Peter Adamson

PHILOSOPHY IN THE ISLAMIC WORLD

A Very Short Introduction

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Introduction

Why 'philosophy in the Islamic world', and not simply 'Islamic philosophy'? There would have been other options too: 'Arabic philosophy', or even 'Islamicate philosophy'. The last of these would be perfect, if only 'Islamicate' were a real word. It was invented in recent decades to express what I mean by 'the Islamic world', which is to say, the geographical areas that have fallen within Islamic political and cultural control, from the rise of Islam down to the present. But I don't think it has caught on enough to be used in a book title. Neither 'Islamic' nor 'Arabic' philosophy fits the bill either. The trouble with 'Islamic philosophy' is that many important philosophers in the Islamic world were not Muslims. Christian thinkers played a major role in the initial reception and interpretation of Hellenic philosophy, and some of the greatest Jewish philosophers of all time—above all Maimonides—lived and worked in the Islamic world, especially in Muslim Spain. 'Arabic philosophy' suffers from a similar problem: philosophy in the Islamic world has been written in languages other than Arabic, especially Syriac, Hebrew, and Persian.

So then, 'philosophy in the Islamic world'. What should we expect this to include? Well, let's start at the beginning. Islam was born in the 7th century AD (see Box 1) with the revelation given to the Prophet Muḥammad, known as the Qurʾān.

The revelation handed down to Muḥammad insisted on the oneness of God (*tawḥıd*), promised reward for those who believe in and obey Him, and threatened punishment for those who do not. Muḥammad is identified in the Qurʾān as a paradigm to be emulated by other Muslims. For this reason, memories of the Prophet's deeds and sayings were passed down orally from his companions, and eventually written down by religious scholars. Such a report is called a *ḥadıth*. Along with the Qurʾān, *ḥadıth* forms the basis of Islamic religious teaching and also Islamic law.

Box 1 The Islamic Calendar

If you are willing to memorize just one date while reading this book, let it be AD 622, which is the year that the Prophet Muḥammad led his followers from his home city of Mecca to settle in Medina. The Muslim calendar is dated from that event, so that you can calculate a year in the Islamic calendar by taking the AD date and subtracting 622. Or you could, if the Islamic calendar were solar. But it is actually a lunar calendar, and lunar years are shorter than solar years. So the further towards the present you go, the less you have to subtract to get the right answer: I'm writing this introduction in August AD 2014, which falls in 1435 AH (a gap of only 579 years). Just as AD stands for *anno domini*, meaning 'year of our Lord', AH stands for *anno hegirae*, referring to the Arabic *ḥijra*, the 'pilgrimage' to Medina. In the rest of this book I'll give only the AD dates, which I assume will be more useful to most readers.

That's a sketch of the beginnings of Islam itself. What about the beginnings of philosophy under Islam? It's usual to identify the beginning of philosophy in the Islamic world with a translation movement that began more than 200 years after the age of the Prophet. From the end of the 8th century until the beginning of the 10th century, many works of Greek science and philosophy were rendered into Arabic. The most famous philosophers of the Islamic world, namely al-Kindı, al-Fārābı, Avicenna,

Averroes, and Maimonides, responded directly to these translations, and especially to the Arabic versions of Aristotle. The tradition they represent was called *falsafa*. As you can tell, this is just an Arabic version of the Greek word *philosophia,* so that the very name of the discipline marked its foreignness. Usually, what people have in mind when they talk about 'philosophy' in the Islamic world is this Hellenizing tradition of *falsafa*.

I however favour a broader understanding, which refuses to ignore material of philosophical interest just because it was not written by so-called 'philosophers (*falāsifa*)'. The historian of philosophy will find intriguing ideas in some commentaries on the Qurʾān (*tafsır*)*,* in classical works on Arabic grammar, and in treatises on the principles of Islamic law (*fiqh*). But for the purposes of this book, the main traditions that need to be considered alongside *falsafa* are *kalām* and sufism. You will presumably have heard of sufism, the mystical tradition of Islam, and its Jewish counterpart the Kabbalah, some of whose key texts were written in the Islamic world. *Kalām* is a less familiar word. In fact it literally means 'word', but is usually translated as 'theology' or 'rational theology'. The theologians, or *mutakallimīn,* were said to be doing the 'science of the word (*ʿilm al-kalām*)', for reasons that remain somewhat obscure. Perhaps it was because they were exploring the meaning of God's word, that is, His revelation. The *mutakallimīn* explored numerous subjects of obvious philosophical importance, for instance proofs of God's existence, human freedom, and even atomistic theories of matter.

An exclusive focus on *falsafa* has often gone hand-in-hand with exclusive focus on a restricted time period, beginning with al-Kindı in the 9th century and ending with Averroes, who died in 1198. Averroes has frequently been seen as the last philosopher of Islam. This is not only because he is the last great representative of Hellenic-inspired *falsafa*. It is also because he and his contemporary Maimonides are the last thinkers from the Islamic world to exercise significant influence on Latin medieval philosophy. Taking a European perspective, historians of philosophy have thus tended to ignore later developments in the Eastern heartlands of the Islamic world, when philosophy was often pursued in the context of *kalām* and sufism. Only recently have scholars begun to explore philosophical developments in the 13th century and beyond. I will duly be sketching those developments in the

chronological survey you are about to read. In the thematic sections of the book, I will be alluding to thinkers from across the ages, right down to the 20th century.

Chapter 1
A historical whirlwind tour

Within a few generations of the rise of Islam, the new religion spread across a huge swath of territory, from the Iberian penninsula in the West to the borders of India and China in the East (see Map 1). Most of this territory still belongs to the Islamic world today, and more besides: nowadays Indonesia is the nation with the highest number of Muslims, and Islam is the second most popular religion in India. Naturally, it would be an exaggeration to say that philosophy has flourished in Islamic culture at all places and times. But the widespread idea that philosophy in the Islamic world declined, or even vanished, towards the end of the medieval period is equally false. This misconception is so deeply embedded that philosophy in the Islamic world is most often taught at university level as a part of *medieval* philosophy. Yet the full story goes well past the medieval period and down to the present day.

The formative period

The medieval period of Europe overlaps with most of what I am calling the 'formative period': the time up to Avicenna (d. 1037). Ancient Greek philosophy became known in the Islamic world a couple of centuries before Avicenna, but our story begins earlier, with the arguments that raged among theologians (*mutakallimīn*) in the 8th century. A good place to start would

be Wāṣil ibn ʿAṭāʾ (d. 748), who is given credit for founding the *kalām* movement known as the Muʿtazilites. This label is slightly misleading. The early theologians spent much of their energy arguing with one another, and did not yet see themselves as adhering to a standard list of Muʿtazilite doctrines. Still, Wāṣil and several other early thinkers, especially Abī l-Hudhayl (d. 849), did hold views that would later be adopted by thinkers who thought of themselves explicitly as Muʿtazilites.

The Muʿtazilites were styled as 'the upholders of unity (*tawḥıd*) and justice (*ʿadl*)', a phrase which gives us a good way into seeing how their theological doctrines hung together. They were staunch defenders of God's unity—not exactly a controversial stance, given that the core teaching of Islam is monotheism. But they interpreted divine unity in an unusually strict way, rejecting the existence of multiple attributes distinct from God. As for the idea that God is just, the Muʿtazilites again had a controversial interpretation of this uncontroversial claim. They believed that human reason can discern the nature of moral obligation. For instance, we perceive that it would be unjust—even for God—to punish people for deeds they cannot help committing. This led the Muʿtazilites to one of their signature doctrines: the affirmation of human freedom.

Other theologians objected to the Muʿtazilites' confident application of human reason. For these opponents, we should base our beliefs on revelation alone. Some went so far as to accept that God has a body because the Qurʾān speaks of Him as having a face, or as sitting upon a throne. Naturally, the Muʿtazilites too saw revelation as an indispensable source for theology. Those who doubt their credentials as 'philosophers', preferring to reserve this term for thinkers who engaged with the Greek tradition, might point to the fact that the Muʿtazilites did argue on the basis of citations from the Qurʾān and *ḥadıth* (see further Box 2). But of course, the holy texts of Islam were common ground between all the theologians, except for disagreements about which *ḥadıth* should be accepted as reliable. In an effort to solve interpretive deadlocks, debates within *kalām* often had recourse to rational argumentation.

Box 2 The *miḥna*

In 833, the caliph al-Maʾmīn declared his support for a Muʿtazilite doctrine: the createdness of the Qurʾān. This teaching went together with the Muʿtazilite understanding of divine unity. The Qurʾān is the word of God, and thus can be seen as one of His attributes. To accept that this word is eternal rather than created would, according to the Muʿtazilites, make it a second divine entity alongside God Himself. That would violate the core Islamic principle of *tawḥId* (God's oneness). Al-Maʾmīn and his successors, the very caliphs who sponsored the translation of Greek scientific works into Arabic, imposed an 'inquisition' or 'test' (*miḥna*) in which religious scholars and judges were required to accept that the Qurʾān was created. Some defied the caliphs and were persecuted, most famously Aḥmad ibn Ḥanbal. But in the end the attempt to enforce theological conformity failed. Ibn Ḥanbal was widely admired for his stance; one of the four orthodox legal schools of sunni Islam would come to be named for him. After the *miḥna* political rulers of sunni Islam would generally leave the theological debates to the scholars or ʿ*ulamā*ʾ, a stark contrast to the top-down enforcement of orthodoxy we find in medieval Christendom. Perhaps for this reason, there has rarely been persecution aimed at *philosophical* beliefs in the Islamic world, even when those beliefs were markedly opposed to mainstream religious convictions. By contrast, sectarian *religious* beliefs have often been treated as politically seditious, with shiites persecuted by sunni rulers and vice-versa.

