An Introduction to Classical Islamic Philosophy

Oliver Leaman

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Islamic philosophy is a unique and fascinating form of thought, and particular interest lies in its classical (Greek-influenced) period, when many of the ideas of Greek philosophy were used to explore the issues and theoretical problems which arise in trying to understand the Qur'ān and Islamic practice. In this revised and expanded edition of his classic introductory work, Oliver Leaman examines the distinctive features of classical Islamic philosophy and offers detailed accounts of major individual thinkers. In contrast to many previous studies that have treated this subject as only of historical interest, he offers analysis of the key arguments within Islamic philosophy so that the reader can engage with them and assess their strengths and weaknesses. His book will interest a wide range of readers in philosophy, religious studies and Islamic studies.

OLIVER LEAMAN is Professor of Philosophy at the University of Kentucky. He has written extensively on Islamic philosophy and is the author of *A brief introduction to Islamic philosophy* (1999). He is the editor of *Friendship east and west: philosophical perspectives* (1996) and *The future of philosophy* (1998) and co-editor of the *History of Islamic philosophy* (1996) and the *History of Jewish philosophy* (1997).

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In fond memory of my father and mother

وَعَنِ ابْنِ عَبَّاسٍ ؓ، قَالَ قَالَ رَسُوْلُ اللّٰهِ صَلَّى اللّٰهُ عَلَيْهِ وَسَلَّمَ: "فَقِيْهٌ وَّاحِدٌ اَشَدُّ عَلَى الشَّيْطَانِ مِنْ اَلْفِ عَابِدٍ".

Ibn ʿAbbās (may God be pleased with him) reported that the Messenger of God (peace and blessings of God be on him) said: A single scholar of religion is more powerful against the Devil than a thousand devout individuals.

Contents

Preface to the first edition

My aim in this book is not just to describe aspects of Islamic philosophy but also to arouse interest in the philosophical problems, arguments and ideas current in the medieval Islamic world. I very much hope that readers of the book will want to go on to read the philosophers themselves. I have tried to bring out something of the range and flavour of Islamic philosophy by following a number of central arguments and issues from their origins in theology to their discussion in philosophy without attempting in any way to provide a comprehensive historical account of the period and its main thinkers. There are a number of books already which describe in some detail the cultural milieu in which philosophy developed in the Islamic world, and there are also books which painstakingly analyse the intellectual predecessors and influences upon the Islamic philosophers. By way of contrast, the emphasis in this book is on the arguments of the philosophers themselves, and the theme of the book is that this is the appropriate emphasis. It is a shame that Islamic philosophy as a topic of interest is at present largely confined to orientalists rather than philosophers. The former often have concerns and interpretative methods which are not shared by the latter, and vice versa. This sometimes has the result that the philosophical point of the argument is lost or confused. I hope that this book will serve to a degree to bring philosophers and orientalists together in a better appreciation of the nature and interest of Islamic philosophy.

It is always a difficulty when dealing with a set of arguments so firmly set within their own period as is much medieval Islamic philosophy to know how far to bring into their analysis the works of more modern philosophers. Indeed, a superficial glance at such arguments might well suggest that they bear close resemblances to later philosophical discussions. For example, it has often been argued that al-Ghazālī's critique of the Aristotelian notion of causality is rather similar to Hume's analysis of the causal relation. In addition, the conflict between al-Ghazālī

and the philosophers over the character of the origin of the world is not unlike the sorts of conflict which are represented in Kant's discussion of the antinomies. It has to be said, though, that when one closely compares the medieval and the modern formulations of apparently similar arguments, the resemblance often appears slight. It is possible to understand Islamic philosophy on its own terms, as a philosophy which deals with topics which do not always appear relevant to contemporary philosophical issues. It is not necessary to relate Islamic philosophy to modern philosophical thought, nor to the continuation of the themes of Islamic philosophy among the Scholastics such as Aquinas. It would be very interesting to carry out a detailed investigation of the relation between the arguments of Islamic philosophy and more recent arguments which proceed on roughly similar lines. It would also be interesting to see precisely how Scholastic thought was influenced by Islamic philosophy. It is not the purpose of this book to explore these fascinating issues, but rather to carry out a far more modest task. This is to discuss some of the leading themes of Islamic philosophy by analysing the arguments of some of the most important philosophers concerned, and by relating those arguments to Greek philosophy on the one hand and to the principles of religion on the other. In this way I hope that the book will be accessible and useful both to philosophers who know nothing about Islam and the Arabic language, and to orientalists who are unpractised in philosophy.

I am very grateful to the British Academy for their financial help in carrying out the research for this book. Dr Erwin Rosenthal has provided sustained encouragement even (especially!) when he has disagreed with me. Both he and Dr Ian Netton have made some very helpful comments on the manuscript. The skilful bibliographical assistance of Jill Stothard from the college Library has eased its path considerably, as has the advice and assistance of Peter Edwards and of the staff of the Cambridge University Press. My thanks go to them all.

Liverpool, January 1984 O. L.

Preface to the second edition

When it was suggested to me that there should be a second edition of my *Introduction to medieval Islamic philosophy* I was initially rather hesistant to agree. It seemed to me that the book I had written some time ago might well deserve to go to its final rest without the prospect of any form of resurrection. After all, since this book I have written many other things on Islamic philosophy, and certainly changed my mind on a number of the issues which I discussed in the earlier *Introduction*. In addition, that book was written with a certain degree of passion and conviction which I find rather harder to summon up nowadays, and not only because I am older and possibly wiser. At the time of the earlier book I felt with some justification that the methodological paradigm for doing Islamic philosophy was firmly in the wrong hands, and that it was important to challenge that paradigm. I felt that Islamic philosophy tended not to be studied as philosophy, but more as part of the history of ideas or as an aspect of some orientalist project, neither of which accurately represented the nature of what I took the discipline to be. Within the last two decades it is encouraging (to me at least) that a much broader set of approaches has been adopted in Islamic philosophy, and many of those who work in the area now are philosophers and treat the material as serious philosophy. So the battle has to a degree been won, and perhaps the situation in the past was not as grim as I represented it at the time.

When I came to read my earlier book again I felt that it still serves as a useful introduction to the Peripatetic tradition in Islamic philosophy. Since I wrote it I have come to have much greater respect for the other ways of doing philosophy in the Islamic world, in particular the mystical tradition, and illuminationist philosophy. In the past I took these to be not real philosophy at all, but much more closely linked with theology and subjective religious experience. I regarded these forms of thought

as indications of a form of *Schwärmerei* or wildness which I regarded with a Kantian disdain. I now think I was too limited in my approach to these ways of doing philosophy, which have much closer links with the Peripatetic tradition than I had previously realized. I have added to the book a brief account of these schools of thought, since they are so important to understanding the cultural context of the discipline as a whole. Nonetheless, I think there is merit in dealing with Peripatetic thought as a distinct entity, and this remains the aim of the book. Readers who are interested in exploring the wider aspects of Islamic philosophy will find many indications of where to go in the bibliography, and it is not the claim of this book that the full extent of Islamic philosophy is discussed here. But some of the central issues in the Peripatetic tradition are dealt with, in particular those which use classical Greek ideas in trying to understand theoretical issues. Although it has been argued often that this sort of philosophy came to an end in the Islamic world with the death of ibn Rushd (Averroes) in the sixth/twelfth century, even were this to be true, and it is not, that would not mean that this sort of philosophy was not of continuing interest. Nor would it mean that this sort of philosophy did not strongly affect the kinds of philosophy and theology which then became the leading theoretical approaches in the Islamic world.

Apart from including some introductory material about the mystical and Illuminationist schools of philosophy, I have also revised many of the translations and included a discussion of Averroes, who I regard as the paradigmatic exponent of classical Islamic philosophy, in his specific role as a commentator on Aristotle in order to try to throw some light on the links between this kind of Islamic philosophy and the classical Greek tradition on which it reflected. I have included some discussion of the influence of Averroes on the wider Christian and Jewish worlds.

I have continued to discuss the Jewish thinker Maimonides as an example of someone who although not a Muslim was firmly within the tradition of classical Islamic philosophy, but I have reduced the amount of space devoted to him. I hope that readers will find the account provided here of interest and useful to them in navigating through what often seem to be the rather choppy waters of Islamic philosophy.

Of greatest help to me in revising the first edition have been the many students in both Europe, the Middle East and North America who have used the book and been kind enough to send me comments and queries. My own students in Liverpool and now in the United States have been the most forthcoming here, and it would be invidious to name any of

them personally, since although some have helped more than others, I really have benefited from everyone's help. I have been privileged to have been able to discuss the ideas in this book with many colleagues all over the world, and I thank them all. All errors are of course my fault only.

Lexington, Kentucky, February 2001 O. L.

Texts and abbreviations

Where there are Oxford Classical Texts of the works of Plato and Aristotle these have been used, and the Oxford translation has generally been used, although sometimes modified. Translations from *De Anima* have been taken from W. Guthrie, *A history of Greek philosophy*, vol. VI, *Aristotle: an encounter* (Cambridge, Cambridge University Press, 1981), since he adopts a similar interpretation of the active intellect to the Islamic philosophers.

An. Post.	*Posterior Analytics*
Cat.	*Categories*
De An.	*De Anima*
De Int.	*De Interpretatione*
Met.	*Metaphysics*
NE	*Nicomachean Ethics*
Phys.	*Physics*

The sources of translations from Arabic and Hebrew are found in either the notes or the section on further reading, and these have often been modified, too. In the text these abbreviations are followed by a page or section number.

Comm.Pl.Rep.	*Averroes' Commentary on Plato's 'Republic'*, ed. and trans. E. Rosenthal, University of Cambridge Oriental Publications, I (Cambridge, Cambridge University Press, 1956)
FM	Averroes, *Faṣl al-maqāl*, in G. Hourani, *On the harmony of religion and philosophy* (London, Luzac, 1976)
GP	Maimonides, *Guide of the perplexed*, trans. S. Pines, 2 vols. (Chicago, University of Chicago Press, 1963)
TT	*Averroes' Tahāfut al-tahāfut*, trans. S.Van Den Bergh (London, Luzac, 1978)

Passages from the Qur'ān are generally taken from the Arberry version, with the sura in Roman and the lines in Arabic numbers.

In the notes, terms are fully transliterated, as are foreign terms, but not always proper names, in the text. Where more familiar Latin versions of names exist, these have been used in the text but not in the notes. The notes are designed to give readers an idea of the sorts of references they will find if they go on to read articles and books on Islamic philosophy. Given the introductory nature of this book, I have tended not to refer to the original Arabic or Hebrew text where an accurate and accessible translation exists. The original reference may readily be found by consulting the translations used.

There follows a list of texts used, with details of the Arabic editions, where these are not available in the notes.

Al-Fārābī, *Agreement of the opinions of the philosophers Plato and Aristotle – Jam' bayna ra'yay al-ḥakīmain Aflāṭūn al-ilāhī wa Arisṭūṭālīs*

Attainment of happiness – Taḥṣīl al-Sa'āda (Hyderabad, Dā'irat al-Ma'ārif al-'Uthmānīyya, 1926)

Book of letters – Kitāb al-Ḥurūf

Catalogue of sciences – Iḥṣā' al-'Ulūm, ed. O. Amine (Cairo, Dār al-Fikr al-'Arabī, 1949)

Philosophy of Aristotle – Falsafat Arisṭūṭālīs, ed. M. Mahdi (Beirut, Dār Majallat Shi'r, 1961)

Philosophy of Plato – Falsafat Aflāṭūn, ed. F. Rosenthal and R. Walzer (London, Warburg Institute, 1943)

Al-Ghazāli, *The incoherence of the philosophers – Tahāfut al-falāsifa*, ed. M. Bouges (Beirut, Imprimerie Catholique, 1962)

The intentions of the philosophers – Maqāṣid al-falāsifa, ed. S. Dunya (Cairo, Sa'adah Press, 1961)

The Renaissance of the sciences of religion – Iḥyā' 'ulūm al-dīn, ed. 'Irāqī (Cairo, 'Uthmānīyya Press, 1933)

Averroes, *Decisive treatise on the harmony of religion and philosophy – Kitāb faṣl al-maqāl*

Incoherence of the incoherence – Tahāfut al-tahāfut, ed. M. Bouges (Beirut, Bibliotheca Arabica Scholasticorum, 1930)

Short commentaries on Aristotle's 'Topic', 'Rhetoric' and 'Poetics' – Talkhīṣ kitāb al-jadal, al-khaṭābah, al-shi'r

Avicenna, *Book of deliverance – Kitāb al-najāt*

Metaphysics – Shifā': al-Ilāhiyyāt

Maimonides, *Guide of the perplexed – Dalālat al-ḥa'irīn* (Sefer Moreh Nebhukhim), ed. S. Munk (Jerusalem, Junovitch, 1931)

Treatise on logic – Maqālah fi ṣinā'ah al-manṭiq

Introduction

Although this book is in no way a guide to the religion and history of Islam itself, it is as well to consider some of the main aspects of that religion before discussing the contribution which philosophy sought to make to it. We might naturally start by considering Muḥammad, the son of ʿAbd Allah and Amīna, a member of the tribe of Quraish, who was born in Mecca in the late sixth century CE. Although his parents were of distinguished lineage, they were far from wealthy, and Muḥammad's father died before his son's birth while his mother died when he was about six years old. He was brought up first by his grandfather and later by his uncle, and spent a great deal of time as a youth and young man in the hills which are near to Mecca guarding his family's flocks of sheep. His fortunes improved when in his mid-twenties he married an older and wealthy widow, whose business affairs he came to manage. Yet it is said that he often spent time alone in the hills of his youth to consider the tribal warfare which caused such great loss of life in Arabia and the idolatry and loose behaviour which prevailed in the local towns. When he was about forty years old he started to hear a voice, interpreted as coming from the angel Gabriel, which commanded him to recite the revelations which were thus made to him.

The sum of those revelations were eventually written down in the Qur'ān (or 'recitation'). This consists of a highly variegated set of elements, with pictures of heaven and hell and warnings about the consequences of immorality, legal regulations and accounts of the tasks of former prophets. The Qur'ān is a confirmation of the teachings and messages of such prophets, including Abraham who is said to have built the shrine (Kaʿba) at Mecca, Moses the legislator of the Jews and Jesus son of Mary, who was not as the Christians insist killed upon the Cross at all, since God substituted a likeness of him at the last moment. The messages which Muḥammad transmitted were critical of the arrogance and egoism of the rich and powerful, and also of the gods whose shrines

in Mecca made the town a place of pilgrimage and so were a source of economic power. It is hardly surprising that the messenger and his followers were eventually obliged to leave the city and take up residence in the oasis of Yathrib, afterwards named Medina (or 'the city') about 200 miles to the north. This migration (*hijra*) is the event which initiated the Muslim calendar, and it is worth noting that the start of the Muslim era is not reckoned from the birth of Muḥammad nor from the commencement of the revelation, but rather from the creation of an Islamic community. At first, this community represented just another community in the large mosaic of tribes at that time, yet by the time of Muḥammad's death his community controlled not just Mecca and Medina but was the most powerful force in Arabia. Only twenty years after his death it had overthrown the Persian empire and captured all the Asian territories of the Roman empire except the area that is now modern Turkey. Only 100 years after his death there existed a considerable empire which extended from the Pyrenees to the Punjab, and from the Sahara to Samarkand.

While Muḥammad lived there was no doubt as to the rightful leadership of the community, but when he died it became necessary to select a *khalīfah*, or successor to the messenger of God. This person could not himself be a messenger, since Muḥammad was the last one, and the criteria for selection became a controversial issue in the community. One section of the Islamic community, which later turned out to be a minority, argued that the Prophet had appointed his successor – his son-in-law and cousin, 'Alī. This group came to be known as the Shī'a, or followers of 'Alī. The majority, on the contrary, took the view that Muḥammad had knowingly left the question of his succession open, passing the responsibility of deciding who would be best suited to assume the leadership to the community itself. These Muslims came to be known as the Sunnīs, or the adherents of tradition (Sunna), a description which is supposed to emphasize their following of principles rather than personalities. Yet the Shī'ī case is a good deal broader than a simple reliance upon Muḥammad's putative choice of 'Alī and the latter's personal qualities. There is also the theoretical principle that, given God's justice and grace towards human beings, it is inconceivable that he should have left the question of leadership open. The first civil war in the Islamic community occurred when 'Alī became fourth caliph in suspicious circumstances, the third caliph 'Uthmān from the Umayya tribe having been murdered in Medina in 35 AH / 655 CE. When 'Alī died his supporters looked for a more appropriate representative of spiritual leadership than that available among

the rich and worldly Umayyads. They naturally looked towards ʿAlī's sons (and Muḥammad's grandsons) Ḥasan and Ḥusain, who were not powerful enough, however, to prevent the formation of an Umayyad dynasty. The Shīʿites argued that the legitimate authority in the Islamic community lay with the Prophet's family, and only the rule of Muḥammad's legitimate heir could bring to an end the injustice and exploitation of the existing régime and replace it with a political system based upon the Qur'ān and the example of Muḥammad. At various times Shīʿite régimes have come to dominate some territories in the Islamic empire, and the basic principles of Shīʿism have become fragmented into many different sects. The first few centuries of Islam have seen a large variety of movements who have all attempted to restore what they have interpreted as the authentic doctrine of Islam in place of the unsatisfactory status quo.

It is often argued that the Shīʿa has a much more committed attitude to philosophy than do Sunnī Muslims. It is certainly true that Islamic philosophy has continued to flourish in the Shīʿi world as compared with many centuries of neglect in the Sunni world, and the Persian-speaking world has played a highly significant role in continuing the tradition initiated in the classical period. One reason might be because the sources of authority in Shīʿism do not tend to pay a great deal of attention to the *sunna* (practice) of the Prophet or the Traditions or the *madhhāb* (schools of law) of the Sunni tradition. So reason comes to be an important principle, albeit in its role as a gift of God, and was regarded as both legitimate and necessary.

Of particular significance is *ta'wīl* or interpretation, which involves understanding the nature of revelation by returning to the original meaning and going behind the apparent meaning. This approach suggests that the divine language of the Qur'ān uses symbolic and allegorical language and needs to be interpreted if it is to be really understood. For example, the Ismāʿīli thinker Ḥamīd al-Dīn al-Kirmānī (d. *c.* 412 AH/1021 CE) has a theory of language which accounts for the different forms of expression in the Qur'ān. He contrasts the contingency of language with the necessity of God, and suggests that this means that language cannot define God. But we have to use language to describe God, there is nothing else available, and we should understand that language is just a starting point, not where we should stop. We can use our intelligence to work out some features of what it means to live in a world created by God, but we must be aware of the limits of that language. It is our reason which gets us to this conclusion. This should be placed within the context of a wider debate in the fourth/tenth century among Muslim theologians

and philosophers dealing with the relation between God's attributes and his essence. Many thinkers came to argue that the problems of defining God should be resolved by concluding that he is beyond existence and non-existence, that only negative properties should be applied to him (i.e. he is not finite, he is not mutable, and so on).

The notion of creation as a process is taken very seriously by many Shī'ī thinkers, and the command by God to the world to be (*kūn*) is not seen as just issued once, but part of a continual set of instructions and orders. This came to be part and parcel of the normal way in which the *falāsifa* saw creation, as is hardly surprising given their general commitment to a Neoplatonic way of interpreting the nature of reality. Of course, with Shī'ism comes the idea of divine intervention being ever-present as a direct possibility through the influence of particular imams or representatives of God. But it is important to distinguish between this and the main position of the *falāsifa*. For the latter the constant creation is not a result of a deity who intends to bring about certain results and who is as a result keeping the tap flowing, as it were. Nor is the eternal dependence of the world on the creator a sign that our fates and that of our world is at the command of a personal deity. On the contrary, the descriptions of the connection we have with God rule out such direct kinds of relationship, and the world flows from God automatically without his direct intervention at all. So there is no scope for arguing that Shī'ism is more attuned to *falsafa* at all. On the contrary, the emphasis in Sunnīsm on general institutions such as the caliphate and the consensus (*ijmā'*) of the community might be seen as more in line with the adherence of the *falāsifa* to general principles such as the necessary status of causality and the ability of logic to analyze the deep structure of language.

But what this shows is how misguided the question of which type of Islam is more friendly to Islam is. It is just as foolish as associating particular theological schools of thought with philosophy (Mu'tazilite) and others as antagonistic (Ash'arite). We shall see from the case of Abū Sa'īd al-Sīrāfī that it is perfectly possible for a Mu'tazili to be opposed to *falsafa*, and we shall also see that there is no difficulty in seeing al-Ghazālī as a *failasūf* malgré lui.

The principal task of Islamic government is to establish obedience to God and his law as laid down in the Qur'ān, although in practice the Qur'ān has had to be interpreted in particular ways to cope with new situations, situations which were dealt with in terms of the Traditions (*ḥadīth*) concerning the doings and sayings of Muḥammad. The political

and social upheavals so prevalent in early Islam were not regarded as merely struggles for power by different groups but as religious disputes made concrete by political and military action. Apart from the caliphs, then, another source of power and influence was to be found in those learned individuals (‘*ulamā*’) who had considerable knowledge of Islamic law and who were capable of interpreting novel and difficult cases. The judgments of the ‘*ulamā*’ were gradually built up into a system of law or *sharī‘a*, which specified the way of life ordained for human beings by God. Of course, different schools of jurisprudence arose, yet within the Sunnī community no one of them was regarded as exclusively true, and where they agreed their judgments were held to be obligatory. Although the ‘*ulamā*’ were certainly not regarded as priests, they did come to wield authority as legitimizers of régimes and witnesses to their doctrinal orthodoxy. Only the first four caliphs after Muḥammad came to be regarded as really orthodox, and many of the succeeding administrations clearly owed their position more to secular power than to religious authority. Nevertheless, the ‘*ulamā*’ were frequently significant politically in providing particular rulers with their Islamic credentials, and as such their suspicion of philosophy became something of a thorn in the side of philosophers in the medieval Islamic world.

From the early years of Islam, then, the community was involved in a number of controversies which occasionally struck at the very essence of the religion. Disputes took place on all fronts, not just between different military powers, but also between different interpretations of the Qur’ān and its law, different views on the legitimacy of government and religious behaviour, so that the notion of the Muslim way of life became something of an essentially contested concept. But none of these controversies were *philosophical* in the sense that they embodied the sort of philosophical thinking which came later to be transmitted from the Greeks to the Islamic world. This kind of philosophy first appeared in the third/ninth century under the ‘Abbāsid dynasty, the successors of the Umayyads. The ‘Abbāsids transferred the capital of the empire from Damascus to Baghdad, a significant move since the ‘Abbāsids had gained control largely due to the support of the Shī‘ite Persians, a non-Arab people with a highly developed culture of their own. Since the Umayyad dynasty, the empire had contained the whole of the area in which Greek thought had spread, with the exception of Europe still under the control of Byzantium. Under the ‘Abbāsids not only Syria and Egypt but also Persia came into the empire, all areas with a long history of Greek cultural and scientific influence. To a large extent the interest in Greek

sciences such as medicine, astrology and mathematics was practical and regarded as useful among the administrative élite in these territories. It was within this context that the 'Abbāsid caliph al-Ma'mūn founded in 217/832 the House of Wisdom (*bayt al-ḥikma*), which was designed both to encourage and bring some order into the development of Greek influence on Islamic philosophy and science in his realms. This institution comprised not just an observatory but also a library, with a team of translators directed to transmitting originally Greek texts into Arabic.

We might wonder, though, how a basically Greek set of ideas, domesticated in Greek religion and culture, and expressed in the Greek language, came to fascinate intellectuals in a radically dissimilar society in which knowledge of Greek was lacking in Jews and Muslims and where the religions of Judaism and Islam were very different from the religious beliefs of the Greeks. The means of transmission were through the mediating force of Christianity and its eventual assimilation of Greek thought. Although for quite a lengthy period philosophy and Christianity were mutually antagonistic, Christian thinkers came to use philosophy, or at least philosophical techniques, in order to provide a rational justification for religion while still insisting on its divine origin. For example, the development of patristic theology in the fourth century CE by St Basil in the East and St Augustine in the West employed elements of Stoicism and Platonism in many of its arguments. The continuation of the traditional Greek philosophical curriculum in the schools of Athens, Constantinople, Antioch and Alexandria made it available to the Muslim conquerors of these areas. Especially important was the way in which the competing Syriac churches, the Nestorians and the Jacobites, adapted various philosophical texts to further their doctrinal controversies and so made these available to the Muslims who lived in the same areas.

What motives did the Christians have for incorporating Greek ideas into their thinking? Since the Bible was regarded as the criterion of truth, those Greek ideas (and there are many of them) which are, at least superficially, incompatible with biblical truth were by and large discarded. Yet many Christians were eager to represent their faith in such a way that it was possible to maintain a notion of continuity between Christianity and Greek accounts of the correct way of living. This might seem a little surprising. After all, the Christian revelation is a covenant of God's relation in history with a specific group of people, the Jews, and their spiritual successors, the Christians, with whom God has established a new covenant in place of the old. The specificity of the historical basis of this relationship is apparently opposed to the entirely general

characteristics of philosophy, consisting as it does of universal rules of reasoning. The fact that Christians were interested in converting the world to their religion and thus broadening the particular relationship between God and his people to include everyone else meant that they became involved in presenting their religious doctrines in as universal a form as possible.

There were aspects of Platonism which Christians did reject out of hand as idolatrous. For example, the belief in the existence of a hierarchy of subordinate deities through whom God works in the world and communicates with his creatures was beyond the bounds of acceptability for orthodox Christians and Muslims. The orthodox position of both religions is that God is entirely apart from the world which he has made and is only available to us through such revelation of himself which he may provide. But many of the Islamic philosophers accepted the Greek view that God communicates his divinity as far as possible to the world and all its parts through the variety of immortal 'souls' lower than him, and so is accessible to a degree to all his creatures via their existing religious traditions. Despite a well-developed hostility to philosophical views which could be seen as offering competing religious hypotheses, Greek philosophy was studied by Christians seeking arguments and argument forms which would be useful in doctrinal disputes in Christianity itself and in disputes with followers of other faiths. What made the study of Greek philosophy by Muslims possible at all was the existence of more-or-less reliable translations of an eclectic range of philosophical texts into Arabic, chiefly by Christian scholars. From 150/750 to 400/1000 a large number of translations were made, some directly from the Greek and some from Syriac versions of the original. The standard is very variable, as is hardly surprising given the basic differences between Greek and Semitic languages, and the difficulty of the subject matter, yet some translations are impressive in their accuracy. The interest in Greek philosophy led to the commissioning of translations of a good deal of Plato and Aristotle, and a substantial body of Neoplatonic works. Plotinus, Porphyry, Proclus and John Philoponus were well known, as were the commentaries of Alexander of Aphrodisias. Some books were described as by Aristotle which definitely were not, such as the *Theology of Aristotle* (in reality Books IV–VI of Plotinus' *Enneads*) and the *Liber de Causis* (by Proclus). Since many philosophers were also doctors and interested in science there were many translations too of Galen, Hippocrates, Euclid and Archimedes.

Yet it would be a mistake to regard philosophy in Islam as starting with the translation of Greek texts. Interestingly, philosophical distinctions

arose in Islamic theology without any apparent direct connection with philosophy, but rather through the development of appropriate rules of legal reasoning. When Islam was established in the seventh century the legal norms seemed rather elementary, with the right and wrong paths being determined by reference to the Qur'ān and the Traditions (*ḥadīth*), which embody supposedly reliable accounts of the practices and beliefs of the Prophet Muḥammad and his Companions. Interpretative difficulties were to be dealt with by a consensus of the learned and independent reasoning was frowned on. The text of the Qur'ān was taken to be decisive, as opposed to independent sources and principles. But the rapid expansion of Islam and its rule over highly sophisticated civilizations made necessary the assimilation of a great number of foreign legal elements, which initially were often subjected to a process of Islamization and identification as Qur'ānic. Foreign practices and customs were absorbed into Islam by means of legal devices. Yet Islamic law is based on religious texts and supposedly requires no further justification. In the absence of a notion of natural law in most Islamic theology, and the corresponding idea of ethical and rational values which impose themselves on God, or which he imposes on himself or which are inherent in him, there is no a priori standard by which to assess human laws and norms other than reference to some religious criterion. Islamic law is flexible enough to accept that it is difficult to claim certainty in all cases, and many jurists are satisfied with solutions which are more just than other solutions.

There are some interesting legal devices which obviously have philosophical relevance. One of these is that a figurative meaning (*ta'wīl*) may be preferred to the apparent meaning (*ẓāhir*) of a religious text if the former is normally admissible for the expression in question, is required for the understanding of the text and is supported by a convincing piece of evidence. In fact, the application of this interpretative device was strictly controlled and very limited. Another philosophically relevant distinction is between terms which are equivocal and those which are unequivocal and so have only one sense. Thirdly, a text which is rather imprecise and loose can be taken, if there is appropriate evidence, in a more precise and determined sense. The movement from the particular to the general via analogy (*qiyās*) is also very important. The sorts of issues which arise here are legion. Do the texts which refer to 'Muslims' and 'believers' cover women and slaves? The Qur'ān threatens with a 'painful punishment' those who store up gold and silver without spending them in the way of God (IX,34): is this text supposed to establish a norm that implies the deduction of the tithe from all objects of gold and silver? Does this include

jewellery and precious stones? There was a great deal of controversy in Sunnite Islam over the appropriate use of analogy, with some strongly opposed to its use at all, and much argument over particular cases even when its use was agreed. The introduction of Greek logic as a rival to the established Islamic reasoning process of analogy led to a good deal of argument, too. But, clearly, even before Greek logic was available, there were philosophical arguments going on in the field of jurisprudence, disputes concerning the nature of law, analogy and meaning, and it is not unnatural to suppose that some Muslim jurists might have welcomed the contribution which Aristotelian logic could make to conceptual clarification in this area.

The development of theology became an issue when Muslims felt the need to systematize the metaphysical worldview of Islam, which meant that there was now a need to reconcile apparent contradictions and difficulties. A particular difficulty was the reconciliation of God's omnipotence and omniscience with his beneficence given the problem of the human capacity to do evil and to be punished accordingly. Another popular theological topic was the appropriate interpretation of anthropomorphic language in the Qur'ān in spite of the fact that the Qur'ān is clear in stating that God does not have a body. One might have expected that the development of interest in Greek philosophy would have led theologians to seek new logical instruments in their theoretical discussions which would be transformed by the import of powerful philosophical concepts. But this did not happen. The philosophers in the Islamic world (who were frequently known as *falāsifa*, a term significantly derived from the Greek language rather than native to Arabic) were rather contemptuous in their philosophical (although not necessarily in their theological) works of the dialectical and so inferior modes of reasoning which the theologians employed. However, the difference between demonstrative and dialectical reasoning is not between a valid and an invalid procedure, but merely between working with premisses which have already been established as certain and unchallengeable, in the case of demonstration, and working with premisses which are generally accepted but not logically established, in the case of dialectic. In theology the premisses are taken from a religious doctrine, which the philosophers assumed could not be logically proved to be true, and so the consequent reasoning is limited and reduced to a defence of those premisses without being in a position to prove them. From the middle of the ninth to the middle of the eleventh centuries CE, philosophers and theologians who were not both tended either to ignore each other or to swap insults.

