even though the real sources were the Neoplatonic works generally available in the Arabic tradition and Avicenna himself. Saladdin's suspicion, though, was probably that Suhrawardî was an Ismaili – and clearly he was not.

Suhrawardî's death seems to have been an injustice, a case of mistaken intellectual identity, and it is an open question whether the same is true of his reputation as a thinker. He came to be regarded as the founder of an 'Illuminationist' school of philosophy, and the *Philosophy* of Illumination had a series of commentators, including the great seventeenth-century philosopher, Mulla Sadra. Suhrawardî's leading advocate among modern historians is the great orientalist, Henri Corbin. For Corbin, Suhrawardî is the great exponent of a philosophy which, though it draws on Plato, is fundamentally different from the Neoplatonic Aristotelianism of the main Islamic philosophical tradition. Corbin is fond of referring to it as 'theosophy', because it involves a special sort of wise knowledge of God. On his interpretation, Suhrawardî has discovered that, beneath essence and existence, as distinguished by Avicenna, there is a deeper level of pure presence or, as he calls it, light. Suhrawardî emerges, then, more as a mystic than a philosopher. It is no surprise that the treatment of logic and detailed critique on Aristotle which form Book I of the Philosophy of Illumination are omitted from Corbin's French translation which, picking up on Ibn Tufayl's distortion of the idea of Avicenna's 'Eastern Philosophy' (Chapter 6, section 2), is published in his French translation as The Book of Eastern Wisdom.

But Suhrawardî is now being re-assessed as a philosopher (Walbridge 2000, 2001), and this is how it seems to have been that the commentators like Mullâ Şadrâ – who translated his esoteric language back into more recognizable terms – regarded him. He can be seen as a perceptive critic of Avicenna who rejects his distinction between essence and existence because there is no principled reason not to go on applying the same distinction to each of its elements *ad infinitum*. His theory of knowledge can be taken as a critique of a central weakness of Aristotelian epistemology: the assumption that in our ordinary cognitions we unproblematically cut the world at its joints. And, despite his Platonism, he is a thoroughgoing nominalist.

2 Philosophy in al-Andalus

From the turn of the twelfth century, Muslim Spain was ruled by two dynasties of North African origin: the Almoravids, who began by imposing a tightening of Islamic law on the region, but were criticized as corrupt by the Almohads, zealous followers of the religious reformer Ibn Tumart, who replaced them. During this century, al-Andalus ceased to be a culturally backward province, and the outstanding philosophers of the period worked there or considered themselves Andalusian in their education.

Solomon Ibn Gabirol and Judah Halevi

Until the time of the Almohads, Jews in Andalus participated in the culture of their Arabic rulers. The earliest major philosopher of Andalus was the Jew, Solomon Ibn Gabirol (c. 1021/2–c. 1058). On the one hand, he was very much part of a specifically Jewish culture, writing Hebrew poetry that probably gained him patronage in his lifetime and has ensured his continued importance to this day. On the other hand, his two philosophical works were originally written in Arabic. One is a practically-oriented ethical treatise, *The Improvement of Moral Qualities (Islaḥ al-'akhlâq)*, based around the Aristotelian idea of the mean. The other, the *Fountain of Life*, survives in full only in the Latin translation by Gundisalvi (*Fons Vitae*), some fragments of the Arabic, and some excerpts in Shem Tov ben Joseph Falaquera's thirteenth-century translation.

Whilst Solomon's Jewish belief is apparent almost everywhere in his poetry, the *Fountain of Life* takes an entirely philosophical approach, so that it was not evident to its Latin readers that the author, whom they knew as 'Avicebron', 'Avencebrol', 'Avicebrol' or the like, was a Jew. Solomon's main sources are the Neoplatonic texts in Arabic which had been popular with al-Kindî and his followers, the *Theology of Aristotle* (that is to say, adapted Plotinus) and the *Book of the Pure Good* (the Latins' *Liber de causis –* Proclus), along with the *Letters* of Ikhwân al-Safâ and the work of his Jewish predecessor, Isaac Israeli. The enterprise of recovering and reconstructing the peripatetic tradition, which had occupied Fârâbî and was taken over by Avicenna, had entirely passed Solomon by; rather, in the *Fountain of Life* he attempts to establish (like Kindî in his *On First Philosophy*) an

ontology, an account of the basic constituents of the universe, through reasoning alone.

Although Solomon's universe is Neoplatonic in that it is seen as, in some sense, emanating from God or the primary essence and consisting of different levels of being, it diverges from the inherited model in two important ways. In typical Neoplatonic fashion he considers God himself to be unknowable. The highest attainable object of knowledge, he says, is God's will. This idea of divine will is alien to a Neoplatonic system, in which all things should emanate necessarily from the first principle. Moreover, Solomon considers that we discern God's will through the world of matter *and* form. Form is the product of the divine will, but matter (in stark contrast to normal Neoplatonic doctrine) is created by God himself. And Solomon devotes most of his energy in the *Fountain of Life* to advancing universal hylomorphism, the idea that, at *every* level of the hierarchy of being below God and his will, things are composites of matter and form.

Solomon divides all non-divine things into compound corporeal substances and simple spiritual substances, and then he subdivides these divisions. Body acts as the matter for accidental forms such as shapes and colours, but body is itself composed of non-sensible matter and the form of bodiliness. Whereas the existence of compound substances is immediately evident, that of simple substances needs to be argued at length (Book III). Since lower substances derive their characteristics from the higher simple substances, the simple substances too must be composites of matter and form. And it is also possible, Solomon considers, to conceive matter in general and form in general. His universal hylomorphism thus has the effect of drawing together the different levels of creation, all of which manifest the same underlying structural pattern and are sharply contrasted with an entirely other and unknowable God. Solomon is therefore the proponent of a negative theology characteristic of Neoplatonism, especially as developed in Islam, but he has put it forward in an entirely novel way.

Judah Halevi (before 1075–1141) was another Jewish poet-thinker, who lived in Spain at a time when the effects of the Christian reconquest and Almoravid rule were already making life much harder for Jews. In 1130–40 Halevi wrote his *Defence and an Argument on behalf of the Scorned Religion*, normally known as the *Kuzari*, because of its setting. In the ninth century, the king of the Khazars, a Central Asian people, had adopted Judaism as the national religion. Halevi imagines a dialogue in which the Khazar king, seeking to find the right religion, is addressed in turn by a philosopher, a Christian, a Muslim and a Jew. Although the format suggests parallels to two remarkable works in the Latin tradition – Peter Abelard's *Collationes* (Interlude iv), which was written at almost exactly the same time, and Llull's *Book of the Gentile* (Chapter 9, section 1) – it lacks their even-handedness. Halevi allows the philosopher, Christian and Muslim to have their say, briefly, but nine-tenths of the work is given over to the rabbi's defence of Judaism, which is based far more on a supposedly historical account of God's covenant with his chosen people than on philosophical reasoning. Indeed, although Halevi knows some philosophy in the broadly Avicennian tradition, and he is capable of arguing when he wishes, he is one of the early representatives of an anti-philosophical strand in Jewish thinking, which would come into prominence at the end of the Middle Ages.

Ibn Bâjja

Ibn Bâjja ('Avempace' to the Latins; before 1100–39) was the first Muslim philosopher of importance to work in al-Andalus – although he may himself have had Jewish ancestry. He is well-known especially for the political, or rather anti-political, stance he takes in his *Rule of the Solitary*. Fârâbî had been well aware of the difficulties for good people, who aimed at true happiness, in living in imperfect cities, but he did not on that account give up an ideal of political happiness – on one reading, indeed, it is a type of political happiness which Fârâbî thinks is the *only* happiness open to humans. By contrast, Ibn Bâjja underlines the extent to which seekers after true happiness are isolated from the communities in which they live and must follow, even in the midst of the multitude, a solitary life.

What is this happiness? Ibn Bâjja thinks that it consists in a conjunction with the Active Intellect that is possible for us in the course of our normal lives. Although this theme is reminiscent of Fârâbî and Avicenna – and Ibn Bâjja's view of the universe is broadly Avicennian - there are important differences, which go beyond the queries over whether Fârâbî thought such conjunction was possible. For both earlier thinkers, despite the role of the Active Intellect, the seeker for wisdom needed to build a structure of scientific knowledge in a way that corresponded to an education in the arts, sciences and philosophy. For Ibn Bâjja, what is important – and what the multitude fails to do – is to think thoughts that are as removed from matter as possible: Ibn Bâjja sketches a hierarchy of ever more abstracted thoughts, beginning with universals closely attached to sense images, and moving through thoughts which do not refer to objects in the physical world at all to a final, ultimate thought which is the same for all thinkers. A human reaches happiness when his possible intellect, which Ibn Bâjja considers merely to be a disposition in the human soul, joins with the Active Intellect, which has worked on it (though not, as in Avicenna, been the real locus of its thinking). This state of conjunction, although prepared by the person's efforts, is described by Ibn Bâjja as a gift from God. In it, there is no longer any distinction between different human intellects, since the intellect is identical with what it thinks and the thought is the same for all.

TWELFTH-CENTURY ISLAMIC PHILOSOPHY

Ibn **Ţufayl**

If he were to be judged by the philosophical theories he proposes alone, Abu Bakr Ibn Tufayl (before 1110-85; 'Abubacer' to the Latins) would hardly rate a passing mention. He follows Avicenna's system quite closely, both in the role he gives to the Active Intellect and in his conception of God as the sole necessary existent, but he gives it a mystical twist and he also explicitly acknowledges the influence of Ghazâlî. The merely intellectual fulfilment which he sees Fârâbî and Ibn Bâjja as having sought is to him of slight value compared to the ecstatic union with God that he considers the true end of speculation. Beginning a school of misinterpretation which continues to this day, Ibn Tufayl associates this mystical strand that he discovers in Avicenna with his 'Eastern Philosophy'. What makes Ibn Tufayl a fascinating writer is the way in which he conveys his thinking. His sole surviving work is a philosophical fable that borrows its title, but not its story, from Avicenna: Havy Ibn Yaqzân ('Living son of the Aware'). But the fictionalized telling does much more than present philosophical ideas in a pleasant and easily assimilable form.

Hayy grows up on a desert island without father, mother or any human company. He is suckled by a doe, and when the doe ages and dies, Havy begins to search for what has happened in her body that has stopped her lifeactivities. This is the beginning of his scientific enquiries which lead him to knowledge of the working of animals, of physical nature and then, through the reasoning at which he naturally arrives, of God, the Necessary Being. Hayy becomes an ascetic, eating only what is necessary and losing himself in an ecstatic contemplation of God. After many years, Absal, a religious man - it is made clear that he is a Muslim, though it is not said in so many words - comes to the island to live as a hermit. Absal teaches Hayy human language and, once they start to talk, Absal realizes that Hayy's description of God and his relation to the world and his joy in contemplating him is the truth of which his own religious knowledge is a symbolic representation. Absal now understands how to interpret the writings of his religion. At the same time, Havy accepts the religious traditions and practices of which Absal tells him. The two men decide to go to the neighbouring, inhabited island, where Absal had lived, in order to preach their understanding to the multitude. But Havy finds that, once he starts to go beyond traditional religious teaching, his audience loses interest or becomes resentful. After a while, he decides that this preaching is misplaced. The multitude, he now believes, should not be encouraged to do anything but follow the traditional religious observances that have been established. He and Absal return to the uninhabited island and the pursuit of an ecstatic closeness to God.

Ibn Tufayl's story consists of two thought experiments designed to confirm the truth of two linked central ideas that were shared by philosophers of the tradition of Fârâbî and Avicenna. The first experiment, occupying the narrative until Hayy and Absal leave the island, is designed to show that the truths which a perfect reasoner reaches through philosophical argument, without revelation, will immediately be seen to correspond exactly to what religion, especially Islam, teaches metaphorically. The second experiment is designed to illustrate why these non-metaphorical philosophical truths should remain the preserve of an elite. No Islamic philosopher was more convinced of these two positions than Ibn Țufayl's younger colleague, Averroes.

3 Averroes

In the Latin West, where he enjoyed a readership and a notoriety he lacked in Islam, Averroes was known simply as the 'Commentator', just the author of the texts he explained so devotedly was called the 'Philosopher'. Looking at the list of his works, it is indeed commentaries, almost all on Aristotle, that predominate, and this central aspect of his work is a good place to begin. But not to end: there was much more to Abû-l-Walîd Muḥammad Ibn Aḥmad Ibn Rushd (*c.* 1126–98), philosopher, court physician and $q\hat{a}d\hat{i}$.

The commentator

Averroes's Aristotelian commentaries are of three sorts: the compendium or short commentary (*jawâmi*'; also *tajrîd* – 'epitome'); the paraphrase or middle commentary (*talkhîs*); and the full or great commentary (*sharh/tafsîr*). The compendia, which were probably written early in Averroes's career but in some cases revised later, give an account of the main ideas of the Aristotelian work, often very much through the medium of later commentaries. The paraphrases are the result of a request made to Averroes (in 1168 or 9) by the man who became his patron, the Almohad ruler Abû Ya'qûb Yûsuf, that he should explain Aristotle in a way that non-experts like himself could understand. Accordingly, these commentaries consist of sentences selectively quoted from the text itself, interwoven with half-quotations, summaries, paraphrases and clarifications of the rest. Averroes brings out his own understanding of Aristotle's meaning, but does so without often speaking in his own voice or referring to the commentators. These compendia and paraphrases cover almost the whole Aristotelian corpus, whereas Averroes wrote full commentaries on just five texts of special importance: the Posterior Analytics, On the Heavens, the Physics, the Metaphysics and On the Soul. In the full commentaries. Averroes divides the text into paragraphs and begins by giving a word by word account of Aristotle's meaning. He then proceeds to consider questions of interpretation at length, discussing the views of different commentators and his own assessment of them.

Such an enterprise in itself shows a devotion to the texts which are so thoroughly examined and explained, and, as various remarks attest, Averroes hero-worshipped Aristotle. This attitude becomes very clear in his approach to logic, where he rejects Avicenna's innovations and, even in the modal syllogistic, where Aristotle is obviously confused, he attempts to rescue him on his own terms. More widely, too, as a commentator Averroes sees himself as freeing Aristotle from the distortions to which interpreters, especially the more recent Arabic ones, and most especially Avicenna, had subjected him. In a number of cases, indeed, at the beginning of his career Averroes himself accepted a way of reading Aristotle that had become standard, but later came to reject it as unAristotelian. The most important change of this sort concerned the theory of emanation, proposed by Fârâbî and central to Avicenna's metaphysics.

In his compendium on the Metaphysics, Averroes follows Avicenna's view of emanation with some small alterations. But a later revision of the compendium shows that he has changed his mind, and his new approach is fully evident in the full commentary on the Metaphysics (1190). Averroes preserves the apparatus of Intellects, including the lowest one, the Active Intellect, but he rejects (Full Commentary on Metaphysics 12 to 1073b1; §44) the view of 'our contemporaries' that they emanate from one another in turn. Such a process cannot apply to things which are entirely intellect and have no element of potency which can then proceed into actuality. Averroes rejects the principle which, he claims, lies behind the theory of emanation: that 'from the one and simple can only proceed or result one'. On the contrary, if x causes its effect by being grasped in the understanding, then its unity will not be compromised if more than one thing is caused in this way by it. Granting that in some sense the Intellects after the First Intellect exist in their own right, they are each given the motion they impart to their spheres and are brought to their particular perfection by contemplating the different representation each forms of the First Intellect. The relation between the Intellects is like that, he says, of the inhabitants of a good state, who cooperate in achieving a good constitution by modelling their actions on those of the ruler. This account also allows Averroes, unlike his predecessors, to identify God, the first cause, with the Intellect of the outermost sphere.

Such a view seems to return to Aristotle's sparse conception of a God who accounts for just the motion of an already existing universe, moving away from the idea, already adopted in late antiquity by Ammonius, of him as an efficient as well as a final cause. The same approach underlies Averroes's insistence, against Avicenna, that the existence of God is proved by Aristotle in the *Physics* with an argument from motion. Metaphysics, he believes, takes over what physics has established and examines especially this immovable substance whose existence natural science has shown. In line with his Aristotelian views, Averroes rejects Avicenna's central distinction between that which considered in itself does not exist necessarily – God alone – and that which considered in itself does not exist necessarily. He does so by insisting on understanding necessity in terms of Aristotel's main, temporal model (rather than looking to the causality based view Avicenna exploited). The

heavens, both he and Avicenna believe, are eternal. But if they are eternal, they must be unqualifiedly necessary.

Averroes is not, however, content to leave God as a purely final cause. In our world of matter and form, he says (*Full Commentary on Metaphysics* to 1072a26), there is a difference between efficient and final causes. Take my outing to the baths: the form of the baths in my mind is the efficient cause, which makes me go off to the baths; the form in matter of the baths themselves is the final cause. But, in the world of the celestial spheres and their intellects, there is no matter, and final and efficient causes are one and the same.

The human soul and intellectual knowledge

The most famous, and on first reading bizarre, of Averroes's attempts to reach a more fully authentic understanding of Aristotle than his contemporaries is his reading of On the Soul. Averroes put forward at least three different interpretations of Aristotle's views on the human soul and intellectual knowledge. All are consistent in the role they give to the Active Intellect. Although the Active Intellect does not, as in Avicenna, actually supply the intelligible forms to thinkers, it is what makes the process of thought possible, and the final aim of human thinking is conjunction with it. By contrast, his view of the material intellect is far less clear and less fixed. In his Epistle on the Conjunction with the Active Intellect and the compendium of On the Soul, the material intellect is a disposition of the soul. According to this reading, close to Ibn Bâjja and Alexander of Aphrodisias, thinking begins from imaginative forms, which are made intelligible. (And, according to the *Epistle*, it ends with a conjunction in which, more completely than in Ibn Bâjja, the material intellect is joined to the Active Intellect.) The material intellect in which the imaginative forms become intelligible is not a part of the soul, nor something outside the soul, but the disposition in the imaginative forms in the soul to become intelligible. This disposition is 'unmixed' with the forms that serve as its substrate. The reading can be interpreted (and has been: Davidson, 1992a, 353) as a 'naturalistic' one, closer to Aristotle's real intentions than, say, Avicenna's views. Yet the theory is quite puzzling. How can a disposition be 'unmixed' with that of which it is a disposition? In what way, precisely, do individual humans relate to this disposition? The *Epistle* (\S 2) gives a little clarification. Just as, when a sensible form is taken into the imagination, it is at once perfected and yet perfects the imagination, so an imaginative form which becomes intelligible is thereby perfected and perfects the intellect. The intelligible forms depend on there being the imaginative forms, which are generated and corruptible, but they are also independent of them.

In the *Paraphrase*, Averroes starts by putting forward a theory very much like this first one. It is a disposition only (§280) that must be identified as the material intellect, not the soul or the human being, because this disposition is not 'mixed' with its subject. But Averroes immediately continues,

recognizing this theory as Alexander of Aphrodisias's, and adding that other commentators consider that the material intellect is a disposition existing in a separate substance, and it is in this sense that it is 'unmixed'. Averroes recognizes that both views are open to criticism. Against Alexander, it can be objected that only something intellectual could have a disposition to receive intelligibles (a blanket rejection of Alexander's naturalism, which he perhaps never really accepted). But, he says, Themistius and the other commentators commit themselves to the absurd position of positing a separate substance which is just a potentiality. The whole Neoplatonic and later Peripatetic tradition conceived of separate substances as being pure forms - the celestial Intellects; and a form, in the Aristotelian view, is in act. Averroes then proposes a compromise solution (§283). The disposition he has been discussing exists in individual humans, not in a separate substance; but the disposition becomes attached to a separate substance, the Active Intellect, because the Active Intellect becomes conjoined with humans. The material intellect itself is no longer identified with the disposition, but is composed of the disposition and the Active Intellect conjoined with the disposition.

In the full commentary Averroes clearly identifies and tackles (\$5; Averroes, 1953, 387-8) a problem which he had hinted at previously in his insistence that the material intellect should be 'unmixed' with any of the physical aspects of humans. At the basis of Aristotle's theory of intellectual cognition is the idea that forms exist in matter in a particular way, forming individual concrete wholes (this human or that horse), and the same forms, when grasped intellectually, exist in the material intellect in a universal way. But, if the material intellect were part of or mixed with the body, then how could it not be matter of the same sort as the matter of the body, which would therefore receive particular rather than universal forms? The view Averroes proposes in the full commentary – tentatively and fully aware of its novelty as an interpretation - overcomes this problem. The Material Intellect, he says ($\S5$), is a single, separate substance, one and the same for all humans. But how can this be so, in the light of the objection he makes in the Paraphrase to Themistius's view: the material intellect is in potency, not act, and so it cannot be a form, like the other separate substances? Averroes explains that even the separate substances, except for the First Intellect, have both a formal and material element; if not, he reasons, they could not be numerically distinct. Apparently, the Material Intellect and Active Intellect constitute a matter-form composite separate substance.

There remains, though, the obvious objection that, if the material intellect is one for all humans, then all humans must have all the same thoughts at the same time. Indeed, to go further with this line of criticism than Averroes himself: does this reading not take thinking away from individual humans altogether? What part do you or I play in the business of having a thought? Averroes can answer the second part of this objection by explaining that every individual human has, as the highest part of his imaginative faculty, the power of cogitation (sometimes also called the 'passible intellect'), which orders and refines images to make them suitable for the act of intellection. And this act itself, although involving two linked separate substances, the Material Intellect and the Active Intellect, is also individuated according to different humans, so that we need not all be thinking the same thing. Every human act of thinking, as Aristotle insisted, involves a form in the imagination: it is in virtue of these forms - which, of course, are different in different imaginations - that thoughts are individuated. The place of imaginary forms in the process of thought can be seen, Averroes says, from the analogy of sensing. Every sense act has two subjects: that which makes the sense act veridical ('true') - the object in the world which is sensed (for example, the half empty coffee cup I am looking at) – and that through which the sensible form exists – the sense faculty (my sense of sight). Similarly, in the case of intellectual cognition, there are two subjects: the imaginative form, in virtue of which the cognition is veridical, and the material intellect in which the intelligible form exists. But there is also another factor - the Active Intellect. It is what makes the imaginative forms into intelligible ones. Like colours which are not visible unless there is light, so the imaginative forms are not able to act on the material intellect until they are made intelligible in act by the Active Intellect.

It has been argued (Averroes, 2002) that many passages in the Compendium seem to be based on the full commentary and so, apparently, to have been written after it. But Averroes seems so clearly in his full commentary to be identifying and tackling the problems he could not resolve in the shorter accounts, and to be departing from the earlier commentators, who are followed there, that it is hard not to accept his theory here as his considered, final view. In the final analysis, both Averroes and Avicenna envisage the problem of human thinking from the same perspective, and they come to solutions which, though different, have a good deal in common. The perspective, which has already been indicated in order to explain why Averroes makes the Material Intellect a separate substance, will probably seem a strange one to most modern philosophers, because it is produced by one of the peculiarities of Aristotle's account of cognition. From a modern perspective, it is not in the least problematic that humans, physical organisms that have been engendered and born, and will die, should think about unchanging universals and construct sound arguments about them. But if, as Aristotle contends, cognition involves assimilation, it is hard to explain how some aspect of a corruptible, bodily thing can become assimilated - by being the matter for it as form – to a universal. It is therefore natural to see the human contribution to thinking as both Avicenna and Averroes do, in terms of manipulating images, and to place the intelligibles themselves beyond the human realm - for Avicenna in the Active Intellect; for Averroes in the composite Active-Material Intellect. The two facets, human and super-human, of each act of intellection are connected: rather loosely by Avicenna, for whom cogitation is merely a preparation for the infusion of an intelligible form; more tightly by Averroes, according to whom it is the properly prepared images which the Active Intellect shines on so as to reveal their intelligible content. And, in Averroes, there is a further element which brings his conception, despite its strange starting-point, nearer to our ways of thinking about thinking. For, according to Averroes, it is the sensible image which makes the thought, as he puts it, 'true'. A modern-day scientific realist would not find it odd to say that there are scientific laws which are eternal and exist whether or not there are humans to understand them, and that in science human researchers, who are merely physiological organisms, establish particular truths in which the things in the sensible world and their interrelations, as perceived through their sense-data, are seen according to scientific laws, and through discovering more of these particular truths about the world, the scientist discovers more of the laws. In his own terms, Averroes is saying much the same thing.

Averroes and the Almohads: philosophy and religion

Although Averroes did not, therefore, live in an intellectual universe entirely foreign to that of philosophers today, the type of Islamic society in which he lived, and his own position within it, were very particular, and without some knowledge of them his wider thinking about the relation of philosophy to religion and the place of philosophers in society cannot be understood. It was usual for philosophers in Islam to depend on the patronage of rulers, and not uncommon that, like Avicenna, one of the skills they could offer was medicine: Averroes became the personal physician to Abû Ya'qûb Yûsuf, the ruler of Islamic Spain and North Africa, in 1182, succeeding another philosopher, Ibn Tufayl, and he wrote an important medical textbook. But Averroes came from a distinguished legal family: Averroes kept up the tradition and, in 1180, was appointed to the post once occupied by his grandfather of chief qâdî of Cordoba. As such, Averroes was an important official figure in the ruling elite, and the Almohad regime promoted by Abû Ya'qûb, his father and his son, al-Mansûr, had a strong and distinctive policy in matters of belief. The Almohads, who replaced the corrupt Almoravids as rulers of al-Andalus and the Maghreb, were followers of the religious reformer Ibn Tûmart (d. 1130), who had proclaimed himself mahdî. Ibn Tûmart wished to restore Islam to its original purity, and he emphasized the unity of God and the need to avoid an over-literal reading of the Qu'ran which led to anthropomorphism. The Almohad rulers tried to put their principles into practice and enforce their militant view of Islam on the population. Though many of the judges, adherents of the Mâlikite legal school, opposed them, there is every reason to suppose Averroes's promotion was part of the Almohad reform, and in his great legal treatise, *Bidâyat al-mujtâhid* ('A Beginning for the Zealous Student'), he stands apart from the teaching of any particular school, attempting to draw out underlying principles. Towards the end of his life, Averroes went through a period of disgrace and exile, and his enemies managed to turn al-Manşûr against the study of ancient philosophy. But the cause was political intrigue, rather than any religious or ideological dissidence on Averroes's part.

This portrayal of Averroes as not merely a $q\hat{a}d\hat{i}$, whose job it was to judge in accord with the *sharî'a*, the law laid down in the Qu'ran, but also the loyal servant of a strict Islamic regime, clashes with the received picture. Averroes has the reputation of a free-thinker or, at least, a rationalist. Did he lead a double existence, by day pronouncing judgements according to strict religious law, by night breathing life into an Aristotelian philosophy, according to which his professed religious beliefs would be no more credible than fables? The obvious implausibility of this idea is strengthened by the fact that a major strand of Averroes's activity as a commentator was the response to a request from the Almohad ruler. And, recently, scholars (Urvoy, 1998; Geoffroy, 1999) have been able to show that, in its idiosyncratic way, Averroes's thought about religion and philosophy bears out the principles of Almohad reform. The key to this unexpected liability lies in the fact that Ibn Tûmart held, on Qu'ranic grounds, a high estimation of human natural reason, which he considered was capable of discovering by its own powers the existence and unity of God. Ibn Tûmart was also highly critical of *taqlîd* – blind, uncritical following of inherited ideas - and, despite an invented tradition which links him with Ghazâlî, this attitude would have engendered among the Almohads a suspicion of Ash'arite kalâm.

Averroes wrote three works on the relation between philosophy and religion in rapid succession between 1179 and 1180: The Decisive Treatise (Fasl al-Maqâl), The Explanation of the Sorts of Proofs in the Doctrines of *Religion* (usually known as the *Kashf*), and the *Incoherence* of the *Incoherence* (Tahâfut al-Tahâfut). It seems that Averroes saw these years as the moment to formulate his own politico-religious ideology for the Almohads, building on the tradition of Ibn Tûmart, but taking it in a direction which this zealot could scarcely have anticipated, in which study of Aristotle was not merely legitimated, but made obligatory in the Islamic state. In the Decisive Treatise Averroes speaks as the $q\hat{a}d\hat{i}$ which he was and pronounces a judgement from the point of view of sacred law (sharî'a) on the study of philosophy (by which he means Aristotelian philosophy, which is based on demonstrative reasoning): is it forbidden, allowed or obligatory? In keeping with this task, Averroes bases himself on the Qu'ran and on the consensus of Islamic tradition. He argues that the study of philosophy is obligatory, on the grounds (§2) that the Qu'ran enjoins the study by the intellect of what exists, and that study by the best means, which is demonstration, is therefore especially required. The conclusions reached by demonstration sometimes go against the literal meaning of the Qu'ran and so the passages in question have to be 'interpreted' - understood in an allegorical way. But such interpretation can never go against the consensus, because (\$15) it has been agreed by the consensus that some verses are to be interpreted but not which these are, and none of the verses concerning theoretical matters (as opposed to practical things) is of the sort about which there is a consensus that it should *not* be interpreted.

Philosophy is therefore obligatory but, Averroes also wants to insist, it is not obligatory for all. People have different levels of intellectual ability, and the Holy Law calls us to assent according to them: some will assent by means of demonstrations, some by dialectical (as opposed to demonstrative argument), some by rhetorical persuasion. When people are given arguments on a level higher than their own ability, there is a great danger of their being led to unbelief, since they are made to doubt the literal sense of scripture without being capable of grasping its deeper sense. Only that elite capable of practising demonstration should, therefore, be allowed to engage in it or be shown the writings of philosophers. Averroes identifies dialectical reasoning as the method of the mutakallimûn, Ghazâlî in particular, and it might seem by the logic of his argument that their theology would cater for a group of Muslims less talented than the philosophers but more able than the rest, who can be brought to assent only by rhetorical persuasion. Yet, in fact, Averroes believes that Ghazâlî and the other theologians, despite their good intentions, do much more harm than good. The reason for Averroes's stand is probably that the *mutakallimûn* claimed exclusive possession of the right interpretation of scripture, condemning the philosophers entirely; and, to make matters worse for the ordinary Muslim, the theologians differed among themselves and, in the case of Ghazâlî, were inconsistent even in their own work.

The two other of these ideological texts take up different sides of this opposition to the kalâm. The Explanation is an attempt to set out the sort of theology which Averroes thinks is suited to the mass of people not capable of demonstration (and so not suitable for studying Aristotle with the help of the commentaries to which he devoted so much of his life). At the same time, it is a critique of the theologians, in particular the Ash'arites: it follows the divisions usual in their theological treatises, but rejects their arguments and methods, using instead reasoning based much more directly on the Qu'ran a strategy of which the Almohads would have approved. The Incoherence is a point by point rebuttal of Ghazâlî's Incoherence of the Philosophers. It is, as Averroes makes clear, a dialectical work: an attempt to undo Ghazâlî's reasoning, itself dialectical, rather than to arrive at the truth. The Incoherence does not, then, in any simple sense assert a philosophical view in place of a theological one. Indeed, although Ghazâlî's target was Avicenna, Averroes often ends up by pointing out what he considers to be the weaknesses of his fellow philosopher's positions.

Although Averroes's ideology asserts the independence of philosophy, it does so, therefore, within the framework of Islamic law. Nor does he suggest that philosophy is a permissible practice, but one detached from the truth gained by religious belief. On the contrary, he presents it as the best way to reach the truth. There *can* be no opposition between what philosophers demonstrate and the Sacred Law: as the *Decisive Treatise* (§12) states it:

'Truth does not oppose truth, but rather it agrees with it and bears it witness.' There seem, however, to be three points of doctrine – those signalled by Ghazâlî – on which a philosopher in the Aristotelian tradition such as Averroes is forced to take sides and follow *either* Islam *or* Aristotle: the eternity of the world; God's knowledge of particulars; and the resurrection of the dead. Yet in all three cases Averroes believes that he can consistently take both sides.

With regard to the eternity of the world, Averroes simply insists that there is no Qu'ranic reason not to consider it eternal. With regard to God's knowledge of particulars, Averroes argues that, in denying it, the philosophers were denying that God knows particulars by means of generated knowledge. Rather, he knows them - and so Averroes suggests that the philosophers in general agreed - as their creator. He does not do much to clarify the nature of this creative knowledge in any of his various discussions, but he seems in this area to be willing to tilt his conception of God away from the detached Intellect of Aristotle's Metaphysics in order that it does not conflict with Islam (although it could be argued that none of the works in which he does so was addressed by him to a philosophical audience, and so he might not be giving his true opinions). The case of the resurrection of the dead is in some respects similar, in some different. In the Decisive Treatise and the Incoherence Averroes does seem, if with reservations, to accept the doctrine; and he emphasizes the obligation to believe that we continue to exist after death whoever denies this is a heretic and should be killed. Yet in his presentation of what he believes to be Aristotelian demonstrative science in the full commentary on On the Soul, not only is there no question of bodily resurrection: it seems also that there is no personal immortality. There is indeed human immortality. The condition for immortality is conjunction with the eternal Active Intellect, and the Material Intellect is always conjoined with it. Although the Material Intellect is a separate substance, it requires human imaginative forms, prepared by cogitation and then made intelligible by the action of the Active Intellect, for it to fulfil its function, and, for this reason, Averroes argues that the human race will last for ever, and there will always be philosophers in some corner of the world, enabling its continuing functioning by their philosophizing. But, regarded coldly, this immortality amounts to no more than saying that there will always be humans, and some of them will be people who engage in acts of intellection, and that the objects of these acts of intellection are themselves eternal. Averroes seems to have been willing to jump the wide gap between this position and the beliefs that Islam demands, or - more likely - to have turned his back on the gap. He lacked Farâbî's heroically determined clear mindedness, but Almohad Andalusia was a very different intellectual environment from the religious and cultural mix of tenthcentury Baghdad, and clarity might have demanded something more than even heroic determination.

Interlude vii: Marriage in the Republic

Among the long list of Averroes's Aristotelian commentaries, there stands out one on a work by Plato, the *Republic*, which survives only in a Hebrew translation. Fârâbî too had taken a great interest in this dialogue. There seems at least to have been a paraphrase of it by Galen, but a part of Plato's text in a fuller Arabic version, which preserves the dialogue form, has recently been discovered.

The style of Averroes's commentary is that of his epitomes. He aims to extract demonstrative arguments about the good for humans in society by eliminating any reasoning that is merely dialectical. Obliquely, Averroes is aiming to instruct his Almohad patrons in political science, and so this commentary can be put alongside the triad of original compositions (the *Decisive Treatise*, the *Explanation* and the *Incoherence*) in which he launched his attempt to found a new ideology for the regime. Yet he also shows at times an ability to grasp Plato's purposes very clearly, however distant the thinking behind them from the norms of his own society.

One instance is his discussion of the position of women and of the passage on 'weddings' for the soldier-philosophers of Plato's ideal city. He not only accepts Plato's view - as unusual in Greek antiquity as in twelfth-century Islam – that women of suitable intellectual and physical capacities should be trained as soldiers and philosophers; he defends it, remarking that women in cities other than Plato's are not allowed to develop their human virtues and are treated as if they were plants - and that this treatment makes them into a burden on the men and brings poverty to the community. In his dialogue, Plato goes on to describe a system in which soldier-philosophers are selected to copulate with each other on eugenic grounds, though they are tricked into believing that their partners have been chosen by lot; and the children are not identified as belonging to their parents, but are brought up communally. Twelfth-century Latin readers, who read this system summarized at the beginning of the *Timaeus*, were so shocked that they found ways of pretending that Plato had never advocated such (to their eyes) gross immorality. Averroes not only takes Plato at his word, but he takes issue with Galen. Galen had apparently suggested as a possibility that Plato envisaged these unions as permanent marriages. Averroes ridicules the suggestion, rightly seeing that it goes against Plato's whole purpose to allow soldier-philosophers to set up their own households and for couples to form, to the detriment of the brotherly and sisterly love that binds the community. The couples, he says, should copulate just for the time needed for the woman to become pregnant.

TWELFTH-CENTURY ISLAMIC PHILOSOPHY

Averroes and Averroism

Averroes's writings had an unusual posterity. In the Islamic world, they were almost entirely neglected until modern times. By contrast, they were eagerly and extensively studied by Jewish and Christian scholars. The Jewish philosophers of Southern France and Italy in the thirteenth and fourteenth centuries used Averroes's epitomes and paraphrases as their way of accessing Aristotle, whose own texts they rarely studied (Chapter 9, section 4). Many of these commentaries were translated into Hebrew, and often they survive only through these translations. For Christian thinkers in the Latin world, Averroes was an indispensable guide to Aristotle's texts, though not a substitute for them (except perhaps in the case of the *Poetics*). The long commentaries on the *Metaphysics* and *On the Soul* were especially important: the latter, which survives only in a Latin translation (apart from some recently discovered fragments), gave rise to a whole school of Latin thinking through the questions about faith and reason which its interpretation of Aristotle thrust before its readers (Chapter 7, section 6, Chapter 8, section 6). But the Averroism of even this thinker's greatest Latin enthusiasts was one-sided: the Decisive Treatise was unknown, and the Incoherence of the Incoherence, translated only in the fourteenth century, hardly read. Averroes's distinctive theological stance remained unknown and almost unimaginable.

4 Maimonides and Jewish Aristotelianism

Aristotelianism, philosophy and Judaism: Ibn Daud and Maimonides

Maimonides was not the first Jewish thinker to adopt Aristotelianism. In 1160, a few years before Maimonides finished his first major work, Abraham Ibn Daud completed *The Exalted Faith (al-Aqida al-rafi[•]a*; written in Arabic but surviving in Hebrew translation as *ha-Emunah ha-Ramah*). In it, Ibn Daud not only introduced his readers to the basic principles of Aristotelianism, as understood by the Arabic Aristotelians, but also showed how Judaism could be conceived as consistent with them. God is seen as the necessary being of Avicenna's philosophy, and the separate intellects are identified with the angels. Where the literal sense of the Bible does not fit Aristotelian science, Ibn Daud is willing to interpret it metaphorically, on the principle that scripture is written to cater to all levels of understanding: the simple take the surface meaning, whereas the wise must penetrate below it. Ibn Daud does not, however, see himself in any sense as undermining traditional Judaism; on the contrary, a long part of his book is devoted to establishing the authenticity of the rabbinic tradition, going back to Moses and God's revelation to him.

Ibn Daud did much more than switch from the allegiance of earlier Jewish philosophers to Plato. His predecessors had either philosophized like the

mutakallimûn within the framework of theology or, like Isaac Israeli and Solomon Ibn Gabirol, they had written their philosophy in such a way that it might have been the work of a non-Jew, a Muslim writing in the philosophical tradition. Ibn Daud also looks to the Islamic philosophical tradition: to the model set up by Fârâbî and adapted in different ways by his successors, according to which Aristotelian philosophy gives the true sense of what religion sets out in metaphorical terms for the sake of the common people. But, whereas in Islam this model was used by writers working selfconsciously as philosophers, Ibn Daud writes as a Jew, justifying the Jewish religion and its tradition of revelation at the same time as proposing his philosophical understanding of religious doctrine.

It is not clear what, if any, influence Ibn Daud had on Maimonides. Yet there is one large side of Maimonides's work that directly continues and extends Ibn Daud's project. Maimonides aims to demythologize and rationalize Judaism, by claiming that an important part of its fundamental doctrine, properly understood, is exactly the same as what he takes to be Aristotelian science (which he draws from the Arabic tradition, though with reference to Aristotle's own writing: Fârâbî is his preferred source; he thinks less well of Avicenna). If this were all that he had tried to do, then Maimonides would have been a Jewish thinker of considerable importance, but not, as he is usually regarded, the greatest Jewish philosopher of the Middle Ages indeed, the greatest Jewish philosopher. Neither, though, is Maimonides remarkable in the same way as the other outstanding medieval philosophers, such as Avicenna, Abelard, Aquinas, Scotus. Although he is certainly capable of arguing powerfully and precisely, as he does when considering God's indescribability or the eternity of the world, Maimonides did not propose original positions in logic, metaphysics, philosophy of mind or ethics, nor did he provide any powerful new arguments to tackle any of the classic problems in these areas. The *Guide of the Perplexed*, the work on which his reputation as a philosopher rests, has a much more distinctive characteristic: its concern is almost entirely with second-order questions. It is not, directly, a study in philosophy nor an attempt to use philosophical tools to search out or defend religious doctrines. Rather, Maimonides regards Aristotelian science and philosophy as, by and large, a fixed body of knowledge, which needs to be learned carefully from the best sources but is not in need of further elaboration. His main question is how a Jew, faithful to the teachings of his religion, should regard this science. His starting-point is not this question itself, but rather the answer which he had already developed (along the same lines as Ibn Daud) in his rabbinic works. He does not reject this answer - indeed, in many ways he extends it. But he also problematizes it. And it is here, in the difficulties it explores, rather than in any solution that it offers, that there lies the secret to the fascination of the Guide and perhaps to the enormous influence it has exercised over Jewish thought.

TWELFTH-CENTURY ISLAMIC PHILOSOPHY

Maimonides's life and writings

Moses ben Maimon ('Maimonides' to the Latins; often designated by the acronym 'Rambam' among Jews) was born in Cordoba in (probably) 1138. He was, therefore, a slightly younger contemporary of Averroes (whose writings he did not know until late in his life, after he had written all his major works). Like Averroes, he came from a distinguished intellectual family - his father was a rabbinic judge – and, in his education, he too benefited from the rich Arabic culture of Islamic Spain, with its leaning towards Aristotelianism, although his direct knowledge of Aristotle may have been quite limited, at least in his earlier career. But life under Averroes's great patrons, the Almohads, who came to power in 1148, was not easy for Spanish Jews, who were threatened with death if they remained in their lands and did not become Muslims. According to some accounts, Maimonides spent a period as a pretended convert to Islam, but these sources are suspect. What is known is just that Maimonides's family left Cordoba, lived for a while in Fez in North Africa (also under Almohad rule) and settled, in 1166, in the Cairo area of Egypt, where the Islamic rule was more tolerant. The greatest change in Maimonides's own life came as the result of a personal tragedy. In 1177 or thereabouts, his brother David drowned in a shipwreck. Besides bringing great grief - he is said to have been bedridden with depression for a year this accident forced Maimonides into earning his own living to support himself and his family. David had been a merchant and he seems to have taken care of financial affairs, leaving Maimonides to pursue his rabbinical work. After 1177, Maimonides had to occupy much of his time as a doctor, tending the courtiers of Cairo. Egyptian Jews recognized him as a great authority in all religious matters, and another great call on his time was in giving judgements on matters of law.

Maimonides's three major compositions are a commentary on the Mishna, the *Mishneh Torah* and his *Guide of the Perplexed*. Other books include a treatise on the 613 Mosaic commandments, public letters (including an important discourse on the Resurrection of the Dead) and, according to many, a short treatise on logic, although its authenticity has recently been questioned.

Rationalizing theology: the rabbinic works

The first two of these major compositions concern what Maimonides and his contemporaries considered to be the Oral Law. As well as receiving from God the five books of the Torah, Moses was thought to have been given an Oral Law, equally divine in origin, which was passed down through generations of rabbis. Eventually, the oral statements of laws were compiled and written down in the Mishna, attributed to a rabbi known as 'Judah the Prince'. The Mishna was widely studied in the Jewish world and it produced an enormous volume of discussion and commentary, in which, very often, the most surprising meanings are extracted from the texts by looking beneath the surface,

by cross-indexing and through dialectical examination. This tradition of commentary was collected in the Palestinian Talmud and the Babylonian Talmud. The aim of Maimonides's Commentary on the Mishna, written in Arabic, was to explain the text in the light of the Babylonian Talmud, so that, in trying to understand a given passage, a scholar would be presented with the relevant Talmudic discussions which would usually be widely dispersed in the Talmud itself and, where the Talmud gave alternative judgements, he would find Maimonides's decision, based on his knowledge of the entire tradition, on which to prefer.

The plan of the Commentary, ambitious though it is, would seem to leave little room for any philosophical speculation. Yet, in introductions, incidental comments, digressions and, especially, in his Introduction to Chapter 10 of Sanhedrin - where he formulates thirteen principles of Jewish belief, Maimonides puts forward a view based on Aristotelian science as found in the Arabic tradition, which he represents as being that of the Oral Law properly understood (Davidson, 2005, 152-65, gives a full discussion and references). The various elements found here will recur in the Mishneh Torah and the Guide. The most important are the following: (a) The structure of the universe follows the Arabic Aristotelian model, with the earth surrounded by nine concentric celestial spheres, and things in the sub-lunar world made up of the four elements. (b) God is incorporeal and no corporeal accidents (such as motion or rest) can be predicated of him. (c) A section on ethics (Shemona peragim) sets out a theory of virtues with its basis in Aristotle's doctrine of the mean. (d) Although the resurrection of the dead is accepted as a principle of Jewish faith, Maimonides pours scorn on the idea that we should be living our lives aiming for sensual, bodily rewards, in this life or the next. (e) Prophecy is explained entirely according to the theory devised in its main lines by Fârâbî (who, however, limited the importance of prophecy in a way not followed by his successors) and taken up by Avicenna. According to the sixth Principle of Faith, some humans have intellectual natures and are predisposed to receive the form of the Intellect. In such cases, the human intellect conjoins with the Active Intellect and receives an emanation from it. It is these people who are the prophets. But, adds Maimonides in the next principle, Moses is an exception, since God communicated to him without any intermediary. (f) The idea of conjunction with the Active Intellect does not just explain prophecy. At one point, at least (Abot 3:20; Davidson, 2005, 164), Maimonides suggests that human immortality comes from having as an object of thought something imperishable.

Maimonides finished his commentary in 1168. The *Mishneh Torah*, written in Hebrew, which occupied him, by his own testimony, day and night for the next ten years, is his largest, most ambitious work. As the title ('A restatement of the *torah*') suggests, Maimonides's aim is no less than to bring the whole of the Oral Law together in a single, systematic work. His sources, then, are the Mishna, and the Talmuds, which he strips of their dialectical form of argumentative give-and-take in the interests of presenting Jewish law clearly. As in the earlier Commentary, here too Maimonides goes beyond the legal framework, to consider more general questions of Jewish belief, and in doing so he reaffirms and extends his rationalizing position. In particular, the first book ('The Book of Knowledge'), designed to put forward the commandments that lie at the basis of the whole law, brings together and states more forcefully a number of the philosophical points ((a)-(f) above) of the earlier work. Maimonides now brings out particularly clearly (VIII) that the world to come is not corporeal, and he remarks (VIII.3) that, so far as the world to come is concerned, the soul is not what vivifies the body, but the understanding which grasps intelligible essences and the physics and metaphysics. He adds another important Aristotelian principle - one accepted by the whole Arabic philosophical tradition aside from Kindî - when he lets it be known (I.4; I.6; as part of his argument for the existence and for the unity of God) that the heavenly spheres are in perpetual motion: the world, he thus implies, is eternal, in the sense that it has no beginning and end (although it could be argued, as Maimonides suggests later, in the Guide, that this view is assumed just for the sake of the argument).

In the *Mishneh Torah*, the historical theory which justifies Maimonides's Aristotelian version of Judaism also starts to become clear. It is not a matter of Jews having to learn from Aristotle. Maimonides holds that the truths found and expressed openly in Arabic Aristotelianism are ones that were known too in scriptural and rabbinic traditions, but kept secret, because they ought not be revealed to the common crowd. Indeed, despite appearances, the ancient rabbis dedicated a portion of their time to philosophy, and honoured it more than the Talmudic reasoning which apparently occupied their time (Twersky, 1980, 488–507). The Account of Creation in the Bible, if properly understood, is an exposition of physics, whilst the so-called Account of the Chariot (Ezekiel 1) is an exposition of metaphysics.

The 'guide of the perplexed' as it isn't

Maimonides wrote his *Guide of the Perplexed* (*Dalâla al-ha'irîn*) in the 1180s, and he presented it as a book written for a special sort of reader, and in a special way. The book is addressed and dedicated to, a favourite student, Joseph ben Judah, who had left Egypt for Syria. It is directed to those, like Joseph, who are both completely firm believers in the Jewish law and who have studied science and philosophy – that is to say, have become familiar with the body of Arabic-Aristotelian science which Maimonides had assimilated and passed on to those in search of wisdom. They are perplexed by some of the terms in the Bible, which seem to describe God in a corporeal manner that contradicts their philosophical understanding of him, and some parables which, again, seem to be unacceptable if taken according to their external meaning.

Given the position that he had already taken in his rabbinic works, it is clear how Maimonides should go about resolving the perplexities of Joseph and those like him. He needs to show them, drawing on what he has already explained and extending it, that Aristotelian science is not only not opposed to Jewish doctrine but in fact identical to a portion of it. A large part of the *Guide*, as it was in fact written, does indeed carry out this task.

The two explicitly announced aims of the *Guide* are (I – Introduction) to explain, first, 'certain equivocal terms' and second, some obscure parables in the Bible. The equivocal terms are those which, if taken literally, would imply that God is corporeal or has anthropomorphic attributes. The discussion of these words, which takes up much of Part I, is a systematic application of the principle, stressed in Maimonides's rabbinic works and at the foundation of his rationalizing approach, that God is incorporeal. The 'obscure parables' which Maimonides promises to elucidate seem, above all, to be the Account of the Creation and the Account of the Chariot, which he had already identified, as he now reiterates, as the Jewish equivalents of physics and metaphysics. In the Guide, Maimonides does indeed set out in detail - by contrast with the fleeting asides in the rabbinic works - the Arabic-Aristotelian cosmology and physics, and how it corresponds to the Genesis creation story and more broadly to the Biblical picture, rightly understood (II.1-12). A rabbinic ban on uncovering the secrets of the Account of the Chariot makes Maimonides's comments on it extremely allusive (III.1–7), although what is hinted at does not, in fact, seem at odds with what he elsewhere states openly. Another aspect of the rationalizing theory in the rabbinic works that (with one change: see below) is given a very extensive development here is the theory of prophecy (II.32–48), which is conceived, as before, in terms of conjunction with the Active Intellect (II.32–48). And there seems good reason to think that human immortality is seen in terms of the perdurance of the Active Intellect and the ability of individual humans to raise their intellects to grasp its eternal thoughts (Altmann, 1987).

A very important extension Maimonides's non-literal interpretation of the corporeal descriptions of God in scripture is his negative theology. Maimonides is not content with arguing that God should not be described by any corporeal attribute. God, he contends, has no attributes at all. The belief that he has them, just like the belief that God is corporeal, is the result of wrongly following the *external* sense of scripture. His argument (I.51–2) could be summarized in this form:

- (1) If God has attributes, they are either accidental or essential.
- (2) God's attributes are not accidental.
- (3) To predicate an essential attribute of an x is to define what x is.
- (4) God cannot be defined.
- (5) God has neither accidental nor essential attributes. [2, 3, 4]
- (6) God has no attributes. [1, 5]

This reasoning is valid, and the first premiss is uncontroversial. The second is easy enough for Maimonides to establish, given what he has already said about the lack of any multiplicity in God and his references forward to Book II where, in the wake of Avicenna, he will argue that God is the one necessary being, which depends on nothing else. If God had accidental attributes, he would neither be wholly unified nor wholly independent. (3) is the premiss which can most easily be rejected by the many theologians who would want to insist that, in some sense, we can say that God is one, good, wise and just. They would accept Maimonides's view that God cannot be defined, in the sense of its being explained how he is constituted (as a human can be defined as a rational, mortal animal), but they would say that, precisely for this reason, we can speak of attributes that God necessarily has, although we have only a weak grasp of what they really are.

Maimonides's view may, indeed, not be so different from that of such critics, since he does go on to allow one positive way of talking about God – though, he insists, it is not really a way of talking about God himself. One sort of attribute (I.52) is the actions that are predicated of someone: not, Maimonides explains, when we characterize a person in terms of what he does ('John cooks' – that is, he is a cook; that is his occupation), but when we simply attribute an action to someone because it was he who performed it ('John cooked that risotto'). It is correct to attribute actions to God in this sense and, Maimonides contends (I.54), when Moses asked to know God's essence and his attributes, he was told that God's essence is unknowable and that his attributes are his actions.

Maimonides develops these ideas further. Although we must literally deny any attribute, *F*, of God (except with regard to his actions), we are allowed to make these predications, so long as they are taken as meaning that we *deny* of him the corresponding privation. 'God is *F*' is thus taken to mean that it is not the case that God is not-*F*. Maimonides (I.58) gives a number of examples of how this denial can be spelled out in terms that are meaningful, because they do not refer to God in himself. For example, we should interpret 'God is powerful' (which in this form would have to be denied) as meaning that God is not powerless, and that statement in its turn means that God's existence suffices for bringing into existence things other than himself. Moreover, even straightforward negation can help us to a better understanding of God, Maimonides believes, in rather the same way as one can progressively convey the idea of some sort of physical object by a series of statements about what it is not, just as well as by a positive description.

The most impressive of the ways in which Maimonides elaborates and extends his project of rationalization is in his account of the origins of Jewish law (III.29–50). Many people, Maimonides recognizes (III.31), think it is quite wrong to look for the purpose of divinely-given law. But he disagrees strongly. To conceive God as decreeing without any purpose is to place him lower than humans, who always act to achieve some end. God's laws, he

believes, were given both so as to enable his people to live harmoniously and to improve them morally, turning them away from bodily pleasures. There are many commandments for which Maimonides can account directly as serving these purposes, but Jewish law is also full of ceremonial stipulations and details that he cannot pretend directly serve these high-flown purposes. He explains these laws indirectly by a more complex theory of God's ways of acting. God, Maimonides emphasizes (III.32), does not change the nature of human beings miraculously: he *could* do so, but he never does. He is an educator, not a puppet-master. Yet, as a good educator, he knows that he cannot simply lay down how he wants people to behave. If they have developed bad habits, they will not easily abandon them entirely. God therefore often employs *talattuf* – a gracious trickery – in order to lead people to behave in the best way in a manner suited to their capacities. The forty years he made the Israelites wander in the desert after they had left Egypt and before they reached the Promised Land are an example. Before they took possession of their own land, they needed the time to shake off the habits of slavishness they had acquired in the captivity and learn to be independent.

The Iews of the time of Moses, Maimonides believed, were accustomed to religious practices like those of the pagans among whom they lived. God knew that they would not easily give them up and so, in his laws, he proceeded in two opposite directions. In some areas, he established lewish laws which were reminiscent of pagan practices, but transformed them into ways of worshipping himself, the true God. So, rather than forbid all sacrifices, and insist that the true worship of God is internal and through prayer, he established animal sacrifices in place of the human sacrifices favoured by the pagans. In other areas, God deliberately commanded the opposite to particular ceremonial practices of the pagans. For example (III.37), the reason why it is forbidden (Deuteronomy 22, v) for men to wear women's or women men's clothes is that this is precisely what some pagan customs required people to do when worshipping planets. These explanations of the Jewish law in relation to pagan practices have an especially remarkable feature: the care Maimonides took to give them a historical basis. As he testifies in his Letter on Astrology, Maimonides has read very widely about pagan (or 'Sabaean' - a term he used rather generally for pagans) beliefs in all the available Arabic sources, and he brings his precise knowledge of their customs (often backed up by textual references) to bear throughout his discussion. Maimonides is, indeed, very far from writing like a modern anthropologist. By explaining the reasons behind Jewish laws he is, he believes, illustrating the workings of God's plan. Still, by using documentary evidence of pagan customs to illuminate Jewish rituals and prohibitions and by insisting that religious laws should have an explanation (even if for him it lies in a divine teleology), he has taken a bigger step towards a complete demythologization of religion than perhaps he might quite have realized or accepted.

Complicating the Guide

Although the sections described above make up more than half of its bulk, the *Guide* was not to be, as taken alone they would suggest, the straightforward explanation and carrying forward of the rationalizing programme implicit in the rabbinic works. Between completing the *Mishneh Torah* and beginning the *Guide*, a change came over Maimonides's outlook. His clear, bold view suddenly became complex and uncertain. He remained as hostile as ever to superstition and literalism among his coreligionists, and as committed as before to the improvement of the intellect as the end of human life. But it no longer seemed to him that the question of how a Jew should react to Aristotelian science could be answered simply by appealing to the apparently identical science discovered by the rabbis and passed on in the Oral Law.

Maimonides now recognized that the Arabic-Aristotelian view, despite its many correspondences with the Jewish one, differs fundamentally from it. The Arabic-Aristotelian God, the necessary being from which the Intelligences emanate and, ultimately, through which the whole universe is formed, acts of necessity without knowledge of or care for individuals. Jews believe in a God who created heaven and earth and whose providence extends to individuals, who will be rewarded or punished according to their deserts. He was faced with a choice. Either he could continue to uphold his philosophical view and, in doing so, bend his Judaism into a belief far distant in its fundamentals from what was traditionally accepted and politically unacceptable as a doctrine to be taught openly. Or, whether by argument or sheer determination, he could accept the elements of Jewish belief that go contrary to Aristotelian philosophy.

Which choice, then, does he make? The commentators are – and have been, since soon after Maimonides wrote – divided. Some consider that he followed Aristotelian philosophy to its limits, but had to disguise these beliefs. Some (a majority at the moment) argue that such notions of an esoteric Maimonides are fanciful, and that his rejection of the philosophical positions incompatible with Judaism is not merely apparent but real.

One factor which any interpreter needs to bear in mind is what Maimonides himself says at the beginning of the *Guide* about the method he intends to use. He is very concerned that some, at least, of what he wants to teach is 'hidden' doctrine, which has never been set down in writing. He feels himself both obliged to make it known to those few people like Joseph, who are in a position to understand it, and yet also to keep it from the knowledge of the casual reader. His solution, so he lets it be understood, is to have written the work in a way that requires very careful reading and cross-comparison of passages if it is to be understood. And he underlines this point when, near the end of Book I, Chapter 1, he lists seven reasons why contradictory statements might be found in a book. The fifth of them – the only one which explains

why there are contradictions in the books of the philosophers, those who know the truth – is that a difficult matter has sometimes first to be introduced in a way that is somewhat inaccurate, in order for it to be understood, and then it is later explained accurately. Maimonides says that in the *Guide* there will be inconsistencies for this reason, but for another one too, the seventh in his list. The seventh reason comes from the need to conceal certain matters from some readers. The discussion is therefore made to proceed from one premiss in one place, and from a contradictory one in another place. But the common readers must not be allowed to become aware of this contradiction. Maimonides seems to be suggesting here that in places his true meaning can be discerned only by noting a (deliberate) contradiction between the premisses from which two strands of reasoning set out, and choosing to disregard one line of argument in favour of the other.

The fact that Maimonides thinks secrecy necessary would seem to indicate that his underlying meaning is more shocking than the rationalizing teachings which he presents quite openly in his rabbinic works. Or perhaps it is just that he is now more worried than before about what can be said to a wide public. The description of the mechanism of concealment suggests that not every statement the author makes should be taken as expressing his real intention. It might, indeed, be the case that Maimonides never wrote in the concealed way he announces. But the *Guide* is one, rare text where interpreters have been given an explicit authorial warrant for esotericism.

Retrenchments, real or apparent?

The interpretation of the Guide rests on whether, in certain areas, Maimonides has really retrenched from an Aristotelian position he held, or whether the retrenchment is merely apparent. The central example, and the most debated aspect of Maimonides's work, is the question of the eternity of the world. Before examining it, consider a simple example of the same problem. As said above, the Guide takes and elaborates the theory of prophecy through conjunction with the Active Intellect which Maimonides had first mentioned in his commentary on the Mishna. But there is one change. He no longer considers that anyone who has a sufficiently good intellect will automatically be a prophet. Maimonides (II.32) explicitly distinguishes his theory from that of the philosophers by adding the proviso that a person can be suited intellectually to being a prophet but not become one, because God so wills. Is this not clearly a drawing back, albeit a minor one, from his previous, naturalistic position, in favour of one where God is more clearly the Biblical God, exercising choice over humanity? But the passage which immediately follows this proviso strikingly fails to produce the illustrations that it seems to be promising, and Maimonides takes the opportunity to reject the idea that God could choose just anybody to be a prophet - except, he remarks contemptuously, in the sense that he could make a frog or an ass into a prophet.

Maimonides's discussion of the eternity of the world takes a long and complicated course. It is closely bound up with his views about demonstrating the existence of God. He believes that, on the one hand, if the world is not eternal, but is created ex nihilo, then it follows almost without argument that God exists, since there must be something to account for the existence of a world which comes into existence from nothing. Maimonides, however, also denies that it can be demonstrated that the world has a beginning. For this reason, he rejects the kalâm method of proving the existence of God on the basis that the world has a beginning. He backs up this discussion (I.74–6) by providing a detailed but highly critical account of the views of the mutakallimûn, whom he considers unable to distinguish between demonstrative and merely probable argument. The way to show the existence of God, and also his unity and incorporeality, is to grant the premiss that the world is eternal. Using this premiss, along with 25 other premisses which he justifies (II Intr), Maimonides is able to offer a series of sophisticated demonstrations, along Aristotelian lines, of what he is seeking to prove. The premiss that the world is eternal, which these demonstrations require, is not, however, one that Maimonides - or so, at least, he repeatedly claims - believes to be true. But he has a justification for his whole procedure (I.71). His argument is of the form:

- (7) Either p or not-p
- (8) If p, then q
- (9) If not-p, then q

Therefore

(10) q

Either the world has a beginning or it is eternal. But if, in fact, it has a beginning, then Maimonides thinks it follows straightforwardly that there must be a God to account for it. If it does not have a beginning, then the existence of God can be proved using an Aristotelian demonstration.

Maimonides then moves on to explaining why he does not accept the premiss of the world's eternity. After giving Aristotle's arguments for the position, he insists (I.15) that they do not amount to demonstrations and – on the basis of some rather dubious textual interpretation – that Aristotle himself did not think so either, although his followers all claim that they are. Maimonides does not consider that he himself has a way of showing definitely that Aristotle's view is false and demonstrating its negation, but he claims that he can show that the weight of argument supports the position that the world has a beginning. He addresses one by one Aristotle's reasons for eternity (II.18) and he also proposes a general principle (II.17). It is never possible, from something that has reached its final state, to discern the characteristics

it had when it was being produced. Who would imagine, for instance, just from observing adult humans that they once were able to live within their mothers' wombs? Yet Aristotle, from his knowledge of the universe as it is now, concludes that it could not have originated in a certain sort of way, a clear example of the sort of inference we cannot make. Maimonides's most developed argument against Aristotle's position, however, is based on the idea of particularization (II.19–20). If the world is eternal, then it follows, Maimonides believes, that everything comes about of necessity and cannot change. But, on this hypothesis, how is the vast variety of different particular features of the heavens to be explained?

For those who wish to read Maimonides as deliberately undermining the positions that he ostensibly is proposing, there are plenty of weak or dubious or suggestive points in his argumentation, from the obvious time and trouble he takes over expounding the arguments for God's existence based on the Aristotelian premisses to the feebleness of his criticisms of Aristotle's arguments for eternity. But it is the chapter (II.25) where he declares his professed underlying reasons for rejecting the eternity of the world that raises the most questions, although it also seems, to those who reject an esoteric interpretation, to provide very strong reasons to take Maimonides at his word. Maimonides begins by admitting that it would be perfectly possible to interpret the Torah in accord with the eternity of the world. The reason for rejecting the view is that, if the world is eternal and so the world exists in a necessary and unchanging way, the whole of Jewish Law and its principles will be overturned. Once, however, it is believed that the world had a beginning, 'all the miracles become possible and the Law becomes possible and all questions that may be asked on this subject, vanish.'

Maimonides then proceeds to list a number of questions which, on the hypothesis of an eternal and so necessary world, would need a reasoned reply, but need not even be asked if the world has a beginning, because the reply is simply: 'That is how God in his wisdom wanted it.' The questions include ones such as why a certain person rather than another is given a prophetic revelation, why certain commandments and prohibitions were imposed, and what is the aim of the Law. After a little, the reader realizes that Maimonides seems, if the passage is read literally, to have forgotten his own fundamental teachings. People are prophets because they have reached a certain level of intellectual attainment (even if God can intervene and stop their prophesving). Maimonides explains the practically and morally educative purposes of the law at length, and he devotes pages of the Guide to explaining with great ingenuity the purposes behind each individual commandment and prohibition. Moreover, the whole bearing of the discussion of providence and the interpretation of the Book of Job (III.17-23) seems to be that humans gain their reward not through anything that involves an intervention by God in the workings of nature, but through turning entirely away from bodily concerns to the life of the intellect. Yet not all even of this chapter supports the esoteric

reading. When Maimonides says that the consequence of accepting the world's eternity would be to make false the external meaning of the Law in those places where no one of intelligence doubts it should be understood externally, it is hard to see how he would not be stating straightforwardly what he believes.

It is hard to believe that Maimonides's underlying position is either an untroubled and complete acceptance of the non-Aristotelian doctrines he professes to espouse, or a total rejection of them, in secret connivance with the reader who has pieced together his hidden intentions from carefully contrived hints and contradictions. On one level – that by which it continues the project of the rabbinic works – the *Guide* provides Maimonides's solution to the perplexities faced by Joseph. On a deeper level, the perplexities are Maimonides's own, and the *Guide*, with its complex, sometimes rambling structure, and its deliberately contrived openness to different interpretations, is the ideal arena for exploring them. It is because so many of them remain unresolved that Maimonides's book would dominate Jewish philosophy in the thirteenth and fourteenth centuries, and that it still, more perhaps than any other work of medieval philosophy, speaks so directly to us today.

7

PHILOSOPHY IN PARIS AND OXFORD, 1200–77

Of all the many ways of thinking philosophically which were followed in the Middle Ages, the scholasticism of thirteenth- and fourteenth-century Paris and Oxford theologians, such as Bonaventure, Aquinas, Duns Scotus and Ockham, is what many non-specialists think of as most characteristically medieval philosophy, or even as medieval philosophy full stop. In fact, it was a very particular manner of medieval philosophizing, developed quite late in the philosophical tradition of the Middle Ages and mainly confined to Latin thinkers, although influential on Jewish and Byzantine thought (Chapter 9, sections 4 and 2). The scholastic approach was the outcome of two very different types of development: on the one hand, the standardization of the academic practices that had been growing up already in the twelfth-century schools; and, on the other hand, the encounter with a whole range of new sources translated from the Greek and the Arabic. This chapter begins by examining both these developments and their outcome in terms of the pattern of studies at Paris and Oxford and the types of text in which scholastic philosophy and theology is preserved. The framework would stay much the same in the universities until and beyond the end of the Middle Ages. The first section thus provides a background to this chapter and the one which follows.