Another reason to begin our overview before the Greek-Arabic translation movement is that the movement did not occur in a vacuum. Already in late antiquity, Hellenic philosophy (see Figure 1) found its way into a Semitic language: not Arabic, but Syriac. In a foreshadowing of the ʿAbbāsid-sponsored Greek-Arabic translations, Christian scholars working at monasteries in Syria produced versions of works by Aristotle and other Greek thinkers. Some Christians, for instance Sergius of Rēshʿaynā (d.

536), composed their own philosophical treatises. This Christian scholarly tradition provided continuity between the Hellenic and Islamic cultures. When Islam spread through the Near East, Greek-speaking Christians fell within its sphere of influence. They retained their religious beliefs, and there continued to be scholars with facility in both Greek and Syriac. So when the ʿAbbāsid caliphs and other wealthy patrons of the 8th–10th centuries decided to have Greek scientific works rendered into Arabic, most of the translators they hired were Christians. This activity was centred in Iraq and particularly Baghdad, the new capital city founded by the early ʿAbbāsid caliph al-Manṣīr.

1. Aristotle teaching Alexander the Great, as pictured in a 13th-century Arabic manuscript.

One outstanding translation group was gathered around the Christian medical expert Ḥunayn ibn Isḥāq (d. 873). He specialized in translating the works of Galen, the greatest doctor of late antiquity. His son, the somewhat confusingly named Isḥāq ibn Ḥunayn (d. 910/11; 'Ibn' means 'son', so his name simply means 'Isḥāq son of Ḥunayn'), concentrated on Aristotelian

philosophy. Philosophy was also the focus of another group, the 'Kindı circle'. Their leader was al-Kindı (d. after 870), the first *faylasīf* of Islam, that is, the first to engage with the newly translated Greek scientific and philosophical works. He does not seem to have known Greek himself, and he was a Muslim, yet he coordinated the efforts of a group of Christian translators. In addition to versions of treatises by Aristotle, the Kindı circle also produced Arabic translations of works by the two greatest late ancient Platonists, Plotinus (d. 270) and Proclus (d. 485). Probably due to a misunderstanding of prefatory comments that were added to the text in the Kindı circle, parts of the Arabic version of Plotinus were transmitted as the *Theology of Aristotle*. In other words, a major work of ancient Platonism was thought to be by Aristotle himself. A similar confusion attached to the Arabic Proclus. A version of the Kindı circle translation of Proclus' *Elements of Theology* became known in Latin Christendom as the *Book of Causes* (*Liber de Causis*), also ascribed to Aristotle.

Al-Kindı was deeply influenced by these Neoplatonic sources, and by the genuine Aristotle, as well as a wide range of other translated sources. He was particularly interested in mathematical works by authors like Euclid and Ptolemy. He drew these ideas together in a series of treatises, often in the form of epistles addressed to his patrons, who included the ʿAbbāsid caliph al-Muʿtaṣim and the caliph's son, whom al-Kindı tutored. These treatises set out to prove the agreement between Islam and Greek philosophy, in order to display the value of the newly translated materials for the educated elite of al-Kindı's day. In his most important work, *On First Philosophy*, al-Kindı used Greek ideas to portray God's unity in a way reminiscent of the Muʿtazilites, and to prove that the created universe is not eternal. But al-Kindı did not restrict his attention to theological questions. He wrote on a bewildering range of topics, from cosmology to ethics to the soul, to more practical topics like swords and perfumes. There are often connections between al-Kindı's philosophy and his contributions in the applied disciplines. His epistles on cosmology provided an implicit rationale for other treatises on astrology, and his Pythagorean interests in mathematics played a role in several writings on music and even in a work on pharmacology.

We can trace his influence among a number of thinkers who form a 'Kindian tradition'. These figures, who included first-, second- and third-generation students of al-Kindı, followed his lead in seeing harmony between Islam and Greek philosophy, especially the Platonism they found in the Arabic versions of Plotinus and Proclus. The most important representatives of this tradition were al-ʿĀmirı (d. 991), author of (among other things) a reworking of the Arabic Proclus materials, and Miskawayh (d. 1030), who quoted al-Kindı at the end of his influential ethical treatise *The Refinement of Character*. Thinkers of the Kindian tradition, like al-Kindı himself, tended to be all-round intellectuals and not just philosophers. Throughout the formative period, philosophy was frequently pursued as just one among several cultivated arts among the intelligentsia (see Figure 2). Miskawayh, for instance, is well known for his work as a historian.
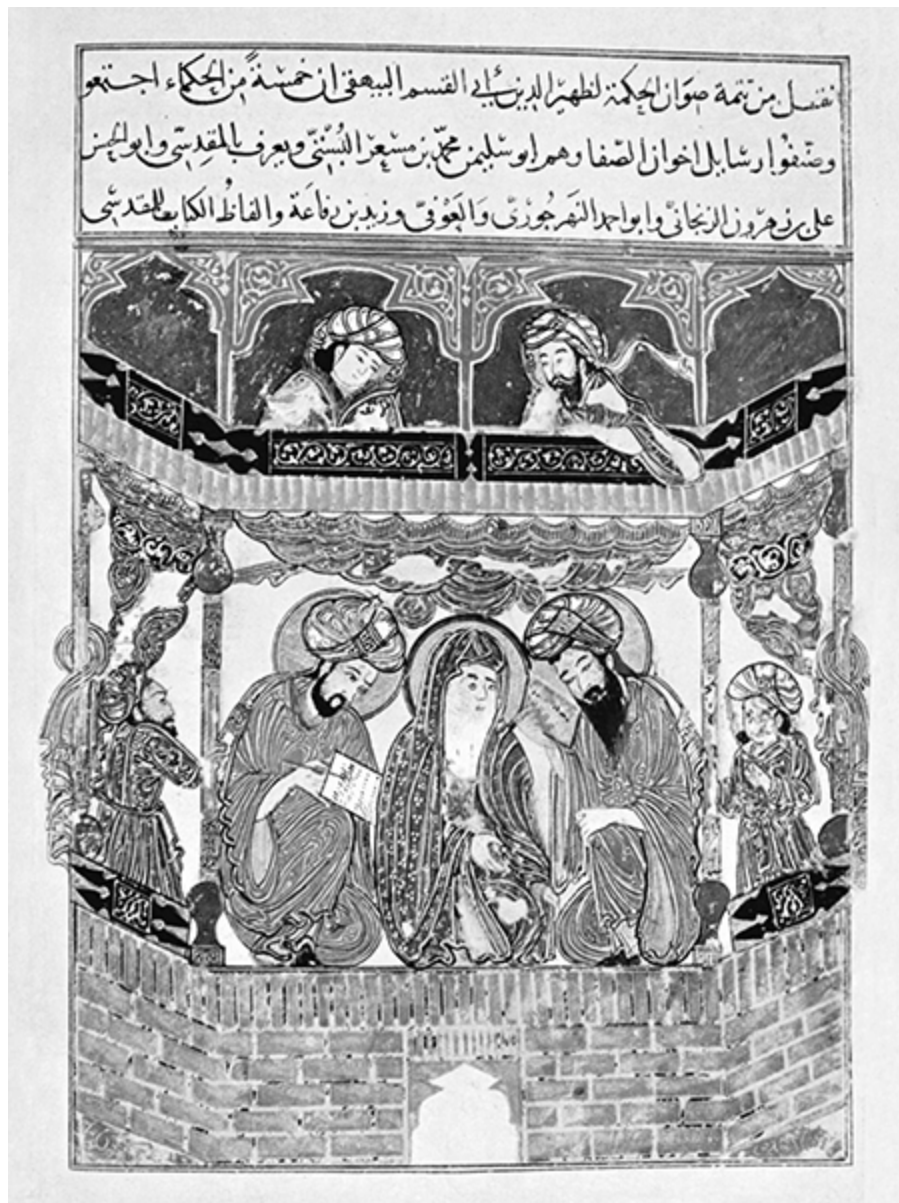
2. Portrait of the 10th-century Platonists known as the Brethren of Purity.

But philosophy also had its detractors. In a famous debate at the court of a Baghdad vizier, a Christian philosopher and exponent of the quintessential Hellenic discipline of logic, Abī Bishr Mattā (d. 940), was publicly embarrassed by a grammarian, al-Sīrāfī (d. 979). Abī Bishr lost the battle, but not the war. Eventually logic would be widely adopted by Muslim theologians. In the shorter term, a group of Aristotelian philosophers

associated with Abī Bishr would flourish for several generations. Mostly this group, the 'Baghdad Peripatetics', were Christians who devoted their attention to commenting on Aristotle, with forays into Trinitarian theology and Biblical exegesis. The most outstanding Christian member of the school was Yaḥyā ibn ʿAdı, from whom we have a number of philosophical and theological treatises. But a more famous name belongs to a Muslim connected to the group: al-Fārābı (d. 950). He shared his Christian colleagues' interest in logic, and likewise wrote commentaries on Aristotle. His fame is, however, due more to his original systematic works, which integrate Aristotelian philosophy with themes from Neoplatonism. Against this cosmological and metaphysical setting, he set out an innovative political philosophy, influential on later thinkers like Averroes and Naṣır al-Dın al-Ṭīsı.

Jews as well as Christians played a major role in the philosophy of the formative period. We have a polite philosophical correspondence between Yaḥyā ibn ʿAdı and a Jewish philosopher, and al-Kindı's writings were used extensively by one of the earliest Jewish thinkers in the Islamic world, Isaac Israeli (d. *c*.907). Jews also adopted ideas from the Islamic theology of their day. The chief example is Saadia Gaon (d. 942), a formidable scholar who wrote on Jewish law and Hebrew grammar, translated the Bible into Arabic, and composed a major philosophical-theological work, the *Book of Doctrines and Beliefs*. He has much in common with al-Kindı, for instance in his discussion of the eternity of the universe. But Saadia is most often compared to the Muʿtazilites, whose positions on human freedom and divine attributes he echoed and further developed.