The description of theology by the *falāsifa* as *kalām* or merely a dialectical and defensive line of reasoning is hardly fair. To a large extent, the difference between philosophy (*falsafa*) and *kalām* is merely a difference in subject matter: philosophers work with philosophical premisses while theologians (*mutakallimūn*) apply themselves to religious texts. *Kalām* sets out to represent the speculative framework and the rational content and coherence of the principles of Islamic belief. It was necessary to resolve conflicts between revelation and practice, between for instance God's great power and the existence of innocent suffering in this world, and the issues raised are often philosophical, although not explicitly identified as such. Why not? Presumably the reason is that it was thought by many that the theoretical instruments of unbelievers could not explicitly be used to unravel problems in the doctrine of Islam. After all, *kalām* became important within a certain context. The term *kalām* means 'speech' or 'conversation' – it is based upon the idea that truth is found via a question and answer process. Someone proposes a thesis, and somebody else questions it, this form of disputation being apparent in the grammatical structure of the works of *kalām* themselves. This technique for solving dogmatic problems accurately represents the fact that from the beginning Muslim theology had to think very much in terms of defence and attack. The *mutakallimūn* had to struggle from the beginning against comparatively sophisticated Jewish, Christian and Manichean intellectual skills. Theology, says ibn Khaldūn (732/1332–808/1406), 'merely wants to refute heretics'. It is 'a science which involves arguing with logical proofs in defence of the articles of faith and refuting innovators who deviate in their dogmas from the early Muslims and Muslim orthodoxy'.[1] It acts, according to al-Ghāzalī, like a protection troop at the pilgrim road.[2] Al-Ghāzalī brings out in more detail what is unsatisfactory about *kalām*:

A group of the *mutakallimūn* did indeed perform the task assigned to them by God. They ably protected orthodoxy and defended the creed which had been readily accepted from the prophetic preaching and boldly counteracted the heretical innovations. But in so doing they relied on premisses which they took over from their adversaries, being compelled to admit them either by uncritical acceptance, or because of the community's consensus, or by simple acceptance deriving from the Qur'ān and the Traditions. Most of their polemic was devoted to bringing out the inconsistencies of their adversaries and criticizing them for the logically absurd consequences of what they conceded. This, however, is of

[1] Ibn Khaldūn, *Al Muqaddimā* (Prolegomena), trans. F. Rosenthal, *The Muqaddimah: an introduction to history* (New York, Columbia University Press, 1958), III, pp. 155 and 34.

[2] Al-Ghāzalī's critical view of *kalām* may be appreciated by the fact that his very last work, finished only a few days before his death, was titled *Curbing the masses from engaging in the science of kalām.*

little use in the case of one who admits nothing at all except the primary and self-evident truths.[3]

A dramatic example of the confrontation between *kalām* and philosophy took place in Baghdad in 331/932 before the vizier. A discussion took place between the Christian translator Abū Bishr Mattā (*c.* 870–940) and the theologian Abū Sa'īd al-Sirāfī (d. 368/979) over the respective merits of the 'new learning' which came from the Greek philosophical tradition. Mattā puts the philosophical position in this way: 'I understand by logic an "instrument" of "speech" by which correct "speech" (*kalām*) is known from incorrect and unsound meaning from sound. It is like a balance, for by it I know overweight from underweight and what rises from what sinks.'[4] His opponent argues at length that each language is a conventional rather than natural system and that they each have different interpretative principles or 'instruments' which are relevant to that specific language. So Greek logic would only be appropriate to the Greek language, and wholly useless in analyzing aspects of Arabic. Obviously, the Aristotelian move required to avoid this sort of objection is to deny that by 'speech' is meant the ordinary lexical meanings, but rather the logical principles inherent in linguistic structure and common to all languages. Al-Sīrāfī refuses to accept this point, reiterating his view that Aristotelian logic cannot do justice to the Arabic language. Al-Sīrāfī pushes the point that the philosophers do not even know the Greek language and the texts they adopt they only have at third-hand, from Greek to Arabic via Syriac. Mattā replies by expressing his confidence in the quality of the translations, and adds that it is not important that every linguistic nuance survives in translation, as long as the basic semantic values are accurately reproduced from Greek into Arabic. Yet al-Sīrāfī is so impressed with the importance of particular languages that he is not prepared to accept this suggestion, and insists again upon the uselessness of a logic being applied to anything but the language out of which it was derived.

Significantly, a strong theme throughout al-Sīrāfī's attack on the introduction of Greek philosophy into Muslim intellectual life is opposition to glorification of Greece and Greeks by comparison with the community of Islam. He suggests that admiration for Greek culture is overdone, and

[3] Al-Ghāzālī, *al-Munqidh min al-Ḍalāl* (The deliverer from error), trans. R. McCarthy, *Freedom and fulfillment* (Boston, MA, Twayne, 1980), pp. 61–114; pp. 68–9.

[4] D. Margoliouth (trans.), 'The discussion between Abū Bishr Mattā and Abū Sa'īd al-Sīrāfī on the merits of logic and grammar', *Journal of the Royal Asiatic Society* NS, XXXVII (1905), pp. 79–129: p. 112.

that no nation is superior to others in its complement of accomplishments. He also pokes a lot of fun at Mattā's failure to master Arabic itself, and thinks he would be better employed studying Arabic grammar and semantics rather than having anything to do with Greece. He does suggest, however, that a distinction can be made between speech and meaning, claiming that the former is 'natural' and mutable, while the latter is apprehensible by reason and is permanent. But he transforms the Aristotelian conception of the relation between logic and language, regarding logic as not a way of reasoning but rather a way of speaking properly. Once the method of correct expression is mastered it can be transformed into a science, that of grammar, and translated into formal rules. It may well be that these formal rules and the intelligible meanings are the same for all languages, but they can only be grasped language by language and then compared, and Mattā has admitted that he does not know Greek (and his Arabic is not perfect, either). Given al-Sīrāfī's definition of logic (a highly question-begging definition, it must be admitted) he is able to claim that the true logician must be able to express himself correctly, and distinguish correct from incorrect expressions on all levels. He pours scorn on Mattā, firing off questions at him which express the implications of his disagreement with Mattā on the basic logic–grammar distinction. Mattā's silence is supposed to represent cowed defeat, no doubt, but perhaps it rather appropriately comes over as a dignified silence when confronted with a disputant who refuses to take seriously a reasonable philosophical argument. Al-Sīrāfī appropriately ends the discussion with a flood of praise about dialectic in both its legal and theological form. These sciences incorporate a complete knowledge of a language, its logic and grammar, and employ sound reasoning to go beyond the confines of language to determine the truth between two opposing positions.

The dispute between al-Sīrāfī and Mattā over the respective merits of *kalām* and *falsafa* brings to the surface an important explanation for the problematic nature of Greek philosophy in the Islamic community. Many of the questions which philosophy applied itself to already had answers provided within the context of Islam. For example, the question of how people ought to live and act had been answered in the Qur'ān, which contains everything in the way of information required to ensure salvation and concerning religious and social behaviour. Islamic law provided details of personal and property relations, and the sorts of political structures which are acceptable. The Muslim had only to observe the Qur'ān, the Traditions of the Prophet and his Companions, and the judgments of

the early caliphs. More abstract issues were dealt with by *kalām*, which argued towards certain theoretical analyses of concepts such as power, fate, God and freedom. In addition there existed a well-developed science of language of long standing. The arrival of philosophy on the intellectual scene seemed to challenge many of these traditional Islamic sciences, and threatened those who were expert in such forms of knowledge. After all, philosophy covered a lot of the same ground as *kalām* but claimed greater surety for its methods and conclusions. Furthermore, on a number of important issues philosophy presents a contrary conclusion which might seem to challenge Islam itself. Aristotle, often referred to as the 'first master', appeared to argue that the world is eternal, that there can be no individual survival of the soul after death and that God is radically removed from connection with his creation and creatures. The scene was clearly set for a major demarcation dispute between the philosophers and the rest of the Islamic intellectual community, a dispute which alternately raged and simmered in the Islamic world from the fourth to the sixth centuries AH/tenth to the twelfth centuries CE.

It is important to distinguish the controversy between *falsafa* and *kalām* from an important theological controversy which took place at around the same time as philosophy entered the Islamic world. The Mu'tazilites, who called themselves the 'people of unity and justice', presented a large number of theological doctrines which sought to define a more satisfactory *rational* basis for Islam. They argued for the unity and justice of God, for the responsibility of human beings for their actions and the necessity to try to justify the actions of God. Perhaps their most significant doctrine for our purposes was the importance of reason in guiding Muslims to a knowledge of God, and the belief in the agreement of reason with revelation. It is hardly surprising that the very same caliph al-Ma'mūn who encouraged the introduction of Greek philosophy and science was enthusiastic about the Mu'tazilite approach. Indeed, this theological school was made the official doctrine in Islam between 833 and 848, with a corresponding persecution of Muslims who could not accept the Mu'tazilite interpretation of Islam. However, the dominance of Mu'tazilite doctrine was relatively short-lived and al-Ash'arī (260/873–324/935) spearheaded the reaction by affirming the more traditional interpretation of Islam, which emphasizes the gap between the power and knowledge of God, and of his creatures. Al-Ash'arī argued that appropriate religious authority is enough to justify the basic theses of Islam, and that reason is not required to justify revelation. The Mu'tazilites insisted that reason is an important interpretative device in gaining profound

insight into the Qur'ān, and that it is a condition of true faith that one should by the use of reason alone know all the following: God's existence, essence and characteristics; the possibility of prophecy and revelation; what it is to act morally and immorally; and the structure of the physical world and its relation to its maker. These facts must be reached by the use of independent reason since otherwise they must rest on authority and tradition, which are imperfect grounds for holding such important beliefs. The Ash'arites challenged this set of theses and argued that reason alone is incapable of establishing satisfactorily the basic themes of Islam. (It is worth noting that both the Ash'arites and the Mu'tazilites hold reason in considerable regard as a means of discovering important facts – a point we shall establish later.) To give an example which helps bring out briefly the flavour of the controversy, we might look at the Qur'ānic injunction against wine. The drinking of grape wine is forbidden in the Qur'ān because it is intoxicating, and so by analogy date wine is forbidden too. The connection between the reason and the rule is different for Mu'tazilites and Ash'arites. For the former, the cause or reason for the rule might help us discover the reason God had in mind when introducing the law. This would be based upon the idea of an objective system of ethics with which God would have to concur. Ash'arites, though, would argue that the cause is just used by God for a particular purpose, and it does not follow that he must use that cause or have that reason for promulgating the law.

Although the Mu'tazilites possibly derived some of their central concepts from philosophy, it would be a serious mistake to think that they came nearer to philosophy than their Ash'arite opponents. To take an example, al-Sīrāfī was a Mu'tazilite, and this did not prevent him from launching his attack upon the new philosophy. The dispute between the two theological schools frequently employed philosophical arguments, yet in its subject matter and methods it was clearly a theological dispute, characterized by dialectical rather than demonstrative forms of reasoning. Despite the strong insults and accusations of heresy which were thrown about in the dispute, it is difficult to argue that either party was involved in the defence of views which were incompatible with Islam itself.

As we shall come to see, the views of philosophers were condemned on occasion as heretical and beyond the limits of Muslim belief. It is important here to distinguish between two sorts of principle. One principle shared by both Ash'arites and Mu'tazilites is that reason is usefully employed in understanding religion. A principle that both would reject

is that religion may be usefully analyzed by the use of concepts derived from Greek, especially Aristotelian, philosophy. The use of such philosophical concepts were not regarded as helpful in an understanding of religion. But in rejecting philosophy the theologians were not rejecting reason; on the contrary, they were enthusiastic concerning the value of reason when employed in a suitably domesticated context. It is not difficult to find Qur'ānic backing for this position. The Qur'ān does not require that people believe in its teaching blindly. Both believers and unbelievers are invited to ponder, reflect and understand through the use of their reason. It warns against blind obedience to one's predecessors (II,170; V,104) and repeatedly addresses itself to the understanding of its audience (III,65; XII,2). Although the teachings of the Qur'ān are based upon divine authority, they often seek by rational persuasion to bring about faith. There are a number of verses which seek to prove that God must be a unity, in particular the verse which argues that the whole universe would have perished if there existed several gods beside God (XXI,22). Similarly, the Qur'ān seeks to establish by argument the veracity of the Prophet, referring to the pious life which he led prior to revelation (X,17).

The rituals mentioned in the Qur'ān are often grounded in reason and Muslims are commanded to understand their spirit and purpose. Many of the rituals are designed to contribute to the welfare of Muslims themselves. For example, Muslims who pray are thereby less likely to fall into disfavour and dishonour, since Muslims who pray remember God (XX,14). The practice of *zakāt* or charity, although not a ritual, is designed to prevent the accumulation of wealth in the hands of only a few people and to spread some of it around the community (IX,60; LIX,7). We shall see later the different explanations which the philosophers give of such religious commandments and customs. The point here is to establish that rational understanding is a much-valued aspect of traditional Islam even where Muslims are suspicious of philosophy. Indeed, it might be argued that the Prophet implies the significance of reason when he abolished prophecy. The Prophet himself announced that he was the last of the prophets, and so there would be no more revelations or voices claiming divine authority. God has thus invited human beings to assume responsibility for their judgments and to employ their reason in establishing the way they ought to behave. Of course, they will be helped by the Qur'ān and the rest of Islamic law and tradition, but there will frequently be occasions when these sources do not comment upon particular problems and situations. We can no longer expect a prophet to reveal the right

way to us in these circumstances, and it might well be argued that we should then have to use reason to work out a solution.

If reason and rational explanation were held in such high esteem by some Muslim intellectuals, why then did they not enthusiastically embrace Greek philosophy as the acme of rationality and employ it to make sense of problems which arose in the interpretation of Islam? A variety of tentative answers may be offered. Firstly, as we have seen, the space which philosophy sought to occupy was *already* filled by theology, the theory of language and a well-developed jurisprudence. Philosophy appeared to be an interloper into a field of problems which were being taken care of quite adequately by other theoretical devices and from different speculative perspectives. Although some Muslim intellectuals had confidence in the value of reason, this confidence was not boundless, and they acknowledged that in the last analysis faith and religious practice are justified by non-rational criteria, i.e. the commands of God. Secondly, the conclusions which philosophy seemed to offer as the only demonstratively respectable conclusions often ran against the most important principles of Islamic theology, not to mention the Qur'ān itself. When one looks at the character of the argument between al-Sīrāfī and Mattā, and arguments between theologians and philosophers in medieval Islam as a whole, one often finds yet another strain of contention emerging. This is a suspicion that philosophy is an essentially *alien* way of thinking. Muslim intellectuals were, and indeed still are, sometimes wary about dealing with pre-Islamic and non-Islamic themes which have become incorporated in Islam. For example, some of the customs and rituals of Islam are assumed to have a non-Islamic origin, being reflections of older and pagan traditions, yet accepting that such practices have pagan precedents has seemed to some Muslims impious and unworthy of the considerable religious respect in which those practices are held by the community. Philosophy clearly bore the marks of its Greek creators, and it was transmitted to the Islamic world through the good offices of the Christian community, and so in some ways it was doubly alien in character due to its *origins* even before its content was considered. It is probably in reaction to this charge that philosophy is a radically alien activity that al-Fārābī tried rather unconvincingly to provide philosophy with an Eastern pedigree, an Islamic pedigree being unfortunately unavailable: 'It is said that this science [Greek philosophy] existed anciently among the Chaldeans, who are the people of Iraq, later reaching the people of Egypt, from there passing to the Greeks, where it remained until it was transmitted to the Syrians and then to the Arabs. Everything composed

by this science was expounded in the Greek language, later in Syriac and lastly in Arabic.'[5]

One of the characteristic aspects of al-Fārābī's approach to philosophy is that he regarded himself as a member of a distinct school in a particular philosophical tradition. This school is a continuation of the Alexandrian tradition in the fifth and sixth centuries CE. He refers to an unbroken line of teachers and interpreters of Greek, and especially Aristotelian, philosophical texts with their ever-developing accretion of criticisms, agreements and arguments. Indeed, al-Fārābī insists that the only genuine sort of philosophy is that which is transmitted from generation to generation.[6]

Abū Naṣr al-Fārābī was born about 259/872 in Turkestan, dying in Damascus in 339/950. He was not only a writer on philosophy and logic but also on the theory of music, and had something of a reputation as a Ṣūfī, although it is difficult to see why. He established the curriculum of the *mashshā'ī* or Peripatetic tradition of Islamic philosophy, and in particular did a great deal to put logic at the head of the philosophical process. His high standard of analyticity and clarity led to his frequent appellation as the 'second master', second, that is, to the *shaykh al-raʿīs*, Aristotle (Arisṭūṭālīs). It is difficult to overemphasize his contribution, since he not only worked in areas of philosophy but really created a whole way of doing philosophy itself. His advocacy of logic had as its main effect the acceptance in the Islamic world of the idea that the rules of logic and grammar are distinct. This had been a controversial issue, in that the grammarians and opponents of philosophy had tended to argue that logic was just Greek grammar being imposed on Arabic grammar, and so far less useful than using Arabic grammar to understand Arabic prose. The argument that logic is the underlying structure of all language and texts, and that it must be understood if we are to be able to understand that prose came to have a long and distinguished history in the classical period of Islamic philosophy.

At the centre of his Neoplatonic theory is the concept of emanation in the hierarchy of being. The First Being, God, is the source of the hierarchy and from it a second being emanates which is the First Intellect and the Second Being. In all, ten intellects emanate from the First Being.

[5] Al-Fārābī, *Attainment of happiness*, in M. Mahdi, *Alfarabi's philosophy of Plato and Aristotle* (Ithaca, NY, Cornell University Press, 1962), p. 43.

[6] Al-Fārābī, *Book of letters*, ed. M. Mahdi (Beirut, Dār al-Mashreq, 1970), p. 155. His point here could be regarded as the philosophical equivalent of the way in which the selection of correct *ḥadīth* was made, i.e. in terms of a justified chain of authorities leading down to the present time.

Emanation is an entirely intellectual process which results in the production of multiplicity out of unity, and provides a neat explanation for the fact that a world which is created by a single being should exhibit multiplicity. The First Intellect thinks about God (what better object of thought can it have apart from itself?) and as a result produces a third being which is the Second Intellect. The First Intellect also thinks about its own essence and as a result produces the body and soul of the First Heaven. The consequent sequences of emanated Intellects are linked with the generation of other celestial things such as the Fixed Stars, the planets, the sun and the moon. A particularly important role is played by the Tenth Intellect, the intermediary between the celestial and the terrestial worlds, between the higher and the lower worlds. This Intellect, which is the Aristotelian *nous poietikos*, the Active or Agent Intellect, is responsible both for making human thought actual and making form available to humanity and the sublunary world. What is interesting theologically about this theory is that God is distant from his creation, he only has an indirect relationship with what he creates, and anything closer would compromise his absolute unity. Another restriction which exists is that our thinking can ascend no higher than to the level of the active intellect, which as we can see from the description of the hierarchy of being is not very high. So we cannot get closer to an adequate description of what is higher than the active intellect, and in particular of God.

There are in fact four different kinds of intellect. These concepts became very significant tools in the conceptual resources of Islamic philosophy. The potential intellect is the ability to abstract the forms of an object from its sensible nature. As the understanding of the form becomes more abstract, we move to the actual intellect, and when this is perfected (only available to a few) the stage of the acquired intellect is attained. This represents the level at which the intellect is fully actualized and the individual human intellect is similar to the other immaterial intellect, the active intellect. It can now not only contemplate itself and the intelligibles abstracted from material things, but also the active intellect and the immaterial substances themselves, and this represents the limit of human knowledge. Al-Fārābī calls this the stage of ultimate happiness and compares it with immortality, but this is very different from personal immortality, since for this sort of knowledge to be available to us we probably need to abandon our bodies, at the same time abandoning the basis of our personal identity.

The active intellect has an important political role. The perfect ruler has a repertoire of qualities. He has the ability to rule since he is trained

for this role. He must perfect himself, be a good speaker and put his soul in contact with the Active Intellect, in other words, he must be a good politician. He is strong, with a good memory, respects the truth and despises material things. The ideal city is one which is directed to goodness and happiness, and it develops the appropriate virtues in the citizenry. The virtuous city is like the limbs of a healthy body in making it possible for people to live well. There are four kinds of corrupt city in which people are not encouraged to live virtuously and as a result suffer harm and punishment, a model derived from Plato. Happiness is attainable by the philosophers through their pursuit of intellectual knowledge, and is available to ordinary believers who are not capable of philosophy through their religious and social practices. The philosopher-king must also be a prophet, and uses his abilities to construct a political system in which the community as a whole will be able to participate in happiness and salvation. That means that each individual will be offered a route to salvation according to his capacity to travel on that route.

The ruler knows how to organize the state through his contact with the Active Intellect. The philosopher connects with the Active Intellect using his intellect alone, while the prophet uses his imagination, which is the source of revelation, inspiration and of course prophecy. Coming to knowledge through imagination means being able to express that knowledge in language which is accessible to the public at large, since he (and it is always a 'he' for al-Fārābī) can illustrate the nature of his message with vivid and persuasive images. Prophecy comes about through the interaction between the intellect and the imagination, and it produces in user-friendly ways the same truths available through philosophy. The highly developed imaginative skills of the prophet, which he has naturally as a result of being the person he is, means that he can receive an emanation from the Active Intellect. This is a good example of knowing the same thing in different ways. The prophet and the philosopher know the same thing, but they are obliged to express that knowledge differently, since the prophet has political skills not shared by the philosopher, who only has intellectual skills. Citizens in the imperfect states will find it impossible to perfect their thinking, but they will not necessarily be punished as a result. But if they live in ignorant cities, cities which do not understand the structure of the world, they will not survive as a consequence of their inability to perfect their intellectual abilities and so have no idea of what is happening. Citizens who live in the wicked cities, those who understand how they should act but reject that knowledge, will be punished in the afterlife by having their desires continued after death

and continually frustrated. Since their desires are corrupt and essentially linked to the body, they will be permanently unsatisfiable, and so will eternally torment them. It is not clear how this would work, though, since without bodies how could physical pleasures linked with the body remain an issue for the inhabitants of the next world?

The argument that the state will be best run by an individual who not only has the relevant theoretical knowledge but also has the ability to make that knowledge comprehensible and acceptable to the widest possible audience became an important principle of Islamic political philosophy in the classical period.

In his metaphysics, al-Fārābī regarded existence as a predicate of essence, as opposed to an inherent quality of essence. This led to the distinction between two basic kinds of being, being which is necessary in itself since it cannot not be (i.e. God) and everything else, being which is necessary through the action of something else, but contingent in itself. This theory was developed in complex ways by ibn Sīnā, and in many ways has represented the party line of *falsafa*, ibn Rushd being a notable exception.

Al-Fārābī's thought was considerably extended and transformed by Abū ʿAlī al-Ḥusain ibn Sīnā (Avicenna). He is without doubt one of the most significant philosophers produced in the Islamic world. He was born near Bukhara in 370/980 and showed a precocious fascination with learning of all kinds, something which was to characterize his very varied intellectual output for the rest of his life. His medical skill led to the local court, and a rather precarious political career as occasional vizier. Despite a tumultuous personal and political life, he produced a large number of logical, philosophical, medical, psychological, scientific and literary works by the time of his death in 429/1037.

There are some themes which run throughout Avicenna's thought. God is the principle of existence, and as pure intellect is the necessary source of all other existing things. The way in which the universe is produced is through emanation in accordance with the form of Neoplatonism so popular in Islamic philosophy, according to which there is a rational production of beings out of an ultimate cause. God is at the summit of the hierarchy of being, and the furthest that human beings can proceed along the hierarchy is towards the Active Intellect, the principle behind the logical organization of everything in our world and the last of the ten cosmic intellects that exist below God. This notion of the Active Intellect stems indirectly from Aristotle's concept of the *nous poietikos*, about which he produced little more than hints but which

comes to have enormous significance in Neoplatonism and Islamic philosophy. Although the nature of our world appears to be contingent, if we appreciate the way in which causes lead to effects we will understand that once the cause is given, the effect proceeds inevitably and necessarily, yet only God is necessary in himself. We can grasp the nature of the Active Intellect by perfecting our rational abilities, and a prophet is able to do this perfectly since he has an entirely rational soul and is able to grasp the logical structure of reality.

Avicenna interprets Aristotle through Alexander of Aphrodisias in identifying the concept of the Active Intellect with the first cause of the universe. God's self-knowledge is eternal and results in a first intelligence which has as its object the necessity of God's existence, the necessity of its own existence as a result of its relationship with God, and its existence as possible in the sense that it is dependent upon God. From these thoughts arise other existents, until we reach the level of the Active Intellect which produces our world. As we descend down the hierarchy the intelligences diminish in power, and the Active Intellect is so far down the hierarchy that it cannot emanate eternal beings, by contrast with what is above it. Nonetheless, there is nothing really contingent in the universe, according to Avicenna. If something is possibly existent, then it must come to pass at some time; if something remains potentially existent but never comes about, then this is because it cannot come about. If a possibility is actualized, its existence is necessitated by its cause. It cannot not be. Indeed, its cause itself is necessitated by another cause, and so on, but not *ad infinitum*, since there is a being which is necessary through itself, God, who lies at the apex of the hierarchy of causes and effects. Once the existence of God is established by proof, everything else that exists flows from him necessarily, and so has to exist.

Logic for Avicenna is the main route to human perfection. The ignorant person who has no or little grasp of reasoning regards reality as a contingent flow of events. The imperfect thinker bases his thinking on language, while the route to perfection is through the purification of the concepts which are present in our linguistic concepts only imperfectly. Although languages differ, the underlying logical structure is the same in all of them, and it is the role of the philosopher to explore and refine these very general and abstract logical principles. We can acquire some knowledge through sense perception, but it is limited by its particularity. Avicenna gives an important role to imagination in epistemology, which permits us to produce images of things we have not experienced and so broadens the scope of our thought. The more advanced thinker

needs to rise above the material nature of our images until he arrives at concepts that are free of physical features. Progressive refinement of our ideas leads to the point where the Active Intellect is able to work with us to produce the rational universals. All efforts by human beings to know can rise no further than the Active Intellect, which represents the basic structure of reality as emanated from God, the pure intellect. At this stage in the hierarchy of emanation, we reach a level of reality which is no longer powerful enough to generate an intelligence and soul. Rather, emanation generates from the Active Intellect a multiplicity of human beings and sublunary matter. Our souls emanate from the Active Intellect, and its illumination (*ishrāq*) of our souls makes possible the kinds of knowledge which can turn towards it. As we shall see in the last chapter, this idea was taken up by *ishrāqi* or Illuminationist philosophy to create an entirely new school of Islamic philosophy.

One of Avicenna's chief contributions to philosophy lies in what he does to the distinction between essence and existence, which he originally acquired from al-Fārābī's account of the distinction between being as necessary in itself and being as necessary through another. We cannot infer from the essence of anything that it must exist, with the sole exception of the essence of God. If all existence were only possible, it need never have actually come about and we should need something which led to existence rather than nothingness. Something must ultimately necessitate actual existence, yet that something cannot itself be merely possible since it would then require something necessary to bring it about if we are to avoid an infinite regress. Hence we arrive at God as the necessitating cause of the universe, the only necessary being in itself.

The soul has to be incorporeal, according to Avicenna, since thought itself is indivisible and cannot be held by something which is composite and divisible. In any case, thought can transcend material limitations so it can hardly be material itself. It is also immortal, and its link with the body, important though it is, is accidental. Since the soul is not composite, it is not subject to dissolution. The eternal soul can suffer penalties and rewards in a life after death as a result of the actions of the individual during this life. We have a choice between good and evil, and we are punished or rewarded in accordance with our actions in this world. Like most of the Islamic philosophers, Avicenna seems to adhere to a theory of the next life which can be understood by all people, regardless of their intellectual capacities. Those capable of intellectual thought will understand salvation in terms of rational improvement, and will not need to be motivated by the corporeal language of the afterlife in the Qur'ān

to motivate them appropriately. On the other hand, those who are not able to understand the intellectual possibility of a spiritual afterlife are provided in religion with a series of images which is capable of helping them understand that the consequences of their actions in this life have a scope which is not completely limited to this life. Such intellectually imperfect people are not to be encouraged to investigate the bases of their beliefs in the afterlife, since this will only result in confusion or even eventual lack of belief.

There has always been controversy regarding Avicenna's real philosophy, in that some have argued that along with the Peripatetic form of thought which he presented in his works based on Aristotle and Neoplatonism he also had a different form of philosophy, one based on a mystical approach to the nature of reality. He is thus sometimes seen as the originator of *ishrāqi* or Illuminationist philosophy, a form of philosophy which came to have a long and continuing history after the decline of Peripatetic philosophy in the Islamic world. This form of thought emphasizes religion and prophecy as the most important route to knowledge, and places reason in an inferior role. There is a text supposedly with the name 'Eastern philosophy' which is no longer extant, if it ever really existed, so it is difficult to know what the truth is on this issue. But it is certainly true that there are significant mystical aspects to much Islamic philosophy which needs to be acknowledged if we are to understand it as a whole. While his thought came to be regarded as inferior to that of Averroes in the West, in the Islamic world it played a large part in the creation of the Illuminationist philosophy which continues to be significant today, especially in the Persian world.

Avicenna came to have considerable influence on Western philosophy, and enormous influence on Western medicine, and his medical thought is still widely used in the Arab world today. Latin versions of some of his work started to appear in the late twelfth century and were extensively discussed by Aquinas and Albert the Great. Since Avicenna wrote so much on Aristotle, he was valued as an interpreter, although again Averroes was felt to be more accurate and less extravagant in his metaphysics. In the Islamic world Avicenna was severely criticized by al-Ghazālī in his *Tahāfut al-falāsifa* (Incoherence of the philosophers) and more gently criticized by Averroes in his response to al-Ghazālī's attack on Peripatetic thought. Al-Ghazālī was particularly incensed over the nature of Avicenna's views on three topics – the creation of the world out of nothing, God's knowledge of particulars, and corporeal immortality. It certainly is difficult to reconcile creation out of nothing with Avicenna's

emanationist system. Given the latter, God seems to have little choice about creating the world, since it is an effect of his thinking about himself, an eternal event which does not take place within time. The account of creation in the Qur'ān is not clear on whether creation was out of nothing, but al-Ghazālī points out against Avicenna that if God is obliged to create the world in the way in which he does create it, then this goes against much of the understanding of creation in Islam. The question is whether God can do anything he wishes, both originally when the world is created and subsequently, through miraculously intervening in the system of nature. Avicenna's God seems to be unable to act freely in these respects, since what emerges from him is part of a logical and necessary system. The nature of the system already specifies what the system is going to be, something which al-Ghazālī argues is damaging to religion. Similarly, God's knowledge is confined to universals and unique events, since he can only be concerned with the formal aspects of reality, not their particular manifestations. Unique events are regarded as logical as opposed to contingent phenomena, since they represent a formal feature of material reality, and they appear to be the sole objects of divine knowledge about our world. It seems to follow from Avicenna's account that there are difficulties in the traditional religious understanding of God knowing everything which goes on in the world of generation and corruption, and this implies that there are then problems with the idea of him knowing how to reward and punish people. Finally, on Avicenna's account what survives death is the soul and not the body, which appears to contradict the Islamic view of the afterlife. Al-Ghazālī argued that Avicenna's conclusions are not only heretical but also unsatisfactory even given Avicenna's premisses, and he set out to demolish the whole system of Islamic Peripatetic philosophy, based as it was on a form of Neoplatonism.