But the period which will be considered in the rest of this chapter, from 1200 until 1277, has its own, special character. Although interesting developments in logic and grammar continued (Section 2), these disciplines were no longer at the centre of intellectual life, as they had been in the previous century. Not surprisingly, because it was during this period that the new texts, mostly non-logical, were first studied. It was not, of course, a neutral reading: thirteenth-century thinkers read Aristotle and the more recent Jewish and Islamic texts in the light of their own intellectual assumptions, strengths, weaknesses and priorities. There was still, however, more than enough to intrigue, excite and, in some cases, disturb or frighten them. In the twenty or so years from 1255, especially, it seemed to be an open question for philosophers and theologians how far and in what way, as Christian thinkers, they should follow the ideas, as they saw them, of the newly available Aristotelian texts and Arabic commentaries. After an initial period of assimilation (Section 3), the philosophers and theologians of the period 1250–75 faced the question of how far this new tradition of thought – or their perception of it – could be allowed to mould their world-view. They gave three different main answers: one was Bonaventure's, another Albert the Great's (Section 4) and a third was, in different forms, that given by Aquinas (Section 5) and by some of the Arts Masters such as Siger of Brabant and Boethius of Dacia (Section 6). The condemnations of 1277 (Section 7) mark at least a symbolic end to this period of intellectual exploration.

But why focus so narrowly on Paris and Oxford universities? Philosophy in the Latin West was certainly *not* confined to the universities during the later Middle Ages, as Chapter 9 will explain. Nonetheless, the great majority of important philosophers of the Latin tradition of the thirteenth and fourteenth centuries were trained, and taught for some time, in the two great Northern European universities, Paris and Oxford. The University of Bologna, which was already flourishing in the twelfth century, specialized in law; Salerno and Montpellier in medicine; the multiplication of universities throughout Europe was a phenomenon of the later fourteenth century. The monasteries and cathedral schools ceased to be leading centres of higher education, although mendicant convents in Paris, Oxford and elsewhere became important.

1 Paris and Oxford universities: the translations, the curriculum and the forms of philosophical writing

The institutional structure of Paris and Oxford universities

Paris and Oxford Universities had very different origins. In 1150, Paris was already a great scholastic centre, with students and teachers from all over Europe, whereas Oxford was an undistinguished school. But by the mid-thirteenth century, both universities had a similar structure, though Paris remained the more influential and more international institution, as it would throughout the Middle Ages, except perhaps for a short period around the 1320s.

There was no abrupt moment of transition between Paris of the schools and the University of Paris, although what is regarded as the first charter of Paris University has the usefully symbolic date of 1200. The university was both more distinct from the world outside it and more tightly organized than the schools had been. The 1200 Charter, for instance, gave all students at the university some of the rights of clerics, whilst the 'Legatine Ordinance' of 1214, which marks the real beginning of Oxford's institutional university structure, was issued to resolve a dispute initially about the immunity of students, as clerics, from punishment by the civic authorities. In Paris, the Charter of 1215, issued by the Papal Legate, Robert of Courçon, shows that the division between the Arts Faculty and the higher faculties was already in place. The Arts Faculty was where all students (with the important, but in practice merely symbolic, exception of the mendicants: see below) had to begin their studies, and where most finished them; a majority would take only part of the seven-year course, usually begun at about the age of fifteen. Those who completed their Arts course were obliged, as part of their degree, to serve as Arts Masters for two years (their period of 'necessary regency'). Only then could a student begin his long course in one of the higher faculties: law (canon and, in some universities, civil), medicine and theology; many Arts Masters were, at the same time, studying in a higher faculty, usually theology. Institutionally, then, the Arts Faculties were predominant. In Paris, the Arts Masters were divided into four 'Nations' – the French (including Italians and Spaniards), the Norman, the Picard and the English-German – which elected a rector, who was in practice the head of the university. Intellectually, however, it was the theology faculty, with its much older and already well-trained students and masters, that tended to take the lead.

The table below sets out the stages of a student's career and the main intellectual activities in which each was occupied (more details about the texts studied are given further on in this section).

Duration (approximate age at beginning)	Description	Main activities
Arts Faculty		
2 (15)	Undergraduate	Attends introductory and discursive lectures on grammatical, logical and some other Aristotelian works; and attends disputations.
2 (17)	Undergraduate	As above, but also responds in disputations.
After which he is 'admitted to determine' 3 at Oxford; more variable at Paris (19)	Bachelor	As above, but the lectures also cover Aristotle's natural philosophy and <i>Metaphysics</i> and the quadrivium. Responding at disputations; giving introductory lectures.
After which he receives his 'licence' and 'incepts' as a Master of Arts 2 but can be extended (<i>c</i> . 22)	Master of Arts – necessary regency	Participation in special disputations etc. Gives discursive lectures and determines at disputations.

Duration (approximate age at beginning)	Description	Main activities
Theology Faculty		
7, later reduced to 6 (24)		Attends introductory and discursive lectures on the Bible and (discursive) lectures on the <i>Sentences</i> , and disputations.
2 (30–31)	Cursus/Baccalareus biblicus	As before, but gives introductory lectures on the Bible and responds in disputations.
2, reduced to 1 by the 14th century (32–33)	Baccalarius sententiarius	Gives discursive lectures on the <i>Sentences</i> .
4 (33–35)	Baccalarius formatus	Takes part in disputations and attends university functions.
After which he	incepts as a Master of Theology	Participation in special disputations etc.
Usually limited (37–39)	Regent Master of Theology	Gives discursive lectures on Bible and determines at disputations.

PHILOSOPHY IN PARIS AND OXFORD 1200-77

There are two misapprehensions that this table might produce. First, it was only a few, rare students who went through all its stages, from the top to the bottom of the columns. The great majority of students did not go beyond the Arts Faculty, and most of them stayed for only part of the Arts course. Second, although the statutes on which the table is based suggest a rigid and uniform system, the evidence of individual masters suggests that they were often not followed to the letter.

From the table, it is clear that the system was one in which there was no rigid distinction between students and teachers. As a student went through the course, he gave first introductory, and then more advanced lectures, and his role in disputations became more serious. The lectures on the *Sentences* given after eight or nine years in the Theology Faculty were the chance for a thinker to develop his own distinctive philosophical and theological position. Even more than the length of the course (not in fact so different from the time it takes, for instance, a German academic nowadays to acquire a *Habilitation* and so the possibility of a chair), what may surprise a modern reader is the lack of any permanent career structure for university theologians, after their period as Regent Master. Although most Arts Masters left their jobs as soon as they could, a proportion of them remained as Masters for five to ten years;

for some, such as Siger of Brabant and John Buridan, it seems to have been a deliberate choice of career (Chapter 7, section 6, Chapter 8, section 9). But there was a great pressure on the chairs of theology, the numbers of which were strictly limited by the university; it was especially great in the case of the majority of them which were held by the Dominicans, Franciscans and other mendicants, where there were other members of the order who had completed their course and were waiting to incept. (Hence William of Ockham's nickname, the Venerable Inceptor': he had completed all the requirements to become a Master of Theology, but found no Franciscan chair available for him.) At the end of the thirteenth century, the average period of regency was two to three years for the Dominicans and Franciscans, though as much as ten years for monks and Augustinian canons, and none for secular masters, but thirty years later it was down to roughly two years. Masters of Theology moved on, therefore perhaps to a high position in the Church or their order (Bonaventure, for instance, became Minister General of the Franciscans); perhaps to run one of their order's houses of study. In very rare cases (the two notable ones were Aquinas and Eckhart), a Master might return to Paris for a second period as Regent Master.

The Church and the universities

Like the cathedral schools from which they had developed, the universities were ecclesiastical institutions, subject to control by the local bishop and the papacy (which, since the late eleventh century, had become increasingly centralizing and avid for power). The secular masters and students – those who did not belong to one of the religious orders of monks or friars – formed a guild (this is what *universitas* means) and, as such, they both regulated their profession internally, setting up a curriculum and examinations leading to degrees, and were also able to act corporately to maintain and improve their position with respect to the authorities. To this end, they were ready, if need be, to go on long strikes, or even leave and set up elsewhere. They were, by and large, more successful in their dealings with the secular authorities than with the ecclesiastical ones, as the conflict over the mendicant orders illustrates.

The mendicant orders, of which the Franciscan and the Dominican friars were by far the most important, had been founded (both *c*. 1210) with spiritual and pastoral aims. But their membership rapidly came to include the Church's leading intellectuals. Both orders had their own systems of schools, and these soon came to include *studia generalia* ('Principal Houses of Study') at Paris and Oxford. Friars would usually receive their arts education in a lesser *studium* outside the university and were not allowed to attend the ordinary university arts course. Although, at the level of Theology Faculty, the Dominican and Franciscan courses and the university syllabus largely coincided, the mendicants, whilst part of the university, retained their separate identity and some distinctive academic practices (such as in-house academic disputations, discussions and speeches); in general, the orders tended to see their functions in the universities in the wider context of providing teachers able to give theological training throughout the range of their own schools. From the point of view of the secular masters, the mendicant orders presented a threat for various reasons. They undermined the teachers' guild's monopoly, because they would not abide by the regulations requiring an arts training in the university for intending theological students. They enticed many of the ablest young students to join them. Worse, they rapidly took over and retained the great majority of theological professorships. During the strike in Paris by secular masters in 1229-30, the friars continued to teach and accepted secular students. In this way, the Dominican, Roland of Cremona became the first of the mendicant masters of Theology, and he was soon joined by Alexander of Hales (Chapter 7, section 3), already a master of Theology, who became a Franciscan in 1231. Once a magisterial chair had been taken by a mendicant, it would be passed on only to other members of his order, so that by 1254 the secular masters had only three out of fifteen chairs of theology in Paris. In 1253–5, the secular masters in Paris introduced a series of measures against the mendicants, but the papacy intervened and the position of the friars was confirmed. In Oxford, the Dominicans and Franciscans became equally predominant, leading to a series of conflicts with the secular masters in the period from 1303–20.

The very distinctive pattern of studies which made up a student's and a master's career was based in considerable part, from the 1250s, on the range of newly translated texts which had been coming into use from the late twelfth century. And so it is they which must be considered next. What was the range of texts which became available? When and how?

The translations

The influx of new material which shaped university studies in the thirteenth century was the result of a translation movement which had four main elements. One of them has already been discussed (Chapter 5, section 8): (i) the translations in twelfth-century Toledo from the Arabic of Aristotelian texts and related works by writers in the Arabic Neoplatonic-Aristotelian tradition (including Jews) – most notably parts of Avicenna's *Healing*. A second, chronologically earlier element (ii) is the work of twelfth-century translators from the Greek. The most important was James of Venice. Between about 1130 and 1150 he translated the *Posterior Analytics*, *Physics*, *On the Soul*, some of the shorter scientific works and part of the *Metaphysics* (at least up to Book IV, 4). There were also anonymous twelfth-century translations of *On Generation and Corruption*, Books II and III of the *Nicomachean Ethics* and the *Metaphysics* except for Book XI. There was, in addition, the work (iii) of the later translators: Michael Scotus, who worked

in Sicily and Toledo early in the thirteenth century, Hermann the German in mid-thirteenth-century and William of Luna, who concentrated on putting Averroes into Latin.

Finally, (iv) there was the outstanding contribution of the most important of all the medieval translators, William of Moerbeke, a Dominican who worked directly from the Greek and had probably studied the language in Byzantium. Between 1260 and 1286, he went through almost the entire Aristotelian corpus, revising the existing translations and translating for the first time where necessary (as in the case of the *Politics*, the *Poetics* and the *Motion of Animals*). For all of Aristotle except the logical works – where Boethius's versions remained standard – Moerbeke's translations became the standard texts for the Latin Middle Ages. Moerbeke also translated a number of Neoplatonic commentaries and Proclus's Elements of Theology.

These four divisions do not, of course, include everything. Very important was the translation by Robert Grosseteste (one of the few medieval Latin philosophers to learn Greek) and his helpers of Aristotle's *Nicomachean Ethics* in the 1240s. And other, minor or anonymous translators will be mentioned below.

What was the range of ancient, late ancient and Arabic (Islamic and Jewish) writings that, as result of this translation movement, was available to Latin thinkers by the late thirteenth century? Above all, there was nearly the whole of Aristotle – including the *Politics*, which was not known in the Arabic tradition. By contrast, apart from the *Timaeus*, in Calcidius's partial translation, Plato was not read directly; the *Meno* and the *Phaedo* had, in fact, been translated in Sicily by Henry Aristippus shortly after 1150. The translations were not entirely lost, but they seem to have been known only to those whose interests went beyond the ordinary Aristotelian university curriculum: for example, the encyclopaedist Vincent of Beauvais (probably), the maverick scientist and philosopher, a pupil of Aquinas's, Henry Bate of Malines (1246–1310) and Berthold of Moosburg (Chapter 8, section 1). (Similarly, there existed by 1280 a Latin translation of Sextus Empiricus (Wittwer, 2002), but it does not seem to have been used.)

Ancient philosophy from the period between Plato and the later Roman Empire was known mostly through the Latin authors, especially Cicero and Seneca (Chapter 2, sections 3 and 8), and Latin readers did not, like their Arabic counterparts, have any translations of Plotinus. They did, however, have a version of Proclus's *Elements of Theology* in the form of the *Liber de causis* (Interlude viii) and, from William of Moerbeke, the original text of Proclus's *Elements*, his three *opuscula* which include discussions of providence and evil and his commentary on the *Parmenides*. In addition, there were a number of Neoplatonic commentaries on Aristotle translated: Ammonius on *On Interpretation*, Simplicius on the *Categories* and on *On the Heavens*, John Philoponus on *On the Soul* (all by Moerbeke), and even more commentaries by the late ancient Aristotelians, including Themistius on the *Posterior* Analytics (translated via the Arabic by Gerard of Cremona); Alexander of Aphrodisias on the *Meteorology* and *On Sense* and Themistius on *On the Soul* (all translated by Moerbeke), and Alexander's *On the Intellect* (translated probably by Gundisalvi). Finally, there were the commentaries by the Byzantine authors Michael of Ephesus and Eustratius on parts of the *Ethics*, which were translated by Grosseteste and his team. Given that, through Boethius, Latin readers had much of Porphyry's discussion of *On Interpretation* and his simpler ideas on the *Categories*, they were altogether well provided with commentaries on Aristotle from the ancient Peripatetic and Neoplatonic traditions, but – in a way that, not surprisingly, echoes the position with regard to the original texts – they did not have commentaries on Plato, except for Proclus on the *Parmenides*, which was hardly used.

Of the writings by authors from Islam, the most important block consisted of parts of Avicenna's Healing, especially On the Soul and the Metaphysics, and a large number of Averroes's Aristotelian exegeses - epitomes, paraphrases and full commentaries; the most important were the full commentaries on the Metaphysics and On the Soul. Kindî's and Fârâbî's short works on the intellect were translated in Toledo, and a number of other texts by these authors, but not Fârâbî's most characteristic writings. Averroes's writings other than his Aristotelian commentaries were not known, until the Jewish translator Qalonymos ben Qalonymus made a Latin version of the Incoherence of the Incoherence in 1328 for Robert of Anjou, King of Naples. Ghazâlî was known just from the translation of his Intentions of the Philosophers (though in fact the whole text of his Incoherence is contained in Averroes's Incoherence of it). Of the Jewish philosophers, some of Isaac Israeli's work was available, and Solomon Ibn Gabirol's Fountain of Life - although neither author was thought of as a Jew. Maimonides's great Guide of the Perplexed was translated in the 1220s in France. The quite free translation is anonymous, probably a collaboration between a Jew and a Christian, and it is based on the second, looser translation by Jehudah al-Hârisî of the original Arabic into Hebrew. As well as its importance in its own right, Maimonides's book would have been the only source through which a Latin reader could have learned about the kalâm tradition. There were, of course, exceptions among Latin readers. Ramón Martí (c. 1220–85), who devoted himself to arguing the case for Christianity to the Muslims, knew a wide range of Arabic works from reading them in the original: among them more Avicenna, Averroes's Incoherence of the Incoherence and a whole range of texts by Ghazâlî.

Aristotle in the universities, and the curriculum of the arts and theology faculties

The rise of Aristotelianism in the universities was rapid. Aristotelian logic, of course, had been central to intellectual life since the time of Alcuin, but

in 1200, interest in any of Aristotle's non-logical works was a rarity, whereas by 1255, the Arts Faculty in Paris had adopted an Aristotelian curriculum.

Some of the earliest apparent evidence for the study of Aristotle's nonlogical works in Paris comes from the prohibitions, imposed by a provincial council at Sens in 1210 and in Robert of Courçon's charter of 1215, on studying Aristotle's Metaphysics and Libri naturales (books on natural science) in the Arts Faculty there. If these texts were prohibited, then surely they were being read; and, what is more, Robert actually prescribed the Ethics. The prohibitions (which applied, it should be emphasized, just to the Paris Arts Faculty) remained in force, despite the appointment in 1231 of a papal commission to examine them. They seem to have had some effect, because a student manual prepared in the 1230s by a Parisian Arts Master gives much more emphasis to two Aristotelian works which were allowed, the Posterior Analytics and the Ethics. But by this time some Arts Masters were clearly using Averroes to help understand Aristotle's On the Soul, whilst theologians such as William of Auvergne (Chapter 7, section 3) displayed an extensive, if not always accurate, knowledge of the new material. By the 1240s, the prohibitions had lost their effect: Roger Bacon taught the Metaphysics, Physics, On the Soul and other Libri naturales in Paris between 1240 and 1247. The pattern of study in Oxford was similar to Paris.

From the 1250s onwards, the curriculum in the Arts Faculties of Paris and Oxford was thoroughly Aristotelian both in that almost every work by Aristotle was studied, and that the works studied as set texts were almost exclusively Aristotelian – almost, because Priscian remained a text-book in grammar, and one or two non-Aristotelian logical texts were studied (Chapter 7, section 2).

By contrast with the variety of textbooks in the Arts Faculty, there were just two for the theologians: the Bible, not surprisingly, and the Sentences of Peter the Lombard (Chapter 5, section 5). Why was this part-compilatory work by a theologian who, though intelligent and balanced in his judgements, was not - like Aristotle - an outstanding mind placed alongside holy scripture and, in practice, given much more attention than it? The explanation is, in part, historical: the Sentences were already a shaping force in twelfth-century theology and, although they had to compete with a strong current of Porretan theology, the Lateran Council of 1215 adopted the doctrine of the Sentences as the Church's. The Sentences, then, provided theologians with a summary of accepted orthodox doctrine, logically arranged. The Lombard's use of the *quaestio* technique meant that he pointed out many of the problematic issues which theologians needed to tackle, for which he helpfully provided a dossier of patristic texts and, in almost all cases, the correct answer in terms of Christian doctrine. The change from imitating the plan of the Sentences, as in the twelfth century, to commenting on them, as theologians did from the time of Alexander of Hales in the 1220s, gave them more freedom. The Sentences would be used, especially in the fourteenth century, more as a

check-list of topics to be covered, than a text to be analysed, and even these theological topics would, in many cases, be hardly more than pretexts for discussing the philosophical issues of the moment. How this happened becomes clearer in the light of the methods of university teaching and the use of the *quaestio* technique.

Interlude viii: Pseudepigrapha and the medieval Aristotle

Mistaken attributions have an important role in medieval philosophy. One of the most famous examples is provided by the writings of the pseudo-Dionysius (Chapter 3, section 3). The initial doubts about whether these writings, the work most probably of a Syrian monk *c*. 500 were really, as they claimed, from the hand of Dionysius, the learned Athenian converted by St Paul, quickly passed and, up to the Renaissance, the near-apostolic antiquity of these texts gave a special brand of authority to their late Neoplatonism. Pseudepigrapha also helped to shape the medieval Aristotle, in both Arabic and Latin philosophy.

In Arabic, the *Theology of Aristotle*, really a version of some of Plotinus's *Enneads*, contributed to the highly Neoplatonic flavour of Kindî and his followers' Aristotelianism. In Latin, the most important pseudo-Aristotelian work was another adaptation, originally made in Arabic in the circle of Kindî (Chapter 3, section 5), the *Liber de causis* (known in Arabic as *Book of the Pure Good*), which is based on Proclus's *Elements of Theology*, but with a monotheistic colouring. Albert the Great (Chapter 7, section 4) thought that the *Liber de causis* was based on texts by Aristotle himself and provided the theology which completed his metaphysics. Aquinas, with William of Moerbeke's translation of Proclus's *Elements* to hand, was able to show that the *Liber* was not an Aristotelian text or compilation, but Albert, whose view of Aristotle and so his own understanding of philosophy, depended so fundamentally on the *Liber*, simply refused to take account of this discovery.

There were many other works wrongly attributed to Aristotle – a recent list (Schmitt and Knox, 1985) runs to nearly a hundred items. One of the most popular was the *Secretum secretorum* ('The Secret of Secrets'), supposedly a letter of advice from Aristotle to Alexander, which mixes sections of practical and political advice for a ruler, and occasional more philosophical passages, with a defence of astrology and material on various occult sciences: physiognomy. The text seems to be the result of a long process of accretion: some Hellenistic or Roman Aristotelian pseudepigrapha were put into Arabic, other material was added and finally it was translated into Latin, and thence into a range of vernaculars.

It survives in more manuscripts than any other Aristotelian work, genuine or spurious.

Also quite popular was *De pomo* ('On the Apple' or 'Aristotle's Death'), which is modelled on the *Phaedo*. Probably originally written in Arabic, then translated into Hebrew, it presents Aristotle as taking a patently Platonic view of the survival of the soul. Not all Latin theologians were convinced, but a considerable number – especially of those who wished to argue that Aristotle himself went to heaven – defended its authenticity.

The methods of university teaching and the 'quaestio'. The literary forms of philosophical and theological texts

In both the Arts and the Theology Faculties, there were two main forms of teaching: lectures on the set-texts and disputations. These methods were not nearly so distinct as it might seem. Texts could indeed be lectured on just following the course of the sense (read *cursorie*; here called 'introductory lectures'). But they were also lectured on in depth (read *ordinarie*). In these in-depth 'discursive' lectures, the teacher would be concerned with the problems raised by the text and their correct solution, rather than with the mere explanation of the set-text's meaning. They seem to have been occasions for discussion and argument, especially among the students in the Theology Faculty, who were already experienced philosophical reasoners.

Disputations in the Theology Faculty were of two sorts. Ordinary disputations were organized by a master for his pupils on a topic of his choice (for instance, the soul or evil), and they took place in two sessions. In the first, pupils acted as objector (*opponens*), putting arguments against a given thesis, or as replier (*respondens*), countering the objector's arguments and setting out their own considered views on the matter. In the second session, the Master would summarize the various arguments given for and against the thesis, and 'determine' the question by giving his own view and his arguments for it. Quodlibetal disputations followed the same format, but any student, not just the Master's own pupils, could attend, and the subject discussed was simply what anyone cared to raise: they were disputations about questions raised by anyone (*a quolibet*) about anything (*de quolibet*). Disputations also took place in the Arts Faculty. Some consisted in the logical exercises called *sophismata* (Chapter 7, section 2) and were designed especially to train students in argument.

For the modern reader, the differences between discursive lectures and disputations seem even less than they would have done at the time, because both were usually written up in *quaestio*-form, even though discursive lectures

sometimes also contained literal commentary on the text concerned. *Quaestio*form had been used, though quite loosely and inconsistently, by Peter Lombard and other twelfth-century theologians (Chapter 5, section 5), and in at least one logical commentary from *c*. 1150. For the university philosophers and theologians, this form seems to have been a way of capturing the give-and-take of classroom discussion and also of regimenting the array of arguments for and against a given position. They were so attached to it that it was even used sometimes in texts that did not arise directly out of university teaching – most famously in Aquinas's *Summa Theologiae*, a general handbook for theology students (probably at the intermediate, sub-university level *studium* at Naples) rather than the result of any particular course Thomas has given.

In a quaestio, a problem is posed as a question to be answered 'Yes' or 'No'. For instance, in his De veritate, a written-up disputation, Aquinas asks (q.1, a.5) whether 'any truth besides the first truth is eternal' (the 'first truth', of course, is God). The writer then (1) puts the arguments for the answer which he does not want to propose, preceded by the phrase Et videtur quod sic/non ('And it seems that it is so/it is not so'). In this case, Aquinas wants to argue that no truth is eternal except in so far as it is in God's mind and so identical with God, and so he begins, with the case against this position, saving Et videtur quod sic. Aquinas then goes on to cite no fewer than twenty-two arguments to show that truths other than God, the first truth, are eternal. Most *quaestiones* would probably have rather fewer of these 'arguments' (in his Summa, Aquinas usually makes do with four or five), but, like this example, they would mix references to authority - Thomas cites Aristotle, Augustine and Anselm - with arguments based on pure reasoning; for example, in Argument 3, Aquinas puts forward the point that, if the truth of statements is not eternal, then there must have been a time when there was no truth of statements. But, if so, the following statement, 'There is no truth of statements', would have been true then, and so a contradiction would be generated. The next section (2) of a quaestio is preceded by the phrase sed contra ('but against [this]'), and one or two brief arguments in favour of the position the author wishes to take. In this case, Aquinas offers two short rational arguments, but a statement from authority is more often to be expected (for instance, in the article of the Summa Theologiae - I.g. 2,a.3 - giving the famous 'Five Ways', the sed contra consist simply of God's statement in Exodus iii, 14: Ego sum qui sum ('I am who am')). There then follows (3) the corpus ('body') of the *quaestio*, in which the writer puts forward his own position on the problem, along with the supporting explanations and arguments needed to justify it. Finally, the writer gives one by one (4) his answers to the arguments against his preferred position with which the quaestio began. Sometimes these counter-arguments contain important and extended arguments, but often the discussion in the body of the quaestio has already indicated the lines of a solution; sometimes, indeed, the writer judges that his main answer makes responding to the arguments unnecessary and he just remarks 'and so the solution to the objections is obvious.'

Individual *quaestiones* are usually grouped together, as articles, into what is called (confusingly) a Question (it is really more like a chapter); so, for example, the article from Aquinas's *De veritate* is one of eleven articles which form the first Question and which are all concerned with the most general characteristics of truth. Questions were sometimes grouped into books (often according to the books of the text being commented on), and, in the case of the *Sentences*, the text was divided into sections that were called 'distinctions'. A particular passage in a *Sentences* commentary might, then, be Book I, Distinction 39, Question 3, Article 2, answer to the fourth objection (usually abbreviated as: I,d.39, q.3, a.2, ad 4). In a world of manuscripts, where there could be no standard page numbering, such devices, clumsy though they might seem, made cross-references, and references to other writers' work, possible.

It is interesting to speculate on the quaestio-form as an indication of the mentality of the scholastic thinkers who were so devoted to it: the wish to divide up logically and comprehensively every topic and to reach answers which had been argued through, but also incorporated a harmonization of the apparently conflicting authorities, philosophical and patristic, ancient and medieval. Such speculations might easily prove unfounded, however, because, although the quaestio-form survived to the end of the Middle Ages and, in some areas, beyond, in much of the most sophisticated theological writing it had become something of a formality even by the end of the thirteenth century. A look at almost any part of Duns Scotus's Sentences commentary will quickly illustrate the point. The structure of arguments, *sed contra* corpus and replies remains, but they have become perfunctory, whilst the corpus has swelled into an independent philosophical essay, often 10,000 words or more long, with its own internal structure, often involving an account of the positions taken by recent thinkers, arguments against them, exposition of Scotus's own view, objections to it, answers to the objections (and sometimes counterobjections to these answers, which Scotus answers in turn).

The majority of philosophical and theological texts that survive from the medieval universities are in forms closely based on the methods of teaching there. Since commenting on the *Sentences* gave students the chance to deal with the whole range of theology and all the connected philosophical questions, very often the major work by which a university theologian is known is based on these lectures. Usually, after the theologian had become a Master, he would take time to write up and revisit his lectures on the *Sentences*, producing what is called an *ordinatio* – a polished, revised version for publication. But sometimes one or more transcriptions of his lectures would survive – a *reportatio* (or, if it has been looked over by the writer, a *reportatio examinata*) – and circulate. Since theologians sometimes lectured on the *Sentences* twice or more, at different universities, the problems for modern editors in judging the manuscript evidence and establishing a text or texts

from it can be enormous. (All these problems arise for the works of Duns Scotus: Chapter 8, section 3.) All these texts are in *quaestio*-form, reflecting the lectures which they record or on which they are based, and the same is true of the texts of ordinary and quodlibetal disputations. Secular masters, such as Henry of Ghent and Godfrey of Fontaines, who did not have to vacate their chairs and so enjoyed many years as Masters of Theology, based their published output on the form of teaching particular to Masters – disputations.

The *summa* – an ordered exposition of the problems of theology, independent of Peter the Lombard and the university course – was a form used and made well-known to posterity by Aquinas (who wrote two) and also by his teacher, Albert the Great (also the author of two *summae*), but not otherwise widespread. Indeed, both Albert and Thomas were rather untrammelled by the forms of university teaching and produced a wide variety of treatises and commentaries on Aristotle. Sometimes more literary forms, unrelated to the methods of university teaching and debate, were used: Bonaventure, for instance, writes his *Itinerarium mentis in Deum* in a personal, meditative style, reminiscent of Anselm and Augustine, and Boethius of Dacia frames his *De summo bono* as something half-way between an essay and a manifesto.

2 Grammar and logic

Two subjects in the Arts Faculty were more loosely related to Aristotle than the others: grammar and logic. The first of these is no surprise, since Aristotle did not write on grammar, but it might have been expected that thinkers would have been Aristotelian in logic, if anywhere, given Aristotle's outstanding position in the history of logic. In fact, the Arts Masters managed, in a strange way, to make their approach to grammar Aristotelian, whereas in logic, although interested in the whole range of the *organon*, their energies were directed elsewhere.

Speculative grammar

Once they began to study the *Posterior Analytics*, Latin thinkers became almost as obsessed by the ideal of an Aristotelian science as Avicenna and Averroes had been. For a university discipline to be respectable, it needed to be a science as defined by Aristotle. This aspiration created a problem in the case of grammar. The study of Latin grammar, using Priscian as a textbook, had already been developed to a highly technical level in the twelfth century. But, despite its links with logic, grammar remained a subject rooted in the particularities of a given language, Latin: how could it proceed from necessary premisses to necessary conclusions, as an Aristotelian science must do? The 'speculative' or 'modistic' grammar of the thirteenth and early fourteenth centuries was designed to meet this challenge by treating grammar in an entirely theoretical way.

To this end, the speculative grammarians – chief among them in the Paris of the 1270s to 1280s were the Danes, John of Dacia, Martin of Dacia (d. 1304) and Boethius of Dacia – used the idea that there are modes of being (modi essendi), of thinking or conceiving (something) intellectually (modi intelligendi), and of signifying (modi significandi) in order to present a grammatical structure that was supposed to be free from contingent details. As Martin puts it, the modes of being are a thing's properties according to its being outside the intellect, the modes of thinking are the same properties according to its being in the intellect, and the modes of signifying the same properties again, according to its being signified in speech. He and the other speculative grammarians take 'thing' in a very broad way, to mean a basic constituent of reality that can be realized (and correspondingly thought of and signified) in different ways. So, for example, the basic constituent, pain, can be realized dynamically (for example, 'my heart pains me', 'my paining heart') or statically ('the pain in my heart'; 'that') or in a modifying way ('I lived painfully'). This distinction corresponds to one in our ways of thinking about pain, and to the grammatical distinction between three groups of the parts of speech: verbs and participles; nouns (including adjectives) and pronouns; adverbs, prepositions, conjunctions and interjections. The ways of being and thinking can be further divided, in a way that matches them to the parts of speech. For example, whereas nouns stand for things in a stable way with a definite reference, pronouns stand for them in a stable way without definite reference.

Beyond these 'essential' modes of signifying, there are the 'accidental' modes, such as tense, mood, number, gender, case – each of which also corresponds to a way of being and thinking. In many cases, this correspondence is very obvious. So the singular stands for things that are or are thought of as indivisible, and the plural for things as divisible; the nominative is the way of signifying what something or other is, and the dative of signifying to or for whom. Even the grammatical genders (in Latin many inanimate things are considered masculine or feminine, rather than neuter) could be fitted into the scheme, since they were held to correspond to an active, passive or neutral way of being.

Just as the choice of which sound should be linked to which broad-sense thing is arbitrary, so the particular ways in which Latin distinguishes between nouns, verbs, participles and so on from the same root, and how it marks number, cases, tenses and moods are irrelevant to the speculative grammarian's concerns. They vary from one language to another, whereas the structure of the *modi significandi* was assumed to be invariable and thus its study was scientific.

The vogue for speculative grammar continued into the fourteenth century, with the work of Radulphus Brito (*c*. 1275–1320 or later), who was an Arts Master *c*. 1300 before becoming a theologian, Thomas of Erfurt, who probably wrote his *Grammatica speculativa* (well-known because it was

misattributed to Duns Scotus) between 1300 and 1310 and Siger of Courtrai (d. 1340), who had an interest in the Latin classics not shared by any of the others. In these later speculative grammarians, the distinctions multiply: the ways of signifying and thinking could be active or passive, and these active or passive modes could, in their turn, be considered materially or formally. Behind this development was probably the need to answer a basic problem about the ontology of the whole system of modes. Martin of Dacia argues that the ways of being, thinking and signifying are the same, although they differ accidentally - just as I remain the same person whether I am in my study at home or my room in college; and that they are rooted in the thing which exists in the outside world. It is not surprising that Boethius of Dacia should think differently, since Martin's view seems to bring things, concepts and signifying words so close together as to make it impossible for anything to have a property that cannot be thought of or signified in language. Boethius holds that the modi are similar, but not identical, and that they are in different subjects: the ways of being in things, the ways of thinking in the intellect and the ways of signifying in phrases. But, if so, then it seems that it is not, after all, the same thing (in the broad sense) that exists, is thought of and is signified. Indeed, the modists never clarified the status of the broad-sense things which lie at the basis of their theorizing, a deficiency which made their schemes intrinsically unstable.

Speculative grammar was not developed further after the beginning of the fourteenth century, and the whole system was challenged in around 1330 by John Aurifaber, in the name of authentic Aristotelianism, which he claimed offered the resources to explain how language functions without recourse to the ways of signifying. Ockham also attacked the theories of the modists, insisting that talk of ways of signifying should be regarded as no more than metaphorical. The modern reader is likely to be struck, not just by the metaphysical vagueness attaching to the central ideas of speculative grammar, but by another weakness. These grammarians attempted to set out a general system for the grammar of any human language. But they based themselves entirely on Latin and assumed that the ways in which the modi significandi charted the distinctions between how different broad-sense things are and are thought about would be shared by all other languages. But, of course, they are not (and the isomorphism the modists detected between language, thought and reality was itself at least in part due to the way their articulation of reality had been moulded by the Latin language). One piece of empirical evidence which the speculative grammarians did cite for the intertranslatability of languages implied by their theory is ironically inadequate. Logic, they said, was written in Greek, but it has been successfully translated into Latin. If only, as a number of Arabic logicians could do, they had been able to compare the translation of Greek logic into an Indo-European language that, like Greek, has a copula (Latin or, in their case, Persian), and into Arabic which, in normal usage, has none, they would have seen that whatever structural similarities exist between languages in general must be sought at a far deeper level than in modes of signifying modelled on the classifications of traditional grammar.

Logic: the organon, sophismata and the theory of the properties of terms

In the twelfth century, a large part of the schools' intellectual energy was devoted to pursuing the problems raised by the texts of the logica vetus; the logica nova became known, but only On Sophistical Refutations was seriously studied (Chapter 5, section 7). Aristotelian logic continued as a fundamental part of the arts curriculum throughout the Middle Ages, though it never again held the central position it had occupied. Although there were many variations, a university logical manuscript might well contain Aristotle's organon (Categories, On Interpretation, On Sophistical Refutations, Topics, and Prior Analytics - all translated by Boethius; and the Posterior Analytics, translated by James of Venice) along with Porphyry's Isagoge, Boethius's De topicis differentiis and De divisione and a short treatise, De sex principiis, probably dating from the later twelfth century, which looks carefully at the six final categories (condition, posture, place, time, action and being-actedon) treated only hurriedly by Aristotle. Of the logica vetus, then, only Boethius's monographs on categorical and hypothetical syllogisms fell into disuse. Commentaries on the three newly studied Aristotelian texts began to be written in the 1240s: Robert Kilwardby (c. 1240) wrote a literal commentary on the *Prior Analytics* which became popular (and was largely borrowed by Albert the Great); Grosseteste (Chapter 7, section 3) performed a similar service for the Posterior Analytics. Commentaries on Boethius's 'Topics' continued to be written until c. 1300, but gradually interest was concentrated on Aristotle's own text. Of the three works, it was probably the Posterior Analytics which exercised the greatest influence, shaping how philosophers and theologians saw their work. As among the Islamic philosophers, demonstration was seen as a scientific ideal, and the exponents of each individual discipline - even, with difficulty, the theologians, and, as explained, the grammarians – wanted to be able to see their pursuit as an Aristotelian science, with its own, self-evident principles as foundations.

Commentaries translated from the Arabic did not have the importance in logic that they did elsewhere, although paraphrase commentaries by Averroes on most of the *organon* were translated, along with a very little logical material by Avicenna and Fârâbî. The Latin version by William of Moerbeke of the *Categories* commentary by Simplicius and the commentary on *On Interpretation* by Ammonius were neither very widely used. To judge from the lack of manuscripts, Boethius's commentaries, which had stimulated so much twelfth-century discussion, were no longer generally read; but there were distinguished exceptions – Aquinas made careful use of Boethius's

second commentary on *On Interpretation* (along with Ammonius's) in his own commentary on the work, and both Albert and William of Ockham also used it. Too little is yet known to allow many generalizations about how Aristotelian logic was studied in the universities. At least this much is sure, that there was a tendency – helped by the practice of *quaestio*-commentary, which allowed teachers to distance themselves from the letter of the text, to try to link it with concerns belonging to the *logica modernorum*.

'Logica modernorum' – by which is meant those branches of logic which were newly developed in the Middle Ages – had its origins in the twelfth century (Chapter 5, section 7), and it would be developed to its fullest in the fourteenth and fifteenth centuries. A survey of most of its branches will, therefore, be made later (Chapter 8, section 8), but two should be looked at here: *sophismata*, because they had so important a role in the arts faculties, and the theory of the properties of terms, which is very much a product of the thirteenth century.

A sophisma is a sentence which presents a problem of interpretation for the logician, usually because it is ambiguous or has, at least in a certain context, awkward consequences, and as a result might be judged to be true or to be false. These ambiguities are more frequent in Latin than English. For instance, the sophisma 'omne coloratum est' means both 'every coloured thing is (i.e. exists)' and 'everything is coloured'; in the first sense it is true, in the second false. Very often, as here, the problematic nature of the sentence rests on a syncategorematic term. Strictly speaking, terms that can be used as the subject or predicate of a proposition are 'categorematic', and all the others (conjunctions, adverbs and prepositions) are 'syncategorematic'. In practice, logicians studied as syncategoremata conjunctions such as 'not' (non), 'besides' (praeter), 'unless' (nisi), 'or' (vel, utrum), 'and' (et), 'than' (quam) and 'if' (si); adverbs such as 'only' (tantum), 'necessarily' (necessario) and 'contingently' (contingenter); and a number of adjectives and verbs which were used syncategorematically, such as 'every' (omnis) and 'no' (nullus), 'begins' (incipit) and 'ends' (desinit). In the twelfth and early thirteenth century, separate treatises were written on syncategorematic terms, but afterwards they came to be studied in the context of sophismata. The term 'Sophismata' was also used to designate a set of discussions of these problem sentences, which took a form, and produced a literary genre, close to that of the disputation. First, the problem sentence is stated, and where necessary the circumstances (*casus*) are given under which this sentence is being considered as problematic (for instance: 'These two men know the seven Liberal Arts' becomes problematic given the casus that Man A knows three of the arts, and Man B the other four of them). Then arguments are given for considering the sentence true (proof), and for considering it false (disproof). The writer then gives his own solution, prefacing it with whatever explanations or distinctions it requires, and finally he shows why the arguments for the answer he has rejected are wrong. Detecting the obvious ambiguity is only a beginning: the argument and counter-argument can often become intricate and sophisticated, and *sophismata* were often a vehicle for exploring problems about reference, quantification, scope and universals.

The theory of the properties of terms, which is concerned with the reference (or, as it came to be called, 'supposition' (suppositio)) of terms within the context of a sentence, was developed in the later twelfth and early thirteenth century. It received a full treatment in the enormously popular Tractatus (known as Summule logicales) written before 1250 by Peter of Spain - probably a Dominican rather than, as used to be thought, the Peter who became Pope John XXI. Other treatises - such as William of Sherwood's Introductio in logicam (c. 1250?) - present differing versions of the theory. According to the medieval theorists, a categorematic term gained by means of an original imposition (one should imagine Adam pointing and saying: 'That's a dog', 'That's a flower' and so on) the property of signifying a universal form and the objects which have that form. But also, depending on how it is used in a sentence, the term has one or another sort of supposition. It has personal supposition when it refers to a particular or particulars; material supposition when it refers to itself ("Dog" has three letters' - today we use inverted commas to indicate material supposition); simple supposition when it refers to a universal ('Dog is a species'; or - according to Peter of Spain, but few others - 'Every dog is an animal'). Some logicians, including Peter of Spain, held that a term also has natural supposition, according to which it stands for everything for which it is naturally fitted to supposit: for instance, 'dog' has natural supposition for all dogs, past, present and future. Natural supposition fits into the contextual approach better than it might at first seem to do. Context was held to 'restrict' or 'ampliate' the supposition of a term: in 'The dog was', for instance, the effect of the past-tense verb is to restrict the supposition of 'dog' to past dogs; in 'The dog can be white', the effect of 'can be' is to ampliate the supposition to possible dogs (which Peter - IX.6 - takes to mean present and future dogs). Natural supposition, then, might be considered a term's supposition when its context does not restrict it at all.

Personal supposition was subdivided into determinate ('Some dog is running'), confused and distributive ('Every dog is running') and merely confused ('Every dog is an *animal*'). These classifications were based on the relationship between the propositions in question, and the propositions about singulars they imply ('descent to singulars'). The subject of a proposition 'Every A is B' has determinate supposition if it follows that this A is B or that A is B or that A is B . . .; and confused and distributive supposition if it follows this A is B and that A is B and that A is B . . .; the predicate has merely confused supposition if it follows that every A is this B or that B or that B . . . Although historians are uncertain about the purpose for which these distinctions of personal supposition were invented, they gave truth-conditions and also provided a useful analytical machinery for dealing with referentially-complex propositions, such as those complicated by tense or those with multiple quantifiers, like the ones on which modern logic students' wits are so often sharpened ('Everybody loves somebody').

3 Arts Masters and theologians, 1200-50

The early Arts Masters

One of the earliest, and most remarkable, users of Aristotle's libri naturales was David of Dinant, whose *Quaternuli* were ordered to be burnt by a Paris synod of 1210. David appears to have known Greek and translated parts of the texts for himself, but using them he shaped a view of things almost as distant from Aristotle's as it was from Christian orthodoxy, insisting on a naturalistic view of the soul (medicine was one of his great interests), and also arguing that, although there are many bodies and many souls, there is one matter (hyle) and one soul (anima), which are identical with each other and God. This strange anticipation of Spinoza may have helped to make Aristotle's science suspect and fuelled the ban on the texts of it. Before the ban, study of them seems to have been becoming common in the Paris Arts Faculty. Alexander Neckam, writing at the very end of the twelfth century, tells of arts students studying, not just Aristotle's logic, but also his Metaphysics, On Generation and Corruption and On the Soul, and the Englishman, John Blund, who flourished c. 1200, is described as lecturing in Paris and Oxford on the books of Aristotle 'recently received from the Arabs.' One of his books, De anima ('On the Soul'), survives: it follows Avicenna's ideas rather than Aristotle's, and takes the Avicennian form of a paraphrase commentary.

In Avicenna's reading of Aristotle (Chapter 4, section 5) the active intellect is identified with the lowest of the Intellects which emanate from God. But, as early as the mid-1220s, a treatise on the powers of the soul by an anonymous Arts Master rejects Avicenna's view in favour of a position which is attributed to Averroes: each soul has, not just a potential intellect, but also an active intellect, which is one of its powers. This interpretation of Averroes – very different from anything Averroes himself had written, and from what would later be considered Averroism – came to be the preferred position of the Arts Masters. By the 1230s the prohibition of Aristotle's *libri naturales* (which, in any case, applied just to the Paris Arts faculty) seems to have been ignored, and *On the Soul* became a text regularly studied; commentaries survive from the 1240s onwards.

Other of the new Aristotelian texts were commented on not much later. A central figure *may* be Richard Rufus of Cornwall. After becoming a Franciscan in (probably) 1238, Richard certainly wrote (*c*. 1250) a *Sentences* commentary, based on lectures given in Oxford, and then, after studying in Paris, produced an abbreviation of Bonaventure's *Sentences* commentary. As an Arts Master, he has also been argued to be the author of commentaries on the *Physics* (*c*. 1235), *On Generation* and *Corruption* and *Metaphysics*. If they

are his, they are the earliest known Latin commentaries on these texts; Roger Bacon's *Quaestiones* on the *Physics* originated in Paris in the 1240s. The corpus attributed to Richard is, in any case, very interesting, because of the author's willingness to reject both Averroes and, in various areas, such as his account of projectile motion, Aristotle himself. Another influential Arts Master was Robert Kilwardby (d. 1279), later Archbishop of Canterbury, who taught in the period around 1240 and whose writings were plundered by Albert the Great.

With the exception of David of Dinant, the impression given by these early approaches to the new Aristotle in the Arts Faculty is one of thinkers trying to understand and assimilate new material, without yet being in a position to use it for their own purposes, or react to it, or to stand back and see what it involved. But the theologians, who were not affected by the Paris ban and had usually studied for longer, took a more active attitude towards these new sources.

William of Auvergne and the early Paris and Oxford theology masters

Among the early masters of theology in Paris were William of Auxerre (1140/50–1231), author of a Summa Aurea ('Golden Textbook'), modelled in form on Peter the Lombard's Sentences, but using a range of sources unknown to Peter - Aristotle's Physics, On Generation and Corruption, Metaphysics, On the Soul and Ethics, as well as Avicenna - and exploring areas such as morality and the demonstrability of God's existence more systematically. A similar range of material is used by Philip the Chancellor (d. 1236) in his Summa de bono ('Textbook on the Good'), which is innovatively arranged around the idea of the Good. Alexander of Hales (d. 1245), who was the first master to comment on the Sentences, knew almost the whole of Aristotle, including the Liber de causis, which he took to be an Aristotelian work. The Summa Fratris Alexandri, compiled between 1236 and 1245, except for Book 4, added later, was put together mainly by followers such as John of La Rochelle (d. 1245; sections on the moral law). The most striking feature of this Summa is its vast size (Roger Bacon said it was as heavy as a horse) and the painstaking detail in which every aspect of the theology syllabus is discussed.

In all these works, the new material, Aristotelian and Arabic, is assimilated into a framework based predominantly on Augustine and some more recent Christian thinkers, especially Anselm and the Victorines. The theologians were helped in this synthesis by a not entirely adventitious similarity between a set of ideas they found in Augustine and what they read in the translation of Avicenna's *Healing*. Although Augustine never set out formally a theory of knowledge, he held that humans cannot reach the truth unless they have the benefit of divine illumination. Part of his motivation was his Platonic belief that the only source of truth, as opposed to opinion, are the Ideas (which he places in God's mind); part of it was a wish to place even ordinary acts of cogitation under divine control. Avicenna shared at least some of Augustine's Platonism. For him (Chapter 4, section 5), intellectual knowledge involves conjunction with the Active Intellect – in his view a separate substance, though not God. It was easy enough for Latin theologians to allow the two views to merge. In the broad theory shared by Alexander of Hales and Robert Grosseteste (see below) and many other of the theologians, my thought of, for instance, the universal, Horse, is a thought of Horse because my intellect is informed by an intelligible species of Horse, which itself has been abstracted from the sensible species of a horse or horses I gain through my senses. The process of abstracting universal intelligible species from sensible species cannot be carried out through the innate powers of the human intellect: they consider it requires the Active Intellect, which they do not, like Avicenna, consider as a separate being, but rather identify with God. What emerges, then, is an Aristotelian theory, seen through Avicenna's eyes (but perhaps closer to Aristotle himself than Avicenna had been), and then reconstructed to fit into an Augustinian framework.

One idea which would figure large in the medieval and post-medieval history of metaphysics was first properly developed by these early thirteenthcentury theologians, especially Philip the Chancellor. It was commonplace among Neoplatonists to link goodness closely with being (evil, as Augustine was fond of saying, is nothing), and also to declare that everything that exists has unity (if it is broken up, it is no longer that thing). Both these points are used, for instance, by Boethius in his Consolation (Chapter 3, section 1), and in his Opusculum sacrum no.3, he starts out from the premiss, taken as obvious, that everything is good in that it exists: goodness and being are therefore at least extensionally equivalent. With Augustine and Boethius in the background, some hints from Aristotle's Metaphysics, and some help from William of Auxerre's discussion of goodness (Summa aurea III, 10, 4), Philip the Chancellor is the first person to formulate these thoughts into a theory of 'transcendentals'. He picks out four properties which all things have: being, goodness, unity and truth. He argues (Summa de bono, qq.1-11) that these properties are not merely extensionally equivalent, as they must be if all things have them, but that they are really the same, differing only conceptually. If being is conceived as undivided, then it is seen as unity; if being is conceived as undivided from its formal cause - the form which makes the matter what it is - it is seen as truth; and if being is conceived as undivided from its final cause, it is seen as goodness.

The most interesting theologian of the period, however, is William of Auvergne (d. 1249), who taught in Paris in the 1220s before becoming its bishop in 1228, and wrote an encyclopaedia of theology, the *Magisterium Divinale ac Sapientale*, covering the whole of the syllabus set out by the *Sentences* in a set of independent treatises, including ones on the Trinity, the universe of created things and the soul (*De anima*). He makes great use of the

new material, but argues against many of the ideas found in it. Avicenna is a stronger influence than the real Aristotle (and Avicenna's views are often presented as Aristotle's), and William's views about God as a necessary being, and existence as an accident in all other things, are clearly taken from the *Healing* (with some distortion). Yet William is especially anxious to go against two central features of the Avicennian universe: the idea that it came about of necessity, and that there are intermediaries – Avicenna's Intellects – between God and the human world. Rather, in accord with Christian doctrine, William affirms that God creates all things, freely and without intermediaries. This view shapes the most distinctive area of his thought, a theory of knowledge which confronts the problems later theologians, such as Aquinas, would face, but resolves them differently.

Since he wishes to eliminate intermediaries, William (*De anima*; William of Auvergne, 1674, II, 214–15) cannot accept Avicenna's idea that intellectual knowledge is passed down from a separate Active Intellect. Rather, he sees the human intellect as knowing the world by using a set of internal signs. Objects in the world form impressions on the senses, and the senses then excite the intellect to form the appropriate signs. Humans obtain these signs directly from God himself, who is present to the human intellect, in the same way as the world of sensible appearances is present to the human body. And humans are so constructed by nature – ultimately, therefore, by God – that a given sensible excitation stirs up the right sign. In some cases, William seems to think that the sign is linked to what it signifies by resembling it, like a picture; some signs – that, for instance, for heat – do not literally resemble what they stand for, but the link to their objects is presumably guaranteed by their origin from God, the exemplar of all things.

Philosophers of mind today often ask, about a given thought of something – say X: in virtue of what is it a thought of X? The type of answer suggested by Aristotle is that it is a thought of X because it *is* X: the potential intellect becomes the form which it thinks. William is proposing a completely different line of reply, which is more like a system of mental language (cf. Chapter 8, section 5) than any sort of adaptation of Aristotle's system.

Robert Grosseteste

Robert Grosseteste (c. 1168–1253) does not fit easily into the chronology of developing scholasticism. Although he outlived Alexander of Hales, his approach to theology was of an unsystematic kind, based on commentary (for instance, on pseudo-Dionysius – 1238–43; on the Hexaemeron – 1230–35 (?)). But he was a pioneer in studying Aristotle, and he wrote one of the earliest commentaries to the *Physics* (begun perhaps before 1225 but finished much later) and the earliest known one to the *Posterior Analytics* (1220–30). And, in some ways, he refuses to fit into the scholastic mould at all: towards the end of a long career, in which he taught at Oxford in the 1220s, and

became Bishop of Lincoln in 1235, he learned Greek – an accomplishment almost unheard of among philosophers and theologians of his time, and translated, with helpers, not only Greek theological works, but also Aristotle's *Nicomachean Ethics* and part of his *On the Heavens*. He also seems to have learned some Hebrew.

Grosseteste most often features in accounts of medieval thought because of his contribution to scientific method, and for what has been called his 'metaphysics of light'. Although Grosseteste spoke, in his commentary on the Posterior Analytics, on how to reach a universal principle based on experience (principium universale experimentale), the claim sometime made that he, first in the Middle Ages, devised an experimental method is borne out neither by his theoretical nor his more practical scientific works. The main achievement of Grosseteste's widely-read commentary was, rather, to help put into circulation the ideas of the Aristotelian treatise which did not guide scientific investigation in the modern sense, but helped rather in thinking about the organization of knowledge. Grosseteste incorporated an Augustinian idea of illumination into his understanding of Aristotle, by holding that, given our fallen state, the process of scientific reasoning requires us to turn to the divine light. In his De luce ('On Light'), light is made into a metaphysical principle. Bodies are three-dimensional. But how does three-dimensionality arise from matter and from the form of bodiliness, since both are simple and lacking in dimensions? The problem can be answered if light is identified as the form of bodiliness, since light extends itself infinitely in all directions. Grosseteste elaborates this basic idea to show how, from a simple point of light, the structure of the universe as concentric spheres was produced; and, in his discussion, he proposes the idea of differently sized infinities – a view interestingly at odds with Aristotle's.

Grosseteste showed his acuteness and original cast of mind on a whole range of topics. For example, his is one of the subtlest discussions of eternity and prescience before Aquinas (Study I). In his *De libero arbitrio* ('On Free Decision'; probably late 1220s for second recension), he poses (Chapter 1) the argument from divine prescience to the necessity of the future in a powerful form unknown to Boethius or even Abelard, but already suggested in the twelfth century by Roland, Abelard's follower, and by Peter of Poitiers. Let *A* be a future contingent. The two propositions

1 If God knows *A* will be, it will be.

and

2 God knows *A* will be.

are both necessary (that is, for 1: Necessarily, if God knows *A* will be, it will be). And so it follows that

3 If God knows *A* will be, it will be necessarily.

Grosseteste (Chapter 6) appeals to an idea of synchronic alternative possibilities in order to solve the problem (Lewis, 1996). Although God has known *A* from all eternity, he *could* not have known *A* (in the case where it is not-*A* that will be). The necessity of something which is so from all eternity in this way is not the same simple necessity as that of 2 + 3 = 5. But how (Chapter 6–7), Grosseteste asks, can there be such a capacity for opposites in God, whose eternity is not extended in time? His answer is that there can be an ordering of priority and posteriority in God, but it is a causal, not a temporal ordering. Grosseteste does not develop this insight systematically, as Duns Scotus would do, but he already has to hand the materials Scotus would use fifty years later (Study L).

Roger Bacon

Roger Bacon – whose improbably long life (c. 1214-92/4) meant that he survived Aquinas by roughly twenty years, although he was a decade older shared Grosseteste's interests in natural science and, more firmly than he had done, stressed the central importance of mathematics for understanding nature. And, taking his cue from Grosseteste's metaphysics of light, he elaborated the theory of how species or likenesses are transmitted and multiplied which would become a standard part of thirteenth- and early fourteenthcentury accounts of sensory cognition. He was, moreover, in the period he spent at Paris between 1237 and 1247, one of the earliest commentators on Aristotle's non-logical works. All these facets of his career, along with his unusual enthusiasm for the study of languages (especially Greek), should have made him one of the outstanding figures of his own day as well as a precursor of modern science. But Bacon was a person of a sort that anyone who lives in an academic community even today will have no difficulty in recognizing. Endowed with a brilliant wide-ranging intellect, endless curiosity, limitless energy and unbounded self-confidence, he began to think that only he had a true understanding of the new Aristotelian science and to rail against anyone who did not share his bold and frequently quirky views and plans for educational reform. These features of Bacon's personality became even more prominent after he joined the Franciscans in 1257. This move not only failed to gain his views the prominence he hoped: Bacon quickly fell out with his order, which tried to silence him. None the less, he was able to interest Pope Clement IV in his ideas and produced for his benefit three wide-ranging works in the later 1260s: the Opus minus, Opus maius and Opus tertium.

Despite Bacon's enthusiasm for languages, mathematics and natural science, his actual accomplishments in these fields were limited. One of his outstanding achievements lies in a quite different area: the study of signs, carried out in a section of the *Opus maius* that was only recently rediscovered.

Bacon is the first medieval author to give a thorough and systematic discussion of signs. Moreover, he makes two innovations with regard to the words of spoken language. He rejects the model set by Aristotle and Boethius, according to which words signify thoughts which signify things, and makes a direct link between words and the things they signify. And he recognizes that, as well as the initial imposition, by which a word is established as referring to things of such and such a kind, there can be further impositions of a less deliberate, more implicit sort, by which a word gains the power of referring to other objects too.

4 Theology in Paris: Bonaventure and Albert the Great

For thinkers coming to maturity half way through the thirteenth century, the world of Paris University offered even more than it had done for their immediate predecessors in the way of opportunities, but also challenge. A very wide range of works by Aristotle, Avicenna and Averroes was now much better known; they afforded paths for new speculation, but they also posed difficult questions for Christian theologians and for Masters in the Arts Faculty. The three great thinkers of the period *c*. 1250–*c*. 1275, the Franciscan Bonaventure, and the Dominicans Albert the Great and Thomas Aquinas (discussed in the next section) each had their own answers to them, as would the Arts Masters Siger of Brabant, Boethius of Dacia and their colleagues.

Bonaventure

Bonaventure studied in Paris under the first Franciscan master, Alexander of Hales, and held the Franciscan Chair there from 1253 to 1255; from 1257 until 1273, the year before he died, he was Minister General of the Franciscans. His writings include a *Sentences* commentary (1250–5), a systematic theological textbook, the *Breviloquium* (1257), university sermons (*Collationes*) from his later years, and two shorter pieces, not related to university teaching, which express his characteristic ideas concisely: their very titles are revealing – *De reductione artium ad theologiam* ('On Reducing the Arts to Theology' before 1274) and *Itinerarium mentis in Deum* ('The Mind's Journey to God'; 1259).

Someone of Bonaventure's generation would not have had the thorough training in the whole of Aristotle which would become a matter of course in the next generation; although he had studied in the Faculty of Arts before becoming a Franciscan, it was at a time before the full Aristotelian curriculum was in place. It was a matter of personal choice how deeply he would study the newly available texts. Bonaventure did not ignore them, but he did not undertake the profound, detailed study of Aristotle and his commentators that his Dominican contemporaries, Albert and Thomas, would do. He used ideas from Aristotle, and the Islamic and Jewish authors, selectively. For example, although he followed a broadly Aristotelian view of senseperception, he considered, in line with the Augustinian tradition, that knowledge of the truth requires illumination from God. He adapted Aristotelian hylomorphism along the lines of Solomon Ibn Gabirol into a theory by which everything apart from God is a composite of matter and form. Human souls, therefore, are related to their bodies not as form to matter, as in Aristotle, but as matter-form composite to matter-form composite. But Bonaventure (1882–1902, II, 50; *Sentences* commentary, II, d.1, pars 2,a.3, q.2) uses this position to try to tighten the relationship between body and soul envisaged by many of his contemporaries: the two matter-form composites which form soul and body have an appetite to be joined together, so that the soul perfects the body and the body the soul.

Like almost every thirteenth-century theologian, Bonaventure considered the Platonic Ideas to be in the mind of God. But he placed great emphasis on them, criticizing Aristotle for their rejecting them, and conceiving the Christian thinker's task as being to reach these divine exemplars by reading their traces in created nature, the human soul and Holy Scripture. This process is the subject of the Itinerarium, which is not an analysis or even a description of the ascent to God, but an itinerary for it. In drawing it up, Bonaventure is guided by Augustine, pseudo-Dionysius and, perhaps to an extent, Avicenna. The journey has three stages: looking outwards, looking into our soul which is the image of God, and transcending ourselves and rejoicing in the knowledge of God. Bonaventure, whose process of thought here is numerological and allegorical rather than argumentative, links these stages to the threefold existence of things, in matter, intelligence and in God's mind, and to Christ's bodily, spiritual and divine substance. He then sub-divides these triads (because God can be seen as beginning and end, or through a mirror and *in* a mirror) to give the six powers of the soul through which we 'ascend from the depths to the heights, from exterior things to internal ones, from the temporal to the eternal': sense, imagination, reason, intellect (intellectus) the common Boethian division - followed by intelligence (intelligentia) and the 'summit of the mind' or 'the spark of synderesis' (a term normally used to designate our inbuilt capacity to recognize basic ethical principles). A host of scriptural sixes are drawn as parallels, among them the six days of creation, steps of Solomon's throne, wings of the seraph seen by Isaiah. Each of the six individual steps of the ascent is also discussed in terms of analogies: for instance, the soul which is purified, illumined and perfected by Faith, Hope and Charity, the three theological virtues, can be compared to the three threefold hierarchies of angels, the three laws (natural, the Old and the New) and the three senses of Scripture (moral, allegorical, analogical).

Bonaventure's response to the new material and ideas was not, then, to reject it, as has sometimes been suggested: he accepted it, but entirely on his own terms (a position which emerges even more clearly in his subtle comments on the question of the world's eternity (Study J)). These were terms that harked

back, not to the logical subtleties of Abelard or even Peter Lombard, but to the Victorines, pseudo-Dionysius and Augustine. The later Franciscan theologians were more purely committed to argument and analysis, and they were far more thoroughly trained Aristotelians. But the respect with which they viewed Bonaventure was more than confraternal piety. In their own ways, they would follow him in his independence with regard to Aristotle, and in a tendency – expressed by Bonaventure in the passionate imagery of mysticism, and by them in the cold logic of God's absolute power – to devalue our earthly life and our hard-achieved rationality.

Albert the Great

Albert the Great (1200–80) could hardly have answered the questions facing the thinkers of his time more differently from Bonaventure. A Swabian by birth, he became a Dominican in *c*. 1220 and was a Master of Theology in Paris (1245–8), a few years before Bonaventure. He taught in the Dominican *studium* at Cologne until 1252 and then was occupied by posts in his order and the Church, though he went on with his writing. As well as two *Summae* – one from the beginning, one from the end of his career, Biblical commentaries, a commentary on the *Sentences* (1246–9), Albert wrote a whole series of long paraphrase commentaries, in the manner of Avicenna, on Aristotelian texts. These texts include, not only the logical works, the *Ethics*, *Metaphysics*, the treatise of natural science and *On the Soul*, but also on the *Liber de causis*, to which another of his important works, *De causis et processu universitatis* (after 1263), is also closely linked.

The difference between Albert's aims and Bonaventure's emerges even from this list. Bonaventure was content to work as a theologian in much the manner of his predecessors such as Alexander of Hales, but with a better knowledge and tighter grasp of Aristotle. By contrast, Albert set out to master and unify the complex, heterogeneous mass of material, genuine Aristotelian, pseudo-Aristotelian-Neoplatonic, Alfarabian, Avicennan and Averroistic, which he made it his business to know better than any of his contemporaries. He organized it by devising, from the hints he found in Aristotle, Averroes and others, a somewhat fantastical history of philosophy, in which positions were attributed not merely to Plato and the Stoics, but also to figures such as Anaxagoras. It was Albert's self-appointed task to explain and vindicate the correct Peripatetic position (an outlook which may have been stimulated by Averroes). Albert's list of works indicates that he was, indeed, a Christian theologian too (indeed, he was an important figure in the Church: Provincial of the German Domincans, then Bishop of Regensburg). He believed, however, that he should discuss natural science and related issues on their own terms, and not bring Christian doctrine to bear on them: 'the fundamental principles of theology do not fit those of philosophy, because they are founded on revelation and inspiration, not on reason, and so we cannot discuss them

in philosophy.' Albert, therefore, carried on his theology in parallel with his philosophy, tending in it towards the mystical and making heavy use of pseudo-Dionysius.

That Albert saw himself as the standard-bearer of Peripatetic (that is to say, Aristotelian) philosophy may seem bizarre, since he reads so often like a Neoplatonist. But the idea becomes more comprehensible in the light of two considerations (De Libera, 1990). First, the mixture of elements in Albert's works reflects that of the Arabic Aristotelian-Neoplatonic tradition, although he certainly inclines more towards the Neoplatonic side of it than the more strictly Aristotelian Baghdad tradition. But, second, this inclination is explicable given his attitude towards the Liber de causis (a work put together in Kindî's Neoplatonically-inclined circle: Chapter 3, section 5). Albert firmly believed that this text was, though not exactly Aristotle's own words, based on a lost work of his. For Albert, the Liber de causis was the theology, the treatment of the highest Being, with which Aristotle completed his *Metaphysics*, which could, then, be regarded as a study of being in general. Acceptance of the Liber de causis thus moulded Albert's whole understanding of 'Peripatetic' metaphysics (see Interlude viii). The Liber de causis helped to mould his special approach to a central theme of his philosophy: emanation. Unlike most medieval Latin thinkers, except those who were his followers, Albert accepted the view widespread since Fârâbî in the Arabic tradition, of a series of Intellects emanating from God, the first cause. He explicitly rejected Maimonides's equation of the Intellects with the angels – an example of his wish to keep revelation apart from rational speculations. But, looking to the Liber de causis, Albert's understanding of emanation was different from that of the Arabic tradition, since he thought of the first cause especially as a final cause, the supreme Good, and he believed that all matter contains a formal element which can be brought out by the attractive power of the Good. Albert was also careful to avoid the implication that the universe emanates eternally from God; as a Christian theologian, he accepts that God is absolutely distinct from the universe which he created and which has a beginning. On the question of the sense in which God himself is eternal, Albert has a very subtle position. Like many other theologians (Study I), he wishes to combine a sense in which divine eternity is unlike mere perpetuity in time, with a sense in which it does have duration, extending infinitely into the past and the future. In his late Summa Theologiae (c. 1270; tr. 5, qu. 23) he does so by allowing that God's eternity really is in itself timeless, but that, in trying to grasp it, the soul extends itself beyond all duration. He thus manages to preserve an absolute distinction between divine eternity and time, and yet to allow a type of epistemic connection.