Avicenna

In the wake of the translation movement, then, philosophy was developing in different ways among thinkers of various faiths. There was the hard-core Aristotelianism of the Baghdad school, the more irenic and broadminded stance of the Kindian tradition, anti-philosophical criticism from men like al-Sırāfı, and jostling for supremacy between Hellenic-inspired philosophy and Islamic *kalām*. But the situation would change in the 11th century, thanks to a thinker from the central Asian city of Bukhārā whose impact was unparalleled: Abī ʿAlı ibn Sınā, usually known in English by his Latinized name Avicenna (d. 1037). As we can see from a brief intellectual autobiography composed by Avicenna, he was a confident and largely self-

taught genius who reserved the right to pass judgement on all his philosophical predecessors. In a series of works covering all the departments of philosophy, above all his magisterial *Healing* (*al-Shifāʾ*), Avicenna thoroughly reworked the ideas of the Aristotelian tradition as it had come down to him.

After Avicenna, philosophers had a stark choice: take Avicenna as the new starting-point, or try to undo the damage by retrieving the authentically Hellenic legacy. In the Eastern heartlands of Islam, the latter was attempted by ʿAbd al-Laṭīf al-Baghdādı (d. 1231), who despised Avicenna and tried to go back to Aristotle. But in these regions nearly everyone chose the former approach of engaging with Avicenna. Sometimes the engagement was highly critical, most famously in the case of al-Ghazālı (d. 1111), whose *Incoherence of the Philosophers* took aim at Avicenna rather than Aristotle. Over the longer term, theologians in the East would continue to criticize, but also selectively borrow from, Avicenna's philosophy. The result was a long-lived tradition of *kalām* shot through with his distinctive terminology and distinctions. Out in the Muslim province of al-Andalus (modern-day Spain and Portugal), the situation was rather different.

Andalusia

Already the early Andalusian jurist Ibn Ḥazm (d. 1063) was able to study with a representative of the Aristotelian Baghdad school. This is the brand of philosophy that for the most part won out in Andalusia. Avicenna was much admired by Ibn Ṭufayl (d. 1185), author of the philosophical novel *Ḥayy ibn Yaqẓān*, in which the title character grows up alone on a desert island and becomes a self-taught philosopher. But even Ibn Ṭufayl complained of having poor access to Avicenna's works. His predecessor, Ibn Bājja (Avempace, d. 1139), was much more influenced by Aristotle and by al-Fārābı, who exerted great influence on both Muslim and Jewish thinkers in Andalusia. Those who drew on al-Fārābı included the greatest Aristotelian exegete of the Islamic world: Ibn Rushd, like Avicenna usually known by a Latinized version of his name, Averroes (d. 1198). He produced numerous commentaries on the works of Aristotle in different formats. In

them Averroes shows his mastery of both the Aristotelian texts and his commentators, from late antiquity to al-Fārābı and Ibn Bājja.

Averroes was not particularly influential among Muslim thinkers, for whom his revival of the Baghdad school's Aristotle-centred philosophical project was no longer relevant. But in Latin Christendom, where the works of Aristotle were just attracting renewed interest in the 12th and 13th centuries, Averroes became the chief guide. Aristotle was called simply 'the Philosopher', and Averroes 'the Commentator'. Averroes' influence was perhaps even greater among Jewish readers in Andalusia and beyond: among readers of Hebrew it became common to consult Averroes' commentaries and summaries of Aristotle rather than Aristotle himself. The great Jewish commentator Levi Ben Gerson (Gersonides, d. 1344) devoted his exegetical works to the exegeses of Averroes, producing 'super-commentaries' on the latter's commentaries.

That was in the 14th century, by which point Jewish philosophy in Andalusia had been a going concern for quite some time. Already in the 11th century, we have Solomon ibn Gabirol (Avicebron, d. 1057/8) and his philosophical treatise *The Fountain of Life* (known often by its Latin title, *Fons Vitae*). This is not an overtly Jewish work, but rather a treatise drawing on Neoplatonic sources to articulate the relationship between God and created things. Ibn Gabirol also wove philosophical themes into his poems, which were a highpoint of Jewish literature in Andalusia. His *Fountain of Life* was written in Arabic, but the poems in Hebrew—setting an example for generations to follow, who often wrote philosophy in Arabic or Judeo-Arabic (written in Hebrew letters), whereas poetry and works on Jewish law or biblical commentary were typically in Hebrew. We see this in the greatest Jewish thinker of the medieval age, and arguably of all time: Maimonides (d. 1204), who wrote legal treatises in Hebrew but philosophy in Arabic.

When it came to philosophy, Maimonides adopted the Aristotelian project inherited from al-Fārābı, like his contemporary Averroes. He sought to reconcile this project with the Jewish tradition, clearing up apparent conflicts between the two in his famous *Guide for the Perplexed*. For some

later Jewish thinkers, the *Guide* was unsettling in its rationalism and devotion to the Aristotelian tradition. Copies of the work were, infamously, burnt by Christian authorities in southern France in the 1230s. This occurred at the behest of Jewish conservatives who were alarmed by the rationalism of Maimonides and his supporters—for instance Samuel ibn Tibbon (d. 1230), who translated the *Guide* into Hebrew. The so-called 'Maimonides controversy' reflected the deep disagreement among Jews about the value of doing philosophy. But even the opponents of rationalist Maimonideanism acknowledged the authority of Maimonides himself when it came to questions of Jewish law.

The development of philosophy in Andalusia stands as the peak of Jewish thought in the medieval period, with Maimonides as the apex of that peak. This was possible because of the favourable conditions enjoyed by Jews in Muslim culture—a general feature of Islamic society throughout the medieval period, but particularly marked in Andalusia. Scholars frequently speak of the *convivencia*, the 'living together' of Jews, Muslims, and also Christians on the Iberian peninsula. This came to an end during Maimonides' lifetime, with the invasion of the fundamentalist Almohads. Maimonides fled with his family and wound up living and working in Cairo, while other Jews relocated to Christian realms, including southern France. After the Christian 'reconquest' of Andalusia, the situation improved, but there was an appalling pogrom in 1391, when the Jews of Barcelona and elsewhere were massacred. One of the victims was the son of Ḥasdai Crescas (d. 1410/11), a brilliant philosopher and critic of Maimonidean Aristotelianism. Almost exactly a century later, the story of Muslim and Jewish thought in Andalusia would come to an end, when the last Jews and Muslims were exiled in 1492.

Box 4 Mysticism in Andalusia

For the subsequent history of philosophy in the Islamic world, the most influential thinker from Andalusia was Ibn ʿArabI (d. 1240), born in Mercia though he later relocated to Damascus. He drew together themes espoused by earlier figures, like the great female mystic Rābiʿa (d. 790s) and the provocative sufi martyr al-Ḥallāj (d. 922). For Ibn ʿArabI and other sufis, God lay beyond the grasp of human reason. Yet He shows Himself to us in the form of the universe He has created and in the revelation, especially the names He has given to Himself in the Qurʾān. Ibn ʿArabI set the stage for the later development of philosophical sufism, perpetuated in Andalusia by Ibn SabʿIn (d. 1270) and in Anatolia by al-QīnawI (d. 1274), who integrated Ibn ʿArabI's ideas with Avicennan philosophy at the same time as al-QīnawI's friend RīmI (d. 1273) was writing his famous mystical poems in the Persian language. Mysticism also blossomed among Jews in Andalusia, with the emergence of the *Kabbalah*, meaning 'tradition'. Kabbalistic authors took inspiration from several late antique texts that adopted a symbolic approach to the divine—for instance by assigning numerical values to the limbs of God's body. (A vivid contrast with the rationalism of Maimonides, who declared it the duty of all Jews to believe in God's incorporeality!) One medieval text of the Kabbalah, the *Zohar*, in fact presents itself as a late antique work. Much as the sufis sought to grasp God insofar as possible through His names, the medieval Kabbalists spoke of ten *sefirot* (roughly, 'numbers') through which God shows Himself to His creation, while Himself remaining utterly transcendent.

Reactions to Avicenna

In the East, Avicenna supplanted Aristotle as *the* philosopher, but he attracted as many critics as admirers. Aside from al-Ghazālı, the most famous critic was Suhrawardı (d. 1191), founder of what he styled as a new

'Illuminationist' (*ishrāqı*) tradition of philosophy. Like sufis who were inspired by Ibn ʿArabı (see Figure 3 and Box 4), Suhrawardı wove together ideas from the philosophical tradition with mystical themes. But Suhrawardı's taste was rather exotic when it came to his inspirations. In his greatest work, *The Philosophy of Illumination* (*Ḥikmat al-Ishrāq*), he claimed solidarity with ancient sages like Plato, for instance by affirming the reality of Platonic Forms. In fact Suhrawardı presented his Illuminationism as a recovery of the wisdom of several civilizations: Greek, Persian, and Indian. At the core of this Illuminationist philosophy, as the name suggests, was the concept of light. God, the 'Light of lights', creates by spreading forth rays of illumination that become progressively dimmer, with bodies constituting 'dark' obstacles to the divine splendour. All this was put forward in opposition to what Suhrwardı called the 'Peripetatic' philosophy, which for him meant Avicennism, not Aristotelianism.