Abū Ḥamīd Muḥammad ibn Muḥammad al-Ghazālī was born in Tus in Persia in 450/1058 and had a typically tumultuous life for a member of the intellectual community at that time. The thinkers in this book rarely had stable existences, being part and parcel of the political life of the states in which they lived and so on a perpetual roller coaster as a result of the huge changes which often rocked the Islamic world. In addition, some thinkers were involved in a constant search for the truth, in the sense that they wanted to work out which approach to the truth was the most likely to get to the right end. Al-Ghazālī is perhaps the most difficult of the thinkers to classify, since he was at different times an enemy of *falsafa* (who nonetheless attacked *falsafa* using *falsafa*), an Ash'arite prepared to use ideas unacceptable to the Ash'ariyya, and a

Ṣūfī who seemed not to require a shaykh, unlike every other Ṣūfī. He spent the first part of his life as head of the Nizamiyah college in Baghdad. He lectured there mainly on Islamic law and moved on to considering a variety of alternative theological interpretations of Islam, distinguishing between the acceptable and the unacceptable. A spiritual crisis led to his retirement from his career and his adoption of the life of a wandering Ṣūfī, which ended with his death in 505/1111.

Al-Ghazālī was an early adherent of the Ash'arite theological school, and its theory of occasionalism, ethical subjectivism and atomism. Their oponents, the Mu'tazilites, regarded human beings as the authors of their own actions, while the Ash'arites regard all action, both human and divine, as brought into being ultimately by God. The Mu'tazilites argued that the world and its creatures were created in order to represent divine justice, so God must do the best he can for us and must reward us in accordance with our deserts. Al-Ghazālī presented the Ash'arite response to these views, arguing that it detracts from the greatness and autonomy of God if the latter is obliged to follow and obey objective principles of justice. Surely God can do anything he wants, he can punish virtuous people and reward the wicked, he is under no obligation at all to his creatures. God has no purposes and his actions cannot be described using human notions like justice at all, so whatever he may do to his creatures cannot be called either just or unjust. While this debate took the form of a theological struggle in accordance with the principles of Islamic theology, it also embodies a great deal of philosophical sophistication, and often deals with the appropriate analysis of key ethical terms. Islamic theology analyzes the ways in which our main ethical language can be translated into language about God, if its 'deep structure' is to emerge.

It is interesting to remember that when al-Ghazālī's works were translated into Latin, his *Intentions of the philosophers* (Maqāṣid al-falāsifa) was such a reliable description of the views of the *falāsifa*, in particular al-Fārābī and ibn Sīnā, that he was often thought of as a *failasūf* himself. In this book he seeks to set out clearly the views of his opponents before demolishing them, in the subsequent *Incoherence of the philosophers*. In this latter book he sets out to overturn the main Neoplatonic and Aristotelian views of reality, in the form of twenty theses which he argues are invalid. The three most serious from an Islamic perspective are the theses that the world is eternal, that God cannot have knowledge of particulars, and that there is no such thing as physical resurrection.

What is interesting about al-Ghazālī's critique of philosophy here and in other places is his steadfast defence of Aristotelian logic as a principle

of reasoning, and as a vital technique to be used in theology. Al-Ghazālī had a great influence on the Islamic world, and the form of philosophy which he criticized did fall out of favour in much of the Islamic world around the end of the sixth/twelfth century, while logic became a staple of Islamic theology. Some Islamic thinkers emerged who were so critical of philosophy that they condemned logic along with it (ibn Taymīyya is a good example), arguing that logic was irretrievably infected with philosophical ideas. There were others like ibn Sab'īn and al-Suhrawardī who also criticized Aristotelian logic and tried to replace it with other kinds of logic, yet these reactions to logic are not typical in Islamic culture, and one aspect of al-Ghazālī's influence was a sharp distinction between philosophy and logic.

In his later work, al-Ghazālī became disillusioned with theology as a route to the truth, and became committed to Ṣūfism. He argued that this is by far the best way to achieve salvation, a path which enables the Ṣūfīs to glimpse the world where God's decree is inscribed. Although al-Ghazālī's crisis of faith led him to abandon theoretical approaches to Islam which were not mystical, there is obviously a great deal of philosophy in his mysticism. Like the philosophers, he holds that the soul is the important part of the individual person, and that it is liberated from the body by death. The human soul is a spiritual substance totally unlike the body; it is divine and makes possible our knowledge of God. The body is the vehicle of the soul on its way to the next life, and if we restrain our anger, appetite and intellect we end up with the virtues of temperance, courage, wisdom and justice. We need to aim at the mean when operating with the body, and so transform ourselves through religion to imitate God, insofar as we can do this. Although Ṣūfīsm is often seen as a private and individual pursuit of a relationship with God, al-Ghazālī argues that the traditional aspects of Islamic life must be followed by the Ṣūfī if his pursuit of salvation is to be effective. As with the philosophers, there are two routes to God. One is the personal route to be undertaken by the Ṣūfī who has mastered the mystical path and who has undergone all the preparatory work which is necessary to achieve such an end. The other route is available to the ordinary believer, and it comprises an exacting obedience to the law and customs of religion, since this enables him to learn how to control himself and how to transform himself in such a way as to bring him as close to God as is possible.

Al-Ghazālī is not an easy thinker to categorize neatly, since he changed his mind over very important issues throughout his life. Some recent

commentators such as Richard Frank have argued that he should not be seen as an enemy of the philosophers since so much of his work incorporated philosophical principles, even those of Avicenna. Others such as Leaman have suggested that while this is true, al-Ghazālī was only using the appropriate technical language in order to try to contradict the particular kinds of philosophy with which he disagreed. The important thing to grasp about al-Ghazālī, frequently known as the 'Proof of Islam' in the Islamic world, is that his arguments against philosophy are themselves philosophical, and that he is far too sophisticated to reject ideas just because they appear to contradict faith. The brilliance of his style and the suggestiveness of his writings led to their continuing popularity in the Islamic world for the last 1000 years, and in translation his ideas also entered the Christian and Jewish worlds. It is ironic that this considerable philosopher should be credited with ending Peripatetic philosophy in the Islamic world. Others would regard him as showing how limited in scope that philosophy was, and take him to have cleared the ground for the development of Ṣūfī and other forms of philosophical thought more attuned to the religious life.

Averroes is the Latin name of Abū'l Walīd ibn Aḥmad ibn Muḥammad ibn Rushd, who was born in 520/1126 in Cordoba, Spain. He was a public official, serving as both royal physician and judge, but his political career was often difficult, and by the time of his death in 595/1198 he had suffered banishment to North Africa. He is an outstanding representative of the great cultural achievements of Muslim Spain, and produced philosophical works which came to resonate through the West for many centuries after his death. Averroes' reputation rests to a large degree on his many commentaries on Aristotle, a task he was set by the caliph of Cordoba, presumably during a period when the pursuit of philosophy was officially sanctioned. Averroes wrote commentaries on most of Aristotle's works then extant in Arabic, and he often produced long, medium and short commentaries on the same work. These had different purposes. The long commentary was a detailed exposition of the text suitable for those skilled in philosophy, while the middle commentary dealt with the main ideas but did not precisely follow all the text. The short commentaries allowed Averroes to express what he thought were the implications of Aristotelianism for contemporary issues, and so were much freer in structure. One of the interesting aspects of Averroes' approach to these Aristotelian texts is his attempt to get away from the Neoplatonic modes of interpretation and seek the ideas of Aristotle himself, not an easy task since the post-Aristotelian commentators had had

a great effect on how Aristotle was understood, and even how he had been translated into Arabic, in the Islamic world.

The idea that there are at least two routes to the truth, and that they both reach the same end, was misunderstood in the West, which understood Averroes through Latin and Hebrew translations as offering a 'double truth' theory, according to which something could be true in philosophy but false in religion at the same time. Averroes did think he could show that religion and philosophy are compatible, not contrary to each other. He was studied in Christian and Jewish Europe, and his commentaries in Latin were much used when people became concerned with trying to understand Aristotle. In the Jewish world his works were popular also, including his works on religion, since they contributed to understanding the precise relationship between faith and reason. By contrast, he rapidly disappeared in the Islamic world until the nineteenth century, when he came to be seen as the harbinger of an attempt to modernize Islam and its philosophy, and was taken up by the Islamic Renaissance movement.

The death of Averroes saw the end of Peripatetic (*falsafa*) thought in the Islamic world for many centuries, until its rediscovery during the Islamic Renaissance or *Nahḍa* of the nineteenth century. The thought of ibn Rushd came to have great importance in Jewish and Christian philosophical circles, initially because of his great skill as an interpreter of Aristotle. As we have seen, Aristotle was held to be the most important philosopher (the *shaykh al-raʿīs* in Arabic, or 'first master') in both Christian and Jewish philosophy, and Averroes was irreplaceable as a clear and consistent interpreter of Aristotle's views. The role of al-Andalus, Islamic Iberia, as a link between West and East was important here as well. In al-Andalus there existed three religious communities who lived in close proximity to each other and who of necessity had a good grasp of Arabic, which for a long time was the main language of scholarly activity and science, as well as of more prosaic activities. When Latin and Hebrew speakers wanted to know what Aristotle's theories were, they found it relatively easy to use translators from al-Andalus to transform the Arabic text of Averroes into Hebrew and Latin. The number of such translations which were commissioned shows how popular Averroes was as an interpreter, and how much demand there was for explanations of Aristotle's thought.

The return of Greek philosophy to the West represents an interesting paralleling of the original translations of Greek philosophy into Arabic in ʿAbbāsid Baghdad in the ninth century. Then these translations were

officially made, often via Syriac by Christians, while in the thirteenth century they were sponsored by Archbishop Raymond of Toledo and Frederick II of Sicily, often via Hebrew by Jews. Although the main direction of the translation movement was on the commentaries on Aristotle, these involved a good deal of Averroes' own philosophy, of course, and they led to the identification of Aristotle with particular controversial philosophical theses, such as the denial of the creation of the world out of nothing, the impossibility of individual existence after death and the relatively brisk dismissal of the role of theology and theologians.

The apparent views of Averroes quickly came to be condemned, and in 1270 and 1277 the bishop of Paris, Etienne Tempier, banned thirteen propositions which were identified with Averroes. The object of the criticism was Latin Averroism, the theory which came to develop as extreme fideism, the thesis that there are different logics involved in religion and philosophy, and that there is no difficulty in accepting that they contradict each other. This came to be known as the 'double truth' theory, which suggested that religion and philosophy could both be true, and yet result in contrary conclusions. Such a theory was held to be controversial, since it meant that religious truths could not be rationally justified, while philosophical truths are irrefutable.

Averroes continued to have his supporters and critics in the medieval period, and philosophers of the status of Aquinas, Albert and Bonaventure regarded him as important enough that they were obliged to deal with his views in their works. With the arrival of Greek texts in the European Renaissance one might have expected that the writings of Averroes would have fallen into obscurity, but the opposite was the case, since the renewed interest in the Greek Aristotle led to renewed interest in his interpreters, and in the Italian universities in the sixteenth centuries there was a revival of Averroism through the debates between Nifo (d. 1538) and Pomponazzi (d. 1525). The radical aspects of the thought of Averroes thus went on to play an important part in the philosophical curriculum of the West through the medieval and Renaissance periods, and provided the essential backdrop for the development of modern philosophy in the West.

Within the Jewish communities Averroes came to have an important place, in particular based on his accounts of the links between religion and reason. The translations which took place into Hebrew were often of his independent works as opposed to his commentaries, and so the discussions in Hebrew tended to be more accurate representations of Averroes' real philosophical views. Averroes continued to fashion the

curriculum of the Jewish and Christian intellectual worlds long after he fell into obscurity in the Islamic world. The effect of his thought was to prepare the way for the complete separation of religion and philosophy, which allowed Western philosophy to develop into its characteristic form of modernity. Although the topic of this book is Islamic philosophy, it is worth bearing in mind that much Islamic philosophy was actually practised by non-Muslims. (Actually, many of the opponents of *falsafa* would argue that Islamic philosophy is carried out exclusively by non-Muslims!) The last philosopher whose work we shall consider in some detail is the Jewish thinker Mūsā b. Maimūn (Maimonides). He was born in Cordoba in 1135 CE and was obliged to leave when the Almohads drove the Jews and Christians out of the city. In 1159 he went to North Africa, but Almohad influence at Fez proved too great, and he finally travelled to Cairo, where he died in 1204. Like so many of the *falāsifa*, Maimonides was a famous physician and author of medical texts, but he is still notable for his systematization and codification of the Jewish law. Our interest here is in the tantalizingly complex *Guide of the perplexed*, which he wrote for readers who had some knowledge of philosophy but who did not see how it could be made compatible with Jewish religious doctrine and law. Although Maimonides presents his arguments within the context of Judaism and Jewish law, he is so deeply imbued with the methods and style of the *falāsifa* that it is important to include him in a discussion of some of their central arguments. Maimonides' thought was strongly influenced by Aristotle and al-Fārābī, and apparently hardly at all by his contemporary Averroes, and some of his arguments represent the culmination of particular themes in *falsafa*. Like many of his philosophical predecessors, he took an active part in the political events of his time, becoming head of the Jewish community in Egypt and having influence which spread far wider. It is important to note too that he was not without detractors within his own community, and philosophy was under just as much suspicion among orthodox Jews as it was among orthodox Muslims.

When one considers the work of these highly active individuals in both their public and their intellectual lives, one cannot but be impressed by their ability to produce so much excellent philosophical (and other scholarly) argument and commentary. When one considers the instability of the times, the danger in which they were sometimes placing themselves and the vocal opposition from the '*ulamā*' and the generally conservative Muslim and Jewish communities, their devotion to philosophy must have been considerable. After all, in the case of most of these thinkers their adherence to philosophy was an obstacle rather than an aid to

their success in their communities. They could have achieved political influence in the state and intellectual influence within the fields of law, medicine and science, and theology without indulging in philosophical speculation which then lay them open to criticism and persecution. There are other thinkers whom we might have included from this period and who also produced interesting arguments, and where it is relevant their views will be briefly considered. In this book, though, we are largely concerned with al-Fārābī, Avicenna, al-Ghazālī, Averroes, Maimonides and of course Plato and Aristotle, because we can use them to follow through particular issues and arguments in a clear and coherent way.

What are these issues and arguments? There are a great number we might have considered, but we have limited ourselves to two broad themes. The first is to take up al-Ghazālī's challenge that the philosophers' adherence to three theses – that the world is eternal, that God cannot know individuals and that there is no bodily resurrection – constitutes opposition to Islam because they are entirely incompatible with basic religious doctrine. We shall see how these philosophical positions were built up by Aristotle, al-Fārābī and Avicenna, and how al-Ghazālī seeks to marshal philosophical arguments to disprove them and theological arguments to show they are equivalent to unbelief. Then we shall consider the counter-attacks of Averroes and the attempt to reconcile religion with Aristotelian metaphysics. Secondly, we shall concentrate on the conflict between reason and revelation in the area of moral philosophy, and especially over the issue of what constitutes human happiness. There exists in both these broad topics a very important hidden agenda, namely, the idea that the philosophers are not really being frank in their representation of their views, a point which al-Ghazālī and later commentators have pushed very firmly. This hidden agenda will be considered very carefully.

As far as the question of the *falāsifa*'s orthodoxy goes, it must be admitted that the absence of a priesthood in Islam meant that the question of which beliefs are heretical and which are acceptable could never be precisely settled. Belief in the divine character of the Qur'ān itself is a vital aspect of Muslim belief, and any belief or practice which is a candidate for acceptance by the community of Islam must be shown to be compatible with the Qur'ān, and sometimes this compatibility is very difficult to establish. This is hardly surprising given the very different societies which the Qur'ān eventually was called upon to regulate. Even looking for relevant sayings of the Prophet and his Companions to justify decisions became difficult without the large-scale manufacturing of such

sayings to suit particular purposes. This involved passing off invented sayings as genuine sayings in order to establish the Islamic credentials of a practice or belief. A good deal of the 'wisdom' which was popular in the Middle East and which derived from non-Islamic religions and traditions became incorporated into acceptable Muslim thinking by the attribution of appropriate attitudes to the Prophet and his Companions. This free-for-all was eventually brought to an end by a strict selection from among the great mass of supposed *ḥadīth* to arrive at an orthodox corpus. This tidying-up process also involved restrictions on independent reasoning applied to scripture and on the relatively free use of interpretation. Yet the suspicion often existed that the orthodox views which thinkers might express were not really their own views, the latter involving all sorts of heretical and innovative principles which their adherents were too cautious to admit.

When one looks at the writings of theologians and philosophers one cannot but notice the frequent references they make to the necessity of concealing aspects of their approaches to doctrine in order both to escape the wrath of the powerful (either rulers, religious authorities or the masses) and to leave the masses secure in their uncomplicated faith. When one considers the extreme breadth of varieties of Islam, ranging from mystical Ṣūfīs, highly legalistic Sunnīs, Ismā'īlis, Zaidīs and so on it is indeed remarkable that they all chose to describe their beliefs as Muslim. It is often emphasized by Muslims how little persecution there was of heterodox sects and of the main religious minorities in the territory of Islam, and indeed by comparison with the history of much of Christian Europe this is true. Nonetheless, persecution did exist for both philosophers and theologians and was a very real factor in their thinking, making them recognize the desirability of caution in the expression and direction of their views. This caution is certainly present in their writings, yet the texts we shall be considering in detail here are not diminished in their philosophical acuity by this factor. The issue of discretion should not, it will be argued, be taken to negate the philosophical interest of what the *falāsifa* and their opponents say, provided that this is expressed in the form of arguments which can be assessed and analyzed.

This concentration on philosophical arguments is the reason for the inclusion of al-Ghazālī and Maimonides. The former certainly did not regard himself as a philosopher, yet did think it important to master philosophy before criticizing it and presented his criticisms in clear and challenging arguments. Although he opposed Greek philosophy and its development in Islam he was a passionate advocate of logic, claiming

that Aristotelian syllogisms are already used and recommended in the Qur'ān, and even illustrating Aristotelian logic with examples from Islamic law.[7] He agrees with the philosophers that there are cases where concealment (*taqīya*) of the truth is no bad thing, that lying is not intrinsically wrong and may be employed if a praiseworthy end is unattainable by other means.[8] Although al-Ghazālī would no doubt have been horrified to find himself referred to as a philosopher, it is the interest and importance of his arguments which make it vital to include him in this book. A similar line of reasoning would justify Maimonides' place. Although not a Muslim, his arguments are excellent examples of *falsafa*. The topics he is concerned with are often the same as those of *falsafa* and he has a well-developed skill of summarizing neatly the philosophical debate up to his time. His arguments are interesting and mesh closely with those of the other thinkers discussed. He is very much part of the continuing debate which took place in the Islamic world in a philosophical form, a debate which more or less came to an end with the death of Averroes. This is not to say that there was no more philosophy but that interesting and novel arguments in Aristotelian form were no longer produced.

Commentators on Islamic philosophy have to avoid many pitfalls. One obstacle is the tendency to assess *falsafa* in terms of its afterlife in Latin in the medieval Christian world. Greek philosophy was initially introduced to that world via translations of Arabic texts into Hebrew and then into Latin, or directly from Arabic to Latin, and these translations formed an important part of the disputes and metaphysics of significant Christian thinkers. But often they were incompletely understood and used for argumentative purposes which were foreign to their origins. Sometimes there is an explicit or implicit assumption that Islamic philosophy is only important insofar as it throws light on Western Scholastic philosophy. This sort of approach is firmly rejected here.

Another pitfall is to over-emphasize the oblique view which the *falāsifa* had of Plato and Aristotle. As we have seen, they were obliged to study their works in translation and with the accretion of some Neoplatonic texts passing as Aristotelian. In addition, the philosophical curriculum which was passed on to them came from a wide variety of different and conflicting sources, with an approach to the interpretation of Aristotle very different from that which exists today. Some commentators

[7] Especially in his *The correct balance*, trans. R. McCarthy, *Freedom and fulfillment*, pp. 287–332.
[8] Al-Ghazālī, *Iḥyā' 'ulūm al-dīn* (The renaissance of the sciences of religion), ed. 'Irāqī (Cairo, 'Uthmānīyya Press, 1933), XXIV.

conclude from this that the *falāsifa* really failed to make contact with genuine philosophical controversies as the Greeks knew them, and that their thought is only interesting from the point of view of the history of ideas as opposed to philosophy itself. Those who accept this view would then be involved far more in an historical analysis of *falsafa* than in an analysis and evaluation of the arguments themselves. I shall criticize this approach and suggest that the arguments themselves are interesting and important, and that they do succeed in dealing with crucial issues in Greek philosophy. The addition of Islamic issues to Greek philosophy makes for a fascinating combination and is well worth philosophical as well as historical attention.

But, it is important to avoid yet another pitfall, which is to exaggerate the importance of Islamic philosophy to such an extent that it is seen as the catalyst for much modern Western thought. Although *falsafa* is well worth studying, it is not philosophically very creative. The philosophical distinctions it took from the Greeks were not transformed radically to construct entirely new systems of thought. Yet these distinctions were intriguingly combined with issues in Islamic theology and medieval religious life via subtle arguments, and some of these are the subject of this book. No doubt the arguments presented here by me have their own pitfalls, but hopefully they will avoid those criticized above.

A good example of how philosophical terms came to be created in Islam occurs in the case of the term which came to represent 'being', in Arabic '*wujūd*', or 'existence'. The verbal root *wjd* means 'to find' (*wajada*) and is one of the main words used to represent 'being' in Arabic attempts to replicate Greek ontology, with the present passive *yūjadu*, and the past passive *wujida*, leading to the nominal form *mawjūd*. *Al-mawjūd* means 'what is found' or 'what exists', and a derivative, *wujūd*, is the abstract noun which ended up being used to represent existence. *Wujūd* is often used to represent the copula, the English word 'is' where this is used as a predicate, and it is also used to represent existence. This ambiguity was spotted right at the start of the use of this term for these purposes by al-Fārābī, who points out that the statement *Zayd yūjadu ʿādilan* (Zayd is just) can be understood purely syntactically without having any implication that Zayd actually exists (*Ḥurūf* p. 126). By contrast, in his *Commentary on the De Interpretatione* he refers to the use of *wujūd* as an attribute to make a claim that something actually exists. But he is generally clear that existence is not part of the essence of a thing, and it is not implied by its essence either. Existence is never anything more than an accident.

Al-Fārābī uses the expressions *muṭlaq* and *wujūdī* to describe Aristotle's notion of the assertoric proposition in his *Prior Analytics*, where *wujūd* obviously represents 'belonging'.

By the time of ibn Sīnā, a crucial distinction was explicitly made between *wujūd* and *māhiyya*, where the former represents being in the sense of existence and the latter essence or quiddity. He spoke of God as the *wājib al-wujūd*, the only being whose essence is to exist, by contrast with everything else which is contingent. The realm of existence can be divided up into the *wājib al-wujūd bi-dhātihī*, necessary being in itself, and everything else which follows from it. The idea that there are essences or concepts which then need something to bring them into existence was adopted enthusiastically by many of the *mutakallimūn*, and they discussed the particular kind of existence which is appropriate to God, a very different kind than that which is applicable to his creatures. In this vein al-Ghazālī describes God as 'Being without qualities' (*al-wujūd bi-la māhiyya*) (*TF* 251). He was able to fit the account of being provided by ibn Sīnā into his Ash'arite and occasionalist metaphysics, since ibn Sīnā accepts that something is needed to move a thing from being nothing more than an idea to becoming an actual existent, and this role is that traditionally assigned to God.

Manuals of logic from the fourth/tenth century regarded *wujūd* as possessing an essence that the mind can comprehend without apprehension. This point is developed at great length by al-Suhrawardī, who argues that the immediacy of existence can be linked via presence (*ḥuḍūr*) and represent unmediated knowledge of reality.

This point is developed by ibn Rushd, who is more explicit on the function of *wujūd* as indicating a truth claim. Existence may be understood as attributing a predicate to a subject, an accident being applied to the substance which serves as the subject of the statement (*TT* 224). He formalized a powerful line of opposition to ibn Sīnā's views on being, however, since ibn Rushd argued that existence has priority over essence. Ibn Rushd accepted the logical distinction between existence and essence, but criticized its application to ontology. It is not just a matter of existence being brought to an essence which allows us to talk of the essence as being actualized, since the real existence of the essence is part of the meaning of the name, and so is a condition of our use of the essence in the first place. If the existence of a thing depended on the addition of an accident to it, then precisely the same would be the case for existence itself, leading to an infinite regress. Al-Suhrawardī took this to

show that essence is prior, since if existence were a predicate of essence, essence has to exist itself before any further question of existence can be raised. In his *ishrāqi* approach, existence is nothing more than an idea, and one can describe reality in terms of lights with different intensities.

Mullā Ṣadrā rejected this argument and replaced it with *aṣālat al-wujūd*, the priority of existence. He argued that existence is accidental to essence in the sense that existence is not a part of essence. But there is no problem in understanding how existence can itself exist as more than a thought, since existence is an essential feature of actuality itself, and so no regress is involved. A development of the concept is provided by Mullā Ṣadrā, who uses the term *wujūdiyya*. He argues that the *wujūd* in everything is real, except for the abstract notion of being where this is an entirely mental abstraction. It provides scope for making a more abstract reference to *wujūd*, as in the expression *mawjūdiyyat al-wujūd*, but he maintains the distinction between the *wujūd* which is a mental abstraction and the *wujūd* which is real. The former tends to be identified with the notion of universality, and when *wujūd* is used in its widest sense Mullā Ṣadrā claims that it is used *bi-l-tashkīk*, not in a univocal manner. Everything which exists has something in common, since otherwise we should say that they do not exist, and what they have in common is not exactly the same attribute, but something which they share analogously. By contrast with al-Suhrawardī, what everything shares is some degree of existence, rather than some degree of light. Like his predecessors he distinguishes between the copulative use of *wujūd* (*al-wujūd al-rābiṭ*) and real being (*al-wujūd al-ḥaqq*). In the case of the former, what is connected by *wujūd* are ideas in the mind, not necessarily anything real. What is it, then, that the different uses of *wujūd* have in common, which manages to distinguish them from claims concerning non-existence? The answer for Mullā Ṣadrā is that all uses of *wujūd* imply either mental or real existence.

He argues that existence is the basic notion of metaphysics, not essence. He accepts that we can think of a concept existing in reality, and only existing in our minds, but this does not show that existence is merely an attribute which is tacked on to the concept's essence in the case that it actually exists. When something exists and yet we think of it as not existing we are thinking of the same thing, our name refers to the same object, and so existence comes first, and its precise characterization later. Even things which only exist in our minds are existing things, and we then need to say what they are like.

In the second part of this book, an important issue in both Islamic theology and philosophy will be discussed, namely, whether an action is

right because God says it is right or whether God says it is right because it is right. This controversy provides a good opportunity to outline some of the features of the different views of the reason – revelation relationship in Islamic philosophy, and to explore the implications for political philosophy. There will also be an account of approaches to the interpretation of Islamic philosophy which take a different direction to that of this book. In the first part the agenda has been very much established by the attacks of al-Ghazālī on Islamic philosophy, in particular:

> In the three questions . . . they were opposed to [the belief of] all Muslims, viz. in their affirming (1) that men's bodies will not be assembled on the Last Day, but only disembodied spirits will be rewarded and punished, and the rewards and punishments will be spiritual, not corporal . . . they falsely denied the corporal rewards and punishments and blasphemed the revealed Law in their stated views. (2) The second question is their declaration: 'God Most High knows universals, but not particulars.' This also is out-and-out unbelief . . . (3) The third question is their maintaining the eternity of the world, past and future. No Muslim has ever professed any of their views on these questions.[9]

In the first part we shall see what arguments the Islamic philosophers could put up to disprove al-Ghazālī's subtle arguments in these, and other, areas of importance.

[9] Al-Ghazālī, *Munqidh*, trans. McCarthy, pp. 76–7.

PART I

Al-Ghazālī's attack on philosophy

CHAPTER 1

How did God create the world?

Religious texts which are designed to serve as the very basis of faith rarely incorporate philosophically or scientifically exact statements concerning the creation of the world, and Islam is no exception here. The Qur'ān makes several quite definite claims about the nature of the creator of the world and of the manner of its creation, yet these statements do not point unambiguously in just one direction. In the Qur'ānic description of God there is no doubt according to the Ash'arites that he is represented as superior to all his creatures, that he is the only God and that there is nothing in the universe upon which he is dependent. He is self-sufficient and has no need of human beings; he could do away with us and replace the world with something else without as a result ceasing to be himself. He need not have created the world, and now that it is created he could ignore it if he wanted to. We are told that God did create the world, that he is the origin of the heavens and the earth, that he created night and day, the sun, the moon and all the planets. He brings about the spring which reawakens nature and gives to gardens their beauty. Fortunately, for human beings, God designed nature and all his creation for our benefit, although he need not have done so, and all he 'requires' in return is prayer and adoration. Many theologians would want to add to these claims the clear assertion which they find in Islam that there was a time when God was and the world was not, and a later time when God was and the world was too. This rather unexciting view was the cause of great controversy between philosophers and theologians, and also within those groups themselves.

Let us first look briefly at how some of the problems concerning the nature of creation arose. We are told, for instance, that creation took six days. We might want to know whether anything existed before the world was created and out of which it was created. We might wonder whether time started with the first of those six days or whether it already existed before God created the world. If one looks carefully at the Qur'ānic text

itself there seems to be no definite answer to these sorts of problems. The language which is used there is not precise enough to come down on one side or another with any certainty when discussing creation. There are interpretations which suggest that God created the world in a free manner out of nothing. One of the Arabic terms frequently used for creation, *khāliq*, means 'to bring about' or 'to produce', and there are examples of its being used in a specifically divine sense to describe how God creates both the form *and* the matter of existence. In the orthodox Ash'arite commentary of al-Rāzī, for instance, for us even to talk about determining (*taqdīr*) or creating and producing (*takhlīq*) something is to speak loosely or metaphorically. God is regarded as having a qualitatively distinct intelligence from ours, and he does not even have to go through a process of reasoning to work out what he is going to bring about, nor have something already in existence for him to use as material for his construction. He can just do it. In a strict sense, then, only God can properly be said to bring into being. But even al-Rāzī has to admit that there is an interesting ambiguity in the meaning of *khāliq*, since in some Qur'ānic references it can mean either *muqaddir* (who determines) or *mūjid* (who brings into existence). If the creator merely determines the character of the universe then the suggestion could well be that he was working with previously existent matter which he at some point organized in a certain way. There are indeed some Qur'ānic passages which could be taken to point to the existence of something before the creation of the world. There is a suggestion, for example, that before the creation, heaven and earth were nothing but smoke. In the Arberry interpretation of the Qur'ān passage XLI,10–12 we are told: 'Then He lifted Himself to heaven when it was smoke, and said to it and to the earth, "Come willingly, or unwillingly!" They said, "We come willingly." So he determined them as seven heavens.'[1] One could take this text to imply that the smoke itself was created by God. But Averroes takes it in another sense:

> if the apparent meaning of Scripture is searched, it will be evident from the verses which give us information about the bringing into existence of the world that its form really is originated, but that being itself and time extend continuously at both extremes, i.e. without interruption . . . Thus the theologians too in their statements about the world do not conform to the apparent meaning of Scripture but interpret it allegorically. For it is not stated in Scripture that God was existing with absolutely nothing else: a text to this effect is nowhere to be found. (*FM* 56–7)

[1] Quotations from the Qur'ān will, unless otherwise specified, be from A. J. Arberry, *The Qur'ān interpreted* (Oxford, Oxford University Press, 1964).