Nowhere in his thinking is Albert's closeness to an Arabic source more remarkable or stranger than in his treatment of intellectual knowledge. Albert was *both* one of the first serious opponents of what came to be called Averroism, and also, though in a slightly different sense, the first, and the most authentic Averroist. Once it became clear that the Arts Masters early in the century had misinterpreted Averroes, and that his real position was that there is one potential intellect for all humans, this reading of Aristotle's On the Soul was attacked both by Bonaventure and by Albert. Albert wrote his De unitate intellectus contra Averroem in 1256 at the request of Pope Alexander IV and continued throughout his career to reject as folly the view, attributed by him to other thinkers as well as Averroes, that there is just a single human intellect. Yet in his commentary on On the Soul (between 1254 and 1257) Albert declares himself in total agreement with Averroes, and in his analysis of Aristotle he does indeed make exhaustive use of Averroes's full commentary. Moreover, unlike the Averroists of the 1260s and later, who tended to take the solution ready-made, Albert approaches the question just as Averroes himself did (Commentary on On the Soul, III, tr.2). He sees it as a very difficult problem to discern Aristotle's view and recognizes - using Averroes as his crib - that there have been a vast variety of different interpretations. Like Averroes, he sees the fundamental problem as being to explain how the potential intellect is unmixed with the body and separate: how to avoid making it the same as prime matter, and so receptive of forms in the same way. He enthusiastically takes up Averroes's solution: that in the reception by the potential intellect of a universal form the form 'determines' the intellect, rather than being united with it as form to matter (Chapter 12).

But is the intellect, then, one or many? Albert answers (Chapter 13) that it is both. It is separate 'according to itself' but conjoined to each individual human in the sense that the substance in which it exists is linked to the senses and to images, which are individual to each human. The soul - as he puts it in the commentary on the *Ethics* (X, 11, q, 7) – has a lower part, which is responsible for capacities which are linked to bodily organs, and a higher part responsible for its intellectual powers, which are not linked to anything bodily. This is why, Albert explains, Aristotle and Avicenna, unlike Averroes, say that the intellect is part of the soul. And since the soul is 'the perfection of the organic body' (and therefore individuated according to the number of bodies), the intellect, which is part of it, cannot be the same in number in many different things. But 'although my intellect is individual and separate from your intellect, however, it does not have a universal in it according to its being individual': what is in the intellect is not individuated. The universal is 'always and everywhere the same in everyone's soul and is not individuated by the soul', but my knowledge and yours are distinct, because sense-images are needed to complete an act of human knowing. Albert seems, in short, to be saving exactly the same as Averroes, but drawing the opposite conclusion from it. And the question which needs to be put is whether he can coherently do so: is Albert guilty of a verbal subterfuge when he says that the intellect is part of the soul and so individuated, when it remains unindividuated in its function, which is grasping universals?

In the Arabic Aristotelian-Neoplatonic tradition, the idea was often mooted of a complete conjunction between a human being and the Active Intellect, which would not merely be the efficient cause of his thinking - as had to be the case for any intellectual thinking – but would become its form. Someone who reached this state would have as the object of his thought the pure forms, which are the contents of the Active Intellect and stem, ultimately, from the First Intellect, God. Such a person would, through philosophical contemplation, have performed a sort of self-divinization. There is reason to doubt whether many of the Arabic philosophers other than Ibn Bâjja (Chapter 6, section 2), held out exactly this sort of goal as the aim of the life of philosophical contemplation. For the mature Averroes of the full commentary on On the Soul, the issue of complete conjunction was complicated by his view that neither the active nor the potential intellect belong to individual humans; they were indeed, he believed, permanently conjoined, but how this fact would affect individual humans was less clear. No such problem faced Albert, who had borrowed most of Averroes's theory, but still held that each person has a potential intellect. He followed the way thus left clear for him especially in *De intellectu et intelligibili* – and made complete conjunction the philosopher's goal.

It is in the light of this idea that he interprets Aristotle's discussion of the contemplative life as the best life for humans in Book Ten of the *Nicomachean Ethics*. His comparison here (Book X, 16, q. 6) between philosophical and theological contemplation is revealing. They are both alike, he says, because they involve a contemplation of spiritual things without the impediment of the passions. In both cases, God is contemplated, though the philosopher contemplates him 'as the conclusion to a demonstration', the theologian as 'existing beyond reason and understanding'; the philosopher as a result of the wisdom he has acquired, the theologian through 'a light infused by God'. Albert also recognizes that the philosopher's contemplation is an end in itself, whereas the theologian's is a stepping-stone to the vision of God in heaven. Despite these contrasts, Albert has given an enormous amount of scope to the philosopher's contemplation: it *does* give some sort of vision of God in this life.

Albert's response to the new material was one, therefore, of enthusiastic acceptance. But the philosophy he reconstructed, although built mostly from elements found in Aristotle and the Arabic (and Byzantine) Aristotelian-Neoplatonic traditions, is unlike any of his models; in particular, his description of a sort of intellectual self-divinization has its roots in his sources, but goes beyond them. Albert's devotion to philosophy and the philosophers did not seem to cause any tensions with his Christian beliefs and his senior position in the Church. In part, Albert may have escaped clashes by insisting on the independence of philosophy from the theology in which he engaged in parallel. But he was also highly successful in ensuring that no irresoluble contradictions arose. Perhaps his thought lacks that hardness of edge which

would have made it less easy for him so insouciantly to follow Averroes and yet attack him.

5 Thomas Aquinas

Life and works

Albert came to be known as 'the Great'. Albert's greatest pupil, however, was finally to become so celebrated - the very personification still for many of medieval philosophy (see Interlude ix) - that Albert is now most remembered as his teacher. Thomas Aquinas was born into the minor nobility in Southern Italy in 1224/5 or 1226. The two decisive events in his early life were his studies of the arts at the newly-founded University of Naples, where Aristotle's non-logical works were already in use, and his choice - against family pressure - to become a Dominican (in 1242 or 3). In the later 1240s, he studied with Albert in Paris and Cologne, and then went to Paris, where he commented on the Sentences (c. 1254-5). This commentary was his first major work, and in it he has already developed many of his characteristic positions. From his disputations as Regent Master (1256-9) derive various set of quaestiones, most notably De veritate ('On Truth'). In the period from 1260 until about 1268, he taught at Orvieto and Rome, where his order asked him to establish an intermediate-level studium. Aquinas had already (c. 1258-60) written one summa (a comprehensive textbook) of theology, the Summa contra Gentiles ('Textbook against the Unbelievers'), in which he did not use the quaestioformat, and for the first three of the four books uses no revealed premisses, but relies alone on reason and what is self-evident. Now he began his Summa Theologiae (ST), perhaps for the Rome convent, using somewhat streamlined quaestiones and not eschewing revealed premisses, though still devoting great attention to what can be known without them. At this time too Aquinas began the first of his commentaries on Aristotle (on On the Soul).

Very unusually, Aquinas was sent for a second period (1268–72) as Dominican Regent Master in Paris. As well as continuing *ST* and his Aristotelian commentaries, and presiding over disputations (such as those from which his *Quaestiones de Malo* ('On Evil') derive), Aquinas became occupied with conflicts in the university over the eternity of the universe (Study J) and the individuality of human intellects (Study K). In 1272, he was sent to establish a Dominican *studium* in Naples, but he became unable to write in 1273 and died the year afterwards.

Aquinas is usually presented, not just as a powerful metaphysical and ethical thinker, but as an outstandingly balanced philosopher, charting a mid-course between conservative theologians, wedded to an Augustinian heritage, and the Arts Masters who wanted to follow Aristotle under the aegis of Averroes; 'synthesizing' – a word often used in his connection – Christian doctrine with Aristotelianism. Yet the two most striking aspects of his thought are each

instances of a daring *refusal* to compromise. One is Aquinas's manifest desire to understand Aristotle in every detail and to champion what he sees (in most cases rightly) as genuine Aristotelian positions against those of his contemporary theologians; the other is his advocacy of a starkly negative theology.

Aquinas the Aristotelian

The mark of Aquinas's devotion to Aristotle was his decision, quite late in his career, and quite apart from any teaching requirements, to set about writing detailed, sentence-by-sentence commentaries to Aristotle's major texts. And the contrast with another Aristotelian devotee, his teacher Albert, is also telling: Albert had read Aristotle in the light of the Aristotelian-Neoplatonic systems developed in Islam, and he developed his understanding of him in discursive commentaries, near in style to Avicenna's Healing, although Averroes was an important source; Aquinas, who follows the model of Averroes's Great Commentaries, but with his attention more closely rooted to the text itself, sticks to presenting what Aristotle said - through his, Thomas's, eyes, certainly, but as an interpreter trying to make sense of the book in front of him. Nowhere, indeed, is Aquinas's scrupulousness as a commentator more evident than in his commentary on the Liber de causis. He does far more than merely detect its origins (Interlude viii). He dedicates the commentary to a close comparison between three Neoplatonic texts: the Liber, the Elements of Theology and the writings of pseudo-Dionysius. He is alert to the ways in which the Liber and pseudo-Dionysius modify the ideas expressed by Proclus to make them more Aristotelian - and thus more easily in accord with Christian doctrine. That confidence in the acceptability to Christians in many things of genuine Aristotelian teaching (that is to say, the best rational, scientific answer to the problems which was known) helped to shape Aquinas's views on the human soul, cognition and (with more qualifications) the good life for humans: they were all decidedly, jarringly Aristotelian in the context of Paris theology, as the short discussions later in this section will indicate.

Negative theology

Aquinas learned much of his negative theology from Maimonides (Chapter 6, section 4). It is true that he does not, like his Jewish predecessor (*Guide* I, 52–4) declare that God can be ascribed attributes only through his actions – as a *Christian* theologian how could he? Aquinas explicitly rejects Maimonides's view (*ST* I, q. 13, a. 2), which, he says, leaves it unexplained why 'good' is more appropriately applied to God than 'body' and is untrue to speakers' intentions. But the gap between the two thinkers may not be so great as this contrast would make it appear. Aquinas's own answer (*ST* I, q. 13, a. 3) uses the idea (Chapter 7, section 2) of *modi significandi*. Words for perfections, such as 'good' and 'living' not only apply to God; they apply

to him more properly than to any of his creatures, with regard to *what* they signify, but they are not used about God 'properly' (*proprie*) because their way of signifying (*modus significandi*) is fitted to creatures. This concession to our ability to describe God does not in fact go very far: 'good' applies to God, but we do not know how; when we talk of God being good, we are necessarily using language in the way that applies to creatures – those things he causes to be good.

Aquinas explains the same idea a little further on (STI, q. 13, a. 5) in terms of equivocity and univocity. The distinction is one found in Aristotle's Categories 1 (1a). The ordinary use of a word to refer to things of the same sort or in the same respect is univocal: when I call John and Jane and Felicity all 'humans', or when I say that they are all curly-haired (because so they are). I would be using 'human' equivocally if I applied it to John and to the portrait of a man, even if it is of John himself: humans and painted images are not the same sort of thing. (Or, more obviously, 'bank' is equivocal: I can sit on the *bank* of a river, so long as it is not too rocky, or I could deposit my money in a bank, if only I had any.) According to Aquinas, nothing can be predicated except equivocally of both God and his creatures. It might seem that an attribute like wisdom would be an exception: God is wise, and so too are some humans. But, Aquinas points out, they are wise in two different ways: in the case of the human, it is through a perfection which is distinct from his essence, whereas for God to be wise is no different from being God. Saving 'wise' of a human circumscribes him in a certain respect, but not saying it of God, whom it leaves 'uncomprehended and exceeding the meaning of the word'. God's complete simplicity, on which Aquinas bases divine infinity, makes univocation impossible. None the less, Aquinas immediately adds that the equivocity is not complete, or else nothing could be demonstrated about God. He allows that words can be said of God and his creation in a manner that is mid-way between univocation and equivocation: by analogy. The idea, again, is Aristotelian (4; Metaphysics iv; 1003a). We call a patient, the medicine he takes and his urine all 'healthy' analogously: the word is being used in the same connection – that of health – but it relates in different ways to the three different subjects: it describes how the patient is, what the medicine brings out, and what the colour of the urine indicates.

This appeal to analogy softens the edge of his negative theology, but does not remove it. And it appears even more sharply in an unexpected place: Aquinas's apparent attempt to describe God by saying that his essence is to exist.

Essence and existence

The essence (*essentia*) of something is the sort of thing it is – a human, for example, or a stone (it is also what Aquinas called a thing's *form* by contrast with its *matter*); its existence (*esse*) is its being one of the things that exist. One

of Aquinas's celebrated positions - already developed in detail in his De ente et essentia ('On What Is and Essence'), written at the time of the Sentences commentary - is that in every created thing essence and existence are really distinct (not just separable mentally), but in God they are one: God's essence is to exist. This idea helped Aquinas to explain how God is distinct from what he created. Contemporaries, such as Bonaventure, accepted the idea that everything besides God is a matter-form composite (a position associated with Solomon Ibn Gabirol). Aguinas, like Aristotle, wanted to leave room for creatures that are pure forms to exist - this is how Thomas depicts angels; but, he can maintain, even angels are composed of essence and existence. The originator of the distinction was Avicenna (Chapter 4, section 5), but his text tended to be misinterpreted in the Latin tradition as making existence seem as if it were an accident of essence. Aquinas avoided this result by bringing the central Aristotelian distinction (Chapter 2, section 1) between potency and act to bear. Aquinas holds that existence is related to essence (or form) as form is related to matter: as act to potentiality. He therefore thinks that a stone is a real stone not ultimately because of its form, but because of its having existence (esse). But existence is not part of the stone's essence - what it must be to be a stone - and so it has its existence from outside: from that alone which exists essentially, God. The distinction between existence and essence allows, then, Aquinas to make God responsible for the continuous existence of his creation.

For all its metaphysical neatness, Aquinas's distinction has received two sorts of criticism. Many of his contemporaries and successors thought it was simply wrong to think of a created being, as Henry of Ghent would put it (Quodlibet 1, q. 9), as if it were air which is completely dark until illuminated by the light of the sun; each being should be thought of rather as a little ray of light itself. Everything in essence is an imitation of God, and so existing is not entirely absent from any essence. Some modern writers have criticized the distinction, and the related idea that God is pure being, from a different angle. The criticism stems from the same line of thought as the objection to Anselm's Argument that existence is not a predicate (Study D). Modern logicians state that something of a certain sort (a stone, for example) exists by saying there is some (one or more) x, and that x is F (in this case, a stone). A bare attribution of existence has no place in this scheme – 'existing thing' cannot be substituted for 'F' - because the meaning of the whole formula could be put as: a stone or stones are among the things that exist. But this sort of objection is misguided on three levels. First, it seems wrong in principle to reject as incoherent a medieval position because it cannot be properly formulated in the logical terms first devised by Frege; the most that can be concluded is that Frege's fundamental metaphysical intuitions differed from those of the medieval writer. Second, as the discussion about Anselm suggested, it may be wrong, even in the terms of modern logic, to rule out existence as a predicate in all cases. Third, when Aquinas says that God's

essence is to exist he is *not* giving a defining property of God, something which he repeatedly says cannot be done. Rather, the very opposite: he is stressing God's indefinableness, that he is not a something like any of the items in his creation. Aquinas explains this point when he argues (*ST* I, q. 13, a. 11) why '*Qui est*' ('He who Exists') is the most appropriate name for God. 'Our intellect', he says, 'cannot know in this life the very essence of God as it is in itself. Rather, however much it tries to make its understanding of God determinate, it fails to capture how God is in himself. And for this reason the *less* determinate a name is, the more it applies to everything without qualification, the more properly it is said by us of God.' To say that God's essence is to exist is a way, then, of saying that what he is *cannot* be defined.

Aquinas may seem, therefore, to be guilty of talking about God's essence, which is to exist, in two opposed ways: to indicate God's unboundedness and unknowability, and also to explain something which we all know – that we and all the things around us exist. But Aquinas could reply that, indeed, we know that the things around us exist and we are able to work out that they are caused to exist, and we can deduce (so he believed) that they must have an uncreated creator: what we cannot properly grasp is what it is to exist as the creator does, not dependent on anything else. If we grasp it, we do so indirectly, through the fact of the creation.

Soul and body

Almost all Christian thinkers until the time of Aquinas were, to a greater or lesser extent, substance dualists in their account of the human soul and body. They thought that soul and body are two substances, bound together in this life (or, more vividly, the body was seen as a prison and the soul as its captive); in this way they could very easily explain the soul's survival after death, which they viewed just as the separation of the soul from the body. In the twelfthcentury Abelard, although arguably less dualistic than his contemporaries, impatiently dismissed the suggestion that the soul could be just a form (Peter Abelard, 1919-33, 212-13). The availability of Aristotle's On the Soul did not immediately change the position. Although Aristotle's position is precisely that the soul is form to 'the body which potentially has life', the early Latin readers of his On the Soul - Alexander of Hales, Richard Fishacre, William of Auvergne, even to an extent Bonaventure and Albert - read his doctrine through the prism of Avicenna (Chapter 4, section 5), who retained Aristotle's vocabulary but treated the human soul as if it were a substance separate from the body. Even if they described the soul as a form, they did not treat it like an ordinary Aristotelian form, and most of them considered that the body also had its own form. So a writer like William of Auvergne could at the same time present himself as following Aristotle on the soul and yet describe the soul as an operator or ruler, and the body as its instrument – the sort of extreme Platonic metaphor which even Descartes would reject.

Even though some, like Bonaventure (Chapter 7, section 3), tried to tackle the difficulty, all these thinkers seem willing to sacrifice the unity of the human being. By contrast, Aquinas sets himself firmly against dualism: humans are not souls which use bodies, but body-soul composites. This stance rests on three positions. Aquinas argues (ST I, q. 76, a. 3) that one and the same soul is responsible for the life functions of a human being at their different levels – growing, sensing and reasoning intellectually. This view that the soul, though tripartite, as Aristotle says, is unified, was not at all a novelty: Augustine taught the unity of the human soul, and neither Aquinas's predecessors, nor later his opponents, actually wanted to suggest that we have more than one soul. But Aquinas adds, second, that this unified soul is the only substantial form of a human being – there is no separate form of the body. Rather, third, it is this soul which is the form of the human body (ST I, q. 76, a. 1), and Aquinas understands 'form' in its strictly Aristotelian sense.

By adopting this position, Aquinas saves himself from the problems of dualism. But he is hard pressed to maintain – as Catholic doctrine demanded that he must – that the soul is immortal. In order to do so, Aquinas argues (*ST* I, q. 75, a. 2) that the human soul is both a form and a subsistent thing (*aliquid subsistens*). By calling it a 'subsistent thing' he means that it is an entity in its own right, capable (unlike an ordinary Aristotelian form) of existing independently. Aquinas's argument for this position is likely to seem quite weak to a modern reader. It is based on the premiss that the human soul has its own activity, thinking intellectually, in which it is independent because such thinking (unlike sensing, or imagining, or juxtaposing remembered images) uses no bodily organ.

In so far as Aquinas can vindicate the claim that the soul is at once form, not a matter-form composite, and a subsistent thing, he has not only opened the way to holding that it is immortal, but also proved that it is so (*ST* I, q. 75, a. 6). In Aristotelian terms, form, which is in act, accounts for a thing's existing, and so a matter-form composite ceases to exist when the form is separated from the matter. A form which is *aliquid subsistens*, capable of independent existence, is not, therefore, open to destruction, because it cannot be separated from itself (it could, of course, in principle be annihilated by God). Despite this train of reasoning, there is a side of Aquinas's thinking which, drawing on the Christian doctrine that, at the Last Judgement, the bodies of the dead will be resurrected and, in a spiritualized state, be rejoined with their souls, stresses that the survival of our souls alone would not mean that we survive.

Intellectual cognition

Aquinas's approach to cognition, especially intellectual cognition, is explicitly and self-consciously Aristotelian. But the main traditions to which he looked back and most of his contemporaries, although they too considered themselves Aristotelian, drew rather different theories from *On the Soul*. Aquinas had to reach his own reconstruction of Aristotle's thought and, in doing so, he bore out his fundamental views about the nature of humans and their position in the universe. It is worth looking back over the tradition (cf. (Chapter 2, section 2, Chapter 4, sections 5, Chapter 6, section 3) in order to see more clearly Aquinas's place in it.

For Aristotle and his tradition, intellectual thought has a restricted range of objects: it concerns only universals because, so it was held, only through a grasp of them could scientific knowledge be gained. Aristotle explained how my thought of Horse is a thought of the universal Horse by saying that the form which, in matter, makes a concrete whole a horse, is what informs my potential intellect. The Arabic tradition explained Aristotle as meaning that my potential intellect (or, for Averroes, the potential intellect) is provided with the pure form of Horse - an exemplar which has not been reached by abstraction and derives ultimately from God - by the Active Intellect. Thinking itself is thus seen as a process which is done for humans, rather than done by them. But the Arabic philosophers connect human effort with thinking by stressing the importance of cogitation, based on sensible images, in order to prepare a person to receive forms from the Active Intellect. The dominant Latin tradition in Aquinas's time rooted thinking a little more closely in individual humans and, in doing so, adopted a realism that was less direct than Aristotle's. For them, my thought of Horse is a thought of Horse because my intellect is informed by an intelligible species of Horse. The intelligible species is reached by abstracting from sense-images, but it requires the intervention of the Active Intellect, which is identified with God.

In line with his view of the intellective soul as the form of the human body, and with his wider wish to see humans as exercising their own natural powers within a divinely-appointed order, Aquinas (ST I, q. 78, a. 4-5) follows the earlier thirteenth-century Arts Masters in placing an individual active intellect in each human: everyone's soul, therefore, has an active element as well as a potential one. Aquinas bows to the idea of illumination by referring to the active intellect as a 'light' and stressing that it has been placed in humans by God, but there is no doubt that, to a considerable extent, his theory demystifies and humanizes the process of thinking. No special divine help is required for humans to engage in intellectual thought: the path to scientific knowledge is their own. It seems – and fundamentally is – a highly optimistic picture of humans and their natural capacities, but it is part none the less of a hierarchical view of knowledge which qualifies this confidence in human abilities and brings Aquinas's position a little nearer to that of his Arabic and Latin predecessors, although it also bears out another characteristic theme in his thought: embodiedness as a characteristic feature of what it is to be human.

There is, Aquinas believes (*ST* I, q. 85, a. 1), an exact match between the position of humans in the scale of beings and the way in which they have been equipped to cognize. In this life, our intellective souls are by their very nature embodied, and so it is appropriate that their defining activity of

thinking intellectually should depend on sense-perceptions, which are rooted in the body. Unlike separate souls and angels, which think using the pure forms they gain from the beatific vision of God, humans in this life can think only on the basis of intelligible species that have been abstracted from sense-images. And, once these intelligible species have been abstracted by the active intellect, humans must go through a long process of reasoning, on the basis of self-evident first principles, putting their thoughts into propositional form ('compounding and dividing'), constructing syllogisms and eventually, with luck, reaching the truth. Properly speaking, intellectual thought is, in Aquinas's view, instantaneous and infallible, and as such it is to be contrasted with the process of reasoning, which takes time and effort, and where there is always the possibility of error. For intellectual thinking in the full sense, Aquinas must turn to the angels, who not only have immediate access to the forms in the mind of God, but go through all the stages of discursive thinking in an instant and perfectly. Human thinking may, however, be considered intellectual, because it has two intellectual moments: the active intellect's giving it the self-evident first principles of scientific reasoning (what we would call *a priori* truths), and the active intellect's stripping of the sensible images to provide the intelligible species.

Aquinas has often been considered a proponent of a type of direct realism, in which there cannot arise the epistemological problems that beset philosophers in the tradition of Descartes and Locke, for whom we perceive the outside world through ideas - representations of outer reality in our mind's eye. Recent work (especially Pasnau, 1997) has underlined how far such judgements are from the truth. For Aquinas (and, indeed, his whole tradition), we think of X (a universal) through the intelligible species of X in our intellect. True, this intelligible species is causally linked to the particulars that exemplify X, because it is from the sensible images they produce that it is abstracted, but the same could be said of Locke's and Descartes's (non-innate) ideas. Moreover, Aquinas insists (ST I, q. 85, a. 2) that intelligible species are not what we know, but rather that by which we know: the objects of our knowledge are rather the 'quiddities' of things, the universal forms by which things are the sort of things they are. If, says Aquinas, we made intelligible species our objects of knowledge, we would know only the contents of our minds, not external reality. Intelligible species are, therefore, mental representations, which stand in an intentional relationship to the quiddities they represent. And Aquinas adds a further level of complexity. Like most medieval Latin thinkers up to his time, he accepts the semantic scheme of Aristotle's On Interpretation, as elaborated by Boethius: words in language signify words in the mind. He is not (ST I, q. 85, a. 2, ad. 3) willing to identify these mental words with the intelligible species themselves. Rather, he says, once the potential intellect is informed by an intelligible species, it forms a mental word (or 'intention', as he calls it in the Summa contra Gentiles (I.53.3-4)). The process of forming propositions and syllogizing is carried on in this mental language.

The analysis so far has left out one important feature of Aquinas's account. The process of thinking must be accompanied, as Aristotle says, by sense images. Aquinas believes that this phenomenon is a matter of common experience: 'anybody at all can experience this personally: when he tries to think about something, he forms sense images to use as examples, in which as it were to look at what he is trying to think about' (ST I, q. 84, a. 7). Although it is questionable whether this is really how we think (I certainly don't think in this way), by taking this idea of Aristotle's seriously Aquinas is able to answer what would otherwise be a difficult problem. Given that intellectual thinking does not use any bodily organ, how is it that brain damage does not just stop a person from acquiring new intellectual knowledge (by way of abstraction from sense images), but also from exercising the intellectual knowledge he already has? Aquinas can answer that such a person cannot think, because his damaged brain cannot produce the accompaniment of sense images essential to thinking. He has a way, without denying the complete incorporeality of the intellect, of allowing for the link between thought and brain function in embodied humans.

Ethics

The most penetrating moral philosopher of the twelfth century, Peter Abelard, had proposed a mainly deontological view of ethics, in which natural law provides a way of being sure that everyone knows their obligations (Study F). By contrast, Aquinas - heavily, though by no means exclusively, influenced by Aristotle's Nicomachean Ethics - embraces a virtue ethics, although one which has room for deontological considerations (he has a developed view of natural law, based on the idea that we grasp certain first, but highly general, moral principles) and is adapted to Christian belief in an after-life. The fullest exposition (about 2000 ordinary pages) of his moral theory is in the two parts of Part II of the Summa Theologiae; its first part, the prima secundae, begins with a treatise on happiness and discusses moral psychology, the passions, the Aristotelian virtues and law. The secunda secundae starts by looking at the non-Aristotelian 'theological' virtues and continues with a very full examination of the individual virtues and vices, in which Aristotelian ideas and Christian doctrine are scrupulously compared, contrasted and, often, combined; the book ends by looking at the different ways of life, active and contemplative, taking into account the options for a religious life, as a monk or friar.

Aquinas takes from Aristotle the principle (surely wrong!) that whatever people desire, they conceive as a good. Different people desire all sorts of things for the sake of something else, but that which is desired just for itself, and for the sake of which other things are desired, is happiness (*beatitudo*). Aristotle and Aquinas are at one in thinking that this happiness is not just, as a brute fact, what humans happen to desire: it is their natural end (for Aquinas, a divinely ordained end), and the moral philosopher's task is to show them how to reach it. For Aristotle, happiness was a sort of place-filler, which raised the immediate question: what sort of human life is the happy one? Aristotle answered that it was a life consisting in activity in accord with human virtue. Aristotle discerned human virtues by looking for the distinctive function of human beings, which he discovered in their ability for rational thought. This position led him to describe the best human life as one given over to intellectual contemplation of unchanging things; but he also recognized a second-best life of activity in accord with moral virtues. In his *Consolation of Philosophy*, which Aquinas cites frequently in discussing happiness, Boethius (Chapter 3, section 4) changed Aristotle's open conception of happiness, to be filled by a description of a type of life, into a monolithic one: the happiness that all desire is the Highest Good, which is to say God.

Writing from the perspective of a Christian theologian, Aquinas is able to adopt Boethius's conception, and also both of the two strands in Aristotle's thought. From the point of view of humans as immortal beings, happiness does indeed consist in God, or rather in the beatific vision of him. But this happiness is not to be had in the present life: here happiness is gained through virtuous activity. Aquinas accepts the Aristotelian virtues, which people acquire, but he also discusses the theological virtues of faith, hope and charity which, he believes, are directly infused by God. Like Aristotle, he discusses the moral virtues involved in the active life in detail, but ends by preferring the contemplative life, which he pictures not – as some of his contemporaries in the Arts Faculty would do – as a sort of philosophical ecstasy, but as the life of a contemplative religious. But there is one sort of life better even than that of pure contemplation: 'Just as it is greater to illuminate than merely to be lit, so it is greater to pass on to others what has been contemplated than merely to contemplate' (ST II-IIe, q. 188, a. 6). The life Thomas, as a rebellious young man, had chosen for himself - that of a Dominican thinker, teacher and preacher - was the very best.

Interlude ix: Aquinas and the historiography of medieval philosophy

Thomas Aquinas is often regarded, by those who know just a little about the history of philosophy (a group that includes many professional Anglophone philosophers), as *the* medieval philosopher. He is also frequently seen as the quasi-official philosopher of the Catholic Church. Both this unique prominence, and his official doctrinal status, reflect post-medieval developments, which distort the history of medieval philosophy if it is allowed to be shaped by them.

Certainly, Aquinas was regarded as a major figure in his lifetime and immediately afterwards, but he was a controversial one, some of whose teachings were explicitly or implicitly condemned. By and large, the Dominicans defended him and made him the basis of their teaching, whereas the Franciscans were much more sceptical. Although his canonization in 1323 gave him a special status, his thought was by this time entirely outmoded. In the fifteenth-century universities, the Thomists were just one among a variety of schools that included followers of Albert, Scotus, Ockham and Buridan. But, at the beginning of the sixteenth century, the Summa Theologiae at last began to be used as a substitute for the Sentences as a theology student's principal textbook. Aguinas's thought was strongly favoured by the Counter-Reformation, instituted by the Council of Trent (1545-63), which sought to re-establish and re-assert Catholic doctrine against the growing power of Protestantism; these efforts were spearheaded by the newlyfounded order of Jesuits, whose founder, Ignatius Loyola, ordered them to study Aristotle and Aquinas. And the Iberian scholastics of the fifteen to seventeenth centuries often turned to Aquinas's ideas, although they were also deeply influenced by Scotus and other, more recent thinkers.

It was only in the nineteenth century, however, that Aquinas was given a position that set him apart from other medieval philosophers and made him almost the official Catholic thinker. Writers such as the Jesuit, Joseph Kleutgen (1811–83) advocated a neo-scholasticism, which went back to Aristotle and Aquinas, as a way of combating philosophically the trends in contemporary thought hostile to Catholicism. The movement was supported strongly by Pope Leo XIII, whose encyclical *Aeterni patris* (1879) argued the need for Catholics to cultivate philosophy, and urged them to base themselves on scholastic philosophy. Aquinas is singled out as the chief of all the scholastics, towering over them and collecting the scattered parts of the body of knowledge into a whole. Philosophy, then, is seen as a fixed corpus, completely in harmony with Christian doctrine, which is best found in the works of Aquinas.

Although much of the early writing on the history of medieval philosophy had come from a different perspective (such as that of scholarly and free-thinking French authors like Victor Cousin and Barthélemy Hauréau), neo-scholasticism and *Aeterni Patris* gave a new direction and energy to the subject, especially in the work of scholars such as Maurice de Wulf in the first part of the twentieth century. The tendency to treat Aquinas as the summit and norm of medieval philosophy is found, a little more subtly, in the much read and still valuable books of Fernand van Steenberghen and, from his own, unusual point of view, in the writings of Étienne Gilson.

Character and direction of Aquinas's thought

The sections above sketch out roughly some of the main areas of Aquinas's philosophy. They give little idea of either the character or the direction of his thought. The following sections add some detail to the picture. They include studies of two particular areas of argument: some of the cosmological arguments by which Aquinas sought to prove the existence of God, and his way of tackling the problem of prescience. Then, after an introduction to the ideas being put forward by Arts Masters in the 1260s, there are two further studies, which examine how Aquinas reacted to these views on the relation between faith and philosophy. At the end of the general direction of Aquinas's thought. How did Aquinas answer the questions posed by the new material: in the cautious and negative manner of Bonaventure or with the excited approval of his teacher, Albert?

Study H: The Five Ways

Aquinas (ST I, q. 2, a.1; SCG I, 10-11) rejects Anselm's way of proving God's existence which rests on the logical implications of the phrase 'that than which nothing greater can be thought' (Study D) – an argument by which he wrongly thinks that Anselm is proposing that the existence of God is self-evident. Anselm's argument is a *reductio* which arrives at the apparent contradiction that there is something greater than that-than-which-nothing-greater-can-be-thought (Study D p. 124). But this, says Aquinas, is a contradiction only if that-than-whichnothing-greater-can-be-thought does in fact exist in reality, which is not yet proven. Although the criticism seems strangely to miss the point, perhaps it does not: is there any contradiction involved in talking about a prime number higher than the highest prime number, since in fact there is no highest prime number? Aquinas therefore prefers, in the famous 'Five Ways' near the beginning of his Summa Theologiae (I, g.2, a.3) to offer a set of cosmological arguments for the existence of God: arguments that are based on some contingent but extremely obvious facts about the world. The Five Ways, as every expositor of Aquinas will emphasize, are only a fragment of his demonstration of the existence of God: they purport to show just that there must exist an uncaused first cause. In the nine *quaestiones* which follow – over fifty pages of close argument – Aquinas explains why this first cause must have the other characteristics of God. Starting with his simplicity, which is the key to his concept of God, he argues that the first cause must be perfect, good, infinite, immutable, eternal and one (like most university theologians, he did not think that God's triunity could be demonstrated; it had to be accepted on faith).

The Five Ways themselves are – at least in the case of the first three – more complex and considerable arguments than they seem to be at first sight. But they are also ones to which, even on their own terms, some very serious objections

can be made. A critical examination can help to make the shape of the arguments, their presuppositions and implications clearer.

It has been pointed out (Kenny 1969b), that all five of the Ways have a common structure. In each, he proposes that there is a relationship *R* which some things bear to each other which is irreflexive (a thing cannot be related in this way to itself) and transitive (if *a* bears the relationship *R* to *b*, and *b R* to *c*, then *a* bears the relationship R to c). He then shows that either there is an infinite series of things bearing the relationship *R* to one another, or that there exists something to which others may stand in the relation of *R*, but which does not itself stand in the relation *R* to anything. Aquinas considers all four Aristotelian types of causality as being such relations, and examines them in turn: efficient causality (Ways 1 and 2); material causality (Way 3); formal causality (Way 4); final causality (Way 5). But this analysis is too schematic. The Fourth and Fifth Ways are much more loosely argued than the first three, and the distinction between the Third Way and Ways 1 and 2 is not really that in Way 3 God is seen as a material cause – which he is not – but that the first two Ways are varieties of Aristotelian proofs from motion, such as Averroes used, whereas the third is indebted to Avicenna and attempts to prove that the very existence of the universe depends on a Necessary Cause.

The Second Way reveals with especial clarity how Aquinas structures the central argument of Ways 1-3, following the template described in the last paragraph:

- (1) There exist (efficient) causes and their effects. [Premiss, from observation by senses]
- (2) If there are causes, either (a) some are their own causes, or (b) there is an infinite chain of cause and effect, or (c) there is a first cause. [Premiss]

Against 2(a)

- (3) Every cause is prior to its effect. [Premiss]
- (4) Nothing is prior to itself. [Premiss]
- (5) If a cause caused itself, it would be prior to itself. [3]
- (6) No cause causes itself. [4,5]

Against 2(b)

- (7) If there were no first cause, there would be no intermediate or ultimate causes. [Premiss]
- (8) If there were an infinite chain of causes, there would be no first cause. [Premiss; meaning of 'infinite']
- (9) If there were an infinite chain of causes, there would be no causes. [7,8]
- (10) There is not an infinite chain of causes. [1,9; modus tollens]

For 2(c)

- (11) There is a first (efficient) cause. [10]
- (12) Everyone calls this first cause God.

Aquinas's problem here seems to be that of justifying his refusal to accept an infinite regress: that is, to justify (8). Why would there be no intermediate or ultimate causes, if there were no first cause? Every cause must be itself caused, but why should this process not go on *ad infinitum*? Moreover, the problem might seem to be particularly acute for him. If the world had a beginning, then it is plausible to say that the causal series which explain what is now happening do not go on for ever, but began when the world began. If the world has no beginning, then it seems that some causal series do indeed go on for ever, because there need be no beginning to them. Although Aquinas, as a good Christian, did accept that the world has a beginning, he took the view that it cannot be demonstrated that this is the case but must be accepted on faith (Study J), and Aquinas can hardly take as a premiss an article of faith if he is trying to present a demonstration that God exists.

The solution to Aquinas's problem is found later on in the *Summa* (*ST* I, q. 46, a.2, ad. 7), where he writes:

... it is impossible to proceed to infinity in efficient causes per se - that is to say, that the causes required per se for some effect are multiplied to infinity; as if a stone were moved by a stick, and stick by a hand, and so on to infinity. But it is not considered impossible to proceed to infinity per accidens in agent causes - that is to say if all the causes that are multiplied to infinity are ordered just <each> to one cause and their multiplication is *per accidens*; as a craftsman uses many hammers *per* accidens, because one after another is broken. It is, therefore, an accident of this hammer that it acts after the action of this other hammer. And, similarly, it is an accident of this man, in so far as he generates, that he is generated by another man. For he generates in that he is a man, not in that he is the son of another man. For all men who generate have a position among efficient causes, that is to say, the position of a particular generator. And so it is not impossible that man should be generated by man to infinity. But it would be impossible if the generation of this man depended on that man, and on an elementary body, and on the sun, and so on to infinity.

The causal chain that leads back to the first cause does not, therefore, consist of causes ordered *per accidens*, but of causes ordered *per se*. The chain which such causes make up is not, it seems in Aquinas's view, a temporal one, and it cannot go on infinitely. Aquinas does not explain exactly why, but if *B* is not merely responsible for causing *C*, but for causing *C*'s causing *D*, then it seems that there

must at some stage be a cause A which is responsible for the whole causal chain, otherwise there will be no causality at all. Imagine seeing a train made of unpowered carriages moving on a flat surface: each carriage pulls along the next, but it is able to do so, we surmise, because somewhere, out of our sight, there is an engine pulling them all. If we were told that there was no engine, but simply one carriage pulling another to infinity, would we believe it?

Aquinas has, therefore, a solid explanation for why *per se* causes cannot form an infinite chain. His real problem is to establish that there is such a chain of causes in general, which leads back to a single first cause. The stone is moved by the stick which is moved by my hand, which is moved, we might say, by my will: why need we take this chain back further?

The Third Way will also rely on the same blocking of an infinite regress, but this move is preceded by a complex introduction. From the observation that some things exist which are generated and decay, Aquinas argues to the existence of two sorts of necessary being(s). The argument is likely to be confusing to the modern reader because it relies on a meaning of 'possible' and 'necessary' which does not correspond to today's usages of these terms. Aquinas takes the modal terms in their Aristotelian temporal sense, by which a being which exists at every time is a necessary being. From what Aquinas says elsewhere, when he discusses his first sort of necessary being, he has in mind pure forms, which do not have a potency to decay that would need to be exercised at some time. He argues that there must be some necessary being in this sense, because if all things were merely possible – that is, had a beginning or end – then there would in fact be no things existing now:

... that which is possible not to be, at some time is not. If therefore all things are possible not to be, at some time there was nothing in things. But if this were true, there would be nothing now too, because what is not does not begin except from something that is. If therefore there was no being, it was impossible that anything should begin to be, and thus there would be nothing now, which is obviously false. It is not therefore the case that all beings *(entia)* are possible, but there must be something necessary in things.

This argument has two weak points. First, one might reject the claim that 'what is not does not begin except from something that is': it rests on a Principle of Sufficient Reason that was commonly assumed in reasoning within the Aristotelian and Neoplatonic traditions, but is not self-evident. There is a more serious problem with the argument that precedes this claim: that if there is no thing that exists at all times, then there will be some time when there is nothing. From

(12) There is no thing such that it exists at every time.

we cannot infer

(13) There is some time at which no thing exists.

Even if this stage of the argument is conceded, Aquinas has only shown that there must exist some incorruptible 'necessary' beings, not a first cause. But he goes on to explain that the sense in which these beings are necessary is a qualified one:

Now everything necessary either has its cause of necessity from elsewhere, or it does not. But it is not possible to have an infinite regress in necessary things that have a cause of their necessity, just as, as has been proven, it is not in the case of efficient causes. Therefore it is necessary to posit something that is necessary through itself (*per se*), and does not have a cause of its necessity elsewhere, but is the cause of the necessity for other things.

The idea which Aquinas adds to his now familiar regress-blocking is the distinction introduced by Avicenna (Chapter 4, section 5) between what is necessary through something else, and what is necessary of itself. In the light of it, the first stage of Aquinas's argument becomes rhetorical in its effect. It is as if Aquinas were saying that, on the Aristotelian temporal view of necessity, we can indeed show (so he wrongly thinks) that there must be a necessary being or beings, but this is not the correct contrast to make between the necessity of God and the contingency of his creation. For that, he turns to Avicenna's re-working of a different Aristotelian modal paradigm.

Study I: Aquinas on eternity and prescience

This study presents an unusual interpretation of Aquinas's argument on an important theological problem.

In contemporary discussion of the Problem of Prescience (Study A), Boethius and Aquinas are often thought to have proposed much the same solution: because God's eternity is atemporal and so he does not *fore*know events, there is no threat to contingency. Study A tried to show that Boethius's response was more complex and essentially different from this common version of it, and in Study *B* that it was wrong to attribute to him the modern idea of atemporal eternity. What about Aquinas?

Boethius addressed a form of the problem which could have been solved by pointing out a logical fallacy (as Abelard, for example, would later do: Chapter 5, section 2). But he had grasped intuitively that the roots of the problem were deeper and were linked to the time-gap involved in prescience. By the time of Grosseteste (Chapter 7, section 3), theologians were posing themselves the problem in a way which presented this intuition formally. This argument (the 'accidental necessity argument', to which Aquinas devotes especial attention) runs as follows:

- (1) God knew already in the past that any given future event E will happen (Premiss: divine omniscience)
- (2) Necessarily, (if someone knows that an event will happen, it will happen) (Premiss: meaning of 'know')
- (3) What has happened in the past is accidentally necessary, because it is unchangeable. (Premiss)
- (4) Necessarily God knows that E will happen. (1,3)
- (5) [Necessarily (If p then q), and necessarily p] implies necessarily q. (Transfer of Necessity Principle)
- (6) Necessarily, E will happen. (2, 4, 5)

If Aquinas had held that divine eternity is atemporal, he would have had a very easy way of responding to this argument. He could have denied (1), on the grounds that there is no past so far as God is concerned. Aquinas takes a different line, but, in order to understand it, we need first to look at Aquinas's central answer to the Problem of Prescience.

Aquinas begins by making what might seem like a very surprising assertion:

(7) No future contingent event can be known (given that knowledge excludes all error).

But how, then, does God know future contingent events, as he must do if he is to be omnipotent? Aquinas answers that

(8) The relationship of God's cognition to any thing it cognizes is always that of a thing which is present to something present.

God, therefore, can know future contingent events because

(9) Future events are not future so far as God's knowledge of them is concerned.

(9), however, can be interpreted in two different ways. According to a 'realistic' interpretation, it means that God is such that the relationship between him and every future (and indeed past) event is that of presentness: every moment of time is simultaneous with God's eternity. According to an 'epistemic' interpretation, however, Aquinas is not claiming that every event is actually compresent with God's eternity, but rather that God knows every future (and past) event in just the same way as other knowers know present events.

The overwhelming weight of the interpretative tradition, both medieval and contemporary, is for the realistic interpretation. It leads to one immediate difficulty, which was noted near the time and has been rediscovered by modern commentators. On this interpretation, every event is simultaneous with God's eternity, and so, for instance, the assassination of Julius Caesar and the assassination of President Kennedy are both simultaneous with God's eternity.

But if A and B are simultaneous with C, then A and B are simultaneous with each other: so Julius Caesar and J.F. Kennedy were assassinated at the same moment. Contemporary philosophers have devised ingenious schemes to counter this objection: the simultaneity between divine eternity and temporal things is of a special sort, they say, which is not a transitive relationship (so from the simultaneity of A and B and B and C, it does not follow that A and C are simultaneous, if *B* is God). But there is considerable doubt whether these schemes are acceptable, or even entirely coherent, and more about whether they have much relation to Aquinas. These difficulties alone would provide some grounds for adopting the other, epistemic interpretation. And Aquinas's texts provide more. Although occasional passages (for instance, SCG 1.66, n. 8; but cf. by contrast 1.67 n. 9) do suggest the metaphysical view supported by the realist interpretation, Aquinas usually talks in terms of things being present to God's knowledge or his sight, not of their being really simultaneous with God. He repeats from Boethius (Study A) the Modes of Cognition principle, that 'everything that is known is grasped not according to its own power, but rather according to the capacity of those who know it', and seems to be suggesting the following line of thought, to justify (9): given the Modes of Cognition principle and the fact that God is eternal, God knows things in the manner of an eternal being, who is not subject to the flow of time: everything is present to his way of knowing it.

We can now return to the accidental necessity argument. Aquinas does *not* reply by rejecting (1). On the contrary, he accepts (1)-(5) and so, in the case in question,

(5*) [Necessarily (If God knows E, then E will happen), and necessarily God knows E] implies that necessarily E will happen.

But he argues that the consequent of (5*), that E happens necessarily, has to be understood in a qualified way, because the antecedent involves a proposition about cognition (a 'cognitive' proposition). Aquinas proposes the following principle, which is related to the Modes of Cognition Principle:

(Aquinas's Principle) If the antecedent of a conditional contains a cognitive proposition, the consequent should be understood according to the mode of the knower, and not that of the thing known.

The consequent of (5^*) must then be read as: 'necessarily E will happen, according to the way it is known by God'. Since God knows everything in the way we know what is present, it follows that the consequent of (5^*) , with its qualification, means just: when E *is* happening (because God's way of knowing is present), E is necessary. E's necessity is therefore nothing more than the Aristotelian necessity of the present (Study A), which Aquinas accepted just as Boethius had done.

But should we accept Aquinas's Principle? He illustrates it by citing the conditional,

(10) If I understand something, it is immaterial.

(10) is like a *sophisma*. In order for it be unambiguously true, the consequent needs, as Aquinas's Principle demands, to be qualified by reference to the mode of cognition in the antecedent, and so the conditional will read:

(11) If I understand something, it is immaterial according to its being understood.

But there are many examples of conditionals with cognitive propositions as antecedents to which Aquinas's Principle does not apply. Consider, for instance, (12) If I feel something with my touch, it is a material thing.

The consequent of (12) does not need to be qualified by a phrase such as 'according to its being touched'. It is simply true that anything I can touch must be material.

Why does Aquinas use this bad argument, when it would be so much easier to deny (1), on the grounds that divine eternity is atemporal? The answer might be that, contrary to what most modern historians believe, Aquinas did not think of God's eternity as atemporal. This is not to say that he treated divine eternity merely as perpetuity - time extended without beginning or end. Eternity is, Aquinas says, distinct from time because it lacks succession (which is why God's eternal mode of cognizing is like our cognizing something in this very moment); it is absolutely without any movement. But this position need not imply that God is atemporal, in the strict sense that he lacks temporal position and extension and so any direct tensed or time-referenced proposition about God is false. Aquinas (and, incidentally, many of his thirteenth-century contemporaries and predecessors) seems to be nearer the position that was arguably Boethius's (Study B) and Anselm's (Chapter 4, section 7). Aquinas is closest to making eternity atemporal by his fondness for thinking of it as a point, by contrast with the extension of time. But Aquinas also thinks of God's eternity as embracing all things in time, and, unlike modern specifications of eternity as atemporal in terms of what it lacks, Aquinas's eternity is conceived as a fullness of being, an absence of the deficiency of movement and change.

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6 Latin Averroism: the Paris Arts Faculty in the 1260s and 1270s

In the 1260s, there grew up in the Paris Arts Faculty a movement which historians used to label 'Latin Averroism'. Doubt has been cast on this title (Van Steenberghen, 1966), but it is a good one if it is understood correctly, and not only because it reflects the usage of the time – these thinkers and their successors later in the Middle Ages were called *averroistae*, though normally by their enemies. Ernest Renan, the modern historian who popularized the tag in his *Averroes et l'Averroïsme* (published in 1852), recognized that Latin Averroism was not an accurate interpretation of Averroes; rather, Averroes had been elevated, or reduced, to a symbol. This symbol, however, is linked,

in a series of connections and distortions, to the real Averroes, whose commentaries the Latin Averroists knew, studied and imitated. And, although no historian today would accept Renan's view of Latin Averroism as involving the 'denial of the supernatural, of miracles, angels and devils and divine intervention; and the explanation of religious and moral beliefs as the result of imposture', his exaggeration points in the right direction, since the Latin Averroists did promote a certain freedom and respect for reason, if within a limited sphere.

There are two outstanding Averroist Arts Masters of the 1260s who can be identified and some of whose work is known, Siger of Brabant and Boethius of Dacia. Siger was born around 1240 and came to study in Paris in 1255-7. He would have become a Master of Arts in the early 1260s. The fact that he was still a Master of Arts in 1275 is important. Most Masters left the Arts Faculty after their necessary regency. Siger – and the same is apparently true of Boethius of Dacia - seems to have decided to devote himself to the work of the Arts Faculty: logic, and commenting on Aristotle. His writings, dating from the ten years after 1265, bear out this impression: there are commentaries on Aristotelian texts, among them On the Soul, the Physics and the Metaphysics, some related treatises and a group of logical writings (including Sophismata). With some anachronism, Siger could be said to have set out to be a professional philosopher. Although he does not seem, as was once thought, to have been the leader of an Averroist faction, his views were clearly troubling enough for him to be called in 1276 to answer a charge of heresy, although he probably was acquitted and ended his life in Liège, where he had long held a canonry. Boethius's life is more shadowy: he was teaching as a Master of Arts in Paris around 1270-80, and his known works were all written before 1277. He may possibly have become a Dominican after this time. His works include commentaries on Aristotelian physics and logic (the Topics), an important contribution to modistic grammar (Chapter 7, section 2) and treatises on dreams, on the Highest Good and on the eternity of the world.

Latin Averroism, both in the work of Siger and Boethius, and their successors in the fourteenth and fifteenth centuries, is characterized by the following features, although not every Averroist master displays all of them. (The comments in italics indicate the extent to which the label 'Averroist' should be regarded as symbolic – that is to say, the extent to which these characteristics differ from those of Averroes's thought.)

(a) The Latin Averroists were devoted to their role as Arts Masters of expounding Aristotle accurately, and turned especially to Averroes's commentaries for help (this feature was shared to a considerable extent by most Arts Masters) – Averroes too devoted himself to expounding Aristotle; he thought of this activity as separate from his work as a theologian, directed towards a wider audience, but he

also conceived of it as providing the best way, for those capable, of understanding what was truly meant by Islam.

(b) They accepted Averroes's interpretation, in his full commentary on On the Soul, according to which there is only a single potential intellect for all humans – Averroes came to this interpretation after a struggle with the text, and he was quite diffident about it. It was an important doctrine for him, but not a central one. There is no reason to believe that he thought it unacceptable for a Muslim of high intellectual capabilities to hold it, though he would not have considered it suitable for the Islamic population at large.

(c) They accepted Aristotle's view that the world is eternal as the correct answer in terms of natural reason and fundamental to Aristotelian physical science. As did Averroes, but so also had most Islamic philosophers in the Aristotelian tradition. Averroes argued explicitly that the eternity of the world is compatible with the teaching of the Qu'ran.

(d) They had an elevated view, echoing Book X of the *Nicomachean Ethics*, of the happiness open to humans in this life who devoted themselves to philosophy (as exemplified by the Arts Masters). *See below*.

(e) They adopted some sort of strategy in order to explain why, though Christians, they followed (b), (c) and (d). Averroes did not think that he had a problem in reconciling (b) and (c) with Islam – though many of his fellow Muslims would have disagreed.

Although Siger also accepted the eternity of the world, at least as a position to be held within philosophy, it was (b) - the Averroistic position on the potential intellect - that seems to have most interested and troubled him, and which shaped his changing answers to (e). In his quaestio commentary on On the Soul III, from c. 1265, Siger simply puts forward, repeatedly and at length, Averroes's view that there is one potential intellect (in Averroes's terms: material intellect) for all humans. He was certainly not the first Latin writer to see that this was Averroes's position. Whilst the Arts Masters earlier in the century had thought differently, by the early 1250s it was recognized by theologians such as Bonaventure and Albert (Chapter 7, section 3). But they, and a little later Aquinas, cited this interpretation of Aristotle so as to denounce it. Siger seems to have been the first person to propose it as correct. His account of Averroes is simplified, but not obviously distorted in its main features. And yet by how he presents it, Siger transforms his theory into something very different from its original. Averroes comes to his view as the result of a struggle to understand Aristotle and reconcile the commentators. For Siger, it is simply the obvious answer, which solves every problem. For Siger, moreover, the immediate reason for declaring that the intellect must be one for all humans is that, as an immaterial form, it cannot be multiplied

numerically. Although Averroes would probably have accepted this argument, it does not play the role for him that it has for Siger. Averroes had to begin from what he recognized was everyone else's view, that each human has a possible intellect, and then show why it was impossible, on that theory, to explain the sense in which intellect is unmixed with matter. Siger starts with what Averroes had painfully established, that there is a unique potential intellect, and he then finds reasons why this view must indeed be true.

When Siger returned to the subject in his De anima intellectiva ('On the Intellective Soul') of c. 1273, he could no longer present Averroes's interpretation with his previous directness and lack of qualification. In December 1270, Stephen Tempier, the Bishop of Paris, had condemned a list of errors which included several relating to Siger's view about the intellect. In the same year, Aquinas had subjected Averroes's interpretation and its Latin followers to a massive attack in his De unitate intellectus (Study K). None the less, the main thrust of De anima intellectiva is still to present Siger's Averroistic view, which, further simplified, now takes on the form of a genuine monopsychism, in which there is a single (intellective) soul for all humans. But he prefaces the work by saving that its purpose is to explain what the philosophers thought and that nothing in it is proposed as Siger's own view. And, when he comes to the question of whether the intellective soul is one or many, after giving a long set of arguments for the view that it is one, he puts a few arguments taken from Aquinas for its being many, individuated in each human. Siger then concludes by saying that the difficulty of these objections made him hesitate for a long time about what was the correct solution according to natural reason, and what was Aristotle's view, 'and in such doubt, one should keep to the faith, which is above all human reason.' A little later in his career, writing the commentary on the Liber de causis, Siger was willing to reject the view that the intellect is one for all humans as heretical and irrational (but there are some doubts about the integrity and reliability of the text). Although it is tempting to see, in his change of position, the effects of official pressure, there is also a consistent philosophical theme that runs through the three texts. Siger is dissatisfied with how Aquinas explains the union between the human intellective soul and the body, and he is determined to find a better solution. When he abandons the Averroistic line, he comes up with his own theory, which proposes an even tighter connection than in Aquinas.

Boethius of Dacia left no record of his views about the potential intellect. He defined his position as a Latin Averroist, rather, through his short but intricate treatise *De aeternitate mundi* ('On the Eternity of the World'), discussed below in Study J and in his even briefer *De summo bono* ('On the Highest Good'). The argument is a distillation and vast simplification of the theme which Aristotle brings out at the end of his *Nicomachean Ethics*. The good for humans is gained through the activity of their best and highest part, which is the intellect. Theoretical intellectual speculation is a higher

activity than the practical use of the intellect, and so the goal for humans, and their life 'according to nature' is to engage in this type of speculation, which leads them (and here the reasoning diverges from Aristotle) to contemplate the first cause of all things and his goodness. Those who can do so achieve the highest pleasure possible in this life, and they are also filled with love for the first cause. And who are these happy people? They are the philosophers – and it seems fairly clear that Boethius means, not the ancient philosophers of pagan antiquity, but those of his own day who, like himself, by teaching in the Faculty of Arts, are devoted to philosophy. 'The philosopher', Boethius concludes by saying, 'supremely takes pleasure in the first cause and in the contemplation of his goodness. This is the philosopher's life, and whoever does not have such a life does not have the right life.'

Boethius was not alone in praising his own lifestyle choice so extravagantly. Since the 1250s, Arts Masters had been putting the claims of their disciplines in terms which had always been reserved for the revealed knowledge and wisdom offered by theology (Piché, 1999, 261–72). A few years earlier, Aubry of Rheims – Siger's opponent in university politics – had written a treatise on philosophy which is no less extravagant in its praise for the philosophical life, and shares another of Boethius's themes: that longing for sensual pleasure and greed are what deter most people from the way of philosophy. It was in connection with the problem of the eternity of the world, however, that Boethius developed most distinctively his conception of the high calling of Arts Masters, but also of the limits to their cognitive authority.

Study J: The eternity of the world: Bonaventure, Aquinas and Boethius of Dacia

The question of the eternity of the world was one of the longest-running issues in the whole medieval tradition of philosophy. It had pitched Neoplatonists and Christians against one another in late antiquity (Study B), and had divided the thinkers in the kalâm tradition, who argued against it, from the philosophers in Islam, who in general supported it. As it was debated in late thirteenth-century Paris, the problem, though at first sight reduced in scope, in fact gained an extra dimension. Any doubt about whether a Christian could support the eternity of the world was removed by the Fourth Lateran Council of 1215, which established the temporal beginning of the world as a doctrine of the faith. No participant in the debate was, therefore, in a position to deny that, on the question of fact, the world did indeed have a beginning in time. Attention shifted, rather, to the grounds on which the temporal beginning of the world was known, and the strength of the arguments for the opposite view. In this way, the particular arguments (all of them old) about the substance of the problem came to be comparatively unimportant, although they were duly rehearsed. Rather, the problem encouraged philosophers and theologians to discuss the relationship between reasoning and revelation, philosophy and Christianity.

Not every solution to the problem raised second-order issues, however. If a theologian believed that there were demonstrative arguments against the eternity of the world, then it was a simple matter for him of putting them - reasoning used aright - to the service of making evident rationally what Christians already accepted on faith. This stance might be called the 'pseudo-Bonaventurian' view. Bonaventure and a long list of later thinkers knew and repeated Philoponus's arguments, which use Aristotelian principles to combat Aristotle by maintaining that an eternal world implies an actual infinity (which Aristotle thought impossible) (Study B). But did they think that these arguments are demonstrations? Some certainly did, such as the Franciscan William of Baglione, who wrote in the 1260s; and it is fairly clear that Aquinas *believed* that Bonaventure himself held this view. In fact, Bonaventure's position was probably more complex (Michon, 2004, 51-5). From the detailed discussion in his Sentences commentary (II, d. 1, p. 1, a. 1, q. 2) (1250) and from other works, it does not appear that he approached the problem as if reason, in the form of Philoponus's arguments – strong though he found them – simply ruled out the possibility of an eternal world. Indeed, he seems to think that the powerful version of the argument is the one based on the actual infinity of souls which would have to exist, and he recognizes that it could be met by someone who accepted reincarnation or denied the human soul immortality. Rather, Bonaventure thought that there was a contradiction between the world's being created from nothing and its being eternal. But it was only through the light of faith, he considered, that believers know that the world is created from nothing in this special way.

For Aquinas, the eternity of the world was from the beginning a problem that raised issues about method, and it is one of the topics on which his opinion definitely shifted during the course of his career. When, about five years after Bonaventure, he commented on the Sentences (II, d. 1, q. 1, a.5), he rejected both the position of the philosophers who affirm the eternal existence of things other than God, and the pseudo-Bonaventurian view that 'not only is it held by faith that the world began, but it is also proved by demonstration.' It is no more possible to demonstrate that the world has a beginning than that God is triune, he declares. The supposed demonstrations have all been refuted by the philosophers, and those who rely on them make the faith an object of derision. Yet the problem is not, as it might seem, a case where philosophy and Christian teaching simply confront each other. At this stage, Aquinas is among those who held, on the basis of a remark in the *Topics* (104b), that Aristotle himself did not think that the eternity of the world could be demonstrated. Aquinas explains why this question cannot be resolved demonstratively by citing Maimonides explicitly: no valid inference about the nature of something in its initial stages can be made from the way it is in its finished form, and we only have knowledge of the finished state of the world. Where, then, Bonaventure approaches the issue from a position of faith - God is the creator – and proceeds to reason on this basis, Aquinas can treat this issue initially in terms of philosophy and then, finding that philosophy does not and cannot demonstrate an answer, turn to his faith to provide the solution.

Aquinas's close study of Aristotle in the course of commenting on his works – in this connection, in particular on the *Physics* – led him to abandon the comfortable view that even Aristotle did not claim to demonstrate the eternity of the world. But in the *Summa Theologiae* I (q.46) (1266–8) he still claims that Aristotle's arguments are not demonstrative *without qualification*: they were directed against earlier philosophers who held the world to begin in various ways that are not in fact possible. By 1270, when he wrote his *De aeternitate mundi*, Aquinas's way of approaching the topic had changed.

In this short treatise, Aquinas's concern is hardly at all with the traditional arguments for or against the world's eternity. He touches, at the end, on the supposed problem about there being an actual infinity of souls if the world is eternal, but dismisses it brusquely. God might have made the world without humans and their souls, or he could have made the world eternally, but humans at some point in time; in any case, he adds, who has demonstrated that there *cannot* be an infinity in act? The tenor of these arguments reveals the new angle from which Aquinas envisages the problem. He begins the piece by asking, granted that the world did have a beginning, as Catholic doctrine holds, could it have lacked one and been eternal? Aquinas does not, as in his previous treatments of the issue, discuss the factual question about what happened and then the second-order issue of our epistemic access to its answer. Rather, putting what actually happened out of the discussion altogether, Aquinas considers what might have happened. He analyses a set of possibilities and, because he is dealing with questions of pure logical compatibility, he is able to argue demonstratively, although the area is one where, so far as actual facts are concerned, no demonstrations are acceptable to him. Moreover, he is very keen to emphasize that, in the sort of questions he is considering, to give the wrong answer is not heretical, just as it is not heretical to say that God can alter the past, although it is, Aquinas believes, untrue.

Aquinas accepts that there is a certain understanding of what is possible that *could* lead to a heretical position. A concrete whole of matter and form cannot be made except from pre-existing matter, which is a 'passive potency' for the actual thing. 'A is possible' or 'A could be' might be taken to mean 'A passive potency for A exists'. To argue that something other than God could be eternal would therefore mean, on this interpretation, that a passive potency for something – that is to say, matter – does actually exist from eternity. And to say this would be to move outside the realm of possibilities and contradict Church doctrine, which rules out the existence of anything eternal besides God. By contrast, Aquinas feels free to make his point so long as it is clear that possibility is to be understood in terms of what does not involve a contradiction.

Aquinas also stresses that he is not considering whether it is possible that something other than God could have existed from eternity in the sense of its not having been caused by God. He considers this view not only heretical, but contrary to reason and as rejected by the philosophers. The question is purely about whether something, though caused by God, could be co-eternal with him. If anything prevents this possibility, it will not be a lack of power in God, and so it would have to be either (1) that there is a contradiction between *x* causing *y* and yet *y* being co-eternal with *x*, or (2) that there is a contradiction between *x* being made (from nothing) and there never having been a time when x did not exist. Aquinas is able to show that in neither case is there a contradiction: (1) God causes whatever he brings about instantaneously, not through a process of motion, and there can be no contradiction in something existing at the same time as what causes it instantaneously. (2) To be 'made from nothing' means, as Anselm realized, just that something is made, but there is nothing from which it is made. It is not as if there had to be a nothing which pre-existed each thing in order for it to be made. And so it is perfectly acceptable for something to be made and yet eternal.

The argument of *De aeternitate mundi* is bold and brilliant. It directly opposes, not merely the pseudo-Bonaventurian position, but also Bonaventure's real one, which made a grasp of the world's createdness lead immediately to acknowledgement of its temporal beginning. Yet it can be seen in some ways as a retrenchment in Aquinas's position. Rather than consider what can and cannot be demonstrated about the world as it is, and so discuss the differing competencies of philosophical reasoning and revelation, Aquinas turns to questions purely about possibility, in a way that anticipates the way theologians would commonly work in the fourteenth century. It is as if he feels that, only by taking the subject from this perspective, will he be free from any accusations of heresy.

Writing at the same time or very shortly after Aquinas, in his *De aeternitate mundi* Boethius shows the same sorts of worry about being accused of heresy, but he tries to face them directly, by concentrating on the second-order question. His starting-point is, of course, different from Aquinas's, because he is an Arts Master. He writes the *De aeternitate* as someone who finds his chosen profession, that of the Arts Master or Philosopher, under attack and who is determined to defend it resolutely.

Boethius's ingenuity lies in elaborating an argument to justify Arts Masters in practising their disciplines according to their own terms, without fear that their conclusions will brand them as heretics. He puts the problem in a particularly sharp way. It cannot be shown, he says, from the principles of natural science, mathematics or metaphysics that the world has a beginning. No one practising these disciplines is, therefore, in a position to assert from the point of view of physics, mathematics or metaphysics that the world has a beginning. Moreover ([7], the natural scientist, it seems, cannot just maintain a neutral attitude: he must actually deny that something generable can be created from nothing rather than through the natural process of generation – as he must deny that the dead can be resurrected – because it would go against the principles of his science to concede these positions. Boethius might seem deliberately to be putting the scientist in opposition to Christianity, but he has a way of escape. Just as whatever anyone says within one of the Arts disciplines must be based on the principles of the discipline, so it is to be understood as being qualified by those principles.

The conclusion by which the natural scientist says that the world and motion have no beginning is false, taken absolutely, but if it is referred to the reasons and principles from which he reaches the conclusion, it follows from them' (§8). When the natural scientist verbally denies a Christian truth, such as the resurrection, all that he is in fact saying is that resurrection is impossible according to natural principles. Boethius is not a full-blown relativist, because he is willing again and again to state that the doctrine of Christianity is true absolutely, not relatively. Boethius is, however, a relativist about knowledge gained within the individual Aristotelian disciplines. Each discipline has its own fundamental principles and the conclusions reached in their basis are only as good as they are. In the case of natural science, it seems that Boethius thinks of its principles as serviceable tools for understanding the workings of the world around us, but often deceptive about the ultimate truth of things.

It would be a misreading, however, to conclude that Boethius wanted to assert the superiority of revealed knowledge in the manner of Bonaventure. The tone of his final paragraphs show why. What he has done, he boasts, is to show that complaints against philosophy are groundless and that the philosopher who 'has given his life over to the study of wisdom' can never be said to contradict Christian doctrine, because everything he establishes must automatically be understood as being said to be true just according to natural causes.

Boethius, Siger and their colleagues in the Arts Faculty answered the questions raised by the new material with an implicit request. It is as if they said: 'We are the people who have decided to dedicate ourselves to following through all that these new sources imply. We want to be let free to do so on their own terms. We do not, however, wish to use them to challenge anything which is established in Christian doctrine. We just want to be left alone to get on with our work.' Boethius's argument tries to make this request impossible to refuse.