Alongside Suhrawardı and a few thinkers in the subsequent generations who commented on his works (especially al-Shahrazīrı, d. after 1288), another line of response to Avicenna developed within the Ashʿarite school of *kalām*. This school's founder, al-Ashʿarı (d. 935/36), began as an adherent of the Muʿtazilite doctrines but came to reject them. Against the Muʿtazilites' austere conception of divine unity, the Ashʿarites accepted the distinct reality of God's attributes. They also believed that the Muʿtazilite stance on human freedom was insufficient to safeguard God's omnipotence, and insisted that God creates absolutely everything other than Himself, including human actions. If the core of Muʿtazilism was its faith in the power of human reason, the core of Ashʿarism was respect for God's untrammelled power and freedom to do as He sees fit. Even moral obligations, from their point of view, arise only once God has laid them upon His creatures. Hence the Ashʿarites endorsed a 'divine command' theory of morality, whereas the Muʿtazilites thought that even God must adhere to certain moral principles.

3. The tomb of Ibn ʿArabi in Syria.

Though Muʿtazilism did live on in the post-formative period, the Ashʿarites (and a similar school, the Māturıdıs) became the dominant force in sunni theology. Avicenna seems to have been influenced by Ashʿarism to some

extent, though to what extent is a matter of debate. There's no debating the influence in the other direction, as Ashʿarite theology absorbed Avicenna's thought. Even the assault on Avicenna in al-Ghazālı's *Incoherence* falls short of a thorough rejection. After all, he refutes only certain Avicennan theses, implying that the others may be acceptable. (A similar range of Avicennan theses was targeted slightly later by another Ashʿarite, al-Shahrastānı (d. 1153).) Furthermore, al-Ghazālı insists on the value of disciplines like logic and astronomy, dismissing critics of the latter by quoting the proverb, 'a rational foe is better than an ignorant friend'. So it was arguably in part thanks to, rather than in spite of, al-Ghazālı that Avicennan philosophy and especially Avicennan logic became abiding interests of later Ashʿarites.

A particularly outstanding representative of philosophical Ashʿarism was Fakhr al-Dın al-Rāzı (d. 1210), who is not to be confused with the above-mentioned Abī Bakr al-Rāzı (the name 'al-Rāzı' just means someone from the Persian city of Rayy). Fakhr al-Dın wrote lengthy and complex treatises covering many of the main topics raised by Avicenna's philosophy, enumerating arguments for and against a range of possible views on each topic. Fakhr al-Dın was an appreciative exegete of Avicenna as well as a critic. Evidence for this is his detailed, though often critical, commentary on Avicenna's late work *Pointers and Reminders* (*al-Ishārāt wa-l-tanbıhāt*). This commentary provoked a backlash from the greatest Avicennan of the 13th century, Naṣır al-Dın al-Ṭīsı, who wrote a counter-commentary on the *Pointers* that is far more approving of Avicenna's arguments. Yet al-Ṭīsı was not just a commentator, a kind of second Averroes devoted to Avicenna rather than Aristotle. To the contrary, he was a protean thinker, who at different stages of his career espoused two varieties of shiite Islam, and who could sound either mystical or highly rationalist depending on context.

Furthermore, al-Ṭīsı made great contributions in the sciences, especially astronomy. He was the head of a group of philosophers and scholars at an astronomical observatory sited at Marāgha in modern-day Azerbaijan (see Figure 4). This group's members were remarkably varied in philosophical approach, though all had an interest in some core disciplines like logic and of course astronomy. They included a major Illuminationist thinker, Quṭb al-Dın al-Shırāzı (d. 1311), an Avicennan theologian named al-Kātibı (d.

1276), who rethought Avicenna's logic in one of the most widely read logical textbooks of all time, *al-Risāla al-Shamsiyya*, and even a Christian philosopher, Bar Hebraeus (d. 1286). To complete the ecumenical picture, we can add that al-Ṭīsı exchanged philosophical views with Ibn Kammīna, a Jewish thinker who took an interest in Suhrawardı's Illuminationist philosophy. Nor was Ibn Kammīna the first Jewish author involved in this long-running engagement with Avicenna. Earlier, a Jewish-Muslim convert named Abī l-Barākāt al-Baghdādı (d. 1160s) had written the *Book of What Has Been Carefully Considered* (*Kitāb al-Muʿtabar*). As the title suggests, Abī l-Barākāt was passing judgement on previous philosophers, including Avicenna, in much the way that Avicenna had passed judgement on the Aristotelian tradition. In the process, Abī l-Barākāt made some proposals on topics in physics not unlike those of the aforementioned (but chronologically later) Western Jewish critic of Maimonides, Ḥasdai Crescas.
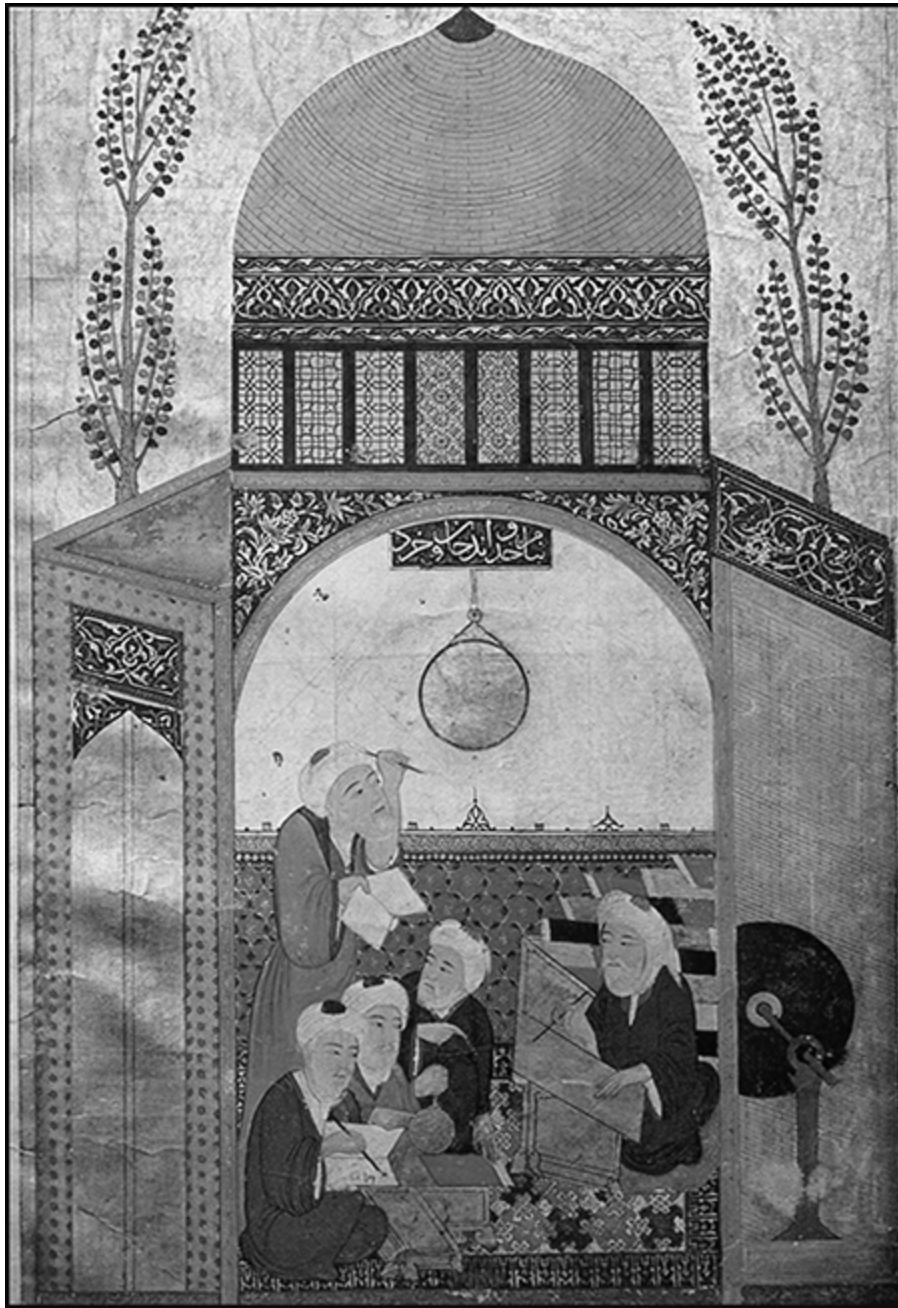
4. A 15th-century Persian manuscript of Naṣır al-Dın al-Ṭısı's observatory at Maragha depicting astronomers at work teaching astronomy, including how to use an astrolabe. The instrument hangs on the observatory's wall.

The Mongol period

With al-Ṭīsī's group at the Marāgha observatory, we already reach the time of the Mongol invasions, which spread death, destruction, and disruption across the Eastern Islamic lands. Surprisingly, philosophy and scientific activity were able to survive and even find sponsorship under the Mongols. The Marāgha observatory enjoyed the patronage of Hülegü, the Mongol conqueror of Baghdad (according to legend, al-Ṭīsī advised him on how to execute the last ʿAbbāsid caliph). A later ruler of Mongol descent, Ulegh Beg, sponsored another observatory at Samarqand. The royal court of Samarqand could also boast of significant intellectuals, for instance the theologian al-Taftazānı (d. 1390). He and earlier Mongol-era sunni theologians like al-Ijı (d. 1355) produced comprehensive summaries of the philosophically tinged sunni *kalām* pioneered in the previous couple of centuries. These duly became the object of further commentaries, and were studied by many generations of young religious scholars in *madrasas* across the Islamic world. In fact works by theologians, together with standard commentaries, were still being studied at al-Azhar university in Cairo in the 20th century, as were logical treatises like the aforementioned *Risāla al-Shamsiyya* of al-Kātibı. In the formative period intellectuals like al-Kindı and al-Fārābı expected philosophy to supplant *kalām*, using the tools of Hellenic wisdom to provide superior answers to questions raised by the Islamic revelation. In the end, something very different happened. *Kalām* became a vehicle for the spread of philosophy, albeit that the philosophy in question derived from Avicenna rather than Aristotle or Plotinus.