Even texts which might seem to point obviously in the direction of creation being *ex nihilo* can, with a little effort, be interpreted otherwise. For example, there is the interesting passage where Muhammad is attacking unbelievers who accuse him of authorship of the Qur'ān and so deny its divine provenance, where he says: 'Let them bring a discourse like it, if they speak truly. Or were they created out of nothing? Or are they creators? Or did they create the heavens and earth?' (LII,34–5). The Arabic expression *min ghayri shay'in* could indeed mean 'from nothing', and that reading would cohere quite well with the subsequent rhetorical question. It would then imply that the heavens and earth were created from nothing on the Qur'ānic view. Yet this is far from being the only interpretation of that passage. The Arabic could also mean 'from nothing' not in the sense of 'out of nothing' but in the sense of 'by nothing' or without purpose or aim, and such a reading would be neutral with respect to the nature of what if anything preceded creation. It is worth noting, too, that there are passages which could point to a different account of creation than the *ex nihilo* doctrine, in particular 'And it is He who created the heavens and the earth in six days, and his throne was upon the waters' (XI,9), a verse readily seized upon by Averroes to 'imply that there was a being before this present being, namely the throne and the water, and a time before this time, i.e. the one which is joined to the form of this being, namely the number of the movement of the celestial sphere' (*FM* 56–7).

Why were the *falāsifa* so eager to snatch every hint in the Qur'ān that creation might not be *ex nihilo*? What does it matter whether time is finite and commenced with the creation of the universe? If creation *ex nihilo* is in many ways the most obvious reading that the relevant Qur'ānic texts can be given, why did apparently orthodox Muslims (or at least writers who tried to pass themselves off as orthodox Muslims) suggest that what seems to be the uncomplicated religious view is unsatisfactory? Certainly this point was taken up with alacrity by thinkers in other religions. In the first of the twelve errors which Giles of Rome found in Averroes, the Christian claims that the Muslim thinker must be condemned 'Because he reviled all law, as is clear from Book II of the *Metaphysics* and also from Book XI, where he reviles the laws of the Christians . . . and also the law of the Saracens, because they maintain the creation of the universe and that something can be produced out of nothing.'[2] As we shall see, Maimonides also explicitly claims that Judaism insists on creation

[2] Giles of Rome, *Errores philosophorum*, ed. J. Koch and trans. J. Riedl (Milwaukee, WI, Marchette University Press, 1944); in R. Mandonnet, *Siger de Brabant* (Louvain, 1908), pp. 8–10.

ex nihilo.[3] But it is not clear that Islam requires creation *ex nihilo* as in these other religions. There is no doctrine of the precise age of the world in Islam and it might seem quite acceptable, although hardly common, to adhere to some other account of its creation such that perhaps it has always existed. And yet, as we have already seen al-Ghazālī felt that Islam was so strongly committed to the thesis of the world's creation out of nothing that philosophers who held different views were not just mistaken but had defined themselves as unbelievers and so were not Muslims at all.[4]

Given that so much religious opinion in all three religions of Islam, Judaism and Christianity was in favour of creation *ex nihilo*, why did the *falāsifa* set out to present a different model of the world's generation? One possible explanation is that they just rather slavishly followed Aristotle on this topic. Aristotle came to the issue after a considerable period of controversy in Greek philosophy with radically different opinions being offered by different philosophers. Some of the arguments which the *falāsifa* give in opposition to the creation *ex nihilo* doctrine are indeed Aristotelian, while others are Neoplatonic or even theological. It is worth having a look at the model which the *falāsifa* constructed of the relationship between God and the world to see why they could not accept the *ex nihilo* doctrine and yet tried to encompass orthodox Islamic doctrines at the same time.

Al-Fārābī and Avicenna constructed the main framework of this philosophical analysis of God and the world which ran into so much theological opposition. They start off by claiming that God is the only uncaused thing in the universe. Everything other than God in the universe is brought about by some cause external to itself. One of the ways in which they distinguish between things that exist is to talk about entities which have existence as part of their essence and those which do not. Something which can only exist if it is brought into existence by something else is clearly contingent and dependent upon something else. As Avicenna put it: 'the existence of something which is dependent upon something else which actually brings it into existence is not impossible in itself, for if it was it would never come into existence. It is not necessary either, since if it was it would not be dependent upon something else, and we have to conclude that it is possible in itself.'[5] Avicenna adds: 'What is necessary is

[3] *GP* II,13, p. 281.

[4] Especially in his *al-Munqidh min al-Dalāl*.

[5] Al-Fārābī, *Philosophische Abhandlungen*, ed. F. Dieterici (Leiden, Brill, 1890), p. 67, but in fact by Avicenna.

what cannot be assumed not to exist without a contradiction. The possible, by contrast, can be assumed not to exist, or to exist, without any sort of contradiction at all.'[6] This distinction between necessity and contingency is designed to contrast God, the creator of everything in the world, and what he has created. If God had himself been created then there would exist something even more powerful than God. If we could think of God not existing then his existence might be regarded as some kind of accident, sharing the status of the objects which we see in the world and which we can quite easily imagine not to exist. In calling God necessary and his creation contingent the suggestion is that we are presented with a theological system which contrasts an independent and self-sufficient deity with his product, a contingent and dependent universe.

But we should be careful about accepting this suggestion. For Avicenna immediately complicates his initial distinction between contingency and necessity to talk about two types of necessity. The first type, which we have already examined, is where 'a contradiction is involved if it is assumed to be non-existent'. If we assume, for the sake of the argument, that God does not exist, then we are involved in a contradiction, since existence is so much a part of the definition or meaning of God that denying his existence is rather like questioning whether a rectangle has four sides. Nothing is a rectangle if it does not have four sides; similarly, nothing is God if it does not exist. Avicenna's other kind of necessity is more complicated. Something 'is necessary, provided a certain entity other than it is given . . . while considered in its essence it is possible, considered in actual relation to that other being, it is necessary, and without the relation to that other being, it is impossible'.[7] Avicenna is talking here about a type of being which relies upon something else to bring it into existence, but given that cause, it exists necessarily. This is an unusual distinction to make. The standard approach would be to distinguish possible beings which can, but do not, exist and possible beings which can, and do, exist, and a necessary being is that which cannot not exist by contrast with both types of possible beings. Avicenna is not interested in the standard approach at all. Indeed, he would claim that what has been called 'the standard approach' is rather misleading. He argues that a possible being is only possible if it *must* exist, while accepting of course its contingency upon the causal power of something else. He claims that those things which are necessary through the influence of

[6] Ibn Sīnā, *Najāt: Kitāb al-najāt*, ed. M. Kurdi (Cairo, Sa'adah Press, 1938), p. 224.
[7] *Ibid.*

something else are exactly what he means by the things which are possible in themselves.

His reasoning takes this form. A thing which is contingent and which is regarded separately from its cause either can or cannot exist. If one says that it cannot exist, then one is claiming that it is impossible, that it involves some sort of contradiction. If one claims that it can exist, then it must either exist or not exist. If it does not exist, it would be impossible. Avicenna returns to this point time and time again. In a chapter entitled 'What is not necessary does not exist' he argues:

> Thus it is now clear that everything necessary of existence by another thing is possible of existence by itself. And this is reversible, so that everything possible of existence by itself, if its existence has happened, is necessary of existence by another thing; because inevitably it must either truly have an actual existence or not truly have an actual existence – but it cannot not truly have an actual existence, for in that case it would be impossible of existence.[8]

When Avicenna talks about the status of a thing which is not necessary in itself he comments: 'The thing, when looked at in terms of its essence, is possible but when examined in terms of its links with its cause, is necessary. Without that nexus it is then impossible. But if we think of the essence of the thing without linking it with anything else, the thing itself becomes seen as possible in itself.'[9]

It might seem that Avicenna is contradicting himself here when he considers the results of thinking of the relationship between an entity and its causes no longer holding. His argument is quite plausible, though. He is suggesting that it is possible to think of something like one's coat without thinking of how it was made and where the materials etc. came from. But it is not possible to think of that coat as having no relation whatsoever to what preceded it in existence. Every contingent thing is related to something else which brings it about; the only thing which is not thus related and which can be thought of as completely independent is God who is necessary in himself. Insofar as it goes, then, Avicenna's distinction does not involve a contradiction.

It is clear that for Avicenna a contingent thing can only exist if it is brought into existence by something else, and we would get an infinite regress of such causes were there not in existence a thing which is necessary in itself and which therefore does not require a causal push into

[8] *Ibid.*, p. 226; trans. G. Hourani, 'Ibn Sīnā on necessary and possible existence', *Philosophical Forum*, 6 (1974), pp. 74–86.

[9] Ibn Sīnā, *Najāt*, ed. Kurdi, p. 226.

existence. Now, many views of God and his creation would interpret this relation as one of God considering which of the possible states of affairs he could bring into existence if he is to fulfil his aims in constructing the world. God can select any possible state of affairs as desirable and then bring it into existence in the world. But this is not Avicenna's view at all. Contingent things are obliged to wait before they exist in a kind of metaphysical limbo which is entirely independent of God's will. All God can do is determine whether contingent things will exist or not; he cannot affect their possibility. This has interesting consequences. Avicenna distinguishes between possible material and possible immaterial substances. The former are essentially as they are before God's causal powers get to work on them; were they to be otherwise, on Avicenna's familiar argument, they would not be possible because 'whatever enters existence can be either possible or impossible before it exists. Whatever cannot exist will never exist, and whatever can exist has a possibility which exists before it is actualized . . . And so matter exists before everything what comes into existence.'[10] God's control over even existence is severely circumscribed with regard to the possible immaterial substances which are dependent upon him for their existence and not necessary in themselves, but for whom there was no time when they were not in existence. They are necessary but only necessary through another thing, God, and they exist in tandem with him. In so far as the contents of the material world go, though, God is confined to willing the possible to exist. He cannot will the possible to be existent *and* possible. He is rather in the position of the customer in a restaurant who has no choice as to what he can order. He can and indeed must order the fixed menu, and he has no control over the selection which is set before him.

So far we have been talking about three types of being. These are: (i) that which is necessarily existent in itself; (ii) that which is necessarily existent by reason of another but possibly existent by reason of itself; and (iii) that which is possibly existent by reason of itself without being necessarily existent by reason of another. As we have seen, members of the third class become rather difficult to distinguish from members of the second class. There is a class of things that are necessary without having a cause of their being necessary and another class of things which are necessary through a cause, this cause being a member of a former class. Examples of beings which are necessarily existent by reason of

[10] *Ibid.*

something else are 'combustion', which is 'necessarily existent . . . once contact is taken to exist between fire and matter which can be burned', and 'four' which is 'necessarily existent . . . when we assume two plus two'.[11] These examples suggest that the distinction between the kinds of being which we have called (ii) and (iii) above is rather artificial. One of the ways in which Avicenna characterizes necessity is in terms of 'indicating something which has to exist'.[12] The necessarily existent in itself is that which has certainty of existence by reason of itself, while the necessarily existent through another would be that which has certainty of existence through another. So in the end there is no real difference between necessary existence through another and actual existence for anything other than God. We might put Avicenna's argument in this way. So long as something is only possible, there is nothing in existence which can move it from non-existence to existence. The possibly existent can only become actually existent if something decides to shift it from the substitutes' bench to the playing area, as it were. Whenever that something is present and sets a series of events in train, the consequent existence of the possible being is inevitable. It will certainly exist and thus is necessary. So when the possibly existent actually exists, its existence is necessary, and when it does not exist, its existence is impossible. All that Avicenna can mean by talking about a class of things which are possibly existent without being necessarily existent is that, if we abstract from all external conditions, the class of possibly existent things can be *conceived* since they are always possibly existent.[13] If we are to divide up the actual existents we need only two categories, that of the necessarily existent by reason of itself, where an impossibility results if we assume it not to exist by reason of itself, and the necessarily existent by reason of another, where an impossibility or contradiction also results if we assume it not to exist, but this time only because it is assumed that something else exists.

To try to become clearer concerning the philosophical motives for this conflation of necessity and possibility we need to look at some aspects of the work of Aristotle. He pointed out that in ascribing a certain power or ability to a thing it is necessary to determine the limits of this power. We do not say that a thing can lift weight as such, but that it can lift a certain weight or range of weights. If we say, then, that something is capable of existing and of not existing, we are bound to add the length

[11] *Ibid.*, p. 225.

[12] Ibn Sīnā, *Shifā': Ilāhiyyāt* (Healing: Metaphysics), ed. G. Anawati and S. Zayed (Cairo, Uthmānīyya Press, 1960). p. 36.

[13] See *ibid.*, p. 38; and *Najāt*, ed. Kurdi, pp. 226, 238.

of time in each case. If the time in question is infinite (and Aristotle does indeed argue that time is at least potentially infinite), then we are committed to saying that something can exist for an infinite time and also not exist for another infinite time, and this, he claims, is impossible. In a slightly different approach, Aristotle sometimes views potentiality as a sort of natural tendency. There is certainly something rather odd about saying that something has a natural tendency which is never fulfilled, even during an infinite period of time. Aristotle does indeed present an argument to suggest that what never happens is impossible.

This Aristotelian approach has been taken up by a commentator on his philosophy, Jaako Hintikka, and called rather appropriately the 'principle of plenitude'.[14] Hintikka argues that for Aristotle something is called necessary if it always was and always will be so and he interprets the sense of possibility relevant here as equivalent to saying that what is possible has happened or will happen at some time. A familiar logical notion is that of worlds which represent alternative arrangements to our existing world and which philosophers call logically possible. Clearly, Aristotle's apparent view that every possibility will in due course be realized runs counter to such an approach.

Aristotle's arguments for his thesis are not convincing. For example, he claims: 'It is not allowable that it is true to say "this is possible, but it will not be"' (*Met.* 1047b 3f.), and he reasons in this way. What is possible can conceivably occur. Imagine it occurring then but assume it will not occur; so imagining it to happen contradicts our assuming it will not happen. He gives the rather misleading example of saying we can do an impossible task but never will. He produces a more plausible argument when distinguishing between something like a cloak and things which like the stars exist for ever and are for ever active (*De Int.* 19a 9–18). Since the stars exist for ever, for the whole of time, possibilities cannot remain for ever unactualized. The sun and stars, if they could stop, would, given the whole of time, indeed stop. So the dual possibility of being and not being does not apply to what is for ever active. Aristotle gives another example when he suggests that if something were at all times sitting, it would be incapable of standing, and that which always exists is incapable of perishing (*De Caelo* 281b 3–25). His argument is not applied to the transient things of this world like cloaks but only to everlasting things and their eternal qualities. Yet it is not obvious why his analysis should not be extended to transient things. For although

[14] J. Hintikka, *Time and necessity: studies in Aristotle's theory of modality* (Oxford, Oxford University Press, 1973), ch. 5.

a cloak which has been eaten by a goat does not continue to possess the capacity to be burnt, it does for ever possess the negative property of not being burnt. Aristotle does accept that things can continue to possess negative properties after they have ceased to exist (*Cat.* 13b 26–35: *De Int.* 16b 11–15). If in the whole of time it will not be burnt, there should, on Aristotle's reasoning, be no time left at which a capacity to be burnt could be actualized, and so the cloak should be incapable of being burnt. It must be admitted that Aristotle carefully limits his principle of plenitude to eternal things – 'In everlasting things, there is no difference between being possible and being the case' (*Phys.* 293b 30) – and yet it is very interesting for our discussion of the notions of possibility and necessity that it is feasible to think of his arguments being extended to things which are not everlasting. Maimonides is quite clear on the distinction which Aristotle wants to make:

> When a species is said to be possible, it is necessary that it exists in reality in certain individuals of this species, for if it never existed in any individual, it would be impossible for the species, and what right would one have for saying that it is possible? If, for example, we say that writing is a thing possible for the human race, it is necessary then that there be people who write at a certain time, for if one believed that there is never any man who writes, that would be saying that writing is impossible for the human race. It is not the same when possibility is applied to individuals, for if we say that it is possible that this child writes or does not write, it does not follow from this possibility that the child must necessarily write at one particular moment. Therefore, the claim that a species is possible is not, strictly speaking, to place the species in the category of possibility but rather to claim that it is in some ways necessary.[15]

We shall see later the significance of this approach when we come to look at Maimonides' analysis of the topic of the creation of the world.

Avicenna's account of the nature of beings results in a good deal of necessity seeping into the world of transient things, with the principle of plenitude being extended to cover everything other than God. Now, the connection between the doctrine of necessity and the model of the creation of the world takes a particular form in Avicenna, one which originally stems from Plotinus. The notion of creation as emanation is not always described in the same way by Avicenna, but it is possible on the whole to give an account of its essential features. God is identified as the necessary existent and is one and simple. This necessary existent or being does not produce other things as though intending them to come into

[15] Letter to Samuel ibn Tibbon, cited in S. Munk 'Commentary' *Le guide des Egares* (Paris, A. Franck, 1861), p. 39.

existence, however, for then he would be acting for something lower than himself and would thereby introduce multiplicity into the divine essence. Rather, the first effect, a pure intelligence, necessarily proceeds from his self-reflection. This first intelligence which results from God's coming to know himself is an example of a being which is necessary through another, the necessary existent, but which unlike its originator is only possible in itself. It is the introduction of this intelligence that introduces multiplicity into the system which is extended once it considers three facts of existence. Firstly, it considers God's existence as necessary in itself. Then, it considers its own existence as a necessitated being. Lastly, it recognizes that its own existence is only possible and very different from the existence of its creator and originator. These three acts of knowing bring about the existence of just three things, maintaining the principle that from one only one proceeds and can proceed. The existence of another intellect, a soul and a sphere (the sphere of the heavens) are necessitated. Then we get a series of triads which explain the creation of yet more beings. The second intelligence replicates a similar process of thought as the first and so leads to the production of a third intellect, another soul and a sphere, this time the sphere of the fixed stars. The process continues via the thoughts of the successive intellects and results in the spheres of the planets, the sun and the moon, each with its intellect, soul and body, only coming to an end with the sublunary world, the world of generation and corruption in which we live. The tenth or last intelligence is the agent intellect, which does not have a soul and the body of a sphere, but rather produces human souls and the four elements of our world. We shall see later the significance of the agent intellect in Islamic philosophy.

Avicenna had the problem of reconciling an eternally existing world and an eternally existing God without having the perfect simplicity and unity of God destroyed by contact with the multiplicity of material things. His strategy was to interpose many levels of spiritual substances, the intelligences, between God and the world of generation and corruption to insulate the divine unity from multiplicity. This model of the development of the universe is hardly close to the traditional religious view. There is a big difference between producing something out of nothing and producing something by emanation from one's thinking. In the latter case there is a resemblance between the agent and the product, which is not to be found at all in the former case. Avicenna asserts that the necessary existent emanates the world via its emanation of the first intelligence, and that choice or deliberation has no part to play in its decision. After

all, God's will is identical to the knowledge of the best universal world order. Once the process of emanation has been set in train there is no place for God's intervention in the course of nature. Indeed, while the One of Neoplatonic thought and the necessary being in Avicenna's model can exist without the products of its thought, all that this means is that it can be conceived to exist by itself, i.e. that it is transcendent. Yet how can this be reconciled with the existence of the immaterial beings as necessary and eternal, with the fact that the intelligible world which has emanated from the One cannot not exist nor can it exist in a different form – it is necessarily produced by the One and produced in such a way that it must have a certain form? As al-Fārābī puts it:

> The first exists in and by itself, and it is part of its essence that it can lead to the existence of what is outside it. So that essence from which existence emanates onto other things is part of its definition . . . from which the existence of something else is produced. This cannot be separated into two separate things, one of them being something it brings about in itself, the other being that which brings about the existence of something else.[16]

So there are things which God brings into existence which cannot possibly not exist and which cannot be other than they are. The gap between God and his creation starts to look as artificial as the gap between beings which are necessarily existent by reason of another and beings which are possible in themselves and not necessitated by anything else.

This is a very different picture of creation and of God's relation to the universe than that implicit in the Qur'ān. To take an example which comes this time not from a verse relating to the creation of the world but rather dealing with the world's possible destruction, we are told that: 'All things perish, except His face' (XXVIII,88). The idea that God can, if he wants, bring his creation to an end is an important expression of the power that God has over the world, something of a theme of the Qur'ān. At one point it says: 'On the day when We shall roll up heaven as a scroll is rolled for the writings; as We originated the first creation, so We shall bring it back again – a promise binding on Us; so We shall do' (XXI,104). Yet the heavens and the world are regarded as eternal by the *falāsifa*. They proceed necessarily from the divine essence and eternally persist in their continuous motion. Avicenna is aware of this problem and provides an orthodox interpretation of XXVIII,88 when he says: 'He dominates, i.e. he has the power to bring about non-being and to deprive of existence those

[16] Al-Fārābī, *Al-siyāsā al-madaniya* (The political régime), (Hyderabad, Dā'irah al-Ma'ārif, 1927), p. 18.

essences which in themselves deserve annihilation. Everything vanishes except he.'[17] It might be possible to argue that in this verse 'all things' refer to the contents of the universe rather than the universe itself, so that it is taken to mean that only what is found in the realm of generation and corruption goes to destruction. However, this would not cover the verse which refers to the rolling up of the heavens. It might then be argued that it is part of the essence of the necessary and eternal things that they go to destruction, and that eternal things can be destroyed if motion is brought to an end, since on an Aristotelian view of time it is only motion which makes time possible. If there is no longer any sense in talking about time then there would no longer be any point in talking about eternity. On such a view 'eternal' would mean something like 'existing until the end of time'. But this would be a difficult view for an Aristotelian to put forward, given the Aristotelian arguments for the infinity of time.

As one might expect, then, Avicenna is hardly enthusiastic about this line of argument. He claims quite confidently that there is no great problem for his approach coming from XXVIII,88:

> The existence of something which is contingent on a cause outside itself is not impossible, for if it were it could not possibly exist. Nor is it necessary, for then it could not be contingent on something else for its existence. The existence of such a thing is possible in itself. With respect to its cause, it is necessary, and with respect to the absence of the cause it is impossible. In itself it has no capacity except to be ultimately destroyed, but with respect to its cause it is necessary – 'All things perish, except his Face.'[18]

The Qur'ānic verse is then taken to distinguish between God and those things which are caused to exist by God. God will not be destroyed, but he could destroy everything else in the universe. Yet the sense which Avicenna gives to this claim is the rather weak explanation that nothing could exist were God not to exist also, that without God the possible things which only require some agent to bring them to existence would not be actualized and so in that sense could be thought of as impossible and destroyed. This seems a rather special sense of destruction. Since God is the 'principle of existence' of those things which are necessary through another, i.e. through him, he at first sight should have no difficulty in bringing their existence to an end. It might seem that all that God would need to do to make everything go to destruction is to will such an event. Yet for Avicenna it follows from the nature of God and

[17] Al-Fārābī, *Philosophische Abhandlungen*, ed. Dieterici, p. 83, but in fact by Avicenna.
[18] *Ibid.*, p. 67, but in fact by Avicenna.

the nature of the possible things in the universe that they will be arranged in a certain optimum way; God could not just decide arbitrarily to change things around. It would be to go against his nature. On this sort of view the Qur'ānic passage which explains that everything goes to destruction except God could either be interpreted as a metaphorical way of expressing God's uniqueness and self-sufficiency and not be regarded as literally true at all. Or it could be taken as the claim that were it to be a desirable state of affairs for the world to cease to exist, then God would have pre-arranged such a state of affairs. As we shall see in the following section, for us to talk about something ceasing to exist is regarded by the *falāsifa* as rather more accurately described as its changing into something else: 'from this point of view the philosophers do not regard it as impossible that the world should become non-existent in the sense of its changing into another form . . . But what they regard as impossible is that a thing should disappear into absolute nothingness' (*TT* 86). Yet even if it is possible to accommodate Qur'ānic references to the destruction of the world within Islamic philosophy it remains true that in the philosophical account of creation God does not seem to have much work to do. God can only create what is possible, and there are beings which are possible and conceivable independently of the act of creation, and so of God. This is neatly put by al-Shahrastānī (d. 547/1153) thus:

> The essential qualities of substances and accidents belong to them in themselves, not because of any connection with the creator. He only enters . . . in connection with existence because he tipped the scales in favour of existence. What a thing is essentially precedes its existence, i.e. the basic qualities which make it a particular thing. What a thing has through omnipotence is its existence and actual instantiation.[19]

Once God has tipped the scales in favour of existence, what has he left to do? If the possible things emanate from him necessarily, at however remote a stage, what control has he over them, what knowledge has he of them, what choice does he have in selecting one thing over another for existence? The difficulties involved in answering these questions in a manner acceptable to Islam suggests that a very different, albeit not necessarily irreconcilable, model of the connection between God and his creation is being presented.

[19] Al-Shahrastānī, *Kitāb nihāyat al iqdām fi 'ilm al kalām* (The 'Summa Philosophiae' of al-Shahrastāni), ed. and trans. A. Guillaume (London, Oxford University Press, 1934), p. 155.

AVERROES V. AL-GHAZĀLĪ ON THE CREATION OF THE WORLD

By far the most brilliant of the opponents of *falsafa* was al-Ghazālī. Studying his writings is a pleasure because of both his clear and polished style and his skill and fervour in argument. He took considerable pains to master expertly the reasoning which had led the philosophers to what he saw as erroneous and theologically dubious conclusions. What gives his arguments their importance is that he attacked the philosophers on their own ground, arguing philosophically that their main theses were invalid on logical grounds. For example, in his book *The incoherence of the philosophers* he sets out twenty propositions which he attempts to disprove, seventeen of which constitute innovation or heterodoxy (in his opinion), and three of which actually reveal what he calls unbelief, an even stronger charge. These three propositions concern the denial of the resurrection of the body, the fact of God's knowledge of particulars, plus the doctrine of the eternity of the world. What is important, though, is not his charge that the *falāsifa* present un-Islamic views, but that they go awry in their arguments:

> It is in the metaphysical sciences that most of the philosophers' errors are found. Owing to the fact that they could not carry out apodeictic demonstration according to the conditions they had postulated in logic, they differed a great deal about metaphysical questions. Aristotle's doctrine on these matters, as transmitted by al-Fārābī and ibn Sīnā, approximates the teachings of the Islamic philosophers.[20]

The philosophical doctrine which al-Ghazālī spends a great deal of time discussing in *The incoherence of the philosophers* is that of the eternity of the world. He argues both that the *falāsifa* are incapable of demonstrating that the world is eternal and that there is no way of reconciling belief in (the Muslim) God with adherence to the world's eternity. In charging those who adhere to the eternity doctrine with unbelief he was making a very strong claim, namely, that that doctrine is so inconsistent with Islam that no one can accept it and remain genuinely part of the community of Islam. Al-Ghazālī is especially careful in making this claim: he was very critical of the practice of some writers in his time as well as of his predecessors of making wild and unjustified accusations of unbelief against opinions and individuals that merely differed from their own on rather peripheral issues.[21] The line of argument which runs right through

[20] Al-Ghazālī, *Munqidh*, trans. R. McCarthy, p. 76.

[21] See al-Ghazālī, *Faysal al-tafriqa bayn al-Islām wa l-zandaqa* (The clear criterion for distinguishing between Islam and godlessness), trans. R. McCarthy, *Freedom and fulfillment*, pp. 145–74.

al-Ghazālī's attack on the *falāsifa* is that belief in God is equivalent to belief that God's existence makes a real difference to the way things are in the world. He claims that there is a serious drawback in the theories of the philosophers in that they seem to want to allow God only a subsidiary role in the eternally organized and determined universe which they defend. He brings the same sort of charge against them for their apparent denial of resurrection and God's knowledge of particulars – these two denials also remove God and his power and knowledge from the world in a way that is obviously problematic for a Muslim. As we have seen so far, the *falāsifa* are not averse to appending their philosophical claims to passages from the Qur'ān, which one might think would be embarrassing given their adherence to theories which are, at least superficially, unsympathetic to the meaning of such religious passages. Al-Ghazālī is hinting that the *falāsifa* use these religious verses as a sort of camouflage for their real views, pretending that their doctrines are quite in accordance with religion when they know that they are quite otherwise. This approach to the *falāsifa* has been highly influential in interpreting their work even today, and al-Ghazālī has posed a methodological question to which we shall return throughout this book. It must be emphasized at the outset that al-Ghazālī is asking a vitally important question about the actual arguments of the *falāsifa*, namely, what difference does the introduction of God into a philosophical theory make? If it makes no difference at all, then surely it is just an attempt to mislead readers when religious vocabulary and Qur'ānic passages are used as though they fitted into philosophical arguments when quite plainly they do not.

The interchange between al-Ghazālī and Averroes is interesting for the subtle argument it often involves and the close relationship which the argument always bears to specific controversial issues. An intriguing feature of the discussion is that Averroes (in his *Incoherence of the incoherence*) is in effect fighting with one hand tied behind his back, since he is often critical of the approach to philosophy which al-Ghazālī criticizes, that of al-Fārābī and Avicenna. Averroes was especially critical of aspects of Avicenna's approach to modal concepts such as possibility and necessity. He argued against the combination of the 'possible in itself' and 'necessary through another', which he saw as a mistaken doctrine. He suggests that we should differentiate clearly between the possible and the necessary (*TT* 146), and argued that Avicenna's position is too heavily influenced by the theologians. Averroes also distanced himself to a degree from what he could perceive as non-Aristotelian (i.e. Neoplatonic) philosophical concepts in an attempt to return to the 'real' Aristotle for

his philosophical inspiration. It must be admitted, though, that he did use a good deal of both Avicennan and Neoplatonic theory in his defence of philosophy, and this was inevitable given the fact that the burden of al-Ghazālī's attack lies heavily on those aspects of philosophical thinking in Islam.

When it comes to considering the creation of the world, al-Ghazālī was repelled by the philosophical conception of the universe as eternal and brought about by emanation, with an eternal matter continually taking different forms. He accepts the view which he regards as traditional that the world was created by God out of completely nothing a finite time ago, and that both the matter and the form of the world were brought into being by God in this original act. It is worth pointing out perhaps that the Neoplatonic model of the relation between God and the world embodies all kinds of features which might well be *prima facie* attractive to mystics. For example, the large number of striking analogies to express the relationship between God and his creation, the stress on the generosity of the One and its self-reflection, the emergence of beings which in turn generate other beings and indeed eventually everything, and especially the power which is ascribed to *thought* as such, all these are principles dear to much mystical thinking. It is difficult to believe that al-Ghazālī, with his well-known fascination for mysticism, was not initially attracted to philosophy as a rational basis for his religious beliefs. When he came to the view that philosophy was a false god he rejected it with all the fervour of an apostate who still sees what is compelling in the old set of beliefs. His *The incoherence of the philosophers* is on the surface a cold and technical work, yet under the surface it is possible to detect the passion with which he abandons an immensely attractive way of looking at the world. Al-Ghazālī is driven to represent the arguments of the philosophers in close detail, replying himself to the criticisms which others might make of their main points before he presents the argument which he regards as the coup de grâce. His almost obsessive concern with accurately describing the arguments of his opponents is evidence of the love-hate relationship which he has with philosophy. It is often regarded as ironic that one of his books, *The intentions of the philosophers*, which sets out clearly the main doctrines of *falsafa*, should have given Christian Scholasticism the impression that he was a *failasūf* himself. It might well be argued that this 'mistake' is highly revealing.

The starting point of al-Ghazālī's approach to the *falāsifa* is to bring out how difficult it is to reconcile with Islam the central tenets of their view of God and the world. A view which emphasizes that from one can

only come one, that has at its apex an entity whose deliberations are limited to his own essence and who can only metaphorically be described as having a will or choice in his actions is not only dubiously compatible with Islam but also, al-Ghazālī argues, philosophically questionable. He insists that only an argument which stresses creation in the Islamic sense can allow for the existence of an effective Islamic God who actively determines what, where, how and when contingent states of affairs take place. He is not necessitated in his creating but considers choices; no general principles direct his choosing in one direction rather than another.