Study K: The potential intellect: Aquinas, Averroes and Siger of Brabant

Written the year before, in 1270, Aquinas's *De unitate intellectus contra Averroistas* ('On the Unicity of the Intellect against the Averroists'), which juxtaposes Aquinas with the other leading Arts Master of the period, Siger of Brabant, complements and contrasts with *De aeternitate mundi* both in its manner of approach and in the aspect of its author's views on faith and reason which it reveals. Whereas *De aeternitate mundi* gives a short and powerful argument about a single aspect of the issue, *De unitate*, seven times its length, is designed as a comprehensive attack on Averroes's theory that there is a single potential intellect for all humans. It offers both historical exegesis of philosophy, and philosophical argument. Averroes had claimed that, all things considered, his interpretation was the best reading of Aristotle's *On the Soul*. In Chapter 1, Aquinas goes through Aristotle's text painstakingly, using the thorough knowledge of it he had gained when writing his commentary in 1267–8, showing that Aristotle certainly did not

intend to propose the theory Averroes attributes to him. The next chapter aims to make clear that (contrary to what Thomas's master, Albert, had believed) Averroes is alone among Greek and Arabic Peripatetics in holding his theory: it looks at the views of Themistius, Theophrastes (known through Themistius), Alexander of Aphrodisias, Avicenna and Ghazâlî (in his Avicennian *Intentions*). Both discussions are testimonies to Aquinas's sureness of touch as a historian. He does not, as Albert did, borrow Averroes's own historical digressions for his own purposes, but draws on a wide range of personal reading.

The three following chapters are written to show that Averroes's view is philosophically incoherent. Chapter 3 is aimed against the view that the potential intellect is separate from the soul; rather, argues Aquinas, it must be part of the soul which is the form of the human being. Chapter 4 confronts the central claim that potential intellect is one for all humans, whilst Chapter 5 (in the manner of a *quaestio*) answers arguments against there being as many human intellects as there are individual people. Two of the most powerful of Aquinas's arguments are the following, the first directed against the separation of the intellect, the second against supposing that it is not multiplied. In both cases, Aquinas is trying to show that Averroes's theory does not leave room for human beings to be said to think at all.

Averroes tries to maintain that the potential intellect is at once separate and yet linked to each person by saying that what acts on and determines the potential intellect is the imaginative form (which belongs to individuals), when shone on by the light of the Active Intellect. Put crudely: this thought is my thought because the potential intellect needs the form in my imagination in order to think it. But Aquinas (III, 65) objects that 'through an intelligible species something is thought, but through an intellectual power something thinks.' He compares the relationship Averroes describes to the relationship between a wall in which there is colour to the sense of vision in which its colour is seen. The potential intellect is like the eye, the human is like the wall, and the imaginary form like the colour in the wall. Just as we would not say that the wall sees, but rather that the colour in the wall is seen by the eye, so Averroes is obliged to say that, on his theory, humans do not think, but rather, the imaginary forms they conceive are thought by the Potential Intellect. The fault of this criticism is its failure to recognize the complexity in Averroes's scheme (Chapter 6, section 3) of the relationship between human imaginary forms and the potential intellect, of which they are the movers. Yet it does capture an aspect of Averroes's theory that causes, at least, unease: acts of thinking, on his view, involve the Active Intellect, the Potential Intellect and our sense-images: what part do we play in the process?

In the next chapter (IV, 85–6), Aquinas once more uses an analogy to attack Averroes's position. It is another argument that is impressive, but starts out from Aquinas's own assumptions – in this case about the relationship between soul and body – which were not completely shared by his opponent. If there is just one Intellect, it cannot be the form of individual humans. Aquinas will therefore grant for the sake of argument that, even if the relationship of the Intellect to humans were only that of a mover, humans could be said to think. But if there is one Intellect for everyone, will humans individually think, or will it be the one Intellect that is thinking? Aquinas sets up two comparisons. In the first, he contrasts the case where many people use a single instrument (he gives the example of soldiers using a giant siege catapult) and that where one person uses many instruments. In the former case, we say that many act, and in the latter that one acts: the decisive factor is the chief thing responsible for acting, not the instruments. The second comparison analogizes the intellect to an eye. According to Averroes's theory, there is just one eye for all humans. If it were the case that the eye were not the chief thing in humans, but there was something higher, responsible for humans' seeing, then the case would be like that of the many soldiers and the one catapult: we could say that many people were seeing with one eye. But if the eye is what is chiefly responsible for seeing, then it would be like a person who uses many instruments: the seeing would be done by the one eye, using many humans. Clearly, Aquinas explains, what the eye stands for, the intellect, is the chief thing in man, responsible for all his activities, and so the case must be the second one. Averroes is therefore committed, he says, to there being one thing only that thinks, with individuals as its instruments – a position that destroys individual freedom of will and so morality.

Aquinas's purpose in *De unitate* is not, however, principally to attack Averroes's theory, which he had done already, especially in the *Summa contra Gentiles*. He did not direct the work *contra Averroem*, but *contra Averroistas*: his targets are the Arts Masters of his university who are teaching Averroes's theory, principally Siger of Brabant. Aquinas, who is normally a balanced, respectful participant in argument, takes an unusually scornful attitude. He seems to have been stung by the Arts Masters' claims that the Latins had misunderstood Aristotle's doctrine of the intellect. Part of the purpose of the lengthy historical analysis is to show, on the contrary, that it is Averroes alone who is responsible for the (mis)interpretation they have chosen to follow, against the opinion of the rest of the Greek and Arabic tradition. Aquinas also attacks another sort of presumption: he complains that the Arts Masters have treated subjects which are matters of revelation and so beyond their competence, alluding to the question of whether the souls of the damned are tortured by corporeal fire in Hell, treated by Siger in his commentary on *On the Soul* in a sceptical manner.

But Aquinas has a worse complaint:

They say: 'I hold through reason by necessity that the intellect is one in number, but yet I firmly hold the opposite through faith.' Therefore he considers that faith includes things the contrary of which can be shown to be necessarily true. Since only a necessary truth can be shown to be necessarily true, and its opposite is what is false and impossible, it follows according to what they say that faith includes what is false and impossible, which even God cannot bring about. (5.119) Alain de Libera (2004b) has shown that this attack operates on two levels. When someone says 'I hold through reason that the intellect is one in number', there is what analytical philosophers call a 'conversational implicature' to the effect that the person believes that it is true that the intellect is one in number; the same is true of 'I firmly hold the opposite through faith'. The Arts Masters are thus informally contradicting themselves, not according to strict logic, but with regard to the pragmatics of conversation. But there is a deeper problem since, according to Aquinas, his opponents hold that it is *necessary* that the intellect is one in number. If so, then as Aquinas explains, it follows that the doctrine of the faith which they say is opposite must be, not only false, but impossible – and even God cannot make an impossible thing true. The position that Aquinas fathers on the Arts Masters (De Libera describes it as a trap) turns out to be a far cry from what it seems at first to be: not a bewildered intellectual's agnostic acquiescence in revelation, but a covert undermining of Christian doctrine.

In fact, Aquinas goes a good way beyond anything that Siger or any other of the other Arts Masters on record had said at this stage, and De Libera sees this attack, and Bishop Tempier's condemnations of 1277 (see below) as having the effect of establishing the very Averroism they seek to confute. So far as Aquinas himself is concerned, his stance on the potential intellect combines with the position he takes on the eternity of the world into an apparently neat position on the relation between faith and reason. There are truths of Christian doctrine - not just the Trinity and the Incarnation, but also, for instance, the fact that the world has a beginning – which no amount of reasoning can establish. But reason correctly used in framing a demonstrative argument can never come to a conclusion incompatible with Christian doctrine, as the proponents of a single potential intellect contend. Faith, therefore, provides a guide as to which demonstrations have been carried out incorrectly, although it cannot indicate whether, in the case of any given revealed doctrine, a rational demonstration of it is in fact to be had. The neatness of the position is, however, deceptive. It will be preserved only so long as the philosopher who is also a Christian does not find any demonstration which, scrutinize it as closely as he can, is flawless, and which contradicts a revealed doctrine. To conclude in such a case that the demonstration must, none the less, be faulty in some hidden way demands a leap of faith that can be justified only to those already willing to take it.

Aquinas, though, never had to face such a case. Although, on the first level, of how Aristotle's texts and ideas are to be understood, his approach to Aristotle turned out to be very different from that of Albert, at the second level of answering the questions posed in general for Christian theologians by the new Aristotelian and Arabic material, Aquinas's answer was almost the same as his teacher's. Both men accepted the new ideas with enthusiasm and, although Aquinas was more rigorous in thinking about his own position, as a theologian, with regard to them, he was sufficiently sure of the coherence of God-given reason with divine revelation not to be disturbed by the worries which, from an external perspective, seem inevitable. (Or did Siger's attitudes hint at such problems, and so provoke such an uncharacteristically extreme response?)

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7 The 1277 condemnations and their significance

On 7 March 1277, Bishop Tempier of Paris condemned a list of 219 propositions which he associated with the Arts Faculty. The condemnation was the broadest and most important of the Middle Ages, but modern judgements about its significance differ sharply. What, precisely, took place?

In 1270, Tempier had already condemned thirteen propositions, some of them linked to Siger of Brabant's teaching (Chapter 7, section 6). They included assertions that there is only one potential intellect, that the world and the human species is eternal, that God does not know individuals or anything other than himself, and denials of human freedom and of providence. In the same year Aquinas had attacked Siger's views on the potential intellect in his De unitate intellectus (Study K). The 1277 condemnations continued the process that had already been begun seven years earlier. In January, Pope John XXI had sent Tempier a letter expressing worries over some of the ideas being taught in Paris. Tempier may have been acting on the Pope's concerns, or of his own initiative in parallel with them. He appointed a commission of sixteen theologians, including Henry of Ghent, to go through suspect texts and put together a collection of propositions to be censured. They did their work hastily (very hastily, if it began only after the letter from Pope John) and produced a disorderly list which both medieval and modern editors have tended to re-arrange. Tempier threatened excommunication to anyone who professed any of the forbidden doctrines. Even those who listened to such teachings were required to denounce them to the authorities or face the same penalty.

Many of the views condemned were the same as those listed and censured more succinctly in 1270. Tempier makes clearer his opposition to any Avicennian model of emanation, in which the First Cause acts only through lower causes; and to anything which seems to restrict God's power, or to threaten human freedom. All of these articles seem to be directed against a heterogeneous assortment of the doctrines in Aristotle himself (eternity of the world, God just as Intellect contemplating itself) and his interpreters in Arabic (unity of the potential intellect, emanation, fatalism) which, taken literally, clash with Christian teaching. Some more specifically theological views are censured – about, for example, angels and about the knowability of God. Most strikingly, the list includes a number of propositions about morality and religious beliefs which seem shocking in the context of medieval Christendom, and some which exalt philosophy – that is to say, the pursuit of rational knowledge as undertaken in the Faculties of Arts - by contrast with theology and wisdom based on revelation. For example, one proposition ([Piché, 1999, no.] 177/[Hissette, 1977, no.] 200) claims that the only virtues are the acquired ones (as discussed by Aristotle), so rejecting the infused Christian virtues of faith, hope and charity; another (171/211) says that humility is not a virtue; others (17, 18, 25/214–16) challenge the possibility of bodily resurrection. One of the condemned articles (16/201) declares simply that it is no matter if something is a heresy, another (180/202) that one should not pray, and another that one should confess 'only for form's sake'. Other articles contradict the doctrine of the Trinity (1/185) and the Incarnation (2/186), or suggest that parts of Christian doctrine are no more than fairy tales (152, 174/183, 181). Among the articles exalting philosophy are two which state that the best condition in life is to be engaged in philosophy (40/1), and that the only 'wise people of this world' (sapientes mundi) are the philosophers (154/2). Further articles assert that the method of Aristotelian science, proceeding from self-evident principles, is the only way of reaching certainty; authority provides no basis for it (37,150, 151/4, 5, 3).

Tempier does not name any individual Masters, but his introductory letter makes it clear against whom the condemnations are principally directed: 'people in Paris studying the Arts who go beyond the limits of their own Faculty.' Not only does this specify a group - the Arts Masters and their students, but the echo of the reproach in Aquinas's De unitate against the presumption of Arts Masters who stray into matters of theology is strengthened by a crude reprise, a few lines later, of Aquinas's famous trap: 'For they say that these things are true according to philosophy, but not according to the Catholic Faith, as if they were two contrary truths . . .' That Tempier had Siger of Brabant in mind, just as Aquinas had done earlier, is confirmed by a number of the articles, which are close to statements made in Siger's works. Other articles paraphrase or cite comments made by Boethius of Dacia, whilst some others have been traced back to surviving anonymous works by Arts Masters of the period. True, many of the articles reproduce positions taken in writings translated from the Arabic but not, so far as is known, adopted as their own by any of the Arts Masters. But Tempier makes it clear at the beginning of his letter that he considers it a fault to discuss such heretical theses at all. Still, a comparison between the condemned propositions and the writings of Boethius and Siger shows that, on many occasions, comments have been taken out of context or stripped of qualifications which should have made them acceptable. And the most directly anti-Christian of the articles have not been found in any texts from the period.

Historians of philosophy have reacted to this complex evidence in two antithetical ways – reactions that do far more than indicate a particular difference in judgement, since behind each lies a very different view of medieval philosophy (and, more widely, very different intellectual horizons). On the one hand, there are the Minimalists. They emphasize the rapidity and carelessness with which the commission did its job, and the way in which, through out of context and partial quotations, the true views of Siger of Brabant and Boethius of Dacia are distorted: no account is taken of Boethius's open acknowledgement of the unqualified truth of Christian teaching; no allowance is made for how Siger had (supposedly) shifted towards an acceptance of orthodoxy in the years after 1271. The 219 articles, they say, will be found in almost all cases either to state genuinely heretical views which no Latin thinker is known to have held, or to distort ideas really proposed by the Arts Masters, which were not heretical, so as to make them so, or in some cases to assert doctrines that should never have been regarded as heresies. On this minimalist view, Tempier was a Church leader, moved by understandable concern for the faith of the general people, who set up and attacked a straw man, a form of anti-Christian Aristotelianism which was unknown in the university. For them, the 1277 condemnation, though a dramatic event, and one which through its prohibitions put some constraints on future university thinkers, has no large significance in the history of philosophy.

By contrast, the Maximalists point to the lasting effects of the condemnations in restricting philosophical discussion, but, more centrally, they insist on the importance of what they indicate about the development of medieval philosophy. Although they accept that a number of the articles misrepresent the exact positions of the Arts Masters, they argue that, from the condemnations read as a whole and in their context, there emerges a picture of philosophy as an independent, autonomous discipline, able to investigate every area, demanding of its practitioners an austere, ascetic style of life, and leading them to the highest degree of happiness and so providing a secular alternative to Christian asceticism and the Christian scheme of heavenly reward and punishment. Although to a considerable extent this picture is of Tempier's own devising, the Maximalists argue that he is making explicit and exaggerating something that was real. Siger of Brabant, Boethius of Dacia and their colleagues thought of themselves, self-consciously, as philosophers, and they desired within the bounds of their subject the freedom to speculate. Tempier was wrong to see them as wanting to challenge Christian teaching directly, but he was right to see the seriousness with which they were setting out their alternative standpoint.

Perhaps, though, in focussing on the Arts Masters, even the Maximalists are in danger of minimalizing the significance of 1277. It was from Aquinas's *De unitate* that Tempier took, greatly simplifying, his initial comment rejecting the idea that there could be two truths, one in philosophy, one in theology; and, as that work above all shows, Aquinas was strongly opposed to Averroes's views on the potential intellect and the Arts Masters who found them persuasive. Yet Tempier was no friend to Aquinas. A few of the 219 articles condemn Aquinas's teachings (on angels, for instance, and on moral psychology), but they were not the main vehicle for Tempier's attack. It seems that in 1277 Tempier envisaged a two-pronged assault on teaching he

regarded as heretical. The condemnations of the Arts Masters' supposed teaching were one prong. The other was to be a posthumous condemnation of Aquinas, and a condemnation of Giles of Rome, who, though by no means a docile follower of Aquinas, had espoused many of the positions Tempier considered suspect. In fact, by the end of March 1277, Tempier had secured the condemnation of fifty-one theses taken from Giles's work. Giles was refused his licence to teach theology and had to wait for nearly a decade before he could resume his teaching career. It seems also that, between 8 and 28 March, Tempier was preparing a separate condemnation of Aquinas, but that he was stopped by Aquinas's supporters. But, in any case, Aquinas's characteristic positions were attacked through the condemnation of Giles's thesis. (On a different interpretation of the evidence - Thijssen (1998) - there was only a process against Giles, but it was intended also to attack Aquinas's teaching.) Meanwhile, on 18 March, Robert Kilwardby, Archbishop of Canterbury, had condemned thirty propositions in grammar, logic and natural science that were said to be being taught at Oxford: among these were three clearly linked to Aquinas's doctrine of the single substantial form. When, in 1284, Richard Knapwell publicly defended this doctrine of Aquinas's at Oxford, the new Archbishop of Canterbury, John Pecham, renewed the condemnation and excommunicated Knapwell. By this time, the Franciscan William de la Mare had already (c. 1281) written his Correctorium fratris Thomae - a wide-ranging attack on many aspects of Aquinas's theology.

Aquinas did, indeed, have strong defenders, especially among the Dominicans, who rapidly made his teaching into their orthodoxy. The *Correctorium* was answered by a set of *Correctoria* of what the Dominican's preferred to call William's *Corruptorium*. And, in 1325, two years after his canonization, it was declared that the 1277 condemnations did not stand in so far as they went against his teaching. But Aquinas's celebrity and support by his own order should not obscure the extent to which the events of 1277 as a whole were an attack on him and his way of doing philosophy and theology, just as much as on the Arts Masters. And the attack against Aquinas achieved its aim, in a way that the condemnation of the Arts Masters' doctrines did not. It signalled, and partly provoked, a change of direction in the way of doing theology.

It was the answer Bonaventure had given to the questions raised by the new material which tended to be that followed, though with much greater intellectual sophistication and a much deeper knowledge of Aristotle and his commentators, by the great, mainstream fourteenth-century theologians. The Arts Masters' answer was not, despite Tempier's apparent hostility, rejected. So long as they stressed their ultimate allegiance to Christian doctrine, Arts Masters were, in fact, allowed to develop their interpretations of Aristotle, even along Averroistic lines if they wished (Chapter 8, section 7). Albert's version of the answer which he and his pupil had given was also able to flourish in an independent German tradition (Chapter 8, section 1). Aquinas's own version of that answer – an eager acceptance of the new material, faith that it would not ultimately clash with Christian doctrine and a rigorous reading of Aristotle, which went far further than Averroes in stripping it of the Neoplatonic trappings in which it had been transmitted – did not survive. There were thinkers early on (like Thomas of Sutton, *c*. 1240–1315) and later (such as John Capreolus, *c*. 1380–1444) in the Middle Ages who were enthusiastic Thomists, but they were not following on with Aquinas's own project, which involved essentially a direct engagement with the ancient philosophical texts. The mood had changed.

PHILOSOPHY IN THE UNIVERSITIES, 1280–1400

For thinkers in the universities, the first three-quarters of the thirteenth century had been full of the thrill of discovery. The excitement lay not simply in the richness and range of argument in the newly available texts of Aristotle, and by Islamic and Jewish philosophers, but even more in the questions they posed about how to be both a Christian and a philosopher (or whether, indeed, it was possible to be both). These very general questions were open, and were answered in very different ways by, for instance, Bonaventure, Siger and Albert and Aquinas. But, by the 1290s, a way of doing scholastic theology was being established which dispensed individual thinkers from the need to face such problems. Three thinkers working during this decade (Chapter 8, section 2) – Henry of Ghent, Godfrey of Fontaines and Peter John Olivi – provide an eloquent illustration of the direction in which intellectual life was moving.

Given the structure of university education (Chapter 7, section 1), the best trained, most ambitious philosophers in the fourteenth century tended to be concentrated in the Theology Faculties at Oxford and Paris, usually as holders of or aspirants to one of the Franciscan or Dominican chairs. The theologians had the freedom to make full use of the vast technical resources of the whole Neoplatonic Aristotelian tradition. But that freedom was bought at the price of accepting a certain, in some ways quite restrictive, reading of Christian orthodoxy and enunciating it. Despite its restrictions, though, the overall view allowed enormous room for dissension on matters which, though sideissues for Christian doctrine, are fundamental for philosophy. And so there was plenty of scope for Duns Scotus and William of Ockham to be innovative, creative, wide-ranging philosophers. There was also the need, if not to invent their own world-view, then at least to think through in detail the philosophical implications of the strange world-view with which they were presented by the enforced compromise between Christian doctrinal stipulations and many elements of Aristotelianism. In particular, they were required to emphasize the freedom and contingency of the Christian God by contrast with the Aristotelian First Mover. It had, of course, always been part of Christian doctrine that God acts freely, but never before had theologians been put into the position of having to think through this point and its implications within a sophisticated metaphysical, epistemological and ethical scheme.

This mainstream theology of Paris and Oxford does not, however, tell the whole story of philosophy in these years. From about 1350 onwards, though more markedly after 1400, there was a great expansion of the university system, as universities began to be founded everywhere in Europe: they included Krakow, Vienna, Heidelberg, Erfurt and Cologne (Chapter 8, section 9). This development brought a certain diversity to the system, perhaps rather superficial because the structure and concerns of theology courses tended to be similar. But there were other, important currents in university thought: developments in logic (section 8, this chapter); 'Averroism' which flourished in a number of Arts Faculties (section 6), and the work of an outstanding master who chose to spend his career in the Arts Faculty, John Buridan (section 8). And, especially at the beginning of the century, there was the tradition with which this chapter begins. It was the special preserve of the German Dominicans but was taught at Paris. Harking back to Albert the Great, and reflecting his deep interest in the way Aristotelian cosmology and noetics had been developed by Avicenna and Averroes, this way of thinking violently broke the norms which were coming to guide university theology: it is hardly surprising that its greatest exponent, Meister Eckhart, was though posthumously - condemned.

1 The Albertine tradition

The ground for this German, Dominican, Albertine tradition was prepared by two early followers of Albert, Hugh of Ripelin, who wrote a text-book exposition of his master's thought in the 1260s, and Ulrich of Strasbourg, who studied with Albert in Paris and then Cologne. Before his death in 1272, Ulrich had written a large summa *De summo bono* ('On the Highest Good') in which he develops more explicitly than Albert himself the idea (based on, or rather distorted from, Avicenna) that the human intellect can raise itself so as to conjoin with the Active Intellect and become quasi-divine.

The human intellect was also a major concern for Dietrich of Freiberg (c. 1250–1318/20), who studied in Paris, was provincial of the Dominican Province of Teutonia from 1293–6 and Master of Theology in Paris in 1296–7. In *De intellectu et intelligibile* ('On the Intellect and the Intelligible'), he takes the first remarkable step of treating the human intellect in a way similar to that in which Averroes treated the celestial Intellects, who bring themselves to their perfection by the way in which each knows the First Intellect (Chapter 6, section 3). The object of a human intellect's thinking is God himself, and it is this thinking of God that constitutes the intellect. In this same act of knowing, the intellect also knows itself as that which knows God. Furthermore, in knowing its origin, God, the intellect knows all things, because God is their exemplar. Dietrich goes on to argue that intellects exist

in a special way. We should not consider them as if there were things with a special power, that of thinking intellectually. Rather, an intellect is just that thinking by which it knows God – it constitutes a type of being that Dietrich calls 'conceptional'.

Dietrich elaborates his view of the God-like powers of the human intellect when he considers its relation to the Aristotelian Categories in his treatise *De origine rerum praedicamentalium* ('On the Origin of the Things that belong to the Categories'). The intellect, Dietrich observes, knows the objects of experience which fall under the ten Categories: what relation do they have to it? They are not identical to it, nor – he argues, breaking sharply with the Aristotelian view – do they cause it. A cause must have a power that is more 'formal' than what it causes, whereas the intellect is far more form-like than the objects of experience. It remains, therefore, to conclude that the intellect is itself the cause of these objects. He does not insist that it is the only cause, but he does end by giving the human intellect a far larger role in the constitution of the world it grasps than any earlier Christian thinker, except perhaps Eriugena.

The most fascinating of this line of German thinkers is Meister Eckhart (c. 1260-1327/8). Eckhart became a Dominican and was educated at their house of studies at Cologne. He was - a rare honour, accorded also to Aquinas - twice Dominican regent master in Paris, in 1302-3 and 1311-13, and he was in charge of the Cologne studium from 1322-5. But his theological innovations struck the Archbishop of Cologne as suspect and, when an investigation into his possible heretical teachings was begun, Eckhart appealed to the Pope. In 1329 a set of twenty-eight propositions from his work were condemned, but by this time Eckhart was already dead. Eckhart's literary output is unlike that of most Parisian masters in consisting partly of Latin works - the unfinished Opus tripertitum ('Work in Three Parts') and the Parisian Questions (from 1302-3) - and partly sermons and other pieces in German, intended for a popular audience outside the universities. Although it is from these that Eckhart has gained fame as a mystic, the philosophical ideas they contain are closely linked to those he develops in his university writings, and it would be artificial to try and separate them.

Dietrich had changed the received idea of the human intellect by arguing that it is not a thing with an activity; rather, its activity makes it what it is. Eckhart applies the same sort of reasoning to God. It was commonplace – it followed, indeed, from God's simplicity – to say that thinking intellectually (*intelligere*) and existing (*esse*) are the same in God. But Eckhart goes on to argue that God should be considered primarily as intellect, and that his existing follows from this. It is not 'because he exists that God thinks, but because he thinks that he exists: so that God is intellect and thinking, and this thinking is the basis of his existence.' The Gospel of John does not begin, adds Eckhart, with the words 'In the beginning was an existing thing (*ens*) and the existing thing was God', but 'In the beginning was the Word'. And 'the

Word', he explains, is a term which fits the intellect. God, Eckhart insists, should not be described in terms of *esse* or *ens*, because something higher is appropriate to him. Here he strikes out on a very individual line of thought in relation to the most influential thinking of his time, that of Henry of Ghent and Duns Scotus (Chapter 8, sections 2 and 3), which was founded on the idea of God as a sort of being. Yet at the same time he recaptures the thrust of his great Dominican predecessor Aquinas's negative theology, bringing it even closer to the tradition of Proclus and pseudo-Dionysius.

Eckhart's speculations about the human intellect are less easy to place within a traditional framework, though they are clearly related to his ideas about God, and to Dietrich of Freiberg's thinking. In the German sermons, he develops the theme of the 'ground' (grunt) or 'spark' (vunke) of the soul. The way Eckhart regards this grunt or vunke bears some similarity to how Dietrich describes the active intellect as being the basis from which the soul springs. But Eckhart has to stress that the grunt does not belong to the soul, although it is in it, because he also wishes to claim that this 'something' is 'uncreated and uncreatable' (Mojsisch, 1983, 133-4). When I wish to leave behind that self which is false and discover what is true in me, and my potential intellect turns away from the forms through which it thinks; when it wishes nothing, knows nothing, is acted on by nothing: then it is to this something in the soul that it must turn. Is this uncreated grunt God, then: a spark of the divine in us all? Eckhart would not demur, but he wishes to go even further. The idea of God, he argues, implies a relation to something else - to his creation. The grunt or the 'I as I' is related to itself alone: it causes itself and even God.

Eckhart has thus turned Albert's way of thinking on its head. For Albert, following his reading of the Arabic tradition, the human intellect could become quasi-divine by being filled with intelligible contents which, ultimately, derived from God's own thoughts. For Eckhart, our souls each contain a *grunt*, an 'I as I' which is divine or more than divine, but we can find it only by ridding our intellects of any content at all. (How far, one needs to ask, does Eckhart's mystic enthusiasm take over from his good sense as a philosopher?) Eckhart also promotes a new moral outlook, which fits both his understanding of human intellectual aims and the popular audience to which his German sermons were addressed. Eckhart's ideal is one of poverty, humility and a renunciation which he encapsulates in the word *abgeschiedenheit* ('detachment').

In the work of Berthold of Moosburg (fl. c. 1335–60), the tradition of Albert takes a different shape. Albert was a self-professed Peripatetic, although his Aristotelianism turns out to be heavily influenced, through the *Liber de causis*, by Proclus. By contrast, Berthold is a self-professed Platonist, whose one surviving work is a partial but vast commentary on Proclus's *Elements* of *Theology* (from which the *Liber de causis* is taken). Berthold is especially concerned to contrast the two ancient schools of philosophy, the Platonists and Aristotelians, and to show how the science of being *qua* being pursued by Aristotle and his followers diverges from the theology developed by both the Platonists and Christian thinkers.

2 Henry of Ghent, Godfrey of Fontaines and Peter John Olivi

Henry of Ghent, Godfrey of Fontaines and Peter John Olivi, probably the three best philosophers in Paris at the end of the thirteenth century, provide an instructive contrast. Henry (d. 1293) was by and large a representative of the new post-1277 order of things – appropriately, he had belonged to the theological commission which Bishop Tempier consulted in drawing them up. His membership did not protect him from being required, by the Bishop and the Papal Legate, to clarify what seemed to them to be an over-tolerant attitude towards Aquinas's position on the intellect as the single, substantial form in humans. Obediently, Henry changed his mind and agreed to condemn the view. He was by far the most influential of these three thinkers, setting out a template of theological problems which Duns Scotus would follow almost exactly, and providing the solutions which Scotus and the other thinkers of the early fourteenth century thought most worth discussing. Godfrey, a constant opponent of Henry's, was much closer intellectually to Aquinas and the Arts Masters of the 1260s and 1270s. His ideas were certainly taken seriously, but they did not have the impact of Henry's. Peter John Olivi, a more adventurous thinker than either of the other two, ended with the reputation of a heretic, and it is only recently that scholars have begun to give his thought its true value.

Henry of Ghent

As a secular, Henry did not have to give up his chair to another member of his order, and so he was able to remain a master of theology from 1276 until the year before his death and thus to exercise a large influence over Parisian intellectual life. His work, collected over his lifetime and, in some cases, revised, consists of a long, unfinished collection of *Quaestiones ordinarie* and a large collection of his *Quodlibets*.

In his metaphysics, Henry takes his lead from Avicenna and, in the way in which he shapes and develops ideas from *The Cure*, rediscovers without knowing it the origins of the essence-existence distinction in debate about non-existent things (Chapter 4, section 5). His first distinction is between a being that is in some way possible (*res a ratitudine* – 'a thing from establishment') and an impossible being, such as a chimaera, which has no sort of existence whatsoever, but which we can nevertheless think of in some way, *res a reor reris* ('a thing from "I have a thought of a thing"'). Any *res a ratitudine*, x, is a possible being, and so there needs, in Henry's view, to be some sort of existence which accounts for its possibility and distinguishes it

from a mere *res a reor reris*. He calls this existence *x*'s *esse essentiae* ('being of essence'). Although the *esse essentiae* is prior even to *x*'s existence in God's mind, it is not independent of God. God's creative knowledge of all things other than himself begins with his understanding his own essence and seeing it as imitable in a variety of ways, and in doing this he produces the *esse essentiae*, which he then is able to know. The idea that creation is just one of the ways in which God can be imitated is Aquinas's, but he does not distinguish the set of possible existing things in this way. For Henry, the range of possibles, *esse essentiae*, derives of necessity from God's nature and is grasped by his intellect, whilst his will decides freely which of them actually exist. Something which actually exists has, not just *esse essentiae*, but also *esse existentiae* ('being of existence'), and Henry uses a new type of distinction, midway between one that is real and one that is merely conceptual, an 'intentional distinction', to explain the relationship between these two sorts of being.

Another of Henry's metaphysical positions was his insistence that predications can be made only analogously of God and his creatures. Henry's view is not much different to Aquinas's; though, it is somewhat qualified by the admission that the same concept can appear – though wrongly – to apply in a univocal way to God and his creation when it is known indeterminately. But he makes an important change by linking the discussion with Avicenna's views about being as the subject of metaphysics. Avicenna thinks that we have a notion of a being which we grasp before we grasp the notions of God and of creature, and that this indifferent idea of being really applies to both. Henry rejects this position because it implies that God and his creatures have some reality in common, and his way of explaining and justifying his rejection is through the doctrine of analogy, which thus becomes, in his treatment, principally an analogy of being. And he insists that there are two distinct concepts, the being of God and the being of a creature, which cannot be further reduced and are related by analogy.

Both these aspects of Henry's metaphysics would be starting points for Scotus, who would criticize them heavily and yet borrow much of the shape of his own thinking from them. Henry's treatment of intellectual knowledge also influenced his successor, and it was a subject over which Henry himself seems to have agonized, since his views about it developed during his career. In the earlier part of his career, Henry seems to have held two parallel accounts of how we come to know intellectually the truth of things – a broadly Aristotelian theory and an illuminationist one. By 'the truth of things' Henry means neither the simple apprehension of a particular or a universal, nor knowledge of a proposition. Rather, according to the earlier Aristotelian account (*Summa* q.1, a. 2), I am able (as in Aquinas's theory), using my own mental powers, to abstract an intelligible species from the many particulars of a given species I have seen – the universal Dog, for instance, from Fido, Rover, Sabre and so on: knowing the truth of a thing consists in my comparing

the particular thing – Sabre, for instance – with the universal, Dog. When I consider Sabre as, for instance, a black and tan German Shepherd or a creature that detests green vegetables, I am not grasping the truth of him. I do grasp it, however, when I regard him as a dog and see how he exemplifies the characteristics of the species. But, says Henry, this is still not the 'absolute truth' (*sincera veritas*), which needs to be reached in a different way, set out in the parallel illuminationist account (*Summa* q. 1, a. 3). The absolute truth is only by reference to the ideas of things in the mind of God. The blessed in heaven have direct knowledge of the divine light' can diffuse itself over the species of things and into our minds, so forming a perfect concept in our intellects of the thing itself. The result is to bring together the intelligible species abstracted from particulars and the idea of the thing in the mind of God to form in the mind what Henry calls a 'word . . . perfectly in accord with the truth which is in the thing.'

Henry never gave up his illuminationist theory, but in his later career he concentrated especially on his Aristotelian account, revising it in a way that makes the label 'Aristotelian' no longer appropriate (*Ouodlibet* IV, g. 7; V, q. 14; XIV, q. 6). There had long been a resistance among many theologians (Franciscans especially) to the way in which Aristotle's theory made the human potential intellect into something purely passive, a potency to receive intelligible species. Henry follows this way of thinking and, in effect, removes intelligible species in the Aristotelian sense from his theory. The term, indeed, remains. But Henry divides intelligible species into 'impressed' and 'expressed' ones. Impressed intelligible species turn out, despite their name, to be senseimpressions or capacities in the memory to bring sense-images to mind. Expressed intelligible species do belong to the intellect, but they are produced by it, not impressed on it. I start my process of intellectual cognition from a particular - say Sabre. My active intellect strips my image of Sabre of its individuating features until I arrive at the universal within the image (at one point - Summa q. 58, a. 2, ad. 3 - Henry even speaks of 'a universal sensible image'). Using this still confused universal, the intellect then goes through a process of analysis until it is able to define Sabre properly as a dog and thus produce the expressed intelligible species.

This theory makes it far easier for Henry to deal with the difficult question of intellectual knowledge of particulars than it had been for his predecessors (*Quodlibet* IV, q. 21). Aquinas had needed to posit a tortuous process of reflection on the sense-images on which the act of intellectual cognition was based. For Henry, the sense-image is involved in the intellectual act itself: intellectual knowledge is, indeed, rooted in the world of particulars. Henry also mentions in passing another way of intellectually cognizing particulars, open to God, angels and perhaps to souls in heaven, which is just like seeing them. This idea, more than any other part of Henry's complex theory of knowledge, would be put into prominence by Scotus and later thinkers.

Godfrey of Fontaines

Godfrey of Fontaines (before 1250–1306/9) was another secular Master of Theology who was able to hold his chair for even longer than Henry (from 1285 to 1303–4). The great bulk of his work consists of his quodlibetal disputations.

Godfrey's intellectual orientation is suggested by the great interest he had for the Aristotelianism of Aquinas and the Arts Masters of the 1260s and 1270s, when he was first a student at Paris, as evidenced by some of the manuscripts he donated to the Sorbonne and the works copied in his notebook (from c. 1280). Given this background and direction, it is not perhaps surprising that his views on controversial questions tend to be the opposite of Henry's, and are often explicitly developed in criticism of them. Consider two contrasts that are particularly telling in the context of post-1277 Paris. Whereas Henry followed Bonaventure in holding not only that the world has a beginning but that this fact can be demonstrated, Godfrey accepts Aquinas's position: the world has a beginning, as we know by faith, but reason cannot demonstrate that it does, nor that it does not. And, whereas Henry, with a little encouragement, acquiesced in the condemnation of Aquinas's theory of the intellective soul as a human's single substantial form, Godfrey was strongly critical of all the theories attributing a plurality of forms to a human being. Even despite fresh, explicit condemnation of the unity theory, Godfrey (Quodlibet III, q. 5) insists that both it and the plurality theory are theologically defensible, although he does not go so far as to declare his own support for Aquinas's view, which is what his philosophical commitments would imply.

Godfrey is sharply critical of Henry's central metaphysical distinction between *esse essentiae* and *esse existentiae* and – in a way that anticipates Ockham's attitude to Scotus's formal distinction (Chapter 8, section 5) – of the related idea that there can be distinctions, like this one, which are neither merely conceptual nor real, but intentional (*Quodlibet* III, q. 1). For Godfrey, there are just two ways of existing: either in reality, or in the mind, which is a lesser or diminished way of being. Rather than try to talk about possibilities in terms of a special sort of existence, Godfrey is content with the Aristotelian apparatus of act and potency. Something which does not exist in actuality can be in potency to exist, because there is already matter existing which can be its matter, or already a cause existing which can be its cause.

In his account of intellectual knowledge (*Quodlibet* V, q. 10), Godfrey might seem, unusually, to be close to Henry – or, at least, to the later Henry – because he too manages to do without intelligible species. The universal is simply abstracted from the sensible image by the light of each person's own active intellect. But Godfrey, as might be expected, has no illuminationist account to match Henry's. He is content just to adapt Aquinas's far more Aristotelian theory.

Peter John Olivi

Among the Franciscans at the end of the thirteenth century, there was no shortage of highly-trained, philosophically competent theologians, including Matthew of Aquasparta (c. 1240–1302), a pupil of Bonaventure and Minister General of the Order, and Richard of Middleton (c. 1249–1302). Richard had some interesting, original positions. For instance, when his fellow Franciscan, William de la Mare attacked Aquinas's views on divine prescience (Chapter 7, section 7) by attributing to him – probably wrongly – the view that all things are really present to God in eternity and attacking it, Richard (*Quodlibet* II, q. 1) chose to defend this way of treating God's knowledge. If future things really co-exist with God's eternity, and God's eternity, he says, has two aspects: one co-exists with our present, the other stretches infinitely before and after it. It is only with this latter that future things co-exist.

But by far the most interesting Franciscan of the time was also the most rebellious. Peter John Olivi (1248-98) studied theology in Paris but never received a doctorate. In 1279 Olivi wrote a quaestio advocating an extreme form of Franciscan poverty which, along with some of his eschatological teaching, led to the condemnation of his works in 1282 and his suspension from teaching. Near the end of the decade, under Matthew of Aquasparta, he was rehabilitated, but after his death his work was again condemned (in 1319 and 1326). Mainly for this reason, it is only recently that historians have been rediscovering an acute and original philosophical mind - especially in his large commentary on Book II of the Sentences. Olivi himself, however, would have recoiled from the description 'philosophical'. He went far beyond the reserve which Bonaventure had shown towards Aristotle. Pagan philosophy, in Olivi's view, could not be expected to have achieved much, because its authors were so deeply misled about the nature of the world and of humans. In practice, Olivi makes full use of the technical apparatus that study of Aristotle had brought to trained theologians, but he is willing to reject fundamental Aristotelian doctrines, which his contemporaries and immediate predecessors put at the basis of their thought.

On cognition, his views (cf. especially *Commentary on Sentences* II, qq.58, 72, 73) are particularly unusual. Unlike Bonaventure and most of the next two generations of Franciscans, he has no place for illumination in his account, and no serious role for the ideas in the mind of God, which are emptied of all content. But otherwise in this area the direction of his thinking is characteristically Franciscan, but pursued it to its ultimate consequences (the same might be said about his views on poverty). As already mentioned, ever since Aristotle's theory of cognition started to be absorbed, the Franciscans had tended to react against its picture of the human mind as largely a passive receptor and stress its powers to act. Olivi goes much further and denies that the objects known are any more than the final cause of the cognition. The efficient cause lies in the human soul itself. A result of this view was that sensible and intelligible species could not play the part they did in his contemporaries' accounts of cognition, since there they act as partial efficient causes. In any case, he would not accept that species could act, in the way that Aquinas and many others held, as intermediaries through which things in the real world are known. Grasping the species requires focussing attention on them which would make *them*, he contends, the objects of knowledge. Olivi holds that, through our cognitive acts, we know things in the outside world; and our basic intellectual knowledge is of particulars, not, as in the Aristotelian theory, of universals.

Olivi's thinking about the will anticipates one of the dominant strands in fourteenth-century thought. He gives a vivid account (Commentary on Sentences II, q.57) of how almost all aspects of what distinguish human life from that of non-human animals - not merely moral judgement, but friendship and deliberation - depend on our having free will; and he insists that this freedom means that the will is absolutely undetermined. Nor is it enough to say that, at instant t^1 the will has the power to choose or not choose to ϕ at the next instant, t². Olivi wants to insist (ibid., ad 10) that at instant t² itself the will can choose or not choose to ϕ at t², and that although there is only one instant of time involved, there is a priority of nature between its choice of will at t^2 and its acting in accord with it at t^2 . Olivi argues that if, in some way, the will loses its freedom to ϕ or not to ϕ at t² when passing from t¹ to t^2 , then it is not in fact free with regard to how it acts at t^2 . The synchronous non-Aristotelian conception of modalities that underlies this account and is strongly suggestive of the modal innovations for which Scotus would be celebrated (Study L) is extended also to God's willing, although Olivi is unhappy to describe divine volition as being 'contingent'; rather, it is 'free'.

3 Duns Scotus

In the traditional historiography of medieval philosophy Duns Scotus is seen as second in importance only to Aquinas. So far as the Latin tradition in the Middle Ages is concerned, this judgement is an underestimate. Although he remained an influential figure, who would be revived and be placed in a preeminent position by the end of the medieval period, Aquinas's achievement was very firmly rooted in the special circumstances of the 1250s–70s, the first, eager attempt to come to terms with the whole range of Aristotelian thinking. Scotus, who was born in 1265 or 1266, developed his thought against the more sober background of post-1277 theology, the generation of Henry of Ghent, the thinker against whom, more than any other, he defines his own positions. He was a highly academic thinker, entirely at home in and happy with the bounds and methods of university theology as he found them, and yet he introduced from within a series of new theories which transformed almost every aspect of theology and its philosophical bases. The sections below examine some of his most important innovations: the univocity of being and his theory of universals; intuitive cognition; the nature of possibility (in Study L) and how it affects his view of providence, human freedom and morality. These topics are, of course, merely a selection of some of those which fit most with the philosophical themes discussed in this history as a whole. Scotus, like his contemporaries, was a professional theologian, and much of his metaphysical apparatus was designed to help in resolving problems peculiar to Christian doctrine. For example, the formal distinction, discussed below, was particularly useful in explaining the relations between the three persons of the Trinity.

Life and works

For so influential a thinker, surprisingly little is known about Scotus's life. He was born in 1265 or 1266 at Duns in Scotland, joined the Franciscans and studied theology in Oxford where, shortly before 1300, he commented on the *Sentences*. He was then sent to Paris, where he again lectured on the *Sentences* and became the Franciscan regent master in theology in 1305. At some stage – perhaps in 1300, perhaps in 1303–4 (when he and other Franciscans who supported the Pope were required to leave France) – he also apparently lectured at Cambridge. Probably in October 1307 he was sent to teach at his order's house of studies in Cologne, where he died the next year.

It was in lecturing on the *Sentences* where, above all, Scotus developed his philosophical and theological views, and it is through the written versions of these lectures that we know his thought most fully. Scotus lectured on the *Sentences* at least twice, in Oxford and then in Paris. His original text for the Oxford course on Books I and II survives (the *Lectura*), but far better known is the *Ordinatio* of these lectures (sometimes known as the *Opus oxoniense*), on which he worked sporadically for the rest of his life, and which was not quite complete when he died. Records of the Paris lectures are preserved by a number of *reportationes*, some published, some not. Among Scotus's other important works are quodlibetal questions, dating from his time as a Master in Paris; some, probably early, commentaries on Aristotelian logic; a commentary on Aristotel's *Metaphysics*, composed at different times in his career and an *Exposition* of the same text; and the treatise *De primo principio* ('On the First Principle' – a proof of the existence of God), partly based on the *Ordinatio*. The authenticity of a commentary on Aristotel's *On the Soul* is disputed.

Scotus's distinctions

At the base of a whole series of Scotus's innovations are two closely related types of distinction which he introduces into his thinking: the formal distinction and the modal distinction.

When we distinguish between two things, *a* and *b*, we usually have in mind what medieval thinkers called a 'real distinction': *a* and *b* are two, numerically

different things – my desk and the bottle of whisky standing on it, or that bottle and the identical bottle in my cupboard. But we also sometimes make merely conceptual distinctions – what were called distinctions 'by reason': for example, the Morning Star and the Evening Star are conceptually distinct – one is the star we see in the morning, the other the star we see in the evening – but they are in fact one and the same thing, the planet Venus. Distinctions by reason are due just to how something is conceived. Scotus contended that there were two other sorts of distinction we can make that have a basis in reality, rather than just in how we think, but are none the less not real distinctions.

Suppose that *a* and *b* are really identical (Scotus's criterion is that it is logically impossible that *a* and *b* should be separated) but they have different definitions or characterizations. Scotus will say that *a* and *b* are 'formally' distinct and (in some works, at least) he calls entities like *a* and *b* formalitates or realitates. He justifies the distinction by arguing that if *a* and *b* are truly defined or characterized differently, then there must be something in the nature of things to distinguish them. Yet, although Scotus's formal distinction merely makes explicit an idea that had often been used by others before him, it is clearly open to attack for incoherence (Chapter 8, section 5).

The idea of a 'modal' distinction is related. When I go to choose the paint for my study, I look at a variety of sample patches, all of which are red, but vary from a very bright, overwhelmingly powerful shade to one, more to my taste, in which there is just a hint of redness. All the patches share the nature of being red, but they have it differently. Abelard would have considered the brightness of the red a separate accident to the accident of redness, but thirteenth-century physicists would have spoken in terms of the intension or remission of the same form of redness. Scotus takes their theory and generalizes it, so that being itself can be described according to what he calls its 'intrinsic modes' of finite and infinite being. The modal distinction between an attribute and its intrinsic mode is very similar to that between two formalities: it is based on reality, but does not make what are distinguished into two different things.

Metaphysics: univocity and universals

It is the modal distinction that will enable Scotus to follow through one of his most distinctive positions: that being is univocal between God and his creatures. Scotus follows Avicenna's view that the subject of metaphysics is being *qua* being, and he takes over from him the idea that we grasp a notion of being which is indifferent as to whether it is divine or creaturely. But these theses serve a different purpose for him than for his predecessor. For Avicenna, to see metaphysics as the science of being, and to be able to envisage being indifferently, was a way of saving the subject from being *kalâm* by a different name (Chapter 4, section 5). For Scotus this understanding of metaphysics was

a way of making it provide an integrated approach to one branch (what we would call 'natural theology') of the wider theological enterprise to which his life was devoted: integrated, because God and his creatures could all be seen in terms of a single notion. Scotus's position – as so often in his work – deliberately reverses Henry of Ghent's (Chapter 8, section 1). Henry used a theory of analogy to justify the irreducibility of divine and creaturely being to any one, single concept. Scotus's view that there is a single concept of being means that he must, as he does, propose a theory of univocity. He is willing to accept that we do indeed have many concepts of God that are analogous to our concepts of creatures, but not that this is the only relation possible.

In favour of an indifferent concept of being, which is univocal to God and his creatures, Scotus argues:

- 1 I cannot be certain and doubtful about one and the same concept.
- 2 I can be certain that God is a being, but doubt whether he is an infinite being or a finite being.

Therefore

3 The concept of being is not the same as the concept of finite or infinite being.

And so

4 There is a concept of being different from that of finite or infinite being (and it is common to both).

This argument seems dangerously close to the fallacy of the Masked Man (I know my father but I don't know the man in the mask; so the man in the mask isn't my father), but it was thought by Scotus and his contemporaries to be a strong one for his position.

The univocity theorist immediately faces the problem of how to preserve the distance between God and his creatures – a distance which Scotus tended to put in terms of the disjunction between infinite and finite being. For Aquinas, God's infinity, just like his perfection (Chapter 7, section 5) was the result of his simplicity (ST I, q. 7, a. 1). Since God is simple, there is nothing to limit his pure form, and so he is infinite. But Scotus has a different way of conceiving infinity. It is not just the lack of a limit, and so simplicity alone will not guarantee it. Rather, infinity of being should be understood along the lines of the intrinsic mode of a perfection. Now, an intrinsic mode is not really distinct from its attribute, but it is modally distinct from it. And so Scotus can at once say that being is the same notion, whether it is infinite or finite (because the intrinsic mode which makes it so is not different from it), and yet that the difference between infinite being (God's) and finite being (his creatures') is based in reality, and so the gulf between creation and Creator remains.

In another central area of metaphysics, the problem of universals, Scotus's answer (Ord. II, d. 3, pt. 1, qq.1-6) depends on his idea of the formal distinction. Scotus's starting point is Avicenna again: here what he uses is the idea (Chapter 5, section 6) of common natures which are neither particular nor universal, such as mere horseness. But he does not seem to accept the clever solution which Avicenna then proposes, but, rather, argues that a principle of individuation is needed to explain how Black Beauty, who is a horse due to the common nature of horseness, is this individual horse. Rejecting various other possibilities, including individuation by matter, Scotus decides that there must be a 'thisness' (haeceitas - but he rarely uses the word, preferring to speak of a something's 'singularity') which differentiates this particular horse from all other horses and is formally, but not really distinct from the horse's essence. He compares these individualizing elements (which should be sharply distinguished from accidental features that happen as a matter of fact to mark out Black Beauty, such as the particular slant of her nostrils) to the differentiae at the bottom of Porphyry's tree which distinguish one species from another. In effect, Scotus has changed the Aristotelian picture Porphyry summarized and which had been accepted in the whole Aristotelian-Neoplatonic tradition, bringing within the scope of his theorizing the 'infinity of individuals' which, until then, had fallen beneath the philosopher's field of vision, focussed on universals and beginning with the most specific species. In his theory of cognition (below), Scotus would respond to this new importance given to the individual in his scheme of things.

Being, the transcendentals and God's existence

Scotus's view that being is predicated univocally and divided into its intrinsic modes of finite and infinite being is at the basis of how he develops the doctrine of transcendental attributes. Thirteenth-century thinkers already recognized a set of attributes which are co-extensive with being and so do not fit into the scheme of Aristotle's Categories, such as unity, goodness and being-an-entity or being-a-thing (Chapter 7, section 3). To these Scotus adds disjunctive attributes, such as necessary-or-contingent, actual-or-potential, infiniteor-finite. This list, which is really just a way of thinking about being, can be extended indefinitely. The most important member of it is 'infinite-or-finite', since it is used to articulate the relationship between univocal being and the Aristotelian categories. Being divides into the infinite (God) and the finite (God's creatures), and then finite being divides into the ten categories. Scotus also includes as transcendentals what he calls 'pure perfections', a group of attributes which are not co-extensive with being, but range across all beings in the sense that any being of whatever sort which has such a perfection is the better for having it. Whereas, for instance, fatness might be a perfection for

pigs, it clearly is not for dogs, humans or angels; but wisdom, although not possessed by everything, makes anything that does possess it more perfect, and so it may be considered a pure perfection. With Scotus's expanded theory, metaphysics becomes – as it would remain, until and including Kant – the study of transcendentals.

The division between finite and infinite being can also be seen at the basis of Scotus's highly complex proof of God's existence, which is set out in several places, including the *Ordinatio* (I, d. 2, q. 1) and *De primo principio*, a shortish treatise devoted to it. Scotus divides the argument into two sections. In the first, which takes and adapts a scheme of Henry of Ghent's, he shows that there is a being who is supreme in three respects (the so-called 'triple primacy') – it is the cause of everything else (efficient and formal causality); it is the end which everything seeks (final causality); it is most perfect (preeminence). In the second section, he mainly concentrates on showing that such a supreme being must be infinite.

Despite its extraordinary complexity and detail, the central thread of argument which echoes through each of the sub-divisions of the first part of the proof is the same as the underlying structure of Aquinas's Five Ways (Study H). Scotus tries to show that, as well as accidentally ordered chains of cause and effect, there is at least one that is ordered *per se* or, as he calls it, 'essentially', and, whilst accidental chains can extend to infinity, essentially ordered chains cannot. The most innovative aspect of this argument is perhaps Scotus's claim that it is entirely metaphysical and not, like previous cosmological proofs, based on any matter of contingent fact (see Study L). In the second part, Scotus offers a choice of arguments to show that the most perfect must be infinite: the simplest and most effective is just that, since a being can be infinite is greater and so more perfect than what is finite, a being that was not infinite would not be perfect.

Intuitive and abstractive cognition

Intellectual cognition was an area where the Aristotelian tradition's focus on the universal was particularly striking. The highest form of human cognition was considered to be that by the intellect and, since it was considered to consist in the reception of universal forms and the elaboration of a structure of knowledge on their basis, there was no obvious place for intellectual knowledge of particulars. This gap (as Aquinas's treatment illustrates: (Chapter 7, section 5)) was awkward for Christian theologians; Scotus, with his rehabilitation of the individual for philosophy, fills it. He accepts the apparatus of the Aristotelian theory of sensible and intellectual cognition, calling it 'abstractive cognition', but postulates another type of cognition too, which he calls 'intuitive' (a name that would call up the idea of knowing something by seeing it). Such an idea was not entirely new: Matthew of Aquasparta (c. 1240–1302) and Vitalis of Furno (c. 1260–1327) had used the term to refer to the soul's knowledge of its own acts; Henry of Ghent had allowed God and angels, at least, a way of intellectually knowing particulars by seeing them. But does Scotus develop it in his own way?

Scotus distinguished, as explained above, between a thing's essence (Black Beauty's horseness) and its singularity, which makes it this, particular horse. He does not think ([Commentary on] Metaphysics 7, 15, nn. 5-7) that we can have cognition in this life of the singularities of things (which would mean that we could tell apart two absolutely identical sheets of paper). But, although Scotus rejects the real distinction between existence and essence (possibly it is not clear – he sees it as a formal one), he recognizes the difference between cognizing something in its actual existence or not. To cognize something not in its actual existence is to know it abstractively: memory is a type of sensible abstractive cognition, as when I call to mind an image of Black Beauty. But when I look at Black Beauty standing there before me, it is intuitive sensible cognition, and Scotus holds that there is the same pair for intellectual cognition: abstractive cognition is knowledge of universals according to the Aristotelian theory (I grasp the universal horseness), but in intuitive intellectual cognition I intellectually grasp a particular as actually existing and present, in the same way as I do sensibly, when I see it in front of me.

Later thinkers, such as Ockham (Chapter 8, section 5), would use Scotus's scheme of abstractive and intuitive cognition as their main model for discussing intellectual knowledge. But Scotus himself usually talks about intuitive intellectual cognition in connection with disembodied souls, human or angelic, and he remarks explicitly (*Quodlibet* 6, n. 8) that, whereas we are sure about abstractive cognition. It might seem that Scotus's position was not far different from Henry of Ghent's in this area. Yet there are grounds for thinking that Scotus did in fact take intuitive intellectual cognition as a normal procedure in this life, accompanying our acts of abstractive cognition, but far less apparent to us than they are. We can show that these acts of intuitive intellectual cognition must take place by considering the phenomenon of intellectual memory (*Ordinatio* IV d.45, qq. 2–3).

'Memory' here needs to be understood in a strict sense, which excludes the mere ability to bring a universal to mind, as when I 'remember' a universal, bringing to mind, for instance, the definition of human as rational, mortal animal. Memory must have as its proximate object something that is past. Although our intellectual acts (so we must assume, lacking any certainty so far about intuitive cognition) concern what is universal and cannot therefore be past, we can remember our own past act of intellectual cognition. Thus I remember, in the strict sense, my cognizing the universal human; whilst this universal, the ultimate object of the act of memory, is timeless, my act of having cognized it, the proximate object, is past. And this sort of strict-sense memory seems to belong to the intellect, not the senses, because it is about an

act of the intellect. It cannot be accounted for by the intelligible species, human, by which I have knowledge of the universal. Rather, given that we do in fact remember intellectually in the strict sense, we must postulate that another intelligible species which accounts for this memory is imprinted in us at the time of the act of cognition, and it must be imprinted under the conditions of intuitive knowledge, as actually existing and presenting, otherwise it would not provide memory of that past act. Scotus has therefore established, through the phenomenon of intellectual memory, that we do indeed engage in intuitive intellectual cognition of our own acts of intellectual cognition. But he goes further. The only sort of memory disembodied souls can have is intellectual, and so, if they are to have memory of their perceptions during life, it must be accounted for by intelligible species. Scotus therefore considers that each of our acts of cognition, sensible and intellectual, is accompanied by an intuitive intellectual cognition of it. His theory is thus sharply different from Henry's, although nearer to Matthew of Aquasparta and Vitalis of Furno than some scholars will accept.

Interlude x: Scotus, the King of France and the Jews

In 1303 Scotus was required to leave France, along with the other friars who refused to take Philip the Fair's side in his dispute with the Pope, Boniface VIII. The choice was by no means an obvious one. Only a narrow majority of the Franciscans in the Paris convent sided with the Pope; Scotus's close disciple, William of Alnwick was one of those who chose to stay. A recent study (Marmursztejn and Piron, 2005) has suggested that Scotus's motive may have been less loyalty to the Pope than to the English King, Edward I, and that behind that loyalty lay a special approval for King's policy towards the Jews.

In 1290, Edward expelled the Jews from England. Scotus, who was at that time studying theology in Oxford, could not have failed to be aware of the event, especially as there was a Jewish community in that town. In his Commentary on the *Sentences* (IV, d. 4, q. 9), Scotus takes a very unusual position on the baptism of Jews. There were, by his time, Jews living in most of parts of Northern as well as Southern Europe. Nominally, at least, they were under the Church's protection, and though attempts might be made, often not without a more or less open threat, to convert them, the argument that Jewish children below the age of reason should be forcibly removed from their parents and baptized, for their own good, was usually firmly rejected. Aquinas, who was the first to introduce the topic into theological discussion, explains that children below the age of reason belong to their parents and that to

baptize them against their parents' will, even though it would be for the children's good, would go against natural law, because it would inflict an injury on the parents.

By contrast, Scotus argues not only for the forcible removal and baptism of Jewish children, but also – a position unique among theologians – for the forcible baptism of their parents too:

I believe the ruler would be acting in a religious way if he compelled the parents with threats and menaces to receive baptism and to preserve <their new faith> once they had taken it; because, even though they would not all be true believers in their souls, it would still be better that they should not keep their illicit law with impunity, rather than be able to keep it freely. Also, their children, if they were well educated, three or four generations on would truly be believers.

To the objection that the Jews should be allowed to keep their religion because of Isaiah's prophecy about the conversion of the Jews at the end of the world, he answers that it does not require 'so many Jews, in so many parts of the world, for so long to be left to persist in their law.' It would be enough to shut away a few of them in an island somewhere.

Is Scotus, as Marmursztein and Piron suggest, writing here as an enthusiastic apologist for Edward's Jewish policy, since what Edward did is the course of practical action Scotus's comments would suggest to a ruler: give Jews the choice to convert or leave? At any rate, the contrast between his stance and Aquinas's is telling.

Possibility, providence, human freedom and morality

Before Scotus, the main model of possibility and necessity used by philosophers in both the Latin and the Arabic traditions was the Aristotelian one, in which modalities are analysed in terms of temporal frequency. As the chapters and studies above have made clear, although this model was dominant, it was not unique: possibility was also considered in terms of the potencies of things, and in terms of causal dependence. Still, Scotus was the first philosopher to spell out very clearly and insist on one of the most important elements of a non-temporal theory of modality – the idea that the present is not necessary: I am sitting now, but it is possible that I am standing now. Study L will examine in more detail Scotus's exposition of this view and what does, and does *not*, follow from it about his modal innovativeness. In whatever way it should be precisely construed, Scotus's position on possibility had very important consequences for his views about divine providence and human freedom.

These consequences emerge in the light of how he conceives God as knowing the universe, and his way of contrasting intellect and will. Through knowing himself God necessarily knows all necessary truths and also all contingent possibilities - in today's language (though he does not put it like this: see Study L) – every possible world. But which of these contingent possibilities are truths? Like most thinkers, going back to Boethius and before, Scotus will not allow that God's knowledge of contingent events is caused by the events themselves. Rather, God's knowledge of contingent truths is based on the knowledge of the free decisions of his own will, which determines which possibilities will be actual. In Scotus's view, intellect, whether in God or humans, is a natural power: it simply grasps what is the case; there is no choice for it exercise. By contrast, will - in a way that is obvious, he contends, from introspection and cannot be further explained - is radically free to choose between alternatives. Consider, then, God's intellect. It knows every possibility - Scotus seems to envisage them set out as a series of disjunctive contradictions: 'Either X or not-X' (Lectura I, d. 39, gg. 1–5, §§ 62–3). His will chooses which alternative in each disjunction is to be true, and his intellect knows what his will has chosen. But the process is not, as the description here makes it sound, a temporal or discursive one: Scotus is at pains to stress that each of these stages really constitutes a single, timeless divine action, and he sometimes speaks about them in terms of 'instants of nature' - a term of art which enables him to divide up as prior and posterior elements that have no temporal ordering.

The way the world is, therefore, results from the choice of God's will among the infinite alternative possibilities. If the divine will were necessary in its choices, then everything that happens would happen of necessity. On an Aristotelian model of necessity, this consequence seems inevitable: God, Scotus held, is timelessly eternal, and so whatever he wills in the timeless present of its eternity would be what he must necessarily will. Scotus's clear understanding of the contingency of the present allows him to avoid this conclusion, which would, in any case, rob God's will of what he considers the essential characteristic of any will. But he is faced by another, equally serious problem: God's ordaining, even contingently, of which possibilities are to be actualized threatens to remove from humans the freedom which Scotus makes the basis of his account of morality.

We naturally desire happiness, Scotus (like Aquinas) believes. But we have another inclination, too: towards justice. Scotus's account of the moral life depends on our being able to choose to follow the inclination towards justice rather than that towards happiness when they clash, and the instrument of this choice is our will. When it makes its choice, reasons can be given for why it should follow one or the other inclination; but the choice itself is radically free, Scotus believes. But how can it be free, when God chooses which possibilities are to be actualized? That *God* chooses contingently does not remove the problem, because it is the freedom of human choice that is at issue. A marionette whose strings are controlled by the changing whims of a puppet-master is no more free to choose how he moves than one whose strings are controlled by a machine, operating according to pre-established plan.

Scotus does have an answer to this line of objection. He considers that human actions are the joint result of the causality of the human agents and God. But God is not seen as a direct cause of the human will's acts. As the first in an essentially-ordered series of causes, God is, rather, responsible for the agent's causality itself: so the human will acts, and it is due to God that the human will is able to act. On this basis it is possible to argue, on Scotus's behalf, that so long as God's knowledge of our future is timeless and so is not past and therefore fixed in relation to our acts, humans are not reduced to the condition of puppets on divine strings (Normore, 2003, 138-9, 144). But, for this defence really to succeed, it would have to limit God's causation of our wills to his having given us wills to use freely; if this were so, God would gain his knowledge from our freely-chosen acts - a position Scotus would certainly reject. As it is, his theory does make it true that when we will x that we might have willed not-x, and it allows us to go through the process of willing, in which we choose between *x* and not-*x*. Yet the final explanation for why we will x rather than not-x lies in the first cause, God. In short, Scotus's account of freedom is far nearer to compatibilism than he would have liked.

Study L: Scotus on possibility

Scotus develops his conception of possibility in answering the question about divine knowledge of future contingents posed in Book I, Distinction 39 of the *Sentences*. This section is missing from the main text of the *Ordinatio*, although a version probably compiled from more than one lecture-course of Scotus's circulated in the manuscripts. But the *Lectura*, his own first formulation of his position, makes the argument particularly clearly.

First (\iint 31-7) Scotus argues against what seems to have been Aquinas's position. Aquinas was happy to allow God to cause in a necessary fashion, because he thought that contingency could be introduced into what happens by secondary causes. Scotus points out that, since secondary causes depend on the first cause, if the first is necessary, they will be necessary too. If there is to be any contingency, it must therefore come from the first cause. Nor can it come from God's intellect, since Scotus considers that intellects act (in themselves) necessarily, and so the source of contingency, if there is contingency, must be God's will. But here there is a problem, so obvious that Scotus leaves it unstated. On the Aristotelian understanding of possibility usual at his time, the present is necessary. If a being exists, as Scotus thought about God, in an eternal present, then whatever his will is, it must be; for it to be otherwise would, on this temporal view of possibility, require at least two instants and so divine eternity would have

to be temporally divided. Scotus tackles this difficulty by turning to the human will – something we can understand better than the divine one – and considering its powers.

It is a defining characteristic of a will that it can will different objects. I can will to go on writing this sentence, or to stop writing it and concentrate instead on the Beethoven sonata playing in the background. An obvious way in which 'this possibility and contingency' manifests itself is in time ($\S48$). Five minutes ago, I was willing to go on writing; now, too taken by the beauty of Op. 109, I will to stop and listen to Sviatoslav Richter. But there is another way, too, in which our wills are contingent. First (\$49) Scotus explains what he means by a possibility (*potentia*) which is merely logical. There is a logical potency when terms can be put together without contradiction, even when there is no real possibility. The example Scotus gives is the proposition 'The world can exist' (*Mundus potest esse*) said before the world existed: it would have been true – because there is no contradiction between the world and existing – although there was nothing in reality to which it referred.

Scotus goes on (§50) to discover this logical possibility in the workings of the will. Take a given instant, t': if the will wills x at t', there is no real possibility of its not-willing x at t^1 (to that extent, the Aristotelian necessity of the present is correct). But there remains the logical possibility. Scotus supports his claim by considering a will which existed just for one instant. Since it could not be an essential feature of the will that it should will (say) x at that one and only instant of its existence, but merely an accident, it cannot be a contradiction to suppose that, instead, it not-willed x. Therefore there is the logical possibility that it should not-will x. And, Scotus continues ((51)), there is a 'real power' that corresponds to this logical possibility. His reason for this assertion seems to be that, without such a real power, no willing could take place and so what has been established to be a possibility would not be possible. The human will, therefore, has at any moment, a real power for opposites: to will x or to not-will x. In a way that ties his discussion nicely to the twelfth-century debate (Study G), although he cannot have known it directly, Scotus explains his point in terms of the different analyses of modal propositions. In the composite sense, the proposition 'The will willing at t' can not-will at t'' is false, because it would mean: 'The following is possible: at t' the will wills and does not will'. In the divided sense, however, it is true. This is not because we have to substitute the weaker 'The will wills at t', and it is possible that at t² it does not will', but because we can also assert 'The will wills at t¹, and it is possible that it does not will at t¹', since the will is willing *freely* at t¹.