These developments were remarked upon by some of the sharper observers of the time. No observer was sharper than the historian Ibn Khaldīn (d. 1406), who had the luxury of witnessing the Mongol invasion from a safe distance, since he came from the Western Islamic world (the 'maghreb'). He noted that Hellenic philosophy had been replaced by something new —'as if the books of the ancients had never been'—and that *kalām* and philosophy had become effectively indistinguishable. Ibn Khaldīn himself stood outside of that tradition. Neither an Avicennan nor a *mutakallim*, he innovatively applied the empirical lessons of Aristotelian science to the subject of human history. Looking back over the rise of Islam and the

success of tribal groups like the Almohads in Andalusia, Ibn Khaldīn came to a general theory about the rise and fall of political dynasties.

Similar observations about fusion of philosophy with *kalām* had already been made earlier, with no little alarm, by Ibn Taymiyya (d. 1328). He promoted a radical approach to jurisprudence (see Box 5), which rejected centuries' worth of legal orthodoxy in favour of what he perceived as the teachings of the first Muslim generations. Ibn Taymiyya also railed against the various corruptions he perceived in Muslim intellectual life. Unlike the earlier critic of philosophy al-Ghazālı, Ibn Taymiyya had nothing but scorn for the discipline of logic. He wrote at length about its uselessness, remarking that expertise in logic is like camel meat on a mountain top: hard to reach, and not worth much once you've got it. Nor was he impressed by 'philosophical sufis' (his phrase), who to his mind represented as grave a threat to Islam as the Mongol hordes.

Box 5 The Islamic legal schools

There is a long history of mutual interaction between law and philosophy in the Islamic world. It was common for both Jewish and Muslim philosophers to be legal scholars: al-GhazālI, Averroes, and Maimonides are only the most famous examples. Within Islam, there are four orthodox legal *madhhabs* or schools in sunni Islam, each named after an esteemed religious authority: the ḤanafIs, the ḤanbalIs, the ShāfIʿIs, and the MālikIs. They largely agreed on broad methodological issues, but were distinguished by areas of geographical dominance (for instance the MālikIs were the main school in the West) and on many points of legal detail. In addition the shiite Muslims had their own legal tradition. Within sunni Islam there were other, less influential approaches to law. For instance the Andalusian jurist Ibn Ḥazm was a ẒāhirI, meaning that he followed only the 'evident (*ẓāhir*)' meaning of pronouncements in the Qurʾān and *ḥadIth*, without drawing analogies or inferences as did the jurists of the orthodox schools.

Three empires

By the beginning of the 16th century, the chaos caused by the Mongols was fading into memory and new political realities were settling in. Three powerful empires controlled most of the Islamic world (see Map 3). The earliest to rise to dominance were the Ottomans, who managed to take Constantinople from the Byzantines in 1453. Somewhat later, in India, rulers with Mongol blood-lines founded the Mughal dynasty. Under both Ottomans and Mughals, philosophy continued along more or less the lines we have seen in the Mongol period. The 'intellectual sciences' were practised in both empires. Sophisticated astronomical work was done in the Ottoman realm by figures like ʿAlāʾ al-Dın al-Qīshjı (d. 1474). In Mughal India, a standard curriculum developed for the study of philosophical *kalām*, the so-called *dars-i niẓāmı*, named for Niẓām al-Dın Sihālavı (d. 1748), a scholar who helped determine which works should be studied. He was a member of a family of scholars, the Farangı Maḥall, who emerged in Lucknow in the 18th century. In the 19th century another family, the Khayrabādıs, would carry on the practice of study and commentary on the classical works of Avicennizing *kalām*

A similar programme of study was followed under the Ottomans, though Kātib Çelebi (d. 1657) worried that the intellectual sciences were stagnating in his day. Philosophical *kalām* had competition from other intellectual currents. For the moderate Çelebi, one worry was a populist religious movement, the Kādızādelis, strong critics of corruption among the scholarly class or ʿ*ulamāʾ*. Like Ibn Taymiyya before them, the Kādızādelis also took aim at the excesses of sufis. But philosophical sufism continued to thrive in the face of such criticisms. In India, a Mughal prince named Dārā Shikīh (d. 1659) even wrote about the harmony between sufism and the teachings of classical India. A later mystical philosopher of India, Shāh Walı Allāh (d. 1762), was also convinced that multiple religions could represent versions of the single eternal truth. Through it all, the *madrasas* of both empires continued to teach students logic, and theologians continued to debate the merits of Avicennan philosophy. Earlier in the Ottoman empire, a sultan even asked two scholars to offer competing assessments of al-Ghazālı's criticism of Avicenna in the *Incoherence of the Philosophers*.

All of which should make it clear that philosophy and science did not, as is so often supposed, vanish in the Islamic world after the medieval period. And we haven't even mentioned the best known of the later philosophical traditions, which unfolded in Persia. In the early 16th century, the area corresponding to modern-day Iran fell under the sway of the shiite Safavid dynasty. Just before and during the rise of the Safavids, three significant thinkers emerged in the Persian city of Shırāz: Jalāl al-Dın al-Dawānı (d. 1501), Ṣadr al-Dın al-Dashtakı (d. 1498), and the latter's son Ghiyāth al-Dın al-Dashtakı (d. 1541). A hostile rivalry between the two Dashtakıs and Dawānı was fought out over questions of logic, metaphysics, and the interpretation of Avicenna. Their mutual refutations, often presented in commentaries or glosses on earlier thinkers, would themselves be made the object of many commentaries in the coming centuries (see Figure 5).

But the greatest thinker of early modern Iran is universally acknowledged to be Mullā Ṣadrā (d. 1640). He typified the syncretic tendencies of philosophy under the Safavids. Like the earlier Ismāʿılı thinkers (see Box 3), Safavid philosophers found Hellenic Platonism to be a good fit with shiite theology, and Greek-Arabic philosophical translations were thus read with the sort of careful attention they had rarely received since Avicenna. We even find commentaries being written on the Arabic Plotinus, or *Theology of Aristotle*, at this time. Alongside these Hellenic ideas, Ṣadrā drew on materials from Avicenna, Avicennan *kalām*, and philosophical sufism. Yet he was also a startlingly original thinker, whose theory of 'modulation' in being and substantial change promised to resolve long-standing disputes about existence and the nature of God.
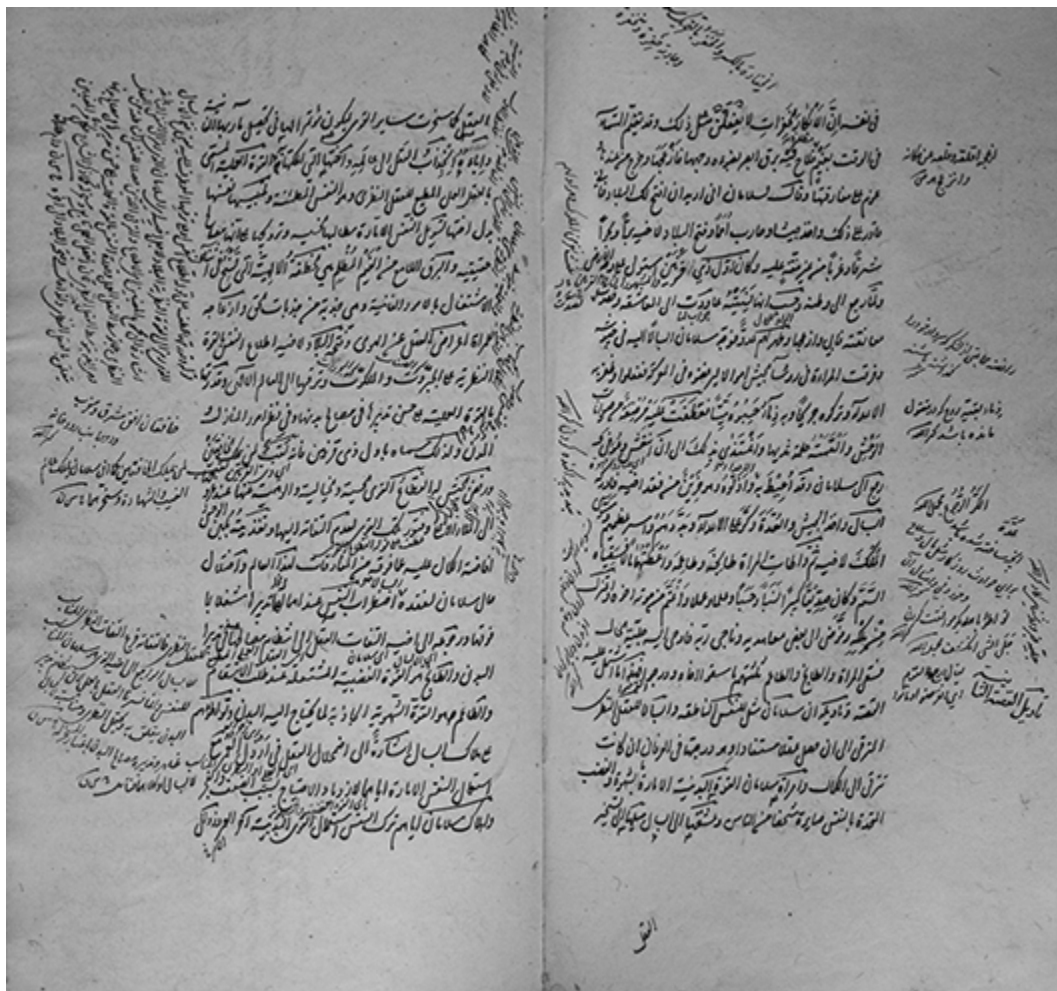
5. Manuscript image showing how glosses were added to comment on philosophical texts.