Al-Ghazālī clearly has a very different conception of God and the universe than the *falāsifa*. He defends his ideas carefully and slowly, developing a piecemeal critique of *falsafa* which I shall attempt to discuss and assess in some of its detail. The First Discussion of his *The incoherence of the philosophers* discusses four proofs which he considers to be the best of those presented by the philosophers in defence of the eternity of the world. The First Proof deals with some of the problems in making sense of the notion that the world came into existence suddenly. On the *falāsifa*'s understanding of Aristotle, every change which takes place must be determined to occur by some cause which is external to it. This is the case not just for physical objects but for states of mind as well. So presumably if God wills a change to take place, some external cause must have led him to that decision. If the world as a whole had come into existence rather than existed eternally this would present a difficulty. There would then have been nothing outside God's mind to influence him into making a decision about the existence of the world, since nothing but God yet existed. Now, we know from our experience that the world is already existing and so we can conclude that this sort of problem did not prevent it from existing. In that case the world must surely have been in existence all the time, an assertion which once it is accepted sidesteps neatly the problem of having to explain how the first change which created the world came about. Given the model of creation through emanation, the world continually emanates from the One and it is of the nature of the One to produce what it thus produces and how it thus produces. The main difficulty which the philosophers see is in explaining the first change, the creation of the world, on the creation *ex nihilo* doctrine. If God at one time existed without anything else, before he created the world, what could have persuaded him to create the world in the first place? There was nothing around in existence to affect him and he could have remained perfectly constant and unmoved. We know, though, that there is a world and we believe that God created

it, and we can only make sense of this fact if we admit that his creation is eternal.

Al-Ghazālī is aware that he has to defend the possibility of the world coming into existence at a certain time. He repeats the Ash'arite view that God could easily have willed eternally that the world should come into existence at a certain time in the future if he wanted to. After all, according to the Qur'ān, all that God has to say is 'Be, and it is' (III,42). Why could he not postdate, as it were, the existence of the universe? The world could then come into existence at a particular time in the future. The traditional objection to such a possibility by the philosophers is that there must be some reason why someone who wills something which he is capable of performing at a particular time desists from the performance. If he wants X and can get X, why should he wait a certain length of time after the performance *could* be carried out to satisfy his want? Surely there cannot be any obstacle which impedes an omnipotent God from carrying out his purpose? As al-Fārābī put it:

> What delays his making it is the obstacle to his making it, and the non-success which he thinks and knows will occur, if he makes the thing at that time is the obstacle which prevents his making it . . . If there is no cause of non-success, its non-existence is not preferable to its existence, and why did it not happen? . . . if he were personally the sole cause of the success, the success of the action should not be retarded in time, but both should happen together, and therefore when the agent is sufficient in himself alone for something to come into existence from him, it follows that the existence of the thing is not later than the existence of the agent.[22]

The Ash'arite response to this sort of objection is to press the analogy between natural and conventional norms and to suggest that God could make the creation of the world contingent on certain conditions being satisfied in the future, in the same way that a man can divorce his wife in Islam as from a particular time in the future. Averroes' objection to this example is that it is invalid to relate natural and conventional causality closely in this way. It is no doubt true that we can determine the legal nature of the future given the legal validity of certain procedures, yet we cannot delay natural events until a future time in the same way. This objection to al-Ghazālī is hardly apposite since, as we shall see later, he adheres to a theory of causality which identifies it with God's commands, and he would probably agree that the analogy of natural and

[22] Al-Fārābī's *The fuṣūl al-madanī of al-Fārābī* (Aphorisms of the statesman). ed. and trans. D. Dunlop, University of Cambridge Oriental Publications, 5 (Cambridge, Cambridge University Press, 1961), p. 66.

conventional causality does not work when applied to human beings, but would be highly appropriate when applied to God, the aim of the analogy in the first place. Perhaps a stronger objection that Averroes might have used would be to ask what *motive* God could have for delaying the creation of the world. After all, there is nothing in existence with him to influence him and one might have thought that if he was interested in creating the world he would just create it and not spend a period of time at rest after having willed the world to be created. This is certainly the point of al-Fārābī's argument above. After all, the use of a legal device as a result of which a man can divorce his wife in the future has as its purpose some practical effect. For example, a wife may be warned that if she does something objectionable in the future then she will from that time immediately be divorced. What possible practical consequences could God's postdated creation of the world have? There is surely no context available in which he would need to threaten or warn anyone or anything, since there is before the creation, on al-Ghazālī's view, absolutely no one and nothing except God himself.

Al-Ghazālī challenges the claim that even the divine will cannot produce a delayed effect. Why *must* there be an obstacle to explain such a phenomenon? What justification have philosophers in ruling it out completely? He argues for the possibility of such a delayed effect by presenting an intriguing account of how the divine will might well work. If we return to the previous point, that the philosophers are dubious about the possibility of a delayed effect since there seems to be no conceivable motive for the delay, we can see that there is also a problem with the creation of the world at one particular time rather than at another particular time. If God did create the world at a certain time, then he decided to create it at that time and not at another time, assuming that he was not acting haphazardly. Yet before anything exists except God what reason could God have for creating the world at one particular time at all? There exists nothing to motivate him in this respect except his thoughts, and why should he select one time in preference to another time? Al-Ghazālī is impatient with this sort of objection to the creation of the world at one finite time:

> as to your affirmation that you cannot imagine this [a will causing a delayed effect] do you know it by the necessity of thought or through deduction? You can claim neither the one nor the other. Your comparison with our will is a bad analogy, which resembles that employed on the question of God's knowledge. Now, God's knowledge is different from ours in several ways which we acknowledge. Therefore it is not absurd to admit a difference in the will . . . How will

you refute those who say that rational proof has led to establishing in God a quality the nature of which is to differentiate between two similar things? Besides, we do not even with respect to our human will concede that this cannot be imagined. Suppose two similar dates in front of a man who has a strong desire for them but who is unable to take them both. Surely he will take one of them through a quality in him the nature of which is to differentiate between two similar things . . . Everyone, therefore, who studies, in the human and the divine, the real working of the act of choice, must necessarily admit a quality the nature of which is to differentiate between two similar things. (*TT* 21)

Averroes replies sharply to this argument:

But this is an error. For, when one supposes such a thing, and a willer whom necessity prompts to eat or to take the date, then it is by no means a matter of distinguishing between two similar things when, in this condition, he takes one of the two dates . . . His will attaches itself therefore merely to the distinction between the fact of taking one of them and the fact of leaving them altogether; it attaches itself by no means to the act of taking one definite date and distinguishing this act from the act of leaving the other . . . he gives preference to the act of taking over the act of leaving. (*TT* 23)

This response is effective. After all, the importance of the choice in such a case does not consist in the quality of one date as against the other, but the fact that there is a clear choice between taking at least one of the dates and remaining hungry. There is then an obvious reason for selecting either of the dates, but not for selecting one rather than the other. Al-Ghazālī wants to establish the point that it is the will which makes choices among equivalent things and distinguishes what is otherwise identical even in the case of human beings. This sort of example will not make his point. It is quite easy to redescribe his example to ensure that there is a choice and a reason for making the choice, too, which is far from arbitrary.

Al-Ghazālī broadens his argument to suggest that it shows that there could be alterations to the structure of the universe which would be neither better nor worse, and so there is no specific reason for God's creation of one particular type of universe rather than another. He considers the objection to creation which asks what could have motivated the creator to create the world at one time rather than another. As we have seen, he replies that although there was nothing about the time when the universe was created which demanded that creation must take place at that time (which would detract from God's power), nevertheless an act of pure will on the part of the creator chose that time. Al-Ghazālī appreciates that the philosophers who defend eternity may well argue

that will consists in the selection of the preferable of two alternatives, and when things are similar in every respect, no property can distinguish one from the other. Why, then, could al-Ghazālī not argue successfully that the fact that the universe has one form rather than another is evidence of such an act of pure will? After all, God could presumably have created the universe without roses in it. He obviously decided at some stage to create the universe *with* roses, but not a great deal hangs on this decision. Is this not evidence for the pure act of choice which al-Ghazālī is looking for? These sorts of examples will not really do since the philosophers could argue that some apparently arbitrary features of the universe such as its size and shape, for example, are optimal and so were preferred over alternatives, if we want to speak in the language of creation by God. An argument can be presented to suggest that those properties of the universe are better than different properties, and so such an example cannot be used to suggest that God's arbitrary choice is possible.

Al-Ghazālī does actually discuss two phenomena variations in which apparently manifest no difference that might serve as a basis for the choice of one from among several alternatives. These are the differences in the directions of the movements of the spheres, and the selection of a pair of definite points in the outer sphere to serve as poles around which the heavens revolve. With respect to the latter, he argues that since all parts of the sphere are of the same character, nothing could render any one pair of opposite points preferable to another as a location of the poles. This would suggest that even within the principles of Aristotle's description of the world it is necessary to talk about a decision having been taken which was entirely arbitrary and not determined by the merits of the alternatives. As far as the direction of the heavens is concerned, why should we accept that the movement of one of the celestial spheres to the west and the others to the east represent the (only) optimal arrangement? Al-Ghazālī argues that the same effects would surely be achieved in a universe that moves in the reverse direction, with the highest sphere moving to the east rather than to the west. In that case the present arrangement of these movements is entirely arbitrary. If this is plausible, even the philosophers must agree that there are instances in the universe of the instantiation of one alternative rather than another quite similar state of affairs, and so they should not object to creation by arguing that nothing could prefer one moment for creation over another. Exactly the same determining factor which selected the location of the poles and the direction of

the movements of the spheres could similarly have selected a time for creation.

Averroes' reply to this objection is rather lame (and like many of his less satisfactory arguments quite long). He suggests that a scientist would be able to say precisely why the world has its specific features and why it would not work properly, or as well, as an integrated system were the changes which al-Ghazālī considers conceivable to take place. Indeed, he even refers to two Qur'ānic verses (XVIII,103–4 and VI,75) which stress the importance of seeing the world as a divinely constructed unit, organized in the wisest and best possible manner. Averroes basically suggests that al-Ghazālī has set up a problem which a competent scientist, working on appropriately Aristotelian premisses, could quite easily answer. But al-Ghazālī has identified a very significant weakness in Aristotelian conceptions of the universe which Averroes' bluster fails to disguise. Happily, though, Averroes can also argue, this time more plausibly, that where it is a question of God considering whether to create or not to create the world there is not a question of a choice between similar alternatives, but rather the possibility of creating life and all that goes with it as against not acting at all. In so far as indifferent alternatives occurred in the construction of the world, then God might be assumed to have done the divine equivalent of tossing a coin to decide which alternative to accept. Again, if it is a better state of affairs for a world such as ours to exist rather than not to exist, then presumably the longer it exists the better. This would give weight to the arguments that God created the world from eternity, that it came into being with him.

Al-Ghazālī produces a second objection to the proofs concerning the eternity of the world. The philosophers admit that an eternal being can cause temporal beings; after all, that is how God brings things about in the world. Their argument for the existence of a first mover is based on the problems in conceiving of an infinite chain of causes which would otherwise have to be regarded as responsible for the phenomena with which we are familiar. The chain of causes, going from more specific to more general causal explanations, must end somewhere if it is not to be infinite. At the end of this causal chain there is a being necessary in itself, uncaused by anything prior to it and eternal. As we have seen, the model of creation which is employed is that of emanation, so that there is a continual creation and activity. Al-Ghazālī's point is that if the philosophers accept that there is such a cause for each state of affairs that takes place in time, are they not then compelled to admit at the same time that there is such a cause for the world as a whole? In other words, why

do they reject the idea that God brings into existence the entire world as a whole at any time he wishes? Averroes claims that al-Ghazālī achieves this conclusion by a sleight of hand. The eternal being does not directly cause any temporal event. Every such event has an *accidental* cause which occurs in an infinite series of preceding temporal events. But the entire eternal series is caused *essentially* by an eternal being acting upon the whole. Such a being is an essential cause in the sense that it brings about its effects simultaneously with its own existence, which is just the opposite of the temporal priority which holds in the case of accidental causes. The eternal being is not, then, a cause of temporal beings directly, but only in so far as they are members of the whole series of beings. This is intended to show that God does not act directly in time. The distinction which Averroes makes here between accidental and essential causes may seem rather artificial, but it has an interesting and persuasive Aristotelian basis. Essential or substantival change is, according to Aristotle, very different from qualitative or quantitative change. A piece of bronze is essentially changed into a statue of Apollo when it is finished, and the change is completely instantaneous. It occupies no time at all. This is obviously an appropriate model upon which to base God's creation of the world; his work is rather like that of completing a sculpture in that an entirely novel substance is brought into existence, and there was no period over which this change stretched. It just happened, and did not happen in time.

Al-Ghazālī skilfully sets about attacking the way in which the philosophical account of creation has difficulties with the phenomenon of change. The eternal being on that account requires some medium to affect the temporal realm of generation and corruption. The most distant heaven was selected since as a whole it is in eternal circular movement, yet its particular movements are changing all the time and so are temporal. Al-Ghazālī's comment on this theory is sharp and to the point:

> Is this circular movement temporal or eternal? If it is eternal, how does it become the principle for temporal things? And if it is temporal, it will need another temporal being and we shall have an infinite regress. And when you say that it partially resembles the eternal, partially the temporal, for it resembles the eternal in so far as it is permanent and the temporal in so far as it arises anew, we answer: Is it the principle of temporal things, because of its permanence, or because of its arising anew? In the former case, how can a temporal proceed from something because of its permanence? And in the latter case, what arises anew will need a cause for its arising anew, and we have an infinite regress. (*TT* 36)

Averroes makes a brief rejoinder which leaves us still in the dark as to how a movement which remains at all times the same can bring about changes in the world. Al-Ghazālī wants to attack the philosophers on this point not just to reveal how shaky some of their arguments are but also to show how they fail to account for the influence of a personal God on the events of our material world. These events are members of an 'accidental' chain if the philosophers are correct, and thus very remotely connected with God.

The Second Proof of the philosophers concerns the nature of time. Al-Ghazālī is interested here in attacking the use which the *falāsifa* make of Aristotle's notion of time. For Aristotle, time is not an absolute independent framework in which all events can be identified. He connects the notion of time very closely to change. Time is regarded as the number of motion with respect to before and after; in other words, time is one movement measuring other movements by comparing the number of times the one takes place while the others take place. He is interested in the way in which we make the temporal judgments before and after, earlier and later, among events, and how our criteria for assessing periods of time involve comparing the changes we are concerned with in terms of other changes we use as standards or measures. And of course for Aristotle the fact that there are changes in the world is just a fact which cannot be denied. At the very basis of our temporal judgments lies the regularity and reliability of the movement of the heavenly bodies. Why is it relevant to al-Ghazālī and the philosophers to determine the question of the finitude or eternity of time? What is the significance of the answer to this question for the nature of the existence of the world? On Aristotelian premisses, the existence of time presupposes the existence of movement and so of a moving being. Since time is the measure of movement, if it can be shown that time is eternal, it would follow that a moving being, i.e. the world, is eternal. And indeed Aristotle argued that there must be eternal and continuous change.

Al-Ghazālī applies the same sort of technique as when dealing with the First Proof. He tries to adhere to Aristotelian principles while at the same time arguing that they do not inevitably lead to the conclusions which the philosophers draw from them. He bluntly claims that the issue is whether time and a moving world are both eternal or whether time and a moving world are both finite. If time is closely related to movement in the way the philosophers argue, this might appear helpful to someone like al-Ghazālī who is going to argue that when God created the first movement, he at the same time brought about time. The first moment

of time existed when God set the universe in motion. Before this point God existed with nothing else:

> Time is generated and created, and before it there was no time at all. The meaning of our words that God is prior to the world and to time is: He existed without the world and without time, then he existed and with him there was the world and there was time . . . the world is like a singular person; if we should say, for instance, God existed without Jesus, then he existed with Jesus – these words contain nothing but, first, the existence of an essence and the non-existence of an essence, then, the existence of two essences, and there is no need to assume here a third essence, namely time, although imagination cannot desist from assuming it. But we should not heed the errors of the imagination. (*TT* 38)

He thus argues that before the creation of the world God existed, but not in time, and if we wonder what it means to say that *before* the creation there was no time, if we wonder how we can use temporal terms to refer to a non-temporal period, then al-Ghazālī suggests that we are being misled by imagination. It is not clear, though, why he thinks imagination is involved here. The opponent of his view would presumably argue that there exists a *conceptual* connection between the notion of change and the notion of time such that we cannot make sense of talking about the one without implicitly mentioning the other. Al-Ghazālī suggests that time just pops up in people's minds when they are thinking about change as though it were an idea merely *associated* with change.

With his usual knack for criticizing the crucial Aristotelian premiss, al-Ghazālī is challenging Aristotle's claim that the world is eternal since no moment could be the first moment of the world's existence. Aristotle argues in this way:

> We say that change is the actuality of the changeable thing in so far as it is changeable. It is necessary therefore that for each change there are things capable of being changed . . . Further these things necessarily either come to be – at some time they do not exist [al-Ghazālī's view] – or they are eternal. If therefore each of the changeable things came to be before that change another change must have come to be, according to which the thing capable of being changed or changing came to be. The supposition that these things existed always but unchanged appears unreasonable immediately, but even more unreasonable if one goes on to investigate the consequences. For if, among the things that are changeable and capable of producing change, there will at some time be something first producing change and something changing, while at another time there is nothing but something resting, then this thing must have previously been changing. For there was some cause of rest, rest being a privation of change. Therefore before this first change there will be a previous change. (*Phys.* 251a 9–28)

Aristotle's argument is that there cannot be a beginning or end of time in that a 'now' is not a period of time but a limit which brings one time period to an end and starts another. There is thus time on both sides of it. There could not be a first 'now' with no time before it, nor a last 'now' with no time after it, and so no beginning or ending of time. The existence of time is dependent upon someone measuring changes. For an event to occur at some time it is necessary that it stands in a determinate relation to the present.

For Aristotle the world is eternal and uncreated, and he takes this to mean that if one were to measure a period of time which covered all events in the world's history, that period would be infinite. Aristotle regards such a measurement as impossible, since although we can measure some of the events of history, there will always be more events to be measured than we can accomplish. One cannot measure the time elapsed in the entire previous history of the world. How can we tell, then, that the world is eternal? Were we to be able to measure the world, then presumably we could say that we had arrived at an eternal measurement, and so could justifiably claim that we had discovered that the world is eternal. For the world to be eternal, it must have existed at all times, or, there was no time at which the world did not exist. Yet since time is the measure of change, and the motion of the heavens provides the standard measure of change, were there to be no world and so no change, neither would there be any time. Thus we can arrive at the conclusion that the world is eternal by putting together the indubitable evidence of our senses and the valid rules of logical reasoning, namely, that there is change in the world and there could not logically be a first change.

Al-Ghazālī tries to test this theory of the eternity of the world in a stronger way than just trying to present examples of language which are temporal and yet, he argues, do not presuppose the presence of time. He goes on to bring in the nature of space. He claims that there is a useful analogy to be drawn between space and time, pointing out that if the philosophers admit that space is finite since it is a property of body which is finite they should also accept that time is finite, since it too is a property of finite movement. He suggests that the proof of the impossibility of an infinite extension applies just as clearly to space as to time. As Averroes puts it: 'al-Ghazālī treats the quantity which has no position and does not form a totality, i.e. time and motion, as the quantity which possesses position and totality, i.e. body. He makes the impossibility of endlessness in the latter a proof of its impossibility in the former' (*TT* 43–4).

Al-Ghazālī has asked a very interesting question, again, at least initially, from within an Aristotelian system of thought. Time is regarded as a measure of change and one measures a particular change by selecting a motion which is uniform and by using it as a standard against which the time of a given change is measured. The best measure of change for Aristotle is regular circular motion such as the eternal motion of the heavenly bodies. However, a body in motion clearly passes over a magnitude of space and so if time is infinite and time is measured by motion, why does not the infinity of time imply the existence of an infinitely extended magnitude? A basic distinction between space and time in Aristotle is that the latter is dependent for its existence on a soul that is measuring changes, whereas this is not the case for the former. The sort of reply which Averroes produces to this challenge is to appeal to what Aristotelians regard as just facts or obvious. A major argument for the finitude of space is that were it otherwise the observable and regular properties of the heavens and the theory of natural motions would become impossible. An infinite space would also presumably involve an infinite chain of causes of a given thing, and so we would not be able to know the explanation of that thing, since the mind cannot grasp all the contents of an infinite series. We are limited beings and not gods, and we cannot grasp that which is without limits. Yet we can know the causes of a thing, we can produce explanations as to why things happen as they do in the world, and so they must be finite. If the properties which made up a substance were infinite in number then we could not know the substance. Yet we can know what substances are and so they only contain a finite number of properties in their definitions. We cannot understand the world unless it is a finite place which contains equally finite things, and it is clear that we do understand the world. Averroes is reduced in his wordy response to al-Ghazālī's attacks to repeating these Aristotelian principles and arguments.

The Third Proof which al-Ghazālī considers is by far his shortest discussion and a very interesting one. He sets out to attack the theory of potentiality, which was so popular among the *falāsifa*, and its links with the notion of an ungenerated universe. The argument starts by claiming that the existence of the world before it actually existed, were there to be such a state of affairs, was always possible. It must have been always possible since now it is actual. Indeed, since it has always been possible it must always have been actual too, and so the world is eternal and not finite. This seems a rather strange argument, and one way of unravelling it is to agree with Van Den Bergh that an unstated assumption which makes

the argument plausible is that the world as a whole is ungenerated.[23] Everything ungenerated is eternal, since by definition it can never go out of or come into existence. The world is possible and we know that it exists at some time, and it follows that if it exists at some time it must have existed at every time, as it is ungenerated. This interpretation of the philosophical argument is implausible. For one thing, al-Ghazālī might well be expected to spot such a suspect hidden assumption and challenge it. The 'hidden assumption', or rather the principle which is in this argument accepted and not defended is the principle of plenitude which attempts to establish a conceptual connection between the eternally possible and the actual. In his comments on this proof al-Ghazālī takes the notion of possibility in a logical sense, so that the realms of possibility and actuality need not be the same. This accounts for the fact that Averroes and al-Ghazālī make statements which fail to engage with each other at all – they are using different notions of possibility. Averroes suggests that:

> The man who assumes that before the existence of the world there was one unique, never-ceasing possibility must concede that the world is eternal. The man who affirms, like al-Ghazālī in his answer, that before the world there was an infinite number of possibilities of worlds, has certainly to admit that before this world there was another world and before this second world a third and so on ad infinitum, as is the case with human beings, and especially when it is assumed that the perishing of the earlier is the necessary condition for the existence of the later. (*TT* 58)

But what al-Ghazālī would mean by saying that before the world was created all sorts of possibilities of world could be conceived is that it is perfectly possible to think about all these alternative worlds. What Averroes means by such a claim is that if these worlds are genuinely possible, then something must (eventually) necessitate their existence, and so they must have existed in a sort of series before our world was created, rather in the way that previous generations of human beings have led to our generation. What is ironic in this discussion is that al-Ghazālī seems to be using a contrast between possibility and actuality which was originally established by Aristotle, while Averroes is identifying those notions in a way which seems close to the thinking of some of the Ash'arite thinkers in holding that possibility is coextensive with reality, that the possible is what has come to be.

The Fourth Proof extends in much more detail the arguments for the eternity of the world that rely upon some version of the principle of

[23] S. Van Den Bergh (trans.), *Averroes' Tahāfut al-tahāfut* (London, Luzac, 1978), 'Notes', p. 43.

plenitude. The Aristotelian argument upheld to some degree by the *falāsifa* is that while the world as a totality is ungenerated and uncorrupted, the parts of the world are in continual flux. Change is only possible if matter acquires different forms and thus new things are brought about. Matter must always exist, it is the necessary substrate of all change and so it cannot itself be subject to change and merely *possible*. It must itself be necessary (although not necessary in itself – that description is reserved for God) and cannot require other matter to affect it causally in order for it to exist, since otherwise there would be an infinite regress. As Averroes approvingly adds to al-Ghazālī's formulation of the philosophers' arguments:

> The summary . . . is that everything that becomes is possible before it becomes, and that possibility needs something for its subsistence, namely, the substratum which receives that which is possible . . . Since it is impossible that the possibility prior to the thing's becoming should be absolutely without substratum, or that the agent should be its substratum or the thing possible . . . there only remains as a vehicle for possibility the recipient of the possible, i.e. matter. Matter, insofar as it is matter, does not become; for if it did it would need other matter and we should have an infinite regress. Matter only becomes in so far as it is combined with form. (*TT* 59–60)

A vital aspect of Aristotle's notion of matter is that of a substratum or subject in the analysis of change. He argued that there must be a persistent element in change. In many cases of change where something grows or moves we ordinarily identify a subject undergoing the change. We talk about the same subject changing from one state to another. Where there is substantival change, where one substance goes out of existence (a pint of beer) and another comes into existence (the growth of a person), Aristotle claims that the generation of one substance involves the destruction of another. What persists in this sort of case is not a particular subject of a given form, as with a moving ball changing from being in one place to being somewhere else, but the matter that was elsewhere. Previously it was in the beer, and now it is transferred into human growth. There are three main aspects of any change: a substratum, a form and a privation. The substratum is the subject that is changing, the form is the end towards which the change is directed, and the privation shows that the form was not present at the beginning of the change. Had the privation been present then there could not have been any change in the first place. The relation between the beginning and the end of a change is that of contraries or opposites so that, for example, any change in the colour of something

from white has to be either to black or to some compound of white and black.

Al-Ghazālī's aim is to attack the attempt to establish the existence of an eternal matter whose whole rationale is the impossibility of something coming from nothing. He seeks to defend the notion of something coming from nothing when God so decides. The first objection which al-Ghazālī presents is very much based upon his use of a logical rather than 'Aristotelian' notion of possibility:

> The objection is that the possibility of which they speak is a judgment of the intellect, and anything whose existence the intellect supposes, provided no obstacle presents itself to the supposition, we call possible and, if there is such an obstacle, we call it impossible and, if we suppose that it cannot be supposed not to be, we call it necessary. These are rational judgments which need no real existent which they might qualify. (*TT* 60).

His first suggestion is that if possibility presupposes a substratum then so does impossibility, yet 'impossibility has no real existence, and there is no matter in which it occurs and to which it could be related' (*TT* 60). A perfect example of the way in which al-Ghazālī and Averroes fail to come into contact on this issue emerges with the latter's reply to this attack. He entirely agrees with al-Ghazālī:

> Indeed the impossible demands a substratum just as much as the possible does, and this is clear from the fact that the impossible is the opposite of the possible and opposite contraries undoubtedly require a substratum. For impossibility is the negation of possibility, and if possibility needs a substratum, impossibility which is the negation of this possibility requires a substratum too, e.g. we say that . . . the presence of opposites at the same time in the same substratum is impossible . . . i.e. in reality. (*TT* 60–1)

Averroes is clearly understanding by 'possibility' and 'impossibility' something very different from al-Ghazālī. The latter divorces these modal notions from 'real existence' while the *falāsifa* as we have seen closely connect them.

A similar problem affects al-Ghazālī's next objection to the philosophers' theory of possibility. He argues that if possibility presupposes the existence of matter, it would be impossible to conceive of certain properties, like colour for example, as being possible when they are unrelated to matter. That is, we can think of *red* without necessarily thinking of red *things*. This is a familiar form of philosophical argument which is based upon a thought experiment which establishes the presence or absence of a conceptual connection between ideas. If it is possible to conceive

of a colour without at the same time conceiving of a coloured thing then, al-Ghazālī suggests, this shows that there is no essential connection between properties and their material substrate, 'And this shows that the intellect in order to decide whether something is possible need not admit an existing thing to which the possibility can be related' (*TT* 61). Averroes replies by arguing that non-existence cannot become existence without passing through a middle stage, this intermediary being represented by matter. Matter must always be present as a substratum for change: 'Therefore there must necessarily be a substratum which is the recipient for the possibility and which is the vehicle of the change and the becoming, and it is this of which it is said that it becomes and alters and changes from non-existence to existence' (*TT* 62). He is arguing that if some state of affairs is possible, then it can come into existence, and if it is to come into existence it must come from somewhere and change in the manner described by Aristotle. Al-Ghazālī, with his thought experiment to show that we can think of things as possible without being actual, tries to show that we can thus conceive of things independently of their instantiation in the world. Then how can it be claimed that the notion of possibility depends upon or presupposes the notion of actuality or existence, in this case the eternal existence of matter as a substratum? Averroes suggests that what is important about the notion of possibility is that it identifies states of affairs which are potentially *actual*. He is being faithful here to the broad interpretation of the principle of plenitude, that: 'It is not allowable that it is true to say "this is possible, but it will not be" ' (*Met.* 1047b 3). If there can be no colours which are not actualized, if there can be no empty spaces, then trying to conceive of such states of affairs is pointless philosophically. That is why Averroes replies to al-Ghazālī by describing in detail the Aristotelian account of change, in particular the significance of the substratum, which appears on the face of it to be a completely irrelevant move in the argument. His point is that the significance of talking about *possible* states of affairs is in terms of their eventual transformation into *actual* states of affairs, and to understand the process of change we must follow the logic of Aristotle's account.

Many commentators who deal with the First Discussion of the *Incoherence of the incoherence* leave the text at this stage and go on to consider the nature of the argument between the two thinkers. But there remains an important section in which al-Ghazālī rehearses some of the counter-arguments which the philosophers might produce to overturn his attacks. And indeed, they are not dissimilar in many cases from the arguments which Averroes does produce. One of the compelling aspects

of al-Ghazālī's approach, and one of the most annoying for Averroes, is that not only does he present the philosophers' arguments well, but he also argues cleverly that they do not work and then presents accurately the sorts of counter-objection they will produce to defend indirectly their original positions. He does this at the end of the First Discussion where he runs through plausible counter-arguments to his proofs of the independence of possibility from matter. Then he appropriately discusses the importance of the difference between his view of the notion of possibility and that of his opponents. As we have seen, this difference is at the essence of the rather bloodless nature of the dispute. He sets out to argue that the philosophers ought to accept the use of modal concepts which he employs:

> And the answer is: To reduce possibility, necessity and impossibility to rational concepts is correct and as for the assertion that the concepts of reason form its knowledge, and knowledge implies a thing known, let them be answered: it cannot be said that receptivity of colour and animality and the other concepts, which are fixed in the mind according to the philosophers . . . have no objects. Still these objects have no real existence in the external world and the philosophers are certainly right in saying that universals exist only in the mind, not in the external world, and that in the external world there are only particular individuals, which are apprehended by the senses, not by reason . . . now, in the same way, it can be said that possibility is a form which exists in the mind, not in the exterior world, and if this is not impossible for other concepts, there is no impossibility in what we have said. (*TT* 64–5)

This clever move suggests that just as universals are subjective and 'in our minds', so is the notion of possibility. If this is true, then the philosophical connection between possibility and actuality will be well and truly severed. Averroes suggests that al-Ghazālī has misunderstood what is meant by saying that universals are subjective: 'The theory of the philosophers that universals exist only in the mind, not in the external world, only means that the universals exist actually only in the mind, and not in the external world, for the meaning is that they exist potentially, not actually in the external world' (*TT* 65). His point is that it is possible to *use* universals in the external world, and so they exist potentially, without having to accept that there *are* universals in the external world. Universals do not actually exist in the world since they are not the sort of concept which can be said to be instantiated as separate, individual entities. Although we can pick out red things in the world, the universal 'red' does not consist in (just) those things but is generally applicable to any appropriately coloured thing which might confront us at any time. We can quite easily talk about tables and chairs existing, and about red

tables and chairs existing, but when we talk about 'red' existing it is not clear what we mean. Al-Ghazālī argues that what we might mean by talking about 'red' existing is that we can form an idea in our minds about that colour without at the same time necessarily bothering about what objects if any in the world have that property. So 'red' is an idea in the mind and not an aspect of the external world.