The application of what Scotus has discovered to God's will is obvious. God's will is not contingent in the first way that created wills are contingent: it cannot will x and then not-will x. But the single will which God has in eternity might have been different – he might eternally not-will rather than will x – in the second way that has just been explained.

Although the step taken here had been partially anticipated by Gilbert of Poitiers (Study G), Scotus argues for and develops his point in a way that had not

been done earlier. His awareness that he is thereby instituting a new way of regarding possibility is indicated by his willingness to change the accepted rules of *obligatio* (an argument-game used in the Arts Faculties: Chapter 8, section 8). According to them, if a supposition about the present instant is put forward which is false, it must be rejected as impossible: Scotus unceremoniously discards the rule. And the discussion above shows how central contingent causation is to Scotus's thinking about providence and human freedom. There are, however, important reservations to be made, both about the coherence of Scotus's position and about its closeness to the way in which modality is treated by analytic philosophers today.

Scotus would not have been content to have established the purely logical possibility that God might have willed otherwise than he does. He needed to take the further step of establishing that there is a real power for him to will otherwise. But it can be questioned whether powers should be treated as if they were datable to this or that instant (Kenny, 1986). It may be that to speak, as Scotus's argumentation requires, of a real power *at t*¹ is simply ungrammatical. Or, to argue along the same lines as Ockham (Study M), it might be a contradiction in terms to posit a real power to act in a way in which, *ex hypothesi*, the agent never will act: in what sense is such a power *real*?

Since the 1960s, modal logicians have used a semantics which, in nontechnical language, is best represented in terms of possible worlds. The modal status of a proposition depends on which possible worlds it is true of: if it holds true of at least one, then it is possible; of all, it is necessary; of none, it is impossible. And if it holds true of the actual world, then it is (simply) true. Scotus never uses the phrase 'possible world', but the term was coined by Scotists in the early modern period and then taken up by Leibniz, from whom the modern logicians adopted it. Scotus's own treatment of modality is, however, still a long way from Leibniz's, let alone from that of contemporary logicians. Rather than thinking in terms of truth at possible worlds, maximal collections of compossible states of affairs, Scotus considers whether or not the terms of a proposition are contradictory or not; and his conception of contradictoriness (repugnantia) is far wider than a modern idea of logical impossibility - for instance, a goat-stag would, for him, be contradictory and so impossible (Normore, 2003). Moreover, Scotus is not simply interested in charting logical possibilities, but in considering the real potencies of things: in this respect, he is not so far removed from one of the Aristotelian models after all.

These observations are supported by one of Scotus's most important innovations in his arguments for God's existence (cf. Chapter 8, section 3 above). Cosmological proofs had always started from an obvious fact about the world, such as that something changes or is caused or decays. Their first premiss, therefore, is contingent, and so they are not, strictly speaking, Aristotelian demonstrations. Scotus believes, however, that he can recast his argument into a strictly demonstrative form by making the first premiss not a statement of (contingent fact), but one of possibility. Rather than say 'something is caused', he will say 'something can be caused', which is a necessary truth (because there is no contradiction between the concept of a thing and that of being caused). Such arguments will lead to the conclusion, not that a supreme being exists but that it possibly exists. But Scotus believes he can add the needed further steps.

The supreme being, he considers, is among other things the first efficient cause. If it is the *first* efficient cause, it cannot be caused by anything else, and so its existence is from itself (*potest esse a se*). Scotus believes that such a being, if it can exist, does exist necessarily (and therefore actually exists). The main reason for accepting this view (putting aside a question-begging argument in *De Primo Principio* 3.22) seems to be that if there is something that can exist of itself, without requiring anything else, then how could its non-existence be explained? Whatever the strength of this consideration, it is obviously alien to contemporary ways of looking at possible worlds, in which no explanation is required for the absence from a possible world of anything except what is logically required by the other things in that world.

* * *

4 Between Scotus and Ockham

In the first two decades of the fourteenth century, there was a profusion of well-qualified, sharp-minded theologians in Paris and Oxford. The Dominican and Franciscan educational machines sent their brightest young men, already highly trained in logic and the Aristotelian sciences, to Paris to lecture on the Sentences and succeed, though only for a couple of years, to one of their chairs. Other mendicant orders, such as the Carmelites and Augustinian Hermits, had their masters too, and there were also some secular theologians. Although there was the phenomenon of lecturing secundum alium, where a teacher simply and uncritically followed a leading figure (such as Scotus), most of these men produced substantially their own answers to the whole range of theological problems covered by the Sentences and the many related philosophical questions. In doing so, the tendency would be for a teacher to follow broadly in the steps of one of the great, original synthetic philosophertheologians of the previous two or three generations, contributing his own twists and developments and, often, responding to recently made criticisms of the view.

Such affiliations were frequently linked to membership of an order. So one of Aquinas's strongest defenders was an Oxford Dominican, Thomas of Sutton (1250–1315). Another Dominican, Hervaeus Natalis (1250/60–1323), who lectured on the *Sentences* at the turn of the fourteenth century and became head of the order, carried on the Thomist tradition. His Thomism was very much an interpretation of Aquinas, adapted in the light of developments

since 1270, especially the work of Scotus. Since 1309, Dominicans had been obliged by their order to favour Aquinas's doctrines, and Hervaeus was determined to make his Thomism the Dominican orthodoxy.

The early Scotists were, as might be expected, Franciscans. William of Alnwick (*c*. 1275–1333), who lectured on the *Sentences* in Paris in 1314, had probably acted as Scotus's secretary. Although not wedded to all Scotus's views, he was especially keen to defend him against the successive waves of criticism in the 1310s and 1320s. Another Franciscan, Hugh of Newcastle, who taught in Paris in the 1320s, provided a clear presentation of Scotus's ideas; another, Francis of Meyronnes (*c*. 1288–1328), who lectured on the *Sentences* in Paris in 1320–1, defended most of Scotus's views and developed especially his idea of the 'formalities' which are distinguished by his formal distinction.

Not all members of an order followed its doctrinal line. Durandus of St Pourçain (1270/5-1334) was a Dominican, who in 1307/8 composed a commentary on the Sentences, probably based on lectures he had given at a studium somewhere, which began to circulate, perhaps without his permission. The teaching in it differed on many points from the standard Dominican adapted-Thomism. A distinctive feature of Durandus's views concerned what might seem to be a merely technical issue, about relation. Relation is one of the Aristotelian Categories of accident, and medieval thinkers usually conceived relation not, as modern logicians do, in terms of a two-place predicate (----- is the father of ------), but as an accident inhering in a foundation. If John is Maximus's father then a relationship of fatherhood inheres in John as its foundation. But what is the ontological standing of such an accident? Aquinas, at least on the reading that Hervaeus Natalis was making standard for the Dominicans, allowed it only a 'diminished' existence and considered that it is not really distinct from its foundation. Durandus argued in a way that might seem to have lessened the reality of relational accidents even more, contending that they are merely a way of their foundation's existing. But to this he allied the contention that this way of existing as just a way of something else existing is absolutely distinct from the sort of existences which substances or accidents of quantity or quality have. As a result, Durandus concluded that relations are really distinct from their foundation. This view on an apparently small matter of philosophy had enormous repercussions on the theology of the Trinity, since it implies that the Trinitarian relations are distinct beings from their foundation, the divine essence, and so compromises divine unity. Although, when he lectured on the Sentences properly at the University of Paris, Durandus removed the anti-Thomistic ideas from his text, the Dominicans, led by Hervaeus Natalis, were not satisfied and condemned him twice. But Durandus remained a favourite of the Pope's, and once he had become Bishop of Meaux in 1326 he issued a third recension of his Sentences commentary in which he reverted to many of the controversial views he had put forward in the first version.

The outstanding thinker of this period, however, was undoubtedly Peter Auriol (c. 1280–1322). Although a Franciscan, Auriol was not a follower of Scotus, but rather an original philosopher, whose positions produced controversy both in his time and much later. He began his lectures on the *Sentences* in Paris in 1316, but before then, while lecturing to the Franciscan *studium* at Toulouse, he had already produced most of a first commentary on Book I of the *Sentences* (the *Scriptum*). Auriol devised theories about a whole range of metaphysical and epistemological issues; two of the most interesting are about intellectual cognition, and God's knowledge of future contingents.

Most philosophers and theologians since the 1250s had explained intellectual cognition using the notion of intelligible species (Chapter 7, section 5). My thought of (the universal) Horse is a thought of Horse (and not Dog, for instance) because in it my potential intellect is informed by the intelligible species abstracted from the sense and memory-images (phantasmata) which have been the result of my sense perception of horses. Proponents of intelligible species did not believe that the species are *what* we think, but *that* through which we think of things. But (like Olivi: Chapter 8, section 2) Auriol (Scriptum d. 27, pars 2, Resp.) did not accept that their theory allowed such a move. In his view, the intelligible species theory - and a variety of other related theories, which posit some mental or imaginary thing as an intermediary between things and our completed thoughts - lead to unacceptable conclusions. For example, the proposition, 'The rose is a flower' will be false, because the two intermediary entities (say, the intelligible species of rose and the intelligible species of flower) are not the same; moreover, we will never know intellectually anything but our own mental contents. Instead of the passive model of cognition, in which the intellect has to be acted upon from outside by an intelligible species, Auriol, in line with a recurring theme in Franciscan thought, offers an active one. He looks to the example of the senses, where he points to phenomena such as after-images and to the way in which, by whirling a stick quickly enough, one can make a circle appear in the air (had he known it, Auriol would have used the example of cinematic animations). These, he considers, show that the senses have put the object regarded into a special mode of being, apparent being (esse apparens), in which it seems to be other than it really is. Similarly, he says, the intellect puts its objects into esse apparens or 'intentional' or 'objective' existence ('objective' meaning as an object - of thought), although the objects themselves remain completely unaltered. Everything, Auriol considers, has two sorts of existence: real existence, and many types of objective or apparent existence in relation to a perceiver. Why many types? Intellectual cognition, Auriol accepts, is of universals and there are many different universals which Black Beauty allows us to think: horse, animal, mortal thing. By putting Black Beauty into objective being, I can think any of them. When, therefore, I think about the world, analysing it into its natural classes, according to Auriol I need iust the particular objects I sense, which I can then conceive as (in objective

being) each of the sorts of things they are (Black Beauty as a horse, an animal and so on).

Auriol rejects previous solutions to the Problem of Prescience. He (Scriptum, d. 38) does not think that Scotus's line, in which God knows the determinations of his own contingent will, will preserve human freedom. He rejects the idea - which was the common, though probably erroneous, interpretation of Aquinas - that future things could be really present to divine eternity. And he identifies immutability with necessity, making it very hard not to conclude that future events are necessary if God knows them. Auriol's own answer is perhaps less rigorous than his treatment of others' theories. God does know future contingents, in himself as their exemplar, he says; but he knows them neither as past, present, future or simultaneous with him, but 'non-distantly' (indistanter). The idea seems to be that, if God's knowledge is not of the future, then it will not remove contingency, and that it is true to say of any event that it is 'non-distant' from God. In order to avoid the problem of logical determinism - that, if a future-tensed proposition has to have the truth-value true or false, then what it says will happen or not happen of necessity, Auriol thinks that a three-valued logic is needed, so that future contingent propositions are neither true, nor false, but neutral.

5 William of Ockham

William of Ockham used to appear in *Histories of Philosophy* as the last important medieval philosopher, and as a figure who was, in a sense, responsible for bringing the tradition of scholastic philosophy, as represented by Aquinas and Scotus, to its end by his attacks on many of its fundamental theses. In the last half century Ockham has been both revalued and, in a sense, devalued. A new understanding of his logic and semantics, and a more careful analysis of his writings as a whole, have helped to present him, not as merely a destructive critic, but as an inventive, wide-ranging and constructive thinker. But Ockham has also been seen to be a less isolated figure than had appeared. Some of his reactions to Scotism were anticipated, though developed differently, by Auriol; Ockham himself evolved his thinking in dialogue with contemporaries such as Walter Chatton; and the Oxford philosophers of the next generation were less members of an Ockhamist school than independent thinkers who adopted certain aspects of his thinking.

Ockham's career did not run a smooth course. Born *c*. 1288 and a Franciscan since his youth, he was educated at the Franciscan convents in London and perhaps Oxford, and he lectured on the *Sentences* at Oxford (or possibly at London first, then Oxford) in 1317–19. Although he was qualified to become a Master of Theology, there was no Franciscan chair available for him, and he spent the years until 1324 teaching philosophy at a Franciscan convent, probably the London one. All his theologico-philosophical work dates from the eight or nine years between 1317 and 1325. The most substantial text is

that of his *Sentences* commentary: Book I exists as an *ordinatio* (1318); Books II – IV are known through a *reportatio*. As a result of his teaching outside the Faculty of Theology in the years from 1319, he produced commentaries on Aristotle's *Physics* and on the *Isagoge*, *Categories* and *On Interpretation*, along with a separate treatise on divine predestination, prescience and future contingents. Also in this period (*c*. 1323) he wrote a large and important *Summa Logicae* ('Textbook of Logic'), and, though not a Master, a set of *quodlibeta* (1322–4; revised 1324–5).

Logic, semantics and Ockham's nominalist project

There is one, central strand in Ockham's work which immediately reminds the modern reader of Abelard and his twelfth-century followers. There is almost certainly no direct influence, but it seems (rather misleadingly, it will turn out) as if many of the preoccupations of the preceding 150 years - the debates about Aristotelian metaphysics and psychology, and its interpretative tradition - have been forgotten and the 'attempt to found a whole philosophy on logic and semantics' has been revived. Like Abelard, and unlike any of the intervening major philosophers, Ockham was an important and innovative logician. Book III of the Summa logicae, with its solution to the problem, left unsolved by Aristotle, of providing a satisfactory system of modal syllogisms, and his theory of conditionals, which stretches beyond the bounds of what would now be considered a formal system, deserves much more than this passing mention. But the parallel is much closer. Both philosophers based their metaphysics on what is conveniently called 'nominalism' and is more properly described as a programme of ontological reduction, which needed a new semantic theory to make it plausible. Like Abelard, Ockham held that all things are particular; and like the later Abelard, but more radically, he denied the existence of real things in a number - nearly all, indeed - of the Aristotelian categories of accident.

Ockham rejected the sophisticated varieties of realism current in his times by attacking the apparatus of distinctions by reason and formal distinctions (Chapter 8, section 3) which was used in framing them. Ockham – in this respect closer to a modern view than Aquinas or Scotus – would not (*Ordinatio* [on *Sentences* I], d.2, q.3) accept that the Morning Star and the Evening Star are two things 'distinct by reason'. Things, he argued, must differ from each other really, if at all; whereas concepts, or concepts and things (e.g. the thing Venus + concept Morning Star) can differ by reason. He would therefore reduce the idea of distinction by reason to a distinction between ways of conceiving the same thing. The formal distinction, introduced by Scotus, was supposed to be rooted in reality in a way that blocked such a reduction. Ockham argues (*Ordinatio*, d. 2, q.1) that it is an incoherent notion, because if *A* and *B* are formally distinct, then they are in some way non-identical. When non-identity is analysed, it is seen that there must be at

least one pair of contraries, x and y, such that A is x and B is y, and it is then clear that A and B cannot be the same thing: they must be distinct things, or distinct concepts, or one a thing, one a concept. With these distinctions no longer allowed, the way is open for Ockham to attack the various sorts of realism themselves (*Ordinatio*, d. 2, qq.4–8). For instance, Scotus's position relies on the idea that a particular thing is distinguished from the common nature it shares with all others of its species by a singularity, which is formally but not really distinct from its nature.

But, so long as the realists sticks to their intuitions, there is no reason why they should find Ockham's arguments compelling. Ockham is most famous in and out of philosophical circles for his 'razor', the principle that 'plurality is not to be posited without necessity' - a general rule for ontological parsimony. But no one, nominalist or realist, is going to find an explanation convincing which posits entities superfluously. The question is *which* entities are superfluous, and here Ockham's opponents start with an advantage. Accepting the real existence of universals is a more obvious position, closer to our everyday practices and use of language, than denying it. The success of Ockham's theory hinges on whether he can find a way of explaining without universals all that is normally explained by them in semantics and metaphysics. The case is similar with regard to his other main area of ontological reduction. He believes that there exist particular substances and particular qualities (this whiteness by which this page is white), but not accidents in the other eight categories, except for certain sorts of relation, which Ockham seems to admit for purely theological reasons. Again, he must show how in this case we can manage to explain the world and how we conceive and talk about it. Ockham's explanation relies on three main notions: mental language, supposition and connotation. In each case, Ockham takes an existing idea, but changes it for his own purposes. The view that there is a mental language was deeply entrenched in medieval philosophy, because of Aristotle's remark, at the beginning of On Interpretation, that words are signs for thoughts and Boethius's discussion of it. Augustine, too, had thought in terms of a mental language. At the very beginning of the Summa Logicae (I.1) Ockham mentions these two authors along with the view that language is threefold: written, spoken and mental (concepta). Augustine was an especially important source for thirteenth- and fourteenth-century discussions for a theological reason. In his De trinitate (Chapter 2, section 9), Augustine uses human processes of cognition as analogies to help us grasp the Trinity, and it is convenient for him to identify within them the production of a mental 'word' (to parallel the Word of God). Since Peter the Lombard used these ideas of Augustine in setting out his trinitarian theology, scholastic theologians were encouraged to enter into long analyses and debates about acts of human cognition and the mental word they produced when, in lecturing on Book I of the Sentences, they discussed the Trinity. But Ockham gave mental language a somewhat different role in his semantics from the traditional one.

Traditionally, a link was established between the world and the human perceiver in the process of cognizing - in many theories by an intelligible species, abstracted from a sensible one, which informed the intellect - and, as the result of that cognition a mental word was produced. Words in spoken language signified the mental words and, through them, the sort of thing in the world which had produced that mental word. For Ockham, however, categorematic mental words (those which parallel the terms in human language suited to being used as subjects or predicates) naturally stand for a given sort of thing. Whereas the word 'horse' is an arbitrary choice of sounds by a human impositor (Adam might just as well have said 'esroh' or 'instf'), the mental term HORSE is in some way specially fitted to stand for horses rather than cows or anything else. This natural fittingness of the mental terms for their objects ensures the links between thinking and the world. But and for this reason Ockham's theory is not so different from those of earlier scholastics - the natural fittingness is not left unexplained: although he changes his mind as to exactly what they are, the terms of mental language are formed in such a way as to resemble the things for which they are terms (see next sub-section). Ockham does, however, change the accepted scheme of the relations between things, thoughts and spoken language. Words in human languages are not, as in the traditional scheme, signs for thoughts or mental words. Rather, the terms of both mental and human spoken languages signify objects in the world (Summa Logicae I.1).

It is by combining a special use of supposition with this idea of a mental language that Ockham carries through his project of ontological reduction. The theory of supposition was newer than that of mental language, but roughly a century before Ockham took it up Peter of Spain had given a classic exposition of the types of supposition (Chapter 7, section 2), that is to say, of how terms refer within the context of a sentence. Peter's way of treating supposition implies a realist stance. A word is made to signify a universal by its imposition (so 'Man' signifies the universal man), and when it supposits for what it signifies (as in 'Man is a species') it has simple supposition, whereas it has personal supposition when it refers to a particular or particulars which fall under that universal. In Ockham's system, however, there are two big changes. First, in line with his basic semantics, both the terms of mental language and of human spoken languages have supposition. Second, the definitions of personal and simple supposition are different (*S[umma] L[ogicae*] I.64). Traditionally, a word supposits personally when it supposits for a particular or particulars; for Ockham – for whom all things are particular – a term supposits personally when it supposits for what it signifies, whether it is 'a thing outside the soul, an utterance, a mental concept (*intentio*), or something written or anything that can be imagined.' Simple supposition was traditionally when a term referred to a universal. Ockham describes it, rather, as when 'a term supposits for a mental concept without signifying it.' Ockham adds an extra sort of division (SL I.11-12). The terms of both mental and

spoken languages can be used to supposit for things, or for mental or spoken terms. A mental term that supposits for things is a 'primary concept' or, as more usually translated, 'first intention' (*intentio prima*) – for example, HORSE; a mental term that supposits for other mental terms is a 'secondary concept' (*intentio secunda*) – for example, SPECIES. A spoken term that supposits for things is a term 'of first imposition' ('horse'); one which supposits for other spoken terms is a term 'of second imposition' ('species' in '"Horse" is a species'); one which supposits for mental terms is called, rather, a term 'of second intention' ('species' in 'Horse is a SPECIES').

Using this apparatus, Ockham can explain our ordinary ways of speaking which involve universals, without accepting that anything universal exists. When I say 'Black Beauty is a horse', the spoken term 'horse' and the mental term HORSE each have personal supposition, by which they refer to anything which is a horse. When I say 'Horse is a species', 'horse' refers to the mental concept HORSE and not to what the word signifies, namely horses, and so it supposits simply; and the same is true for the parallel mental-language term and proposition. The word 'species', in Ockham's view, signifies a certain sort of mental concept: those which, like HORSE, but unlike BLACK BEAUTY are able to supposit for many things. So, although in 'Horse is a species', 'species' supposits for a concept, not a thing, it is suppositing for what it signifies. But it is a word of second intention, and in the mental proposition HORSE IS A SPECIES the mental term HORSE is a secondary concept (or 'second intention').

The second stage of Ockham's reductive programme, the reduction of the Aristotelian categories, is carried out using the distinction between absolute and connotative terms. In working out this distinction, Ockham makes use of 'exposition', one of the techniques which had been developed in the logica modernorum (Chapter 8, section 8). The surface structure of some propositions is considered to be misleading or opaque, and they cannot be used in argument without producing ambiguities until the problematic terms have been 'expounded' - substituted by an equivalent explanatory phrase that removes the unclarity. Terms are absolute, says Ockham (SL I.10), when 'they do not signify something primarily and something else or the same thing secondarily.' Terms are connotative, he goes on to explain, when they do signify something primarily and something secondarily. What does he mean by signifying primarily and secondarily? He explains through examples. 'Animal', which straightforwardly signifies cows, donkeys, humans and other animals, is an absolute term, whereas album (the neuter Latin adjective, meaning white thing) is connotative. Connotative words are, then, the same as what earlier medieval logicians called 'derived' words (Chapter 4, section 7; a large sub-class of derived words were known as 'denominatives' or 'paronyms'): they are the words by which we signify a thing in virtue of its having a property – the property is what, in Ockham's terms, is connoted. If, then, a connotative word signifies something, in virtue of X, it will always be possible to frame a nominal definition for it. Whereas we can give no nominal definition to 'animal', we can explain that *album* means 'something which is informed by whiteness', and in such a definition one part ('something') is put directly and so is what the word signifies primarily, and something is put obliquely ('informed by whiteness') and so is the secondary signification.

A connotative term 'X', then, can in every case be expounded as 'something which is related in such and such a way to X-ness' (very often: 'something informed by X-ness'; but consider the connotative term 'cause' which Ockham says means 'something to the existence of which something else follows'). Ockham describes (SL I.5) connotative terms and absolute substance terms as 'concrete', whereas terms of the logical form 'X-ness' - what many others, but not Ockham, would describe as terms referring to the nine Aristotelian categories of accident – are called by him 'abstract'. Since connotative terms can always be expounded as an expression involving an abstract term, the second stage of Ockham's reductive programme will depend on how he fixes the supposition of abstract terms. Ockham believes that many, though not all, of the accidents included under the Aristotelian category of quality (and, for theological reasons, a few of those in the category of relation) are real items in the world: there exist, for example, real whitenesses, which are particulars (just like Abelard's particular accidents). This page is white because it really is informed by a particular accident of whiteness. In the proposition, 'The page is white', therefore, which reads, when the connotative term 'white' is expounded, as 'This page is something informed by whiteness', 'whiteness' supposits for real accidents of whiteness, just as 'page' supposits for pages. Where, however, the abstract terms involved are not terms for such qualities (or the few such relations), Ockham argues that they are synonymous with the corresponding concrete terms. So, for instance, 'horseness' is synonymous with 'horse' and 'length' with 'long thing'. Ockham believes that those who hold that, because horses are like one another, horseness must be an item in the world - or, indeed, that similarity must be an item in the world - are allowing themselves to be misled by the surface structure of language; and those too who think that length exists as well as long things, or action as well as things that act. The theory of connotation provides a way of avoiding this confusion, although it still needs a very careful category by category analysis (SL I.40-62) for Ockham to bear out his reduction of the Categories.

Mental language and the world

What constitutes mental language? A spoken language consists of utterances, vibrations in the air made by the tongue; mental language consists of mental terms or concepts, but what exactly are they?

Ockham's answer to this question changed in the course of his (short) academic career. Earlier on (*Ordinatio* d. 2, q. 8), Ockham had explained that, when the intellect apprehends something it makes a fictional thing which

is like what it apprehends but is not a real quality in the mind; rather, it is merely what is known, so that its existence is its being thought of. These fictional things are the categorematic terms in mental propositions. In this theory, which has a good deal in common with Auriol's, Ockham brings to the centre the intentional character of thinking: to have a thought of Black Beauty is for Black Beauty to be the content of my thought. He ensures, in addition, that mental language is linked in its origins to what it signifies, and he also explains how this link applies to the general terms in mental language, such as HORSE and HUMAN: because the fictive thing I make when I perceive Black Beauty is like other horses too, I can use it as a universal to supposit for any horse. In his later theory (e.g. SL I.12), suggested to him by Walter Chatton, who had attacked the idea of *ficta*, Ockham contends that the mental concepts or terms can be identified with the acts of thinking them. This new theory enables Ockham to avoid the oddness of *ficta*, and - as he says explicitly - favours parsimony, but it might seem to place enormous weight on the unexplained natural relationship between mental terms (which are simply acts of thinking) and what they signify. One suggestion is that Ockham believes (Ouodlibet IV, g. 35; cf. Panaccio, 2004, 119-43) that acts of thought can bear a likeness to their objects, just as the *ficta* of his earlier theory did. Or it may be that the relationship is partly that of structural likeness and partially a causal one, between the things in the world and the mental acts they cause (Perler, 2002, 372).

Ockham, then, links mental propositions to the world by the supposition of their terms, which is itself based on the natural likeness between them (whether considered as fictions or acts) and the things. But it is not enough that these propositions should be about the world. Ockham must also give some explanation of how we are able to form the mental propositions which provide what he calls 'evident knowledge', by which he means something close to justified true belief. The theory based on intelligible species does not fit his nominalist metaphysics. Intelligible species are universals and, in the standard theory (Ockham seems to have in mind a view like Aquinas's), they are impressed on the intellect by the thing cognized. But, given that, on Ockham's view, things are particular, they would not be able to impress such a *universal* species (*Ordinatio* d. 3, q. 6). In fact, Ockham has no place for any sort of species, intelligible or sensible, in his account. Instead, he takes the idea of intuitive cognition, which had lurked in the background of Scotus's epistemology, and makes it central.

There are two sorts of propositions, Ockham considers, which give evident knowledge. There are those which we are able to see are true just from examining their terms – in modern terms, analytic propositions. But there are also propositions about what we cognize to be the case at present – for instance: 'The bus (on which I am trying to write this paragraph) is smelly'. The cognitions of the objects of the terms of this proposition – the bus and the smell – are intuitive. They are, moreover, intuitive *intellectual* cognitions, although

Ockham also recognizes intuitive sensible cognitions. All intuitive cognitions, in normal circumstances, must be of particular things which exist and are present. Any other sorts of cognition, of whatever type, are 'abstractive': for instance, my memory of this bus, the universal concept of bus which I can use as a mental term to supposit for any bus, the act of judgement – based on the intuitive cognitions just described – that this bus is smelly, or that this or that analytic sentence is true.

Ockham has, however, to allow for a twist in his neat theory. There might in principle be abnormal circumstances in which intuitive cognitions are not of existing things. Ockham often resorts to the idea of God's absolute power - that God can do whatever does not include a logical contradiction. Among other things, by picking out what is and is not possible according to God's absolute power, Ockham has a way of making a distinction near to the modern one between what is and is not logically possible. Although normally an intuitive cognition can be produced only by an existing thing which is present, Ockham does not believe that there is any contradiction involved in supposing that God could give someone, miraculously, an intuitive cognition of what does not exist. But, he says, it would be an intuitive cognition of it as not existing. Walter Chatton objected to Ockham, however, that it was an undue restriction on God's omnipotence to rule out the possibility, as Ockham was doing, of his making someone believe that something exists when it does not. Ockham's reply (Quodlibet V.4; cf. Karger, 1999) is that, if he so wishes by miraculous means, God can directly cause in us the *judgement* that a nonexisting thing exists, although he cannot cause the intuitive cognition of the non-existing thing as existent.

Absolute power, ordained power and Ockham's ethics

The exposition so far may have given the impression of Ockham as an almost secular philosopher, interested in the formalities of logic and in producing a coherent and parsimonious ontology. Yet he was also, and before everything, a Franciscan thinker, for whom the overwhelming power of God was fundamental, and who was diffident about the powers of human reason to grasp the divine. For example, unlike Scotus, he thought that only the existence of an Aristotelian first mover, not that of an infinite God, could be rationally demonstrated. One of the ways in which Ockham and other thinkers of the fourteenth century discussed God's power was in terms of the distinction between God's ordained power (potentia ordinata) and his absolute power (potentia absoluta). God's absolute power is his ability to do whatever does not involve a contradiction, whilst his ordained power is his power as bound by the covenants he has made (the Old and New Testament) and the order of nature he has established. Scholars of the earlier part of the twentieth century thought that writers like Ockham used the distinction to undermine all certainty, since God could by his absolute power act in completely unpredictable

ways. But, in a revisionist interpretation (Oberman, 1963), it was contended that the distinction does not mean that God ever does act outside his ordained power, merely that he could have done: God has the power to act otherwise than he actually does. This view, however, was in its turn found to be oversimplified, because, from the late thirteenth century, influenced by the canon lawyers' discussion of papal power, thinkers *did* start to see God's absolute power as an exercised ability to act directly in the world, against the established order of things.

The most nuanced account of Ockham's view (in this case, near to Scotus's) offers something of a compromise (Gelber, 2004, 309–49; Ockham, *Quodlibet* 6, q. 1). God acts only in accord with an order he has ordained, but he has, and uses, his absolute power to change the ordained order, as illustrated by the replacement of the Old Law with the New Law. God also enjoys considerable freedom of interpretation in deciding on the particular application of the ordained law, so that he can make exceptions to the general rule without this being a suspension of the ordained law. Ockham's emphasis on the freedom of God's will, and a similar emphasis on the freedom of humans' wills, provided the background to his complex ethical theory, in which he distinguished sharply between moral virtue (open to Christian and pagans alike) and merit, which alone makes for salvation; and where, unlike Aquinas, he considered that people *can* will to do what they recognize as evil.

The 'venerable inceptor': the ending of Ockham's career

Ockham is known as the 'Venerable Inceptor', because he completed all the requirements to become a Master of Theology, but never incepted and took up a chair. In 1324, while he was teaching in London, waiting for his turn to proceed to a chair for Franciscans, he was summoned to Avignon by the Pope to answer complaints about his orthodoxy. While he was there, Ockham became involved in the debate over absolute poverty. The question at issue was whether Christ and his apostles had owned any property collectively, or been absolutely without possessions. The Franciscans claimed that the latter view was correct, and that they as an order followed it and so lived the most Christ-like lives. This position had been accepted by Pope Nicholas III thirty years before, and the arrangement was that ownership of what the Franciscans needed to use in order to carry on with their lives and work was vested in the papacy. But John XXII had decided to open the question again to discussion, and in 1322-3 issued a series of constitutions rejecting the Franciscan doctrine of poverty and refusing to continue the arrangement of owning what they used. Asked by Michael of Cesena, the Minister General of the Franciscans, who was in Avignon, to study the pope's pronouncements, Ockham came to the conclusion that they were not merely wrong, foolish and contrary to natural reason, but heretical.

On 26 May 1328, he fled with Michael to join the Emperor, Ludwig of Bavaria, who was in conflict with the Pope, first in Italy and then at his court in Munich. Ockham remained there until his death in 1347, writing treatises against Pope John and in favour of the imperial cause. These works contain plenty of theoretical reflection – about the nature of heresy and lordship, for instance, and about whether rulership is best carried out by one or many. But what is the connection between this writing and Ockham's earlier work in logic, philosophy and theology? Although, thanks to the researches of the last twenty years, Ockham now seems to have become quite familiar and well understood, modern specialization has tended to turn him into two, almost separate thinkers: one philosophico-theological, one political. What holds all his output together as the work of a single mind remains elusive.

Study M: Ockham and the problem of prescience

Ockham's *Tractatus de praedestinatione et de praescientia divina* ('Treatise on Predestination and God's Prescience') is especially remarkable for three of its positions, each of which tells a great deal about Ockham's fundamental views: (i) the ingenious logical 'way out' Ockham devises so as to reconcile the apparent determinism of the Christian doctrine of predestination with future contingents, but (ii) Ockham's inability to explain *how* God knows these future contingents; and (iii) his rejection of Scotus's views about contingent willing and the modal innovation on which they are based.

In tackling (i) Ockham (Q.1, *Suppositiones* 2–4) uses the same sort of analytical linguistic tools as had served him in setting out his metaphysics and semantics. As the Accidental Necessity Argument (Study I) shows, there is a special problem about God's *prescience or pre*destination. Ockham captures it by enunciating what might be called 'Ockham's Principle': any true proposition which is about the present both verbally and really (call it a proposition 'genuinely' about the present) entails a necessary proposition about the past. If 'John is writing' is true now, then 'John was writing' will be necessarily true at all times in the future. The proposition about the past is necessary because the past is unchangeable.

Christians believe that it is the case with regard to anyone that it is true either that he is 'predestined' (i.e. at the end of his life he will go to heaven) or that he is 'damned' (i.e at the end of his life he will go to Hell). Suppose that, in fact, Peter is predestined. Then, by Ockham's Principle, it will always be true in the future that he was predestined, and this past proposition will be necessary. So can he be damned? If not, then why should he bother about how he acts: deliberation and planning would be in vain. If so, then it must be allowed that possibly he will be damned. But it has been granted that it will always be a necessary truth that he has been predestined, and so there is a contradiction.

Ockham's way out of this problem is to say that some propositions that are verbally about the present are not genuinely about it, but rather are equivalent to propositions about the future, because their truth depends on a proposition about the future. There is no necessary proposition about the past which follows from such merely verbal, non-genuinely present-tense propositions. And he goes on to argue that all of the propositions about predestination and damnation are of this sort – since (Ockham takes this point as obvious) they depend for their truth on what will happen in the future: will Peter in fact go to heaven or not? In effect, what Ockham has done is to bring to the surface the logical principle which makes propositions like 'Peter is predestined' seem to have deterministic implications, but then expound these sentences ('Peter is predestined' = Peter will go to heaven) so as to show that they do not fall under the logical principle, whereas the genuinely present-tense sentences which do fall under the principle, such as 'Peter is walking', do not yield any deterministic consequences when it is applied to them.

The openness of the future assumed in this answer raises the familiar problem about divine prescience: how can God have certain knowledge of what is not yet determinate? Ockham does not have a theory about how God, through the special nature of his eternity, is able to grasp the future as if it were present, or has the future present to him. In fact, he has no answer to this problem, but his strategy for explaining his positions is very revealing. He presents the difficulty (Suppositio 5) as Aristotle's. According to Aristotle, if E is a future contingent event, then there is no more reason to say that one disjunct is true than the other in 'E will happen or *E* will not happen'. There is therefore no determinate truth about which God can know. But then Ockham goes on to assert (Suppositio 6) that 'it should be held without doubt that God knows with certitude all future contingents': he does know whether 'E will happen' or 'E will not happen' is true. But how? Scotus, he says, has an explanation: God knows because he knows his own will which determines what will happen. Ockham rejects this as an answer because, he says - and the line of criticism seems well-founded (Chapter 8, section 3) - that either Scotus leaves unexplained God's knowledge of what depends just on the decisions of non-divine wills, or it does not leave any place for will other than God's to make choices, in which case there can be no merit or demerit. Scotus is rejected, but Ockham himself cannot offer much in its place:

... It is impossible to express clearly the way in which God knows future contingents. It should, however, be held that he knows only contingently. And this should be held because of the sayings of the sacred writers of the Church (*sanctorum*) who say that God knows what is to be done no differently from how he knows what has been done.

At the most Ockham can offer a rather vague analogy. The same intuitive cognition of the objects can be the basis for our evident knowledge of one or other side of a contradiction, he says. (His idea seems to be that 'The glass is on my desk' and 'The glass is not on my desk' are both verified by intuitive cognitions that count as the same, because they are in each case of the glass and my desk.) Similarly, God has a single intuitive cognition of all things past and future which enables him to know in every case whether '*E* happened/happens/will happen' or '*E* did not/does not/will not happen' is true.

Later in the treatise, Ockham examines another side of Scotus's answer. Scotus did not just explain that God knew the future through his will; he also introduced, for the first time explicitly, a view of modality that includes synchronous alternative possibilities (Study L), which he thinks necessary in order to safeguard the contingency of God's willing. Given that, unlike Scotus, Ockham does not consider God to exist in a single moment of eternal presentness, he does not need this modal innovation. In any case, he thinks (Q. 3) that Scotus is wrong in developing it. He summarizes Scotus's point succinctly:

It is imagined . . . that in the same instant of time there are many instants of nature, and then, if there were a created will that existed for just a single instant, and at that time it willed some object contingently, then this will, as being naturally prior to this volition, has the potency to the opposite act <of volition> at the same instant in which this act <of volition> is posited: as naturally prior it could not-will that object at that instant.

But Ockham believes that this 'potency to the opposite act' cannot exist. The supposed potency, argues Ockham, can never be actualized and so is not a genuine potency at all. Scotus is claiming that

(1) W wills X at t and has a potency to not-will X at t.

Ockham argues that if that potency were realized, then it would be the case that

(2) W wills X at t and W not-wills X at t.

(2) is a contradiction and so impossible. But, says Ockham, Scotus's defenders might reply that

(3) If it were the case that *W* not-wills *X* at t, then it would not be the case that *W* wills *X* at *t*,

and so, contrary to Ockham's claim, the potency to not-will X at t can be actualized without entailing (2). Against this argument Ockham is able to use his Principle. Any genuinely present-tense proposition entails a necessary proposition about the past. Therefore, if it is true, as it is posited, that W wills X at t then it will be true that necessarily W willed X at t. (3) is therefore false. According to Ockham, for a will to will X contingently at a given instant t, supposing that it has not existed before t, it is enough that it could cease at some instant after t to will X.

In finding a way out of the problem about those who are predestined, Ockham shows himself very much as the logician, dissolving difficulties through analysing

propositions and revealing their deep structure. A different side of his approach emerges when he tries to discuss how God knows future contingents: the willingness, at a certain point, to recognize the sheer inexplicability of God and accept the teaching of the Church without being able to explain it. Yet another side of Ockham is brought out by this rejection of Scotus's explanation of the contingency of the will. Ockham does more than simply reject the modal principles Scotus wants to introduce. Part of the cleverness of his attack is that Ockham's Principle, on which it is based, requires only the necessity of the past, not that of the present, and Scotus, it seems, accepted – perhaps against the underlying direction of his theory – that the past is necessary (*Lectura* I, d. 40, qu. un.; Normore, 2003, 136). Still, Ockham does thoroughly reject Scotus's modal innovations and sticks to a solidly Aristotelian position. Despite his anti-Aristotelian stance on epistemology and metaphysics, there are aspects of his thinking where Ockham is the Aristotelian traditionalist and Scotus the radical.

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6 The Paris Arts Faculty and fourteenth-century Averroism

After Siger of Brabant and Boethius of Dacia had left, the business of the Arts Faculty was carried on in a less contentious way by teachers such as Peter of Auvergne (d. 1303), who commented on the *Politics*, and Simon of Faversham (c. 1260–1306), influenced by Aquinas, but attracted to Avicenna and Augustine as much as to Aristotle; both went on to become theologians. So did Radulphus Brito (c. 1270–1320), who had contributed to the elaboration of modistic theory (Chapter 7, section 2). But the approach associated with Siger and Boethius, and condemned in 1277, reappeared in the work of John of Jandun (1285/9–1328), who was teaching in the Paris Arts Faculty from 1310–26, and wrote a series of commentaries on Aristotelian texts, including the *Metaphysics* and *On the Soul*.

Some modern scholars prefer to see John, rather than Siger or Boethius, as the first Latin Averroist, because he seems, throughout a body of work, to adopt Averroes's interpretations of Aristotle, including those on issues where they clearly conflict with Christian doctrine, such as the eternity of the world and there being only one potential intellect for all humans. His writings were widely read and played an important part in establishing a type of Averroism in Bologna and Padua in the following decades, in Erfurt later in the century, and in fifteenth-century Krakow and sixteenth-century Italy.

The way in which John explained his adoption of such positions is intellectually close to, but rhetorically very different from, the strategy set out by Boethius of Dacia in his *De aeternitate mundi* (Study J). Consider a couple of his remarks (both from the commentary on *De anima*, III, q. 5): For all these arguments [for the Averroistic view of the human soul] go through if it is posited that the soul is made as a natural thing by some particular thing which generates it by bringing to act some matter which is in potency; but, because it is not so, but rather the soul is created immediately by God, so it can have many properties that other material forms cannot have . . . If these do not at first sight seem to be sufficient as answers to the arguments [against the Christian position], one should not be disturbed because of it, because it is certain that divine authority should command greater faith than any reasoning devised by men, just as the authority of a single philosopher is stronger than some piece of weak reasoning put forward by a child.

I assert that this conclusion [that of Christian teaching] is true without qualification and I hold it without any doubt by faith alone. And I would like to reply to the arguments against this opinion briefly, stating that all those things which these arguments show are impossible are possible for God.

As Boethius had done, John accepts that Christian doctrine is not merely one among a number of different accounts of reality which conflict, because they are based on different principles, but the truth without qualification. But, whereas Boethius had made this declaration plainly and without show, within the context of a proud assertion of the autonomy and importance of the work the Arts Masters do following the principles of the Aristotelian sciences, John goes out of his way to emphasize the debility of human reasoning when compared with doctrine based on faith. Again, although he is as willing to argue that, according to reason, a philosopher can reach the peak of happiness by contemplating the pure forms and reaching a perfect knowledge of God, he goes on to add that this conclusion – that of Aristotle and Averroes – is wrong, because 'according to faith and the truth' we shall see God face to face only after death (*Commentary on Metaphysics*, II, q. 4). Yet, in practice, in page after page of commentary, John apparently does what the Boethian philosopher-Arts Master should do, and interprets the Aristotelian texts on their own terms.

Does this mean, given his apparent loyalty to Averroes as the commentator, that John provides a faithful rendition of Averroes's reading of Aristotle? A close study of his commentaries (Brenet, 2003) shows otherwise. Almost every feature of Averroes's construction is re-thought, in the light of Latin versions of Averroes and attacks on him, and of Latin thinking on cognition. John is quite as likely to follow Siger of Brabant, or even Aquinas, as what Averroes actually said, and his reconstructed view is designed to answer the problems Aquinas had raised about Averroes and explain how individual humans can indeed be said to think.

John's career as an Arts Master was brought to an end, not as the result of any objections to his method or conclusions, but because of his close association with Marsilius of Padua. Marsilius, who was rector of the University of Paris in 1312-13, seems to have shared his friend's range of interests, and a Metaphysics commentary very close to John's is attributed to him. Marsilius's fame - which, both in his own time and since, has been far wider than that of almost any straightforward university philosopher rests on the Defensor Pacis ('Defender of the Peace'), a book that rose directly from the political struggles of the time, but still reflects obliquely on the problems he shared with John. Ever since the reforms of Pope Gregory VII in the eleventh century, there had been a tension over the increasing claims of the papacy to ultimate jurisdiction over temporal rulers. A conflict along these lines was taking place in the early 1320s between Ludwig of Bavaria, who had been elected Emperor and, in 1322, defeated in battle a rival, who also claimed election. Pope John XXII claimed that papal consent was necessary before Ludwig could be legitimately crowned. Ludwig disagreed and when, in 1324, the Pope excommunicated him, he tried to bring about his deposition. Ludwig also attacked Pope John on another, unrelated issue, by supporting the absolute poverty of Christ and his apostles, which was claimed by some Franciscans and set up by them as a model to follow (Chapter 8, section 5).

The Defensor Pacis was finished in 1324; it is dedicated to Ludwig and when, in 1326, Marsilius's authorship was discovered, he and John of Jandun fled Paris to join Ludwig's court. In some respects, the Defensor might almost be seen as Ludwig's manifesto. Discourse II, which accounts for three-quarters of the whole treatise, is a sustained examination and dismissal of papal claims to temporal power (and – Chapters 12–14 – a defence of absolute apostolic poverty). Discourse I presents a political doctrine which, by advocating an elected ruler or rulers, could also be seen to bolster Ludwig. But the Defensor is more than an occasional composition. For the history of political theory, the most important features of Marsilius's scheme are its conception of law and of the unitary state, and the weight given to popular opinion. Law is constituted, Marsilius believes, not through a rational content, but because of its coercive power. It should be exercised, he argues, by a single, secular authority, under whose jurisdiction the Church falls. And he sees the law as being made by the whole body of citizens, though with more influence accorded to some than others. For the historian of philosophy, the special interest of the work is how its treatment of the place of religion in political organization relates to the attitudes of the Latin Averroists.

When considering the different groups of people (such as farmers, mechanics, soldiers) needed for a city, Marsilius (I.5) is willing to follow Aristotle (*Politics* VII.9) in describing the priestly class as just one among the others. He begins by describing a purpose for priests and religious laws that the ancient philosophers had noted, and which is directed to the worldly good of the city. In order to enforce good behaviour on people, especially with regard to actions which could be concealed, religious laws and priests to promulgate them,

along with the threat of punishment and promise of reward in the after-life, are set out by philosophers, even if they did not themselves believe in human immortality. But, continues Marsilius, pagan views about God were wrong, and he gives (I.6) a very straightforward Christian account of the creation, fall and redemption of humankind, and the founding of the Church so as to preach the Gospel and lead people to eternal happiness. He has recognized a little earlier (I.4.3) that there are two sorts of living well for humans, one earthly, the other eternal and heavenly. This second sort of living well falls outside the scope of philosophy, however, because it is neither self-evident nor can it be demonstrated. On this basis, Marsilius sets out the way the city should be organized and the place of the priests within it from an Aristotelian perspective, leaving aside, though not denying, the true importance of religion as established by faith.

The parallel is clear between this procedure and the Latin Averroist strategy - as carried out by John of Jandun, for instance - of accepting Christian doctrine unhesitatingly as the truth, but continuing to develop rational interpretations of Aristotle which go against it. But there are three important differences. First, Marsilius carries through his plan in a way that John of Jandun turns out not to do. Second, Marsilius does not write as an Arts Master sticking to his own sphere of non-revealed texts and reasoning and anxious just to preserve his autonomy within it. Since he is engaging with papal claims based on the Bible, he spends the greater part of the Defensor handling theological material. Third, Marsilius does not, here at least, seem to share with the Latin Averroists their high-flown conception of philosophy as a means to a sort of self-divinization in this life. The living well at which the city should aim is a matter of material security and peace, and Marsilius's concern is not with the goal that can be reached just by a few intellectuals, but with providing a tolerable life for everyone. Such a position could be the product of an Augustinian pessimism about the possibility of earthly society providing humans with anything more than the tranquillity they need for spiritual pursuits - and Marsilius does even endorse Augustine's view that government and the state are the consequences of Original Sin. Alternatively, Marsilius's approach could be compared to the type of non-Platonic Aristotelianism (even less Platonic than Aristotle himself) apparently championed in Fârâbî's commentary on the Ethics (Chapter 4, section 3), in which the highest happiness for humans is held to be political happiness.

7 Oxford and Paris theology after Ockham

The theology of Oxford and Paris in the second quarter of the fourteenth century presents the historian of philosophy with a special problem. As new research makes ever clearer, in Oxford especially – these years were, intellectually, its Golden Age – but in Paris too, there was an abundance of highly-trained theologians, discussing philosophical problems at a very

sophisticated level. There are grounds, then, for suggesting that the emphasis is misplaced in most accounts of medieval Latin philosophy, which treat the years from 1325-50 as an addendum to what they present as the more important achievements of Aquinas, Scotus and Ockham. Against this view, however, it might be urged that, although these thinkers are independentlyminded, their interest is especially at a rather technical level. Arguably, none of them draws together in an original way ideas from the whole range of philosophy as their great predecessors had done. Even so, this section can provide only a quick sketch of a period of thought which, however it is finally valued, deserves more detail. Although these thinkers are still not yet well enough studied for it to be clear whether, as well as being highly sophisticated, they have the breadth and originality of such predecessors, they deserve a more thorough treatment than space allows them to receive here. (More than ever, the reader is encouraged to use the Guide to Further Reading and read some of the important new work being done in this area of medieval philosophy.)

Oxford

Neither Walter Burley (1274/5-1344 or later) nor Walter Chatton (c. 1290-1343) can be described as coming 'after' Ockham. Burley's career sandwiches Ockham's. A secular priest, Walter was a Master of Arts at Oxford by 1301; he spent the years c. 1309–27 in Paris, where he studied and became a Master of Theology. From c. 1334 he became a member of the household of the bibliophile Bishop of Durham, Richard of Bury. Burley may well have been one of the realists whose views about the existence of universals outside the mind Ockham attacked. In turn, once Burley became acquainted with Ockham's thought, he set about attacking all the fundamental theses of his nominalism. He insisted that universals do really exist, though not in separation from individuals; he rejected Ockham's reduction of Aristotle's Categories, holding that there are real things corresponding to each of the categories, and he argued similarly against his reductive account of physical notions such as change and time. He shared with Ockham, however, a high technical accomplishment as a logician, and he was especially interested in discussing hypothetical propositions and in developing the branches of the logica modernorum (Chapter 8, section 8). His De puritate artis logicae ('On the Purity of the Art of Logic'; later 1320s) combines both aspects of his work, acting both as an implicit answer to and critique of Ockham's Summa logicae, and as an innovatory logical treatise in its own right.

Chatton was Ockham's contemporary at the Franciscan convent in London from 1321–3, and he went on, having delivered a version of his lectures on the *Sentences* there, to lecture on them in Oxford later in the 1320s. He was Ockham's most critical and valuable philosophical colleague, debating with him in every area, forcing him to abandon his earlier theory about concepts as mental fictions and pushing him to refine his ideas about intuitive cognition of non-existents (Chapter 8, section 5). Chatton tended to defend Scotist positions, for example against Auriol's attack on the univocity of being. He was helped in making his arguments by a methodological principle he propounded in deliberate contrast to Ockham's parsimony, that when a proposition is made true by things, it is necessary to posit as many things as are necessary to make it true.

Adam Wodeham (d. 1358) was Chatton's pupil in the Franciscan seminary at London, but sharply dissented from his critical attitude to Ockham, many of whose ideas he followed. But Wodeham is not the simple Ockhamite he was once taken to be. He was a subtler and more complex thinker than Ockham, and Scotus and Auriol were also influential on him. Wodeham is best known to scholars today from what is probably the second of three Sentences commentaries, given in Norwich c. 1329, of which just the lectures on Book I survive. His view that the human intellective and sensitive souls are one, simple form goes against both Scotus and Ockham and returns to a position like Aquinas's, which had been condemned in England (Wodeham carefully advances it merely as an opinion). He is much more concerned than Ockham with the sceptical problems raised by intuitive cognition, given the deceptions possible both naturally and through God. In its stricter senses, propositions are self-evident only if they are what we would call analytic, or else self-verifying (such as 'I exist'). Propositions about contingent things outside the mind are never evident in the sense that things cannot fail to be as they appear, although some such propositions are strictly evident if the qualification 'unless God is deceiving me' is added. Wodeham was also one of the most important contributors to the debate on the semantics of propositions (see below).

Ockham, Chatton and Wodeham were all Franciscans; the English Dominicans at once used their methods, but followed their own agenda. William Crathorn, who lectured on the Sentences in Oxford in 1330-2, developed an idiosyncratic theory of cognition which included a nominalist account of universals and led him to an extreme scepticism only relieved by the assurance that God might deceive us from time to time, but not as a matter of course. His confrere Robert Holcot, who died of the Black Death in 1349, is probably the most interesting and original of all the English thinkers of his remarkable generation. Besides an Oxford Sentences commentary (1331-3) and quodlibets, he wrote several Biblical commentaries, including one on the Book of Wisdom which was very widely copied, probably because it provided a simplified introduction for a general audience to the type of debates characteristic of the university theology faculties. Holcot took many of Ockham's ideas for granted, though he differed on some important points (for instance, he retained species in his account of cognition). He tended to stress the insufficiency of unaided reason to grasp theological truths. In his Sentences commentary (I, d.4), he argues that, because Aristotelian syllogistic is not accommodated to Trinitarian theology, then – just as Christian doctrine adds concepts to natural science and ethics which would not be reached by reason alone – so the faith needs to add special rules to Aristotelian logic. Aristotelian logic is thus not universal, because it does not embrace the arguments suitable to every sort of subject.

Interlude xi: Holcot and the philosophers

Robert Holcot had a range of classical reading unusual for a fourteenthcentury university thinker, and references to Socrates, Plato and Aristotle, to say nothing of Hermes Trismegistus, abound in the pages of his very popular commentary on the Book of Wisdom. It has often been argued that his attitude towards ancient pagans, particularly the philosophers, was unusually indulgent, especially so far as their chances of salvation were concerned. Holcot's dictum *facientibus quod in se est deus non denegat gratiam* ('to those who do what is in them, God does not deny grace') is cited in this regard. Yet how does this attitude fit with the outlook of a thinker who everywhere stresses the insufficiency of human reason and the absolute power of God?

A simple answer would be as follows. Holcot believes God can do whatever does not entail a contradiction, but that God has bound himself to observe the order of nature he has freely established. Within this order, it is just that, if pagans do all that they naturally can to find out about God and live well, they should be given whatever else they need in order to achieve salvation. In fact, for Holcot matters are much more complex. On the one hand, he has to accept, from the text of the Book of Wisdom itself (and also Paul's Letter to the Romans), that the pagan philosophers did have knowledge of God. On the other hand, he considers (along with Ockham) that no rational demonstration of the existence of God is available. Holcot's solution is to take up an idea of Augustine's and posit a primordial revelation to all:

... they accepted the faith, because of the fact that from the beginning of the world some people worshipped God – Adam and some of his children, for example, and Noah and his children after the flood. Also, there were without break prophets who taught divine worship, and their fame reached to the Egyptian, Arabic (!), Greek and Chaldaean philosophers. And so God's prophets preceded all human and earthly wisdom, as Augustine declares in the *City of God* XVIII, 47 ... And so it is sufficiently established that knowledge of the worship of God

had come through the patriarchs and prophets (and knowledge of their lives and observances) to the cognizance of the philosophers who lived many thousand years after them. (Commentary on the *Sentences*, III, q. 1, a. 5)

Although by this supposition Holcot can explain the salvation of some of the ancient philosophers, its general effect is to lower their estimation. The philosophers did not heroically grasp the truth about God through their reasoning, but benefited from revelation. But, as he explains, they did not realize what was happening: they thought that they had succeeded through reasoning, where reasoning could never in fact have brought success.

Another English philosopher who died of the plague (in the same year as Holcot, 1349) was Thomas Bradwardine. At the time of his death, he was Archbishop of Canterbury, but he had earlier been an Arts Master and Fellow of Merton College, Oxford. Along with Richard Swynshead, William Heytesbury, Roger Swynshead, John Dumbleton and Richard Kilvington, he was one of the so-called 'Oxford Calculators', who applied mathematical techniques to problems in the natural sciences (see Chapter 8, section 7). He then studied theology and became a Master of Theology late in the 1130s; in the mid-1140s he wrote his vast attack on what he took to be the neo-Pelagianism of his contemporaries and immediate predecessors, De causa Dei contra Pelagium (On God's behalf against Pelagius). Bradwardine believed that the way Ockham and a number of theologians after him answered the Problem of Prescience (Study M), claiming that propositions about God's foreknowledge are open, because they are not genuinely past-tense, undermined God's role in predestining his creation. He stressed in the strictest Augustinian terms that human efforts and merit have nothing to do with whether a person is damned or not, but only the unmerited grace of God. Bradwardine did indeed allow contingency in the universe, because he followed Scotus's modal conceptions and thought that God might have made an alternative universe. But he did not believe that there is any room for individual humans living in this world to avoid or alter the destiny, and the ultimate destination in the after-life, chosen for them by God for reasons that are, if not arbitrary, then quite imponderable.

Paris theology

During this period, theology in Paris was less lively than at Oxford, and a great part of the reason, both for Oxford's flowering and Paris's decline, was the

fact that English students had started to stay at home from the 1310s and very few came to Paris in the 1320s and 1330s. Two important English thinkers were there, however, in the 1320s: one was Burley, discussed above, and the other the Carmelite John Baconthorpe (d. 1345-52), who became a Master of Theology probably in 1323 and returned to England after 1330. Baconthorpe tended to attack the views of Henry of Ghent and Scotus and, when he came to know them, Auriol; he does not seem to have known Ockham's thought. Surprisingly for a theologian, rather than an Arts Master, Baconthorpe had an especial interest in Averroes. Indeed, at the beginning of the sixteenth century, Augusto Nifo described him as the 'chief of the Averroists'. But the label 'Averroist' is wrong, because he did not try to develop rational positions independently. Rather, he seems to have favoured some of Averroes's views, but to have been willing to adapt them to fit Christian belief. For example, he introduced the idea of a 'two-fold conjunction' between the potential intellect and humans which allowed him to say that in some way the potential intellect, though one, was multiplied in human individuals.

Scotism of various types was a strong force. Among the Scotists who were independent to a greater or lesser degree, was the Franciscan Nicholas Bonet, who became a Master of Theology in 1333. The debate over absolute poverty (Chapter 8, section 5) had a large bearing on the lives of many Franciscans at this time. Francis of Meyronnes (Chapter 8, section 4) argued in favour of absolute poverty, but remained an ally of Pope John XXII. By contrast, Francis of Marchia – roughly his academic contemporary (he was a Master of Theology by 1334) – was led by his belief in absolute poverty to join the group of intellectuals that included William of Ockham and Marsilius of Padua at the court of Ludwig of Bavaria. Marchia was a highly independent Scotist, whose thought is only now being rediscovered. In his influential discussion of future contingents, he firmly rejects Auriol's three-valued logic, and tries to preserve the possibility of free human action with a series of distinctions that raise as many questions as they answer. Meyronnes had also been keen to reject Auriol's views on divine prescience, favouring Scotus's instead.

Marchia – directly, or through Michael of Massa – influenced the criticisms of Auriol on prescience put forward very powerfully by Gregory of Rimini (c. 1300–58). Gregory both affected the course of theology in Paris in the second half of the fourteenth century and was widely read in the later Middle Ages. An Augustinian Hermit, he studied theology in Paris in the 1320s and, after teaching at various Italian houses of study belonging to his order, he returned to Paris, lecturing on the *Sentences* in 1343–4. During his years teaching in Italy, Gregory came across the thought of the Oxford theologians of the 1320s and 1330s, such as Ockham, Chatton and Wodeham. It was one of the two main forces which shaped Gregory's own thinking in the *Sentences* commentary, and it changed the preoccupations and style of theology in Paris, which had been until then rather isolated from English

developments. The other shaping influence on Gregory was Augustine. He knew Augustine's writings extremely well, and he was sympathetic – against much of the preceding scholastic tradition – to the rather negative views of human freedom found in Augustine's later anti-Pelagian treatises. Alongside, therefore, a nominalism stemming from Ockham, Gregory puts into effect – just like Bradwardine in England at the same time – a programme designed to attack what he considers to be Pelagian positions. It is anything but surprising that he rejects Auriol's views on future contingents – though he accepts them as a correct exposition of Aristotle. In the same way as Bradwardine, Gregory is content to allow the contingency in affairs to rest just on the fact that God could have chosen an alternative synchronic world to the one he did choose. And he is happy to underline the most deterministic aspects of Augustinian teaching on grace (precisely those for which, 500 years previously, Gottschalk had been condemned: Study C).

Nicholas of Autrecourt (d. 1369) presents a stark contrast with the influential Gregory: a Master of Arts by about 1320, his studies in theology were cut short by his summons in 1340 to appear before the papal court at Avignon and his subsequent conviction for false and heretical teaching in 1346, which ended his academic career. From the condemned articles and the works of his that survive – principally, a treatise on the Arts course (*Exigit ordo*) and a set of correspondence, Nicholas's heresies appear to have been more against Aristotle than Christian doctrine. He was not by any means – as historians once depicted him – a radical sceptic; on the contrary, he was happy to accept that our sense faculties are generally reliable and so appearances are to a large extent trustworthy. Using the principle of non-contradiction as a touchstone, he laid down a criterion for the truth of conditionals quite similar to Abelard's (Chapter 5, section 2), and applied it more widely to cover any type of acceptable inference: not only must it be impossible for the antecedent to be true and the consequent false, but the meaning of the consequent must be identical to or contained in that of the antecedent. With this criterion in mind, he rejected much of Aristotelian metaphysics, since one cannot, on this view, infer from effects to causes, or from the accidents we perceive to the substances which, on the traditional, Aristotelian view, are their substrate. He did not, however, make this impossibility of certainty a reason for doubting everything, but rather (Grellard, 2005) for adopting a probabilistic view, according to which different beliefs have different degrees of justification. This aspect of his thinking may show him to be a far more important precursor of philosophy and science in the following centuries than he appeared to be when he was wrongly linked with scepticism.

The 'complexe significabile'

One debate is particularly characteristic of this period, and links together and contrasts some of the theologians just discussed. What is it that a proposition

as a whole signifies? The question is important, because it asks what is the object of scientific knowledge. And yet, in the thirteenth century, it had not been much discussed; it was in the twelfth-century that Abelard had given a distinctive response to it – propositions signify *dicta*, which are not things at all (Chapter 5, section 2) – which would be echoed (though there was no direct influence) by the Oxford and Paris theologians two hundred years later.

There were four main theories in the fourteenth-century debate. Ockham held that, in scientific knowledge, our object of assent is simply the proposition. By contrast, Burley and Chatton argued that what we assent to, and what a proposition signifies, is what is signified by the proposition's categorematic terms. Whilst Holcot put forward the theory that propositions signify the composition of the terms of mental language (close, then, to Ockham's view), Wodeham developed the theory of the complexly significable (complexe significabile): the proposition p signifies that p. So, for example, what 'God is God' signifies is that God is God or God-being-God. Wodeham saw his theory as a way of avoiding the opposing defects of Ockham's position on the one hand, and Burley and Chatton's on the other. Wodeham points out against Ockham that we assent to a fact, not just to a proposition. Against Burley and Chatton, he argues that our mental acts are simply too complex for the significate of a proposition to be just what its categorematic terms signify. Propositions do not just tell us that things, as signified by the categorematic terms, are, but how they are. How on the Burley-Chatton view, Wodeham objects, are the significations of the propositions 'God is God' and 'God is not God' to be distinguished?

Wodeham's own view is close to Abelard's *dictum* theory, although the *complexe significabile* is more definitely considered a truth-maker, rather than a truth-bearer, than Abelard's dictum. Like Abelard, though, Wodeham insists that a *complexe significabile* is not really anything at all: it does not belong to any of Aristotle's categories, and questions about what it is are inappropriate, because it is not a what but a to-be-what (esse quid). Whether this is a case of trying to have one's ontological cake and eat it is debatable: it has been suggested (Perler, 1994) that complexe significabilia are rather like qualities that are said, in contemporary jargon, to supervene on other features of a thing. It makes good sense to call a cup fragile, but there is no extra thing which accounts for its being fragile. Gregory of Rimini adopted Adam's theory (indeed, he used to be credited with its invention), but he altered and simplified it, losing Wodeham's holistic approach to knowledge and his sharp recognition that, if he was to maintain that the *complexe significabilia* are, in a certain sense, nothing, he must make it clear that they are to be thought of as 'hows', not as 'whats'.

8 Logica modernorum

One of the great achievements of university thinkers in the fourteenth century was in the elaboration of the logica modernorum, the various branches of logic first developed in the Middle Ages. Some of the best logicians of 1300-50 have already been discussed: Ockham, Burley and Bradwardine. Other important logicians include Richard Kilvington, who wrote his Sophismata before 1325 and who is regarded, along with Burley and Bradwardine, as one of the 'Oxford Calculators' (Chapter 8, section 7), and William Heytesbury (d. 1372-3), and in the later part of the century, Ralph Strode. As this list suggests, English - Oxford - logic was pre-eminent, and even the great Italian logician, Paul of Venice (c. 1369-1429) studied at Oxford from 1390-3, before writing his comprehensive logical textbook, the Logica Magna (1396–9). Similarly, the other great Continental logician of the time, Albert of Saxony, Master of Arts in Paris in 1351, and founding Rector of the University of Vienna (1365), although continuing the tradition of Buridan (who is treated below: in section 9) was heavily influenced by Ockham, Burley, Bradwardine and Heytesbury.

Three branches of the *logica modernorum* were considered above: the theory of the properties of terms (Chapter 7, section 2), which was developed and used in distinctive ways by Ockham and Buridan (Chapter 8, sections 5 and 9), exposition – at the basis of Ockham's theory of connotation (Chapter 9, section 5), and *sophismata* (Chapter 7, section 2). *Sophismata* remained of central importance in the training of Arts students, and in some of the English authors (Kilvington, Heytesbury, Bradwardine) they take on a special style, because they provide the opportunity for thought-experiments which are used as a basis for developing physical theories. Three other important branches of *logica modernorum* were the theory of *consequentiae, insolubilia* ('Insolubles') and the logical game known as *obligationes*.

Consequentiae have been of special interest to contemporary logicians, because they seem – and by some philosophers have been treated as – a medieval version of the modern system of propositional logic. But this similarity is partly deceptive, and a good deal about *consequentiae* remains rather puzzling. Abelard had developed a sophisticated account of *consequentiae*, in the context of the Boethian theory of topical argument (Chapter 5, section 2). But the fourteenth-century treatises on *consequentiae* probably developed quite separately from discussion of the *Topics* or of any Aristotelian treatises; and the sharp distinction Abelard made between the validity of an argument and the truth of a conditional, though theoretically available, is not explicitly followed. Many historians would say that *consequentia* meant both an 'if . . . then . . .' proposition and an argument – that the distinction between implication and inference was all but ignored. A good case, however, has recently been made (King, 2001) for supposing that, despite some of their language, fourteenth-century logicians regarded *consequentiae*

as inferences, which are or are not 'good', or 'hold' or fail to hold, rather than as conditionals which are true or false.