The modern age

Ṣadrā's theories have also met with opposition in some quarters, and though he was always read he became the central inspiration for Iranian philosophy only from the 19th century onwards. This was in part thanks to sympathetic exegesis by Sabzawārı (d. 1878) and more recently ʿAllāmah Ṭabāṭabāʾı (d. 1981). Seyyed Hossein Nasr (born 1933), originally from Iran but now an academic based in the United States, has been inspired by Ṣadrā and also by Ṭabāṭabāʾı; the two read philosophy together in Iran. Nasr has also urged a broad, multi-faith and multi-cultural perspective that finds commonalities in

many traditions within and beyond the borders of Islam. Taking a page from the book of Shāh Walı Allāh, Nasr sees fundamental agreement between a number of religious traditions on a core set of commitments he calls the 'perennial philosophy'. He has even suggested that these shared values could provide an effective basis for environmentalism, since the perennial philosophy urges the subordination of selfish desire to the good of the whole creation.

While Ṣadrā and other figures from Islamic history have provided inspiration for latter-day intellectuals, philosophical and scientific ideas from beyond the Islamic world have also had an impact. In the 18th century, Ottoman thinkers like the philosophical sufi ʿAbd al-Ghanı al-Nābulusı (d. 1731) were already arguing for a 'renewal' of Islam that would respond positively to European science. By the 19th century, the Ottoman sultans were looking to European models as they brought in bureaucratic, military, and educational reforms. This helped launch more radical reform movements, the Young Ottomans and Young Turks, who made frequent mention of European philosophy in formulating their political views. Two leading Young Turks, Ziya Gökalp (d. 1924) and Abdullah Cevdet (d. 1932), drew respectively on the sociology of Émile Durkheim and the theories of Ludwig Büchner and Auguste Comte.

The same point is illustrated by the greatest Muslim political philosopher of the early 20th century, Muḥammad Iqbāl (d. 1938). Iqbāl's political activities in his native India were inspired by the education he received in Europe, and by ideas taken from Friedrich Nietzsche. Islamic intellectual history has in a sense come full circle. Ideas from European philosophers from Descartes to Heidegger have provoked reactions similar to those that greeted the medieval Greek–Arabic translation movement: outright opposition in some quarters, enthusiastic embrace in others, but most often a circumspect approach of reinterpretation and rethinking in light of the Islamic revelation.

Chapter 2
Reason and revelation

The three Abrahamic religions, Judaism, Christianity, and Islam, agree in recognizing a single God who is the source for the existence of all other things, and who has revealed His will to us through a line of prophets. But how should we understand God as a being transcendent beyond all others? What is the nature of the causality He exercised in creating the universe? How does the knowledge granted to the prophet relate to the sort of knowledge available to other humans? If the prophet is also the leader of a community, how does his religious authority relate to his political authority? These questions will all be examined later in this book. First, we're going to look at a more basic issue: how should one go about answering them?

It is easy to assume that intellectuals of all three faiths faced a simple choice. They could either use unaided human reason, or they could turn to revelation, as found in the Hebrew Bible, the New Testament, and the Qurʾān. This is a natural assumption for us to make, since we are nowadays quick to to see an antithesis between science and religion, between reason and faith. Also, we might also expect the situation in the Islamic world to mirror the situation in Latin Christendom. Medieval Christian thinkers like Aquinas clearly distinguished between theology, which draws on revelation, and philosophy, which uses only the natural light of reason. Something like

this distinction was embodied in the very structure of Latin medieval education, with the 'arts' faculty being distinct from the theology faculty in the newly risen universities.

But we should try to free ourselves of these assumptions in approaching the Islamic world. It is unhelpful to see the rivalry, and ultimate reconciliation, between *kalām* and *falsafa* as a confrontation between 'faith' and 'reason'. Rather, there was a struggle within *kalām* itself between more and less rationalist approaches to understanding the revelation brought by Muḥammad. Nor should critics of philosophy be indiscriminately tarred with the brush of 'anti-rationalism'. Al-Ghazālı criticized Avicenna not for doing philosophy, but for making mistakes in his philosophy ('reckless precipitance of the philosophers' would be a more literal translation of the title of his *Tahāfut al-Falāsifa* than 'incoherence of the philosophers'). Ibn Taymiyya insisted that reason (ʿ*aql*) is in full agreement with the Qurʾānic revelation, though his understanding of 'reason' was not the same as that of the philosophers. Other, more mystically inclined authors pointed to the limitations of reason. Yet they often granted, even emphasized, that rational argument was effective within its proper boundaries.

The standards of reasoning

Deciding what can, and cannot, be achieved using human reason presupposes an understanding of rationality itself. For authors drawing on the Greek tradition, such an understanding was readily available in the form of Aristotelian logic. Treatises from Aristotle's logical corpus, or *Organon* (see Box 6), were among the first Greek works translated into Arabic. They were immediately put to use, sometimes in surprising contexts. Al-Kindı, for instance, deployed ideas from Aristotle's *Categories* to prove the immateriality of the soul and to refute the Christian doctrine of the Trinity. (A couple of generations later, the Christian logician Yaḥyā ibn ʿAdı wrote a counter-refutation.) Adherents of *falsafa* were distinguished by nothing so much as their interest and expertise in logic.

Box 6 The *Organon*

The ancients referred to a group of nine Aristotelian logical treatises as the *Organon,* or 'instrument', in keeping with their understanding of logic as the indispensable instrument for doing philosophy. The first text in the series was actually not by Aristotle: an *Introduction* (*Eisagoge*) to logic by the late ancient Platonist Porphyry (d. *c.*305), a student of Plotinus. Students of philosophy would start with this, and then go through the following works of Aristotle: *Categories, On Interpretation, Prior Analytics, Posterior Analytics, Topics, Sophistical Refutations, Rhetoric, Poetics.*

As a list of works on 'logic', this is rather surprising. Really only the *Prior Analytics* looks more or less like logic as we would imagine it, as Aristotle there set out the types of valid argument and how they relate to one another. (After Avicenna's pioneering work on logic, this also became the main focus of attention among logicians in the Islamic world.) Its sequel, the *Posterior Analytics,* is something more like a treatise on epistemology or philosophy of science. It delineates the requirements that have to be satisfied in order for us to take something as scientifically demonstrated. The *Topics* deals with dialectical debate, and was translated into Arabic very early, perhaps for use in religious disputation. As the title suggests, the *Sophistical Refutations* helps the reader to diagnose bad arguments. As for the *Rhetoric* and *Poetics,* they may seem to us to have nothing at all to do with logic. But great effort was made to fit them into a unified *Organon,* for instance by portraying poetic metaphors as implicit syllogisms.

The logical discipline was thus a tempting target for those who resented the spread of Greek ideas into Arabic-speaking culture. We see this with the debate between the Christian philosopher Abī Bishr Mattā and the grammarian al-Sırāfı. Our information about this event, which occurred in 937/8, is indirect and preserved by reporters sympathetic to al-Sırāfı. But it

seems that the logician was indeed trounced by the grammarian. Abī Bishr apparently provoked the debate with the grand claims he made for logic. Quoting Greek commentators on Aristotle, he declared it the indispensable tool for 'knowing correct from faulty speech, and unsound from sound concept (*maʿnā*)'. This claim is likely to find our sympathy. How can one distinguish true from false without understanding the difference between valid and invalid arguments, which is surely the province of logic?

But Abī Bishr went further. He insisted that, whereas grammar operates with the linguistic 'expression' or 'utterance' (*lafẓ*), logic's domain is the level of the mental concept (*maʿnā*) underlying the linguistic expression. Here his Aristotelianism was showing. The idea that language expresses a mental concept can be found at the beginning of Aristotle's *On Interpretation*. There Aristotle adds that different people express the same 'affections of the soul' using different sounds—as when a German says '*Hund*' where an English-speaker would say 'dog'. Logic, inferred Abī Bishr and other members of the Baghdad school, is a universal science that studies the standards of correct reasoning for all humankind. By contrast grammar is parochial, the study of correct *expression* within some given language. Against this, al-Sīrāfī made the powerful point that an intimate knowledge of language is needed to avoid error when we are reasoning. One must be aware of the ambiguous meanings of terms and master grammatical constructions in order to phrase one's thoughts accurately.

Tellingly, he also challenged Abī Bishr to use 'his logic' to solve a hypothetical legal issue about land ownership. This would not be the last time that the reasoning involved in jurisprudence (*fiqh*) would appear as a rival to the theory of reasoning put forward by experts in logic. About four centuries later, Ibn Taymiyya wrote a massive polemic with the self-explanatory title *Refutation of the Logicians*. Like al-Sīrāfī, he pointed to the gulf between real-life reasoning and the idealized syllogisms studied in logic. For instance the number of premises required in a given argument depends, not on rules laid down by Aristotle, but on each person's background knowledge and assumptions. Ibn Taymiyya illustrated with a legal example: if a Muslim who knows that wine is intoxicating hears that the Prophet forbids drinking intoxicating beverages, he will thereby understand that he shouldn't drink wine. Someone who doesn't know that

wine is intoxicating would have to add this as an additional premise. But even this premise would leave the argument ineffectual for non-Muslims.

More generally, Ibn Taymiyya argued that the sort of reasoning used in law is more feasible and effective than the sort fetishized by the philosophers. Aristotle and his followers had understood knowledge in the strict and proper sense (Greek *episteme*, Arabic *ʿilm*) as involving necessary and universal truth claims, in which one general term is predicated of another. So a standard scientific syllogism for the Aristotelians would be something like this:

> All giraffes are animals
> All animals have sensation
> Therefore all giraffes have sensation

The point of such a syllogism is to explain the universal truth that giraffes have sensation, by referring to the fact that they are animals. Against this, Ibn Taymiyya pointed out that our knowledge is always grounded in encounters with particular things, and that universal judgements are generalizations from such encounters. Isn't it as good or even better, then, to use judgements about particulars in our reasoning, as the jurist does? Besides which, as even the philosophers agreed, the best thing of all to know about is God, and He is not universal, but particular.