Now, Averroes agrees that we cannot talk about 'red' existing in the same way that red tables exist, since the latter is a question of the existence of particular things, while the former relates to the status of universals, or to the properties of those particular things. The fact that we can use such universals suggests to Averroes that they must succeed in abstracting features of the external world which actually do exist: 'it cannot be doubted that the judgments of the mind have value only in regard to the nature of things outside the soul. If there were outside the soul nothing possible or impossible, the judgment of the mind that things are possible or impossible would be of as much value as no judgment at all, and there would be no difference between reason and illusion' (*TT* 67). Like universals, possibility has an external existence in the sense that we can use that notion in identifying phenomena, and so it exists potentially in the external world. Averroes seeks in this way to refute al-Ghazālī by showing that notions like possibility are not just 'in our minds' but rather have a foot in both the camp of our minds *and* the camp of the external world. Averroes refuses to accept that either modal notions or universals are merely formal concepts, with no corresponding, albeit irreducibly individual, objects in the real world. Towards the end of the First Discussion, the argument quite clearly is stripped for perhaps the first time to the basic issue which so importantly separates the philosophers from al-Ghazālī, and that issue is the notion of possibility.

Averroes thinks he can dispose of the theological objections to the notion of the eternity of the world by similarly reducing the controversy to one which is about the way in which certain key terms are taken. In one of his more popular works, the *Decisive treatise on the harmony of religion and philosophy*, he describes the dispute thus:

> Concerning the question whether the world is pre-eternal or came into existence, the disagreement between the Ash'arite theologians and the ancient philosophers is in my view almost resolvable into a disagreement about naming . . . For they agree that there are three classes of being: two extremes and one intermediate between the extremes. One extreme is a being which is brought into existence from something other than itself and by something . . . and . . . its existence is preceded by time . . . All alike, ancients and Ash'arites, agree in

naming this class of beings 'originated'. The opposite extreme to this is a being which is not made from or by anything and not preceded by time: and here too all members of both schools agree in naming it 'pre-eternal'. This being is apprehended by demonstration; it is God . . .

The class of being which is between these two extremes is that which is not made from anything and not preceded by time, but which is brought into existence by something, i.e. by an agent. This is the world as a whole . . . the theologians admit that time does not precede it, or rather this is a necessary consequence for them since time according to them is something which accompanies motion and bodies [so the theologians are all taken to be Aristotelians!]. They also agree with the ancients in the view that future time is infinite and likewise future being [so they did not according to Averroes accept the Qur'ān's prediction of everything except God going to annihilation]. They only disagree about past time and past being: the theologians hold that it is finite . . . while Aristotle and his school hold that it is infinite. (*FM* 55–6)

Averroes suggests that the dispute, for all its heat, is nothing more than a storm in a teacup. It is just a matter of each party thinking that time more closely resembles either what is generated or what is pre-eternal. And in his view 'in truth it is neither really originated nor really pre-eternal, since the really originated is necessarily perishable and the really pre-eternal has no cause' (*FM* 56). Averroes is certainly taking liberties with the views of most of the Ash'arites, but he does have a point in suggesting that if the theologians will go along with an Aristotelian theory of time's dependence upon movement, then it is possible to defuse to a degree the whole controversy. If time is parasitic upon the concept of motion and so is inconceivable without the existence of the universe, then time can be seen as eternal if the universe has always been in production. Before this continual production, this creation, there was nothing out of which the universe could be created. So the universe was created out of nothing and was not preceded by time. But is this attempt at separating the question of creation *ex nihilo* from the question of the eternity of the world a success? Averroes thinks he can accept creation *ex nihilo* without abandoning the eternity of the universe. Creation in time can be regarded as the contrary of creation from eternity; creation *ex nihilo* need not be identified with creation in time at all.

There are indications that this approach has more general support. In a more popular work, al-Fārābī upholds Aristotle's position that the world as a whole is not subject to generation and destruction, reconciling this position with the doctrine of creation by suggesting that Aristotle's doctrines of movement and time do not exclude the possibility that the world as a whole together with time were created from nothing by a

God who is the world's final and efficient cause. He even claims that Aristotle in his *Theology* (in reality part of the *Enneads* of Plotinus) has made it clear that he believes that God created the world *ex nihilo*.[24] Yet intriguingly in that work the world, including its matter, is represented as emanating from the essence of God, as one would expect given its authorship. Wolfson comments on this apparent confusion and thinks it reveals a significant clue to an appropriate understanding of the sense of creation *ex nihilo*. He claims that: 'The fact that al-Fārābī ascribes to that work the view that matter was created ex nihilo undoubtedly means that in his opinion creation ex nihilo meant the same as creation from the essence of God.'[25] It is interesting that Aristotle actually claimed that the *ex nihilo nihil* principle (nothing can come from nothing) was as old as philosophy itself and the 'common assumption' of all those who wrote on nature (*Phys.* 187a 27–9; *Met.* 1062b 24–5). By contrast, al-Fārābī argues in his *Agreement of the opinions of the philosophers Plato and Aristotle* that Plato and Aristotle were agreed on the doctrine of creation *ex nihilo* unlike pagan, Jewish and Magian philosophers. This is not just an uninteresting confusion based on the ignorance of the real authorship of the *Theology of Aristotle*. It points to the fact that the expression '*ex nihilo*' or 'from the not existent' has two senses. It could mean 'nothing' in the sense of 'not a something'. On the other hand, it could be identified with 'matter', and indeed was by Plotinus who identified it with 'something'.

Plotinus developed a new theory of the origin of the world which appeared alongside the older theories of Plato and Aristotle. The world was no longer regarded as being created from a pre-existent matter which was itself coeternal with God (Plato), nor was it regarded as being in its completeness coeternal with God (Aristotle); it is now seen as being eternally generated or emanated from the essence of God. This new view attempts to interpret the belief in creation *ex nihilo* as the temporal generation of the world from the essence of God. This is not just an example of philosophical nit-picking, but of considerable importance in challenging the idea that al-Ghazālī is eager to defend, namely, that there is a wide gulf between the proposition that the world was created *ex nihilo* and the proposition that time is eternal. But, as we have seen, the claim that the world was created after complete non-existence is not equivalent to the claim that the world was created *ex nihilo*. The former claim

[24] Al-Fārābī, *Philosophische Abhandlungen*, ed. F. Dieterici, p. 23.

[25] H. Wolfson. 'The meaning of *ex nihilo* in the Church Fathers, Arabic and Hebrew Philosophy, and St Thomas', in *Medieval studies in honor of J. D. M. Ford* (Cambridge, MA, Harvard University Press, 1948), pp. 355–70; pp. 356–7.

implies that before creation there had been non-existence, while the latter may be interpreted to signify the continuous creation of existence out of non-existence or the eternal forming of matter. Such a view of creation *ex nihilo* is far from being incompatible with the theory of the eternity of time.

It rather seems, then, that because the philosophers and al-Ghazālī use a different notion of what creation '*ex nihilo*' comes down to, their arguments fail to clash just as they avoided each other when discussing arguments involving the notion of possibility. Like so much philosophical dispute it is a matter of both sides presenting different analyzes of the key concepts upon which their reasoning is based and leaving it to the reader to decide which analysis makes better sense in the context. Al-Ghazālī is trying to re-establish the role of a personal, powerful and omniscient God which he feels cannot be reconciled with the basic metaphysical and logical theses which the philosophers accept and defend. In so far as he tries to do this while trying to maintain an Aristotelian, or aspects of an Aristotelian, system he must be judged to have failed. When he accuses the philosophers of having reduced God's role in the world to one of relative impotence it is always open to them to reply with Averroes that 'impotence is not inability to do the impossible, but inability to do what can be done' (*TT* 52). But al-Ghazālī definitely succeeds in demonstrating how limited a role the philosophers' God retains once he is put alongside a deterministic and eternal world, and how different this role is from that explicitly described by Islam. On the other hand, bearing in mind Averroes' point above, perhaps that is the only role which can be made philosophically respectable.

MAIMONIDES AND THE PROBLEM OF CREATION

Some writers regard Maimonides as a specifically *Jewish* thinker, whose arguments and theories are designed to be theological rather than philosophical. In other words, he is regarded as primarily engaged in defending the tenets of religion and only incidentally as a philosopher trying to establish truths which may well be independent of religion. I shall argue, however, that Maimonides is indeed a *failasūf* well within the tradition of *falsafa* and that he has some very interesting comments to make upon the sorts of arguments which the *falāsifa* produced and upon their applications. When we started to discuss the issue of creation and how traditional interpretations of God's creation of the world *ex nihilo* could be reconciled with Aristotelian arguments in favour of the

world's eternity, we concentrated upon the sorts of modal distinctions which al-Fārābī, Avicenna and Averroes made. While Maimonides uses much the same technical vocabulary as his predecessors he alters it in various ways. He agrees that God is the only thing necessarily existent in himself while everything else is possible and requires a cause outside itself in order to exist. He also accepts that the universe is controlled by necessary causes yet tries to avoid the model of emanation which sees the universe as derived from a cause connected necessarily and eternally with its immaterial part. One of the themes of Maimonides' thought is the stress on the gap which exists between God and his creation, and the emanationist system in effect reduces that gap by arguing that the things of this world and the things of the divine world merge into each other, however indirectly. Maimonides indeed objects to that system by using one of the basic Neoplatonic problems, namely, how to reconcile two kinds of creature, God and mortal beings, when they have nothing in common with each other.[26] The model of emanation is designed to show how things which have nothing in common with each other do at the same time have interconnections. The intermediaries are represented by those entities which al-Fārābī and Avicenna called necessary through another and which seem to determine God's actions and decisions without giving him the opportunity to choose to do anything at all he might like. Maimonides is in fact operating with a slimmed-down version of metaphysics as compared with the *falāsifa*. Following Aristotle closely, al-Fārābī's *Catalogue of sciences* divides the subject of metaphysics into: (i) the science which studies being insofar as it is being; (ii) the science which investigates the basic principles of the individual sciences; and (iii) the science which investigates the supersensible beings. In his *Treatise on logic*, Maimonides omits any suggestion that metaphysics should be concerned with the ontological problems of (i).[27] Of course, he would acknowledge that distinctions can be made between different kinds of supersensible beings, such as God and the angels, but he would not regard them as important distinctions. The basic distinction he is concerned with is that between created and uncreated beings.

Maimonides argues consistently that there is no possible demonstrative proof for the immutability and necessity of the laws which regulate this universe. He challenges the *falāsifa* to present evidence which *proves*

[26] A structural feature of Neoplatonism with which all religious philosophers had to struggle.

[27] Maimonides *Treatise on logic*, ed. and trans. I. Efros, Proceedings, American Academy for Jewish Research (AAJR), VIII (New York, AAJR, 1938).

that the laws we are familiar with are the only possible laws which could apply to the world, evidence which is more solid than just pointing to the fact that these are in fact the laws which prevail now. We are immediately reminded of the argument between Averroes and al-Ghazālī over the Second Proof. By a rigorous proof or demonstration Maimonides means, like Aristotle, a reasoning which starts from true and certain premisses and proceeds by syllogistic rules of valid reasoning to a conclusion which is as indubitable as the premisses. A syllogism is just an argument in which, certain things having been assumed, something other than those assumptions follow necessarily. Maimonides does not doubt that these laws are necessary in the sense that they have been necessitated by God's will, but he denies that they are necessary in the sense that they necessitate God's will to select them in the first place. This enables him to try to accommodate Aristotle in what passes for a theologically acceptable manner:

> He [Aristotle] said that the first matter is subject to neither generation nor passing-away and began to draw inferences in favor of this thesis from the things subject to generation and passing-away and to make clear that it was impossible that the first matter was generated. And this is correct. For we do not maintain that the first matter is generated as man is generated from the seed or that it passes away into dust. But we maintain that God has brought it into existence from nothing and that after being brought into existence, it was as it is now – I mean everything is generated from it, and everything generated from it passes away into it; it does not exist devoid of form; generation and corruption terminate in it; it is not subject to generation as are the things generated from it, nor to passing-away as are the things that pass away into it, but is created from nothing. And its Creator may, if He wishes to do so, render it entirely and absolutely nonexistent. (*GP* II,17,296–7)

It is one thing to argue that the laws which regulate the world are well devised and are not arbitrarily altered by their creator, but quite another to claim that these laws are the only possible ones:

> For we, the community of the followers of Moses our Master and Abraham our Father, may peace be on them, believe that the world was generated in such and such manner and came to be in a certain state, which came after another state. Aristotle, on the other hand, begins to contradict us and to bring forward against us proofs based on the nature of what exists, a nature that has attained stability, is perfect, and has achieved actuality. As for us, we declare against him that this nature, after it has achieved stability and perfection, does not resemble in anything the state it was in while in the state of being generated, and that it was brought into existence from absolute nonexistence. (*GP* II,17,296)

Interestingly, though, Maimonides does not claim that the philosophers are wrong in their adherence to the eternity of the world. He argues in this section of the *Guide of the perplexed* that, while he is in a position to demonstrate the possibility of creation *ex nihilo*, he cannot demonstrate its truth, nor can the philosophers demonstrate the eternity and the necessity of the world.[28]

Maimonides shares to a large extent the approach to *falsafa* adopted by al-Ghazālī. They both contrast in detail the model of emanation with the traditional notion of God as a free and omnipotent agent who considers a variety of possible creations and then effects one of them. Basic to their views of religion is a creator by design, a creator who freely wills the world's organization in the sense that that organization can be changed if God wants to and so must come *after* him in time. Maimonides is not convinced of the possibility of the reconciliation between the claim that the world was created by design and yet is eternally actual, since he argues that the latter claim entails a divine will being obliged to determine from all eternity and so not really being autonomous:

> For the meaning of the assertion, as maintained by Aristotle, that this being proceeds necessarily from its cause, and is perpetual in virtue of the latter's perpetuity – that cause being the deity – is identical with the meaning of their assertion that the world derives from the act of the deity or exists in virtue of His purpose, will, free choice, and particularization, but that it has always been and will always be as it is – just as the sunrise is indubitably the agent of the day, though neither of them precedes the other in point of time. But this is not the meaning of purpose, as we propose to conceive it. For we wish to signify by the term that it – I mean the world – does not necessarily proceed from Him, may He be exalted, as an effect necessarily proceeds from its cause without being able to be separated from it. (*GP* II,21,315)

We saw in the previous section that there is not necessarily an incompatibility between creation *ex nihilo* and the doctrine of the eternity and necessity of the universe, but Maimonides is determined to reject the forms of emanationism which would make these two positions cohere. He accepts that the proofs for the existence of God do not depend on the assertion of creation (*GP* II,2,252), that there can be no philosophical demonstration of creation and that biblical passages which refer to creation need not be regarded literally (*GP* II,25,327–30). Yet creation is a fundamental principle of the Jewish religion, equal in importance to the principle of God's unity (*GP* II,13,281). The principle of creation is so

[28] The sort of 'possibility' he has in mind here is obviously different from that involved in the principle of plenitude – it has no necessary connection with actuality.

central because of the close connection between the nature of the world and the possibility of miracles:

> If we accept the eternity of the universe as taught by Aristotle, that everything in the universe is the result of fixed laws, that nature does not change and that there is nothing supernatural, we should necessarily be in opposition to the foundation of our religion, we should disbelieve all miracles and signs, and certainly reject all hopes and fears derived from scripture, *unless miracles are to be explained figuratively* [my emphasis].[29]

There does indeed seem to be no place for miracles as ordinarily understood in the Aristotelian universe given its necessary and necessitated structure. Maimonides' argument is that if God is to be provided with some metaphysical room in which to operate as he wishes then the principle of creation *ex nihilo* must be accepted.

Or does he rather try to conceal his true views on this issue? Maimonides quite explicitly refers to his *Guide of the perplexed* as having been written in a particularly difficult to penetrate manner, so that those who would be in danger of damage to their faith by their imperfect apprehension of the views contained in it remain untroubled. One of the techniques Maimonides uses to make it difficult to grasp his real position is contradiction. He employs contradictions in several different ways, one of which is to discuss a difficult subject whose truth may be dangerous to the faith of the ordinary people (and perhaps also to the welfare of the philosopher) and so must remain concealed. One way of concealing the point is for the writer to make a claim which contradicts something else he has said, and it is vital that the contradiction remains undetected by the ordinary reader while at the same time alerting the wise to the device of concealment and the need to unravel the writer's real meaning. According to Leo Strauss, Maimonides pretends to adhere to a God who has created the world out of his free will, who can intervene in it, who has knowledge of his creatures and sometimes actually answers their prayers. His genuine view is that there is no such thing as free will for God who cannot act in the world nor have knowledge of material sublunary entities. Maimonides' account of creation is couched very much in terms of the seventh reason for contradiction, i.e.

> In speaking about very obscure matters it is necessary to conceal some parts and to disclose others. Sometimes in the case of certain dicta this necessity requires that the discussion proceed on the basis of a certain premise, whereas

[29] Maimonides, *Treatise on resurrection*, ed. and trans. J. Finkel, Proceedings, American Academy for Jewish Research, IX (New York, AAJR, 1939), p. 31; see also, *GP* II,25,329.

in another place necessity requires that the discussion proceed on the basis of another premise contradicting the first one. In such cases the vulgar must in no way be aware of the contradiction; the author accordingly uses some device to conceal it by all means (*GP* Introduction,18).

And indeed, there are passages where Maimonides contradicts his claims which seem to establish his adherence to orthodox religious interpretation of creation. For example, he suggests that the theory of the world's eternity should be assumed in his proofs of the unity, existence and disembodied nature of God in order 'not [to] cause the true opinion . . . to be supported by a foundation which everyone can shake and wish to destroy, while other men think that it has never been constructed' (*GP* I, 71,182). The foundation which he mentions here as especially dubious is presumably that the world came into existence after a state of non-existence. Of course, he makes clear that he thinks the Aristotelian view of creation cannot be demonstrated and that it can only be used to establish other desirable conclusions. Yet his proofs relating to God suggest that our knowledge of God depends on the premiss of eternity (*GP* II, Introduction,239–40).

Not only does Maimonides in places seem surprisingly sympathetic to Aristotelian views of eternity, he also sometimes seems to adhere to an Aristotelian view of the necessity of creation. In Maimonides' account of the spheres as the source of all earthly motion, even 'free' acts of man are determined by purely physical factors. The sphere causes the external factors which determine the purposes of the human soul. Thus even the motion caused by the soul is ultimately brought about by the sphere. Now, Maimonides claims that he is an opponent of Aristotelian arguments which hold that all things exist by divine necessity, believing rather in divine purposes as the cause of everything (*GP* II,19,303; II,21,316–17). He insists that 'all that exists has been brought into existence . . . by God through his volition' (*GP* II,13,284). Yet he also argues that there are serious difficulties in talking about God having a will and wishes and that applying the term 'purpose' to describe the purposes of God and human beings is to use that term equivocally (*GP* III,20,483; II,18,301; II,21,315). Indeed, Maimonides does seem to leave the possibility of reconciling divine necessity with the divine will open. In explaining the Aristotelian notion of the necessary derivation of the world from God, he comments that 'this necessity is somewhat like the necessity of the derivation of an intellectum from an intellect' (*GP* II,20,313). Of course, for God 'knowledge of things is not derived from them . . . On the contrary, the things . . . follow upon his knowledge which preceded and established

them as they are . . . He also knows the totality of what necessarily derives from all his acts' (*GP* III,21,485). This could be taken to suggest that when Maimonides talks about God willing certain states of affairs to take place and then bringing them about, the latter does not really have the power to make choices in the way in which we (seem to) make choices. These 'choices' might just be the way in which Maimonides chooses to describe what God, being God, is obliged to do.

A clue to Maimonides' position on creation might be discovered by exploring the relationship that he suggests exists between different positions on the question of creation and on the topic of prophecy. When the discussion of prophecy in the *Guide of the perplexed* begins, he comments that 'The opinions of people concerning prophecy are like their opinions concerning the eternity of the world or its creation in time' (*GP* II,32,360). The opinions which relate to creation and eternity are these:

1C The opinion . . . of all who believe in the Law of Moses . . . that the world as a whole . . . after having been purely and absolutely nonexistent . . . through [the divine] will and volition [has been] brought into existence out of nothing.

2C The . . . opinion . . . that there exists a certain matter that is eternal as the deity is eternal . . . He is the cause of its existence; and . . . He creates in it whatever He wishes. Thus He sometimes forms out of it a heaven and an earth, and sometimes He forms out of it something else.

3C The . . . opinion . . . of Aristotle, his followers, and the commentators of his books . . . He thinks that this being as a whole, such as it is, has never ceased to be and will never do so; that the permanent thing not subject to generation and passing-away, namely, the heaven, likewise does not cease to be; . . . and . . . that the thing subject to generation and passing-away, namely, that which is beneath the sphere of the moon, does not cease to be. (*GP* II,13,281–4)

The three views concerning prophecy which Maimonides mentions are these:

1P The first opinion – that of the multitude of those among the Pagans who considered prophecy as true and also believed by some of the common people professing our Law – is that God . . . chooses whom he wishes among men, turns him into a prophet . . . According to them it makes no difference whether this individual is a man of knowledge or ignorant, aged or young. However, they also posit as a condition his having a . . . sound morality.

2P The second opinion is that of the philosophers. It affirms that prophecy is a certain perfection in the nature of man. This perfection is not achieved . . . except after a training that makes that which exists in the potentiality of the species pass

into actuality . . . According to this opinion, it is not possible for an ignoramus to turn into a prophet . . . Things are rather as follows: When, in the case of a superior individual who is perfect with respect to his rational and moral faculties, his imaginative faculty is in its most perfect state and when he has been prepared, . . . he will necessarily become a prophet . . . According to this opinion it is not possible that an individual should be fit for prophecy and prepared for it and not become a prophet.

3P The third opinion is the opinion of our Law and the foundation of our doctrine. It is identical with the philosophic opinion except in one thing. For we believe that it may happen that one who is fit for prophecy and prepared for it should not become a prophet, namely, on account of the divine will. To my mind this is like all the miracles and takes the same course as they. For it is a natural thing that everyone who according to his natural disposition is fit for prophecy and who has been trained in his education and study should become a prophet. (*GP* II,32,360–1)

The first opinion, then, is that prophecy is a miraculous event brought about by the direct will of God, the second is that it is a purely natural phenomenon and the third is that God can miraculously withhold prophecy if he wishes.

Maimonides rather weakens his claim that the two sets of three opinions are in some way related by adding 'I mean that just as people . . . have . . . three opinions concerning the eternity of the world or its creation in time, so are there also three opinions concerning prophecy' (*GP* II,32,360). Yet most commentators have assumed that he meant the connection between the two sets of opinions to be more than just numerical. Great controversy has taken place over exactly what Maimonides intended the comparison to show, if anything. Certain resemblances between the two sets of claims are tempting, though. The belief in creation *ex nihilo*, which we have called 1C above, is regarded by him as the orthodox religious view, while 3C is taken to be Aristotle's view that the world proceeds from the first cause in an eternal, necessary and immutable manner, leaving no room for divine free will. Plato is credited with a view which lies between these two positions, namely, that the form of the world is created and the matter is eternal. Matter must be eternal since the generation of something from absolutely nothing is held to be impossible. God created the world by imposing a form on matter which had existed, with him, from all eternity. As we have already seen, Maimonides sharpens ontological distinctions which he regards as serving no directly logical purpose – hence the disappearance of the class of entities which lies between God and his creation. Similarly, with theories of creation,

he claims to perceive no real difference between the Aristotelian and the Platonic views (a position he shares with many *mutakallimūn*) since both 'believe in eternity; and there is, in our opinion, no difference between those who believe that heaven must of necessity be generated from a thing and pass away into a thing or the belief of Aristotle who believed that it is not subject to generation and corruption' (*GP* II,13,285). This is surely not quite correct. The Platonic view is compatible, after all, with the view of creation as being *ex nihilo* given the interpretation of matter as equivalent to 'nothing', as we saw in the previous section. However, Maimonides rejected the account of creation which could support that interpretation of 'nothing'. Yet the only act which God cannot perform on the Platonic view is to create matter out of nothing, but once the matter is there he can carry out all of the theologically required actions, just as though he had created the world out of absolutely nothing. Maimonides even seems to allow that the Platonic view is acceptable from a religious point of view, as opposed to Aristotelian accounts of the world's eternity (*GP* II,25,330). Were we to accept that his real view is to be attained by searching for contradictions, it would seem here that his real view is that God created the world out of pre-existent matter, which might be thought to be hardly a very exciting theory that needs to be concealed.

There are important aspects of the Platonic view which should make us hesitate before agreeing that Maimonides could quite happily accept it. The notion that matter is eternal is linked by Plato to the doctrine that evil is due to matter (*Timaeus* 147 and *Statesman* 268–74). This suggests that God's power to direct affairs in the world is limited. Averroes was prepared to accept this:

> Those evil events which inevitably affect the individual cannot be said not to have come from God . . . he cannot do absolutely anything at all, for the corruptible cannot be eternal, nor can the eternal be corruptible. In the same way that the angles of a triangle cannot be equal to four right angles, and in the same way that colour cannot be heard, so it is an offence against human reason to reject such propositions.[30]

In this passage Averroes links limitations in God's power to bring about the best with logically impossible propositions, a strong claim indeed. This brings out quite clearly an important implication of Platonic views of matter and creation, namely, that God's sphere of action is limited

[30] Averroes, *Summary (Jami') of Aristotle's 'Metaphysics'*, in *Rasā'il ibn Rushd* (Hyderabad, Dā'irah al-Ma'ārif, 1947), p. 171.

by the *nature* of matter. The eternity of such matter is only theologically acceptable if the matter is completely unformed and so does not in any way limit form, which is far from the Platonic view.

It might seem rather strange to relate views on creation and prophecy to each other; what sorts of connection could possibly hold between these different concepts? To appreciate the significance of this comparison it is necessary to look a little more closely at the sort of notion of prophecy which Maimonides is using. The source for his analysis of prophecy is quite clearly al-Fārābī. According to the latter, philosophy is both logically and temporally prior to religion. As we saw in the introduction, al-Fārābī believed that he represented a stage in the development of a long tradition of philosophical reasoning which preceded Islam by a long time, so that Islam would have to be regarded as temporally subordinate to philosophy. Religion is logically subordinate to philosophy because it consists of theoretical claims (e.g. that there is such a phenomenon as bodily resurrection) for which it provides no demonstrative grounds for acceptance at all. Also, the laws which religions establish are designed to apply to a specific group of people at a particular time, and so are not the same as the very general, indeed universal, ethical principles which moral and political philosophy discuss. These religious laws can only represent examples of norms which embody knowledge of the ends of human beings as such in their realization of their ends, namely, happiness. These laws will be presented in figurative and compelling language with no explicit reference at all to their philosophical grounding in the knowledge of human nature which the legislator should employ in constructing them. This might seem peculiar, to frame legislation in such a way as to make it represent accurately ethical norms but at the same time to conceal this fact from the community. The reasoning behind this approach is that a philosophically sophisticated system of norms might well fail to be grasped by the masses, with dire consequences, and even if it is understood the masses may fail to feel suitably motivated to obey the laws without some additional reason for such obedience. The legislator is essentially a *popularizer* who translates his philosophical awareness of how people ought to live, what happiness really is, into a system of persuasive stories or pictures which show them how to act in ways which are really in their own interests. These stories contain images of kings and prophets who existed in the past and who behaved virtuously and who were opposed by evil men. In this way the important rules of how people in the community are to behave are put over persuasively to the masses, where philosophical and theological argument would totally fail

to move them and would probably result in the weakening of the general belief in religion.

The perfect or ideal philosophical legislator, who in theory originally set up the state, has a complete grasp of both theoretical knowledge of the very general ends which all human beings have and practical knowledge of the types of institutions which will foster these ends in the state. As we have seen, though, this will not be enough to enthuse the community concerning those institutions and those ends; there is also a need to create images which teach the people to behave in appropriate ways. These images must embody philosophical concepts and yet be acceptable right across the community, to the ignorant as well as to the wise. Maimonides closely follows this analysis of prophecy as actualizing a person's rational and imaginative faculties. The divine overflow from the Active Intellect (a concept we shall examine in greater detail in the chapter dealing with immortality) to the rational faculty produces theoretical perfection, while to the imaginative faculty it results in practical perfection, including both the production of the rules necessary for ethically desirable behaviour and the ability to disseminate this information in an acceptable and persuasive manner to others who are not recipients of the divine overflow (*GP* II,36). God's part in this process seems rather restricted, especially when we are told to acknowledge the necessary mediation of the Active Intellect between God and human beings. In addition, before the prospective prophet can hope for revelation, he must first perfect his intellect. While theoretical perfection is a necessary condition of prophecy, it clearly is not sufficient. Moral qualities are also required. The prophet is a person who is not satisfied with the knowledge he can acquire by the use of reason alone but also tries to discover the nature of the most important things in the universe, appraisal of which necessarily involves the application of his imagination. He may well then go on to enter the public world of his community to persuade people to think and behave in certain ways.

Moses is an exceptional prophet for Maimonides, the only really political legislator, and like al-Fārābī's philosopher-king he could suspend existing laws and establish new ones. Maimonides claims that the term 'prophet' is properly used to describe Moses and only applicable to other people in an 'amphibolous' or analogical sense. Moses' prophecy is not mediated by angels, Maimonides' term for the personal imaginative faculty. This does not mean that he received a direct prophetic gift from God and did not require mediation by the Active Intelligence. Moses' prophecy was entirely intellectual and did not

require imagination. Nonetheless, it is important to recognize that Moses' character and disposition to receive prophecy are both unique and natural. He attained the highest possible degree of perfection that is natural to the human species, and which must necessarily be realized in at least one individual (*GP* II,35,367–9). Since he was succeeded by lesser prophets there was a need to write down the law which then required interpretation by poorer intellects. The sort of prophecy with which Maimonides is concerned in the *Guide of the perplexed* is natural prophecy, the sort of prophecy which Aristotle discusses in his *On divination in sleep* and likens to veridical dreams. Aristotle is reluctant to accept that these dreams are sent by God since they come to all sorts of people, not necessarily the best and the wisest, and he suggests that they just arise in such people when the normal senses are dormant. Once one accepts, as al-Fārābī does, a model of the whole of existence which includes God and consists of a continuum of emanations starting from God and filtering through a hierarchy of intelligences to reach the Active Intellect, the source of forms in our world, then the nature of the potential recipients of prophecy determines whether they will get it or not. Indeed, since it is also suggested that this system has *always* been in operation, presumably it is laid down from all eternity who will get what amount of prophecy. There is no longer any room for individual divine actions. Although to some extent Maimonides distanced himself from the emanation model, and while he does indeed sometimes talk about the divine will having a part to play in disposing human intellects to prophecy, he does not seem to have in mind God deciding through a case-by-case thought process on whom to bestow his gracious gift of prophecy, but rather he points to the arrangement of the universe as characterized by God's wisdom, in a naturalistic manner.