Burley seems to have been one of the earliest, perhaps the earliest, logician to systematize the ordering of consequentiae in his De puritate artis logicae. He and Ockham distinguished between 'formal' and 'material' consequentiae. Formal consequentiae hold in virtue of the contingent relations between their terms, or the necessary relations between their terms, or the syntactic relation of the propositions (as evident from the syncategorematic terms). Material consequentiae, by contrast, hold in virtue of the truth conditions of statements, but according to many logicians there are just two of them: what are now called the paradoxes of strict implication - that from an impossible proposition any one follows, and that a necessary proposition follows from any proposition. It seems, then, doubly misleading to think of Burleigh's or Ockham's consequentiae as propositional logic: reference is often made to the inner structure of atomic propositions, in a way that is foreign to a propositional system and, in any case, many consequentiae were considered to hold in virtue of the meaning of their terms (for instance: 'If every animal is running, then every human is running') and so fall outside the scope of what would now be considered formal logic. Yet this observation should not be taken as a criticism of these logicians, but as a warning against misinterpreting them by forcing them into an alien mould.

Insolubles are paradoxes of the Liar type - for example,

(P) This proposition is false.

Medieval interest in them goes back to Adam of Balsham in the twelfth century and, at first, *insolubilia* were discussed in the general context of fallacies. The problem is, of course, to decide on a determinate truth value for such propositions, which seem to be false if they are true and true if they are false. Early solutions were to deny that such propositions say anything at all, or to say that no self-reference takes place (for example, the 'this proposition' in (P) cannot refer to the whole of (P)). Bradwardine's more complex solution was to say that every proposition implies that it is true. From (P), therefore, follows

(1) P is true.

But from the meaning of (P), it follows that

(2) P is false.

Since Bradwardine also believes that a proposition signifies whatever follows from it, P signifies (1) and (2) – a contradiction, and so it is false. A different

way of tackling insolubles was proposed by another Oxford logician, Roger Swynshead (d. 1365), who held that, to be true, a proposition had both to (i) correspond to reality and also (ii) not falsify itself. The truth of P is ruled out by (ii).

Obligations were a logical game that formed an important part of the training of logicians; the treatises on obligations set out its rules. It began to be developed even in the twelfth century, and flourished in the fourteenth. There were two players, the Opponent and the Respondent. In the most popular form of the game, a *positum* was put forward – a proposition which the players were obliged to accept as true. The proposition was almost always false, and sometimes impossible, though never an obvious self-contradiction that no one could even entertain. It was the Opponent's task to put forward a series of true or false propositions, and the Respondent had to assent to, deny or doubt each proposition as it was put forward, according to a set of rules which, in their most common formulation (as found in Walter Burley) were as follows:

(I) If the proposition is entailed by the conjunction of the *positum* and the proposition(s), if any, he has already accepted as true, it is assented to.

(II) If the proposition is inconsistent with the conjunction of the *positum* and the proposition(s), if any, he has already accepted as true, it is denied.

(III) If neither (I) nor (II) is the case, the proposition is irrelevant and the Respondent assents to it or denies it according to the actual facts, or, if he does not know the facts, he doubts it.

A variant set of rules which simplify the game were proposed by Roger Swynshead in his *Obligationes* (*c.* 1330–5). According to them, any proposition is irrelevant unless it is entailed by, or is inconsistent with, the *positum* alone. Some authors followed Swynshead, but most (for instance, Strode and Paul of Venice) rejected his new rules.

The aim of the game was for the opponent to force the respondent into contradiction. But was there any deeper point to *obligationes*? Some scholars think that the purpose was just logical exercise. It has been suggested, however, that they were intended to investigate the logic of counterfactuals (Paul Spade), since the *positum*, which must be accepted as true, almost always states that things are otherwise than they really are. But this explanation does not account for the presence of propositions which are to be evaluated as irrelevant. Moreover, if the idea were to investigate counterfactual conditionals, there would need to be some restriction on the propositions which the opponent can propose, even leaving aside those which will be judged irrelevant. To put it in modern terms, it would not be enough to arrive at a

series of propositions all of which might in some possible world follow from the *positum*: we should want to know what propositions follow from it in the possible world nearest to the actual one in which the counterfactual antecedent is true. Given these objections, a different theory has been suggested: obligations should be regarded as thought experiments. Acceptance of certain logical or semantic theses will make the respondent evaluate certain propositions in certain ways. If these evaluations lead him to a contradiction, though otherwise he argues correctly, then this is an argument against the thesis in question.

9 John Buridan

The medieval Arts Master who, perhaps more than any other, was practically successful in putting into effect the idea of a life dedicated to pursuing philosophical, non-revealed wisdom is John Buridan. Buridan (c. 1300-c. 1360) was a Master in the Arts Faculty at Paris by 1320. Although he accumulated the personal wealth that would have allowed him, had he so chosen, to enter the 'higher' Faculty of Theology, he chose to remain an Arts Master throughout his long career of about forty years, and he occupied positions of authority in the university. He drew together his logical teaching into monographs and an enormous textbook, the Summulae Dialecticae, and commented, often more than once, on a wide range of Aristotle. Buridan's influence was very great: he ensured that nominalism became dominant in Paris for the rest of the century, and his following in the later Middle Ages eclipsed Ockham's. Lacking the ecclesiastical backing of the great medieval theologians and the dramatic role of Siger or Boethius of Dacia, Buridan is only beginning to be appreciated as one of the most powerful and innovative philosophers of his century.

As a dedicated Arts Master, Buridan taught and wrote extensively on logic. His *Summulae* are a vast commentary on Peter of Spain's popular handbook (Chapter 7, section 2), though they were quickly regarded as a free-standing work. The plan, therefore, roughly follows Peter's: after setting out preliminaries in Book I, Books II–III and V–VIII follow through the matter of the *Isagoge, Categories, Prior Analytics, Topics, Sophistical Refutations* and *Posterior Analytics*, whilst Book IV is a treatise on supposition and the theory of the properties of terms. A sophisticated monograph on *sophismata* was sometimes appended as Book IX, and Buridan also wrote a separate treatise on *consequentiae*.

Buridan carefully developed and made use of a nominalism close to that which Ockham had so stridently advocated. Like Ockham, Buridan thought that all existing things are particulars and only concepts can be universals; like him, too, Buridan did not accept accidents in most of the Aristotelian Categories as real items in the world, although he explicitly differed from Ockham in accepting the reality of quantities as well as qualities. As in Ockham, a mental language is used to provide the discriminations which nominalism strips from the real world. Buridan's mental language is, like spoken and written language, compositional: the meaning of larger units is built up from that of smaller ones, which are joined by concepts that are the mental equivalents of *syncategoremata* in speech, such as the copula.

Buridan uses this strategy of explaining away distinctions through the apparatus of mental language and so reducing his ontological commitments more quietly, however, than Ockham. He rejects, for instance, Ockham's explanation of simple supposition – where a term in a sentence refers to a universal – as being reference to a concept. It is unnecessary to single out this sort of reference as a special type, Buridan thinks. There need only be two main types of supposition: personal, when a term refers to a thing or things (and hence to particulars, because nothing is universal), and material, when it refers to concepts or to other words. And more generally, Buridan, whose primary concerns are always didactic, shows a great concern for how real spoken or written language (as opposed to mental language) is used, and for the many varieties of non-literal expression found in it. It is for this reason that his involvement, as Rector, in the anti-Ockhamist Arts Faculty statute of 29 December 1340, (Chapter 8, section 10) is not at all surprising, since this measure was directed against an over-literality and rigidity in interpretation which some passages in Ockham encourage.

In his treatment of *consequentiae*, Buridan takes an apparently original line and follows it through more consistently than any other logician of the period. He conceives the distinction between formal and material consequentiae in a sharply different way from Burleigh and Ockham. A material consequentia is one which depends on the meaning of the terms, such as, 'If a man runs, an animal runs'. A formal consequentia is formal in a sense near to what logicians today would recognize: the test that it holds is not whether the antecedent contains the consequent, or whether it would be impossible for the antecedent to be true and the consequent false, but rather whether it remains true whatever terms are uniformly substituted for the categorematic ones. Buridan rightly includes syllogistic as belonging to this sort of formal argument. He does, not, though, try to propound a formal system, because he still keeps a large place for non-formal, material arguments. In the final book of the *Summulae* (Sophisms 7-12), there is a detailed treatment of insolubles. Although the outline of the solution he adopts owes a lot to Bradwardine (the paradoxical proposition is false because of a contradiction generated between it and another proposition stating that it is true), Buridan rejects the claim made by Bradwardine that every proposition signifies that it is itself true: rather, suppose we have a proposition (for example, 'The horse runs') and we name that proposition 'A'. Then from

(1) A

(2) The proposition 'A' exists

there follows

(3) A is true.

Buridan taught the whole range of the arts syllabus and, in discussing works such as Aristotle's Physics and On the Soul, he faced the problems and opportunities that confronted all Arts Masters in considering ideas that did not fit with Christian doctrine. He was certainly not a Latin Averroist, since he rejected the Averroists' characteristic view that, according to the best rational arguments, there is one potential intellect for all humans. Some passages in his work, indeed, suggest that he was less committed than they to retaining (at least in principle) the autonomy of rational speculation. In his commentary on the *Physics*, he recalls that all Arts Masters have to vow not to discuss any purely theological topic, and that if it happens that they are discussing a question which touches on both the faith and philosophy, they will answer it as faith demands 'and solve the arguments <against the answer in accord with faith> as it seems to them that they should be answered.' Buridan took this oath seriously, and was happy at times to introduce a theological twist into his philosophical reasonings when he needed in order to follow it (Sylla, 2001). For example, in discussing the eternity of the world he is willing to stretch his arguments beyond the realm of ordinary physics, into imagining what might be the case, in order to show that a first motion is perfectly conceivable. Yet his predominant position is that it is only on the authority of the Bible and the teaching of the Church that he accepts the *creatio ex nihilo*; so far as the arguments for this position are concerned, Buridan refutes them in detail.

On the question of the soul, Buridan uses the same strategy as the Latin Averroists, but in relation to Alexander of Aphrodisias's view. He distinguishes (Quaestiones de anima III, q. 3-6) three answers: that of Alexander of Aphrodisias, that the 'human intellect is a material form, that is generable and corruptible, drawn out from the potency of the matter and extended like the matter, just like a cow's or a dog's soul, and it does not remain after death'; that of Averroes, which makes the human intellect immortal but just one for all people; and that of 'the truth of our faith' - the soul is created, unextended and does not derive from matter, and is immortal. He rejects Averroes's view, but recognizes that Averroes and the Christian faith both agree that the soul is not a material form. He gives Averroes's arguments for this view - the Christian one - and says that they are persuasive, not demonstrative. He finds it particularly hard to explain how the human intellective soul could be both unextended, as it needs to be in order to be intellective, but also fulfil the functions of sensing and growth. Although the Christian view is supported by 'probable reasons' and is 'true without gualification and should be held firmly by faith', in order to become evident from first principles (leaving the teaching of the Church out of consideration), it would need God's special intervention. In the same way, Buridan adds - naming two articles of faith that almost everyone in his time accepted as not being able to be established by natural reason – God could, through special grace, make the Incarnation or the Trinity evident to us. At moments like these, Buridan seems to be asserting the autonomy of reasoning and of Arts Masters just as firmly as any of the Latin Averroists.

10 The late fourteenth century

Just as in the twelfth century, so the most original and best known philosophers of the fourteenth century had finished their careers by its midpoint; though the impression of the period from 1350–1400 as thin philosophically (except with regard to logic: Chapter 8, section 8) may owe a lot to the gaps in modern historical knowledge.

Oxford philosophy and theology was not so badly affected by the Black Death of 1348–9 as was once thought, but the intellectual energy and the special style of thinking of the 1320s–40s was lost. Although a strong interest in logic remained characteristic of theology there, Oxford now became, surprisingly, a centre for realism. Outside logic, the three most important Oxford thinkers of the later fourteenth century were two men who have remained quite obscure – Nicholas Aston, who became Master of Theology in 1358; Richard Brinkley, a Franciscan who worked between 1350 and 1373 – and one famous and controversial figure, John Wyclif.

Aston, who is known through his (unpublished) commentary on the *Sentences*, was famous in his own day throughout Europe for his proof of God's existence. Aston considers the proposition P, 'God does not exist'. Suppose it is false. Were P merely contingently false, then not-P ('God exists') would be merely contingently true; but Aston considers that, if God exists, then he exists necessarily. Since Aston also lays down that any false proposition which is not contingently false is self-contradictory, it follows that if P is false, it is self-contradictory. But, he points out, if a proposition is self-contradictory, then no change in anything external to it will stop it from being self-contradictory. Whether God does or does not exist, therefore, P is self-contradictory. So God exists necessarily. (The problem with this argument is illustrated by the fact it would work equally well if P were '2 + 2 = 4'.)

Brinkley is known both as a logician and a theologian. His *Summa logicae* (1360–73), written after he had become a theologian, covers the whole range of the subject. On the vexed area of the semantics of propositions, he argues for the view that a proposition as a whole signifies the things in the world its terms signify. Brinkley is keen to defend realism. On supposition, for instance, his view is like that of Peter of Spain: simple supposition is of real universals and not, as Ockham argued, of concepts; they are signified only by the mental and linguistic terms actually imposed to signify them. The little that has been studied of Brinkley's theology shows him using fine linguistic distinctions supposedly to establish, for example, how God can act contingently, although he is a necessary being. God and God's action are not distinct, and so if he

acted 'in a contingent way', he would himself be contingent. But if we say God acted 'contingently', then the adverb merely – so Brinkley claims – tells us about the thing that is brought about in this way by God.

John Wyclif was born before 1330, and was a Master of Arts at Oxford in 1356, and Master of Theology in 1372. He remained in Oxford until 1381, three years before his death. By that time, his polemics against the Church's wealth and abuse of it, and – more centrally – his rejection of the traditional doctrine of transubstantiation, had turned him into an outcast. He was an inspiration for the popular Lollard movement in England and for John Hus's movement of reform and nationalism in Bohemia; and at the Council of Constance (1414–18), where Hus was burnt, Wyclif's writings were condemned. For much the greater part of his life, however, Wyclif was an academic philosopher and theologian, who elaborated a complex and in some respects original set of ideas that historians are only now beginning to unravel and assess. Wyclif's sophistication in the *logica modernorum* is shown by a treatise he wrote early in the 1360s giving an original theory of how to tackle *Insolubilia*.

Wyclif's special concern, however, was with a much more traditional area: the problem of universals. He was another Oxford realist, and he blamed nominalism for all manner of philosophical, theological and moral errors. He did not, however, advocate an extreme Platonic type of realism, in which universals exist as real things quite distinct from particulars. Picking up on a classification of universals first made in late antiquity (Chapter 2, section 1), Wyclif distinguished different sorts of universal: universals in the mind of God ('before the thing'), universals as signs ('after the thing') and – centrally - universals 'in the thing'. Universals in things are real, but they are not really distinct from the things, but merely formally distinct. Things which are formally distinct for Wyclif are even nearer to being completely identical than they are for Scotus in his Ordinatio; it is, for instance, a less sharp distinction than that between the three persons of the Trinity. Wyclif argues for this view by pointing out that everyone agrees (De universalibus 3; cf. Kenny, 1986, 26-7) that propositions can be true, and one sort of true proposition is of the form 'A resembles B in respect C'. But, in grasping such a truth, we are doing exactly the same as what we do in grasping a universal, except that in grasping the universal we are grasping the simple resemblance-of-A-and-Bin-respect-C, whereas the object of our knowledge is complex when it is a proposition. This argument points to what fundamentally separates Wyclif from the nominalists. Medieval nominalists do not deny that there are similarities between particulars of the same kind that are really the case, but they wish to maintain that this truth does not require there to be any thing that is, in whatever way, universal. Wyclif, however, presents them with the very antithesis they deny: either accept universal things (though not really distinct from particulars), or deny any basis in reality for distinctions between genera and species.

In Paris, by contrast, the nominalist heritage of Ockham and Buridan continued to flourish. Appearances seem otherwise, because the Faculty of Arts banned commentary and citation of Ockham in 1339. But the statute of 1340 shows that what the Arts Masters wished to do was to restrain those of their number whose extreme interpretation of Ockhamism led them to stress the literal meaning of every proposition, as if there were a set way to analyse a sentence logically, without regard for the speaker's meaning. This attitude – not unfamiliar to those who mix with contemporary logicians – was the very opposite of Buridan's respectful treatment of linguistic nuance. By rejecting it, the Arts Masters in fact shored up a nominalist position.

In theology, too, a nominalist view predominated, united with a tendency to fideism. The combination is found in both Marsilius of Inghen, who was in the Paris Arts Faculty between 1362–79 and wrote prolifically on logic, before moving to the newly-founded university of Heidelberg, where he commented on the *Sentences* in 1395–6, and in Pierre d'Ailly, who became a Master of Theology in 1381 and wrote a treatise on the soul as well as a *Sentences* commentary. Marsilius is willing even to go along with Buridan in saying that, according to natural reason, there is no proof of the soul's immortality; Pierre disagreed, but none the less tended to emphasize the limits of human knowledge. It is not surprising to find Pierre d'Ailly opposed to the Dominicans and critical of Aquinas, whose metaphysics was so different from his own, and whose confidence in reason so much greater.

Interlude xii: How far can you go? Biagio Pelacani di Parma

In a Latin work on the soul from the last years of the fourteenth century, you come across the following set of conclusions. There is no reason to think that the human soul can be separated from the body; there is no experimental evidence for it and, naturally speaking, no one should say it. God could indeed separate the intellective soul from the body and preserve it for ever: this should be admitted because it is not contradictory, and the philosophers – Christians and non-Christians – agree that God can do whatever does not involve a contradiction. It is possible, adds the writer, that God created the human soul, but not evidently true; and it is more probable that, whether or not God created it, the human soul will cease to exist than that it is immortal. He goes on to explain how humans are generated from putrefying material, through the action of the stars, and so to conclude that the human soul is a generable and corruptible material form.

Would any medieval author think such things? At first the answer seems to be negative. Looking back a few pages in the edition of Biagio

Pelacani di Parma's Quaestiones de anima ('Questions on the Soul'), one notices that these conclusions are marked explicitly as being philosophical ones, and they are preceded by a very different set of conclusions given 'as a Christian'. Is Biagio really different in his stance from Buridan (Chapter 8, section 9), who said that, were it not for Christianity, Alexander of Aphrodisias's materialist view of the soul would be the one he would prefer? But it turns out that this text is of the revised version of the *Quaestiones* which Biagio wrote in 1397, after an interview with the Bishop of Pavia in 1396, where it was made clear to him that he needed to express regret for the views he had held contrary to Christianity. In the earlier version of the commentary (1385), his materialism is unqualified. Through his various works, Biagio, who was distinguished as a scientist and as a logician familiar with the subtleties of the English School, asserts astral determinism, and the view that the human soul is generated and corrupted, just like that of a dog or a horse; and, while not denying the existence of God, he even suggests that he might be an immanent, material principle. Looking at the brevity with which, in his revised commentary, he runs through the Christian position, and the enthusiasm and length at which he propounds the philosophical one, it is hard to doubt his sincerity - as a philosopher.

PHILOSOPHY OUTSIDE THE UNIVERSITIES, 1200–1400

In an Introduction such as this, it is the custom for the writer to assume an attitude of anonymous omniscience, handing down his chapters like the tablets of the Decalogue, as if they had been conceived in a timeless realm, far removed from everyday contingencies. Readers usually, apart from some occasions of particular annoyance, accept this pretence. They do not believe it – they know that the author, like themselves, lives in a world of deadlines and word-limits, of limited abilities and unlimited distractions – but they suspend their disbelief. But it is time now to pull aside for a moment this veil of fiction. Here I am, at the beginning of Chapter 9. I have few words left from my word-limit and even less time from my deadline-to-end-all-deadlines. And, if these are contingencies which might seem as if they admitted of some easy solution, given the publisher's cooperation, there is one more important factor to which there can be no speedy remedy: my ignorance.

The section that remains in the plan of this book is the one covering philosophy outside the universities in the thirteenth and fourteenth centuries: that is to say, the philosophizing in the Latin world, in Latin and the vernaculars, conducted outside Paris, Oxford and a few other centres; Byzantine and Islamic philosophy; and Jewish philosophy which, in these centuries, was mainly conducted in Hebrew by Jews living in Christian Europe. Each of these areas deserves a full chapter to itself, and altogether the space allocated to them should be greater than that occupied by the last two chapters, devoted to what is just one species of the philosophical thinking which took place at this time. A quick calculation will show that achieving this balance would require a book almost half as long again as the present - one which, even supposing I were granted the time and the pages, I would lack the capability to write. (Indeed, in the present state of research, it is doubtful whether even specialists would be in a position to write satisfactorily about Byzantine or Islamic philosophy in these centuries.) The following pages, then, can only give an impression of some of what there is to be found in these rich areas. Their fewness should be taken as a failure of this book to achieve its aims, rather than as a judgement on the value of the material.

1 Outside the universities: philosophy, courts and the vernacular in the Latin West

Was Latin philosophy in the thirteenth and fourteenth centuries confined just to Paris and Oxford? Even from the last two chapters, it will be clear that there is an obvious way in which it was not. Not only were there more minor universities, such as Bologna (important for law, and with its own tradition in the arts) and Cambridge – and in the late fourteenth century new universities such as Prague, Krakow and Vienna, there were also the Dominican and Franciscan *studia* outside the university towns. It was at Blackfriars in London that Ockham did much of his important work and debated with Chatton and Wodeham; Albert the Great was based mainly at Cologne; Aquinas was sent at one stage to Naples to found a *studium* there; Peter John Olivi spent most of his teaching life at provincial Franciscan houses of study. Still, the university tradition, at least until the fifteenth century, took its lead from Paris and Oxford, and all the figures just mentioned studied at some stage at one or the other.

In the earlier Middle Ages, royal courts had provided a home for philosophers - witness Charlemagne and his grandson, Charles the Bald (Chapter 3, sections 6 and 7). To a limited extent, the same was true in some cases in these later centuries too. Ludwig of Bavaria gave refuge to four of the most brilliant philosophers of their time: the Franciscans William of Ockham and Francis of Marchia, who had split with the Pope over absolute poverty (Chapter 8, sections 5 and 7) and Marsilius of Padua and John of Jandun (Chapter 8, section 6), who had to flee Paris after the publication of the Defensor Pacis. Yet this intellectual constellation produced little philosophy at Ludwig's court, and Ockham devoted himself to writing political tracts: it was as if the philosophizing they had practised could only flourish in the context of a university. The Emperor Frederick II (1194-1250) had more of a genuine personal interest for philosophy than his descendant. Frederick's court was the setting for Michael Scotus's work as a translator of Averroes (Chapter 7, section 1), and Frederick addressed a series of questions to the philosopher Ibn Saba'în on subjects including the eternity of the world, metaphysics and the immortality of the soul. Reports of his conversation suggest that he also grasped at a sophisticated level Maimonides's anthropological view of the origins of Old Testament law. Frederick's son, Manfred, seems to have shared his father's enthusiasm for such speculations. Robert of Anjou, King of Naples from 1309–43, was one of the greatest princely promoters of philosophy. Francis of Meyronnes (who described him as 'a true philosopher') and Giles of Rome dedicated works to him; and Qalonymos ben Qalonymos, the Jewish translator, made the first Latin version of Averroes's Incoherence of the Incoherence at his court, where Petrarch was honoured and Boccaccio wrote his learned epic, the Teseida.

Boccaccio (1313–75) and his writing are indeed characteristic of the sort of philosophical work that was more normally done outside the universities.

Unlike the intellectuals who had joined Ludwig of Bavaria, or Francis of Meyronnes and Giles of Rome, Boccaccio was a layman: he did not enjoy the special clerical status given to those engaged in university study and teaching. Boccaccio united a proto-humanist interest in Latin antiquity and literature with a serious interest in philosophy and, of course, an important output of works in the vernacular (most famous of all, the Decameron) and in Latin. One of Boccaccio's most enthusiastic readers - he miniaturized the Teseida into his Knight's Tale and vastly expanded another of Boccaccio's narrative poems, the Filostrato, into his Troilus and Criseyde - was Geoffrey Chaucer (1340/5-1400), who worked at the court of the English king, Richard II. Chaucer showed his interest in philosophy by making an English translation of Boethius's Consolation - a task in which he was following in the footsteps of another of his favourite sources. Jean de Meun who had translated the Consolation into French as well as (c. 1280) writing the enormous 'continuation' of Guillaume de Lorris's twelfth-century Roman de la Rose. The special interest of these two vernacular poets in the Consolation was general in nonuniversity medieval intellectual life. Boethius's work was translated into almost every medieval vernacular, often several times, and there are even vernacular commentaries on it. The Consolation was part of the twelfthcentury curriculum, rather than that of the universities, and Chaucer and Jean de Meun looked back to the twelfth century – especially to the philosophical poetry and prosimetra of Bernard Silvestris and Alan of Lille (Interlude v) - in a way that distinguished them from the university thinkers. Yet both of these poets were aware of the philosophical developments of their own century. Chaucer clearly knew Holcot's Commentary on Wisdom, and he gives (though, typically, in a comic context) a brief but accurate summary of Bradwardine's position on divine prescience. Chaucer's great contemporary, William Langland, who wrote his enormous allegorical dream-poem Piers Plowman away from the court, had an even closer knowledge of university theology and philosophy, which informs the debates in his poem (reminiscent at times of scholastic disputation) on subjects such as predestination, grace and merit.

The two non-clerical writers, however, who made the outstanding contribution to later medieval Latin philosophy away (mostly) from the universities were undoubtedly Italy's greatest poet – Dante Alighieri – and the unclassifiable Majorcan, Ramon Llull.

Dante

Dante Alighieri (1265–1321), though a layman, who came to philosophy only after the death in 1290 of his beloved Beatrice, the subject of much of his earlier love poetry, was arguably one of the most serious and thoroughgoing of all the Latin Averroists. Already an established Florentine poet, Dante gave himself a philosophical education probably by attending at this period lectures given at the Dominican school of Santa Maria Novella. Literary scholars used to imagine (and some in the Anglophone world still believe) that Dante's philosophy was a sort of potted Aquinas. In fact, he was clearly influenced very much too by Albert the Great, and very deeply by the sort of thinking represented by Siger of Brabant. His *Convivio* (1304–7), though in Italian and in the form of commentary on Dante's own poems, is a treatise which, in the tradition of Aubrey of Rheims and Boethius of Dacia (Chapter 7, section 6), puts forward an ideal of happiness attainable here on earth through philosophical speculation, and the complementary ideal of the noble soul able to lead this life. Although Dante also considers the eternal destiny of humans, he keeps it distinct, advocating the pursuit of earthly philosophical happiness on its own terms, although it can also be seen as a preparation for a greater eternal happiness.

Dante's most important philosophical work, and his most Averroistic, is his Latin treatise, the Monarchia ('Monarchy', 1316-19 - an earlier dating was once favoured, but recent scholarship supports this later one). Its aim is to show that the Roman Emperor should be the supreme ruler of mankind (the subject of Book II) and that he should not be subject to the Pope in temporal matters (the subject of Book III). Book I lays out the theoretical foundation for these claims. Humankind cannot reach its goal unless there is peace, and that peace requires a universal monarchy. But what is the goal of humanity? It will be found, Dante reasons (I,3), in the activity which is peculiar to humanity taken as a whole, and it will be different from the goal of individual humans or smaller social and political groupings - families, villages, cities, kingdoms. This activity turns out to be that of intellectual cognition through the potential intellect: members of lower species do not apprehend through the intellect at all, whereas celestial intelligences are essentially intellectual, not intellectual in potency. It is the activity of humanity as a whole, because it requires a great many people to make this intellectual potency actual: 'the peculiar work of the human race taken as a whole', he concludes (I,4) 'is to actualize always the whole power of the possible intellect.' The most obvious way to read this passage is as an adoption of the Averroist position, to which Dante gives a political twist. There is a single potential intellect which we, as a species, must aim to actualize - something which requires the devotion to learning and science of multitudes of people the world over, and will never be achieved without universal peace. At the end of the work (III,15), Dante also makes his Averroism explicit, when he describes the respective roles of Emperor and Pope. Philosophical teaching - the province of the Emperor - guides humans towards their natural end, as social being on earth. Theological teaching - the responsibility of the Pope is not a way for people to reach their natural end, but just their supernatural one.

Since, in his *Divina commedia*, Dante places (*Paradiso* X, 133–8) Siger of Brabant alongside Aquinas and Albert the Great in heaven, his Averroism

would not seem to be in doubt. But almost all Dantists have denied it. They point out that, on an Averroistic view, there is no individual immortality, but Dante's Commedia is precisely about the punishment and reward of individuals in the after-life. Moreover, in the course of that poem, Dante explicitly rejects (through the mouth of Statius, a late ancient poet supposedly converted to Christianity, who is the guide-figure at that point) Averroes's theory of the single potential intellect (Purgatorio XXV, 68-74). But these objections miss the central point that Averroism – that is to say, the Latin Averroism which should be symbolically rather than literally linked with the thought of Averroes himself (Chapter 6, section 7) – involves a procedural relativism. When working in terms of natural reason, the Latin Averroists accept an Averroist interpretation of Aristotle's theory of the intellect; when working in terms of faith, they reject it. The first book of the Monarchia is strictly based on nonrevealed premisses and supposedly demonstrative reasoning. By contrast, the Commedia is a theological work. Where Dante differs from the Averroistic Arts Masters is not in the extent of his adherence to their principles, but in the use he makes of them. For the Arts Masters, Averroism justifies an elitist isolation of a small group of intellectuals in pursuit of their individual philosophical heaven on earth. For Dante, who was not an arts master, but a poet and moral reformer, Averroism becomes the basis for political action designed to secure the ultimate earthly happiness of all mankind.

Llull

By a neat antithesis, Ramon Llull was, among many other things, a convinced and combative anti-Averroist. Llull's long working life - he was born in 1232, just a few years after Aquinas, and he was writing almost until his death in 1316, the year before Ockham began his lectures on the Sentences - had a most unusual course, which is known in more internal detail than for most medieval thinkers, because he wrote an autobiographical account of his spiritual development, aspirations and achievements, the Vita coaetanea ('Contemporary Life'). His father was one of the first generation of Catalans to settle Majorca after the Christian reconquest. He was well-off and connected with the court, and Llull describes his own life when a young man as worldly and profligate. At the age of thirty he had, so he tells, a series of visions of Christ, which persuaded him to give up his goods, separate himself from his wife and children and devote his life to converting non-believers to Christianity – a task which seemed pressing from the perspective of Majorca, with its large Muslim population and its close links with the vast world of Islam.

To accomplish his missionary task, Llull realized that he needed to educate himself. His native language was Catalan, which was spoken quite widely in the Western Mediterranean. Llull taught himself not only Latin, the language of Christian thought and culture, but also Arabic, the language of the people he wished to convert. He learned these languages well enough to write in both of them, and also wrote in his own vernacular, and so Llull's vast oeuvre was split between Catalan, Latin and Arabic (though none of his Arabic texts survives). Despite the extent of his literary production (over 250 works, some of them hundreds of pages long, are extant), Llull did much more than sit at his desk and compose treatises. He lobbied the Pope and others, with some success, to provide instruction in languages such as Arabic for missionaries. He tried to introduce his doctrines to the University of Paris, and, as mentioned, he argued against the Averroist current there: it seemed to him to be an intrusion of anti-Christian thought into Christian society. Most daringly, Llull undertook a number of missions to North Africa, with the aim of converting Muslims to Christianity through his arguments. Such behaviour was likely to be punished with death, and Llull was lucky to have escaped with insults, stoning, imprisonment (including a period, when he was already over 75, locked in the prison latrine) and expulsion. He did, none the less, have some chance to engage in debate with Muslim intellectuals, although never the time he needed to carry his arguments through with the success he was certain they would achieve, if only they were heard out.

Llull's certainty was based on the belief that God had granted him a special insight into a method or 'Art' by which the existence of the Christian triune God and the Incarnation could be shown in a way that would rationally convince Muslims. In work after work, Llull expounds his Art in one or another form, with greater or less complication. In its basis, Llull's Art is a sort of natural theology, which sees in the whole created universe the reflection of the divine Trinity. Its spirit is very much that of Bonaventure (Chapter 7, section 4), and its optimism that specifically Christian mysteries can be made rationally persuasive fits with twelfth-century assumptions rather than those of Llull's own day. The Art, though, is a highly formalized system. Llull identifies a set of nine 'dignities' (goodness, greatness, eternity, power, wisdom, will, virtue, truth and glory) which are like Platonic Ideas, existing in God: they are convertible with each other and do not introduce any plurality into God. They each have three aspects: the agent, that which undergoes action, and the relation between the two: in the case of goodness, for instance, that which makes good; that which is made good; and making good. This analysis into triads enables Llull to see the imprint of the Trinity everywhere in creation. There are, moreover, various different spheres or 'subjects' of existence (for example, the angels and humans, the imagination and the senses), and nine main types of relationships (difference, concord, contrariety and so on). Llull uses single letters of the alphabet to label these individual notions or combinations of them, and then combines the letters in all the different ways possible in order to work out his system.

Despite his own dedication to it, and the influence it would have up to the time of Leibniz, it is doubtful whether there is much of philosophical interest in the strange combination of mathematics, mysticism and a host of Neoplatonic assumptions that constitutes Llull's Art. Llull's main importance in the history of philosophy lies elsewhere, in his role as a figure who breaks the boundaries between languages and cultures (although his learning in Arabic thought was limited, he is one of the only Latin writers to be influenced directly by Ghazâlî or by Sufism), and between types of writing. Llull is one of the finest mystical poets of the Middle Ages, and he wrote several fictionaldidactic works which combine a novelist's imagination with his overriding theological and moral concerns. He is very fond, too, in his Latin works of the dialogue form, which he often treats with an unusual vividness, presenting not just the sequence of arguments but also their dramatic setting. One of his most fascinating works, written in Catalan, is the Libre del gentil e dels tres savis ('The Book of the Gentile and the Three Wise Men'; 1274-6?). The Libre features that most unusual of figures in the Middle Ages: a genuine atheist, the Gentile of the title, who believes neither in God nor the after-life. As a result, he is filled with sadness and pain, because he is fond of earthly life and cannot bear the idea that he will lose its joys when he dies. The Gentile meets a learned trio - a Jew, Muslim and a Christian - who band together to convince him, with ease, of the existence of a Creator God. They then take their turns to expound to him their different religions, and although a little more space is given to the exposition of Christianity, Llull gives full and wellinformed expositions of Judaism and Islam. In the arguments used to educate the Gentile, Llull draws on his Art, but does not use its specific methods. At the end, the Gentile is about to announce his decision about which religion he will choose. But the wise men prefer not to hear it: they prefer to be left, uninfluenced by his choice, to go on discussing the matter among themselves in the hope of finding the truth. And so the readers, too, are left in suspense. There is no doubt, indeed, of Llull's own allegiances, nor of his fervent desire that all humanity should share them. But as a thinker, and more particularly as a literary thinker, Llull is aware that the way in which truth is found can be integral to grasping that truth itself.

2 Byzantine philosophy

Despite the sack of Constantinople in 1204 and the establishment of a Latin Empire, which lasted until 1261, with the restoration of Byzantine rule under the Palaeologi, in the thirteenth century Byzantine philosophy continued on the path it had now been following since the ninth century: scholars drew on the great heritage of Greek thought, often continuing the late ancient school tradition, without – or so it seems in the present state of research – adding much of philosophical importance themselves. Nicephoras Blemmydes (1197–1272), who refused offers of bishoprics to remain a simple monk, is the most important Byzantine philosopher of the thirteenth century, though, like so many Byzantine intellectuals, he was also a polymath. He does not seem, though they were present, to have been influenced by the Latins and

their philosophy. He wrote on political theory, but his more purely philosophical works were an epitome of logic and an epitome of physics. The logical work is a simple introduction, which concentrates on the matter of the *Isagoge* and, *Categories* and basic non-modal syllogistic; one of its sources is John of Damascus's *Source of Knowledge* (Chapter 3, section 4), itself mostly a compilation from earlier works). A short section on hypothetical syllogisms deserves further study, since outside the Latin tradition of Boethius there is so little to be found on this area. Another widely learned scholar of this period was George Pachymeres (1242–1310) who, in addition to his writings on history and on the mathematical subjects of the quadrivium, was author of a long summary of Aristotle's philosophy, a commentary on (part of) Plato's *Parmenides* and a paraphrase of pseudo-Dionysius.

In the fourteenth century, however, there was a change in the tenor of philosophical debate. It was due to two factors which became interrelated, although their origins were very different. The first factor was extrinsic to the Byzantine tradition and goes back to the thirteenth century. Although the Latin presence in Constantinople seems not to have influenced Blemmydes or Pachymeres, it succeeded in stimulating a translation movement (albeit a small one). Four of the Latin works translated into Greek were parts of the twelfthcentury curriculum, rather than thirteenth-century university text-books: Boethius's Consolation, and his logical textbooks on topical differentiae and hypothetical syllogisms, and Macrobius's Commentary on the Somnium Scipionis. (Note, though, how the logical texts fill gaps in the curriculum presented by the Greek texts.) But in the later thirteenth century, Maximus Planoudes (c. 1255–1305) produced Greek versions, not only of another Latin classic, Augustine's De trinitate, but also of Aquinas's Summa Theologiae. This work of translation would be continued in the later fourteenth century in Thessaloniki by Demetrios and Prochoros Kydonos, who put more Augustine, Aquinas and other scholastic theologians into Greek.

The second factor behind the fourteenth-century changes was, by contrast, strictly internal to the Byzantine tradition. Hesychastic prayer is a practice that goes back to the early Greek Fathers and involves certain physical techniques, such as breath-control. It came to be a matter of controversy when it was attacked by Barlaam of Calabria in the 1330s. Barlaam, who was brought up in the Greek-speaking part of Italy, came to Constantinople in search of Aristotle's texts in the original. He had a highly sceptical attitude to the ability of humans to know theological truths through reasoning – one which made him critical of Aquinas's claims in his discussions of God, and gave him a novel approach to the great political question of the day: could there be a union between the Orthodox and the Catholic Churches? The greatest doctrinal obstacle to union was the Latins' belief that the Holy Spirit proceeds from the Father *and the Son*. Barlaam's approach was simply to put such questions out of the scope of theological discussion, because they were beyond human powers of knowledge, and there was no certain answer in scripture

or the Fathers. He did accept that the Fathers had been given a special knowledge of theological truths, but he considered this illumination to be a strictly rational one and, in a move that outraged his opponents, but has uncanny parallels with the thinking of Peter Abelard two centuries before, he suggested that the pagan philosophers had also enjoyed these special insights. Barlaam was contemptuous of the hesychastic monks' physical approach to prayer, and he emphatically denied their claims that they were somehow able, through their praying, to see God himself.

The cause of Hesychasm was taken up against Barlaam's attacks by Gregory Palamas (1296–1359), a monk of Mount Athos. Gregory gave an intellectual basis to the practice of hesychastic prayer and attempted to justify its claims. He took a distinction which he could have found in the Greek fathers between God's essence and his activities. God's essence, he argued, cannot be known; but his activities (energeiai), and so in a sense God himself, can be known by those engaged in hesychastic prayer. Gregory thus puts himself into a tradition of Greek thinking about the deification of human beings and the appearance of God, which runs back to pseudo-Dionysius and Maximus the Confessor (and is known in the Latin tradition through Eriugena), but he radicalizes it. On the one hand, God himself, as he really is, remains entirely unknowable, even to the blessed in the after-life; on the other hand, God does manifest himself - it is this emphasis which is novel to certain people even in this life. Palamas's defence of Hesychasm became entangled with the turns of political fortunes in the 1330s, and with the idea of a Greek tradition to be opposed to the Latin one. After some reverses, his cause was victorious, and Barlaam was forced to flee to Italy, where he converted to Catholicism, became a bishop and also, for a time, tutored Petrarch in Greek. Yet the opposition between Greek traditions and Latin innovations is not a neat one, since Palamas himself may well have been influenced by Augustine.

An interesting pendant to the Hesychastic controversy, which also warns against making over-neat doctrinal affiliations, is found in a work by Nicholas Cabasilas (d. 1371) a writer of mystical theology who has sometimes been seen as a Palamist. In fact, Cabasilas reacted strongly against the tendency to scepticism, derived from some Platonic writings, which he found both in Palamas's work and in that of a leading anti-Palamist, Nicephorus Gregoras. In response to it, he wrote a treatise *Against Pyrrho* (1355/9), which draws on Sextus Empiricus to present and attack sceptical arguments. Given the tendency of Byzantine philosophers to follow the late ancient view in regarding Platonism and Aristotelianism as the only two ancient schools worthy of notice, such a treatise is exceptional. But Cabasilas's complete lack of originality in argument is, by contrast, all too common in the tradition of Byzantine philosophy.

3 Philosophy in Islam

According to a view still common among historians of medieval philosophy, philosophy in Islam ended with Averroes, to be replaced by a style of mystical speculative thought. Modern research has begun to show that this historiography is very far from the truth: a tradition of serious philosophical thinking flourished in Islam well into the seventeenth century, and the leading living historian of Islamic thought has recently published an article provocatively sub-titled 'The Golden Age of Arabic Philosophy, 1000-c. 1350' (Gutas, 2002b). The main title of that article is revealing: 'The Heritage of Avicenna'. From the Latin perspective, the philosophical tradition in Arabic seems to run from Kindî, through Fârâbî and Avicenna to Averroes; and it seems to be - this is certainly how the scholastic philosophers and theologians regarded it – a tradition of Aristotelian commentary. From the Islamic perspective, the picture is very different. As previous chapters will have indicated (Chapter 3, section 5; Chapter 4, sections 3-4), there were two main traditions among the *falsafa* (as opposed to the *mutakallimûn*): a heavily Neoplatonic tradition, reaching back to Kindî, and a Baghdad-based Peripatetic one, the greatest exponent of which was Fârâbî. Avicenna (so Gutas convincingly argues) succeeded in uniting these two traditions. The Andalusian tradition, which looked back to Fârâbî, was something of an irrelevance so far as the mainstream of philosophy in Islam was concerned. Whereas Averroes's multifarious commentaries on Aristotle assured him a place of eminence in the Latin and Jewish traditions, where interpreting Aristotle became a central preoccupation, he was forgotten by Islamic philosophers who had stopped commenting on, or indeed reading, Aristotle. They had a different authority to interpret, attack or defend: Avicenna.

Avicenna did more than unite the two different aspects of the philosophical tradition. Although some of his doctrines seemed heretical to orthodox Muslims, Avicenna's system incorporated enough elements close to Islamic doctrine - especially in its view of God as the only necessary existent and its theory of prophecy - to allow for the absorption of much of his thinking into kalâm. Ghazâlî, Avicenna's fiercest opponent, is also in many respects his follower (Chapter 6, section 1). The Avicennians of the thirteenth and later centuries would not be, like Avicenna himself, self-conscious philosophers, but Islamic thinkers who, by adoption or criticism, put Avicennian ideas at the centre of their work. The two most important of the thirteenthcentury Avicennian thinkers were an Ash'arite theologian, Fakhr al-Dîn al-Râzî (d. 1210) and the Shi'ite polymath, Khwâja Nasîr al-Dîn al-Tûsî (1201-74). Both men wrote commentaries on Avicenna's Pointers and Reminders - a work composed in a laconic manner that called for interpretation. (Commentary on Pointers was, indeed, one of the main channels of the Avicennian tradition: at least ten are known, up to the sixteenth century, and there are additionally sets of glosses - Avicenna, 1951, 72-4). Râzî is

usually thought of as Avicenna's opponent, Țûsî as his defender; but Râzî was himself a close and careful, if critical, interpreter of *Pointers*. Moreover, just as Avicenna himself had valued questioning and probing, so in the Avicennian tradition the aim was not to recycle Avicenna's doctrine, but to tackle the problems he had left unresolved.

Both the Avicennian basis, and the independence of thought, are especially evident in logic. A logical training was as much a prerequisite for those going into higher education in Islam as in the Latin West. In Islam, Avicenna's reconstruction of Aristotelian logic replaced Aristotle's own texts as the starting-point for study. Whilst there was no invention of new branches of logic to correspond with the Latin *logica modernorum* (Chapter 8, section 8), Islamic logicians shared and developed Avicenna's interest in modal syllogistic, which came to occupy a large place even in textbooks, such as the very widely studied *Shamsiyya* by Tûsî's pupil Kâtibî (d. 1276). Avicenna's distinction between the descriptive (*wasfî*) and substantial (*dhâtî*) readings of modal propositions provides Râzî, Tûsî and Kâtibî with the apparatus for tackling the difficulties of the modal syllogism, but they use it in their own ways to reach solutions often different from Avicenna's own. And, as Arabic logic developed towards ever greater formalization, even Avicenna himself came to be eliminated from it.

There was also, indeed, an important 'illuminationist' tradition in Islamic philosophy, stretching from the thirteenth to the seventeenth centuries, in which the central text for study and commentary were the writings of Suhrawardî. There are, for instance, the commentaries of Shahrazûrî (d. after 1288), Ibn Kammûna (d. 1284) and Shîrâzî (d. 1311) (who is very dependent on Shahrazûrî). Certainly, there is an inclination towards mysticism in these writers, yet there is no simple contrast between their approach and that of the Avicennian mainstream. Suhrawardî's commentators, unlike many of his twentieth-century epigones, approached his writing as reasoned argument and tended to translate its idiosyncratic terminology back into more standard philosophical vocabulary. Moreover, Shahrazûrî's *al-Shajara al-ilâhiyya* ('The Divine Genealogy') uses Fârâbî and Avicenna and contains a discussion of logic, and Ibn Kammûna was also a logician and wrote a commentary on Avicenna's *Pointers*.

The philosophy of thirteenth- and fourteenth-century Islam is, then, still mostly to be rediscovered. Whether it was really a golden age remains to be tested.

4 Jewish philosophy

It is wrong, then, to think of philosophy as disappearing from Islam after the death of Averroes. But Jewish philosophy in the lands of Islam hardly survived the death six years later, in 1204, of Maimonides. Even in the next generation, the most distinguished thinker in the area, Maimonides's own son, Abraham (1186–1237), abandoned his father's rational, strongly Greekinspired approach for a pietism which draws on Sufi ideas. Jewish philosophy, however, continued to flourish, but now it was written in Hebrew by Jews who lived among Christians. Islamic philosophical and intellectual culture had provided the setting for Jewish philosophy in the period up to 1200. Although, as has been made clear, the Jewish thinkers brought their own perspective, they worked in Arabic and took up, in their own ways, the various trends current in Islam: for Saadia, *kalâm*; for Isaac Israeli and Ibn Gabirol, the Platonism of Kindî; for Maimonides, Andalusian Aristotelianism. Later medieval Jewish philosophers, working in Latin Europe, had no such close link with an existing tradition. The intellectual context against which they worked is an odd construction, which helps to explain the character of the philosophy they wrote.

The translation movement and the context of later medieval Jewish philosophy

Jews had lived in Latin Europe from the time of the Roman Empire. Unlike Jews in Islam, they remained for the most part outside the high culture of the countries in which they lived. They knew the local vernaculars and had sporadic contacts with Christian scholars anxious to know about the original Hebrew Old Testament, but they did not learn Latin or participate in any of the Christian educational institutions. There had been some outstanding Jewish thinkers, especially in France, who worked in Hebrew on traditional Rabbinic subjects, such as Rashi, the great Biblical commentator, but no philosophers. Philosophy came to these communities through the refugees who chose to flee the Almohads by journeying northwards, rather than seeking out a more tolerant Islamic state. It was especially in Southern France that these immigrants succeeded in stimulating the curiosity of their coreligionists towards this new type of speculation, and a translation movement was begun to provide philosophical texts in Hebrew. The most important of these translators were the Tibbon family, from Granada: Judah Ibn Tibbon settled in Lunel in about 1150; his translations - which precede the main movement - were generally of works of Jewish philosophy, by such writers as Saadia, Judah Halevi and Ibn Gabirol. His son Samuel (d. 1232) and Samuel's son in law, Jacob Anatoli, and others in the family were prolific translators; whilst, in the early fourteenth century, the most active translator was Qalonymos ben Qalonymos (who also put Averroes's Incoherence of the Philosophers into Latin).

It is in the choice of material translated that the distinctiveness of the thirteenth- and fourteenth-century Jewish philosophical movement emerges. In 1204 Samuel Ibn Tibbon made a Hebrew version of Maimonides's *Guide of the Perplexed*. Unlike the works of Jewish philosophers translated by Samuel's father, the *Guide* would be a – indeed *the* – central text for the

philosophers writing in Hebrew. Most of the other works translated (apart from some more technical scientific and mathematical texts) were Aristotelian, but not in general Aristotle's own texts. Rather, the translators chose to translate Averroes's compendia and paraphrases of Aristotle and Fârâbî's exposition of Aristotelian logic, which they used as their base texts and subjected to commentary. There was much less interest in Averroes's full commentaries: those on the Posterior Analytics and the Metaphysics were put into Hebrew by Qalonymos ben Qalonymos early in the fourteenth century, but the others (including the full commentary on On the Soul) probably remained untranslated, at least until the sixteenth century. Strikingly absent are any works from the Platonic tradition except for Averroes's epitome of the Republic, and anything by Avicenna, the dominant figure in the Islamic tradition, except his Intentions of the Philosophers. The correspondence between the translators' preferences and Maimonides's recommendations is too close to be accidental, and underlying it is a further and deeper continuity between Maimonides and the Hebrew-language philosophers, at least in the thirteenth century. Like Maimonides, they tend to regard Aristotelian science and philosophy as an established body of knowledge which needed to be synthesized and assimilated, rather than altered or challenged. As for him, the question for them is how, as Jews, they should react to this view of the world apparently so different in many ways from the conception enshrined in the Bible and the Talmud.

Rejecting Maimonides, interpreting Maimonides and Jewish Averroism

Not everyone in the Jewish communities of Southern France and Spain was willing to accept Aristotelian-Averroistic science and philosophy, and the reaction centred especially around Maimonides, who was rightly taken to be the originator of the philosophical turn within Judaism; and in the 1230s a group of Southern French scholars banned Maimonides's works unsuccessfully, since they continued to be read more than ever. The Guide of the Perplexed is a work open to different readings (Chapter 6, section 4): a moderate-harmonizing one, in which it allows the Jewish reader to reject without unreasonableness most of the Aristotelian doctrines that go sharply against traditional beliefs (eternity of the world, no divine providence over individuals, no individual immortality), and an esoteric-radical interpretation, according to which Maimonides really advocated such positions, though he wanted to keep them secret from the masses. The religious reaction against Maimonides was, in the first place, against a Maimonides understood in a moderate-harmonizing sense - even so, he was thought to have gone too far; and the defence of Maimonides was usually conducted from this perspective too - the Guide could be seen as a way of defending Judaism against those aspects of Aristotelian science that were most unacceptable.

But Samuel Ibn Tibbon, the Hebrew translator of the Guide, took a quite different view. His own reading of Maimonides's masterpiece was an esotericradical one: in 1199, before he translated the work, he had written a letter to Maimonides about the discussion of divine providence in it, in which he already clearly revealed this attitude. In his Commentary on Ecclesiastes, Samuel goes so far as to say that the defenders of the Guide would, for the most part, turn into detractors were they to understand Maimonides's true meaning. Samuel believes that readers need to observe very thoroughly the injunctions Maimonides gives about how to read his book and extricate teachings which he had deliberately hidden, because they were not suitable for the mass of people. He justified his own attempts to make explicit what the author himself had concealed through a theory which is just a development of Maimonides's own anthropological understanding of religious law. Now that they are living in a more sophisticated philosophical environment than previously - Ibn Tibbon states explicitly that philosophy is better known in the Christian lands than in Islam - it is necessary for levels of understanding of Scripture to be made widely known that were properly kept hidden in the past.

The radicalism of Samuel and many readers of the Hebrew translations of Maimonides and Averroes in the thirteenth century fuelled the anti-Maimonidean, anti-philosophical reaction, leading to the banning, in 1305, of Arabo-Greek learning to Catalonian Jews under twenty-five. It also inspired much of thirteenth-century Jewish philosophizing, though the most remarkable of the thirteenth-century Jewish thinkers, Albalag, is a partial exception: he shared Samuel's radical views, but did not attribute them to Maimonides.

Nothing is known about Albalag's life, except that he lived in Catalonia in the second half of the century. Just one work of his survives: a translation into Hebrew of Ghazâlî's Intentions of the Philosophers, along with extensive comments, which Albalag considered to be a separate treatise (Sefer Tikkun ha-De'ot; 'Book of the Righting of <Ghazâlî's> Doctrines'). The choice of this work to translate and discuss is, at first sight, a most surprising one. Ghazâlî's Intentions is based largely on Avicenna's Philosophy for 'Alâ' al-Dawla (Chapter 6, section 1). Christian thinkers used the Latin translation of the Intentions as a convenient summary of Avicennian thinking, and regarded 'Algazel' as a straightforward follower of Avicenna. But the quickest glance at Albalag's commentary shows that his purposes were altogether different and more sophisticated. Albalag knows that Ghazâlî wrote the Intentions only so as to set out the philosophers' views for the purpose of refuting them in his Incoherence of the Philosophers; and Averroes's response to Ghazâlî, the Incoherence of the Incoherence, is one of Albalag's favourite points of reference. Albalag strongly opposes both Ghazâlî's attack on philosophy, and the Avicennian philosophy he attacks, which he considers a distortion of Aristotle. His own reading of Aristotle is much nearer to Averroes's, but even Averroes is not followed uncritically or uniformly by

Albalag, whose strangely oblique way of setting out his position – through the examination of an exposition of what he regarded as a deficient version of Aristotelian thought – turns out to be his way of adopting a critical distance from all the various transmitters, attackers and defenders of philosophy, not least Maimonides, whom he reads in a moderate-harmonizing way and so considers to have given far too much ground to the demands of religious doctrine in suggesting that certain philosophical demonstrations did not, in fact, reach demonstrative conclusions.

How did Albalag, as a Jew, justify his adherence to Aristotle as transmitted by Averroes - an Aristotelianism which went considerably beyond that of (at least the exoteric) Maimonides, since it included acceptance of the eternity of the world? He has sometimes been described as a genuine advocate of the doctrine of there being a double truth, a truth of religion and a truth of reason - a view wrongly attributed to Latin Averroists by medieval critics and early twentieth-century historians. But his stance is more subtle and, ultimately, more radical. Albalag believes that the starting point for a member of the educated elite (and it is they for whom he writes, not the masses, whom he wants to leave content with simple belief) should be the truths established by demonstrative reasoning (normally, therefore, the doctrines of Aristotelian science). If the words of a passage in the Bible can be interpreted to fit this doctrine, they should be. If there is no passage in the Bible which supports the teaching, then it should be accepted on the basis of reasoning alone. If there is a scriptural text which contradicts the results of the demonstration, then both the demonstrated truth should be believed and the Biblical passage, in its literal sense, 'by the way of miracle'. Is there not a double truth on these occasions? Not really, given what Albalag explains about the meaning of 'by way of miracle'. Passages true in this manner, he says, can only be comprehended by the prophets. They fit into the category of what, in his prologue, he describes as prophetic doctrines. Just as demonstrative teaching can be understood only by demonstration, so prophetic teaching can be understood only through a divine capability, which belongs to the prophets alone. It is folly to try to penetrate the meaning of such teaching by reasoning. The position then is as if (to provide Albalag with an explicit example, which he does not himself give) I concluded as a result of demonstration that the body of every human being will sometime decay and the Bible contains a sentence which reads 'X's body never decayed'. According to Albalag I should accept that, whatever this sentence means, it is true. But I have no idea what this meaning is – it might be that 2 + 2 = 4 for all I know – and I have no reason to believe that it is the proposition that X's body never decayed or any other that is incompatible with the result of my demonstration.

A confirmation that Albalag did not think in terms of a double truth is provided by his treatment of human immortality. Although Averroes's full commentary on *On the Soul* (Chapter 6, section 3), where he arrives at his famous theory of there being one potential intellect for all humans, was never,

so far as is known, translated into Hebrew, thirteenth- and fourteenth-century Jewish philosophers none the less attributed to Averroes the view that human immortality is not individual, but rests in the existence of a single, separate intellect. They may have inferred this position from Averroes's Epistle on the Conjunction, or from a passage added to his epitome of On the Soul after he had written the full commentary which is in the Hebrew translation (Davidson, 1992b, 199-201); Albalag himself might, of course, have read the full commentary in the original Arabic. In any case, Albalag describes Averroes as taking the position, contrary to Avicenna's, that human souls are distinguished numerically only in so far as they are embodied; there is no survival, then, of your or my soul when we die. If he had been a double-truth theorist, he could easily have accepted Averroes's views, and at the same time endorsed the Biblical view that individuals survive and are rewarded or punished in the after-life. Instead, he rejects Averroes's view out of hand, since it implies that all, wise and foolish alike, will receive the same heavenly reward. Rather, he believes (in line with Avicenna) only intellective souls survive, but they have been individuated by the different knowledge they have each acquired from the Active Intellect during their lives.

There were a number of other thirteenth- and fourteenth-century Jewish thinkers who, in their different ways, promoted Aristotelianism as seen through Averroes: for example, in the second half of the thirteenth century, Levi ben Abraham ben Hayyim, an extreme Averroist who was targeted by the opponents of philosophy; or Yedayah ben Abraham Bedersi ha-Penini (c. 1270–1340), a far more moderate advocate of Aristotelianism, who may have also been influenced by the discussions of Christian scholars. The most interesting of these thinkers, both in the range of his interests and for the comparison he affords with Albalag, is Moses of Narbonne. Moses was born c. 1300 and died after 1362, and like Maimonides he earned his living as a physician. Like Albalag, he commented on Ghazâlî's Intentions of the *Philosophers* (though he had to use an existing Hebrew translation; there is no reason to believe he knew Arabic), but many other works of his are known - mostly commentaries, among them ones on Aristotelian logic (supercommentaries on Averroes's presentation of it, that stick closely to Averroes's text), on Ibn Tufayl's Hayy Ibn Yaqzân, Averroes's Epistle on the Possibility of Conjunction with the Active Intellect and on Maimonides's Guide, though also some independent works, including a treatise on the perfection of the soul.

Where Albalag used his medium of commentary in a strikingly modern, or rather post-modern, manner, in order to stand at a critical distance from a whole set of competing traditions, Moses is a more straightforward Averroist: someone who, by and large, follows Averroes's Aristotle and, like Averroes himself, imagines, or at least hopes, that this science – which must remain the preserve of a small elite – is not fundamentally at odds with the true meaning of his ancestral religious law. Indeed, in his commentary on *Hayy*, Moses borrows a long passage from the *Incoherence of the Incoherence* (Averroes, 1930, 581-3; 1954, I, 359-60) where Averroes says that 'philosophers believe that religious laws are necessary political arts' and goes on to explain that 'religions are, according to the philosophers, obligatory, for philosophy only leads a certain number of intelligent people to the knowledge of happiness'; though he differs from Averroes, as might be expected, in considering that, though all religions are equally true, Judaism is a better religion than Islam. Rather than criticize Maimonides, as Albalag had done, for conceding too much to traditional Jewish doctrine, he accepts an extreme esoteric-radical reading of the Guide and so has to reproach its author merely for some occasions where he follows Avicenna. As for Ghazâlî, Moses suggests that his professed goal of expounding the philosophers' ideas so as to refute them was just a subterfuge. Living at a time when the ruler had for religious reasons forbidden the study of philosophy, Ghazâlî needed to find a way of, none the less, communicating the science he knew. (Moses is aware, though, that Ghazâlî also wrote an Incoherence of the Philosophers: 'God knows', he remarks, 'what his real aim was . . .') Within Averroes, whom he tends to follow so closely. Moses has a particular interest in that aspect of his thought which is brought to the fore in his Epistle and owes much to Ibn Bâjja: the possibility of a human – a philosopher, needless to say – conjoining his material intellect with the Active Intellect. Where Albalag had stuck to a view of individual immortality in the after-life, compatible with Jewish law, Moses thinks of human immortality in terms of this conjunction. For Moses, this line of interest unites with a mystic streak, absent in Averroes, and an interest in the kabbalah.

Gersonides

Levi ben Gershom or, as the Latins called him, 'Gersonides' (1288-1344) was born in Bagnols and seems to have spent his entire working life in Provence. Whereas Moses of Narbonne followed by and large the path of the radical, Averroistic interpreters of Maimonides that had been traced out from the early thirteenth century, Gersonides, though working slightly earlier, took Jewish philosophy in a new direction. On the surface, his sources are the same as those of other thirteenth- and fourteenth-century Jewish philosophers, though, scientific and mathematical works aside, narrower: Averroes's epitomes and paraphrases (and their historical excurses) are the bases for his understanding of the Aristotelian tradition, and Maimonides is the one Jewish philosopher he discusses. In his major philosophical work, The Wars of the Lord (Sefer milhamot ha-shem), the main topics discussed are those defined by Maimonides and which had dominated the attention of the philosophers writing in Hebrew: the eternity or otherwise of the world, the nature of divine knowledge and providence, the extent of human capacity to understand and talk about God, prophecy and the nature of the human soul and whether or

not it is immortal. But Gersonides's approach to these questions is unlike that of either Maimonides or the others, and nearer to the manner of mainstream Arabic and Latin philosophy. Rather than regard Aristotelian science as a fixed body of knowledge and devote himself to considering what attitude a Jew should have to it, Gersonides envisages all these central questions as needing to be re-thought thoroughly. Whilst Gersonides is far more painstaking than his contemporaries and predecessors in setting out all the different positions which have been taken on a given problem, he then criticizes these various views and proposes his own solutions, based on arguments that he sets out fully and clearly.

Gersonides wrote a wide range of works as well as his The Wars of the Lord (1317-29), his philosophical masterpiece. They include Biblical exegesis and Talmudic studies, where he was an expert, scientific and mathematical texts, and a set of supercommentaries to Averroes's expositions (epitomes or paraphrases) of Aristotle's logic, short treatises on natural science, Metaphysics and On the Soul, and to Averroes's Epistle on the Possibility of Conjunction. Although it seems that these commentaries were, for Gersonides, preparation for writing the final version of *The Wars*, he also had a strong interest in logic for its own sake, and his independent logical treatise on The Perfect Syllogism is an innovative work in the degree of formality with which it presents syllogistic theory. Gersonides also broadens syllogistic so as to be able to explain why, for instance, it follows that if every horse is an animal, the head of every horse is the head of an animal. Gersonides's greatest interest, however, was in astronomy, and this aspect of his life had an important bearing on his philosophical work, first because of the place he gives to a partial astral determinism, and second because his fame in this subject brought him into contact with Christian scholars. An instrument he invented for measuring the heights of stars above the horizon was used by Latin astronomers, who called it 'Jacob's Staff', and his long review and critique of astronomical theories in Book 5 of The Wars was translated into Latin in his lifetime. These contacts raise the question of whether Gersonides might have had philosophical contacts with Latin scholastic thought and been influenced by it. Specialists have not reached agreement, although most acknowledge that it is unlikely that he actually read Latin texts. He could, however, have learned about Latin thinking through conversation (in Old Provencal, his mother tongue) with Christian scholars, and his careful method of approaching problems, by setting out earlier views and criticizing them, may have been influenced by Christian scholastic techniques (Sirat *et al.*, 2003).

Three of the central themes in the Jewish philosophical tradition which Gersonides re-thinks with particular originality are the problem of divine prescience, the eternity of the world and the immortality of the soul. His approach to the problem of prescience shows the extent of his commitment to the results of reasoning. There is a long tradition of Jewish and Christian thinkers who, faced with the *prima facie* dilemma of how God could know with certainty something contingent, of which therefore the outcome is uncertain, have found some means of escape – an argument which, to their apparent satisfaction, allows them to preserve future contingents and God's knowledge of them. Gersonides believes, however – and probably with good reason – that the dilemma is insoluble. Since he considers that human freedom is paramount, and that there could be no freedom were all future events necessary, he is willing to adopt the Aristotelian position (which he holds is consistent with the Bible: III,6) and deny that God has knowledge of any particular events. On the questions of the eternity of the world and the immortality of the soul, by contrast, Gersonides devises arguments and propounds his own original positions which, he considers, resolve the difficulties they pose.

Jewish philosophers from Maimonides to Gersonides's contemporaries considered themselves faced by two main alternative accounts of how the world came to exist: either the Biblical story, according to which God created heaven and earth out of nothing, or the Aristotelian conception (followed not just by Fârâbî and Averroes, but also by Avicenna) of a universe that has no beginning in time but has existed, complete with all its species, for eternity. Maimonides ostensibly chose, and certainly gave arguments for, the Biblical view. Most of the thirteenth- and fourteenth-century Jewish philosophers preferred to follow Aristotle and Averroes, and some of them thought that secretly Maimonides had done so too. Gersonides rejects both alternatives and turns to the theory of Plato in the Timaeus - a position Maimonides discusses respectfully but leaves aside - according to which the world was created, but from eternally pre-existent formless matter, not out of nothing. His reasons for rejecting the eternity of the world are not, as for Maimonides, that it undermines Judaism, although he does consider that whatever is eternal cannot be created. Rather, he uses (VI, 11–14) arguments of the sort devised by Philoponus (Study B) and taken up by the *mutakallimûn* to show that the eternity of the universe would imply the existence of an actual infinity, which Aristotle rejected. He also argues positively from the teleological ordering of heavens that they must have been created. But he rejects, on Aristotelian physical principles, the idea that there can have been a creation of concrete wholes from nothing. He is aware of the difficulties which Aristotle found in the Timaeus theory, but he believes (VI, 17) that they can be solved once it is understood that the eternal matter is completely without form and motion. Moreover, Gersonides believes that a careful reading of the Bible supports his interpretation, rather than the view of creation ex nihilo.

Gersonides follows the Jewish tradition from Maimonides onwards in not arguing for the immortality of individual human souls along Avicennian lines, according to which the human soul is of its very nature incorruptible and separable from the body. Indeed, his view of the human intellect is very near to Alexander of Aphrodisias's. Gersonides (I,5) conceives of the human body as being endowed, hierarchically, with various dispositions which are forms. The intellect is the highest of these dispositions: it is generated and has the body as the subject in which it inheres – but the body as already configured by the form which accounts for the imaginative faculty; and so the intellect can be considered a disposition of the human imagination. Moreover, Gersonides rejects (I.12) the Averroistic idea of conjunction with the Active Intellect, favoured by, for instance, Moses of Narbonne. He believes that it would take place only if some individual human being managed to grasp the totality of all knowledge in the perfectly ordered system which is the content of the Active Intellect, and that this is a feat beyond human capacity.