Some of the points Ibn Taymiyya made in his *Refutation* had already been made by authors with a friendlier attitude to philosophy and logic, like Suhrawardı and Fakhr al-Dın al-Rāzı. They wanted to revise but not abandon logic as they found it in the Aristotelian *Organon* and, above all, in Avicenna. Avicenna himself had radically rethought Aristotelian logic, not least with new ideas about modality (that is, necessity, contingency, and impossibility). After him, logicians continued to notice and fill gaps in the system. They noticed, for instance, that many perfectly good inferences cannot be put into the form of an Aristotelian syllogism. One much-discussed example was the 'relational' syllogism, for example:

> The Eiffel Tower is bigger than the elephant

The elephant is bigger than the mouse
Therefore the Eiffel Tower is bigger than the mouse

Right down through the late Ottoman empire we find authors attempting to extend the resources of Aristotelian–Avicennan logic to deal with inferences like this (for another example of developments in logic, see Box 7).

In the long run, and despite the complaints of critics like Ibn Taymiyya, logic became a standard part of the education of religious scholars across the Islamic world. Just like beginning philosophy students in late antique Alexandria, students at *madrasas* in early modern India, Persia, or Egypt would encounter logical textbooks early in their studies—not a work by Aristotle or the *Introduction* of Porphyry, but a post-Avicennan logical treatise like al-Kātibı's *Risāla*.

Box 7 The liar paradox

The famous liar paradox, first discussed in antiquity, turns on self-referential assertions like 'this statement is false'. If that statement is false, then it is true; but if it is true, then it is false. In the Islamic world, this paradox already received attention from early *mutakallimīn*. They posed the question whether someone who had never before told a lie, and then states, 'I am a liar', counts as a liar or not. Later on, in the post-Avicennan period, many philosopher-theologians offered analyses of the paradox. Some proposed that 'this statement is false' is actually neither true nor false. For instance al-ṬīsI argued that the truth or falsehood of a sentence depends on whether what it says about *something else* (not itself) is accurate. Unfortunately this solution would make it impossible to make any true or false self-referential statements; yet it surely looks true to say, 'this statement is in English', and false to say, 'this statement is in German'. The liar paradox was further debated by the philosophers at ShIrāz. One of them (the elder DashtakI) suggested distinguishing between first- and second-order truth. Normally, he pointed out, one sentence can be about another sentence without causing any problems. If I say, 'what Mary says is false', then I have made a second-order statement, that is, a statement about a statement. In that case, what I say will be true just when what Mary says is false; this causes no difficulty. The problem is that in the liar case, the sentence is about its own truth or falsehood, so that we do have the possibility of inconsistency between the first- and second-order levels.

The supremacy of reason

The most confident, even aggressive stance taken in favour of philosophy in the Islamic world is to be found in al-Fārābı and in authors influenced by him, especially Averroes. Al-Fārābı begins from the idea that we want to achieve *certainty*. In a short treatise on this subject, he acknowledged that there may be different degrees of certainty. I might, for instance, count

myself as having 'certainty' that Avicenna's real name was Ibn Sīnā because I read it in a book from a reputable publisher. But the highest degree of certainty, which al-Fārābı calls 'absolute certainty', cannot be acquired through this sort of second-hand information gathering. Nor can absolute certainty even be concerned with such things as Avicenna's real name. Absolute certainty is a feature of knowledge in the strict sense, or 'science (ʿilm)', which means being certain about universal and necessary truths.

How then to achieve certainty about such truths? Al-Fārābı's answer was *burhān,* or 'demonstration'. *Burhān* was also the name given to the Arabic version of the *Posterior Analytics,* in which Aristotle set down the requirement that scientific truths should be necessary and universal. In line with Aristotle's theory, al-Fārābı thought that demonstrations are syllogistic arguments that yield the appropriate, scientific sort of truths as conclusions. The syllogistic argument explains why the conclusion is true, as we saw with the giraffe example. But of course a syllogism is only as strong as its premises. Suppose, going back to that example, that I wonder why it is that all animals have sensation? This appeared as a premise in our argument, but it may itself have a further explanation—for instance that all animals need nourishment, and require sensation to locate that nourishment.

There is a threat of regress here. It would be troubling if every explanatory demonstration stood in need of further demonstrations to explain why its premises are true. To avoid this, Aristotle and his followers invoked first principles, truths which stand in no further need of explanation. These principles, which might be basic rules of reasoning like 'the whole is greater than the part' or general facts about the world gleaned from sensation, provide the foundations upon which Aristotelian science rests. Another member of the Baghdad school, Ibn ʿAdı, used this idea to explain logic's role as an 'instrument for philosophy'. The inference rules of Aristotle's syllogistic tell us how to combine first principles into valid arguments. These arguments securely establish further truths, which can then be further combined using the logical rules, to derive even more truths.

When it comes to human beliefs, first principles and demonstratively proven conclusions are the gold standard. But al-Fārābı was prepared to hand out silver and bronze medals too. After all, as he himself admitted when he allowed for different degrees of certainty, not all true human beliefs reach the standard realized in demonstrative science. We routinely rely on testimony and on widely held beliefs, and accept arguments that we find merely persuasive rather than probative. Al-Fārābı looked again to the Aristotelian *Organon* to understand these sorts of beliefs. When we argue on the basis of assumptions or commonly held opinions, we are engaging in 'dialectic', which is studied in the *Topics*. Merely persuasive arguments, meanwhile, are classified as 'rhetorical'—no prizes will be awarded for guessing which Aristotelian work deals with these.

With these distinctions in hand, al-Fārābı was ready to make a bold proposal about the relation between philosophy, theology, and religion. A prophet who brings revelation to his people would not get very far if he presented them with demonstrative syllogisms. So instead, he speaks to them with powerfully convincing images and symbols. In other words, the language of revelation is characteristically rhetorical. As for dialectical arguments, which simply presuppose premises rather than tracing them back to rock solid first principles, they are in al-Fārābı's eyes typical of *kalām*. This does not, of course, mean that the *mutakallimīn* were always arguing for false conclusions. For instance al-Fārābı would agree with the Muʿtazilites that God exists, is one, is incorporeal, and is the first cause of all things. It's just that the *kalām* arguments for these conclusions were not demonstrative.

These ideas were taken forward in Andalusia by Averroes, in his *Faṣl al-maqāl*, usually translated *Decisive Treatise*. Here Averroes wrote from the point of view of a jurist. (He came from a family of Mālikı legal scholars and was himself chief judge in Córdoba.) Islamic legal judgements often addressed the question of whether a given activity is required, encouraged, licit, discouraged, or forbidden. In the *Decisive Treatise* Averroes applied this sort of question to philosophy itself. On the basis of Qurʾānic injunctions like 'take heed, you who have eyes' (59:2), Averroes inferred that the revelation instructs believers to seek knowledge. And what is philosophy, if not the search for knowledge? Thus philosophy is not just

licit or encouraged, but actually *required* for Muslims, albeit only for the few who have the talent and opportunity to travel the daunting path towards scientific understanding. Other Muslims must content themselves with true beliefs induced by persuasion. Averroes agreed with al-Fārābı that this sort of belief is appropriate for the normal religious believer, and that *kalām* operates with dialectical arguments. Such argumentation could be dangerous. Averroes complained that the dialectical procedures of the theologians did not converge on agreement, leading to strife, and even violence, within the community.

Averroes was *not* saying that there are two different, even inconsistent, sets of beliefs, one for the philosophers and another for everyday believers. Rather, both groups have the same core of true beliefs. It's just that the philosophers have certain knowledge attained through demonstration, whereas the rhetorical class of believers are persuaded of things they can't prove, and grasp the truths symbolically. The normal believer may understand God to be powerful by picturing Him on a throne, whereas the philosopher can prove that He is the First Cause of the physical universe. This is another reason why it was unwise for the *mutakallimīn* to debate the meaning of the revelation publicly. It could confuse the rhetorical class to hear the theologians arguing for God's incorporeality. Exegesis of the Qurʾān should instead be left to the philosophers. They are the only readers who can be sure to interpret the revelation's true meaning, since they can check their interpretations of scripture against what they already know to be true on independent grounds. They should, however, go about this quietly, being careful not to shake the convictions of other Muslims (for a related dispute within Judaism, see Box 8).

6. A manuscript from the Cairo Genizah, which preserves Maimonides' own handwriting.

Box 8 The principles of the Jewish Law

Like al-FārābI, Maimonides (see Figure 6) believed that knowledge
should have a foundational structure. He applied this to the Jewish
Law itself, identifying a group of thirteen key principles upon which
the rest of the Law was founded. Within this group of thirteen, three
principles had particular significance: God exists, is one, and is
incorporeal. Maimonides' attempt to give the Law this sort of
scientific structure was challenged by a number of Jewish thinkers,
both in Andalusia and in southern France. Maimonides' insistence
that his co-religionists must deny the corporeality of God was already
contentious. Kabbalistic authors indulged in bodily descriptions of
God, and one of them remarked that many Jews, 'including
Maimonides' betters', had taken such descriptions at face value. A
different sort of critical response came from Ḥasdai Crescas. His
remarkable assault on Aristotelian physics was staged in order to
show the unreliability of Maimonides' argument for God's existence.
Not, of course, because Crescas denied the existence of God, but
because he feared that Maimonides was placing the Law on shaky
foundations. He also questioned Maimonides' idea that we are
commanded to believe the principles. Belief doesn't respond to
commands, but to good reasons for believing. Later, the Spanish exile
Isaac Abravanel (d. 1508) denied that the Law has any genuine
principles at all. Rather it must be accepted through faith (*emunah*) in
its entirety. Nonetheless, Abravanel thought that Maimonides'
axiomatic approach could be justified on pedagogical grounds. One
might start instructing a believer with so-called 'principles' before
moving on to more specific aspects of the law.