Let us return to Maimonides' reference to the comparison between opinions concerning creation and prophecy and lay out a sort of table:

Creation		*Prophecy*		*Adherents*
1C	*Ex nihilo*	1P	*Ex nihilo*	The vulgar
2C	From eternal matter	2P	Prophecy is a natural quality	The philosophers
3C	Eternal existence	3P	2P + possibility of miraculous prevention	The Jews = opinion of the law

As one might imagine, a great number of permutations of these different opinions has been carried out by commentators and interpreters of Maimonides, with very varied conclusions.[31] Not only do interpreters need to look for resemblances between these opinions, but even contradictions are grist to the mill given that Maimonides did refer to the use that contradictions might play in concealing the truth from those whose faith might suffer as a result, and surely these topics are precisely such theologically sensitive areas. Although it is difficult to find an interpretation of the two sets of opinions which is totally satisfying, Maimonides is quite right to relate them in the sense that they both represent different opinions on how something or some property came about. One might well expect that the sort of answer that is provided to explain the generation of the world would also fit the explanation of prophecy. For example, if one thought that the world was created *ex nihilo* then one might well also adhere to 1 P. These connections are rather weak, though, and it is difficult to believe that Maimonides really expected them to show very much, if anything at all. He may just have been laying out different opinions and pointing to relations they might share with other opinions *to some degree* similar. To suggest that Maimonides in his comparison of these opinions is inviting readers to indulge in rather arbitrary and ad hoc connections between different theoretical positions is to fail to take seriously his commitment to demonstrative reasoning as the only valid form of argument. It will be recalled that he comments on Aristotle's theory of eternity that it is neither demonstratively established nor held to be so established by Aristotle himself (*GP* II,15; II,19). Whatever form of argument is involved in the comparison between the opinions on prophecy and creation, it is hardly demonstrative and unassailable as proper reasoning ought to be.

I would like to compare the form of proof appropriate to creation with that applicable to prophecy by first discussing in detail a particular argument which Maimonides presents to suggest that the world was created by God. Maimonides employs the traditional theological argument from determination which finds reasons for saying that the world could have been determined to have features different from those which it in fact does have, and so its creator was not obliged to form it in a

[31] See, for example, W. Harvey, 'A third approach to Maimonides' puzzle', *Harvard Theological Review*, 74 (1981), pp. 287–301; L. Kaplan, 'Maimonides on the miraculous element in prophecy', *Harvard Theological Review*, 70 (1977), pp. 233–56; H. Davidson 'Maimonides' secret position on creation', in I. Twersky (ed.), *Studies in medieval Jewish history and literature* (Cambridge, MA, Harvard University Press, 1979), pp. 16–40.

particular manner. We have seen already how al-Ghazālī used this sort of argument to throw doubt on the Aristotelian claim that the world had to be constructed in the way it was constructed (in his discussion of the Second Proof reproduced by Averroes at *TT* 51). The reasoning behind Maimonides' adaptation of the argument is this: if there exists in the universe things which are not absolutely necessary to the nature of the universe, so that it is conceivable that there might have been other different things, then this suggests that the existence of an agent who by decision of his free will has brought about this particular variety can be established. For example, some theologians used the argument derived from the variations in the motions of the spheres against the philosophers, accepting for the sake of the argument that the circularity of motion which is common to all spheres may be an essential property of the nature of the substance of the spheres, but challenging the philosophers with the problem of explaining why there are then variations in the motions of the spheres which are said to be essential to the nature of the substance of the spheres. The theologians suggest that such variations are evidence of a selection having taken place from among several alternatives, which implies that there is an agent who freely has picked one among the many possibilities of a world (*GP* II,4).

In the running warfare between theology and philosophy, the former argued that a large number of features of the universe which the philosophers regard as necessary are instead only possible. As we have seen in the Averroes/al-Ghazālī confrontation, the philosophers respond by arguing that those features of the world which the *kalām* calls possible are necessary, and the theologians fail to recognize the validity of philosophical proofs to this end. Yet there are features in the world which both philosophers and theologians can agree are only possible and might well have been different, like the particular shapes of things, their size and position and their properties. Accordingly al-Ghazālī does not just use the argument derived from the variation of the motion of the spheres, but also makes much of the fact that certain things in the world are white while others are black, that some things move while others rest, and that particular shapes rather than others are found in the world. The fact that there are in the world things which could have been otherwise proves on his view that there must be a determining cause which acts freely. Maimonides complicates his version of the argument by distinguishing between three types of variation in the motions of the spheres. Firstly, there is a difference in the direction of the motions of the spheres, since

some rotate from east to west while others rotate in the opposite direction (*GP* II,19,305–6). He argues that there is no necessity for that sort of diversity. Similarly, with the differences between the velocity of the motion of the spheres and in the courses of the motions of the planets, he rejected the explanation of their necessity in terms of theories of epicycles and eccentric spheres and so could find no satisfactory explanation of these differences by examining the phenomena alone. The only remaining explanation is that God brought these phenomena about and established those variations. Maimonides also uses examples which show that some particular accidents in the structure of the universe are not necessary. For instance, while each of the seven planets has several spheres, the fixed stars are all contained in one sphere. The stars and spheres are attached to each other and yet differ from each other because the former are at rest and opaque while the latter are in motion and transparent. Lastly, the stars in the eighth sphere are of different sizes and distances from each other. None of these facts is necessary given the nature of heavenly bodies themselves – they could have been different. Thus, Maimonides concludes, the only explanation of such phenomena is the influence of a free will which determined the selection of one in preference to the others.

It is important to emphasize that despite the complexity of Maimonides' examples and arguments, he does not think he has *proved* anything by his points. He cannot demonstrate the truth of his conclusion since his initial premisses are themselves not certain, and perhaps not true. All he can do is argue for the plausibility of his point of view, and refute other contrary views – a typical dialectical procedure. Indeed, Maimonides claims that Aristotle himself did not think that the issues of the eternity of the world and the nature of its creation were capable of determinate and demonstrative proof. Maimonides does argue, though, that his view of the creation of the world by an agent acting freely is the most likely given the evidence of the nature of the world and Aristotle's principle that eternity implies necessity. Were the world to be an eternal entity, it would be necessarily organized in a particular way, and there would be no room for free choice. But if it had been organized necessarily in just such a way we could not conceive of all the varieties and deviations from uniformity which we find in the world. We can accept the possibility of such contingent features of the world being changed and so they cannot be necessary. They were created at a finite time in the past by an agent acting freely (*GP* II,19).

Maimonides uses a similar type of argument to establish the creator's free will when he discusses the nature of the celestial spheres. The Aristotelian theory regarded the celestial spheres as consisting of differing matter as opposed to the sublunary objects. This is because the natural motion of the spheres is circular, whereas the sublunary objects follow a rectilinear path. Another and different kind of matter in the universe is that which belongs to the stars, which also accordingly have a distinct type of motion. Now, it is the nature of matter to accept whatever form is appropriate to it; it is determined to have that particular form. If the spheres consist of a common matter, as they must since they possess a common motion, then the matter of each sphere is as likely to receive the form of any sphere as it is to receive the form of a particular sphere. Similarly, the stars are all made up of a common material substance and could receive any sort of form which is appropriate to that sort of matter. Were the world to be run entirely on the lines of a natural process, one would expect that the matter of the spheres and of the stars would copy the matter of the sublunar world in constantly changing form. That is, one would expect things with matter in common to receive all the different forms which they are capable of receiving. Why, then, are the stars and spheres only affected by one particular type of organization or form? The explanation which Maimonides offers is that a conscious and free agent has determined that each sphere will continually pass through a particular circular motion and each star will continually radiate a particular light.

It is worth dwelling for a moment on Maimonides' way of arguing in these passages. He is not employing *kalām* techniques which sometimes presuppose the truths of religion. He tries to present purely rational arguments which can support the idea of God's free will, and thus defend the belief in creation. It is possible, then, to show how miracles and prophecy came about, for: 'Know that with a belief in the creation of the world in time, all the miracles become possible and the Law becomes possible, and all questions that may be asked on this subject, vanish' (*GP* II,25,329). He sets out to challenge the view that necessity controls the activities of the universe as a whole, at the same time accepting that Aristotle has proved that necessity characterizes all events (even our own) in the sublunar world. The fact that Aristotle is not successful in showing that necessity can explain the features of the heavenly world provides Maimonides with the opportunity to argue that those features are only explicable given a freely acting creator, who in turn brings about miracles

and prophecy. Creation *ex nihilo* must be accepted if God's autonomy is to be possible.

Yet, as we have seen, it would be an over-simplification of Maimonides' very diverse arguments and suggestions in the *Guide of the perplexed* to feel totally satisfied that this conclusion represents his unambiguous view. He might mean by it that since God's autonomy is *not* possible, perhaps because he accepts the view that the world is eternal, then creation *ex nihilo* should be rejected. If we accept his argument at *GP* II,25 cited above that, with belief in creation *ex nihilo*, miracles themselves become unproblematic, then we might think at least that we can understand the miraculous prevention of prophecy as the extraordinary witholding of a natural characteristic from people, as in the prevention of King Jeroboam from moving his hands and of King Aram's soldiers from seeing (*GP* II,32,39). A miracle prevents prophecy in a person naturally fit to prophesy as a miracle prevents sight or motion in a person naturally fit to see or move. Yet we must be careful here. Is the notion of natural prophecy which Maimonides derives from al-Fārābī not very different in its theological implications from natural capacities such as motion or sight? After all, the notion of prophetic experience for Maimonides is an internal psychological process only contingently related to external reality. Where angels are said to be present in prophetical visions or dreams, then this is not a pointer to an objective element in those experiences; on the contrary, it suggests that such experience is entirely imaginative. The prophet is not just a good and wise person, but must in addition have great imaginative powers. The references to angels might be seen as direct reference to the internal nature of the creative experience: 'Accordingly, Midrash Qoheleth has the following text: When man sleeps, his soul speaks to the angel, and the angel to the cherub. Thereby they have stated plainly to him who understands and cognizes intellectually that the imaginative faculty is likewise called an angel and that the intellect is called a cherub' (*GP* II,6,264–5). This goes against the view that biblical texts with references to angels should be taken literally, and yet religious orthodoxy insists that such spiritual causes do actually have effects upon the world. Maimonides' view, that prophets create pictures and tales in order to make appropriate religious points, is very different. In possibly accepting that God can prevent this exercise of prophetic imagination by miraculous intervention Maimonides may be making a gesture in the direction of preserving God's autonomy. Yet at the same time he is importing a notion of

prophecy which is far removed from the religious norm. It is not clear, either, that he regards the arguments that establish this notion of prophecy as not demonstrative in nature, which is his description of the arguments concerning creation.

There are many ways to approach Maimonides. A very popular approach over the years since his death is to wonder what he actually believed. Here we are more concerned with seeing how he sharpened and made more extreme the philosophical theories expounded by his predecessors. He developed to its furthest degree the theory of prophecy devised by al-Fārābī in order to explore its novel implications. He extended the form of argument used by al-Ghazālī to challenge Aristotelian accounts of the structure of the world as necessary by using Aristotelian principles themselves and not theological presuppositions. He argued very much in the tradition of al-Ghazālī that the emanative system could not be reconciled with the notion of a freely creating deity, and that references by the philosophers to God having precisely those properties are empty unless they provide him with the metaphysical space in which to act and will.

CREATION AND THE CONTROVERSY OVER THE NATURE OF CAUSALITY

One of the advantages of the Aristotelian distinction of actuality and potentiality is that it conceives of change as a continuous process instead of a sudden re-creation of new states of being after previous states of being. In adhering to a metaphysics of atoms and accidents which are continually being re-created by God, the Islamic theologians had to reject Aristotle's distinction between actuality and potentiality and his account of causality. For Aristotle, causation occurs when an actual being actualizes some potency. Since the theologians were using a system of atoms and accidents they could accept no such action of one being upon another. Any change in being could not be due to the atoms since they do not endure through time. Change would then occur only when God re-created the atoms in new states of being at each successive instant. This theological account brings out the reason for the controversy in Islamic philosophy concerning the nature of the causal link between God and the world, and the religious significance of the notion of the causal relation as such, especially in so far as it applies to the sublunary world. The significance lies in the relationship between human and natural causality and creation. The causality of agent must involve creation,

in the sense of bringing about a certain state of affairs. Since God is an omnipotent agent and so responsible for the creation of everything in the world, how, then, can we understand the human act as really a human act, something for which we are responsible? This problem was much discussed in the *kalām*, and al-Ash'arī had the problem very much in mind when he tried to describe human causality in such a way as to reconcile God as the sole and unique creator of all states of affairs with the reality of human causal power. His attempted solution was to describe our causality as an accident which is created by God. Human beings are created by God and there is no aspect of us which is not entirely dependent upon his creativity, yet God does not perform the human act even though he is the creator of our causal power. God cannot be the efficient cause since he has already created as an accident our causal power and it is as a result of this power that we bring things about in the world.

It is important to appreciate that the Ash'arites did not deny that the existence of causes can be inferred from the existence of effects, nor did they deny that there are causal relations between events. They were concerned rather to refute the thesis that the causal power of a thing is a necessary consequence of the thing's nature or essence. Aristotle's thesis of the simultaneity of cause and effect (*Met.* 1014a 20ff.) was used by Avicenna to support arguments in favour of the world's eternity, which itself involves the notion of the eternal agent producing the world by the necessity of his eternal essence. This model of beings coming about necessarily through the causal efficacy of their originators, only ending with the First Cause or God, was strongly opposed by the Ash'arites. It is important to be clear on what Avicenna meant by 'coming about necessarily'. It is not just that every contingent thing must have a cause, but also that its existence is necessitated by that cause. Indeed, once all the causal conditions are fulfilled, it follows necessarily that the effect follows. Only something which obstructs the effects could be used to explain the non-appearance of the effect. We have already seen what use Averroes made of this point when challenging the theologians to explain why, on their account, an immortal omnipotent deity *waited* before carrying out the creation. The Ash'arites argue that God wills the existence of the world but delays the instantiation of this wish for a period of time. Given the way in which the philosophers take the notion of cause, such a view of the possible gap between cause and effect is incoherent.

Al-Ghazālī was an enthusiastic proponent of this Ash'arite view in opposing the Aristotelian claim that empirical knowledge is necessarily

connected to the causal relations between objects and events. His strategy is to deny that there is anything *necessary* in the relation between cause and effect: 'According to us, the connection between what is usually believed to be a cause and what is believed to be an effect is not a necessary connection; either of two things has its own individuality and is not the other, and neither the affirmation, negation, existence and non-existence of the other' (*TT* 316). Al-Ghazālī demands from the philosophers a proof of sufficient rigour to establish the logical nature of the relationship between cause and effect. He does not in any way challenge the belief that some events in the world bring about other events, and that our experience of such facts provides us with good grounds for believing that we can make sense of what is going on in the world. All he challenges is the thesis that the causal nexus is necessary. Causal relations are only as they are because of God's organization of events in the world. Al-Ghazālī uses a number of examples to make his point. One involves a piece of cotton put in touch with a flame. He claims that there is no logical flaw in one's reasoning were one to deny that the cotton *must* catch fire:

> We regard it as possible that the contact might occur without the burning taking place, and also that the cotton might be changed into ashes without any contact with fire, although the philosophers deny this possibility. The discussion of this matter has three points. The first is that our opponent claims that the agent of the burning is the fire alone; this is a natural, not a voluntary agent, and cannot abstain from what is in its nature when it is brought into contact with a receptive substratum. (*TT* 316)

On an Aristotelian account, if there is material which is capable of burning (its receptive substratum being disposed to burn) and a flame with the purpose and formal essence of bringing about burning, then we are dealing with entirely natural phenomena which must lead us to the conclusion that the cotton will, indeed must, burn. Interestingly, as with his objections to the theory of the world's eternity, al-Ghazālī suggests that on Aristotelian principles themselves the philosophical position on the necessity of causality falls down. For Aristotle argued that matter is of itself incapable of movement, that it is passive until energized by some prime mover (through appropriate intermediaries), so that the claim that physical objects have essences which of themselves make necessary certain processes in nature seems inconsistent with the philosophical view of the nature of matter.

Averroes is in no doubt concerning the serious implications of al-Ghazālī's view:

> Denial of cause implies the denial of knowledge, and denial of knowledge implies that nothing in this world can be really known, and that what is supposed to be known is nothing but opinion, that neither proof nor definition exist, and that the essential attributes which compose definitions are void. The man who denies the necessity of any item of knowledge must admit that even this, his own affirmation, is not necessary knowledge. (*TT* 319)

Two claims are made in this passage. The weaker claim is that were al-Ghazālī correct, there could be no such thing as knowledge. Were we to abandon the search for causes, then all enquiry would come to an end. However, we shall see that al-Ghazālī is not in favour of abandoning the search for causes. The stronger objection is that if al-Ghazālī were right then he refutes himself, since his proposition will have no sense. The connection between a concept of a thing and its causal properties is not just accidental, but it is rather a question of meaning. A concept of a thing has as part of its meaning various causal properties, and denying the necessary nature of this relation is to reject the meaning of the term itself. Indeed, we often only count a particular thing as a member of a certain class of objects if it shares basic causal properties with those other objects. For instance, a pencil with which it is impossible to write because it has no lead might well be denied the name 'pencil' given its lack of the causal power generally associated with pencils. This objection produced by Averroes is an interesting one and we shall return to it later.

Al-Ghazālī claims that the only justification there is for believing in a causal nexus is experience, and we are very limited in what we are entitled to assert as a result of such experience: 'Indeed, the philosophers have no other proof than the observation of the occurrence of the burning, when there is contact with fire, but observation proves only a simultaneity, not a causation, and, in reality, there is no other cause but God' (*TT* 317). He gives a picturesque example to support this point. Suppose that someone is blind and has never heard people talk about the difference between night and day. Such a person might well imagine, were sight to be made available to him or her, that the opening of the eyelids caused the appearance of the visible objects before that person. Yet once the night comes on it will be appreciated that in fact it was the light from the sun which is a necessary condition of seeing objects:

The true philosophers were therefore unanimously of the opinion that the accidents and events which occur when there is a contact of bodies . . . proceed from the bestower of forms who is an angel or a plurality of angels, so that even they said that the impression of the visible forms on the eye occurs through the bestower of forms, and that the rising of the sun, and the soundness of the pupil, and the existence of the visible object are only the preparations and dispositions which enable the substratum to receive the forms; and this theory they apply to all events. And this refutes the claim of those who profess that fire is the agent of burning, bread the agent of satiety, medicine the agent of health and so on. (*TT* 317–18)

Al-Ghazālī argues that, although we can talk as though some things cause others to change, in reality there is a power which does not exist in the things themselves but ultimately in God and which makes possible the transformation which we can see in the world. He is perfectly prepared to deal with the obvious philosophical objection to his account, namely, that if God has complete power to control and fashion every temporal event, what sorts of constant conjunctions or regularities in the world can we rely upon? What prevents our experiences and expectations from being chaotic and haphazard?

The Ash'arite response to these questions is that our impressions of the uniformity of nature are nothing more than a habit or custom arbitrarily established by the divine will. The contingent atoms and accidents which constitute our world are nothing more than creations *ex nihilo*, combined to form bodies and maintained in temporally finite spaces of existence by divine action. These combinations give us the impression of uniformity actually implanted in the phenomena themselves, yet exceptions or the creation of miracles are easily conceivable. Can this way of looking at causal properties do justice to our experience in the sort of way that Avicenna's discussion of knowledge does? For Avicenna, when the proper conditions of knowledge obtain, we attain through our senses indubitable knowledge of particulars external to us. A necessary condition is the natural causal power of the object to influence the appropriate sense organ. One might wonder how al-Ghazālī could accept the certainty of such knowledge when he denies any causal power to the things which are said to affect our senses. The answer is that a benevolent God has no desire to deceive us and so has organized nature in such a way that when he brings about conditions like those in Avicenna's account, but without the causal properties in natural things, he creates simultaneously in us indubitable knowledge of the object. On one side of the epistemological fence we have knowledge in the form of potential knowers and on

the other side exist particular things, and there is no causal link between them. Instead of there being a natural connection there is a supernatural connection.

Al-Ghazālī argues quite convincingly that it is possible to reconcile the philosophical thesis that things have essences with doubts concerning the immutability of these essences:

> The second answer . . . is to agree that in fire there is created a nature which burns two similar pieces of cotton which are brought into contact with it and does not differentiate between them, when they are alike in every respect. But still we regard it as possible that a prophet should be thrown into the fire and not burn, either through a change in the quality of the fire or through a change in the quality of the prophet, and that either through God or through the angels there should arise a quality in the fire which limited its heat to its own body, so that it did not go beyond it, but remained confined to it, keeping, however, to the form and reality of the fire, without its heat and influence extending beyond it; or that there should arise in the body of the person an attribute, which did not stop the body from being flesh and bone, but still defended it against the action of the fire. For we can see a man rub himself with talc and sit down in a lighted oven and not suffer from it; and if one had not seen it, one would deny it, and the denial of our opponents that it lies in God's power to confer on the fire or to the body an attribute which prevents it from being burnt is like the denial of one who has not seen the talc and its effect. For strange and marvellous things are in the power of God, many of which we have not seen, and why should we deny their possibility and regard them as impossible? (*TT* 326–7)

Matter can receive any form, and so any of these events in the world must be conceivable. We could then look for a new causal determinant of the change in what previously was normal behaviour for the material objects involved. Al-Ghazālī is quite prepared to admit that if there is no relevant difference between two pieces of cotton, then a fire which will ignite one will also ignite the other. Nonetheless, it is always open to God to affect the nature of cotton in such a way that it will not catch fire.[32] This sort of explanation clashes sharply with that provided by Avicenna. For the latter, as we have seen, those things which exist and yet which are not necessary in themselves are brought about necessarily by something else. The world emanates from God in a continually necessitating and necessitated chain of states of affairs, with perfect regularity

[32] Terminology is important here. Al-Ghazālī moves away from the use of the philosophical term *ṭabī'a*, which has the sense of the fixed and Aristotelian natures that are a part of the philosophical notion of causality, and instead uses the term *khalqa* or creation, which explicitly establishes a relation to a creator. Still al-Ghazālī appears to have no problem with the idea of natural acts (*fi'l ṭabī'ī*) in other contexts, e.g. *K. al-tawḥīd* (Book of divine unity), *Iḥyā' 'ulūm al-dīn* ed. 'Irāqī, IV, pp. 219–20.

and immutability of the natural order guaranteed by the eternity and permanence of that which makes everything else necessary, i.e. God. The mutability which al-Ghazālī's analysis imports in principle into the constitution of the world is clearly designed to contrast with the natural uniformity of a deterministic Avicennan system.

A significant motive for al-Ghazālī's attack on natural necessity is his desire to leave room for miracles in the scheme of things in the world. He claims that it is possible for God to bring about miracles whereby the moon will split, a staff will become a serpent and the dead will be revived:

> There is no denying this, except through a lack of understanding and an unfamiliarity with higher things and oblivion of the secrets of God in the created world and in nature. And he who has examined the many wonders of the sciences does not consider in any way impossible for God's power what is told of the wonders of the prophets. (*TT* 328)

We ought to consider whether Avicenna and the philosophers must deny the possibility of the sorts of miraculous events which al-Ghazālī mentions here in order to remain consistent with their arguments. Given the definition of a miracle as an interruption of the course of nature, then it does seem difficult for the philosophers to accept miracles into their view of the world. After all, whatever exists is necessary of existence, and cannot be supposed not to exist without the occurrence of an impossibility. Yet the Qur'ān refers, as al-Ghazālī points out, to the transformation of Moses' staff into a serpent, the resurrection of the dead and the splitting of the moon to herald the final judgment. The philosophers could either deny these accounts or interpret them as showing that prophets have extraordinarily developed psychic powers (and so are glorified magicians), or regard them as allegorical and not supposed to be taken by the wise as historically accurate. As far as Avicenna is concerned, ability to forecast accurately future events is interpreted as an entirely *natural* process. The emanation of causal laws from the heavenly intelligences upon the souls of their respective spheres are transformed into material phenomena and can produce ideas in souls which outline what events will occur in the future. Once the imaginative potential of some people attains remarkable control over the external senses and so is no longer distracted by them, it is ready to receive an emanation of these ideas from the heavenly souls. Prophetic miracles, then, do not interrupt the course of nature, but rather are evidence of the great power and imaginative capacity of the prophet.

A different sort of miracle results from the perfection not of the imagination but of the intellect. Some people are extremely quick-witted in

their ability to run through valid reasoning processes when presented with incomplete premisses. They can formulate demonstrative proofs to answer problems in the fastest possible time. With no more than perhaps the middle term of a syllogism, or just the major and minor premisses, they can reconstruct the proof, and even derive others from it in rapid succession. All that such people require is a hint and they can go off by themselves thinking logically and acquiring a comprehensive knowledge of the world. They can even extend their understanding of the principles governing this world to those controlling the heavens, and they can even acquire knowledge of all the intelligible things (*TT* 313–14). It is worth adding that although these people do not require teachers, they do require the emanative overflow of the Active Intelligence, the provider of forms to all things in the sublunar sphere, before they can proceed to amplify their knowledge and reasoning to all that is knowable.

A last type of 'miracle' which Avicenna mentions is not really a miracle at all. There are occurrences which appear to violate necessary causal connections in nature but do not really do so. He has in mind here phenomena like sending thunderbolts to punish the wicked, with accompanying tempests and earthquakes. These events are certainly surprising and insufficiently understood by people, yet they proceed by entirely normal, albeit rather dramatic, causal processes.

Averroes is rather hesitant in his description of miracles. He starts off by claiming that the ancient philosophers deliberately omitted to mention miracles, not because they failed to acknowledge their reality but because they recognized that belief in miracles is among the fundamental principles establishing religious laws (*TT* 314). Miracles are divine events which contribute to the attainment of virtue and are themselves beyond comprehension. He is rather scathing about Avicenna's naturalistic view of miracles:

> As to what al-Ghazālī relates of the causes of this [miracles] as they are according to the philosophers, I do not know anyone who asserts this but Avicenna. And if such facts are verified and it is possible that a body could be changed qualitatively through something which is neither a body or a bodily potency, then the reasons he mentions for this are possible: but not everything which in its nature is possible can be done by man, for what is possible to man is well known. Most things which are possible in themselves are impossible for man, and what is true of the prophet, that he can interrupt the ordinary course of nature, is impossible for man, but possible in itself; and because of this one need not assume that things logically impossible are possible for the prophets, and if you observe those miracles whose existence is confirmed, you will find that they are of this kind. The clearest of miracles is the Venerable Book of Allah, the existence of

which is not an interruption of the course of nature assumed by tradition, like the changing of a rod into a serpent, but its miraculous nature is established by way of perception and consideration for every man who has been or who will be till the day of resurrection. (*TT* 315)

Averroes claims that Avicenna over-extends the causal range of the prophet's soul, taking in not just activities which ordinary people cannot do but even activities which are logically impossible. This criticism is hardly fair and gives rise to the suggestion that Averroes is employing the technique of *taqīya* or concealment here, concealing his real view that miracles are entirely natural events which are not consciously brought about by human beings of a certain moral perfection but just happen to people, with no prior moral and intellectual preparation being necessary. In the passage just quoted Averroes might be taken to imply that if prophets can really carry out the miracles ascribed to them then they are not human beings. His selection of the Qur'ān as the best sort of miracle could be taken to mean that it is designed to enable all people to attain virtue and happiness in the most effective way. He seems hesitant about accepting the normal interpretation of miracles as interruptions in the course of nature brought about through exceptional natural power as presented by Avicenna. He is far more attached to the Aristotelian principle that the sorts of miracles which involve qualitative change through non-material agents may well be logically impossible. And indeed it is worth emphasizing that Islam as a religion does not make much use of miracles. Muḥammad does not claim to have performed miracles himself:

none denies our signs but the evildoers. They say 'Why have signs not been sent down upon him from his Lord?' Say: 'The signs are only with God, and I am only a plain warner.' (XXIX,49)

The unbelievers say, 'Why has a sign not been sent down upon him from his Lord?' Say: 'God leads astray whosoever he will and He guides to Him all who are penitent.' (XIII,27)

At XVII,92–6 the Qur'ān is particularly contemptuous of the idea that God should have sent miracles with Muḥammad to explain the Book and to 'validate' it. Later on in that sura, at 103–4, there is a reference to Pharaoh's reaction to Moses' nine clear signs of his divine mission as an accusation that the prophet was bewitched! This suggests that the evidence for the veracity of the Qur'ān is internal rather than external, stemming from the work itself rather than from additional 'tricks' which are then described as miracles.

In his defence of the possibility of miracles, al-Ghazālī by no means wants to assert that God can do anything at all. He delineates quite

precisely what is impossible for God, even an omnipotent God. He cannot perform that which is logically impossible, nor can he transform a being of one genus into another:

> We say that for one thing to become another is irrational. If, for instance, the black could be transformed into power, the black would either remain or not, and if it does not exist any more, it is not changed but simply does not exist any more and something else exists . . . and when we say that water becomes air through being heated, we mean by it that the matter which has received the form of water is deprived of this form and takes another, and the matter is common to them, but the attribute changes. (*TT* 329–30)

Al-Ghazālī's adherence to Aristotelian terminology here is designed to prepare the way for an attack upon the analysis of causality provided by Avicenna. In Avicenna's *Metaphysics*, he distinguishes the efficient cause from the other Aristotelian causes as the only type capable of bringing about an existence other than itself. An agent's efficient cause is an essential attribute, it is part of the agent's nature and is necessarily involved in the activities of the agent. There are two types of efficient cause, one accidental and one essential. The former is described as being prior to the effect in time, while the latter both produces and sustains the effect in existence. Given the model of the universe as emanation, God is the essential efficient cause of the world which is his necessary effect. There is no question of choice in the matter, since God, being God, has to produce this sort of world, and given the necessarily stipulated law-like structure of the world, there appears to be no room for miracles. Al-Ghazālī has successfully isolated the central philosophical thesis which is the key to what he regards as the philosophers' error. The idea that action is logically entailed by something's nature is vital to Avicenna's entire metaphysical system. Al-Ghazālī opposes it by arguing that nothing can really be an agent unless it has a will. Only inanimate objects can be said to behave in one way rather than another as a result of the necessity of their essence. To suggest as Avicenna does that God's actions are constrained by his essence is tantamount to suggesting that God is inanimate. (Al-Ghazālī is convinced that this is indeed an assumption which the *falāsifa* make, albeit surreptitiously.)