Yet Gersonides thinks that there are good philosophical arguments for individual immortality. Although the intellect is merely a generated disposition, it is gradually perfected to a greater or lesser degree by the knowledge it gains, ultimately through the agency of the Active Intellect. This body of intellectual knowledge - the 'acquired intellect' - is immaterial, Gersonides argues (I,11) and so incorruptible, since it is only composites of matter and form that can be destroyed, through the separation of form and matter. These immortal individual intellects are individuated because the extent of knowledge of one person differs from that of another (I,13). The more intellectual knowledge a person has, the more he is happy. But in this life we are constantly being distracted, by our bodies, from the contemplation of this knowledge, whereas after death we shall apprehend all our knowledge simultaneously. Unlike those thinkers who based human immortality on conjunction with the Active Intellect, Gersonides appears to be holding out the hope of immortality not just to philosophers, but to anyone who achieves any intellectual knowledge, though such a soul's eternal happiness will be far less complete than that of the sage. Unfortunately, however, Gersonides says little to answer the obvious objection that occurs to his view: that to say my particular body of knowledge and my disposition in having it are immortal seems to fall far short of establishing that I will continue to exist for ever. Perhaps this was something Gersonides was happy to accept.

At the end of Book I of *The Wars*, where he has expounded this theory of individual immortality, Gersonides inserts a short chapter (I,14) which he says applies to the whole work. He considers that his view is in fact in accord with the Bible and the Jewish faith. If it is not, then his reader should abandon what has been argued philosophically and follow religion. Gersonides's position seems to be not unlike Aquinas's (Study K). He believes that the results of correct philosophical argument will not in fact contradict what his religion holds. His belief in this concordance is perhaps less confident than Aquinas's and, more strikingly, the room for manoeuvre that he gives himself in interpreting the content of Judaism is far, far wider than Aquinas or any medieval Christian theologian could have envisaged with regard to Christian doctrine. As it turned out, it was far wider too than his Jewish contemporaries and successors would tolerate. Gersonides was quickly regarded as heterodox, and the new direction in Jewish philosophy he initiated had no followers.

NOT AN EPILOGUE: 'MEDIEVAL' PHILOSOPHY, 1400–1700

An epilogue to this book might run as follows:

1400 is, of course, in some ways an arbitrary date at which to end an account of medieval philosophy. It is a round figure that corresponds to no memorable event, birth or death. Yet a case can be made for putting the break at about this point, at least in the Latin tradition and to some extent for the Byzantine and Jewish traditions too. The one area in which it is seriously inappropriate is Islam - where, indeed, the very notion of 'medieval' philosophy is hardly fitting. In Islam, the Avicennian tradition of philosophy stretched on to the seventeenth century and later. One of its better known exponents, the Persian Mullâ Sadra (1572-1640), stands especially in the tradition which looks back to Suhrawardî. But many other types of Avicennism are found in this rich, and as yet almost uninvestigated, material. For Byzantine philosophy, it might seem better to move the final date to 1453, when Constantinople fell to the Turks, especially since it nicely includes the most fascinating of all Byzantine philosophers, Gemisthos Plethon (d. 1452), whose enthusiasm for the Greek past led him almost to revive a form of pagan Neoplatonism. Yet the connections between Byzantine philosophers of the fifteenth century and Renaissance thought in Italy may suggest that these developments fall outside the range of medieval philosophy. Fifteenth-century Jewish philosophy, too, faces in two directions. Some thinkers, such as Hasdai Crescas and Isaac Abrabanel fit into the medieval tradition, but in Italy scholars like Elijah Delmedigo and Leo Hebraeus assimilated the Latin high culture of the Christian milieu in a way which links them with more recent Jewish philosophers.

So far as the Latin tradition is concerned, the fifteenth century was, in one sense, a time of great expansion in scholastic philosophy and theology, since the movement to found new universities continued and some of the new universities, such as Leuven (founded 1425), became very important academic centres. Intellectually, however, there is little in the fifteenth-century universities, outside the field of logic, to compare with the innovative thinking of the fourteenth. Rather than tackling problems, masters in the universities tended to put themselves behind the banner of one of the great philosophers of the previous two centuries: Aquinas, Albert, Scotus, Ockham or Buridan. There were, indeed, important philosophers in this century, such as Nicholas of Cusa, Marsilio Ficino and Giovanni Pico della Mirandola, but all of them worked outside the universities and, largely, outside the tradition of medieval philosophy. Yet it is not quite true to say that medieval philosophy ends, or at least goes into deep decline, after 1400. In the sixteenth and early seventeenth centuries, there was a scholastic revival, which can be seen in Italy in the work of the Thomist, Thomas Cajetan (1469–1534), but was especially remarkable in the Iberian peninsula, with thinkers such as Francisco de Vitoria (1492/3–1546), Luis de Molina (1535–1600) and, the greatest of them, Francisco Suárez (1548-1617). One of the last representatives of this Iberian movement, John of St Thomas - a very close follower of Aquinas - died only in 1644, a few years before Descartes.

And at this point, such an epilogue could continue with an account of this 'Silver Age' scholasticism. It might even add a section on the vicissitudes and revivals of scholasticism up to the nineteenth century, or up to our own day.

But this brief chapter is *not* such an epilogue. It is not an epilogue at all. Rather, it is an explanation of why, from the perspective taken in this book, such an epilogue would be entirely out of place. Fourteen-hundred-more-orless does not, according to the view taken here, mark the end or the beginning of anything in the history of philosophy. Although periodizations in intellectual history must be seen as tentative and plural - they are linked to particular research projects, questions and emphases - a good case can be made, given the traditions traced in this book and the type of problems on which it has dwelled, for regarding philosophy from c. 200 to c. 1700, from roughly the time of Plotinus to that of Descartes, Spinoza and Leibniz, as one, long period. Of course, the Neoplatonists drew heavily on Plato, Aristotle and even the Stoics, yet it was they who drew up the framework within which the traditions of philosophy would go on to develop in the Latin world, in Islam, among the Jews and in Greece, and within which its cargo of Aristotelian texts would be studied. And, whilst no one will forget the factors which link the seventeenth-century philosophers in France, Germany and Holland to the modern tradition of philosophy, there is much of importance in Descartes and Leibniz that is comprehensible only when it is seen at the end of a tradition of Latin philosophy, and in Spinoza that reads as both culmination of and reaction to earlier Jewish philosophy.

The present book breaks off at 1400, then, not because that date represents or is in near reach of the end of a discrete period of medieval philosophy, but simply because there is no more room. As an ending to a study, it is not 'in some ways', but *totally* arbitrary. But it does have some sense if it can be seen, not as an ending, but as a convenient point at which to bring one part of a book to its close. Although the period between 1400 and 1700 is a third the length of that from 500 to 1400, the richness, variety and complexity of the philosophy in the Latin, Islamic and Jewish traditions justify another, not much smaller volume. The question is just: who will write it?

GUIDE TO FURTHER READING AND MATERIAL¹

Chapter 1 Introduction

Encyclopaedias and reference works

The Routledge Encyclopaedia of Philosophy (Craig, 1998: abbreviated RE) has numerous, excellent articles on medieval philosophers. More detailed, analytical treatment will sometimes be found in the web-based *Stanford* Encyclopaedia of Philosophy (http://www.seop.leeds.ac.uk/contents; http:// plato.stanford.edu/contents; abbreviation SEP), A Companion to Philosophy in the Middle Ages (Gracia and Noone, 2003: abbreviation CMP) gives short, up-to-date accounts of a wide range of medieval thinkers.

Histories of medieval philosophy

For historiographical surveys, see Imbach and Maierù (1991) and Inglis (1998). Of the older Histories (mainly on the Latin tradition), Copleston (1950, 1953) is fairly full in his coverage, especially (in the second of these two volumes) of the period from Ockham to Suárez; Knowles (1987; originally 1962) is an elegantly written example of the once popular Aquinas-centred brand of History, improved by Knowles's own historical background and, in the second edition, by a newer list of supplementary reading and corrections; Gilson (1955) is the work of a powerful mind with a strong and to some extent idiosyncratic view of the subject, based around his conception of 'Christian philosophy'. All these books are now seriously outdated, though Vignaux (1959; re-edition of French with valuable introduction: Vignaux, 2004) remains surprisingly contemporary and is particularly sophisticated in its discussion of the interplay between theological and philosophical concerns. The Cambridge History of Later Medieval Philosophy (Kretzmann et al., 1982), a manifesto for approaching medieval philosophy from the perspective of contemporary analytical philosophy, though uneven in its coverage, contains dense and valuable specialized thematic studies. A replacement is now being

¹ See Methods of Reference, p. xi.

written, under the general editorship of R. Pasnau. The medieval volume of the Routledge History of Philosophy (Marenbon, 1998) is chronologically arranged, with chapters by specialists offering a range of different approaches. Luscombe (1997) is a wide-ranging but deliberately very brief survey – a good historical overview of the whole Latin field. By contrast, the Cambridge Companion to Medieval Philosophy (McGrade, 2003) gives the authors of the individual thematic chapters the chance to look quite closely at a selected range of topics. Kenny (2005) precedes topically-arranged chapters with an historical survey: although his scope is somewhat restricted, Kenny is always lucid and brings out clearly the questions in medieval philosophy which interest contemporary philosophers. For readers of French, Alain de Libera's La philosophie médiévale (De Libera, 2004a; original edition 1994) is strongly recommended. I follow De Libera in looking at all four traditions, Byzantine, Latin, Islamic and Jewish, although De Libera considers them separately rather than together. In German, Gombocz (1997) gives an extremely thorough, if pedestrian discussion of the first part of the period. A reliable and bibliographically rich source is provided by Schulthess and Imbach (1966). Flasch's Einführung (1987; French translation 1998) is a brilliant introduction - avowedly not a full history, but keen in its insights about methodology. His longer, more comprehensive History (Flasch, 2000) is very strong on the social setting of medieval philosophy; his choice of philosophers and topics is often unusual, and always well-judged. I owe more to the works of De Libera and Flasch than to any other Histories.

On Islamic philosophy, the Routledge History (Leaman and Nasr, 1996) is wide-ranging but uneven, and individual chapters lack the space for much philosophical analysis, whereas the Cambridge Companion (Adamson and Taylor, 2005), though much less comprehensive, does more to show the philosophical interest of this tradition. Badawi (1972) is far fuller, but outdated, on the theological philosophers, whilst Corbin (1986; originally 1964) concentrates on the Shi'ite mystic-tending tradition and, while learned and fascinating, should be read in conjunction with other, more balanced accounts. For medieval Jewish philosophy, Sirat (1985) gives an authoritative account, which is especially valuable for its wide range and inclusion of minor as well as major thinkers; the multi-authored Routledge History (Frank and Leaman, 1997) ranges through medieval and later Jewish philosophy, whilst the Cambridge Companion to Medieval Jewish Philosophy, edited by the same team (Frank and Leaman, 2003), is more concentrated on the medieval period. Rudavsky (2000) looks at time throughout the tradition of medieval Jewish philosophy. For Byzantine philosophy, the best general account is still Tatakis (2003) - this is a translation of the original French (Tatakis, 1959), with unfortunately only a limited amount of updating. See also Ierodiakonou (2002) - not a comprehensive History, but a collection of stimulating essays and, for a survey of current research, the essay by L. Benakis in that volume (283-8).

Important wide-ranging works and scholars

There are a number of general works, or collections of work by outstanding scholars, which are too wide-ranging for there to be a slot for them in the sections below or should be mentioned in a general as well as a particular context. Here are some: De Libera, Alain (1991b), (1996), (1999), (2003) all wide-ranging studies of great importance, both for their analyses and their methodology; Imbach, Ruedi (1996a): a collection of his always rich and perceptive articles; Knuuttila, Simo (1993) provides a controversial but highly detailed and wide-ranging account of modality in medieval thought; in Knuuttila (2004), the topic of emotion receives even broader treatment; Pines's essays have been collected and published by the Magnes Press, Jerusalem: see esp. Pines (1996), (1997b) (complete bibliography: http:// www.shlomopines.org.il/files/bibliography); Perler, Dominik (2001), (2002) and (2003) on medieval theories on intentionality; Irène Rosier-Catach's monograph (2004b) is a very wide-ranging and innovative exploration of the links between grammar, logic and theology; {Paul Spade's website - http:// www.pvspade.com/Logic – is a treasury of mostly unpublished material by this leading expert on medieval logic}.

Chapter 2 The ancient traditions in medieval philosophy

1 What was ancient philosophy?

Donini (1982) synthesises the evidence on the philosophical schools, and social position of philosophers. Clarke (1971) 55–108 gives a useful account of the philosophical schools, and see also the classic study of ancient education, Marrou (1956), which must be corrected, so far as the liberal arts are concerned, by Hadot (1984). On ancient understanding of philosophy and the philosophical life, Hadot (1987) and (1995) are highly recommended, as is Nussbaum (1994), and cf. Jordan (1990).

3 Plato and the Hellenistic Schools

<u>Texts</u>: For Calcidius's Latin translation of the *Timaeus* and his commentary: Plato (1975) {Latin translation alone at Sc and K. Many of the Latin texts are available at Ll or For; the pseudonymous correspondence between Seneca and Paul is translated at http://www.comparative-religion.com/ christianity/apocrypha/new-testament-apocrypha/4/9.}|| For the tradition of Stoicism and its history in the Middle Ages, see Strange and Zupko (2004).

4 Plotinus's Neo-platonism

<u>Texts</u>: *Enneads* Plotinus (1966–88) gives a parallel text with good translation; most, though not all, of them are conveniently available in a single volume (Plotinus, 1991) a slightly loose but poetic translation and with useful notes. {Greek text: Sc}|| On Neoplatonism in general, Armstrong (1970) remains a good guide, Wallis (1995) is a brief introduction; Lloyd (1990) is rich, detailed and difficult. Excellent introductions to Plotinus include *O'Meara (1993) and Gerson (1994) and (1996) – a collection of essays.

5 Porphyry and Aristotelian logic

Texts: Porphyry's *Isagoge* has been the subject of extensive commentary by two of the leading historians of ancient and medieval philosophy: Porphyry (1998) – text, French translation and commentary and introduction by Alain de Libera; Porphyry (2003) translation and commentary by Jonathan Barnes. {Greek text and Boethius's Latin translation: Sc}. For the surviving short *Categories* commentary and a large amount of the other texts of Neoplatonic commentaries on Aristotle, see the CAG (vol. IV). For contents of CAG, see Sorabji (1990) 27–9. Much of CAG, and other related material, is gradually being translated into English, in the Ancient Commentators on Aristotle project: see http://www.kcl.ac.uk/kis/schools/hums/philosophy/ aca.ll On Porphyry and Aristotelian logic, see Ebbesen (1991 – extracted from a work written in 1984) and Evangeliou (1988). The *Dictionnaire des Philosophes Antiques* (Goulet, 1989) contains wonderfully full discussions and catalogues of the Greek and Syriac commentary tradition on Aristotle.

6 Iamblichus and Proclus

<u>Texts</u>: *The Elements of Theology* Proclus (1961) contains an extensive commentary || Shaw (1995) gives a fascinating reading of Iamblichus's views, and *Siorvanes (1996) a comprehensive introduction to Proclus. Bos and Meijer (1992) – a collection of essays tracing the tradition of Proclus through the Middle Ages.

7 Old and new religions

Texts: *Bib* Philo, Origen. {Translations (and extensive material) on Philo at http://www.torreys.org/bible/philopag; translations of Justin and Clement at Fa, vol. 2}. For *On First Principles*, the four-volume edition: Origen (1978, 1980) with Rufinus's Latin text and French parallel translation should be used in preference to the English: Origen (1966). {Works at Fa, vols. 4 and 9}. II Chadwick (1966) gives a good general introduction to Philo and Origen. Wolfson (1947) – an over-systematic interpretation of Origen; Dillon (1996) investigates them in the light of the Platonic tradition.

8 Translations, Latin philosophy and the Latin Fathers

Translations cf. II.3 for Plato; Siegmund (1949) for translations of Greek Fathers. <u>Texts</u>: *Latin philosophy* Cicero and Seneca are widely available and translated. *Bib* Apuleius, Macrobius, Martianus Capella {Sc for Cicero; Ll for Seneca – Latin texts; Apuleius *Periermenias* at K }. *Latin Fathers* The texts of the Latin fathers are available in *PL* and, in many cases, in better, more recent editions: for details of which see Dekkers (1995) {English translations of all the patristic texts at Fa}. *Bib* Marius Victorinus II On all the secular Latin thinkers, a fundamental, synthetic study is *Gersh (1986). On Calcidius, see also Van Winden (1959) and den Boeft (1970); on Macrobius, Flamant (1977) and, for medieval influence, Hüttig (1990); on Martianus, for a commentary on Book 1, Shanzer (1986). On Ambrose, see Madec (1974). Pierre Hadot (1971) has revealed the range and interest of Marius Victorinus's work.

9 Augustine

Texts: Augustine's works are available very widely, in Latin and English. Old, but not usually unreliable, editions in *PL* for Augustine: Modern editions in CCSL and CSEL (see Dekkers, 1995 for details). The *Bibliothèque augustinienne* gives parallel French and Latin texts and extensive commentary on a large range of the works. {A wide range of his texts in Latin are found at Sc and K; complete works in English at Fa} II Peter Brown's (1967) biography is justly famous, and there is now a new one by James O'Donnell (2005). Chadwick (1986) provides an elegant, brief introduction, whilst Matthews (2004) is far more philosophically challenging. *Rist (1994) gives a broad and balanced philosophical survey; Kirwan (1989) explores links with contemporary analytical philosophy, as do some of the contributors to the well-balanced *Cambridge Companion* *(Stump and Kretzmann, 2001). Madec (1994) discusses in detail the relationship between pagan philosophy and Christianity in Augustine's life and writings.

Chapter 3 Old traditions and new beginnings

1 Boethius and the logical curriculum at the end of antiquity

<u>Texts</u>: Translations of Aristotle and Porphyry in *AL*; for the logical works of which separate editions are not listed, see *PL* 64. *Opuscula sacra* and *Consolation* – Boethius (2000) is the best edition, but Boethius (1973) is usable and has parallel English translation of both works. The best translation of the *Consolation* is probably Boethius (2001), whilst Sharples (1991) gives a good commentary on the end of Book IV and Book V. Eleonore Stump's translations of the two works on topical reasoning (Boethius, 1978,

1988) also contain extensive commentary. {Latin texts of all philosophical works at K; translation of Consolation at For and Sc (also commentary on Latin text by J. O'Donnell)}. Greek commentaries: for the late ancient Greek tradition, CAG prints many of the works, and they are being translated: cf. Chapter 2, section 5 above. || General studies of Boethius include Courcelle (1967) - sources and influence (Boethius himself is rather reduced to a conduit), Chadwick (1981) - strong on Boethius's doctrinal engagements, and his work on music and arithmetic, Gibson (1981), Fuhrmann and Gruber (1984) - collections of essays and *Marenbon (2003a) - attempt to analyse some of the arguments. On Boethius's logic: for the translations and their use, see Minio-Paluello (1972); Shiel (1990) suggests that Boethius wrote his commentaries by slavishly translating marginalia from Greek manuscripts (although no such manuscripts are known); Ebbesen (1990) provides counterarguments, and a good assessment of Boethius's work. Martin (1987, 1991) shows how Boethius failed to grasp Stoic ideas of propositional logic, and De Libera (1999) gives the most thorough analysis of his treatment of universals (and, for background, see also De Libera, 1996). On the Opuscula sacra and their influence, see Hadot (1972), Schrimpf (1966), Schlapkohl (1999). Gruber (1978) is a commentary on the Consolation, more literary, however, than philosophical. Relihan (1993) and Dronke (1994) provide the background to the literary form of the work. On the influence of the Consolation, see Minnis (1987) and Hoenen and Nauta (1997).

Study A: The problem of prescience in Boethius's 'Consolation'

Kretzmann (1985, 1998) gives background to Boethius's conception of human freedom and the problem of logical determinism. Zagzebski (1991) sets out a supposedly Boethian argument in modern form and considers its strengths and weaknesses. Huber (1976), Marenbon (2003a, 125–45; 2005a, 21–54) and Evans (2004) present analyses of Boethius's argument (at the moment, I still incline to prefer Marenbon's). Sorabji (1980, 1983) gives valuable background to concepts of necessity and time in antiquity, and for Boethius's modal conceptions and their Aristotelian background see *Knuuttila (1993).

Interlude i: Philosophy and a manuscript culture

Bischoff (1990) provides a guide to the study of handwriting and manuscripts; McKitterick (1989) considers questions of literacy and orality in Carolingian times.

2 Monks and encyclopaedists: the Latin West from 525-780

<u>Texts</u>: *Bib* Cassiodorus, *De mirabilibus sacrae scripturae*, Isidore {Latin texts of all of Cassiodorus's works available at http://ccat.sas.upenn.edu/jod/ cassiodorus.html}. {Isidore *Etymologiae* Ll}. For further details of early Irish works, see Lapidge and Sharpe (1985). || For general cultural history see Courcelle (1969). The best modern study of Cassiodorus is O'Donnell (1979) {complete at http://ccat.sas.upenn.edu/jod/texts/cassbook/toc with extra bibliography} and on Isidore and his learning see Fontaine (1959), supplemented by the complementary notes in Fontaine (1983).

3 The last pagan philosophers, and their Christian pupils

Texts: The late pagan Platonists: Damascius (1999), with its full commentary, gives a vivid picture of intellectual life in this period. For individual commentaries, cf. Chapter 2, section 5. *Bib*. Pseudo-Dionysius {Latin version by John Scottus at Sc; English translation http://www.ccel.org/ccel/dionysius/ works}. John Philoponus: his commentaries on Aristotle are in CAG 13–17, and are being translated (see bibliography). II The essays in *Sorabji (1990) are an invaluable introduction and guide. See also Hadot (1978) and (1987) – an important conference on Simplicius. On the closing of the School of Athens, see Tardieu (1986), who argues that the philosophers settled in the pagan city of Harrân, and that a specifically philosophical tradition survived there. Many scholars are not convinced: see Hoffmann (1994) for a balanced assessment. On Pseudo-Dionysius: Roques (1954) – a systematic study; Rorem (1993) – a commentary.

Study B: Eternity and the universe: Augustine, Boethius and Philoponus

Texts: cf. Chapter 2, section 9 and Chapter 3, section 1. For Philoponus's arguments, see commentary on Physics III in John Philoponus (1899) and (1994), 428–30, 467–8; On the Eternity of the World against Proclus in John Philoponus (1887) 9–11 (translated in Sorabji, 1983, 214–15); On the Eternity of the World against Aristotle as collected and translated in John Philoponus (1987) 143–6.ll *Sorabji (1983) is an indispensable introduction and guide to the whole subject of time, eternity and whether the world has a beginning. On different notions of eternity, see Marenbon (2003b). On infinity, see also Moore (1990), esp. 1–48. For Augustine, Kirwan (1989) 151–86 gives a careful analysis and Knuuttila (2001) a wide-ranging survey. Flasch (1993) is a detailed study of the discussion of time and eternity in the Confessions. Important analyses of Boethius's conception of eternity are given in Stump and Kretzmann (1981) and Leftow (1991) 238–41; I have queried these and other accounts of it as atemporal, in Marenbon (2003a) 136–7, (2003c) and (2005a) 48–53, 150–3.

4 The East from Justinian to the Umayyads

Logic in Greek and Syriac I shall give only basic indications for this still obscure area. Greek texts can be found in CAG; on David and Elias, see Westerink (1990); Stephanus (2000) contains translations of two commentaries probably by Stephanus and an important discussion. See also Goulet (1989), V, 113 ff. and, for the Syriac tradition, I, 502–28. On this tradition, see also, above all, Hugonnard-Roche (2004), which collects together his articles cited individually below (and other work); Brock (1983), and for the wider background, Brock (1982); on Sergius of Resh'aina, see Furlani (1926) and Hugonnard-Roche (1997a, 1997b); on Paul of Persia, Gutas (1983), Hugonnard-Roche (2000) and Teixidor (2003). Maximus the Confessor Texts: Bib Note that Ambigua ad Iohannem is in PG 91, 1061–1418 and other works in PG 91–2; some have been, or are being, edited critically. || *Louth's introduction to Maximus the Confessor (1996) is full and clear. The classic study is Von Balthasar (1961), and there are useful articles in Heinzer and Schönborn (1982). Perl (1994) draws together themes and makes an illuminating comparison with Eriugena. Islam. Arabic and Greek thinking under the Umayyads: early kalâm Texts: Early kalâm is known almost entirely at second-hand; a very important and full account is given by al-Ash'arî in his Maqâlât al-Islamiyîn (Ash'arî, 1929–30); another, later account is by Shahrastânî in his Book of Religions and Sects (al-Milâl wa-l-nihal) (Shahrastânî, 1986 - a French translation with extensive annotation). The best source, however, is the carefully collected and arranged testimonies (in German translation) in Volumes 5 and 6 of Van Ess (1991–5). || Van Ess (1991-5), vols. 1-2 studies the earliest period of kalâm; Van Ess (1984) is an earlier, incisive presentation of his ideas. An interesting, but one-sided view of kalâm as strictly theology, not philosophy is given in Frank (1992a). There is a good general account (of the whole theological and philosophical tradition) in Montgomery Watt (1985). The links between Aristotelian logic and the debates in early kalâm are investigated in Schöck (2006). John of Damascus Texts: Bib || On Damascus's theory of free will, see Frede (2002).

5 The varieties of Philosophy under the 'Abbâsids

<u>Texts</u>: *Bib. Liber de causis*, Proclus, Kindî. For the Mu'tazilites, cf. the comment on Chapter 3, section 4. The Arabic Plotinus is printed (in English translation) in Plotinus (1959), and the Arabic *Liber de causis* (Book of the *Pure Good*) is edited in Badawi (1955 {Kindî-M} || Van Ess (1991–1995) III gives a very thorough study of the Mu'tazilite systems; also useful are Pines (1997a) and Baffioni (1982) on atomism. A brilliant study of the translation movement and its links with the politics of the 'Abbâsids is given in *Gutas (1998). On the Arabic Plotinus, see the study by Adamson (2002). On the *Liber* and its medieval tradition, see Fidora and Niederberger (2001). On Kindî: Jolivet (1971); Endress (1997) – especially on the translations and their use; Adamson (2003) – his relations with the Mu'tazilites.

6 Alcuin and philosophy at the court of Charlemagne

Texts: *Bib* Alcuin; Fredegisus, Theodulf of Orleans (for the *Opus Karoli Regis*). Texts from the circle of Alcuin and Candidus are edited as appendices to Marenbon (1981). More information about Fredegisus is found in a letter to him by Agobard of Lyons in Monumenta Germaniae Historica, *Epistulae* V, 210–21. II For a general discussion of philosophy in the period, see Marenbon* (1981) corrected by Marenbon (1997d). For background on Alcuin, see Bullough (1991) and (2004) – but his very late dating of *De dialectica* (followed in Marenbon 1997d) is probably wrong; more general background: McKitterick (1993).

7 John Scottus Eriugena and the ninth century

Texts: Bib Gottschalk. On the controversy between Ratramnus and Macarius, see Delhave (1950) and Marenbon (1981) 67-9. John Scottus Eriugena: Texts: Glosses on Martianus Capella: John Scottus (1939) prints glosses that are at least partly Eriugenian; in the appendix to Jeauneau (1978) there is a different version of the glosses to Book I, almost certainly by Eriugena. The best guide to this complicated question is Leonardi (1959, 1960). Periphyseon: This text was revised several times and poses enormous problems for its editors; they are resolved as well as humanly possible in John Scottus (1996-2003). Translations: Periphyseon - John Scottus (1987) is a complete translation, not based on the most recent edition. John Scottus (1968-95) gives a Latin text and a translation, mostly the same as that in John Scottus (1987), for all except Book V. The Homily is translated in O'Meara (1988) 158–76. || A bibliography is provided by Brennan (1989), and there are supplements to it in Riel et al. (1996) and McEvoy and Dunne (2002). These two volumes are the proceedings of the most recent conferences on Eriugena, in a series which goes back to 1970; the most useful of them is probably Roques (1977) and Beierwaltes (1987). On Eriugena in general, there is a valuable set of studies collected in Jeauneau (1987). Cappuyns (1933), although outdated, still has not been fully replaced. The most interesting philosophical study is *Moran (1989). Gersh (1978) studies the Periphyseon in the context of the Neoplatonic tradition, as does Beierwaltes (1994), and Schrimpf (1982a) in the context of Carolingian culture.

Study C: Gottschalk, Eriugena and his contemporaries on predestination and salvation

<u>Texts</u>: *Bib* Florus of Lyon, Gottschalk, Hincmar, Hrabanus Maurus, John Scottus Eriugena, Prudentius of Troyes. || I discuss this topic in more detail in Marenbon (1990). On the predestination controversy, see the Introduction to John Scottus (2003) and Schrimpf (1982b). On Eriugena's view of salvation, see Colish (1982), Dietrich and Duclow (1986) and McEvoy and Dunne (2002) – proceedings of a conference devoted to Eriugena's eschatology.

8 Commentary traditions: Byzantium and the Latin West

Byzantium <u>Texts</u>: *Bib* Photius, Arethus of Caesarea {http://www.tertullian. org/fathers/photius_copyright for Photius (1920) and extra translated material.} || Lemerle (1986) gives an account of the background. There is no philosophical study. The Latin West: <u>Texts</u>: *Bib* Remigius of Auxerre. One of the early *Consolation* glosses is edited and discussed in Troncarelli (1981). A late ninth-century commentary on the *Opuscula sacra*, possibly by Heiric of Auxerre, is edited in Rand (1906) and wrongly attributed to John Scottus; cf. Cappuyns (1931). Extracts from the early *Categoriae decem* glosses are printed in Marenbon (1981) 173–206. There are further extracts from Remigius's *Consolation* commentary in Silk (1935). || On the early Boethius commentaries, Courcelle (1967), though many of the conclusions need revising. More generally on the glosses, see Marenbon (1981) and, on Remigius and his school, Iogna-Prat *et al.* (1991).

Interlude ii: Priscianus ad regem Osdroe

See Marenbon (1981) 193–4 for the text and 134–5 discussion, and D'Alverny (1977) for attribution of translation of Priscianus Lyddus to Eriugena.

Chapter 4 Traditions apart

1 The beginnings of medieval Jewish philosophy

<u>Texts</u>: *Bib* Saadia; Isaac Israeli: *Altmann and Stern (1958) translate most of Isaac's works, with commentary and a synthetic discussion. II Saadia was not the only representative of the movement of Jewish *kalâm*-like speculation, which began in the early ninth century with Dâwûd al-Muqammiş, a Jew who converted to and reconverted from Christianity, and flourished among the breakaway Jewish sect of Karaites: see Ben-Shammai (1997) for an orientation and bibliography.

2 The kalâm tradition

On Jubbâ'î and Abû Hâshim, see *Frank (1978) and Gimaret (1980); on Ash'arî, Gimaret (1990). Montgomery Watt (1985) gives an introductory account.

Interlude iii: Arabic free-thinkers

Urvoy (1996) and Stroumsa (1999). It is hoped Patricia Crone's Birkbeck Lectures (Cambridge, 2005) on this theme will soon be published.

3 Fârâbî

Translations: The Enumeration of the Sciences, the Harmony of the Two Philosophers and other works are translated in Fârâbî (2001a). An important extract from the Kitâb al-hurûf is translated in Khalidi (2005) 1-26. The first half of Fârâbî's On the Purposes of the Metaphysics is translated in Gutas (1988), 240–2. {Texts in Arabic and English, and other valuable material is available at http://www.muslimphilosophy.com/farabi/ default} || There is no good general survey of Fârâbî, apart from the entry by a number of hands in the Encyclopaedia Iranica available at http://www.muslimphilosophy.com/ farabi/art/v9f277. Druart (1987) argues that the discrepancies within his doctrine are related to the different types of his work. The view that Fârâbî systematically conceals his thought is that of Leo Strauss, whose enthusiasm for Fârâbî has done much to make his writings better known, but also, some scholars would argue, to distort them (see Gutas, 2002, 19–24, and esp. p.19, n.33 for further references). This way of thinking affects the presentation of Fârâbî's thinking in the Introductions to the very useful translations made by Mahdi and Butterworth, as it does Galston's (1990) nevertheless interesting study of his political philosophy. On Fârâbî's logic, see Street (2003), and on his account of the transference of studies from Alexandria to Baghdad, Gutas (1999). There is a fine discussion of the *Kitâb al-hurûf* in Diebler (2005). Baghdad Aristotelians: Text and translation: Ibn 'Adî (2002) - his ethical treatise. || On Ibn 'Adî, see Endress (1977), for a complete list of works, with some summaries; more generally, see Peters (1968).

4 Ismailis and Neoplatonists

<u>Texts</u>: *Bib* Ikhwân al-Ṣafâ'. For Sijistânî's works see Daftary (2004) 153–5, and for Kirmânî's, ibid. 124–8. <u>Translations</u>: Sijistânî: there is a French of *The Wellsprings* in Corbin (1961). There is no complete translation of the letters of the Ikhwân al-Ṣafâ', but some partial translations into German and French, the most useful of which is Diwald (1975), of the letters on the

soul and intellect (into German). For a full list of translations, see Daftary (2004), 169–73. || On the Ismailis and early Shi'ism in general, see Daftary (1990). *Sijistânî*: Walker (1993). *Ikhwân al-Ṣafâ*': Netton (1982) – a brief account, which casts doubt on Ismaili authorship; Marquet (1975) gives a lengthy study, emphasizing the Ismaili connection, and also links with the Sabaeans. A balanced discussion of the identity and cosmology of the Ikhwân is found in Nasr (1964), 1–104. *Kirmânî*: Walker (1999).

5 Avicenna

Avicenna Texts: A very valuable list of works, with details of editions or manuscripts, is given in Gutas (1988) 79-145. Translations: English-Arabic parallel version of the Metaphysics from *The Healing* (poor Arabic text) - Avicenna (2005); Avicenna (1956) has Arabic and French texts of the section on the soul. The Latin translations of the sections on the soul and on metaphysics from the Healing are ed. in Avicenna (1972/ 1968) and (1977/1980/1983). Part of the logic section of the Healing in Shehaby (1973); Gutas (1988) contains translations of a number of important shorter works and extracts, including the autobiography (22-30), On the Rational Soul (72–8). The section on the soul from al-Najat is translated in Khalidi (2005) {M – many texts} || Bibliography: Janssens (1991), (1999). *Gutas (1988) presents an overall interpretation, and Wisnovsky (2003) proposes an important new reading of Avicenna in the context of his sources; *Wisnovsky (2005) presents his ideas in a less technical form. Collections of essays: Wisnovsky (2001), Janssens and De Smet (2002), Reisman (2003). On the soul: Marmura (1986) – on the famous 'flying man' argument; Haase (2001) - on importance of abstraction in his account of cognition. Avicenna's logic, see Street (2002) and cf. Shehaby (1973).

6 Ancient philosophy, logic and metaphysics in the eleventh-century Latin West

Commentaries on Boethius <u>Texts</u>: Bovo of Corvey's commentary and the one which uses the *Timaeus* are edited in Huygens (1954); for Remigius, see Chapter 3, section 8. || Courcelle (1967) remains the only general guide, although it is outdated. *Logic and Metaphysics* <u>Texts</u>: *Bib* Abbo of Fleury, Berengar of Tours, Gerbert of Aurillac, Lanfranc, Peter Damian. The edition of Abbo on hypothetical syllogisms by Schupp (Abbo of Fleury, 1997) should be used.|| *Holopainen (1996) offers a judicious study of the whole field; the best study of Abbo's logic is in the introduction and notes by Schupp to Abbo of Fleury (1997); Van de Vyver (1942) is still useful. Marenbon (2005b) looks at Berengar and Lanfranc in relation to the *Categories*. A fine analysis of Berengar's theories is found in Rosier-Catach (2004a). Resnick (1992) – a detailed study of Damian's *De divina omnipotentia*.

7 Anselm

There is valuable commentary on the *Proslogion* in Anselm (1965) {Latin texts: K, Sc, Aug; translation of *Monologion, Proslogion, Cur Deus Homo* at http://www.ccel.org/ccel/anselm/basic_works} || There are two important biographical studies by Richard Southern (1983, 1990). For a wide-ranging, modern philosophical introduction, *Davies and Leftow (2004). On modality, Serene (1981). Anselm's logic, especially in *De grammatico* – a strange but important study: Henry (1967); also on *De grammatico*, see Adams (2000) and Marenbon (2005b). On the theory of truth, Adams (1990); on justice, Pouchet (1964). The best treatment of Anselm on time is in Leftow (1991).

Study D: Anselm's 'ontological' argument

The secondary bibliography is vast. Two useful anthologies of discussions are Plantinga (1968) and Hick and McGill (1968). Davies (2004), Kapriev (1998), Klima (2000) give sophisticated and historically informed interpretations. Among the most famous modern philosophical discussions of the argument are Plantinga (1974) and Lewis (1983) – reprinting with postscript an article he wrote in 1970. Oppy (1995) provides a wide-ranging and always acutely analytical survey of the many forms the argument has taken. My own views on the proof and the *Proslogion* as a whole are given in Marenbon (2005c).

8 Psellos, Italos and the twelfth-century Byzantine Aristotelians

<u>Texts</u>: *Bib* Michael Psellos || On Psellos, see Zervos (1920) and Duffy (2002). On Italou, see Stephanou (1949).

Chapter 5 Latin philosophy in the twelfth century

General works on twelfth-century Latin philosophy

*Dronke (1988a) contains quite detailed studies of the whole field by the leading specialists, although it has become a little out-dated on the logic. The classic general presentation of the 'renaissance of the twelfth century' is in Haskins (1927), which the more recent, multi-author volume by Benson and Constable (1982) is designed to supplement and update. Chenu (1957) contains highly illuminating essays about the intellectual context. Southern (1995, 2001) is interesting but suffers from lack of contact with the most recent scholarship and the wish to propose an all-embracing, and implausible, thesis. For historiographical discussion, especially on the tendency to discount the twelfth century as merely an age of humanism, see Marenbon (2000a).

1 Logic and grammar at the turn of the twelfth century

Texts: Abelard's early commentaries are in Peter Abelard (1969a) and further examples of *in voce* exegesis are edited in Iwakuma (1992). A very interesting early commentary on Boethius's De topicis differentiis is edited in Hansen (2005). An important extract from the Priscian Glosule is edited in Rosier-Catach (1993). The whole text is available in some of the incunabula editions {that of Venice, 1496, can be read on Gal.} || General The studies collected in Mews (2002) add greatly to knowledge of Roscelin and his times, especially with regard to theological discussion. Logic *Tweedale (1988) is acute but already rather outdated on the period before Abelard; Marenbon (2004) gives an opinionated survey of the area and cf. Iwakuma (1992). The best reconstruction of Roscelin's views is Jolivet (1992). Iwakuma (1999, 2003) has argued for attributing logical commentaries to William of Champeaux (with valuable discussion and edition of extracts), but for good reasons to reject these attributions, and analysis of some of the material, see Cameron (2004). Grammar Fredborg (1988) provides a survey. Hunt (1941-3, 1950) remain important, as does Gibson (1979). Rosier-Catach (2003a, 2003b) provides a lot of information, by way of background to Abelard.

2 Peter Abelard

Texts: Most of Abelard's writings except for those on logic are edited in PL 178, but better, modern editions exist for most of them. Logic Early commentaries: Peter Abelard (1969a); Dialectica: Peter Abelard (Logica Ingredientibus and Logica Nostrorum petitioni sociorum: Peter Abelard (1919-33) - but unfinished commentary on De topicis differentiis is in Peter Abelard (1969a), and for authentic ending of LI commentary on On Interpretation, see Minio-Paluello (1956b): a new edition of this commentary, based on both known manuscripts, is forthcoming in Corpus Christianorum (Peter Abelard, forthcoming). Theology Theologia Christiana: Peter Abelard (1969c); Theologia Summi Boni and Theologia Scholarium: Peter Abelard (1987); Commentary on Romans: Peter Abelard (1969a); Commentary on Hexaemeron: Peter Abelard (2005); Scito teipsum: Peter Abelard (2001b) contains slight textual improvements on Peter Abelard (1971), but lacks the parallel English translation and commentary. Letters Peter Abelard and Heloise (2004) has very valuable commentary. Translations: Abelard has not been served well by translators. For the logic, there is only the extract on universals in Spade (1994) and some passages in Bosley and Tweedale (1997), where there are also some translated extracts from the *Theologia* Christiana (of which there exists an old, partial translation (Peter Abelard, 1948) and Theologia Scholarium. For the letters, be sure to use the revised edition. Peter Abelard and Heloise (2003). {Latin texts, usually of best editions,

of all works at K and Sc}. || General Works For a survey of philosophical discussions of Abelard 1980–2005, see Marenbon (2006), and for a survey of his life and works, with full biography, Mews (1995). Clanchy (1997) is a brilliant biography, from the point of view of a social and cultural historian. whilst Mews (2005) is richer in detail as an historian's account of Abelard's work, and of Heloise. Marenbon (1997a) mixes an account of Abelard's intellectual development with some more philosophical discussion. Thomas (1980), Jolivet (1981a), Jolivet and Habrias (2003) and *Brower and Guilfov (2004) are collective volumes of essays; Brower and Guilfoy's is particularly useful. Mews (1985) changed historians' view of the chronology of the works; it is reprinted, along with other important discussions of Abelard's text and their historical background, in Mews (2001). Logic and semantics De Rijk has pioneered the understanding of this complex topic: see especially De Rijk (1986). Martin (1987) and (2004) reveal Abelard's discovery of propositionality. Jacobi (1985) subtly analyses Abelard's treatment of impersonal propositions, whilst Rosier-Catach (2003a and b) uses new material to further a long-running debate on Abelard and the verb 'to be' (with full references to earlier contributions from Kretzmann, Jacobi, Marenbon and others). On the semantics of propositions, see Nuchelmans (1973) for what remains an excellent and judicious introduction to the whole topic; De Rijk (1975), De Libera (1981), Jacobi, Strub and King (1996), Guilfoy (2004), Rosier-Catach (2004a). Universals and metaphysics Study E Theology: Mews (2005) provides a good survey; Peppermüller (1972) - on the subjects considered (such as grace and Christ's work) in the Commentary on Romans. Ethics Study F The letters A summary of the debate about the authenticity of the correspondence is given in Marenbon (1997a) 82-93. The important contributions of Peter Dronke to this debate and to the wider view of Abelard as a writer and user of classical texts are collected in Dronke (1992) 247-388, and those of Peter von Moos in Von Moos (2005). Mews (1999) proposes a controversial theory, rejected by many specialists, which attributes a large group of 'new' letters to Abelard and Heloise: cf. Dronke and Orlandi (2005).

Study E: Abelard on Universals

<u>Texts</u>: See Chapter 6, section 5; note that the passage discussed is well translated in Spade (1994); some extra texts and notes by him are available at http://www.pvspade.com/Logic/docs/univers.pdf. The two best studies are King (1982) and De Libera (1999) 281–498 (and for background, cf. De Libera 1996). Some of King's views are summarized in King (2004). Tweedale (1976) presents a pioneering and, in many respects, excellent analysis. One feature of his interpretation is, however, very questionable: according to Abelard, he argues, universal words signify, not just common conceptions, but also statuses. This view is not born out by any direct textual evidence; rather, statuses are the common cause which explains why a universal word is able

to refer to all the things belonging to the sort in question. De Rijk (1980) is useful on the semantic problems, whilst Shimizu gives a clear account of Abelard's developing views, and Marenbon (1997a) 174–201 looks at all the relevant texts, though sometimes in a rather confusing way. Jolivet (1981b) argues that Abelard believes universal words are founded on universal ideas in the mind of God; for arguments against this interpretation, see Marenbon (1997b).

Interlude iv: Abelard, the Philosophus and the ancient philosophers

Jolivet (1980) discussed Abelard's depiction of the ancient philosophers, and there is further discussion in Marenbon (forthcoming b).

Study F: Abelard and early medieval ethics

<u>Texts</u>: *Bib Moralium dogma philosophorum*. The material by Anselm and William is in Lottin (1959); for Abelard, see Chapter 5, section 2: {Ll Latin text of *Moralium dogma philosophorum*} Delhaye (1958) brings out the important links between grammatical teaching and ethics in the period. Blomme (1958) studies the moral psychology of the masters of Laon and Abelard, from a theological standpoint but lucidly. De Gandillac (1975) is a subtle exposition. Marenbon (1997a) offered a wide-ranging interpretation, and considers the change and development in Abelard's views over the 1130s, which is ignored in the discussion here. Perkams (2001) presents a highly coherent reinterpretation. *King (1995) and Normore (2004) are the best philosophical studies, the former underlining the parallels with Kant, the latter with the Stoics.

3 The Schools, Platonism and William of Conches

<u>Texts</u>: *Bib* Bernard of Chartres, William of Conches. A complete edition of the works of William of Conches is being published in CCCM, under the general editorship of Edouard Jeauneau.{*Philosophia mundi* I, Ll}II <u>The Schools of Chartres and Paris</u> Southern's views are collected in Southern (1995, 2001), which to a great extent reprints earlier material. A lengthy answer is given in Häring (1974). See also Jeauneau (1973) – the essays here give, indirectly, the best statement of the pro-Chartrian case. *Bernard of Chartres* The case for Bernard's authorship of the *Timaeus* commentary he attributes to him is made in Dutton (1984). For some queries, see Dronke (1988), 14–17. *William of Conches* A good introduction is given in *Elford (1988a); see also Gregory (1955) and Jeauneau (1973), who looks at William and other writers who have been connected with Chartres. On William's

atomism, and the extent of atomism in the twelfth century, Pabst (1994) is illuminating.

4 Gilbert of Poitiers

<u>Text</u> {Comm. on Treatise III only at K, Sc}ll Elswijk (1966) – for biographical and historical information; *Nielsen (1982) – an excellent overall presentation; Gracia (1984) brings out the originality of Gilbert's theory of individuation; Jolivet and De Libera (1987) is an important collection of articles on Gilbert and his influence. Marenbon (1988) over-stresses Gilbert's theological commitments, but shows links with topical reasoning and explains (350–1) why readings of Gilbert as a Platonist are unfounded; Jacobi (1995, 1996), more briefly, in English (1998), gives a very clear analysis. Marenbon (2002) examines Gilbertian mathematics. The pages in De Libera (1996, 170–5) are lucid.

Study G: Abelard and Gilbert on possibility

*Knuuttila (1993) presents both the most nuanced version of his views on Abelard (82–96) and his developed discussion of Gilbert (75–82), which I have largely followed. Jacobi (1983) raises important queries about Knuuttila's method and conclusions, and Weidemann (1981) queries his reading of Abelard. I discuss Abelard and modality in Marenbon (1991) and (2005a) 60–5. Martin (2001) gives a searching analysis of Abelard's view of modality and Thom (2003) provides a formal system which helps to elucidate Abelard's views. Both these writers bring out the way in which he bases possibility on potency.

5 The beginnings of Latin scholastic theology

<u>Texts</u>: *Bib* Hugh of St Victor, Peter the Lombard. For Anselm of Laon's and William of Champeaux's theological *Sententiae*: Lottin (1959). Landgraf (1973) lists sources and editions; on the School of Laon, see Colish (1986); on Peter Lombard, see Colish (1994) and the shorter but more incisive and balanced Rosemann (2004).

6 The Platonisms of the later twelfth century

<u>Texts</u>: *Bib* Thierry of Chartres, William of Lucca. For historiography and fullish bibliography, see Marenbon (1997c). The best study remains the chapter 'Les Platonismes du XIIe siècle' in Chenu (1956; translated 1968); see also Dronke (1974). On Thierry, see Gersh (1982) and Dronke (1988a), who gives a much more enthusiastic account of Thierry as a thinker than mine.

Interlude v: Platonism and poetry

<u>Texts</u>: *Bib* Alan of Lille, Bernard Silvestris {Alan of Lille, *De planctu* and Anticlaudianus – Ll; translation of *De planctu*: http://www.fordham.edu/halsall/basis/alain-deplanctu} || Wetherbee (1972) is a useful introduction (or more briefly: Wetherbee, 1988). On Alan of Lille's poetry, see Simpson (1995).

7 The Parisian schools of the later twelfth century

Logical Schools Texts: Bib Adam of Balsham. Compendium logicae porretanum. There is a Porretan commentary edited in Ebbesen (2001); nominalist texts in Ebbesen (1991). The Introductiones montane maiores and the Ars meliduna are not yet edited, but De Rijk (1962/1967), vols. I, and II-2, contain a wealth of logical material from the period, including the Introductiones montane minores. Translation: Abbreviatio Montana in CTMPT 1, 39-78. {http://www.humnet.ucla.edu/humnet/phil/faculty/tparsons/download/ medieval contains some pieces translated from De Rijk (1962, 1967)}|| For a list of the commentaries, see Marenbon (1993/2000). De Rijk (1962, 1967) is fundamental though one-sided; Jacobi (1988) provides an excellent conspectus, and the papers collected in Vivarium 30 (1992) by William Courtenay provide a fuller introduction: Ebbesen (1992) and Iwakuma and Ebbesen (1992) are particularly important. Iwakuma (2004) is full of information, some of it quite technical, culled from the unpublished sources. See Martin (1987) for the responses to Alberic's argument against Abelard. Compendium logicae Porretanum (1983) includes an analysis of the logical doctrine in the Porretan compendium by Chris Martin. Theological Schools Texts: Bib Alan of Lille, Everardus of Ypres, Peter of Poitiers, Peter of Poitiers/Vienna. || On Peter of Poitiers, Boh (1985). On the social context of the schools, see Baldwin (1970). On Everardus: Häring (1955), Jacobi (1999), Marenbon (2002). On Alan of Lille, see the Introduction to Alan of Lille (1965) and De Libera (1987).

8 Beyond Paris. The scientists and the translators

<u>Texts</u>: *Bib* Adelard of Bath, Hermann of Carinthia. For editions of the translations, see *Burnett (2005) 391–404; the most important of them are probably the versions of Avicenna's *Healing*. *On the Soul* Avicenna (1972/1968); *Metaphysics* Avicenna (1977/1980/1983).|| For good introductions to Hermann and to the scientific movement, see Burnett (1988), and to the writings of Gundisalvi: Jolivet (1988) 134–41. On the translators at Toledo, Burnett (2001) and (2005) give an excellent, up-to-date guide.

Chapter 6 Philosophy in twelfth-century Islam

1 Islamic theology and Avicenna

The kalâm tradition <u>Texts</u>: *Bib* al-Juwaynî || On Avicenna and al-Juwaynî, Wisnovsky (2004); on 'Abd al-Jabbar, Hourani (1971), Frank (1978), Vasalou (2003). *Ghazâlî* {M – rich collection} There is a debate between Frank (1992b), (1994), who believes that Ghazâlî is very close to Avicenna and Marmura (1994), (2002), who defends something nearer to the traditional view of him as an occasionalist. On modality, see Kukkonen (2000).

Interlude vi: Suhrawardî - theosophist or philosopher?

Translations: Suhrawardî (1986) also contains the commentaries by Shîrâzî and Mulla Ṣadr. || Walbridge (2000), (2001) gives a more philosophical account, to balance the theosophical one in Corbin (1971–2), vol. II. But see also Gutas (2003) for some cautions about the discussion of Suhrawardî's sources.

2 Philosophy in al-Andalus

<u>Texts</u>: *Bib* Ibn Bâjja, Ibn Țufayl, Judah Halevi, Solomon Ibn Gabirol. Ibn Bâjja (1992) includes *Rule of the Solitary* and an essay on conjunction with the active intellect. || On Ibn Gabirol: Schlanger (1968); on Judah Halevi, Silman (1995) suggests that a chronological development can be found in Halevi's thought, which began as being in sympathy with Aristotelianism; on Ibn Bâjja, Altmann (1965); on Ibn Țufayl, Hawi (1974).

3 Averroes

Texts There is a very full guide to texts and translations in Aertsen and Endress (1999). {M – many texts. A very extensive database of manuscripts, secondary literature and translations – still not yet completely ready at: http://www. thomasinst.uni-koeln.de/averroes} || *Urvoy (1998) places Averroes in his historical and cultural context, as does, more pointedly, Geoffroy (1999). Aertsen and Endress (1999) is a good collection of essays. Davidson (1992) 220–356 presents a sustained and precise analysis of Averroes's developing thought on the soul, and its background in his metaphysics; cf. also Davidson (1987) 311–35, and Ivry (1999). Taylor (1999) is particularly useful in understanding how Averroes's interpretation fits together.

Interlude vii: Marriage in the Republic

<u>Text</u>: Averroes (1956) with translation. <u>Translation</u> Averroes (1974) gives a better translation. \parallel On the availability of the *Republic*: Reisman (2004); on the comparison with the Latin tradition, see Marenbon (forthcoming c).

4 Maimonides and Jewish Aristotelianism

Ibn Daud Fontaine (1990) Maimonides Translations: The French translation by Munk which accompanies his edition of the Arabic text is to be recommended; it can be bought separately - e.g. re-edition by the publishers Verdier (1989). Commentary on the Mishna, an English translation of Shemona *peragim*, is given in Moses Maimonides (1975) 60–95. The Introduction to Chapter 10 of Sanhedrin is translated in Dienstag (1983) 131-61 {Hebrew text of Mishneh torah and some translations: http://www.mechon-mamre. org/e/index; an older translation of the Guide is available at http://www. sacred-texts.com/iud/gfp/gfp.htm; http://www. columbia.edu/cu/lweb/indiv/ mideast/cuvlm/maimon - contains some translated extracts and information.} || *Davidson (2005) is a masterly study of all aspects of Maimonides's life and work, although the author is dogmatically against any esoteric interpretations of the Guide. Twersky (1980): on the Mishneh Torah. Different interpretations of the Guide: The classic modern esoteric interpretation is given by Leo Strauss in his essay on 'The literary character of the Guide' prefaced to Moses Maimonides (1963); Pines's special esoteric slant is proposed in a number of essays, notably Pines (1979) (and cf. Pines, 1997c); Fox (1990), Ravitzky (1990). Altmann (1987) analyses Maimonides's view of the intellect, responding especially to Pines (1979c); Stroumsa (2004) - on Maimonides and paganism. Collections of essays: Pines and Yovel (1986). Ormsby (1989), Frank (2002), Lévy and Rashed (2004), Seeskin (2005)

Chapter 7 Philosophy in Paris and Oxford, 1200-77

1 Paris and Oxford universities, the translations, the curriculum and the forms of philosophical writing

Universities General studies include *De Riddier-Symoens (1991) – wideranging; Verger (1997); Leff (1968) – a little outdated, but a good synthesis on Paris and Oxford, and see also Courtenay (1987); Rashdall (1936), although based on a work first published over a century ago, has still not been entirely superseded. For Oxford and Cambridge, see *Cobban (1988). For Oxford, see Catto (1984) and Catto and Evans (1992); for Cambridge, see Leader (1988); for French universities, the first half (on the Middle Ages) of Verger (1986). Courtenay (1987) gives an excellent survey of the whole of English education in the fourteenth century. On the *Guides* for Arts students – an important source for university practices see Lafleur (1995) and

Lafleur (1988) for an edition. O. Weijers (1987), although officially a guide to vocabulary, gives a detailed survey of every aspect of the academic organization of the medieval universities. *Types of philosophical teaching and writing*: *Arts Faculty* Weijers (1995), (2002); Weijers and Holtz (1997). Censures at the university of Paris: Bianchi (1999), Putallaz (1995); Glorieux (1971) – a catalogue of Arts Masters; *Theology Faculty* Stegmüller (1947) lists editions and manuscripts of commentaries on the *Sentences* of Peter the Lombard. A mine of information about medieval theology is to be found in the chapters of Evans (2002) on medieval *Sentences* commentaries. Glorieux (1925), (1935) on quodlibetal disputations; on teaching in the Theology Faculty. Glorieux (1933–4) – a catalogue of theology masters in Paris.

Interlude viii: Pseudepigrapha and the medieval Aristotle

The Aristotelian pseudepigrapha are catalogued in Schmitt and Knox (1985); and see Kraye *et al.* (1986). On the *Secretum secretorum*, see Ryan and Schmitt (1982) and Williams (2003). The *Liber de pomo* is edited in pseudo-Aristotle (1960) and translated with a useful introduction in pseudo-Aristotle (1968).

2 Grammar and logic

The Organon Texts and catalogues: Commentaries on On Sophistical Refutations up to 1300 are catalogued in Ebbesen (1993), and those on the Topics and Boethius's De topicis differentiis in Green-Pedersen (1984). The Liber de vi principiis is edited in I, 6–7 of the Aristoteles Latinus {K}. Logica modernorum Textbooks Bib Lambert of Auxerre, Peter of Spain, William of Sherwood; Sophismata De Rijk (1988), De Libera (1991a) and see Bib Buridan, Kilvington (for the later tradition) {a catalogue of sophismata from the thirteenth and early fourteenth century: http://www.unige.ch/lettres/ philo/sophismata/Coll_liste} || See Isaac (1953), Braakhuis and Kneepkens (2003) for On Interpretation; Green-Pedersen (1984) for Topics; Ebbesen (forthcoming) for Prior Analytics; Serene (1982), De Rijk (1990) and Marrone (1983) - early thirteenth-century uses - on Posterior Analytics. Logica modernorum On the theory of the properties of terms {A very important study by Paul Spade of supposition and medieval theories of signification in general is available only on the web at: http://www.pvspade.com/Logic/ docs/thoughts} On sophismata: De Libera (1986), Rosier (1991), Read (1993) Modistic grammar and semantics Texts: Bib Boethius of Dacia, Martin of Dacia, Radulphus Brito, Thomas of Erfurt, Pinborg (1967), (1972); Rosier(-Catach) (1983) – specifically on the modistic grammarians, Covington (1984) – also on the modisti; Rosier/Rosier Catach (1994) (2004a); Marmo (1994).

3 Arts Masters and theologians, 1200-50

The Arts Masters Texts: Bib David of Dinant, Richard Rufus, Robert Kilwardby. The text on the powers of the soul is edited in Gauthier (1982a) and translated in CTMPT 3. {For texts supposedly by Richard Rufus: http://rrp. stanford.edu} || On David of Dinant, see *Maccagnolo (1988) survey; and Casadei (1998) - translations of Aristotle, the latter against Pickavé (1997) which argues that David used existing translations. The early commentaries on On the Soul are listed and discussed by R.-A. Gauthier in Aquinas (1984), 235^*-67^* , and the interpretation of Averroes from c. 1225-40 is examined in Gauthier (1982b). For early Physics commentaries (up to c. 1270), see Trifogli (2000) – a detailed analysis, especially of the English material from c. 1250–70 – and Trifogli (2004), a repertorium, which gives a summary of the discussions in the English commentaries of this period. On the earliest uses of Aristotle in England, see Burnett (1996). The case for Richard Rufus as a very important early Aristotelian commentator is made in Wood (1994) and (1998); cf. also Wood (1996) - Rufus on individuation. Many doubt Wood's attributions: see Raedts (1987) and Donati (2005).

The Theologians Texts: Bib Alexander of Hales (for Summa fratris Alexandri), Philip the Chancellor, William of Auvergne, William of Auxerre. William of Auvergne: De universo and De anima are both available only in William of Auvergne (1674), in I and II, supplements, respectively; there are modern editions of some more minor works, including De immor*talitate animae* – in an appendix to Dominicus Gundisalvi (1897). Another theologian of this period is the Oxford Dominican, Richard Fishacre (d. 1248), author of a Sentences commentary and interested in, but not fully conversant with, Aristotle: for a good summary, see R.J. Long in Gracia and Noone (2003), 563-8. || On the whole period, see Masnovo (1945-6) and, for reference, Landgraf (1973); both now very outdated. The classic study of the merging of Augustinian and Avicennian ideas is Gilson (1929). On William of Auxerre – St Pierre (1966), a bibliography; on John of la Rochelle, Bougerol (1994); on Richard Rufus, Raedts (1987); on William of Auvergne, Moody (1975), Rohls (1980), Marrone (1983). Macdonald (1992) looks at goodness as a transcendental in this period, and see also the essays collected in Macdonald (1991). On cognition, throughout the thirteenth century, see Marrone (2001).

Robert Grosseteste Texts: The most important philosophical works (including *De luce*) are in Robert Grosseteste (1912). Editions and translations of Grosseteste's work (among which, so far, his *Hexaemeron*) are being published in the series Auctores Britannici Medii Aevi {The Electronic Grosseteste – http://www.grosseteste.com – provides texts, including Grosseteste (1912) and further information.} Translations: Some of the shorter treatises are in McKeon (1930). *De luce* is in Schoedinger (1996) 763–70. || *McEvoy (1982) is a comprehensive study, whilst the briefer McEvoy (2000) is more historical

in its emphasis; Southern (1986) displays its author's customary humanity of tone and understanding; Crombie (1953) is a classic study of Grosseteste's position in the history of science, now rather outdated. Callus (1955) and McEvoy (1995): important collections of essays. On his theory of knowledge, see Marrone (1983). Lewis (1996) analyses Grosseteste's views on possibility and compares them to Scotus's. *Roger Bacon* <u>Texts</u>: Roger Bacon (1859) contains the *Opus tertium* and *Opus minus*. Il Easton (1952), Lindberg (1983), Tachau (1988) – on multiplication of species, optics and cognition, Luscombe (2005) – on language; Hackett (1997) – a collection of essays.

4 Theology in Paris: Bonaventure and Albert the Great

Bonaventure Translation His commentary on the Nicomachean Ethics X is translated in CTMPT 2. \parallel A balanced survey of his life and thought is given in Bougerol (1988). Gilson (1953) – English translation of first edition: Gilson (1938) – remains a classic study. Ratzinger (1971) is usefully challenged by Speer (1997) on the question of Bonaventure's attitude to philosophy. Weber (1974) looks at the relationship between Bonaventure and Aquinas. Albert Texts: The complete edition in Albert the Great (1890–9) is gradually being replaced by the critical edition, Albert the Great (1951–): the commentary on On the Soul is in VII, 1 and that on the Nicomachean Ethics in XIV, 1–2. \parallel *De Libera (1990) is by far the best general exposition; now see also De Libera (2005); Weisheipl (1980), concentrating on Albert and the sciences, Meyer and Zimmermann (1980) and Zimmermann (1981) are collections of essays.

5 Thomas Aquinas

(In my discussion, I have tried where possible, to give references to the Summa Theologiae, which is easily available in translation. Often Aquinas treats the same subjects more fully elsewhere. Most editions of ST provide lists of crossreferences.) Concordance Busa (1974-80) Texts: A list of the best editions of all the works is posted at http://www.corpusthomisticum.org/reoptedi. The complete works are brought together in large volumes culled from various editions and prepared for the purposes of the computer concordance: Busa (1974–80). The Leonine edition, giving full critical editions of the Latin texts, is still incomplete, over a century after it was started. Some of the most valuable editions in it are listed in the bibliography. The Leonine text of the Summa Theologiae is conveniently available in a number of different cheaper editions, such as that in the Biblioteca de Autores Cristianos, and the publishers Marietti of Turin have published all Aquinas's major works, usually using the Leonine edition where it was available by the time of publication. Particularly useful are its edition of the Summa contra Gentiles (Thomas Aquinas, 1961–7) – the best edition available, of the commentary on pseudo-Dionysius (Thomas Aquinas 1950) and Thomas Aquinas (1964-5), which

contains all his various disputations other than the *quodlibets*. The best edition of the commentary on the Liber de causis is Thomas Aquinas (1954). {Complete works at http://www.corpusthomisticum.org/iopera} Translations Aquinas is better served by translations into English than any other medieval philosopher. Full, slightly outdated details of available English translations are found at http://www.nlx.com/titles/titlagbi (where an electronic database containing all the material can be bought). There are two very useful anthologies: Thomas Aquinas (1993b) is arranged thematically. It includes extracts on central topics from the two Summae, the disputed questions and other works, as well as De ente et essentia complete. Thomas Aquinas (1998) is longer, and is arranged chronologically. It contains extracts from a wide range of Aquinas's works and includes the full text of De aeternitate *mundi*. There is a complete parallel text translation of ST in 60 volumes: Thomas Aquinas (1963). An earlier, often more literal translation has been reprinted in various forms, such as Thomas Aquinas (1981). The Summa contra Gentiles is translated in Thomas Aquinas (1975). Other useful translations are listed in the bibliography; Thomas Aquinas (2002) - ST I, gg. 75–89, has a full commentary. {ST in English: http://www.newadvent. org/summa; SCG in English (some abridgements) http://www.nd.edu/ Departments/Maritain/etext/gc}. || General For a systematic general account of Aquinas's life and works, see Torrell (1996) (or better, for a revised edition, in the original French: Torrell (2002)). *Davies (1992) gives an excellent, balanced introduction for the beginning reader. Stump (2003), a magisterial work, is a very ambitious account, stressing the links between Aquinas's ideas and analytic philosophy, whilst Davies (2002) selects some of the best recent articles. *Kretzmann and Stump (1993) collects specially written essays on each of the main aspects of Aquinas's thought and provides a very fine philosophical introduction to it. Metaphysics Wippel (2000) - close, textual studies on central themes; Elders (1993), Kenny (2002) - a controversial critique of Aquinas's discussions of being; Aertsen (1996) – transcendentals; Montagnes (1963) – analogy. Human nature and the soul Pasnau (2002a) - an analytical study, based mainly on ST; Callus (1961), Dales (1995) background to Aquinas's position on soul as only form of the human being, on which cf. also Boureau (1999), especially 39-86: see also under Study K. Cognition Kenny (1993) Natural Theology On the Five Ways - Kenny 1969b), MacDonald (1991). Pasnau (1987); Panaccio (2001). Natural Theology On the five ways (Kenny 1969b, MacDonald (1991) Hughes (1989) - the divine attributes; Kretzmann (1997-2000) - on the Summa contra Gentiles. Ethics Macdonald and Stump (1998) - a collection of sophisticated, analytical essays; Westberg (1994). For contemporary Thomists, the theory of law, especially natural law, has become a central issue, but the debate, though originating with Aquinas, often moves far away from him: neither of the two best modern monographs on this area – Lisska (1996) and Finnis (1998) - is exactly a historical study.

Interlude ix: Aquinas and the historiography of medieval philosophy

See Inglis (1998) and, on Neoscholasticism and the background to Aeterni Patris, see Coreth, Neidl and Pfligersdorffer (1988). See also the section on Histories of Medieval Philosophy under Chapter 1 above.{An English translation of Aeterni patris is available at http://www.vatican.va/holy_father/leo_xiii/encyclicals/documents/hf_l-xiii_enc_04081879_aeterni-patris_en.html }.

Study H: The five ways

See under Chapter 7, section 5, Natural Theology.