The limits of reason

A prime example of the sort of public disputation that bothered Averroes
was al-Ghazālı's *Incoherence of the Philosophers*. Its project is basically a
negative one. Al-Ghazālı sought not to offer an alternative set of theories

but to show that Avicenna's theories are unproven. This was not because al-Ghazālī rejected the desirability of certainty. To the contrary, the quest for certainty is a leitmotif of his intellectual autobiography, the *Deliverer from Error*. It describes an epistemological crisis he experienced as a young man, born out of considering the way that sense perception can be corrected by the mind. For example, shadows cast by the sun look to be standing still, but we know that they are moving very slowly throughout the day. How can we rule out that the judgements of the mind are likewise subject to some higher court of epistemological authority? Even the apparently indubitable truths of mathematics and logic could fall prey to this sort of sceptical worry.

Al-Ghazālī was freed from the impasse only thanks to 'a light cast into his heart' by God. The experience taught him that human reason cannot provide the highest form of insight and certainty. That is rather the province of the mystic, whose direct connection to the divine trumps even the most certain demonstrative argumentation. On the other hand, human reason is reliable in its proper sphere. The problem is not using reason, but thinking that reason can do too much, for instance by claiming to discern rules that would govern even the actions of God, as the Muʿtazilites and Avicenna had dared to do. Averroes would later charge al-Ghazālī with being 'an Ashʿarite with the Ashʿarites, a philosopher with the philosophers, and a sufi with the sufis'. While it's true that *kalām*, philosophy, and sufism all played a role in his thought, this does not necessarily mean that he was inconsistent. His willingness to take over ideas from Avicenna was tempered by his Ashʿarite commitment to the untrammelled freedom and transcendence of God, who is properly grasped only by the few who are granted mystical insight.

Another combination of philosophy and mysticism, though without the Ashʿarism, can be found in Suhrawardī. Explaining the methodology of his new 'Illuminationist' approach to philosophy, he said that it travels not one but two paths. One is the method of discursive enquiry and argumentation, characteristic of the 'Peripatetics'. The other was the higher road of mystical intuition, enjoyed not only by the sufis of Islam, but also by the sages of Greece, Persia, and India. They were all granted a direct vision of God, the Light of lights, and on this basis (supposedly) agreed on a range of

doctrines taken over by Suhrawardı. As we'll see later, he also proposed a novel epistemology that could help to explain such mystical insights.

Al-Ghazālı and Suhrawardı set the tone for developments in the later Islamic world. Al-Fārābı and Averroes had claimed that certainty was the privilege of the philosopher alone, who achieves it through demonstrative arguments. Post-Avicennan theologians, including al-Ghazālı, agreed with them that certainty was an admirable goal. Whether that goal could be reached through nothing but human reasoning, though, was another matter. In the work of a theologian like Fakhr al-Dın al-Rāzı, we see the full flower of the dialectical method characteristic of *kalām*. He did follow earlier *mutakallimīn* in also recognizing a type of knowledge as 'necessary', meaning that we cannot help endorsing it. But when it came to more contentious and difficult points, his characteristic method was to consider all the positions that had been (or could be) adopted on a given philosophical issue. In the end, all but one position would be shown to be incoherent or implausible. Scrupulous in his methodology, al-Rāzı would not always assert the certain truth of the victorious position, the one that has survived the process of elimination. Instead it might be designated as 'most adequate (*aqrab*)' among the options considered. When al-Rāzı concluded his arguments with the pious formula 'but God knows best', he meant it.

The later tradition of philosophical theology is a rebuke to the charge of methodological carelessness levelled at *kalām* by al-Fārābı and Averroes. Al-Rāzı was as much a rationalist as the philosophers, but more modest when it came to the question of what reason can establish beyond all doubt. This was entirely in keeping with the tenets of Ashʿarism, a tradition which would sometimes take refuge in the expression *bi-lā kayf*, or 'without saying how'. For instance some Ashʿarites would insist that God does have distinct attributes, but refuse to say how exactly we should understand these attributes and their relation to God's essence. Ashʿarite *kalām* did not necessarily go hand in hand with mysticism—al-Rāzı was no sufi. But in al-Ghazālı and certain other, later thinkers the epistemic modesty of the *mutakallimīn* did serve the ends of mysticism, as for that matter did limits on philosophical demonstration recognized by the philosophers themselves. Both *kalām* and Avicennan philosophy admitted that God remains, at least to some extent, beyond the understanding of natural human reasoning. So

there was plenty of room to say that mystical insight must complement discursive rational argument.

The mystical tradition offered the prospect of going where reason could not. Sufi ascetic practices helped to direct the developing mystic's attention away from worldly things and towards the divine. Stories about the early sufi Rābiʿa al-ʿAdawiyya tell of her unconcern for the world around her and her yearning for God. She is said to have remarked, 'the love of God inhibits me from the love of His creatures'. The most famous sufi of all, the Persian poet Rīmı, famously used images of sex and drunkenness to convey the mystic's union with God. Ultimately, the sufi's goal was to achieve not some sort of discursive account of God, but rather an obliteration or annihilation (*fanāʾ*) of the self, in which the mystic dissolves in God's being, like 'a drop of vinegar in an ocean of honey'. Yet Rīmı did not abandon reason entirely. He remarked that 'the leg of the reasoners is wooden' and hence unsteady, but he also retained a significant role for 'intellect (*ʿaql*)', making it the capacity by which we grasp God.

The direct union with God achieved by the sufis promised to remedy the deficiencies of the philosophers' reason. But talk of union was dangerous, too. At their most provocative, the sufis could be taken to eliminate all distinction between God and what God has created—as when al-Ḥallāj notoriously remarked, 'I am the Truth'. Some, like Ibn Taymiyya, were quick to denounce this tendency among the more extreme sufis. But the sufis themselves were alive to the danger, and took pains to preserve God's transcendence despite recognizing His union with, or presence to, all other things. On this score, the greatest contribution was that made by Ibn ʿArabı, which was then systematized and fused with philosophical language by al-Qīnawı and other members of the 'Akbarian' school (an allusion to Ibn ʿArabı's epithet *al-akbar,* 'the greatest'). Ibn ʿArabı made much of the divine names found in the Qurʾān, seeing them as the means by which God made Himself manifest to His creation. Had the names not been revealed to us, we could not speak of God at all. But the divine names are more than mere labels. They are the very relationships that God bears to created things, and ultimately identical with those things. The created universe is distinct from God, and characterized by multiplicity rather than God's total simplicity, in just the way that God's various names are distinct from Him

and form a multiplicity. God in Himself, though, remains beyond all that He has made.

There is a strong parallel between these ideas and the Jewish mystical tradition of Kabbalah, which is most likely no coincidence. Kabbalah emerged from the same cultural context that produced Ibn ʿArabı, and may have been influenced to some extent by Islamic mysticism. The *sefirot* of Kabbalistic theory play a role akin to the divine names in Ibn ʿArabı's thought, symbolically evoking the emanation of God's influence into the created world. Again, God Himself remains beyond our grasp. He is, as the Kabbalists of southern France put it, the *ein sof* or 'infinite'. This sefirotic theory looks to be a kind of theoretical account of God's relationship to the universe. But this was only one aspect of medieval Kabbalah. Again like sufism, Jewish mysticism also had a practical dimension, with ritualistic and meditative practices designed to provoke the experience of union with the divine.

The mystics themselves noted that their enterprise transcended religious boundaries. We've already seen Suhrawardı claiming common cause with sages from multiple traditions, both within and outside Islam. Two thinkers of Islamic India, the Mughal prince Dārā Shikīh and Shah Walı Allāh, had a similarly ecumenical outlook. Particularly striking is Dārā Shikīh's treatise *The Confluence of the Two Oceans*. The title refers to the agreement between the traditions of Islam and classical India, as represented especially by the *Upanishads* (which Dārā translated himself). The *Confluence* lists correspondences between Sanskrit philosophical terminology and the technical terms of philosophical sufism, and argues for the agreement of the two traditions on points such as the nature of the soul and bodily resurrection. Dārā thus took very seriously an injunction he found in one Hindu sage, to the effect that the truth does not belong solely to any one religion.

Of course none of this deterred philosophical sufis from a profound engagement with Islam and its key texts. Shah Walı Allāh's ecumenicism was tempered by his insistence that Islam is the most perfect manifestation of the truth shared by all religions. And if we consider another great

philosopher of recent centuries who drew on sufism, Mullā Ṣadrā, we find a thinker whose thought and writing is steeped in the language of the Qurʾānic revelation. Like several other Muslim philosophers (notably Fakhr al-Dın al-Rāzı), Ṣadrā wrote works of commentary on the Qurʾān and saw no tension between this activity and the pursuit of philosophy. Ṣadrā wove concepts from the philosophical and sufi traditions into his exegesis. He echoed Ibn ʿArabı's idea that the divine names are manifestations of God and even applied this to the Qurʾān itself. The revelation is God's word, and thus contains within it all of creation (*al-sīrat al-fātiḥa*, the first or 'opening' chapter, in turn contains within it all that is expressed in the rest of the Qurʾān). Ṣadrā's innovative metaphysics was ultimately an attempt to explain God's creation as an unfolding or manifestation of what, in God, is perfectly unified.