How does al-Ghazālī reconcile his claim that 'in the case of two things which have no connection with each other and which are then related in existence, it is not necessary that from positing the negation of the one, the negation of the other will follow'[33] with his belief in the validity

[33] Al-Ghazālī, *Al-iqtiṣād fi al-i'tiqād* (The golden mean in belief), ed. I. Çubukçu and H. Atay (Ankara, 1962), p. 99.

of scientific knowledge? Both al-Ghazālī and Avicenna entirely agree that constant conjunction is not the same as causal connection, that we cannot validly move from *post hoc* to *propter hoc*. The fact that events are frequently related in an apparently law-governed manner is not enough in itself to show that that connection is a causal one. It could just be the continual repetition at certain times and in certain places of two otherwise unconnected states of affairs. Al-Ghazālī follows Avicenna's account of the nature and types of demonstrative reasoning very closely.[34] He agrees that if a syllogism is to be demonstrative then its premisses must be certain and its conclusion valid. When empirical premisses are considered they can be divided into those which consist of truths arrived at immediately by the senses, where our sense faculties are sound, the object of perception is in an appropriate position and there is no obstacle present, and those which provide us with justified knowledge of regular events in the past, thereby enabling us to claim that it is certain that such regularities will continue in the future. Al-Ghazālī almost quotes an Avicennan (and Aristotelian) image of a 'hidden syllogistic power' (*qūwa qiyāsīya khafiya*) embedded in the world, since were the order of nature to be a matter of chance, it would not have been able to continue as regularly as it has done most of the time.[35] The use of this comparison with reasoning is designed to suggest that basically the workings of the natural world are just as formally laid out and inevitable as the structure of a logical reasoning process. Avicenna of course claims that such uniformity is due to the inherent nature of objects and events in the world. Their essences determine the various necessary connections which such objects and events have with each other. Al-Ghazālī agrees that on the whole there *are* such connections, but the explanation for the connection itself is not correctly analyzed on Aristotelian lines. He argues that the trouble with Aristotelianism is that it seeks to explain the essence of what brings about change, whereas all it really does is describe that change. For example, from a theological point it is not decapitation which brings about death, nor eating satiety, nor fire burning, but God is the ultimate agent of all these events. This was very much the burden of his argument in *The incoherence of the philosophers*, that it is rational to expect decapitation to lead to death, but that does not show that it is decapitation by itself which brings about that death. In fact, by looking at the sequence of events themselves we could not say whether they had come about through

[34] M. Marmura, 'al-Ghazālī's attitude to the secular sciences and logic', in *Essays on Islamic Philosophy and Science*, ed. G. Hourani (Albany, State University of New York Press, 1975), pp. 101–11.

[35] Ibn Sīnā, *al-Shifā'; Logic V; Demonstration*, ed. A. Afifi (Cairo, Dār Ma'ārif 1955), pp. 95, 96, 223.

some sort of causal necessity, through the direct will of God, or through God's habitual actions. All Aristotelianism does is talk about what can be observed to be the connection between causes and effects, but we have to look deeper if we are to understand the nature of the connection itself.[36]

Al-Ghazālī's shrewd point is that he is offering a different analysis of the way in which the connection takes place, not of the connection itself. (Indeed, Aristotle also makes clear that his discussion of the four causes is really a discussion of four forms of explanation.) Nature is organized in such a way that it is possible for us to make certain judgments about it and predictions from it, yet we must never get away from the fact that that organization is not inherent in nature but rather comes from God.

Let us return to al-Ghazālī's argument that there is no real sense in which inanimate objects can be called 'agents'. An 'agent' is really a being that lives, wills and knows, in which case decapitation by sword can result in death without the sword or indeed the decapitation being the agent of death. The only real agent, then, is God. Al-Ghazālī's point here, and indeed throughout his critique of Avicenna, is that it is perfectly possible, indeed easy, to adopt Avicenna's basic starting point and then draw totally different conclusions. It is perfectly possible, that is, to accept that there are connections between states of affairs and that we can use these connections to make reliable judgments about the external world, yet it is always open to al-Ghazālī to translate judgments which mention the causality of such connections in terms of personal connecting on the part of God. But beyond showing that this can be done, does it have any point? The attempt to limit the use of 'agent' to animate beings is only persuasive once one has accepted the whole enterprise of translating causal language into language referring to God's actions.

Averroes does not, needless to say, have any sympathy with al-Ghazālī's thesis. He bitterly attacks al-Ghazālī over the way he uses the term 'habit' to explain our expectations of the regular connection between cause and effect. Averroes argues convincingly that this term is ambiguous because three different things might be meant by it. It could either be the habit of God in determining the normal course of things, the habit of things themselves in following their normal course, or our own habit in passing judgments upon things. He argues that it is not possible for God to have this habit, since 'habit' is definable as a 'trait acquired by the agent and necessitating the recurrence of his activity in the generality of cases'

[36] Al-Ghazālī, *Miʿyār al-ʿIlm* (The criterion of knowledge), ed. S. Dunya (Cairo, 1961), p. 58.

(*TT* 320). This description will not do to describe a God for whom there is no alteration (XXXV,41). Talking about God having habits is to ascribe to him far more variability in behaviour than is acceptable to Islam. But al-Ghazālī cannot be referring to the nature of things in his use of the term 'habit' since he clearly sets out to deny they follow a course which can be entirely naturally defined. The habit in question may refer to our own mode of passing judgments upon things. Such a formulation is appropriate if this habit is meant to be the mode of the intellect's procedure in passing judgments upon things, in a manner necessitated by its own nature. But of course al-Ghazālī would not have that. On the other hand, it might mean that most of the time people just make particular judgments, which is a rather unexciting claim if those judgments are not regarded as having some connection with facts which exist independently of those judgments. Averroes adds that: 'If this were so, everything would be the case only by supposition, and there would be no wisdom in the world from which it might be inferred that its agent was wise' (*TT* 320).

Averroes is entirely justified in pointing to the rather confused nature of al-Ghazālī's theory, since when the latter talks about the habitual ordering of nature, he is referring both to the habit of God creating a certain order in events and to the habit of our regarding this order as having some necessary causal nature. Nevertheless, al-Ghazālī is shrewd in his use of argument to suggest that one could adopt the structure of Avicenna's account of causal connection without necessarily accepting at the same time its *impersonal* and non-divine nature. We could then go along with the rules and discoveries of natural science by following the methodological principles of scientific investigation while at the same time acknowledging the direct responsibility of God in establishing the kinds of 'natural' connection in the world which we can come to understand. This is very much part of al-Ghāzalī's strategy in separating the objectionable features of *falsafa* from the useful and valuable aspects of science and logical reasoning which import no principles antagonistic to Islam.

CHAPTER 2

Immortality and the active intellect

It will be recalled that al-Ghazālī did not think that the philosophers set themselves against Islam merely through their adherence to the doctrine of the eternity of the world. They also

> were opposed to all Muslims in their affirming that men's bodies will not be assembled on the Last Day, but only disembodied spirits will be rewarded and punished, and the rewards and punishments will be spiritual, not corporal. They were indeed right in affirming the spiritual rewards and punishments, for these also are certain; but they falsely denied the corporal rewards and punishments and blasphemed the revealed Law in their stated views.[1]

He is quite right in claiming that the philosophers did not accept without severe qualification the idea that God will eventually reconstitute bodies and they will live again in the sense that *we* will live again. There are difficulties in the Aristotelian account of the soul for the sort of account which orthodox Islam seems to want to provide and yet be acceptable philosophically. The notion of the soul which the *falāsifa* develop is complex and closely connected with their use of the concept of the active intellect.

The notion of the active intellect in Islamic philosophy stems from what appears to be a casual remark of Aristotle that the intellect is 'part of the soul', which at first had no nature other than its potentiality for thinking, but which later could 'become each thing' (*De An.* 429a 21–2; 429b 6). He adds that here as elsewhere it is possible to distinguish between that which constitutes matter and so is potentially all things, and that which is an agent as a result of its making all things (*De An.* 430a 10–15). A controversy has long existed as to whether the intellect which makes all things is part of us or rather some being with transcendent status, an incorporeal being located in some place in the universe above us. This latter interpretation is certainly suggested by Alexander of Aphrodisias

[1] Al-Ghazālī, *Munqidh*, trans. R. McCarthy, p. 76.

and Plotinus. But, as so often in medieval philosophy, the origins of the theory in Aristotle seem far more modest than its later development. Aristotle starts with the proposition that all nature contains both material factors and causal or productive factors. The soul is not an exception, and must contain these factors too, an intellect which can 'become all things' and an intellect which can 'make all things', an intellect disposed to receive thought and an intellect disposed to produce those thoughts. We have already seen the force of the Aristotelian argument that what exists actually is generated from what exists merely potentially. Yet how precisely the active intellect is generated from what exists potentially and brings the human intellect to actuality is unexplained.

This was an omission that the Islamic philosophers sought to make good. Aristotle himself never used the expression 'active intellect', referring explicitly only to the 'passive intellect' and only by contrast to the intellect that makes everything (*De An.* 430a 14ff.). It was Alexander of Aphrodisias who first used the expression 'active intellect' in commenting on this passage. Aristotle actually expressed himself in this sort of way:

> Just as in the whole physical world there is, in each class, on the one hand matter (i.e. what is potentially all those things) and on the other something else which is the efficient cause, in that it makes them all (e.g. a craft in relation to its material), so in the sphere of the soul also there must exist this distinction. One intellect is such as to become all things, the other such as to make them all, a kind of positive state, like light: for in a sort of way light makes potential colours actual colours. (*De An.* 430a 10)

The comparison of the agent intellect with light is well chosen, since light is a third factor which must be present besides the capacity (sight) and the seen object, if the act of vision is to take place. This might seem a small point, but it is quite the reverse. In his opposition to Platonic views of the possibility of knowledge as dependent upon self-subsistent forms or abstract entities, Aristotle had to explain how knowledge was possible in the sense of how it is possible for us to receive the abstract concepts which are so important a part of our knowledge. Aristotle's references to something like an agent intellect that 'illuminates' the potential intelligibles concealed in sense objects rather as light reveals the colours of objects which are also 'hidden' in the dark, suggests that in a sense the concepts are already 'there' in the things, and all they need is lighting up. An interesting aspect of the analogy is that light is clearly an entirely different sort of thing than the object of sight or the subjects who see.

Aristotle hints at the independent and substantial existence of the agent intellect as 'separate from the other and pure, being in its own essence actuality' (*De An.* 430a 17–19), and 'once separated from the body this intellect is immortal, indeed, eternal' (*De An.* 430a 22–3). Of course, he is quite hesitant about the exact nature of this intellect, since: 'Our only explanation must be that mind alone enters from without and is alone the divine element. When and how and from where mind comes is a most difficult question, which we must answer carefully and as best we may' (*De generatione animalium* 736b 273). This dilemma was taken up with alacrity by Alexander who understood by the agent intellect an external substance or potency acting upon the individual soul. He identified it with the force of god actualizing the human soul regarded as matter, while the Neoplatonists interpreted it as an emanation of God flowing into and filling the human soul.

Aristotle had used the example of light in order to describe the function of the agent intellect in making possible our application of universals to our sense data. Themistius, like Alexander a celebrated commentator, shrewdly notes the difference between the imagery employed by Plato and Aristotle. While Plato uses the example of the sun, which denotes a unitary being, Aristotle talks about light, which in a sense is one and in another sense is diffused into many things.[2] There are, nonetheless, important analogies between the sorts of qualities which characterize the active intellect and Aristotle's notion of God. Both are immortal and eternal, and both possess uninterrupted activity as a continually operating cause which necessitates their essential and eternal activity. The agent intellect is the cause of our being able to reason about the world, which we experience through the unity of body and soul, which in turn describes our constitution. It 'starts off' the human intellect by presenting it with the basic principles of theoretical reason which later make possible the human intellect's attainment of the perfect state, called by Alexander the 'acquired intellect'.

To understand how these notions of the active and the acquired intellects fit into Islamic philosophy, it is first necessary to consider the cosmological system posited by the philosophers. The universe is generally taken to consist of Aristotle's series of celestial spheres continually revolving around a stationary earth, with each movement being dependent upon incorporeal movers assigned to each sphere. The only causality which exists in Aristotle's system at this level is in terms of motion, but

[2] *Themistii . . . De anima paraphrasis*, ed. R. Heinze (Berlin, Reimer, 1899), p. 103.

the use of the Neoplatonic notion of emanation provides a far more 'religious' model of the universe. After all, God may be identified with the eternal emanating cause of the existence of the first intelligence, which in turn is the eternal emanating cause of the existence of the second intelligence, and so on. Aristotle did not see the need for an incorporeal mover of the lower sublunar world, since he identified causality only with the motion of the universe, not with a sublunar world which does not move as a whole. For al-Fārābī, on the other hand, the ninth intelligence which controls the sphere of the moon emanates a tenth intelligence which he identifies with the active intelligence of Aristotle's *De Anima*. This works as an intermediary between the celestial intelligences and the sublunar world. The active intellect is the intermediary in the sense that it leads the potential human intellect to actuality; it is the heavens and not the active intellect which produce the substance of the sublunar world and accordingly develop the existence of souls in that world. As with Aristotle, the heavens are the cause of the generation and corruption of the lower world, but with the added Neoplatonic feature that specifies the mode of connection as emanation. Al-Fārābī describes the work of the active intellect in such a way that close resemblances emerge with the path that the heavens follow in performing their tasks. After all, the heavens do not act directly to perfect all parts of the sublunar world. Instead, they activate things in the world which then operate on each other until they reach progressively higher levels of existence, through an interaction of the things' own efforts with the continually descending powers of the heavens. Similarly, the active intellect does not complete the perfection of the human intellect by itself. It rather sets off the development of the human intellect and later on provides important knowledge. People differ in their innate ability to receive the first set of very general scientific principles which the active intellect supplies, so that some do not receive any and remain ignorant of virtually everything that is important, while others receive them all. All fairly intelligent people receive enough in the way of such knowledge for them to agree with others on acceptable canons of knowledge and behaviour, while some superior people receive additional and special items of knowledge whereby they are enabled to understand more deeply the structure of the universe through an understanding of the principles of physics and metaphysics.

Al-Fārābī distinguishes between two types of being, one incorporeal and the other corporeal, the former being actually intelligible while the latter are only potentially intelligible. The development of the human intellect from potentiality to actuality through the active intellect enables

us to think about both objects of thought. There seems to be some sort of hierarchy intended here, whereby the human intellect derives abstract concepts of things in the sublunar world by means of the active intellect, deriving concepts of incorporeal beings (such as the active intellect itself) by attaining a higher level of intellectual development initiated by the active intellect. The highest stage is sometimes called that of the 'acquired intellect', which is reached when someone 'perfects his intellect with all intelligible thoughts'.[3] He often characterizes the state of attaining the acquired intellect as one where the active intellect unites with the human soul by producing an emanation which transforms the human being into a philosopher. Once the human intellect reaches the stage of acquired intellect it becomes similar to the incorporeal beings which comprise its subject matter, and so, al-Fārābī argues sometimes, it is immortal in the sense that it is capable of existing without the body. Even before the death of the body it is possible for people to enjoy supreme happiness with souls that continue indefinitely. But only these acquired intellects are immortal, and since they consist in nothing but their thoughts (the very reason for their immortality) they cannot be differentiated from each other, since these thoughts are all the same. They thus possess nothing that might serve as a criterion of distinction between them. This form of immortality is entirely without memory and knowledge of individuals. It is independent of the sense impressions which come to human beings and is unaffected by them, and so we cannot in a future existence retain any impressions for the future from this life.

It is worth noting that in his *Commentary on the 'Nicomachean Ethics'*, sadly not extant, al-Fārābī is reported to have argued that the soul is mortal and that human thought comes to an end. This is because we are unable to grasp abstract forms and so cannot become lasting like them. He also argues controversially that prophecy is a matter of the imaginative faculty alone – a doctrine whose influence on Maimonides we have already mentioned. These arguments of al-Fārābī were rather notorious in medieval philosophy and were in marked contrast with those works of his in which he follows the line that human intellects can grasp intellectual objects by means of insight, the latter being a divine faculty that emanates from the active intellect while at the same time not being identical with it. This divine faculty relates to the objects of the imagination in much the same way as the senses relate to their objects. It grasps, as though illuminated, the intellectual objects, that is the abstract

[3] Al-Fārābī, *Al-madīna al-fāḍila* (The virtuous city), ed. F. Dieterici (Leiden, Brill, 1895), pp. 57–8.

concepts applying to celestial principles which are then present in us as objects of the imagination. But these objects undergo a change when they are transferred from the imagination to the intellect in this way. The imagination is closely connected with our ability to receive sense impressions and to play about with aspects of them, but once abstract concepts are regarded as objects of intellect rather than of imagination this connection with the sense faculties is no longer applicable. We would not require bodies to grasp these intellectual objects if they are immortal and unchangeable. If they are immortal and immutable then the soul which cognizes them must share these characteristics. Alexander argued that someone who thought about things which are subject to corruption must himself be subject to corruption, while if the object of thought is not subject to corruption, then neither is the intellect which thinks about it. This is a consequence of the identity of the intellect with the object of knowledge which plays such a large part in the discussion of immortality in Islamic philosophy.

We saw in the previous chapter how the imagination is said to make possible both dreams and prophecy. Some prophets are people who have not perfected their intellect and yet, nonetheless, they receive the active intellect in their imaginations. At the higher level of intellectual development represented by the notion of the acquired intellect, the active intellect automatically comes into play, and the imagination is affected. The imagination occupies what is, in effect, an intermediary position between practical and theoretical reason, and the effect of the active intellect on it is to supply it with knowledge of present and future events as well as abstract ideas and propositions. Since it is characteristic of the imagination to represent its contents in terms of figurative or symbolic language – being a physical faculty capable only of receiving physical forms – it transforms these rational truths into representational language. As for its practical function, the imagination becomes an accurate predictor of future events, as in dreams or visions. What seems to be meant by this is that the normal intellectual processes of working through propositions describing the present to reach conclusions about the future are speeded up by the active intellect, so that both practical and theoretical inferences are run through very quickly. This sort of process makes possible prophecy in people whose imaginations have been perfected. A superior variety of prophecy is available to those who have, in addition, passed through all the appropriate stages of intellectual development that are available to human beings and then have been granted an emanation from the active intellect to bring them to the level

of the acquired intellect. The effect of prophecy on the philosopher is to transform his imagination in such a way that he acquires the skill of using persuasive expressions and stories to instruct those less perfect than him in the intellectual truths, and possibly in the practical aspects of life too.

Avicenna extended al-Fārābī's use of the notion of the active intellect in important ways. They both accepted the view, contrary to Aristotle, that the existence of matter in the world must have a cause, but differed over the nature of the cause. As we have seen, al-Fārābī pointed to the celestial spheres, but Avicenna also includes the active intellect as bringing about prime matter, with its potentiality for receiving the forms of all natural objects in the sublunar world as a cause together with the celestial spheres. Avicenna employs the Aristotelian argument for the existence of God from the motion of the universe, adding to it his proof of God stemming from the distinction between necessary and possible existence and the requirement for an absolutely necessary and self-subsistent cause. To Aristotle's demonstration of the existence of the active intellect from the motion of the human intellect from potentiality to actuality, Avicenna adds a proof from the existence of the matter of the sublunar world. Both matter and the forms appearing in matter are emanated from the active intellect, according to Avicenna, and this is not a matter of choice or God's grace but rather a necessary implication of the active intellect's essence. It is within the context of this system that he demonstrates the immortality of the human soul. He argues that human souls are incorporeal substances by using Alexander's principle that only an indivisible incorporeal subject can apprehend intellectual thought. This follows from the principle that what thinks becomes one with the object of thought in the act of thought, and since human souls do receive intellectual thoughts, these souls must be incorporeal. He next argues that the disintegration and destruction of the soul is not necessarily connected with the destruction of the human body, arguing that the soul is produced by the active intellect acting upon some matter already formed in an appropriate manner so that it is disposed to receive it. It follows from this sort of explanation that the soul is not essentially brought about by the body, but rather it is brought about by the active intellect, the body being only the recipient of the soul over a certain period. In that case, the death of the body need not lead to the death of the soul.

It is worth nothing how distant this account of the soul is from that provided by Aristotle. For the latter, the soul is not a thing but rather the organization of a series of life activities. The soul is a substance only in

the sense that it is the form of a body which can possibly live. It is the organization of a set of capacities, and nothing more. He disliked the idea that the soul was a separate entity of some sort. Since Avicenna accepts the idea of the soul as a substance he falls into a number of problems. He argues that a substance will only be destroyed if it can be destroyed, and it can be destroyed only if it consists, at least in part, of destructible matter. But incorporeal substances by definition contain no such matter, and so are immortal. How can Avicenna establish the individuality of these immortal souls, and what is to prevent them from transmigrating to other bodies? He claims that the souls are differentiated as a result of their *origin* in different bodies, such that the surviving souls bear some trace of their originally distinct corporeal setting. As for transmigration, Avicenna objects that it is a redundant suggestion since, whenever some material substance is in an appropriate condition to receive a soul, the active intellect provides it with one. In that case there is no possibility that souls will transmigrate into recipient bodies since the latter will already be occupied by souls anyway.

Let us look at the significance of a disagreement between al-Fārābī and Avicenna on the issue of immortality. For al-Fārābī immortality is attained when the human soul reaches the level of the acquired intellect, and the active intellect is a contributory factor in the attainment of this final stage due to its part in starting off the human thinking process. But for Avicenna the human intellect is immortal due to its very essence regardless of a developing perfection. He does consider the nature of the thoughts which the immortal soul can have when disembodied, and sees that this presents a problem. Since the soul when embodied is dependent upon sense perception and thought to prepare it to receive emanation by the active intellect, then one might expect that with the disintegration of the external and internal senses only a very limited notion of thought could survive. Avicenna accepts that if one did not when alive involve oneself in intellectual thought then with the absence of one's faculties when dead there is no possibility of making good this omission later. What he takes to happen is that if the soul establishes a disposition to receive all possible knowledge when alive, then the necessity to maintain contact with the body disappears and moreover the physical link becomes something of a distraction rather than a help in the task of thinking.

There are different varieties of immortal souls, as one might expect given that perfection is not a necessary condition of immortality. Some souls achieve the ultimate in happiness available to human souls due to their complete perfection enabling them to conjoin completely

and permanently with the active intellect. Others are less successful at achieving this total conjunction, since they possess less than a perfect disposition for conjunction with the active intellect. These souls just have a basic grasp of the principles of physics and metaphysics. There are souls which do not reach even this level but which nonetheless understand that perfect happiness is only achievable by the development of intellectual thought. There are also souls which are so completely ignorant that they constitute a formless material substratum which does exist, but without any intellectual activity, and so Avicenna sometimes characterizes them as being as good as non-existent. There are other important distinctions to be made, since we have yet to consider the effect of moral behaviour on the character of souls. There are souls which are ignorant and yet have led virtuous lives, and they will lead a peaceful (i.e. painless) existence during immortality entirely uncluttered with intellectual content. Those souls which were steeped in sin in the mortal realm will suffer due to their inability to satisfy their desires. The model which Avicenna has in mind for these disembodied entities is that they both enjoy physical pleasures and suffer physical pains by virtue of the application of their imaginations, so that vivid sensations appear to come to them and affect them.

Some of the problems which Avicenna's account involves are fairly evident. In the first place, he is very unclear on precisely how much knowledge must be acquired in this world for conjunction with the active intellect in the next world to be assured. The claim that some souls seem to be as good as dead given their ignorance appears difficult to reconcile with the original demonstration of the immortality of the soul as such. Again, the survival of the virtuous yet ignorant soul seems to be accepted by Avicenna, yet how can mere virtue replace knowledge among the necessary conditions of immortality if there are to be such conditions? Even more importantly, how can Avicenna provide a description of pains and pleasures in a disembodied immortal existence, since the physical organs which in the human body make possible the application of imagination are no longer there? Not only would it be impossible for the immortal soul to feel sensations, but it would also be unable to imagine them. The imagination is not an immaterial faculty and so it cannot grasp the universal and the immaterial. It can indeed deal with both intellectual and sensible data, transforming them into vivid and persuasive symbols capable of motivating people to action, yet imagination presents its workings in figurative and symbolic language because of its material basis. Once that basis is assumed no longer to exist, there

can exist no imagination either. Since the immortality of the soul can only be described in such colourless ways that abstract completely from what ordinary people would regard as desirable features of a future life, why should anyone care about this sort of future life in the first place?

While Avicenna is prepared to accept that the soul is a form, since it is the soul which perfects the various species of living beings, i.e. makes a particular living being a member of a particular species, he regards it as more than just a form. Some things are perfections of other things without being their forms but by being substances separate from them, just as a pilot is the perfection of a ship. So he firmly set himself against the view of the soul defended by Aristotle, perhaps without entirely realizing it. In fact Avicenna's discussion of immortality was also highly controversial in Islam, and much discussed philosophically given its rather unsatisfactory ramifications. A particular aspect of his claim that the soul retains its individuality after separation from the body appears rather dubious, especially when one considers the qualms which Aristotelians have in admitting the existence of an actual infinite number of anything. Given the eternity of the world, and so the eternity of the human and other species along with the processes of generation and corruption, it follows that the present moment has been preceded by an infinite number of people who have died, and so there must also exist an infinite number of souls which are immortal. As we have seen, Aristotelians have no problem in conceiving of an infinity of bodies as such, provided that they only constitute a potential rather than an actual infinity. They succeed one another and do not persist all together simultaneously. But this is far from the case as far as the series of immortal souls goes, they must very much coexist and so constitute an actual infinity. One solution to this difficulty would be to develop some theory of transmigration, so that a finite number of souls 'survived' an infinite number of bodies and was shared around. As we have seen, Avicenna was opposed to theories of transmigration, and especially to the notion that there could be souls waiting in the wings of some prior existence for appropriate bodies to accept them. If there were to be such a variety of souls, how could they be individuated, given their total lack of connection with any body? If there was just one soul, then the resulting individuals would be all the same, which they patently are not, so the transmigration hypothesis must be rejected. The idea that souls can exist prior to their connection with a body is attacked by Aristotelians who argue that the soul can only exist with the body. Avicenna's solution to the problem of the actual infinity of souls is to appeal to the lack of order or position in the numbering of these

souls. After all, such souls are immaterial and so without spatial position and they do not causally affect one another, or anything else for that matter. In that case, the sorts of divisions which can be made of actual infinites and which produce problems, such as the distinction between part and whole leading to descriptions of the part applying to the whole, just would not arise. In the course of his discussion in the *Book of deliverance* of the impossibility of things being infinite in number, Avicenna claims that an infinite number is possible in the case of things which, even though existing simultaneously, have no order either in position or by nature, i.e. which are neither corporeal nor interrelated causally.[4] Al-Ghazālī accurately describes this thesis as 'the human souls which are separated from bodies at death can be regarded as infinite in number, and they can exist all at the same time, since . . . that form of existence is without priority and posteriority'.[5] This Avicennan line of argument omits to mention the very real diffculty that God still has to order the infinite collection of immortal souls in order of merit, so that a sort of order is involved in this actual infinity in apparent opposition to Aristotelian principles.

As one might expect, al-Ghazālī, that acute critic of the *falāsifa*, attacked with alacrity Avicenna's account of an infinite number of souls. In fact, he describes that account as being one of the undesirable consequences of the belief in the eternity of the world. He argues against the eternity of the world on the ground that this would imply an infinite number of revolutions of the spheres, which, he argues, is impossible. Of course, Avicenna could reply that an infinite number of things is impossible only of things existing simultaneously but not of things existing successively. Al-Ghazālī responds to this sort of reply thus:

> And we say moreover to the philosophers: According to your principles it is not absurd that there should be actual units, qualitatively differentiated, which are infinite in number; I am thinking of human souls, separated through death from their bodies. These are therefore realities that can neither be called even nor uneven. How will you refute the man who affirms that this is necessarily absurd in the same way as you claim the connexion between an eternal will and a temporal creation to be necessarily absurd? This theory about souls is that which Avicenna accepted, and it is perhaps Aristotle's. (*TT* 13)

Averroes agrees that Avicenna's argument is faulty, since matter is the only individuating criterion on the more Aristotelian view that Averroes

[4] Ibn Sīnā, *Najāt*, ed. M. S. Kurdi, p. 203.
[5] Al-Ghazālī, *Al-maqāṣid al-falāsifa*, ed. S. Dunya (Cairo, Sa'adah Press, 1961), p. 194.

defends, and the immaterial nature of souls means that they cannot be individuated at all. And, even if we could talk of their being individuated, we should not accept that an actually infinite quantity of such individuals is conceivable.

Averroes makes clear that Avicenna's theory is different from that of 'the ancients', so in response he does not defend that theory but just the various philosophical positions on the nature of infinity and the circular movements of the heavens in response to al-Ghazālī. Al-Ghazālī criticizes the philosophical argument which rests on the impossibility of an actually infinite number of essential causes on the grounds that the philosophers (and he means Avicenna) are not consistent in ruling out this possibility. If we think even of only one soul being created each night that the world has existed, we will end up with a temporally ordered series of souls, an order consisting in an infinite number of coexisting individuals. As we have seen, al-Ghazālī quite shrewdly wonders why an actual infinity should be disallowed for space and yet apparently allowed for time, and he also brings in his doubts about the Aristotelian position on infinity and the success with which the *falāsifa* have resolved their account of the eternity of the world even given Aristotelian premisses (*TT* 169). Avicenna would perhaps have replied that the difficulty with actual infinity only arises if there *is* such a quantity, or can be thought to be such a quantity, but if there is no such identifiable series (as he argues is the case with immortal souls in time) then there is no problem. Averroes might agree with this but might suggest that this sort of reply rather gives the whole game away. After all, he would argue that there are no great problems here since there is no identifiable order because there are no identifiable individuals. The notion of immortal souls existing at all is, then, rather strange. Of course, Avicenna was quite aware of the fact that there are problems in trying to individuate souls when disembodied. This was in fact his main argument against the possibility of the existence of souls *before* they merged with bodies. He argued that after death the souls which survive are shaped individually and are differentiable by virtue of their prior connection with very different organizations of matter and different behaviour patterns. This is how he explained different achievements with respect to perfection by mortal human beings resulting in different and distinguishable souls which are then immortal. The interesting question remains, though, of whether the sort of connection which exists between such souls and matter is sufficient for us to talk about the separate existence and development of those souls?

This question returns with a vengeance when one considers Averroes' remarks on this issue. Some Qur'ānic doctrines, such as the belief in the provision of reward and punishment in return for individual failings and virtues in this life, are fairly specific about the events of the next life. Yet sometimes when Averroes refers to the consequences of our actions affecting our happiness in the next life he speaks as though those consequences automatically take effect: 'True science is knowledge of God, blessed and exalted, and the other beings as they really are, and especially of noble beings, and knowledge of happiness and misery in the next life . . . right practice consists in performing the acts which bring happiness and avoiding the acts which bring misery: and it is knowledge of these acts which is called "practical science"' (*FM* 63). In his *Commentary on Plato's 'Republic'* Averroes accepts Plato's view that happiness is not a reward and misery not a punishment, but rather both are effects of the corresponding acts (I,XI,5–7). Very much in this vein Avicenna comments: 'it is not to be imagined that after the resurrection there are obligations, commandments and prohibitions for anyone, so that by witnessing reward and punishment they should be scared or refrain from what is proscribed to them and desire what is commanded them'.[6] Avicenna claims that reward and punishment, praise and blame, merely have instrumental value in modifying behaviour.

All these descriptions of the future life fail to mention the significance of the agency of God. This omission can hardly be allowed to pass without comment, since the Qur'ān makes so much of the notion of personal divine judgment and its consequences for the pleasantness or otherwise of the afterlife. The problem for Averroes is quite clear. As an Aristotelian he would regard the possibility of personal immortality as being a difficult notion to comprehend. Matter, the principle of individuation, is precisely the substance which is corruptible and perishes when we die, and so we have to ask two questions. Does Averroes argue that the soul is immortal, and that each individual soul is immortal? In his account of the intellect he compares it with sensibility since both are passive powers which receive their objects from elsewhere. Following Alexander, he calls our intellect the material intellect, and argues that, since it is not physical or a power in something physical, it must be numerically one for all individuals. There could not be more than one given that multiplication within a species is inconceivable without matter. When separated

[6] Ibn Sīnā, 'Essay on the secret of destiny', trans. G. Hourani, *Bulletin of the School of Oriental and African Studies*, XXIX, I (1966), pp. 25–48; p. 33.