Study I: Aquinas on eternity and prescience

Texts: Aquinas's view on this subject does not seem to change greatly over time, although he gives slightly different emphases in different works. The fullest treatment is in *De veritate* q. 2, a. 12. Other treatments include: Commentary on Sentences I, d. 28, g. 1, a. 5; Summa contra Gentiles I. 67; ST I, q. 14, a. 13; Compendium Theologiae I, 133; Commentary on On Interpretation I, lectio 14; De malo, g. 16, a. 7. For editions, see above, Chapter 8, section 5 || The best, detailed study is Goris (1998); I discuss the topic in Marenbon (2005a) 117-70. Kenny (1969) and Prior (1962) are classic analyses of the topic, whilst Leftow (1990) is particularly sophisticated. For the epistemic and metaphysical interpretations, see De Finance (1956). On Aquinas's view of divine eternity, Stump and Kretzmann (1981) and (1992), where the theory is slightly modified. Fox (forthcoming) offers a very important analysis of thirteenth-century conceptions of eternity, casting doubt on whether Aquinas and others thought of it as atemporal, in the manner of some contemporary philosophers of religion. Craig (1988) gives a survey of discussions about divine prescience in the Latin tradition, from Boethius to Suárez.

6 Latin Averroism: the Paris Arts Faculty in the 1260s and 1270s

Texts: *Bib* Boethius of Dacia, Siger of Brabant; a *Physics* commentary, once attributed to Siger: Zimmermann (1968); anonymous commentaries on *De anima* in Giele, Van Steenberghen and Bazán (1971), one of which is translated in CTMPT 3, and in Kuksewicz (1964) {Boethius, *De aeternitate*, *De summo bono*; Siger *In III De anima*, *De anima intellectiva* – Sc.}|| Renan (2002 – a re-edition with introduction of a book first published in 1852) – historiographically very important; Van Steenberghen (1966) represents the view according to which there is no Latin Averroism in the 1260s and the

1270s, but 'radical Aristotelianism'; an earlier English version of his views is found in Van Steenberghen (1955). For a general survey of Averroes and Averroism: Hayoun and De Libera (1991). Siger: Gauthier (1983–4) destroys a number of myths but underplays the importance of Siger; Putallaz and Imbach (1997). Boethius – Pinborg (1974). Further studies on Siger and Boethius are found in works on the 1277 condemnations: see Section 7 below {There is a bibliography of Siger prepared by Fabienne Pironet at http://www.mapageweb.umontreal.ca/pironetf/Siger/SigerBiblio}.

Study J: The eternity of the world: Bonaventure, Aquinas, Boethius of Dacia

<u>Texts</u>: Dales and Argerami (1991) present a dossier of texts on the problem. <u>Translations</u>: Vollert *et al.*, (1964) includes translations of texts on the subject by Bonaventure, Siger and Aquinas. John Pecham (1993) translates this thinker's contribution. A superb anthology, with excellent introductions, is available in French: Michon (2004) || Dales (1990) – a wide-ranging study; Sorabji (1983) puts the thirteenth-century discussions into a broader context; Wissink (1990) – conference proceedings, looking at the topic in Aquinas and his contemporaries.

Study K: The potential intellect: Aquinas, Averroes and Siger of Brabant

There is valuable commentary in the English translation of Aquinas's *De unitate* (Thomas Aquinas, 1993) and even more so in Alain de Libera's French version (Thomas Aquinas, 1994). For a full commentary on Aquinas's work: De Libera (2004b).

7 The 1277 condemnations and their significance

Texts: The text of the 1277 condemnation is printed with extensive commentary in Hissette (1977). A better edition of the text, which does not re-order it, and contains full commentary, is in Piché (1999). Aertsen *et al.*, (2001) – a collection of essays. An illuminating study of the legal context of the condemnations, not all the conclusions of which have been accepted by historians, is Thijssen (1998). For minimalist interpretations, see Hissette (1977), (1990) and Emery and Speer (2001). For the maximalist: Flasch (1989), Bianchi (1990), *(1998), (1999), De Libera (1991a), (1998) On the 'trial' of Aquinas and the condemnations of his theses at Oxford, see Glorieux (1927), Callus (1946) and Wielockx (1988). For the *correctoria*: Texts: Bib Correctorium Quare/Quaestione/Sciendum, John Quidort II Jordan (1982).

Chapter 8 Philosophy in the universities, 1280–1400

1 The Albertine tradition

Texts: *Bib* Ulrich of Strasbourg, Dietrich of Freiberg, Eckhart, Berthold of Moosburg. II An excellent study of the whole tradition is given in De Libera (1984); Flasch (1984) – a collection of essays. *Dietrich of Freiberg* Mojsisch (1977) – on his theory of the intellect; Kandler *et al.* (1999) – a collection of modern studies. *Eckhart* Mojsisch (1983) – an important revisionary general study, translated into English – *Mojsisch (2001); Mojsisch's article in *SEP* summarizes his views in English, and has an excellent bibliography; Imbach (1976) – comparison with Aquinas; Zum Brunn and De Libera (1984); Zum Brunn and others (1984); Flasch (1988) – on regarding Eckhart as a philosopher rather than a mystic; Aertsen (1992); a more traditional approach – McGinn (2001).

2 Henry of Ghent, Godfrey of Fontaines and Peter John Olivi

Henry of Ghent Texts: The only complete editions of the Summa quaestionum ordinarium (S) and the Quodlibets (Q) are still the early printed ones, which have been photographically reprinted: S - Henry of Ghent (1520), Q – Henry of Ghent (1518). A complete, critical edition of both is under way - Henry of Ghent (1979-). So far S XXXI-XLVI and Q I-II, VI-VII, IX-X, XII-XIII are in print. Translation: Important material on cognition in CTMPT 3. || There is no general modern monograph in English on Henry, but Porro (1990), and Marrone (1985) and Laarmann (1999) - on his theory of knowledge, are useful. Paulus (1938) is a classic study, but many of its conclusions are now questioned. Vanhamel (1996) collects recent essays by various scholars. Godfrey of Fontaines Texts: Godfrey's works are edited in the series Les philosophes belges (PB = Godfrey of Fontaines, 1904–37), as follows: Quodlibets I- IV in PB 2; VI-VII in PB3; VIII-X in PB4; XI-XIV in PB5; XV and *Quaestiones ordinariae* in PB14 || *Wippel (1981) gives an authoritative account; see Wippel (2001) for Godfrey's student notebook. Olivi Translation: Extract from commentary on John, in CTMPT 3. {http:// www.oliviana.org - an e-periodical. The entry in 'Franciscan Authors' http:// users.bart.nl/~roestb/franciscan/ has a rich bibliography} || On his life and condemnations, see Burr (1976), (1989); *Boureau and Piron (1999) a collection of essays, in which Piron is especially illuminating on his philosophy. See also Burr (1971) - attitude to philosophers, and Dumont (1995) - theory of modality; Madigan (2003): apocalyptic interpretation of Matthew.

3 Duns Scotus

Texts: Luke Wadding's edition (W = [John Duns] Scotus, 1639), is gradually being replaced by two, critical editions: the Vatican edition (V = Scotus, 1950) and the Saint Bonaventure edition of the philosophical works (B = Scotus, 1997). Books I and II of the Ordinatio are in V (vols. 1-8); III and IV in W (vols. 6–10); the Lectura is in V (vols. 16–19). Some reportationes of the Paris lectures on Bks. II-IV are in W (vol. 11), but what is printed there as a reportatio of Book I is in fact a compilation by Scotus's secretary, William of Alnwick. An edition of Book I, based on the five genuine reportationes, has now been published, with parallel English translation: Scotus (2004). The commentary on the Metaphysics is in B (vols. 3-4), and the quodlibets (W vols. 25-6) are edited in Scotus (1963). The logical works are in W (vol. 1), and – in part – in B (vol. 1) {For information, bibliography and a selection of translations see: http://www.nd.edu/~wwillia5/dunsscotus/} || *Cross (1999) provides a fine, highly intelligent introduction to the whole range of Scotus's thought. On Scotus's life and works, see Wolter (1993b) and cf. Courtenay (1995); for a good up-to-date summary, see the Introduction to Williams (2003). Recent important collections of philosophical studies include: *Williams (2003) - a Cambridge Companion (sophisticated and excellent, especially for readers from an analytical background; less accessible than Cross (1999)). Honnefelder et al. (1996) contains detailed, philosophical discussions covering the range of Scotus's thought; another good collection is Wolter (1993a). Wolter (1990) collects some of his important articles on Scotus. Metaphysics King (2003) is superb. On transcendentals, see Wolter (1946).

Study L: Scotus on possibility

Scotus (1994) gives the text, translation and commentary on the exposition of Scotus's position in the *Lectura*. Knuuttila (1993) offers an excellent survey of the background to conceptions of modality. The exact interpretation of Scotus's position, though, is controversial, especially on (i) whether or not the ultimate foundation of what is and is not possible is independent of God or not, and (ii) how exactly should Scotus's theory be related to modern possible worlds semantics. The two leading scholars in this debate – whose views differ from each other and have themselves changed over time – are Simon Knuuttila (1995) and (1996). Kenny (1996), who is sceptical about the value of Scotus's modal innovation, provides another perspective.

4 Between Scotus and Ockham

<u>Texts</u>: *Bib* Peter Auriol. Excellent introductory accounts, with basic bibliography and lists of editions (and translations, if any) will be found in

Gracia and Noone (2003) for Hervaeus Natalis, Thomas of Sutton, William of Alnwick, Francis Meyronnes and Durandus of St Pourçain. <u>Texts</u>: *Scriptum* – part: Peter Auriol (1952, 1956) {A very important website, giving bibliography and mostly unpublished new editions of the *Scriptum* is http://www.igl.ku.dk/~russ/auriol.html} <u>Translations</u>: Texts on cognition by Alnwick and Auriol translated in CTMPT 3. || Friedman and Nielsen (2000) – a collection of essays; Schabel (2000) – detailed treatment of Aureol, his intellectual context and reactions to him, centred on the topic of divine prescience. For Durandus, see the important new study: Iribarren (2005).

5 William of Ockham

Texts: Ockham's philosophical works are edited in William of Ockham (1974-88): the Summa Logicae is volume 1. The theological works are edited in William of Ockham (1967-86): the Ordinatio is in vols. 1-4. Translations: The main treatment of universals (d. 2, gq. 4–8 of the Ordinatio) is translated in Spade (1994); and see also Tweedale (1999) for translation and full commentary. Material on cognition in CTMPT 3 {Sc. has most of the Summa *logicae* with some English translation; an alternative source for SL I–II is Ki} || Bibliography Beckmann (1992). Biography and chronology: Leppin (2003). The two-volume study of Ockham – Adams (1987) – provides analyses of a range and depth unmatched for any other medieval thinker in a single work. *Spade (1999) contains essays by the best specialists over the whole range of Ockham's work. On Ockham's semantics, Michon (1994) is detailed and sophisticated; whilst Panaccio (2004) draws together beautifully the various strands in his logic, semantics and epistemology. Tachau's study (Tachau, 1988) sets Ockham's epistemology in its intellectual context, and cf. Lenz (2003). On absolute and ordained power, see Oberman (1963), Courtenay (1990) and Gelber (2004) 309-49.

Study M: Ockham and the problem of prescience

<u>Text and translation</u>: Ockham's central discussion of the problem, the *Tractatus de praedestinatione*, is printed in *Opera Philosophica* II, and Ockham (1983) translates it with extensive commentary. || Plantinga (1986), Perler (1988), Kenny (1996).

6 The Paris Arts Faculty and fourteenth-century Averroism

<u>Texts</u>: *Bib* John of Jandun, Marsilius of Padua || *John of Jandun* Older studies – MacClintock (1956); Schmugge (1966) – biography, political ideas and links with Marsilius – are largely replaced by the complete redescription and re-evaluation undertaken in Brenet (2003). *Averroism and its spread*

Kuksewicz (1965), (1968); Niewöhner and Sturlese (1994) – collection of essays; in Italy — (1979) *Marsilius of Padua* <u>Translations</u> The second volume of Gewirth (1951–56) contains a fine translation of the *Defensor Pacis*, available separately. Either it or the recent translation listed under Marsilius may be used. || Gewirth (1951–56), vol. 1; Nederman (1995).

7 Oxford and Paris theology after Ockham

Texts: Bib Adam Wodeham, Gregory of Rimini, Nicholas of Autrecourt, Robert Holcot, Thomas Bradwardine, Walter Chatton, Walter Burley, William Crathorn. {The incunabula editions of Holcot's Sentences and Wisdom commentary are available at Gall. Some otherwise unpublished editions of Francis of Marchia can be downloaded from the SEP entry on him by C. Schabel, and it also contains a full list of the various places where his work has been published: http://www.seop.leeds.ac.uk/entries/francismarchia. Nicholas Bonet: Details of MSS and secondary works at http://users. bart.nl/~roestb/franciscan.} Translations Texts on cognition by Crathorn, Holcot and Wodeham in CTMPT 3. || For all this period Andrews (1997) is a valuable collection of specialized essays. Grassi (1986), Tachau (1988) and Pasnau (1997) contain important discussions of the theory of cognition in this period. Burley: Wood and Ottman (1999) Wodeham: Courtenay (1978) - biography and works; Adams (1993), although a review of an edition, presents an excellent concise summary of many of Wodeham's central ideas. Holcot: Smalley (1956); Hoffmann (1972); Gelber (2004); Baconthorpe Etzwiler (1971), (1976); Bradwardine Genest (1992); Dolnikowski (1995); for his scientific work - Crosby (1955 - with text), Murdoch (1970); Gregory of Rimini Leff (1961); Fiorentino (2004); influence - Oberman (1981) Autrecourt Grellard (2005); Kaluza (1995); Thijssen (2000); there is a valuable introduction and notes in Nicholas of Autrecourt (2001); Dutton (1996) - atomism. There are especially valuable SEP entries, bringing forward new material and interpretations, for Francis of Marchia (C. Schabel) and William Crathorn (A. Robert). The 'complexe significabile' See Nuchelmans (1973) for a general introduction to the problem; Gál (1977); Perler (1992) 292-342, and (1994); Zupko (1997).

Interlude xi: Holcot and the philosophers

Oberman (1963), Coleman (1981b), Marenbon (2005c)

7 The Oxford Calculators

<u>Texts</u>: *Bib* Thomas Bradwardine, William Heytesbury, and Richard Kilvington. || Sylla gives an introduction, and see in the *REP*: 'Oxford Calculators'; Murdoch (1975) – a classic study: Weisheipl (1969) – a

repertorium of material from Merton College, where many of the Calculators were based.

8 Logica modernorum

Texts: *Bib* Albert of Saxony, Paul of Venice, Richard Kilvington, Thomas Bradwardine, William of Ockham, Walter Burleigh. Kann (1994) has the text of the treatise on supposition from Albert of Saxony's *Perutilis logica*. For an anonymous treatise on *Consequentiae*: Schupp (1988); <u>Translations</u> CTMPT 1 contains much relevant material, including Albert of Saxony on Insolubles, Burley on *Consequentiae* and obligations, Ockham on *Consequentiae* || <u>Insolubles</u>: Spade (1975b) – a catalogue; Martin (1993); Read (2002); the *SEP* article *Insolubles* (Spade) provides an excellent introduction and bibliography, including references to Spade's own extensive work on the area. *Obligations* Yrjönsuuri (1994), (1996). *Consequentiae* Schupp (1988), King (2001). *Albert of Saxony* Kann (1994) *Kilvington* Jung-Palczewska (2000). *Heytesbury* Wilson (1960); there is an excellent, lengthy article in *SEP* (Longeway) {a full bibliography at http://www.mapageweb.umontreal. ca/pironetf/download/ GHbiblio}.

9 John Buridan

Texts and translation: His commentary on Nicomachean Ethics X is translated in CTMPT 2. {Buridan is well-served by the web, on which a good deal of otherwise unpublished material can be found. The Summulae, treatise on Consequentiae, and some Aristotelian commentaries are available at K and Sc} || A wide-ranging study is given in *Zupko (2003), but it does not do full justice to Buridan as a logician, on which see the Introductions to John Buridan (1985) by Peter King, and to Buridan (2001), by Gyula Klima, and also, for modal syllogistic, Lagerlund (2000) 136-64. A series of important studies on Buridan's metaphysics and logic have been written by Gyula Klima (see http://www.fordham.edu/gsas/phil/klima).Thijssen and Zupko (2003) collects studies on his metaphysics and natural science, and Friedman and Ebbesen (2004) on language, starting with Buridan and looking on into the late medieval and early modern period. The correct interpretation of Buridan's attitude to the relations between faith and philosophical reasoning, and of his position on subjects such as the immortality of the soul and the possibility of happiness in the present life is debated: Sylla (2001) presents a far less radical Buridan than Pluta (1986), (2002) - the latter a particularly fine and challenging essay. For a balanced and subtle account of his views on the soul, see Lagerlund (2004). On Buridan and the Statute against the Ockhamists, see Paqué (1970). {There is a very full Buridan bibliography, compiled by Fabienne Pironet, at http://mapageweb.umontreal.ca/pironetf/Buridan Biblio1, and some other translations of Buridan are available on her web page: http://mapageweb.umontreal.ca/pironetf}

GUIDE TO FURTHER READING

10 The late fourteenth century

Texts: *Bib* John Wyclif, Marsilius of Inghen, Pierre d'Ailly, Richard Brinkley. Kaluza (1989) has extracts from Brinkley's theological works. Many of Wyclif's writings were published in the late nineteenth century by the Wyclif Society. || Bakker (2002) – a collection of essays on different aspects of the period. The documentary evidence, timing and purpose of the ban on teaching in Ockham in the Paris Arts faculty is disputed: see Courtenay (1995b). *Brinkley* Kaluza (1989). Kaluza (1988) is a fundamental study for university philosophy in the late fourteenth and fifteenth century. *Marsilius of Inghen* Hoenen and Bakker (2000). *Peter of Ailly* Pluta (1987).

Interlude xii: How far can you go? Biagio Pelacani di Parma

Federici Vescovini (1979)

9 Philosophy outside the universities, 1200–1400

1 Outside the universities: philosophy, courts and the vernacular in the Latin West

Texts: Bib Dante Alighieri, Llull (Ramon). Dante Alighieri (1989) is a particularly rich edition of the Monarchia in its notes and introduction. Non-university Latin philosophy has been explored especially by Ruedi Imbach (1989), (1996b). On Dante, Boccaccio, Cavalcanti and the Italian tradition, see the fundamental new study by Gentili (2005); on Boccaccio, Gagliardi (1999). On the dissemination of philosophy in England, Coleman (1981a), (1981b); Dante Gilson (1939), Nardi (1967), (1985); Corti (1983); Marenbon (2001). Lull Texts: The (as yet incomplete) edition of the Latin works is in Llull [Ramon] (1959-67), (1978-), supplemented by Llull (1721–40); the Catalan works are edited in Llull (1906–17, 1923–50). The modern edition of the Libre del gentil is in Llull (1990–), II. Translations Llull (1985) gives an excellent selection, including the Libre del gentil, along with a catalogue of all the works; Llull (1993) is a shortened version of Llull (1985). The vita coaetanea is translated with commentary in Llull (1985), 13–48 {some selections from the Catalan texts at – http://www.mallorcaweb. com/Mag-Teatre/llull/amic.html} || *Hillgarth (1971) and Platzeck (1962–4) give general studies; Johnston (1987) on Llull's 'logic' and Urvoy (1980) on Llull's knowledge of Islamic writings.

GUIDE TO FURTHER READING

2 Byzantine philosophy

<u>Texts</u>: *Bib* Gregory Palamas, Nicholas Cabasilas || Podskalsky (1977); Meyendorff (1959) on Gregory Palamas.

3 Philosophy in Islam

See Gutas (2002a); on the logic, Street (2003). Leaman and Nasr (1996) contains a long study of Țusî, and some other material on this still obscure period. On Râzî, see Arnaldez (2002).

4 Jewish philosophy

<u>Texts</u>: *Bib* Albalag, Gersonides. Moses of Narbonne's commentary on Averroes's *Epistle* is in Averroes (1982). Albalag's work is translated, put into order and discussed in Vajda (1960) || The translation movement: Zonta (1996). *Samuel Ibn Tibbon* Ravitzky (1981). *Albalag* Vajda (1960); *Moses of Narbonne* Hayoun (1989). *Gersonides*: Touati (1973), Dahan (1991), Sorat, Klein-Braslavy and Weijers (2003) – collections of essays.

Chapter 10: Not an epilogue: 'medieval' philosophy, 1400–1700

Here are a few studies that help to indicate why it is better, as argued here, to treat the period running up to 1700 as a unity, rather than making a break, as is usually done, between medieval and early modern philosophy: Ariew (1999) – Descartes and the scholastic tradition; Frede (1998) – scepticism; Funkenstein (1986) – traces a set of questions through the whole period; Lagerlund and Yrjönsuuri (2002) – both the range of the articles, and the important introduction, bring out the theme of continuity; Marion (1981) – Descartes and theology from the time of Aquinas; Menn (1998) – Descartes and the Augustinian tradition; Schmitt and Skinner (1988) – this collective history of Renaissance philosophy is a good place to begin looking at the thought of the fifteenth and sixteenth centuries, and it stretches further back too, although its title and focus do tend to reinforce the traditional separating out of medieval, renaissance and early modern philosophy; Wilson (1989) – Leibniz's intellectual background.

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Abbo of Fleury (2003) Commentary on the Calculus of Victorius of Aquitaine, ed. A.M. Peden, Oxford: British Academy (Auctores Britannici Medii Aevi 15).

- Abelard, see Peter Abelard
- Abraham ibn Daud (1986) *The Exalted Faith*, trans. N.B. Samuelson, Rutherford/ Madison/Teaneck, and London/Toronto: Fairleigh Dickinson University Press and Associated University Presses.
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Aquinas, see Thomas Aquinas

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INDEX

Medieval Latin, Greek and Jewish names are usually listed and ordered alphabetically given name first (i.e. Thomas Aquinas), though exceptions are made where figures are commonly known by a family name or a cognomen (e.g. Chaucer, Geoffrey; Bonaventure). In Arabic, I have used the name by which each thinker is most usually known; *al*- is ignored for purposes of alphabetical ordering.

Abbo of Fleury 115-6 'Abd al-Jabbar 172-3 Abelard, see Peter Abelard abgeschiedenheit 274 Abraham Ibn Daud, see Ibn Daud Abraham Maimonides 339-40 abstractive cognition 285-7, 302-3 absolute/connotative terms 300-1 Abû Hâshim 88-9 Abû-l-Hudhayl 63-6 Abû Ma'shar 169 accidents 20, 63-4, 119, 123, 142, 155, 294, 297 Accidental Necessity Argument 251-3, 305 acquisition (in kalâm) 90, 173, 175 act and potency 11, 55, 183, 239, 278 active/contemplative life 92, 244-5 Adam of Balsham (/of the Petit Pont) 164-5,320 Adam Wodeham 313, 318, 330 Adelard of Bath 163-4, 169, 171 Aegidius Romanus, see Giles of Rome Aeterni patris, encyclical of Pope Leo XIII 246 Ailred of Rievaulx 160 Alain de Libera 265 Alan of Lille 164, 167-8, 331 Alberic of Paris 138, 165 Albert the Great 214, 221-2, 225, 232-6, 240, 256, 263, 269, 330, 332; tradition of, 272-5

Albert of Saxony 319 Aldhelm 48 Alexander of Aphrodisias 15, 21, 36, 99, 107, 170, 184-5, 212, 263 Alexander of Hales 210, 225-6, 230, 240; and see Summa fratris Alexandri Alexandria, School of 23, 50, 56-7, 67 Ambrose 29, 77 Ammonius 46, 50–1, 57, 183; Commentary on 'On Interpretation', 211, 221-2 ampliation (of supposition) 223 analogy 238, 276; 'proportionate transumption', 155-6, 167 angels 54, 231, 239, 243, 268 animals (compared to humans) 91, 103Anselm of Canterbury 119–29, 134, 145, 225, 239, 244, 254 Anselm of Laon 135, 145, 152, 160–1, 171anthropomorphism, rejection of 63, 111, 187 Apollonius Dyscolus 134 appellation 123-4 Apuleius 28, 72, 116 Aquinas, see Thomas Aquinas Arcesilaus 14 Archytas 23 Arethus of Caesaria 82 Arianism 35, 47

Aristotle: libri naturales, 170, 210, 213; organon: 56, 93, 221, 232; study of made obligatory in Paris statutes, 188. Individual works and their commentaries: - Categories, 9, 20-1, 38, 62, 65, 69, 71-2, 92, 116, 119, 123-4, 133, 135, 139, 221, 238, 242, 273, 300, 318, 336; commentaries - 36 (Boethius), 57 (Sergius of Resh'aina), 82 (Photius), 211, 212 (Simplicius), 133 (anon. 12th C Latin) 135 (Abelard), 297 (Ockham); Metaphysics, 10-11, 23, 68-70, 92, 106-7, 154, 210, 213, 224–5, 238; commentaries – 182–4, 341 (Averroes), 224 (?Richard Rufus of Cornwall), 232 (Albert the Great), 255 (Siger of Brabant), 281 (Duns Scotus), 308 (John of Jandun), 341 (Averroes, trans. Qalonymos ben Qalonymos); Meteorology – commentary: 212 (Alexander of Aphrodisias, trans. Moerbeke); Nicomachean Ethics, 23, 68-9, 211, 213, 225, 228, 244, 256-7; commentaries - 92 (Fârâbî), 130 (Eustratius), 232, 235 (Albert the Great); On Generation and Corruption, 69, 224-5; commentary - 220 (?Richard Rufus of Cornwall); On the Heavens, 228; commentary - 182 (Averroes); On Interpretation, 9, 21, 36, 46, 69, 116, 133, 139, 221, 243, 298, 306; commentaries - 36 (Boethius), 57 (Stephanus), 92-4 (Fârâbî), 129 (Psellos), 135-9 (Abelard), 211, 221-2 (Ammonius, trans. Moerbeke), 297 (Ockham); On the Motions of Animals, 211; On Sense - commentary: 212 (Alexander of Aphrodisias, trans. Moerbeke); On the Soul, 11-2, 68, 210, 213, 224-5, 241, 323; commentaries - 16 (Themistius: paraphrase), 57 (Stephanus), 182, 184-7, 190, 192, 224, 233-6, 256 (Averroes), 211 (Philoponus, trans. Moerbeke), 212 (Themistius: paraphrase trans. Moerbeke), 232 (Albert the Great), 235-7 (Siger of Brabant), 281 (?Duns Scotus), 308 (John of Jandun), 323 (Buridan); *Physics*, 55,

69, 170, 210, 213, 225, 323; commentaries - 182 (Averroes), 224 (?Richard Rufus of Cornwall), 225 (Roger Bacon), 227 (Robert Grosseteste), 255 (Siger of Brabant), 260 (Aquinas), 297 (Ockham); Poetics, 9, 57, 98, 192, 211; Politics, 211; commentary - 308 (Peter of Auvergne); Posterior Analytics, 10, 12, 36, 57, 98, 155, 170, 210, 213, 218, 221; commentaries - 130 (Eustratius), 182, 192 (Averroes), 212 (Themistius, trans. Gerard of Cremona), 221, 227 (Grosseteste); Prior Analytics, 8–9, 36, 186, 221; commentaries - 92-3 (Fârâbî), 221 (Kilwardby), 221 (Albert the Great), 341 (Averroes, trans. Qalonymos ben Qalonymos); Rhetoric, 9, 98; Sophistical Refutations, 9, 36, 57, 157, 166, 221; Topics, 8, 36, 38, 57, 61, 68, 93, 98, 100, 166, 221, 319; commentary - 255 (Boethius of Dacia). See also: harmony of Plato and Aristotle; modality, Aristotelian view of; syllogistic. Ars Meliduna 165 Arts, Faculty of 206-7, 213, 215 Arts Masters 152, 207, 224, 234, 255-8, 261-2, 264-9, 278, 324 arts, see liberal arts (al-)Ash'arî 88–90 Ash'arites 109, 11, 173, 175-6, 188-9, 338 (al-)aslah, see God, can only do what he does/is best Athanasius 81 atheism 90, 128 Athens, Academy of 23, 50, 56-7 atomism 14, 64-6, 89, 91, 151-2, 175 Aubrey of Rheims 258, 332 Augustine 29–33, 39, 47, 51, 54, 71–2, 75, 77, 79, 120, 126, 145, 225-6, 231-2, 241, 298, 300, 311, 314-5, 317 Augustine (the Irish) 48 Avempace, see Ibn Bâjja Avencebrol, see Ibn Gabirol Averroes 99, 182–92, 194, 211–3, 221, 224, 232, 233-7, 242, 248, 254-8, 262-4, 272, 309, 316, 330, 338, 340 - 7

Averroism 192, 234, 254-8, 308-11, 316, 331-3 Avicebrol, Avicebron, see Ibn Gabirol Avicenna 49, 103-114, 170, 173, 177, 180-1, 183, 186, 189, 192-3, 195, 198, 212, 221, 224-7, 231-2, 237, 248, 251, 263, 275-6, 308, 338-9, 342, 344, 347; A.'s 'Eastern Philosophy', 104-5, 177, 181; Avicennizing Augustinism, 226 Bar Hebraeus 57 Barlaam of Calabria 336-7 Basil 77 beatific vision 235, 243, 245 Bede 48 being, see existence Berengar of Tours 118-9 Bernard of Chartres 149, 152, 162 Bernard of Clairvaux 136, 143, 152–3, 160, 165 Bernard Silvestris 163, 331 Berthold of Moosburg 274-5 Biagio Pelacani di Parma 327-8 Bible: Arabic translation, 87; interpreted metaphorically to fit Greek science, 162, 192, 197; Septuagint, 25; textbook in Theology Faculty, 213; Vulgate, 25, 29Boccaccio, Giovanni 330-1 Boethius of Dacia 219–20, 255–8, 261-2, 267-8 Boethius, Anicius Manlius Severinus 29, 35-46, 120, 123, 132-3, 211, 254. Individual works and their commentaries: Commentaries 36, on Cicero's Topics, 38, 336, on Isagoge II, 36–7, 116, on On Interpretation II, 36-7, 116, 126, 222, 243, 298; De consolatione Philosophiae 40-6, 54-5, 71-2, 80, 131, 163-4, 226, 245, 254, 336; commentaries - 82 (early medieval glosses), 82, 115 (Remigius of Auxerre), 150–1 (William of Conches), 150 (Nicholas Trivet); translations into European vernaculars, 331; translation into Greek, 336; De syllogismis categoricis, 116; De syllogismis hypotheticis, 37-8, 116, 133, 221,

336; De topicis differentiis, 38, 116, 134, 155, 336; Opuscula sacra, 39-40, 54-5, 72-3, 115, 149, 226; commentaries - 82-3 (early medieval glosses), 152-6 (Gilbert of Poitiers), 162-3 (?Thierry of Chartres) Bonaventure 224, 230-2, 240-1, 256, 259, 269, 278-9 Book of the Pure Good, see Liber de causis Bovo of Corvey 115 brain processes 112, 244 Burgundio of Pisa 62 Cajetan, Thomas 350 Calcidius 28, 72-3, 162 Calo Calonymus, see Qalonymos ben Qalonymos Candidus Wizo 72 Cassiodorus 46-7, 115; Institutiones, 46-7, 71, 116 casus 222 Categoriae Decem 71; early medieval glosses on, 82-3 categories, see Aristotle, Categories causation 18, 69, 77, 110, 229, 235, 247; 4 Aristotelian types, 10-11,69, 248; attributes said of God causatively, 75; by being grasped in understanding, 183; contingent, 289-90; efficient, 41-2, 50, 96, 111, 183-4, 248-51; final, 41-2, 96, 183-4; formal 111, 226 (and see form); the higher the cause, the lower stretch its effects, 24; material, see matter; *per se/per* accidens causes, 249, 285; primordial causes, 74, 77; in theory of signification, 123, 141; simultaneity of cause and effect, 261. See also occasionalism Chaldaean Oracles 25, 129 Chartres, controversy over School of 148-50 Chaucer, Geoffrey 331 Christ, nature and person 39, 52, 58, 65,130 Christian-Jewish/Muslim debate, see Inter-Faith debate Cicero, Marcus Tullius 14–5, 160; De inventione, 15, 147; De officiis,

15, 148; De republica, 28; influence

INDEX

on Augustine, 30; Topica, 38, 116 Clarembald of Arras 162 Clement of Alexandria 26 cogitation 112, 114, 186, 190, 242 commentary: Aquinas on Aristotle, 236; Aristotelian commentary in the ancient tradition, 15, 20, 23; Averroes's different types of commentary, 182; Boethius on logic, 36; different approaches to commentary on Boethius's Consolation, 115; Irish early medieval biblical, 48; by Stoics on Homer, 26; super-commentaries, 341 complexe significabilia 317-8 composite and divided senses 106 concealment by authors of their meaning 92-3 (and see Guide), 197, 200-4, 342-5 conceivability 40, 127-8 concepts 108-9, 112, 124-7, 142-3, 299-300, 322 condemnations 26 (Origen), 58 (Maximus the Confessor), 79 (Gottschalk), 80 (Eriugena), 136 (Abelard), 150 (William of Conches), 224 (David of Dinant), 266-9, 257 (by Bp. Tempier, 1270), 266-9 (by Bp. Tempier, 1277), 268–9 (Giles of Rome), 269 (Oxford, 1277), 269 (Knapwell), 273 (Eckhart), 279 (Peter John Olivi), 317 (Nicholas of Autrecourt), 341 (Maimonides) conditionals, see *consequentiae* consent 146 consequentiae 43, 138, 166, 312, 317, 319-20, 323-4 Constantine of Africa 150-1 contemplation 225, 235; and see active/contemplative life contingency, see modality copula 93-4, 138, 220 Councils, Church 39 (Constantinople, 381), 72 (2nd Nicaean), 79 (Quierzy, 849), 80 (Valence, 850), 136 (Soissons, 1121), 136 (Sens, 1141), 153 (Rheims, 1148), 213 (4th Lateran, 1215), 246 (Trent, 1545–63), 258 (4th Lateran, 1215), 326 (Constance, 1414 - 8

Corbin, H. 177 Cousin, V. 246 counter-factuals 321 creation ex nihilo 76, 86, 261, 324 Cynics 14 Damascius 50, 60, 66 Dante Alighieri 331-3 David 56, 82 David of Dinant 224 De VI principiis 221 deification 58, 81, 337; selfdivinization, 235, 272, 311 Demetrios Kydononos 336 demonstration 68, 95, 98, 100, 188, 190-1, 202, 221, 259, 262, 265, 292, 324, 343 De pomo 215 Descartes, R. 164-5, 243, 350 determinism, see predestination, problem of; prescience, problem of dhâtî/wasfî readings of modal statements, see modality, dhâti/wasfî possibilities dicta 138-9, 146-7, 156, 159, 318; and see propositions, semantics of Dietrich of Freiberg 272–3 Dirâr Ibn 'Amr 63-5 dispositions 184-5 disputations 215, 218, 331 distinctions 278; formal, 281-2, 294, 297-8, 326; intentional, 276; modal, 282-7 Dominicus Gundisalvi 170, 178 donatists 30 Duns Scotus, see John Duns Scotus Eckhart, Meister 273-4 elements 52, 66, 151-2, 195 Elias 56, 82 Elijah Delmedigo 349 elitism, intellectual 91, 182, 189, 193 emanation 18, 95-6, 102, 179, 183, 233, 266 Epicureanism 14, 144-5, 152 equivocity 238 Eriugena, see John Scottus Eriugena esoteric interpretation, see concealment by authors of their meaning essence, contrasted with existence 109-111, 173, 177, 227, 238-40, 275-6,278

- eternity, is timeless? 19, 45, 53, 229, 233, 251-4, 279, 289-90; and see
- world, eternity of
- Eucharist 73, 118–9, 326
- Eusebius 27
- Eustratius of Nicaea 130
- Eutyches 39
- Everardus of Ypres 168
- evil 18–9, 22, 67, 80, 97, 117, 145–6; is merely a deficiency of
- goodness and so does not exist, 40–1, 80, 226
- existence apparent/objective existence, 295; common being, 107, 233, 283–4; 'conceptional' being, 273; equated with God, 51, 106, 233; necessary, 110, 127–8, 173, 181, 192, 198, 227, 251, 325; nonexistent things, 89, 109, 303, 318; possible and impossible, 275–6; is it a predicate? 126, 239; see also essence, contrasted with existence experimental method 228
- exposition (in logic) 300
- exposition (in logic) 500
- extension, pure 3-dimensional 52
- Faculties, higher, 206–7; and see Arts Faculty, Theology Faculty
- faith and reason, see philosophy and religion
- (al-)Fârâbî 57, 91–100, 102, 104, 106–7, 109, 114, 170, 180, 193, 195, 212, 221, 311, 338, 347
- fatalism 60, 266
- 'Five Ways' 247-51
- Florus of Lyons 80
- forms in Active Intellect, 133–4, 139–40, 153–4; determine intellect, 234; immanent 39, 133–4, 139–40, 149, 153–5, 166; pure, 239, 42, 250; soul as form of the body, 111, 240–1, 263–4; unicity of substantial form, 241, 275, 278, 313; and see matter, and form; Ideas, Platonic Francis of Marchia 316 Francis of Meyronnes 294, 316, 330 Fredegisus 72 freedom of will, see will, freedom of Frege, G. 239 Fulbert of Chartres 149

Galen 57, 68, 92, 151, 191 Garlandus, see Gerlandus

- Gates, Bill 126
- Gaunilo of Marmoutiers 128
- George Pachymeres 336
- Gerard of Cremona 169-71, 212
- Gerbert of Aurillac 115-6
- Gerlandus of Besançon 133-4, 171
- Gersonides 345–8
- (al-)Ghazâlî 170, 173–6, 181, 189–90, 212, 263, 335, 338, 342, 345
- Gilbert of Poitiers (Porreta/de la Porrée) 152–6, 158–9, 170–1, 291; Porretanism, 163, 165–6, 167–8
- Giles of Rome 269, 330
- Gilson, E. 246
- Giovanni Pico della Mirandola 350
- gnostics 22-3
- God, his attributes in relation to him, 66, 68, 70, 88-9, 102, 121, 173-4, 197-8, 237; and Categories, 31-2, 39, 71–2, 74–5, 87; can do only what is best/what he does, 67, 70, 88, 146, 157, 167, 176; existence, arguments for his, 72, 107, 121-2, 124-9, 173, 183, 202, 225, 247-51, 285, 314, 325, 334-5; freedom of, 67, 111, 227, 271, 304, 325-6; immutability of, 40; incorporeality of, 195-7, 202; indefinability of, 240; infinity of, 238, 247, 266, and see infinity; justice of, 27, 63, 87–8, 122; knows only universals, 111, 174, 190, 347; does not know what he is, 75; mercy of, 122; omnipotence of, 42, 60, 65–6, 117-8, 122, 146, 158, 266; omniscience of, 43–3; simplicity of, 122, 238, 247; unity of, 63, 87, 98, 173, 187, 198, 202, 247; will of, 86, 111, 117, 159, 163, 179, 201, 280, 304. See also existence, necessary; negative theology; power, absolute/ordained; prescience, problem of; providence, problem of
- Godfrey of Fontaines 278
- good (the) 17–18, 40–2, 51, 145–8, 191, 225, 233, 244–5, 257–8; causal efficacy of, 24; common good, 28–32; the good diffuses itself, 18–19, 24, 271; meanings of 'good', 145–7; as transcendental, 156, 226
- Gottschalk 78-9, 317

grace 30-2, 42, 78-9, 121, 315, 317 grammar 71, 149; speculative/modistic, 218-21, 308; grammatical and dialectical senses of a proposition, 134Greek knowledge of, 28, 30; use by David of Dinant, 224; John Scottus Eriugena, 74, 83; Robert Grosseteste, 228. See also translation, Greek into Latin Gregory of Nazianzen 58 Grgeory of Nyssa 58, 74-5, 77, 79, 81 Gregory Palamas 337 Gregory of Rimini 316-8 growth, 'nothing grows', 165 Gundissalinus, see Dominicus Gundisalvi hads, see intuition haecceities 284 happiness 30-1, 41-2, 244-5; highest human, 95, 256 harmony of Plato and Aristotle 21, 50 Harrân 50 (see Guide), 61 Hasdai Crescas 349 Hauréau, B. 246 Heiric of Auxerre 83 Heloise 135 henads 24 Henry Aristippus 211 Henry Bate of Malines 211 Henry of Ghent 239, 275-8, 286, 316 Hermann of Carinthia 169 Hermann the German 211 Hermes Trismegistus 314 Hervaeus Natalis 293 hesychasm 337 Hilary of Poitiers 29 Hilduin of St Denus 51 Hincmar of Rheims 79 Hisperica famina 48 Hrabanus Maurus 73, 79 Hugh of Newcastle 294 Hugh of Ripelin 272 Hugh of St Victor 160-1, 167 Hume, David 87, 24 Hunayn Ibn Ishaq 68 hylomorphism, universal 179, 231, 239. See also matter, form and hypostasis as persons of the Trinity, 39, 58; Plotinian, 17-18, 28, 32, 52. See also Intellect (hypostasis); One,

the (hypostasis); Soul (hypostasis); enhypostatization, 58 Iamblichus 20, 22-3, 36 Ibn al-Muqaffa' 93 Ibn al-Rawandî 90 Ibn Bâjja 49, 180, 184, 235, 345 Ibn Daud, Abraham 170, 192-3 Ibn Kammûna 339 Ibn Rushd, see Averroes Ibn Saba'în 330 Ibn Sînâ, see Avicenna Ibn Tufayl 181–2, 187, 344–5 Ibn Tûmart 187-8 Ideas, Platonic 17–18, 20, 22, 24–6, 39, 86; in God's mind, 26, 225, 231, 277; identified with God and considered as one, 149, 155, 163 Ikhwân al-Şafa', Letters of 102-3, 178 illumination, divine 225-6, 228, 231, 242, 276-9, 337; illuminationist philosophy, 177, 339 images 98-100, 109, 142-3, 184-7, 190, 234, 242-4, 277, 295 imagination 45, 185-6, 231; special imaginative ability, 113 Imam, role of 99–100, 102–3; occlusion of, 101 immortality 92, 99, 103, 190, 195. See also soul, immortality of imposition 142, 223, 230; first and second imposition, 300 infinity 55-6, 69, 76, 87, 228, 259-60, 283 - 5insolubles 320-1, 326 intellect(s) 24, 68, 77, 102, 231, 233; acquired, 97, 99; active, 12-13, 15-16, 96-7, 99, 111-4, 181, 183-7, 190, 224, 227, 242-3, 274; are equivalent to angels, 192, 233; Aristotle's God, 10, 17, 95; conjunction with Active Intellect, 97, 99, 112-4, 180, 184, 190, 195, 201, 226, 235, 272, 316, 344, 348; is constituted by thinking, 272-4; hypostasis, 17-19, 51, 86, 163; material/potential, 11-2, 15-6, 96-7, 111, 184-7, 224, 234-5, 242, 263-4; one material/potential intellect for all humans, 180, 185-6, 234-6, 256-7, 262-4, 266, 324,333; 'passible', 186; equivalent to Son, 29

intentionality 142, 227, 243; in ethics, 146 - 7intentions, first and second 105, 300 Inter-Faith debates: Christian-Cathar, 168; Christian-Jewish, 168, 179-80; Christian-Muslim, 61–2, 68, 168; Jewish-Muslim, 179-80; Jewish-Pagan; 179; Muslim-Manichaean, 61, 66; Christian-Jewish-Muslim-Atheist, 335 Introductiones montane maiores/minores 165 intuition hads, 113; intuitive cognition, 285-7, 302-3, 306, 313 Isaac Israeli 86, 178, 193, 212 Isaac of Stella 160 Ishaq Ibn Hunayn 68–9 Isidore of Seville, Etymologiae, 47, 71, 116 Ismailis, 101-3, 111 Iuvenal 167 Ivo of Chartres, Panormia 171 James of Venice 210 Jean de Meun 331 Jehudah al-Hârisî 212 Jerome 25-6, 29, 117 Jewish-Christian/Muslim debate, see Inter-Faith debates Jews, forcible baptism of, 287 John Aurifaber 220 John Baconthorpe 316 John Blund 224 John Buridan 322-5, 327 John Capreolus 270 John of Dacia 219 John of Damascus 62, 336 John Dumbleton 315 John Duns Scotus 94, 217, 280-96, 304, 313, 316, 326 John of Fidanza, see Bonaventure John Hus 326 John Italos 130 John of Jandun 308-9, 330 John of La Rochelle 225 John Pecham 269 John Philoponus 39, 51–3, 55–6, 65, 69, 82, 87, 211, 259 John of Salisbury 149-50, 162, 166 John Scottus Eriugena 51, 73–83, 170 - 1,273John Wyclif 326 Joseph ben Judah 196-7, 200, 204

(al-)Jubbâ'i 88 Judah Halevi 179-80, 340 Judah Ibn Tibbon 340 Justin Martyr 26 Justinian 47, 50, 59 (al-)Juwaynî 173 kalâm 60-1, 70, 87, 108-9, 172-6, 188-90, 193, 202, 212 Kant, I. 124, 126 (al-)Kâtibî 339 kharijites 60 (al-)Kindî 68-70, 86, 93, 169-70, 178, 212, 214, 338 Khusrau I Anushirwan 50, 57, 83 (al-)Kirmânî 102 Kleutgen, J. 246 knowledge, intellectual 11-3, 15-6, 111-3, 184-7, 225-7, 233-6, 241-4, 276-80, 285-7, 295-6; of particulars, 277, 285-7 Lactantius 29 Lanfranc of Canterbury 118-20 Langland, William 331 language(s) diversity of, 220-1; Greek as language of ancient philosophy, 6; human in relation to the divine, 31, 51, 154-6, 167-8, and see negative theology; learning of languages advocated, 229, 334; mental language, 21, 227, 273, 298-303, 318, 323; origin and growth of, 99–100 law moral, 66; natural, 77, 146-7, 244; oral law of Judaism, 194-6; origins of Jewish Law, 199, 203; scientific, 187 Leibniz, G. 124, 292, 350 Leo Hebraeus 349 Letter on Divine Science 68 Levi ben Abraham ben Hayyim 344 Levi ben Gershom, see Gersonides Liber de causis (Book of the Pure Good) 68, 101, 170-1, 178, 211, 214, 225, 232-3; commentaries -237 (Thomas Aquinas); 257 (Siger of Brabant) Liber de causis primis et secundis 170 Liber pancrisis 161 liberal arts 28, 30, 47, 71, 73, 164 Libri carolini (Opus Karoli regis), see Theodulf of Orleans

- light, metaphysics of 228
- Locke, J. 243
- logic 8–9, 20–2, 36–8, 62, 71–2, 76–7, 93–4, 105–6, 117–8, 123–4, 129–30, 132–43, 164–6, 171, 297–301, 322–4; 3–valued, 296; Aristotelian logic not universal, 314; 316; formality of, 137; *in re* and *in voce* readings of logical texts, 133–4, 136; *logica modernorum*, 222–4, 300, 312, 319–20, 326; *logica nova*, 162, 166, 221–2; *logica vetus*, 115–6, 131–4, 149, 171, 221–2; propositional, 127, 319–20, 323; syllogistic
- Lollards 326
- Lucretius, De rerum natura 14
- Lupus of Ferrières 79
- Macarius the Irishman 73
- Macrobius, Commentary on Somnium Scipionis 28, 73, 115, 131, 163–4; commentaries – 82 (early medieval glosses), 150–1 (William of Conches)
- Maimonides 66, 193–204, 212, 237, 259, 330, 340–7; dispute over esoteric understanding of his *Guide*, 200–1 (modern writers), 342–5 (medieval writers)
- Manichaeism 30, 61, 68, 168
- manuscripts 48–9, 217; MS Milan, Ambrosiana B. 71 sup., 83–4
- Marius Victorinus 29-30, 75
- Marsilius of Inghen 327
- Marsilius of Padua 310-11,330
- Martianus Capella, *De nuptiis Mercurii et Philologiae* 28, 47, 116, 131, 163–4; commentaries – 73 (Eriugena), 82 (Remigius of Auxerre)
- Martin of Dacia 219-20
- materialism 14, 29–30, 90
- Matthew of Aquasparta 27
- matter 18–19, 91, 180, 228; eternal existence of, 130; and form, 11, 86, 102, 111, 162–3, 179, 184–6, 231, 233–4, 238–9, 240–1, 348; formless, 25, 163; prime matter, 52, 96, 102, 234
- Maximus the Confessor 50, 57–8, 74–5, 77, 81, 337
- Maximus Planoudes 336

meaning, meanings of meanings as subject of logic; outer and inner

- meanings of religious law, 101;
- Priscian's theory of, 135
- memory 30, 49, 112, 286–7
- mendicant orders 209–10, 293 Menippean satire, see prosimetra
- mental language, see language, mental
- mereology 134, 165
- merit 79, 88–90, 146, 304, 315
- metaphysics, subject of 107, 282-3
- metempsychosis, see reincarnation
- Michael Cerularius 129
- Michael of Cesena 304
- Michael of Ephesus 130
- Michael Psellos 129–30
- Michael Scotus 210–1, 330
- miḥna 63, 88
- miracles 48, 117, 176, 199
- Mishna 194–5
- Miskawayh 57
- Mitty, Walter, see Gates, Bill
- modality, Aristotelian conception of necessity and possibility, 42, 45–6, 94, 110, 128, 157, 183–4, 250; *dhâti/wasfi* possibilities 106, 329; necessity of the past, 305–8; necessity of the present, 46, 117, 253; possibility, 40, 42–6, 117–8, 156–9; possible worlds, 127–8, 159, 292–3, 321; simple and conditional necessity, 45; two types of necessary being, 250–1; synchronic conception of possibility, 67, 94, 118, 140, 157–8, 176, 229, 280, 288–93, 307, 315, 317
- modes *ahwâl*, 89; intrinsic, 283; of signifying, thinking and being, 219–20, 237
- Modes of Cognition Principle 44–5, 253
- monasticism 48, 73, 114, 180; reform of 136, 143
- monothelitism 57
- Monophysites 39, 51, 57
- Moralium dogma philosophorum 148
- Moses 25–6, 95
- Moses Maimonides, see Maimonides
- Moses of Narbonne 344–5
- motion 66, 183; projectile motion, 52, 225
- Mu'ammar 64–5
- Mullâ Sadr 349

Muslim-Jewish/Christian debates, see Inter-Faith debates mutakallimûn, see kalâm (al-)Mutawakkil 63 Mu'tazilites 61-7, 69-70, 87, 109, 172 - 3mysticism 95, 163, 174, 232, 273 nature 39, 65, 74, 158-9, 164; common nature, 107-8, 110; natural things distinguished from artefacts, 133. See also Christ, nature and person; law, natural necessity, see modality negative theology 17-9, 29, 51, 58, 63, 65-6, 75-6, 89, 101-2, 110-11, 179, 197-8, 237-8, 273-4 Nemesius of Emesa 58 Nestorius 39 Nicephoras Blemmydes 335 Nicholas Aston 325 Nicholas of Autrecourt 317 Nicholas Canasilas 337 Nicholas of Cusa 350 Nicholas Trivet 150 nominales, see Peter Abelard, influence in logic nominalism, see universals, nominalism notions, primary, see principles, first *nous*, see intellect(s) obligationes 321-2 occasionalism 63, 175-6, 317 one equated to Father in Trinity, 29; the hypostasis, the One, 178, 20, 51, 69, 101; as transcendental, 24, 37, 69, 226 ontological argument 124-9 Origen 26-9, 58, 77, 81 Olympiodorus 50 Oxford, see universities, Oxford Oxford calculators 315 pagan religion 22, 29, 32, 73, 199, 314; and see philosophers, ancient pagan paradoxes of strict implication, 320;

liar-type, see insolubles Paris schools of, 148–9; and see

- universities, Paris participation 24–5, 58
- passions 147, 235, 244

past, can it be undone? 117–8. See also modality, necessity of the past

- Paul the Persian 57
- Paul of Venice 319, 321
- Pelagius 30-1, 77
- Pelagianism 79, 144, 315, 317
- perception, sensible 45, 68, 97, 231, 237, 243
- perfect-being theology 121-3
- Peter Abelard 27, 106, 133–48, 151, 156–61, 165–7, 171, 240, 244, 297, 317–9, 337; influence in logic (*nominales*) 164–5; influence in theology, 167
- Peter Auriol 295-6, 313, 316, 317
- Peter of Auvergne 308
- Peter Damian 116–8
- Peter John Olivi 279-80, 295, 330
- Peter the Lombard 152, 160, 167–8, 171, 216, 298; his *Sentences* as university textbook, 208, 213–4, 217
- Peter of Poitiers 167, 171, 228
- Peter of Poitiers/Vienna 167
- Peter of Spain 223, 322, 325
- Petrarch 330
- phantasmata, see images
- Philip the Chancellor 225–6
- Philo Judaeus 25–6, 29
- philosophers, ancient pagan, 6–7, 25–6, 39, 42, 47, 136, 144–5, 150, 279; autonomy of, 255, 268, 325, 328; philosopher-kings, 99; as living best life, 258, 267–8; pagan philosophers as Christian before Christ, 26, 144–5, 151, 314, 337
- philosophy: history of as seen by medieval thinkers, 97–8, 100, 232, 262–3; personified in Boethius's *Consolation*, 40–2; and religion, 97–8, 100, 188–90, 192–204, 232–3, 257–70, 309–11, 313–5, 324–5, 332–3, 341–8; as a way of life, 7, 19, 91, 95, 235, 268
- Pierre d'Ailly 327
- place 58, 77, 122
- Plantinga, A. 127-8
- Plato 55–6, 91, 100, 151, 162; Galen's epitomes of, 161–3; varieties of Platonism in twelfth century Latin culture, 161–3. Individual works and commentary: – *Gorgias*, 41; *Meno*, 211; *Parmenides*, 17, 23 –

- commentary, 51 (Proclus), 211 (Proclus, trans. Moerbeke); *Phaedo*,
- 211; Republic, 13, 17, 92, 99, 144,
- 149 commentary, 191–2, 341
- (Averroes's epitome); Sophist, 20;
- *Timaeus*, 13, 17–8, 23, 25, 36, 42,
- 70, 73, 87, 115, 131, 144, 162, 169,
- 191, 211, 347; translations of, 28
- (Cicero), 28 (Calcidius).
- Commentaries 28, 72–3, 162 (Calcidius), 149 (?Bernard of
- Chartres), 150–1 (William of
- Conches)
- Platonic Ideas, see Ideas, Platonic pleasure 147, 199, 258
- Plenitude, Principle of 70
- Plotinus 16–9, 23, 28–30, 214; the 'Arabic Plotinus', 68 and see Theology of Aristotle, Letter on Divine Science
- political philosophy 99–100, 180, 191, 305, 310–1, 332–3
- Porphyry 20–3, 27, 36–7, 76; *Isagoge* 21–3, 29, 62, 115–6, 133, 139, 336. Commentaries 36–7 (Boethius), 82 (Arethus), 133–4 (early twelfth-century), 139–43 (Abelard), 297 (Ockham). See also universals, Porphyry's questions
- Porphyry's tree 21, 139-40, 153
- Porretanism, see Gilbert of Poitiers, Porretanism
- Possibility, see modality
- poverty, absolute 274, 279, 304, 316
- power, absolute/ordained 232, 303-4
- predication 31, 107, 116, 166, 198, 239
- predestination, problem of 32, 42–3, 60, 78–9, 121, 289, 305–8
- prescience, problem of 42–6, 94, 121, 137, 228–9, 279, 296, 305–8, 315, 251–4, 316, 347
- principles, first 73, 97, 110–1, 155–6, 167–8, 221, 243, 261
- Priscian, *Institutiones grammaticae* 131, 135, 139, 149–50, 171, 213; commentaries – 135, 149 (early twelfth-century *glossulae*)
- Priscianus the Lydian 50
- Prochorus Kydonos 336
- Proclus 23–5, 51, 129, 274; Commentary on Parmenides, 211; Elements of Theology, 23–5, 68,

- 211, 214, 237; commentary 274–5 (Berthold of Moosburg); *Opuscula*, 211
- prophecy 86, 90, 98, 101–3, 113–4, 133, 195, 201, 203, 343
- properties of terms, theory of 223–4, 332
- proposition(s) 'analytic' division of 57; propositional contents, 138; maximal propositions, 38, 138; propositional operators, 38, 43–4, 137, 158; impersonal propositions, 138; semantics of, 138–9, 317–8, 325; thoughts take propositional form, 243; = token sentences, 8. See also logic, propositional
- prosimetra 28, 42, 163-4
- providence 32, 41, 121, 146, 159, 200, 203
- Prudentius of Troyes 80
- pseudo-Augustinian paraphrase of *Categories*, see *Categoriae decem*
- pseudo-Dionysius 50–1, 57–8, 74–5, 79, 163, 170, 214, 227, 231–3, 237, 274, 337
- punishment 27, 43, 122, 173, 264, 315; and reward after death, 28, 78–81, 88, 101, 113–4, 195, 200; self-punishment of the wicked, 41, 80
- Pythagoreanism 22, 102
- qadarites 60-1
- Qalonymos ben Qalonymos 212, 330, 340–1
- *quaestio*-technique 160–1, 213, 215–7, 236
- quodlibets 60
- quo ests, quod ests 153-4, 168
- Qu'ran 59–61, 65, 70, 187–90, 256; eternal or created, 63, 88–9
- Radulphus Brito 219, 308
- Ralph Strode 319, 321
- Ramon Llull 333-5
- Ramón Martí 212
- rationalism 143-4, 152, 188, 193, 255
- Ratramnus of Corbie 73
- Rawls, J. 26
- Râzî, Abû Bakr 90–1
- Râzî, Fakhr al-Dîn 338–9
- realism, see universals, material essence realism, sophisticated realisms

reason, relation to intellect 44, 231, 243 reductionism, ontological 297-8 reference 123-4, 135, 141-2 reincarnation 27, 91, 111, 115, 130, 177, 259 relations 40, 140, 294 relativism 27, 262, 333 religion, and philosophy, see philosophy, and religion Remigius of Auxerre 82 renaissance of the twelfth century 131 - 2Renan, E. 254 restriction (of supposition) 223 resurrection 101, 190, 195, 241, 262, 267 Return (epistrophê) 74, 78, 80-1 **Richard Brinkley 325** Richard of Bury 312 Richard of Fishacre 240 Richard Kilvington 315, 319 Richard Knapwell 269 Richard of Middleton (Mediavilla) 279 Richard of St Victor 163 Richard Swynshead 315 Robert of Courçon 206, 213 Robert Grosseteste 211, 221, 226-9 Robert Holcot 313-5, 318, 331 Robert Kilwardby 221, 225, 269 Robert of Melun 152, 165 Roger Bacon 213, 229-30 Roger Swynshead 315, 320-1 Roland of Cremona 210 Rufinus 26 Roscelin of Compiègne 133, 171 Saadia Gaon 86-88, 340 Sabaeans 61, 199. See also Harrân. salvation 32-3, 81, 157-8 Samuel Ibn Tibbon 340, 342 scepticism 30, 90, 174-5, 243, 313, 317, 337 scope-distinctions 43-5, 94, 118 Scotus, see John Duns Scotus; John Scottus Eriugena; Michael Scotus Secreta Secretorum (pseudo-Aristotle) 214 self-evidence 24, 221, 243, 247, 313 semantics 21, 72, 123-4, 140-3, 219-21, 297-303. See also propositions, semantics of Seneca 15, 148

sense(s) 77, 81, 226, 231; Fregean, 124. See also compound and divided senses sense-perception, see perception, sensible Sergius of Resh'aina 50-1, 57 Severus Sebokht 57 Sextus Empiricus 211, 337 Shahrastânî 61 Sharazûrî 339 Shi'ism 60, 100–3 Shîrâzî 339 Siger of Brabant 255-8, 264-8, 309, 332 Siger of Courtrai 220 signification 123-4, 135, 141-3, 219-21, 227, 229, 243, 294, 318, 320 signs 119, 227, 229-31 (al-)Sijistânî 101-2 Simon of Faversham 308 Simplicius 50, 52, 82; Commentary on Categories, 23; 211, 221 (trans. Moerbeke); Commentary on On the Heavens, 211 (trans.Moerbeke) sin 30-1, 60, 88, 145-7, 173; 'intermediate position' about grave sinner, 61, 63; Original Sin, 77, 120-1, 161 Socrates 91 Solomon Ibn Gabirol 170, 178-80, 193, 212, 231, 239, 340 sophisms 133, 166, 215, 222-3, 253, 319, 322 soul 30, 91, 184–7, 224; and body, 11-2, 78, 196, 203, 231, 240-1; grunt/vunke of, 274; human souls all one, 73; hypostasis, 17-9, 24, 77, 86; immortality of, 13, 15–16, 28, 111-4, 215, 241, 259, 324-5, 327, 343-4; 347-8; materialist view of, 29; part of soul remains undescended, 23, 25; pre-existence of, 27; separate, 243, 286-7; World Soul, 17, 25, 111, 115, 163, 169 Southern, Richard 149 species intelligible, 226, 242-3, 277-8, 286, 295, 299; multiplication of, 229; sensible, 226, 280, 299 spheres, celestial 10-11, 70, 96, 183-4, 195, 228, 72 Spinoza, B. 124, 224, 350

states-of-affairs 67, 139, 142, 292

- status 141–2
- Stephanus 56–7
- Stephen Tempier 257, 267-9, 275
- Stoicism 14–15, 22, 26, 41, 144–5; Stoic ethics 14, 147; Stoic logic, 28, 37, 116, 137
- *studia* 209–10, 236, 330, 332; London *studium* of the Franciscans, 296, 312–13
- Suárez, Francisco 350
- sufism 174-5, 335, 340
- Suhrawardî 177-8, 339, 349
- Summa fratris Alexandri 225
- Summa sententiarum 167
- supervenience 318
- supposition 223, 299–301, 322–3, 325
- syllogistic 8–9, 28, 37, 47, 57, 71–2, 105–6, 112–3, 130, 137, 243, 314, 336, 346; modal, 105–6, 137, 183, 297, 339
- syncategoremata 166, 22-3
- talațuff 199
- Talmud 195
- Tempier, see Stephen Tempier
- terminism, terminist logic, see properties of terms, theory of
- Themistius 15–16, 185, 263; Commentary on Posterior Analytics, 212 (trans. Moerbeke); paraphrase of On the Soul, 212 (trans. Moerbeke)
- Theodulf of Orleans, Libri carolini 72
- theology as a subject, 107, 160–1;
- Faculty of, 206–10, 213–5, 311–7 Theology of Aristotle 68–70, 95, 101, 178, 214
- theophany 76, 81
- Theophrastus 263
- theurgy 22–3, 25
- Thierry of Chartres 162-3
- Thomas Aquinas 66, 214, 216, 221–2, 236–54, 257–70, 274, 276, 293–4, 308–9, 313, 332, 348; conflicts after his death and the literature of the *correctoria*, 246, 269; historiography of, 245–6; *Summa Theologiae* – as a textbook, 216, 246; trans. into Greek, 336
- Thomas Bradwardine 315, 319–20
- Thomas of Erfurt 219–20
- Thomas of Sutton 270, 293

- thought experiments 40, 66, 181–2, 319, 322
- time 30, 54, 58, 91, 102; all time present to God, 45, 118, 123; God not circumscribed by, 122, 233
- Timothy, Nestorian Patriarch 68
- topical argument 38, 137–8, 153, 189, 319
- Toledo, as centre for translations 169–70, 210, 312
- transcendentals 226, 284–5. See also good, as transcendental; one, as transcendental
- translations: Arabic into Hebrew, 340–1; Arabic into Latin, 169–71, 210–2; Greek into Arabic, 67–9; Greek into Latin in antiquity, 28; Greek into Latin in Middle Ages, 210–2; Greek into Syriac, 57, 67–9
- trans-world identity 159
- Trinity 26, 29, 31–2, 39–40, 52, 72, 120, 136, 143–4, 155, 161–2, 247, 294, 298, 314, 324, 326, 334
- trope theory 133
- truth 91, 98 120, 186–7, 216–7, 225–6, 243, 264–5, 276–7, 306, 318–20, 343
- (al-)Tûsî 338–9
- Ulrich of Strasbourg 272
- unicity of Intellect, see intellect, one material/potential intellect for all humans
- unicity of substantial form, see forms, unicity of substantial form
- universals 12, 20, 22, 36–7, 45, 73, 82, 97, 107–8, 154, 223, 226, 234, 243, 277, 280, 283, 295; abstractionist theories of, 37, 112; before the many, in the many, after the many, 36, 326; material essence realism, 134, 139; nominalism, 73, 134, 139–43, 297–8, 313, 316–7, 322, 327; Porphyry's questions about, 21–2; sophisticated realist theories, 166,169, 297–8, 31, 325
- universities 206–210; Bologna, 206, 230; Cambridge, a minor university, 330; Leuven, 349; Montpellier, 206; Oxford, 206–10, 213, 224, 227, 312–5, 325–6; Paris, 206–10, 213,

224, 230–70, 315–7, 327; Naples, 236; Salerno, 206; Vienna, 219; late medieval expansion of, 272 univocity 238, 282–4, 313

Valla, Lorenzo 51 Van Steenberghen, F. 246 Victorines 225, 232. See also Hugh of St Victor, Richard of St Victor Vincent of Beauvais 211 Virgilius Maro Grammaticus 48 virtue(s) 23, 32, 41, 81, 97, 147–8, 161, 195, 244–5, 267, 304; all virtues are one, 14; virtue ethics, 244; theological virtues, 231, 244–5, 267 Vittoria, Francisco de 350 Vivarium 47

Walter Burley 312, 318, 320
Walter of Chatillon 148
Walter Chatton 303, 312–3, 316, 318, 330
wasfî/dhâtî readings of modal statements, see modality, dhâti/wasfî possibilities
Wâsil Ibn 'Atâ' 61
will, human 66, 280, 291; freedom of, 27, 30–1, 57, 62, 79, 120, 282–90.

See also God, will of

word, mental 126 William of Alnwick 287, 294 William of Auvergne 213, 226-7, 240 William of Baglione 259 William of Champeaux 134-5, 139, 156-7, 160-1 William of Conches 148, 150-2, 162 William Crathorn 313 William Heytesbury 315, 319 William of Lucca 163, 165 (possibly a different William) William of Luna 211 William de la Mare 269, 279 William of Moerbeke 211, 214, 221 William of Ockham 220, 222, 296-308, 312-3, 316-8, 320, 322-3, 325, 330 William of St Thierry 150, 160 William of Sherwood 223 women, equal to men 191 Yahyâ Ibn 'Adî 100 Yedayah ben Abraham ha-Penini 344 Yûhannâ Ibn Haylân 92

Zoroastrianism 57, 67

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